FEATURES

Letter from the Editors

In the context of the Eurozone recovery, Spain continues to outperform the rest of the single currency area. The March issue of *Spanish Economic and Financial Outlook (SEFO)* starts off by taking a look at outstanding structural obstacles to improving the Euro area's growth potential and the possible risks of failing to do so for the ongoing recoveries of the individual countries in the region, for Spain in particular and for the very existence of the common currency itself.

Despite the recent pick-up in economic activity, the Eurozone remains an area of relatively modest growth and high unemployment. Performance is also unequal across countries, leading to a process of ever-increasing divergence. This disappointing record reflects the systemic weaknesses which prevail since the construction of the Euro: Shortfalls in the ECB's capacity to act as lender of last resort, the strong exposure of banks to domestic shocks; and, the lack of instruments for macroeconomic stability. Reinforcing the architecture of the Eurozone will be critical for supporting the ongoing recovery in Spain, while making growth more socially inclusive.

In tandem with Spain's macroeconomic recovery, the country's banks too have now largely completed their post-crisis transition and have moved into the recovery phase. In this setting, we analyse the most recent data on the performance of the Spanish banking sector, in absolute terms and relative to the rest of the EU – their 'deleveraging' effort continues, but the prospects for credit are improving little by little, their cost-to-income ratios and income-generating capabilities also outperform those of the EU. And while Spanish banks' Tier 1 capital ratios remain somewhat below the Eurozone average, they rose from 11.87% to 14.96% between 2010 and 2016 – comfortably above regulatory requirements and demonstrating reinforced transparency. Going forward, both Spanish and Eurozone banks face a challenging international environment, mainly due to uncertainty surrounding Brexit implementation, potential spillover effects from US financial deregulation, and the upcoming stress test exercise – but compared to 2016, this year makes a greater case for renewed optimism.

We take our analysis of the EU financial sector a step further and examine how its adaptation to the crisis and post-crisis operating environment has been reflected in the business models of EU, and in particular Spanish banks, by looking at changes to their balance sheet activity and income structures. On the whole, the post-crisis environment of falling interest rates, deleveraging, regulatory requirements and increased competition has forced Euro area banks to adapt their

business models to maintain profitability. The structure of banks' balance sheets has changed, with the relative weight of non-interest sources of income increasing. In Spain, we point out that the retail banking model continues to dominate, although overall lending to the private sector fell largely due to deleveraging by non-financial corporations. Also, the weight of sovereign debt on Spanish banks' balance sheets has tripled, making it one of the countries with the fastest growth in sovereign debt holdings by banks within the Euro area.

Finally, on a related note, we look at room for further progress in Spain in the area of digital payments. Spaniards' payment habits are shifting in the expected direction but not at the expected speed. The fact that Spaniards still use cash more often than card-based payments, that one in four still only uses cash and that just 7% pay for their purchases only with cards, suggests that there is still a long way to go in terms of encouraging card usage– particularly among small retailers and, generally speaking, for micro payments. Whether this dynamic reflects current obstacles in the evolution of the card-based payment market, or simply Spaniards' payment habits, Spain currently lags behind its EU peers as regards use of cards relative to cash payments.

Moving on to the macroeconomic and fiscal analysis of the situation in Spain, we examine several areas where there has been progress in correcting imbalances, but where obstacles still persist: unemployment, the current account balance, and fiscal accounts.

As regards the issue of unemployment we assess empirical evidence to conclude Spain's current high rate of structural unemployment leaves little room for the unemployment rate to fall without distorting prices. Estimates for structural unemployment in Spain currently point to a range of between 15% and 19%, depending on the methodology employed. Lowering this high rate through structural reforms thus becomes an increasingly important priority to reduce potentially negative consequences for the Spanish labour market and overall economy.

We then study Spain's current account balance. Since 2013, the current account entered into surplus – reversing a recent history of deficits. Unlike the years prior to the crisis, an apparent rise in labour productivity across most sectors is presumably underpinning these recent favourable developments. Nevertheless, current account and productivity figures in Spain coexist with a rate of unemployment that is nearly three times that of other benchmark economies. Until the Spanish labour market begins to create jobs in the quantity and of the quality needed, the economy will not move towards effective recovery.

Related to the issue of improving Spain's external accounts, at the micro level, we look at the role of industrial policy in addressing some of Spain's aforementioned structural challenges. By helping to increase manufacturing exports, the right industrial policy mix could help to generate a more balanced growth without exacerbating external imbalances, and at the same time provide new opportunities for employment.

Finally, on the fiscal front, greater political stability, a more favourable economic climate, and substantial upward revisions

to original deficit targets means there is a high probability that Spain will meet its 2016 deficit objectives. Under current conditions, consensus expects slippage in 2017. Neither the social security system, nor the regions will be able to substantially bring down their deficits and local corporations' surpluses may even be reduced, forcing the central government to bear the brunt of the adjustment burden. Reaching agreed upon fiscal objectives this year may still be feasible, but unlikely without additional measures, particularly in the area of tax revenues.

The Euro: An incomplete architecture

Raymond Torres[1]

Despite having emerged from the crisis, an incomplete architecture leaves the Eurozone vulnerable to subdued economic performance and cross-country divergence. More progress will be needed on reducing systemic weaknesses if the Euro area is to deliver on its promise of greater prosperity for participating countries and to avoid calling into question the very existence of the common currency.

Despite the recent pick-up in economic activity, the Eurozone remains an area of relatively modest growth and high unemployment. Performance is also unequal across countries, leading to a process of divergence which may call into question the very existence of the single currency. This disappointing record reflects the systemic weaknesses which prevail since the construction of the Euro. The paper reviews these weaknesses and their consequences, and examines briefly possible solutions, taking into account efforts already made. Reinforcing the architecture of the Eurozone will be critical for supporting the ongoing recovery phase in Spain, while making growth more socially inclusive.

When it was created almost two decades ago, the Euro was intended to bring greater prosperity to all participating countries. The expectation was that the single currency would strengthen financial stability and facilitate convergence. This worked out well for a while. Between 2000 and 2007, the Eurozone enjoyed robust economic growth and declining unemployment among most of its members.

The growth-cum-convergence process came to an abrupt halt with the advent of the great recession and the subsequent sovereign debt crisis. Since then, major efforts have been made to tackle the consequences of the crisis. The creation of a European Stability Mechanism and the adoption by the European Central Bank of an exceptional arsenal of unconventional measures to prevent deflation and stabilise the Euro are important steps in this direction (European Commission, 2015).

However, these initiatives, important as they are, remain insufficient to make the Euro fulfil its promises. Indeed, the heart of the matter is that the architecture of the Eurozone remains incomplete and, as a result, the area faces the prospect of subdued economic performance as well as cross-country divergences, which may call into question the very existence of the single currency. In its recent report on the future of Europe, the European Commission itself has openly considered such a break up scenario (European Commission, 2017).

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The purpose of this paper is to: a) provide an overview of the areas where the weaknesses are most blatant; b) shed light on the potential risks of inaction and to examine reforms options; and, c) briefly discuss the implications for Spain of the present state of affairs.

Economic performance in the Eurozone: Low growth and increasing cross-country divergence

To start with, the growth record of the Eurozone is mediocre. During the central years of the crisis (2008 to 2012), the Eurozone economy performed worse than other European countries – and performance was also worse than the United States, where the global financial crisis originated.

Likewise, during the ongoing recovery phase that followed the exceptional measures of the ECB, economic growth has been relatively modest. Since 2013, GDP increased by a total of 5 per cent in the Eurozone, that is 2.5 percentage points less than in other EU countries and 1 percentage point less than in the United States (Table 1).

Table 1

Weak Eurozone performance

Cumulative change in GDP, at constant prices, in %

	2000-2007	2007-2013	2013-2016
Euro area	14.3	-1.8	5.0
Non-euro area (Denmark, Sweden, UK)	20.2	1.6	7.5
Denmark	12.0	-1.2	4.5
Germany	10.2	3.9	5.3
Spain	27.7	-7.9	8.0
France	13.8	2.0	3.1
Italy	8.5	-8.7	1.8
Netherlands	14.7	-0.4	5.6
Finland	24.4	-4.5	-0.4
Sweden	23.2	3.6	10.3
United Kingdom	20.8	1.6	7.3

Source: Eurostat and Funcas.

Current trends suggest that the Eurozone economy is growing somewhat faster than expected. According to the latest projections, economic growth in the zone should reach 1.7 per cent in 2017, two decimals more than in the previous projections. This is still a relatively modest record, especially in light of the depth of the crisis.

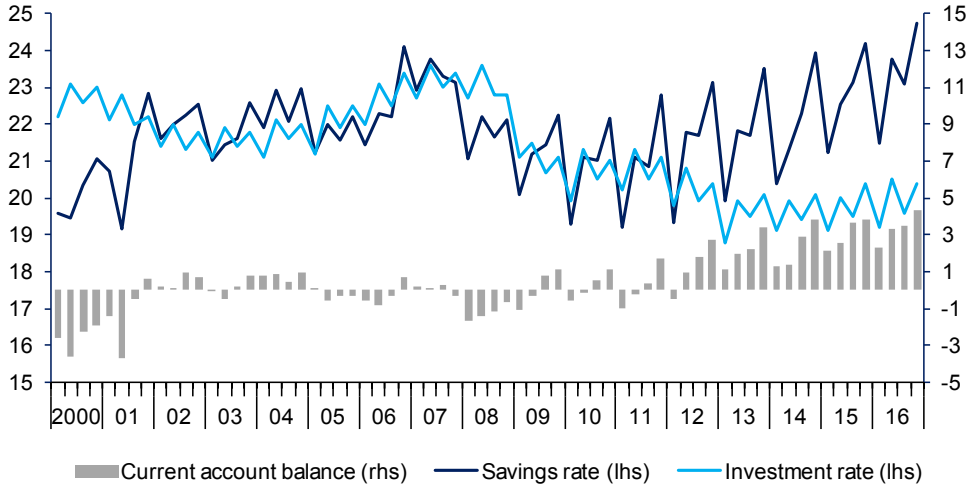
The result is a worsening of labour market outcomes. Unemployment has increased more in the Eurozone than elsewhere in Europe. In view of the gloomy employment prospects, a disproportionate number of working-age people have been discouraged and have exited the labour market. And, for those who obtain employment, job precariousness is on the rise.

Looking in detail at the components of GDP, it emerges that the Eurozone is characterized by weak domestic demand, notably as regards investment. Today, the area invests less than many other countries in Europe and also less than was the case before the crisis. The result is a situation of excess savings. In other words, Europe saves more than what it is prepared to invest in its economy. In fact, excess savings are growing, as illustrated by the increasing current account surplus, which now represents over 200 billion euros, or 2 per cent of GDP (Exhibit 1). Paradoxically, part of this surplus will serve to invest in countries outside Europe, notably the stimulus programme launched by the new government of the United States.

Secondly, the Eurozone is facing significant divergences. Core countries such as Germany, Austria and the Netherlands do well. These countries enjoy solid growth rates and they are reaching a nearly full employment position. By contrast, growth performance in Greece and, to a lesser extent, Italy remains mediocre. France

Exhibit 1

Growing excess savings



Source: Eurostat, ECB, and Funcas.

appears to have de-linked vis-à-vis Germany. And in general Southern European countries face the prospect of prolonged unemployment and/or a high incidence of low-paid jobs.

These divergences, if unchecked, will make the monetary union unsustainable. Indeed, low-growth performers are unable to offer sufficient job opportunities. They run the risk of social dislocation and political fragmentation. These trends are already at work in some countries. In addition, emigration of talented young people to richer areas is a likely prospect. This is tantamount to a subsidy from low- to high-performers.

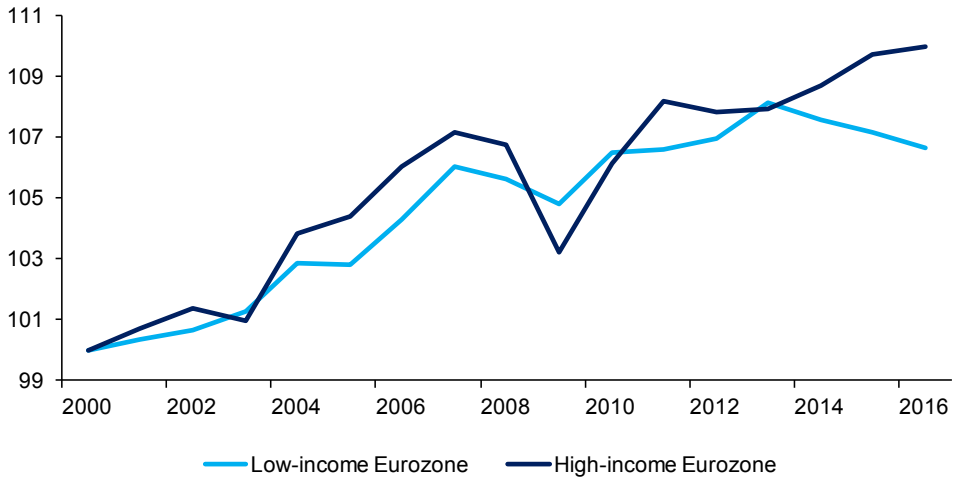
In theory, low-performers could overcome their handicaps by attracting investment. This is possible when it is cheaper to produce in these countries. However, in a low inflation environment, improving cost-competitiveness requires outright cuts in nominal wages and incomes. This is not easy to achieve and is socially harmful. Moreover, cost-cutting policies affect domestic demand in the short run, while the possible benefits on external competitiveness, gains in export markets and improved investment attractiveness only show up in the medium- to longer-run.

The result is a growing productivity divide (Exhibit 2). Core economies are not only more productive than peripheral ones, but they also enjoy relatively strong productivity gains. These trends, if persistent, will inexorably lead to a different trade-off between the goal of maintaining a single currency area and that of improving economic prosperity.

More generally, weaker performers are more vulnerable to shocks than their stronger peers in the single currency. The probability of such shocks is all the more likely, because the structure of European economies remains different. Those located at the core are specialized in relatively high value-added sectors. They are also more integrated and thus their cycles tend to be synchronized. By contrast, peripheral economies have a different source of comparative advantage and their cyclical behaviour is different from that of the core of the Eurozone.

Exhibit 2

Diverging productivity trends



Note: The exhibit shows labour productivity, measured as GDP per employed person, in high-income Eurozone countries (Austria, Belgium, France, Germany and the Netherlands) and low-income Eurozone countries (Greece, Italy, Portugal and Spain). The data are harmonised to take the value of 100 in the year 2000.

Source: Funcas estimates.

Missing pieces in the Euro architecture and possible reform options

Undoubtedly, the low growth situation and intensified divergences reflect domestic policy conditions. Some countries have stronger institutions, including effective product and labour markets, well-designed education and social protection, participatory dialogue between employers and workers, and solid financial supervision. They are rewarded with improved economic performance (ECB, 2016).

The first element of vulnerability of the Euro architecture is that the central bank is not designed as a lender of last resort.

However, even carefully crafted reforms of domestic policies are not enough to prevent the observed divergences in performance.

Indeed, the fundamental problem is that the Euro is a currency which is weakly connected to the States of participating countries. It therefore lacks the guarantees which the State normally provides in terms of ensuring adequate liquidity, counteracting shocks and reducing the risk of bank runs (Eichengreen and Wyplosz, 2016).

More specifically, the first element of vulnerability of the Euro architecture is that the central bank is not designed as a lender of last resort (Pisani-Ferry, 2012). So governments have to fund their deficits in a currency that they do not control (similar to the situation of a private borrower). Experience shows that such a fragile link between the currency and sovereigns can lead to "sudden stops" of private capital flows, as investors fear about the ability of governments

to sustain their debt. This sudden stop, in turn, forces governments to adopt austerity measures with a view to improving budget balances quickly, thereby further aggravating the crisis and requiring more austerity (the so-called austerity trap).

Indeed this is what happened in 2010, when risk premia increased exponentially. Suddenly, investors, including banks, realized that the bonds and obligations of other governments which lied in their balance sheets were not supported by the central bank as lender of last resort. Thus, governments should repay their debt obligations via their own means, *i.e.* a combination of higher taxes, lower spending and market-based funding. Otherwise they faced bankruptcy.

This problem has been partly addressed through the announcement, as late as in 2012, by the ECB that it would do whatever it takes to save the single currency. Initially, this took the form of a programme of outright monetary transactions (OMTs), whereby the ECB could purchase government bonds in secondary markets. In this initial stage, OMTs were restricted to countries involved in bail-out programmes (through the European Financial Stability Facility and the European Stability Mechanism). In 2015, the programme was scaled up and involved direct purchases of government bonds as well as corporate securities.

A limitation to this instrument is that it only applies to government bonds that have a certain credit rating. At present, the asset purchase programme does not apply to Greek debt, which is regarded as too risky. The same may happen in the case of a future country-specific crisis –unlike in a "normal" central bank, which can act as lender of last resort to its government, under all circumstances.

More generally, there are doubts as regards the extent to which the ECB can pursue its unconventional monetary policy beyond a certain time horizon (Borio and Zabai (2016), and Borio (2017)). There are indeed side effects associated with these interventions, notably in terms of: an inefficient allocation of savings, distortions in the structure of asset prices, the emergence of new bubbles, and growing difficulties in exiting the measures, as the volume of government debt purchased by the ECB becomes more and more significant. Already, the ECB has announced a gradual tapering of its asset purchase programme in the course of 2017.

In order to move forward, some form of Eurozone-wide insurance of government debt must be put in place. While several ideas have been put forward in this regard, no action has taken place so far.

The second systemic weakness of the Eurozone is the strong exposure of banks to domestic shocks.

The second systemic weakness of the Eurozone is the strong exposure of banks to domestic shocks (Gros, 2013). For one thing, banks tend to hold a disproportionate volume of government bonds of their own country (Exhibit 3). Therefore, a significant increase in the risk premium tends to aggravate the balance sheet position of national banks, which find themselves in a weaker position to provide credit to the real economy. This, in turn, affects the economy and the fiscal position of governments.

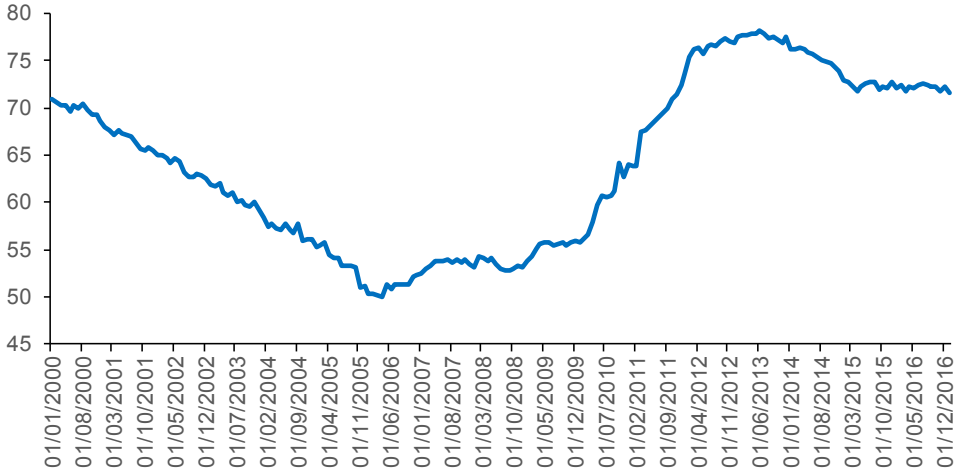
This perverse feedback loop between banks and their governments was in motion during the central years of the crisis in Ireland and a number of South European countries. It only ended because the ECB intervened to calm markets and reduce risk premia.

In addition, bank regulation has been strengthened through the establishment of a single supervisory system and the application of stress tests, designed to act as a prevention device. However, doubts have been expressed regarding the reliability of stress tests. Also, the single supervisory system

Exhibit 3

Increasing exposure of banks to domestic debt

Bank holdings (other than ECB) of domestic government debt as a % of total Eurozone government debt



Note: This exhibit shows that, since 2009, commercial banks have increased their exposure to debt of their own government, while they have reduced exposure to debt issued by other Eurozone governments. The data exclude the ECB.

Source: ECB and Funcas estimates.

has emerged slowly and needs to find its proper articulation with national supervision institutions, which will take some time. More fundamentally, as long as banks do not diversity their holdings of government debt, they will continue to be exposed to the risk of a perverse feedback loop. Going forward would therefore require imposing further prudential rules on the composition of bank assets.

Another missing piece in the banking union architecture is the lack of deposit insurance. At present, bank deposits are insured by each government –typically up to a maximum of 100,000 euros per bank account. This means that, in the event of a debt crisis, the insurance scheme is not credible, which may provoke bank runs and the flight of deposits to safer jurisdictions. It is therefore important to establish a single Eurozone-wide deposit insurance, which comes on top of national insurance systems. This should go hand-in-hand with strict bank supervision mechanisms, along the lines noted earlier, as well as proper management of public finances in each country. Uncertainties regarding the ability of different participating countries in achieving this may explain the fact that the European deposit insurance has not been enacted as yet.

The final main missing pillar of the currency union is that the Eurozone lacks an instrument for macroeconomic stability. There are still no effective tools for responding to shocks, both adverse and favourable.

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Instead, Europe mainly relies on preventive measures, such as macroeconomic surveillance

tools (European Semester, Macroeconomic Imbalance Procedures) designed to avoid the build-up of unsustainable imbalances. This is welcome in general, though the tools operate at the county level and do not take into account the overall European situation (which in present circumstances is one of excess savings, as noted above). It also tends to apply asymmetrically, in that the system is supposed to punish deficit countries, while treating a surplus situation with leniency. Europe also puts considerable emphasis on structural reforms. These are of course important, provided they are well designed and take into account a country's societal preferences. However, structural reforms take time to feed through the economy and, at any rate, these measures are not meant to respond to major macroeconomic shocks (they can, of course, facilitate adjustment to those shocks over the long run). Moreover, in the short run, certain structural reforms are deflationary and thus aggravate the crisis, *e.g.* when they impose wage cuts.

The launch in 2014 of the European Investment Plan (or Junker plan) goes some way towards meeting these weaknesses. The aim is to mobilise investment (private and public) in the different countries, in areas with large externalities, such as infrastructure, or where normal funding is not easily available, *e.g.* small and medium-sized businesses. The amount is relatively small, however – 315 billion euros, or less than 3% of the combined GDP of the Eurozone, spread over a period of three years. Moreover, the plan acts as an aggregation of national investment plans, rather than as a genuine European-wide policy. This means that the Junker Plan, though helpful, is not conceived as a tool to respond to asymmetric shocks.

In order to tackle this problem, several proposals have been made, notably the establishment of a European fiscal capacity (Bénassy-Quéré *et al.,* 2016). A European unemployment insurance system is an attractive option in this respect. This raises issues of political accountability and devolution of national sovereignty, which are complex to address in light of the rising Euro-scepticism and reluctance on the part of core countries to engage in this direction.

Two practical paths that could also be followed include: i) an expansion of the Junker Plan along with a modification of implementation criteria, so that countries most hit receive more support; and, ii) greater use of the Youth Guarantee policy which presently operates in an embryonic manner. This would act as a quasi-automatic stabiliser and possibly face less hostility than a fully-fledged unemployment benefit system. The proposal would have the added advantage that it already exists and thus does not require a major overhaul of social protection. In both cases, however, resources would be called for.

In general, a single currency requires mobility of private savings across countries. At present, there are many investment opportunities in crisis hit countries, such as Portugal. At the same time, other countries are not able to mobilize internally all their available savings. Theoretically, it would be advantageous for them to place their excess savings into other Eurozone countries. However this does not happen, given the uncertainties that savers perceive regarding the future of the monetary union.

Implications for Spain

The case of Spain is important. Indeed, the country has broadly tackled some of the macroeconomic imbalances that had preceded the crisis (Torres and Fernandez, 2017). Yet, the incomplete architecture of the Euro remains a threat to the progress made.

The size of pre-crisis imbalances has been significantly reduced:

- The balance-sheet position of non-financial enterprises has improved considerably. Their debt to income ratio now comes close to the situation of the early 2000s, before the

build-up of the credit bubble. Households, too, have managed to alleviate their debt position, though to a lesser extent than enterprises. Both enterprises and households are now in a position to take loans in a sustainable manner, which augurs well for the strength of Spain's recovery.

- Banks, for their part, have been broadly restructured. The process has been painful to the public purse. Indeed it has entailed significant injections of tax-payers money, while also necessitating significant support of the European Stability Mechanism. However it has delivered important results in terms of improved capital buffers, strengthened governance arrangements, and stricter supervision. The fact is that the flow of new credit to new businesses has resumed its upward trend, thereby nurturing the economic recovery.

- The current account balance runs comfortable surpluses. And it does so even though the economy is expanding faster than in neighbouring countries. This is the result of rapidly rising exports, in excess of world markets, and gains in domestic markets vis-à-vis importers. The Spanish economy is much more open than pre-crisis in terms of both trade and foreign direct investment. The cyclical synchronization with respect to core European countries has therefore been enhanced.

- The real economy also seems to follow a sustainable expansion. The construction bubble has burst. Housing investment has declined to levels which are modest by both national and international standards. The recovery phase relies little on the construction sector. Indeed it is broadly based, led by a diversified manufacturing sector and market services, including a dynamic non-tourism sector.

- Cost-competitiveness has improved. Thus, the gap that had widened in terms of unit labour costs vis-à-vis the Eurozone has practically disappeared.

These gains have been achieved at a significant cost in terms of enterprise bankruptcies, employment losses, job precariousness and income inequalities. And public debt has taken the place of private debt.

So Spain needs further action to tackle the legacies of the crisis. Its efforts also should be shouldered by institutional reforms in the Eurozone. Indeed, the country remains vulnerable to shocks. A sudden stop of capital flows would exert upward pressure on the risk premium –all the more likely given the level of public debt. This would automatically worsen the accounts of banks, which are still overly exposed to domestic debt. In addition, and more fundamentally, Spain suffers like other countries from the lack of an effective macroeconomic instrument for addressing shocks.

Spain has broadly tackled some of the macroeconomic imbalances that had preceded the crisis. Yet, the incomplete architecture of the Euro remains a threat to the progress made.

In this regard, the phasing out of ECB purchases of government bonds will provide an important test. Spain has benefitted significantly from the asset purchase programme of the ECB, and the issue arises as to how risk premia and capital flows will react to the exit from this programme.

Concluding remarks

While there is growing awareness on the need for tackling the failures in the functioning of the Eurozone, significant differences remain regarding the remedies. Some countries stress the need

for preventive country-specific measures, that is a combination of structural reforms and fiscal discipline, combined with European sanctions in case of non-compliance with commitments. Others champion stronger European action in counteracting economic cycles, building common institutions and addressing future crises. While a mix of both approaches is called for, it is essential to move quickly. Indeed, the systemic weaknesses have been masked by the ECB's heterodox policy, which will have to come to an end over the next couple of years. This is exactly the time available for European leaders to make the Euro area one of shared prosperity.

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The Spanish banks in a European context: From transition to recovery

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

Spanish banks have taken advantage of the crisis to implement measures, which now appear to have given them some relative advantages with respect to many of their European peers. Despite a seemingly more benign outlook going into 2017, major challenges remain on the international scene for both the Spanish and eurozone banks.

Spain's banks appear to have more reason for optimism in 2017 than they did in 2016 – a year marked by uncertainty and market jitters since its onset. The scrutiny of the European and international institutions and the efforts made by the sector itself appear to have translated into a significant improvement in the robustness and earnings prospects of the Spanish banks, which are nevertheless still making adjustments, significant in some cases, in a market environment that still cannot be described as risk-free. Relative to the eurozone as a whole, the Spanish banks continue their 'deleveraging' effort in an attempt to match supply with the new demand paradigm. However, the prospects for credit are improving little by little. Spanish banks also appear to present a relative advantage in terms of their cost-to-income ratios and income-generating capabilities. Two-thirds of the gross operating income generated by the banks in the single currency area are gobbled up by their administrative and wage costs, compared to just half in Spain. Finally, the Spanish banks' Tier 1 capital ratio rose from 11.87% to 14.96% between 2010 and 2016 – somewhat below the eurozone average, but comfortably above regulatory requirements and demonstrating reinforced transparency. Going forward, both Spanish and eurozone banks face a challenging international context, mainly due to uncertainty surrounding Brexit implementation, potential spillover effects from US financial deregulation, and the upcoming stress test exercise.

The backdrop: Earnings at the Spanish banks, outside scrutiny and ratings actions

So far, 2017 has not been free from uncertainty for the European banks, although the markets have not been as convulsive or volatile as in 2016. Monetary conditions remain exceptional, with the ECB expected to continue to provide abundant liquidity and real rates still in negative territory.

Doubts about the health of the Italian banks linger. The solution offered to date for the bailout

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of Monte dei Paschi di Siena is incomplete and unlikely to address three problems: (i) tainted sector credibility given the persistent lack of transparency; (ii) correct application of the mechanisms contemplated by the single supervisor, given that the situation has been defined as a bailout and not a 'bail-in' (in which shareholders and bondholders would assume part of the costs); and, (iii) non-performance across the Italian banking industry as a whole. Although the Italian authorities have offered up to 20 billion euros of contingent aid for the country's banks presenting solvency issues, an exhaustive analysis of the banks' assets is still lacking.

In the midst of the doubts about the Italian banks, the ECB itself has made statements suggesting that it might be a good idea to create a pan-European asset management company (a so-called bad bank) to provide a faster exit route for the impaired assets still in the hands of the eurozone's banks. This avenue would offer an additional solution for the Italian banks and those of other countries, potentially even complementing the bad banks already set up in some instances. Whatever happens, the transparency-related problems have yet to be definitively resolved.

As for Spain, the banks have just wrapped up reporting their 2016 results. The six largest Spanish banks – Santander, BBVA, CaixaBank, Bankia, Popular and Sabadell – posted aggregate net profit of 8.76 billion euros, marking a drop of

Stripping out the loss recognized by Banco Popular last year would have a considerable effect on last year's overall performance by Spanish banks – profits would have risen by 8.5% rather than having dropped.

22.3% from 2015. The loss recognised by Banco Popular (3.49 billion euros) had a considerable effect on the overall performance. Stripping Popular out, sector profits would have risen by 8.5%.

In the middle of earnings season, the European Commission (EC) published an important report (on February 22nd) titled *Country Report Spain 2017 – Including an In-Depth Review on the prevention and correction of macroeconomic imbalances* (Brussels, 22.2.2017 SWD [2017] 74 final). Although the document broadly addresses the full spectrum of macroeconomic policies and the recent performance of the Spanish economy, it also assesses financial aspects of considerable interest.

Specifically, in this working document, the EC affirms that the "financial sector has continued to show a high degree of stability, supported by its ongoing restructuring, low funding costs and the economic recovery." In reference to the banking sector, it notes that it has "further strengthened its capital buffers and all six Spanish banking groups that were subject to the EBA stress tests of July 2016 comfortably met capital requirements under this exercise."

The EC maintains that the non-performing loan ratio will continue to trend in the right direction, noting that the "aggregate non-performing loan ratio fell to just above 9% in November 2016. As elsewhere in Europe, squeezed profitability, against the background of low interest rates and remaining scope to further improve the sector's business model, is the main challenge."

Although the outstanding volume of credit in Spain is still falling, consensus points to a reversion of this trend in 2017, as there are already signs of recovery in SME and consumer credit.

In sync with the outlook which most economists continue to express, the report notes that although the outstanding volume of credit is still falling, this trend may well revert in 2017; indeed bank lending to small and medium-sized enterprises is already registering considerable growth. There are also signs of some recovery in consumer credit.

The report also underlines the solvency of the Spanish banks, observing that the system "has ample access to liquidity and can comfortably meet the regulatory capital requirements. Solvency levels are resilient to a stress scenario, strengthened."

Taking a longer-term perspective, although the authors applaud the private sector's deleveraging efforts, they also indicate that "the indebtedness of the Spanish economy remains high, with the stock of private non-financial sector debt amounting to 167.5% of GDP in Q3-2016. Mirroring the net external liabilities, the high level of debt remains a macroeconomic imbalance, the associated financial burden constraining domestic demand and increasing vulnerability to interest rate shocks."

Elsewhere, in terms of the environment facing the Spanish banks, it is also worth highlighting the fact that certain court decisions are among the factors exerting downward pressure on profitability. On December 21st, 2016, the EU Court of Justice ruled that the outlawing of the so-called mortgage 'floors' in Spain in May 2013 should have full retroactive effect. Although a good deal of the potential impact had been provisioned for by the banks as a reasonably probable legal risk, the ruling had the effect of reducing the profits reported by a considerable number of banks in 2016. On January 20th, 2017, the Spanish government approved a free, voluntary and expedited out-of-court settlement procedure for dealing with demands for reimbursement in connection with the mortgage floors. Note that a sizeable number of financial institutions consider that the eventualities contemplated in the ruling do not affect some or all of their existing mortgage agreements.

In terms of the sector's improving reputation, it is worth noting that on February 9th, Standard & Poor's (S&P) upgraded Bankia's issuer rating from BB+ to BBB-, restoring this entity to investment grade status. S&P left its ratings outlook at stable. This ratings agency also lifted the ratings of Bankinter (from BB+ to BBB-), Ibercaja (from BB to BB+) and Abanca (from B+ to BB-) by one notch, leaving them all on watch positive. It also put its issuer ratings for Santander, CaixaBank, Kutxabank, Cecabank and Caja Laboral on watch positive. On the other hand, Fitch downgraded Banco Popular from BB- to B+ on February 15th.

In parallel and in this same arena, Spain's House of Deputies and the Bank of Spain have been scrambling to take transparency measures in the midst of intense controversy concerning their preventative and supervisory actions before and during the financial crisis in Spain. Both institutions have announced they will compile reports analysing these matters in detail.

Situation relative to the eurozone

Several qualitative aspects of what sets the Spanish banks apart from their European peers have been analysed in detail in prior editions of the *Spanish Economic and Financial Outlook*. Specifically, the following three aspects:

- A unique effort to step up transparency (beyond the usual regulatory requirements) in a bid to dispel doubts about the quality of their assets.
- A deeper restructuring effort which has driven a bigger adjustment in supply and demand for retail banking services in Spain; this effort, moreover, remains intense.
- Application of a broad package of requirements as a result of the financial aid provided by the EU, notable among which the assumption of bail-in mechanisms, even though: a) at the time the Single Resolution Mechanism had yet to be set in motion; and, b) these mechanisms have not been applied in Italy despite being effective since January 2016.

That being said, Spain continues to display certain tendencies that are evolving in line with those unfolding in the rest of the eurozone. The most recently updated figures in the European Central Bank's Statistical Data Warehouse enable a comparison of the Spanish banks relative to the eurozone average as of September 2016. The first thing that jumps out is the deleveraging process: total banks assets have been contracting sharply since 2015 (Exhibit 1) and although there was a brief let-up towards the end of 2016, there are few signs of a recovery that would suggest that the size of the eurozone banking sector will increase any time soon.

Total bank assets have been contracting and although there was a brief let-up towards the end of 2016, there are few signs of a recovery that would suggest that the size of the eurozone banking sector will increase any time soon.

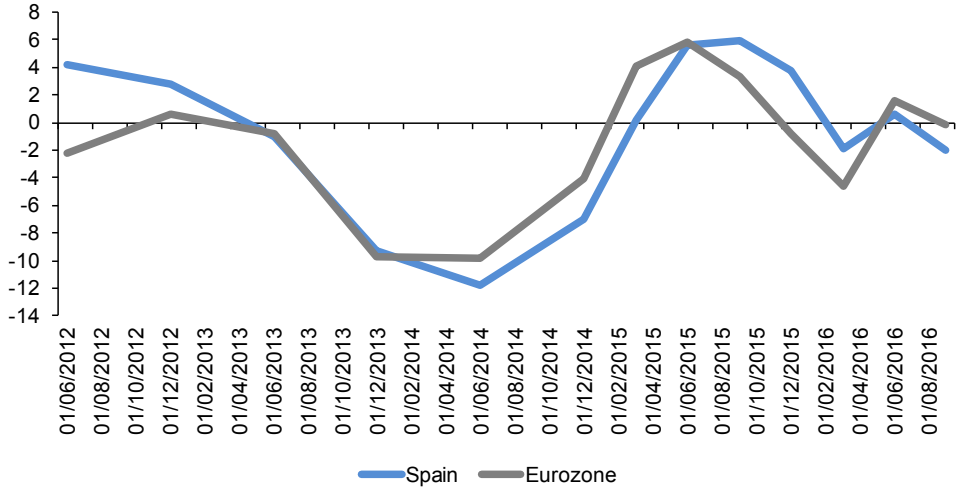
This contraction in overall assets is evident in the credit balance, which, as noted above, began to recover in 2015 before going on to fall once again in the face of market uncertainty throughout 2016. As shown in Exhibit 2, the quarter-on-quarter rate of change was negative in 2016 and there are no signs of a significant turnaround. The proliferation of elections and the associated uncertainty is partly responsible for containment of the growth in credit. On top of this, the banks face regulatory pressure and reduced demand for financing at a time when indebtedness remains high. Nevertheless, the outlook for 2017 is brighter.

As for the business side of things, the negative rate environment is the key obstacle in the way of the European banking industry's path back to profitability. This challenge relates not only to the generation of interest margin but also to matters less widely discussed such as the technical challenge of designing contracts when rates are negative or the outlook for demand when the cost of money is shaped by the central bank's actions rather than reflecting the real risk of potential

Exhibit 1

Bank deleveraging

(YoY % change in total assets)

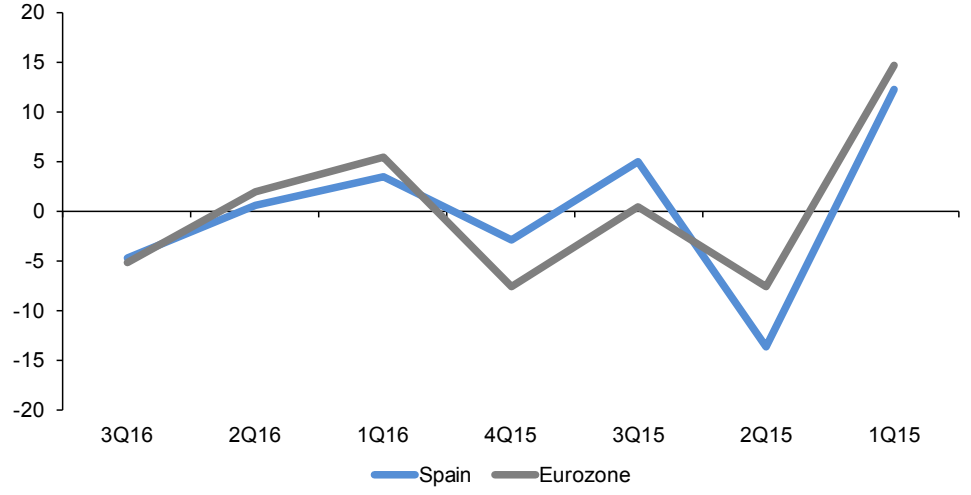


Source: European Central Bank and authors.

Exhibit 2

Bank credit

(QoQ % change)

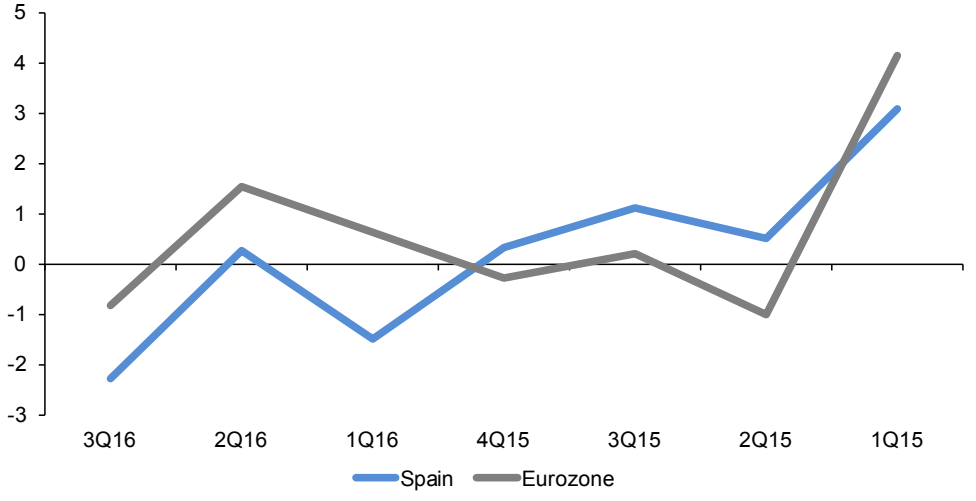


Source: European Central Bank and authors.

Exhibit 3

Private-sector deposits

(QoQ rate of change)

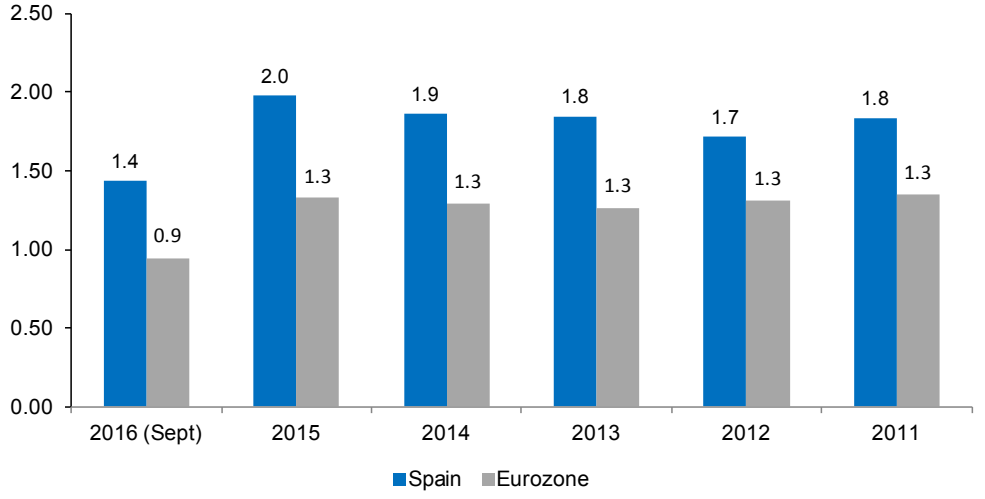


Source: European Central Bank and authors.

borrowers. All of which framed by the widespread public perception, albeit somewhat biased, that the current rates favour the banks but not households. However, the majority of households and companies have been able to repay their debts with significantly greater ease in the current

Exhibit 4

Net interest income/total assets
(Percentage)



Source: European Central Bank and authors.

environment of negative real rates. For the banks, however, it is more challenging to apply the risk premium needed to get credit flowing more decisively. As shown in Exhibit 4, net interest income as a percentage of total assets held steady between 2011 and 2014 (averaging 1.8% in Spain and 1.3% in the eurozone) but fell substantially in 2016.

One of the aspects on which the Spanish banks started out with a competitive advantage relative to the eurozone was efficiency. Given that sector restructuring has been relatively more intense in Spain, it is not surprising that the sector has maintained its edge in this respect. The cost-to-income ratio (operating expenses/gross operating income) presented in Exhibit 5 reveals a figure of 51.8% for the Spanish banks compared to a eurozone average of 64.4%. This means that two-thirds of the gross operating income generated by the banks in the single currency area are gobbled up by their administrative and wage costs, compared to just half in Spain.

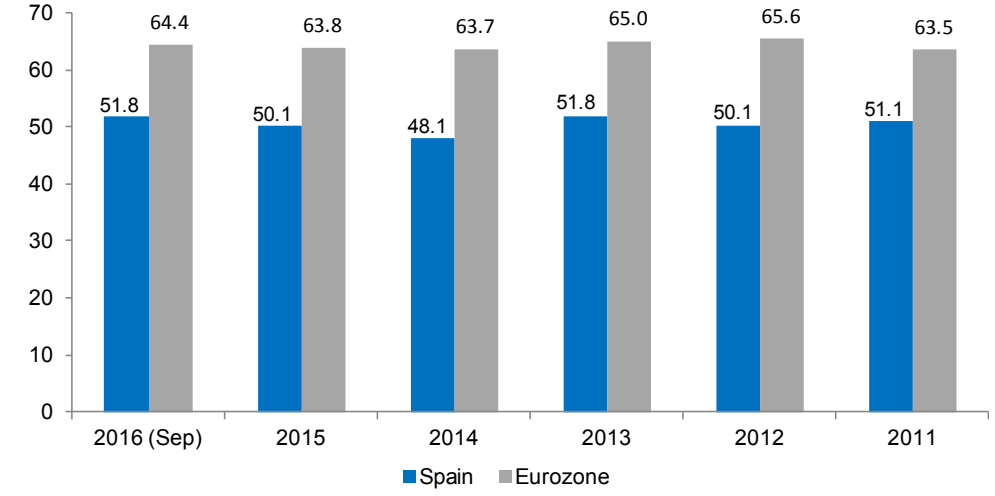
Where the Spanish banking sector continues to evidence the higher indebtedness of the private sector relative to the European average is on the

While eurozone banks have somewhat of an edge over Spanish banks as regards solvency ratios, an appropriate level of transparency regarding asset quality is just as important as having a high capital ratio, if not more so.

'loan-to-deposit' ratio (Exhibit 6). This simple ratio provides an approximation of how much of the credit awarded has been backed up by the banks' main source of liquidity: Deposits. In Spain, despite the cumulative drop in outstanding credit, the loan-to-deposit ratio stood at 94.2% in September 2016, having risen from 90.9% in 2014. However, the eurozone has continued in the opposite direction, with the average falling from 102.2% in 2014 to 100.7% by September 2016.

Exhibit 5

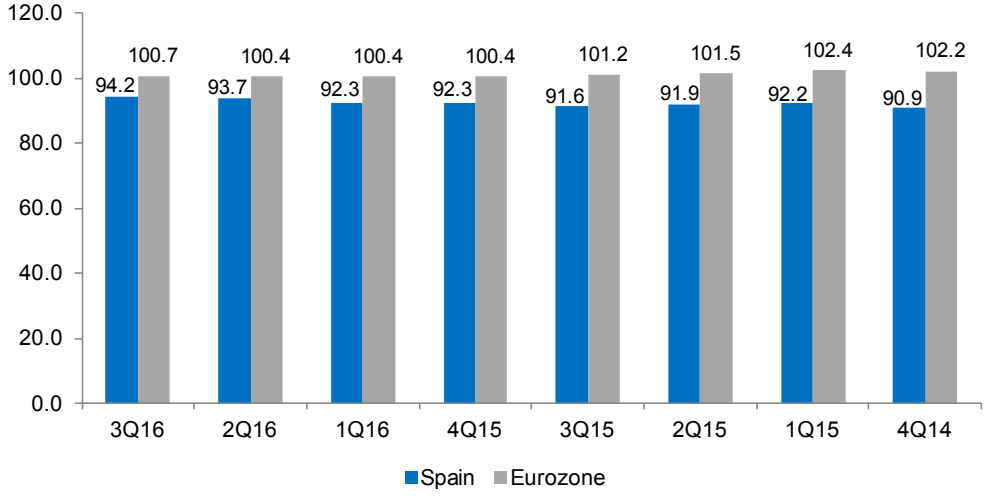
Cost-to-income ratio (operating expenses as a % of gross operating income)
(Percentage)



Source: European Central Bank and authors.

Exhibit 6

Loan-to-deposit ratio
(Percentage)



Source: European Central Bank and authors.

Another aspect to have contributed meaningfully to renewed confidence is the observed increase in capital adequacy ratios. The Spanish banks' Tier 1 ratio increased from 11.87% to 14.96% between 2010 and 2016 (Exhibit 7). The eurozone continues to have somewhat of an edge in this respect, presenting an average Tier 1 ratio of 17.08% in 2016. Nevertheless, and continuing the thread of the analysis performed in the last section, an appropriate level of transparency regarding asset quality is just as important as having a high capital ratio, if not more so.

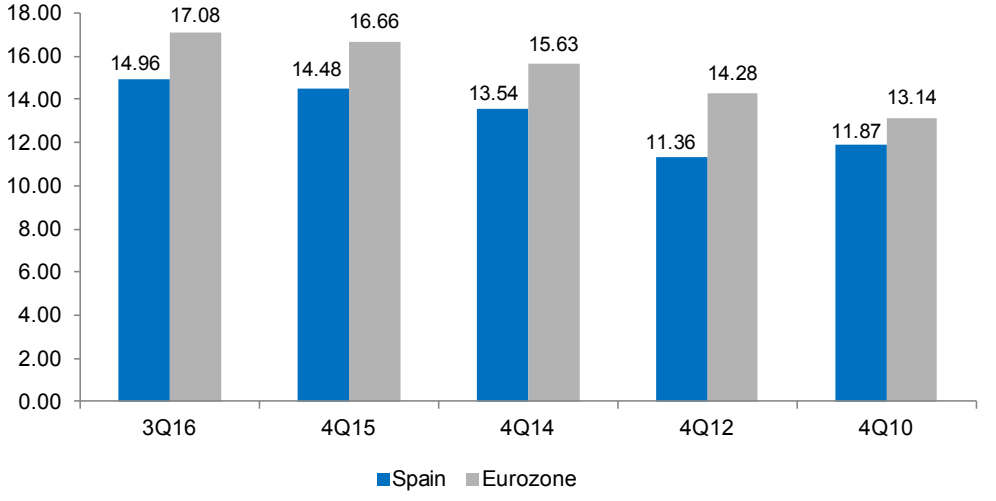
Challenges in 2017

Even though the markets appear to be a little firmer, 2017 is not free from risks for the Spanish banks or their European peers. By way of conclusion, here we summarise three of the major international challenges looming and their potential impact on the Spanish and eurozone banks:

- One of the most controversial: Brexit. The triggering of this process in March 2017 is particularly important for the Spanish financial institutions on account of their exposure to the UK market. In fact, as illustrated in Exhibit 8, the Spanish banks were the only institutions among the major European countries to increase their exposure to the UK in the year prior to the referendum of June 23rd, 2016. Specifically, by 21.97 billion euros. This increase, however, should be viewed against the backdrop of the Spanish banks' relative presence in the British market and their recent acquisitions. Moreover, as outlined in the last edition of SEFO, the risk of changes in the regulatory environment governing Spanish banks operating in the UK market do not appear excessive, although it is too soon to calibrate these changes.

- Financial deregulation pressure stateside: although this issue is still on his 'wish list' and lacks concrete form, President Trump

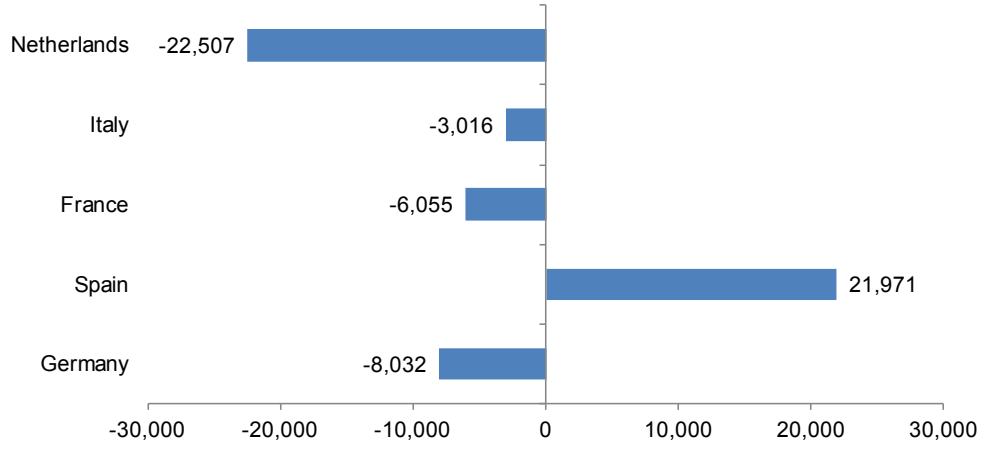
Exhibit 7
Tier 1 ratios
(Percentage)



Source: European Central Bank and authors.

Exhibit 8

Investment in the UK by European banks during the year prior to the Brexit referendum
(€ million)



Source: Bank for International Settlements and authors.

has suggested that the regulations brought in under the Dodd-Frank Act are excessive and inappropriate and should be largely rolled back. If he were to do this, dismantling much of this legislation without introducing sufficient counterbalances, it could turn out to be an error of gigantic proportions for two reasons. Firstly, because it could lead to the assumption of inadequate risk by the US and a proliferation of 'shadow banking' activities. And secondly, because it would seriously damage already-tenuous international financial coordination, an effort which at least has found a certain amount of common ground and success on certain aspects, such as capital adequacy. This loss of coordination could catch the eurozone off-guard at a particularly delicate time given the evident fragility of the banking union's financial architecture in the face of the Italian banking crisis.

- Lack of transparency benchmarks: The European Banking Authority faces a major challenge in 2017. This year there will be just one transparency exercise in the banking sector, while the next stress tests have been put off until 2018. The Italian banking crisis and lingering questions about certain institutions suggest that this transparency exercise could go in either direction. It could turn out well if sufficiently stringent and robust. But it could also turn out badly if, as until now, it overlooks important risks that end up materialising in the form of fresh episodes of bank stress, as happened with Monte dei Paschi di Siena. For the Spanish banks, this transparency exercise may prove the definitive opportunity for showing that the market is correctly assessing relative risk factors.

European banking models: Adapting to a new, complex operating environment

Joaquín Maudos[1]

The post-crisis environment of falling interest rates, deleveraging, regulatory requirements and increased competition has forced banks to adapt their business models to maintain profitability. Against this backdrop, in Spain as well as the rest of the euro area, the structure of banks' balance sheets has changed, with the relative weight of non-interest sources of income increasing.

A new operating reality for European banks has forced change in the composition of both their banking activity and their income structure. Empirical evidence demonstrates how Spanish banks have adapted their business models in response to these changes relative to their euro area peers. In Spain, the retail banking model continues to dominate, although overall lending to the private sector fell largely due to deleveraging by non-financial corporations. Also, it is worth noting how the weight of sovereign debt on Spanish banks' balance sheets has tripled, making it one of the countries with the fastest growth in sovereign debt holdings by banks within the euro area. Finally, both in Spain and the euro area, the decline in interest income and the slowdown in lending growth have undermined banks' profits and obliged them to seek out non-interest bearing revenue streams, particularly by increasing fee income generating activities.

The recent financial crisis and the measures that have been taken to combat it have affected banks' activity and their business models. The crisis has forced the private sector to undergo a deleveraging process with negative knock-on effects for banks' activities, changing the composition of their balance sheets. The toughening up of banking regulation (including higher capital requirements, liquidity coverage ratios, a leverage ratio and loss absorbing capacity requirements) has also affected the structure of balance sheets, both on the liability (with a growing weight of own resources) and asset (discouraging activities which consume more capital) side. Furthermore, difficulties in accessing wholesale funding markets have led to an increase in the weight of more stable funding (deposits), altering banks' funding structures. Finally, the excessive liquidity gap which many banks accumulated during the boom years, gave way to a period of sharply declining bank lending, which was necessary to bring down the excessive loan-to-deposit ratio.

In the European banking sector, the measures adopted by the ECB have also affected the

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composition of banks' balance sheets, both through offering copious amounts of funding at a reduced cost (or even zero), as well as through assets purchase programmes. Part of the funding that was initially awarded did not bring about increased lending to the private sector but instead was used for purchases of sovereign debt. In addition, the continued downward reduction in interest rates, reaching negative rates in some parts of the yield curve, has negatively affected net interest income, obliging banks to seek more profitable activities as an alternative to interest income.

All of these factors have had an impact on European banks' business models, with changes both in the composition of balance sheets, as well as in the income statement, illustrated by variations in the relative weight of different sources of income. Thus, the decline in net interest income and slower lending growth have undermined profits, requiring banks to seek out non-interest bearing revenue streams (such as bank fees and commissions).

Against this backdrop, the objective of this article is to analyse the changes in the business model of European banks, focusing on the Spanish banking sector in comparison to both the eurozone average and the main banking sectors (Germany, France and Italy). Aggregate balance sheets for the Monetary Financial Institutions of eurozone economies provided by the ECB have been used for this exercise, with structural changes being analysed over the period 2007-2016. Business model changes are also apparent in the revenue structure, which is analysed using ECB data for consolidated banking groups.

The article is structured as follows: The next section analyses the differences in specialisation of the Spanish banking sector in comparison with the eurozone average and the changes that have taken place from 2007 to 2016. The following section extends the comparison to the main European banking sectors (Germany, France and Italy) with the aim of identifying different types of business models and the changes that have taken place. The subsequent section focuses on analysing differences in the income structures of the euro area banking sector and the changes that took place during the crisis years. Finally, the article set outs the main conclusions.

Business models in the European banking sector: Recent changes

In the eurozone, and within Member States, financial institutions operate using different business models. However, at the aggregate country level, a specific type of banking specialisation tends to dominate in each banking sector.[2] This can be observed from the structure of the balance sheet in each sector. In general, there are two main types of models: retail banking, characterised by a high proportion of loans and deposits and, therefore, of net interest income in total income; and investment banking, where service provision is the main source of revenue as opposed to interest income. In between both extremes, various groups of specialisation or business models can be found. For example, a recent ECB (2016a) analysis identifies up to seven groups using cluster techniques: medium-sized universal banks, small deposit-taking banks, specialised lenders with high market based-funding, large universal banks, medium-size universal banks, large international banking groups and investment banks.

The Spanish banking sector has a clear retail focus, as can be seen in the 2016 data set out in Table 1. Loans to the private sector account for 47% of assets (12.4 percentage points – pp – above the eurozone average) and private sector

[2] Through a cluster analysis Ayadi *et al.* (2016) identify up to five different types of European banking model (f*ocused retail, diversified retail 1, diversified retail 2, wholesale and investment*). According to their analysis, retail banks dominate in Spain (around 90% of total business) with market-based and investment banking having a very limited role (around 10%).

deposits represent 53.2% of total liabilities (15.2 pp more than the euro area).

The Spanish banking sector has a clear retail focus – loans to the private sector account for 47% of assets (12.4 pp above the eurozone average) and private sector deposits represent 53.2% of total liabilities (15.2 pp more than the euro area).

In terms of lending to the domestic economy, Spain also stands out for the higher weight of lending for house purchase, which accounts for 19.7% of total assets, compared to 13% in the euro area. Lending to non-financial corporations also represents a larger share in Spain (18.7% *vs.* 13.8%). This is a reflection of the proliferation of SMEs in our economy, which are highly dependent on bank financing.

Both sight (29.2% of total assets in Spain, compared to 19.1% in the euro area) and time deposits (22.4% *vs.* 10.8%) are much more important sources of funding for Spanish banks than debt funding, which has a lower weight in Spanish banks' liabilities (7.6% *vs.* 12.1%). The Spanish banking sector is also relatively better capitalised. The ratio of own resources/assets stood at 11% in 2016 compared to 8% in the euro area.

The focus in this article is on the changes that have taken place in the business model of the Spanish banking sector within a wider European context since the start of the crisis, comparing the structure of the balance sheet in 2007 and 2016. The following messages emerge from this comparison:

- The deleveraging process in the Spanish economy is the main factor behind the 12.3 pp decline in the weight of private sector lending in total assets from 59.2% to 47%. Deleveraging has led to a 482 billion euros reduction in (mainly bank) debt between 2007 and 2016, or the equivalent of a 21% fall. The decline is primarily focussed in lending to non-financial corporations (whose weight in the balance sheet has fallen by 11.5 pp from 30.2% to 18.7%), given that lending to households only declined by 2.2 pp. These movements are in sharp contrast to the euro area banking sector, where lending to non-financial corporations fell 1.1 ppts, while lending to households rose 1.1pp. As a result, the difference between Spain and the euro area in terms of the weight of lending to the private sector on the balance sheet has narrowed by 12.4 pp to 2016.

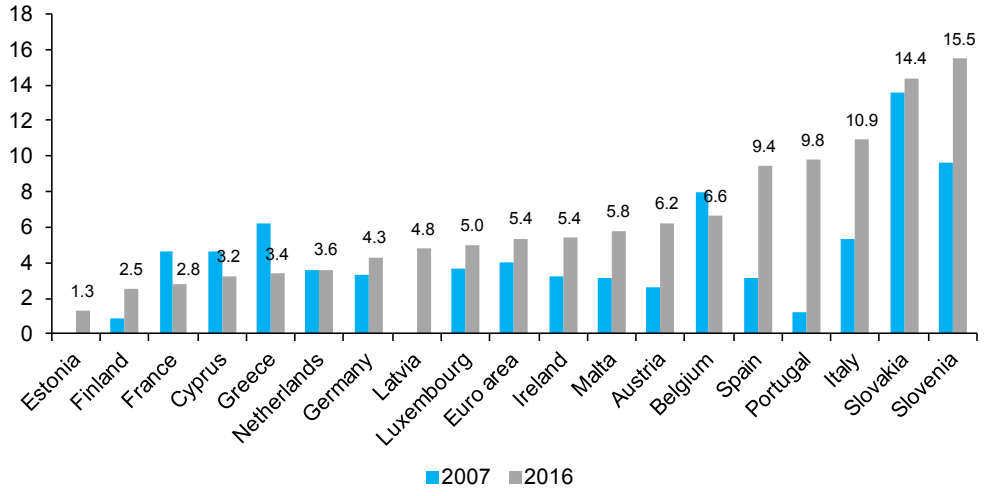
- Another noteworthy change in Spanish banks' assets is the increase in the weight of investment in debt instruments, which have almost doubled their share in the balance sheet from 9.8% in 2007 to 17.5%. The increase in holdings of public debt is behind this growth, with Spanish banks' sovereign debt holdings registering a threefold increase over the period to reach 9.4% in 2016. As can be seen in Exhibit 1, Spain comes second only to Portugal in terms of the increase in public debt in total bank assets registered from 2007 to 2016 (6.3 pp *vs.* 8.5 pp in Portuguese banks). Exhibit 1 also reveals that the Spanish banking sector has the fifth largest proportion of public debt in total assets amongst eurozone economies, after Slovenia, Slovakia, Italy, and Portugal.

Spain comes second only to Portugal in terms of the increase in public debt in total bank assets registered from 2007 to 2016.

- On the liability side, private sector deposits have increased their weight in the balance sheet by 4.5 pp from 2007 to 2016. Taking into account the decline in lending, the Spanish banking sector's liquidity gap has improved significantly from a positive loan-deposit gap of 240 billion euros in 2007 to a negative difference of 170 billion euros in 2016. In other words, in 2007 for

Exhibit 1

Weight of public debt in total assets of MFIs of euro area countries
(Percentage)



Source: ECB.

every Euro in private sector deposits, Spanish banks were providing 1.15 euros' worth of credit. In 2016, the ratio stood at 0.88, which is below the 0.91 for the euro area as a whole.

- Sight deposits have gained particular momentum in Spain, increasing their weight in the balance sheet by 13.1 pp to 29.2%, well above the 19.1% they represent in the euro area banking sector. Meanwhile, the relative weight of time deposits has fallen (to 22.4%), though still remaining twice as important as in the euro area (10.8%). The decline in interest rates on time deposits towards close to zero explains both the lower weight of this type of deposit in the balance sheet as well as the increase in current accounts.

- Another important feature of Spanish banks' liabilities is the loss of weight of funding through debt issuance, which has declined from 14.1% of assets in 2007 to nearly half (7.6%) in 2016. The decline has been much more pronounced than in the European banking sector, with the weight of market-based funding in Spain 4.6 pp lower than the euro area average.

- Finally, the increased regulatory demands imposed by Basel III explain why own resources have increased their share over total assets, rising from 6.9% in 2007 to 11% in 2016 in Spain. The increase is smaller in the eurozone and in 2016 the overall capital ratio of the Spanish banking sector was 3 pp above the European average, although the solvency coefficient is lower. The latter implies that the proportion of risk-weighted assets (RWAs) in total assets is larger in Spain, reflecting a more demanding treatment. This is a point that should be very much kept in mind when making international comparisons of bank solvency.

Exhibit 2 provides a graphical summary of the specialisation of the Spanish banking sector in comparison to the euro area average, as well as of the changes from 2007 to 2016. The exhibit organises the data from smaller to larger differences (in percentage points) between Spain and the euro area in terms of the weight of each

Table 1

Balance sheets of the euro area Monetary Financial Institutions. Spain and euro area
(Percentages)

	2007			2016			2016-2007	
1. ASSETS	Spain	Euro area	Spain-Euro area	Spain	Euro area	Spain-Euro area	Spain	Euro area
1.1. Loans to euro area residents	72.7	57.3	15.4	60.0	56.7	3.4	-12.6	-0.6
1.1.1. Monetary financial institutions	12.0	19.7	-7.7	9.8	18.6	-8.8	-2.2	-1.1
1.1.2. General government	1.4	3.3	-1.8	3.3	3.5	-0.2	1.8	0.2
1.1.3. Other euro area residents	59.2	34.4	24.9	47.0	34.6	12.4	-12.3	0.2
1.1.3.1. Non-financial corporations	30.2	14.8	15.4	18.7	13.8	4.9	-11.5	-1.1
1.1.3.2. Households	28.1	16.3	11.8	25.9	17.4	8.5	-2.2	1.1
1.1.3.2.1. Consumer credit	3.4	2.1	1.3	2.5	2.0	0.6	-0.9	-0.1
1.1.3.2.2. Lending for house purchase	20.8	11.6	9.2	19.7	13.0	6.7	-1.1	1.4
1.1.3.2.3. Other lending	3.8	2.5	1.2	3.6	2.4	1.2	-0.2	-0.1
1.1.3.3. Non-monetary financial intermediaries other than insurance corporations and pension funds	0.8	2.9	-2.1	2.0	3.1	-1.1	1.2	0.2
1.1.3.4. Insurance corporations and pension funds	0.1	0.3	-0.2	0.4	0.3	0.0	0.2	0.0
1.2. Holdings of securities other than shares issued by euro area residents	9.8	13.4	-3.6	17.5	13.1	4.3	7.6	-0.3
1.2.1. Monetary financial institutions	1.7	5.9	-4.2	0.7	3.9	-3.1	-1.0	-2.0
1.2.1.1. Up to 1 year	0.3	1.3	-1.0	0.1	0.8	-0.7	-0.1	-0.5
1.2.1.2. Over 1 year and up to 2 years	0.2	0.5	-0.3	0.1	0.1	-0.1	-0.1	-0.3
1.2.1.3. Over 2 years	1.3	4.1	-2.9	0.6	2.9	-2.3	-0.7	-1.3
1.2.2. General government	3.1	4.0	-0.9	9.4	5.4	4.1	6.3	1.3
1.2.3. Other euro area residents	5.0	3.4	1.5	7.3	3.9	3.4	2.4	0.5
1.3. Money market fund shares/units	0.0	0.3	-0.3	0.0	0.2	-0.2	0.0	-0.1
1.4. Holdings of shares/other equity issued by euro area residents	4.5	4.4	0.1	4.2	3.8	0.4	-0.3	-0.6
1.4.1. Monetary financial institutions	0.6	1.4	-0.8	0.7	1.3	-0.5	0.1	-0.1
1.4.2. Other euro area residents	3.9	3.0	0.9	3.5	2.5	1.0	-0.4	-0.5
1.5. External assets	6.6	16.5	-9.9	6.9	13.9	-7.0	0.3	-2.6
1.6. Fixed assets	1.0	0.7	0.3	1.6	0.6	1.0	0.6	-0.1
1.7. Remaining assets	5.3	7.4	-2.1	9.7	11.6	-1.9	4.4	4.2
1.8. Total	100.0	100.0	0.0	100.0	100.0	0.0	0.0	0.0

Table 1 (continued)

Balance sheets of the euro area Monetary Financial Institutions. Spain and euro area (Percentages)

	2007			2016			2016-2007	
2. LIABILITIES	Spain	Euro area	Spain-Euro area	Spain	Euro area	Spain-Euro area	Spain	Euro area
2.1. Currency in circulation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.2. Deposits of euro area residents	65.1	51.3	13.8	69.1	54.8	14.3	4.0	3.5
2.2.1. Monetary financial institutions	15.5	20.6	-5.1	15.4	16.4	-1.0	-0.1	-4.2
2.2.2. Central government	0.9	0.4	0.5	0.5	0.4	0.1	-0.4	0.0
2.2.3. Other general government/other euro area residents	48.7	30.3	18.4	53.2	38.0	15.2	4.5	7.7
2.2.3.1. Overnight	16.1	10.7	5.5	29.2	19.1	10.2	13.1	8.4
2.2.3.2. With agreed maturity	29.6	13.1	16.5	22.4	10.8	11.5	-7.2	-2.3
2.2.3.2.1. Up to 1 year	11.0	6.1	4.9	7.4	3.1	4.2	-3.6	-2.9
2.2.3.2.2. Over 1 year and up to 2 years	1.8	0.7	1.1	4.7	1.0	3.7	3.0	0.3
2.2.3.2.3. Over 2 years	16.9	6.4	10.5	10.3	6.7	3.6	-6.6	0.3
2.2.3.3. Redeemable at notice	0.0	5.5	-5.5	0.0	7.2	-7.2	0.0	1.7
2.2.3.3.1. Up to 3 months	0.0	5.1	-5.1	0.0	7.0	-7.0	0.0	1.9
2.2.3.3.2. Over 3 months	0.0	0.4	-0.4	0.0	0.2	-0.2	0.0	-0.2
2.2.3.4. Repurchase agreements	2.9	1.0	2.0	1.6	0.9	0.7	-1.3	-0.1
2.3. Money market fund shares/units	0.0	2.6	-2.6	0.4	1.8	-1.5	0.4	-0.7
2.4. Debt securities issued	14.1	15.7	-1.6	7.6	12.1	-4.6	-6.5	-3.5
2.4.1. Up to 1 year	3.1	2.0	1.1	0.7	1.0	-0.3	-2.5	-1.0
2.4.2. Over 1 year and up to 2 years	0.7	0.8	-0.1	0.3	0.3	0.1	-0.3	-0.5
2.4.3. Over 2 years	10.3	12.9	-2.5	6.6	10.9	-4.3	-3.7	-2.0
2.5. Capital and reserves	6.9	5.7	1.2	11.0	8.0	3.0	4.1	2.3
2.6. External liabilities	7.1	15.4	-8.3	4.1	11.9	-7.8	-3.0	-3.5
2.7. Remaining liabilities	6.8	9.3	-2.5	7.8	11.3	-3.5	1.0	2.0
2.8. Total	100.0	100.0	0.0	100.0	100.0	0.0	0.0	0.0

Source: ECB.

asset and liability heading in the total balance sheet. The right of the exhibit shows business areas where Spanish banks are most specialised and vice-versa.

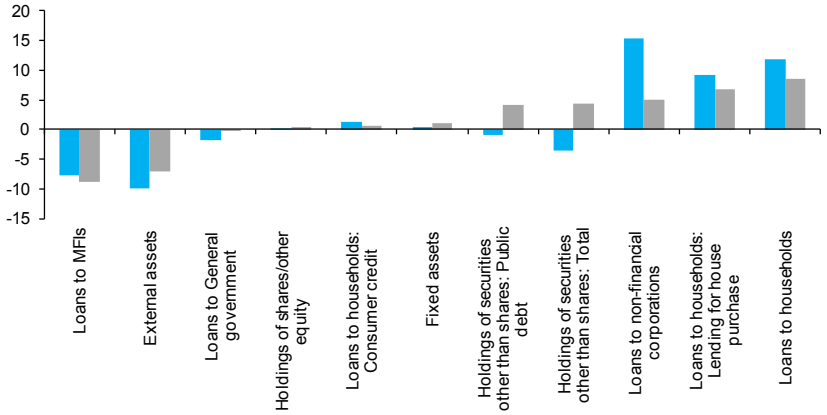
The latest data to 2016 show that the biggest differences lie in the relative weight of lending to the private sector, both to households for house purchases and to non-financial corporations, as well as in the overall importance of both sight and time deposits.

Meanwhile, the European banking sector is more focused in the interbank market and in external activity (non-euro assets), as well as debt funding through wholesale markets.

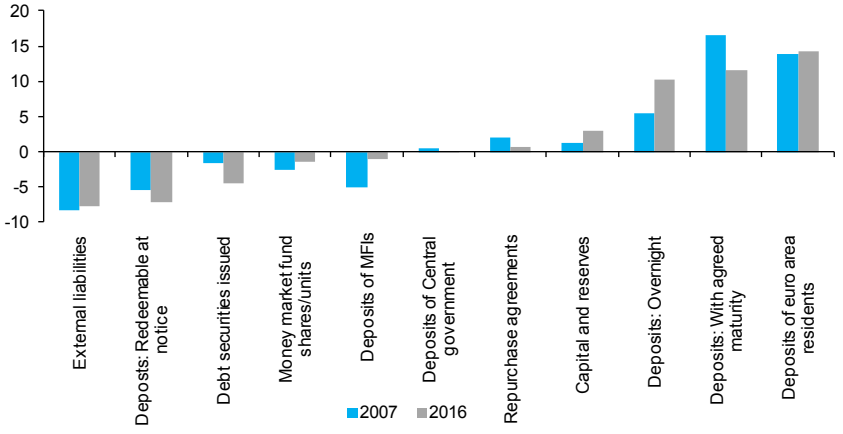
Exhibit 2

Difference in percentage points between Spain and euro area in the weight of each item in total assets

a) Assets



b) Liabilities



Source: ECB.

One of the most noteworthy changes between 2007 and 2016 is the decline in the weight of lending to non-financial corporations in Spain, as a result of the deleveraging process. Also of note is the growing weight of fixed income investment, which has gone from having a lower relative weight in total assets than the European average in 2007 to being nearly 4.3 pp above in 2016. On the liability side, the increased weight of sight deposits in Spain and the declining importance of interbank funding are the main highlights.

One of the most noteworthy changes between 2007 and 2016 is the decline in the weight of lending to non-financial corporations in Spain, as a result of the deleveraging process.

Differences in the specialisation of the large European banking sectors

Various different types of business models coexist in the European banking sector, as reflected in the

different balance sheet structures. As regards the main euro area economies, the Spanish banking sector stands out for the high proportion of private sector lending and deposits, which is the defining characteristic of a retail banking model. Thus, lending to the private sector in Spain in 2016 accounts for 47% of total assets, compared to 34.3% in Germany, 27.8% in France and 42.1% in Italy. The same is true for deposits, with a weight of 53.2% in Spanish banks' total liabilities, compared to 43.7% in Germany, 27.1% in France and 43.1% in Italy.

Non-interbank deposits have increased their weight in the balance sheet between 2007 and 2016 in all four economies, albeit with Spanish banks registering the smallest increase and Italian banks leading the pack with a 12.4 ppt increase. By contrast, the weight of lending to the private sector in total assets has increased in Germany and France (2.5 pp and 2.3 pp respectively) but has fallen by 1.4 pp in Italy, with Spain registering by far the largest decline (12.3 pp). It is worth remembering that in the boom years leading up to 2007, Spain was an outlier in Europe due to the strong growth in lending associated with the real estate bubble. As such it is logical that the subsequent correction has been much more pronounced.

Another feature of the Spanish banking sector compared to the main European economies is the much higher degree of specialisation in the mortgage market. The weight of lending for house purchase accounted for 19.7% of total assets in Spain in 2016, compared to 14.4% in Germany, 11.1% in France and 9.4% in Italy. By contrast, the weight of lending to non-financial corporations in total assets is higher in Italy (20%) than in Spain (18.7%). The high ratio of non-performing business loans in Italy, together with the significant weight of lending to this segment on the balance sheet, help to explain some of the current problems facing the Italian banking sector.

A difference that can also be seen is the weight of sovereign debt in the balance sheets of French and Germany banks compared to Spanish and Italian banks. Thus while in the case of the former two countries the weight of sovereign debt has fallen (in the case of France) or barely changed (Germany), public sector debt holdings have significantly increased in the second group –doubling in Italy and tripling in Spain. Italian banks have the highest weight of public debt (10.9% of total assets) in 2016, closely followed by Spain (9.4%). By contrast, sovereign debt accounts for just 2.8% of French banks' assets and 4.3% in the case of German banks. The hefty difference between the two groups of countries helps explain why German is calling for a change in the treatment of public debt, demanding capital be consumed according to risk.

A common feature across all the European sectors analysed is the increase in capitalisation as a result of the implementation of Basel III. The largest increase in own resources/assets has been in Spain (4.1 pp from 2007 to 2016), with more modest increases in Germany and France (of 1.6 pp). Capitalisation levels in 2016 are greater in Spain (11%) and Italy (11.2%) than in France (7.1%) and Germany (6.3%).

A common feature across all the European sectors analysed is the increase in capitalisation as a result of the implementation of Basel III.

A distinctive feature of the Spanish banking sector is the limited importance of interbank market activity, especially as far as lending to other MFIs is concerned. In Spain, lending to MFIs accounts for 9.8% of total assets, almost half as important as it is in European banks and considerably less than for France (24.8%) and Germany (21.5%).

Another aspect worth highlighting regarding the Spanish banking sector is the relative lack of importance of funding through debt issuance, which accounts for 7.6% of the balance sheet in

Table 2

Balance sheets of Monetary Financial Institutions of the main euro area countries
(Percentages)

	2007					2016					2016-2007				
1. ASSETS	Germany	France	Italy	Spain	Euro area	Germany	France	Italy	Spain	Euro area	Germany	France	Italy	Spain	Euro area
1.1. Loans to euro area residents	59.4	51.6	68.5	72.7	57.3	60.2	55.1	62.0	60.0	56.7	0.8	3.6	-6.4	-12.6	-0.6
1.1.1. Monetary financial institutions	22.5	23.6	18.4	12.0	19.7	21.5	24.8	13.2	9.8	18.6	-1.0	1.2	-5.1	-2.2	-1.1
1.1.2. General government	5.1	2.4	6.6	1.4	3.3	4.4	2.6	6.7	3.3	3.5	-0.7	0.1	0.1	1.8	0.2
1.1.3. Other euro area residents	31.8	25.5	43.5	59.2	34.4	34.3	27.8	42.1	47.0	34.6	2.5	2.3	-1.4	-12.3	0.2
1.1.3.1. Non-financial corporations	11.3	10.7	24.2	30.2	14.8	12.0	11.5	20.0	18.7	13.8	0.7	0.8	-4.1	-11.5	-1.1
1.1.3.2. Households	18.7	12.3	13.6	28.1	16.3	20.2	14.0	15.9	25.9	17.4	1.5	1.7	2.3	-2.2	1.1
1.1.3.2.1. Consumer credit	2.2	2.2	1.5	3.4	2.1	2.4	1.8	2.2	2.5	2.0	0.1	-0.4	0.7	-0.9	-0.1
1.1.3.2.2. Lending for house purchase	12.7	9.0	7.8	20.8	11.6	14.4	11.1	9.4	19.7	13.0	1.7	2.1	1.6	-1.1	1.4
1.1.3.2.3. Other lending	3.8	1.1	4.3	3.8	2.5	3.4	1.0	4.3	3.6	2.4	-0.4	-0.1	0.0	-0.2	-0.1
1.1.3.3. Non-monetary financial intermediaries other than insurance corporations and pension funds	1.7	1.9	5.4	0.8	2.9	2.0	1.6	6.1	2.0	3.1	0.4	-0.3	0.6	1.2	0.2
1.1.3.4. Insurance corporations and pension funds	0.1	0.6	0.3	0.1	0.3	0.0	0.7	0.1	0.4	0.3	0.0	0.1	-0.2	0.2	0.0
1.2. Holdings of securities other than shares issued by euro area residents	15.3	14.2	10.0	9.8	13.4	11.2	9.6	20.0	17.5	13.1	-4.1	-4.6	10.0	7.6	-0.3
1.2.1. Monetary financial institutions	10.0	5.8	3.2	1.7	5.9	4.9	3.2	5.9	0.7	3.9	-5.1	-2.6	2.6	-1.0	-2.0
1.2.1.1. Up to 1 year	0.5	3.2	0.0	0.3	1.3	0.0	1.5	0.0	0.1	0.8	-0.5	-1.6	0.0	-0.1	-0.5
1.2.1.2. Over 1 year and up to 2 years	1.0	0.3	0.3	0.2	0.5	0.1	0.3	0.1	0.1	0.1	-0.9	-0.1	-0.3	-0.1	-0.3
1.2.1.3. Over 2 years	8.6	2.3	2.9	1.3	4.1	4.8	1.5	5.8	0.6	2.9	-3.8	-0.9	2.9	-0.7	-1.3
1.2.2. General government	3.3	4.7	5.4	3.1	4.0	4.3	2.8	10.9	9.4	5.4	1.0	-1.9	5.6	6.3	1.3
1.2.3. Other euro area residents	2.0	3.7	1.4	5.0	3.4	2.0	3.6	3.2	7.3	3.9	0.0	-0.2	1.9	2.4	0.5
1.3. Money market fund shares/units	0.1	1.2	0.0	0.0	0.3	0.0	0.6	0.0	0.0	0.2	-0.1	-0.6	0.0	0.0	-0.1
1.4. Holdings of shares/other equity issued by euro area residents	4.4	5.3	6.4	4.5	4.4	3.9	4.9	4.3	4.2	3.8	-0.5	-0.4	-2.1	-0.3	-0.6
1.4.1. Monetary financial institutions	0.6	2.4	3.7	0.6	1.4	0.5	2.5	2.0	0.7	1.3	-0.1	0.1	-1.7	0.1	-0.1
1.4.2. Other euro area residents	3.8	2.9	2.7	3.9	3.0	3.4	2.3	2.2	3.5	2.5	-0.4	-0.6	-0.5	-0.4	-0.5
1.5. External assets	17.6	14.1	3.1	6.6	16.5	13.6	12.7	3.7	6.9	13.9	-4.1	-1.4	0.6	0.3	-2.6
1.6. Fixed assets	0.4	0.5	2.4	1.0	0.7	0.4	0.4	1.5	1.6	0.6	0.0	-0.1	-1.0	0.6	-0.1
1.7. Remaining assets	2.8	13.2	9.5	5.3	7.4	10.8	16.7	8.5	9.7	11.6	8.0	3.5	-1.1	4.4	4.2
1.8. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0

Table 2 (continued)

Balance sheets of Monetary Financial Institutions of the main euro area countries (Percentages)

	2007					2016					2016-2007				
2. LIABILITIES	Germany	France	Italy	Spain	Euro area	Germany	France	Italy	Spain	Euro area	Germany	France	Italy	Spain	Euro area
2.1. Currency in circulation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.2. Deposits of euro area residents	58.5	42.8	53.2	65.1	51.3	59.3	48.8	63.4	69.1	54.8	0.8	6.0	10.3	4.0	3.5
2.2.1. Monetary financial institutions	23.4	22.5	22.0	15.5	20.6	15.5	21.4	19.0	15.4	16.4	-8.0	-1.1	-3.0	-0.1	-4.2
2.2.2. Central government	0.5	0.3	0.4	0.9	0.4	0.1	0.3	1.3	0.5	0.4	-0.4	0.0	0.9	-0.4	0.0
2.2.3. Other general government/other euro area residents	34.5	20.0	30.8	48.7	30.3	43.7	27.1	43.1	53.2	38.0	9.2	7.1	12.4	4.5	7.7
2.2.3.1. Overnight	10.4	6.4	19.1	16.1	10.7	23.5	9.8	25.4	29.2	19.1	13.1	3.4	6.3	13.1	8.4
2.2.3.2. With agreed maturity	16.4	6.7	1.8	29.6	13.1	12.6	9.4	6.0	22.4	10.8	-3.9	2.7	4.2	-7.2	-2.3
2.2.3.2.1. Up to 1 year	6.0	1.9	1.5	11.0	6.1	3.2	1.8	1.3	7.4	3.1	-2.7	-0.1	-0.2	-3.6	-2.9
2.2.3.2.2. Over 1 year and up to 2 years	0.6	0.6	0.1	1.8	0.7	0.7	0.4	0.9	4.7	1.0	0.1	-0.2	0.8	3.0	0.3
2.2.3.2.3. Over 2 years	9.8	4.2	0.2	16.9	6.4	8.6	7.2	3.8	10.3	6.7	-1.2	3.1	3.6	-6.6	0.3
2.2.3.3. Redeemable at notice	7.3	6.2	6.7	0.0	5.5	7.6	7.4	7.6	0.0	7.2	0.2	1.3	0.9	0.0	1.7
2.2.3.3.1. Up to 3 months	5.9	6.2	6.5	0.0	5.1	6.9	7.4	7.5	0.0	7.0	1.0	1.3	1.0	0.0	1.9
2.2.3.3.2. Over 3 months	1.4	0.0	0.2	0.0	0.4	0.7	0.0	0.1	0.0	0.2	-0.8	0.0	-0.1	0.0	-0.2
2.2.3.4. Repurchase agreements	0.4	0.7	3.2	2.9	1.0	0.0	0.4	4.1	1.6	0.9	-0.3	-0.3	0.9	-1.3	-0.1
2.3. Money market fund shares/units	0.4	5.9	2.1	0.0	2.6	0.0	4.1	0.1	0.4	1.8	-0.3	-1.8	-2.0	0.4	-0.7
2.4. Debt securities issued	21.6	13.8	18.0	14.1	15.7	13.2	12.4	14.1	7.6	12.1	-8.4	-1.4	-3.8	-6.5	-3.5
2.4.1. Up to 1 year	0.8	5.1	0.0	3.1	2.0	0.3	2.2	0.0	0.7	1.0	-0.5	-2.8	0.0	-2.5	-1.0
2.4.2. Over 1 year and up to 2 years	1.6	0.3	1.3	0.7	0.8	0.3	0.2	0.2	0.3	0.3	-1.3	-0.1	-1.1	-0.3	-0.5
2.4.3. Over 2 years	19.2	8.5	16.7	10.3	12.9	12.6	9.9	13.9	6.6	10.9	-6.6	1.4	-2.8	-3.7	-2.0
2.5. Capital and reserves	4.6	5.5	7.8	6.9	5.7	6.3	7.1	11.2	11.0	8.0	1.6	1.6	3.5	4.1	2.3
2.6. External liabilities	9.7	16.3	6.3	7.1	15.4	9.6	11.5	3.2	4.1	11.9	-0.1	-4.9	-3.2	-3.0	-3.5
2.7. Remaining liabilities	5.2	15.6	12.6	6.8	9.3	11.6	16.2	7.9	7.8	11.3	6.4	0.5	-4.7	1.0	2.0
2.8. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0

Source: ECB.

2016, compared to 13.2% in Germany, 12.4% in France and 14.1% in Italy. While the importance of debt as a source of funding has fallen across all the countries analysed, and the euro area in general between 2007 and 2016, the decline has been more pronounced in Spain and, even more so, in Germany.

Business models and income structures

Changes in banking business models can be seen in both the composition of the balance sheet and the income structure. As highlighted by the ECB (2016a), since the start of the crisis many European banks have diversified their sources of income to maintain profitability levels. The pressure from falling interest rates (which has a negative impact on the net interest margin) and slower lending growth (negative in some countries like Spain) has forced banks to seek out alternative sources of income, such as fees and commissions or trading income. In addition, more recently, the zero interest rate environment

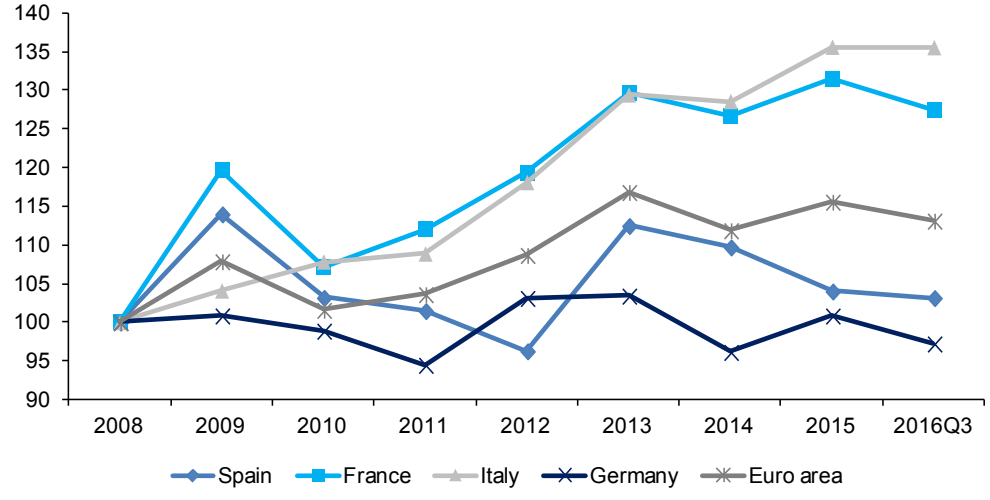
The pressure from falling interest rates and slower lending growth has forced banks to seek out alternative sources of income, such as fees and commissions or trading income.

and growing ECB penalisation of banks' excess liquidity (since February, -0.4% in the deposit facility and on excess reserves) has pushed the interest rate on deposits to very low levels, encouraging banks to direct savings towards alternative forms of investment, such as mutual funds, in order to generate fee income.

In order to analyse changes in the income structure of European banks in recent years, Exhibit 3 shows developments from 2008 (information is not available for 2007 for some countries) to the third quarter of 2016[3] in the share of non-interest

Exhibit 3

Evolution of the ratio (non-interest income/total net income) in the euro area banking sector (2008=100)



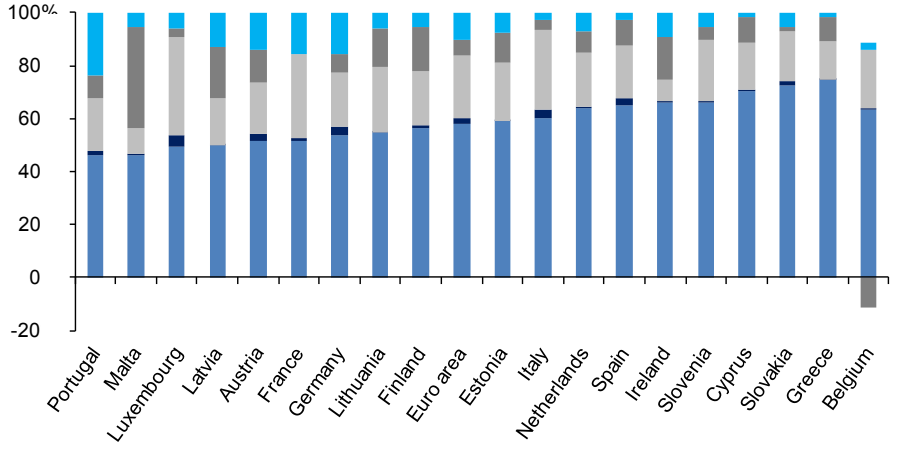
Source: ECB.

[3] The 2016 data in the exhibits has been annualised on the basis that fourth quarter data is equal to the average of the three previous quarters.

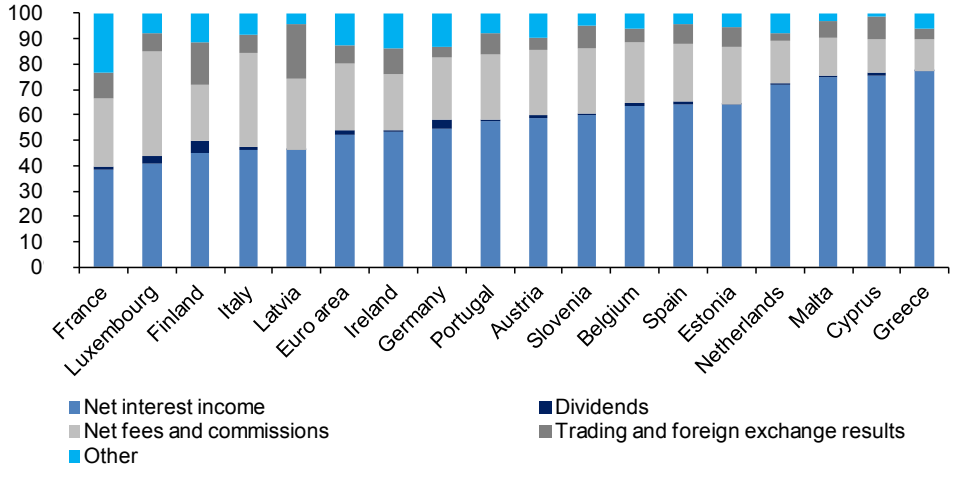
Exhibit 4

Income structure in the euro area banking sector
(Percentages)

a) 2008



b) 2016 (3rd quarter)



Source: ECB.

sources of income in total net income. Non-interest sources of income include fees and commissions, dividends, trading income and foreign exchange rate results.

After experiencing a sharp fall in 2008 as a result of losses on financial operations, the weight of non-interest income in net income on average in the euro area has gained weight, standing at 13% above 2008 levels in 2016. In Spain, developments have been more volatile. Following the fall during the worst years of the crisis from 2009 to 2012, non-interest income recovered in 2013, but then fell again. In 2016, it stood at relatively similar levels to 2008. In the case of France and Italy, the weight of non-interest income is 27% and 35% higher, respectively, than in 2008. Meanwhile, in Germany, the income structure has remained relatively stable. Overall, since 2008, the weight of non-interest income in the European banking

sector in general has increased in the face of a decline in net interest income on the back of falling interest rates.

Overall, since 2008, the weight of non-interest income in the European banking sector in general has increased in the face of a decline in net interest income on the back of falling interest rates –standing at 13% above 2008 levels in 2016.

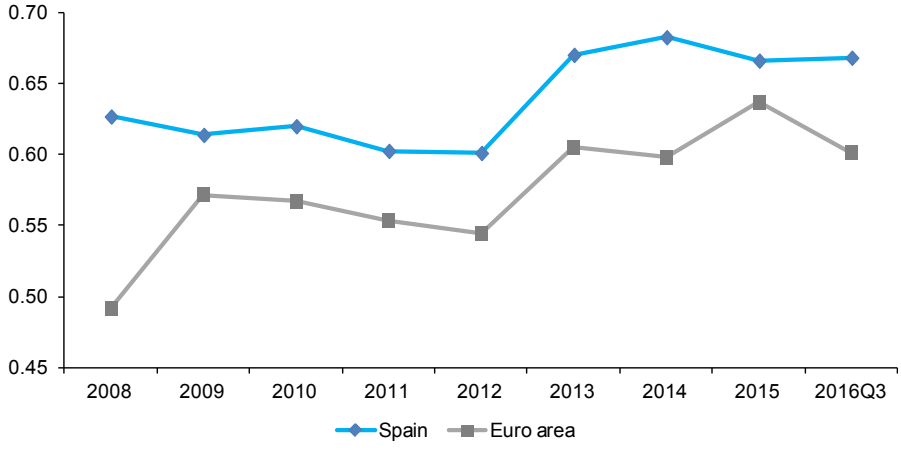
Data for 2008 and 2016 point to significant differences in the income structure of European banks (see Exhibit 4). For example, in 2016, the weight of net interest income varies from a minimum of 38% in France to a maximum of 77% in Greece. The weight of net interest income in Spain stands at 12 pp above the euro area average, at 64%, reflecting the importance of retail banking activities. There is no clear pattern in income structure developments across different euro area countries between 2008 and 2016.

The ECB (2016b) has concerned itself with analysing the impact that changes in the European banking sector's business model are having on their capacity to offer activities that generate income through fees and commissions, given how cyclical (such as the fall in interest rates) and structural factors (regulatory changes, growing competition) are squeezing bank profitability. Hence, the interest in focusing on these sources of income, analysing their development over time and differences across countries.

Exhibit 5 focuses on Spain and the euro area, showing the increase in the weight of fees and commissions in relation to total assets since 2012. New highs were reached in Spain in 2014 (0.68%) and the euro area in 2015 (0.64%), both in excess of 2008 levels. The Spanish banking sector has consistently registered a higher proportion of fees and commissions in total assets, which remains the case up to September 2016 on the basis of annualised data. As a result, the evidence suggests that both Spanish and euro area banks have responded to the challenges posed by cyclical and structure factors by increasing activities that generate fee income.[4]

Exhibit 5

Fees and commissions income in the banking sector in Spain and euro area
(Percentage of assets)



Note: 2016 annualised with data to the third quarter.
Source: ECB.

[4] The increase in the weight of fees and commissions in total assets has taken place in the euro area aggregate between 2008 and 2016 and across the majority of countries, with the exception of Finland, the Netherlands, Greece, Cyprus and Portugal.

Conclusions

The recent financial crisis and the way in which it has been dealt with have resulted in a new, much more complex operating environment for European banks. This is characterised by very low levels of interest rates, a very flat yield curve, growing private sector deleveraging, increased regulatory burdens (both capital and liquidity) and an increase in competitive pressures (both within the sector and from outside, such as fintech). The combination of these factors has pushed down profitability levels to below the cost of capital.

In this hostile environment, European banks have responded by changing their business models to adapt to the new reality. These changes are happening both in the composition of banking activity and in their income structure.

Against this backdrop, the objective of this article has been to provide empirical evidence of the changes in Spanish banks' business models in the context of the euro area, using information on both balance sheets and income structures. The analysis has been carried out for the period from 2007 to September 2016, making it possible to compare how banks have reacted in the aftermath of the crisis.

The conclusions from this evidence are as follows:

- The retail banking model continues to dominate in Spain after the crisis, although lending to the private sector has fallen as a share of total assets by 12.3 pp since 2007, mainly due to deleveraging by non-financial corporations.

- A key aspect worth highlighting is the increased weight of sovereign debt in Spanish banks' sector assets, which has tripled from 2007 to 2016 to above 9.4% (compared to a euro area average of 5.4%). Only one other euro area country has seen faster growth in sovereign debt holdings than Spain.

- The sharp decline in lending and the increase in the weight of non-interbank deposits in Spanish banks' balance sheet has led to a complete reversal of the 2007 liquidity gap. In 2016, for every euro of deposit banks lent out 0.88 euros. This is below the 0.91 ratio in the euro area.

- The decline in interest rates on term deposits explains why this product has lost importance as a source of funding for Spanish banks, as well as explaining the growth in sight deposits. The weight of term deposits in the balance sheet has fallen by 7.2 pp, while sight deposits have increased by 13.1 pp.

- Difficulties in accessing wholesale funding markets explain why the weight of debt on Spanish banks' balance sheets has practically halved between 2007 and 2016.

- Tougher regulatory demands have forced banks to increase capital levels, such that the weight of own resources in Spanish banks' assets has increased 4.1 pp in the period to now stand at 3.0 pp above the European average (11% *vs.* 8%).

- Changes in the business model are also illustrated by banks' income structures. The relative weight of non-interest sources of income has increased in both the euro area and Spanish banking sectors since 2008, albeit less strongly in the latter. In 2016, non-interest income accounted for 36% of total net income in Spanish banks, 12 pp below the European average.

- The growing weight of fees and commissions in total income is a corollary of changes in the business model. Banks have responded to the new environment of low interest rates, increasing regulatory demands, heightened competition, etc. by increasing fee-generating activities. This has also been the case in the Spanish banking sector, which has seen the weight of fees and commissions in total assets increase from 0.63% in 2008 to 0.67% in 2016, putting it above the European average. Nonetheless,

as a proportion of total net income, fees and commissions in Spain (23%) account for a smaller percentage than they do in the euro area (26%).

In summary, the new environment facing the banking sector as a result of falling interest rates, deleveraging, regulatory requirements and growing competition, has forced banks to respond by adapting their models in order to maintain profitability levels. This can already be observed by comparing current balance sheets to pre-crisis balance sheets and also by analysing the income structure. Against this backdrop, and this is true for Spain, the structure of the balance sheet has changed (lower weight of lending, growing importance of sovereign debt purchases, increased funding through deposits and lower recourse to wholesale debt markets, increased capitalisation, etc.) with the relative weight of non-interest sources of income increasing, particularly fees and commissions for providing services.

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Analysing payment trends in Spain

Verónica López Sabater and Diego Vizcaíno Delgado[1]

Although recent data point to a change in trend among Spanish payment cardholders towards an increased reliance on PoS card payments versus ATM cash withdrawals, Spaniards still use cash more often than card-based payments. Whether this dynamic reflects current obstacles in the evolution of the card-based payment market, or simply Spaniards' payment habits, Spain currently lags behind its EU peers as regards use of cards relative to cash payments.

Spaniards' payment habits are shifting in the expected direction but not at the expected speed. The fact that Spaniards still use cash more often than card-based payments, that one in four still only uses cash and that just 7% pay for their purchases only with cards, suggests that there is still a long way to go in terms of encouraging card usage- particularly among small retailers and, generally speaking, for micro payments. There have been some noteworthy structural changes in both domestic and international payment card schemes. However, mass adoption of card-based payments (whether physical or virtual) or A2A electronic payments, as soon as this segment develops acquiring solutions, currently faces obstacles that need to be pinned down from the standpoint of all involved. It remains to be seen whether or not Spain's relative failure to wholeheartedly embrace e-payments is the result of preferences or rather existing impediments in the electronic payments market.

In the first quarter of 2016 – exactly one year ago – Spain registered a shift in trend in relation to user habits by payment cardholders. For the first time, the value of PoS card payments exceeded the value of ATM cash withdrawals. Accordingly, the ratio of the 'value of PoS payments/value of ATM cash withdrawals' exceeded one for the first time.

This progress on the use of cards is eclipsed if we analyse the ratio with a little more context, at least at the European level. Spain is not only the laggard among the countries selected as benchmarks, but also displays extreme sluggishness in changing habits in light of its starting position as group straggler. Only Italy (intensely) and France (less so) present a contraction in the ratio in question since 2011. Germany is at the bottom of the selected universe of countries, withdrawing twice as much cash from ATMs relative to card-based PoS payments. Sweden and the UK are making strong progress, while Finland, Portugal and Spain are making slower progress, albeit coming from different starting points.

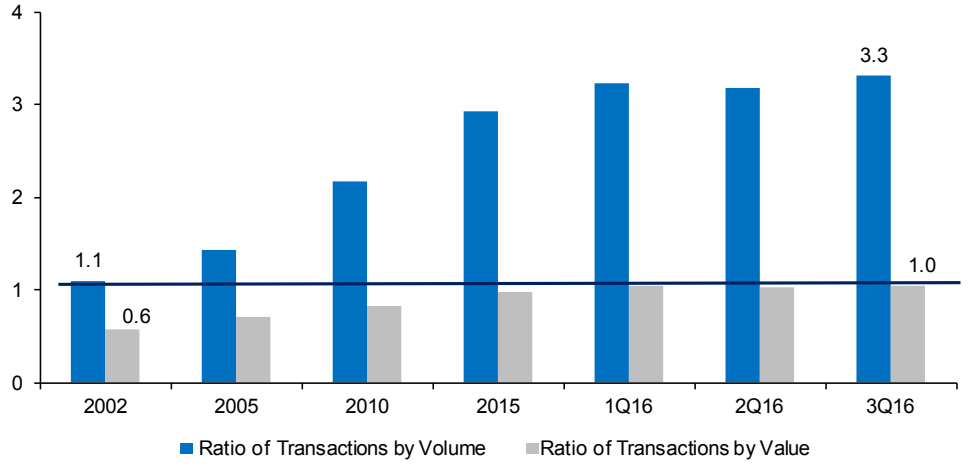
Spain is proving extremely slow at changing its payment habits.

By transaction volumes, Sweden (where card payments are 11 times more frequent than cash

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

Exhibit 1

Ratio of value of PoS payments / value of ATM withdrawals, Spain

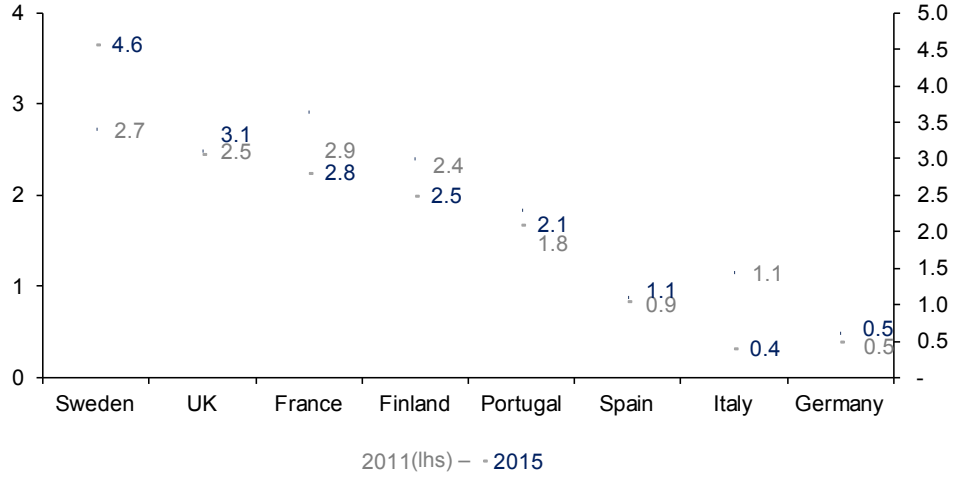


Source: AFI, based on Bank of Spain data.

withdrawals) and Finland (over 8x) are way ahead of Spain (over 3x). Some countries, such as Denmark, according to data published by the ECB, do not present cash ATM withdrawals using domestic bank-issued cards: all card transactions take place at the point of sale.

Exhibit 2

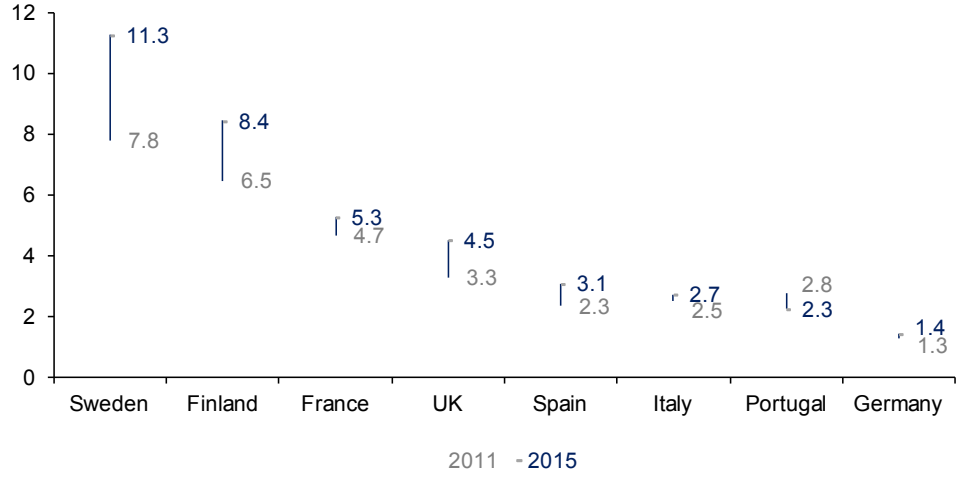
Ratio of value of PoS card payments / value of cash withdrawals, select European countries



Source: AFI, based on ECB data.

Exhibit 3

Ratio of volume of PoS card payments / volume of cash withdrawals, select European countries



Source: AFI, based on ECB data.

Cash remains a constant and permanent presence in our everyday payments

Public statistics about the use of cards do not reveal the motives driving their usage, which is why it is necessary to obtain demand-side (user) information in order to be better armed when attempting to identify user motives or impediments.

The demand-side study conducted against the backdrop of the *TECNOCOM Report on Trend in Payment Instruments, 2016,* a report in whose preparation Analistas Financieros Internacionales (A.F.I.) actively participates (see TECNOCOM, 2016), researches, among other matters of interest, everyday purchase payment habits in Spain and six Latin American countries. When analysing the specific instruments used to pay for weekly expenses in Spain, it is very illuminating to note that cash payments continue to outstrip card payments: 92% of 'banked' individuals use cash daily, 16 points more than those who say they use cards daily.

Another insightful finding relates to the use of cards to pay for weekly expenses: exclusive use of cards is not very entrenched in Spain, with just 7% of the banked population (holders of a payment card or bank account) using only their cards to pay for everyday items.

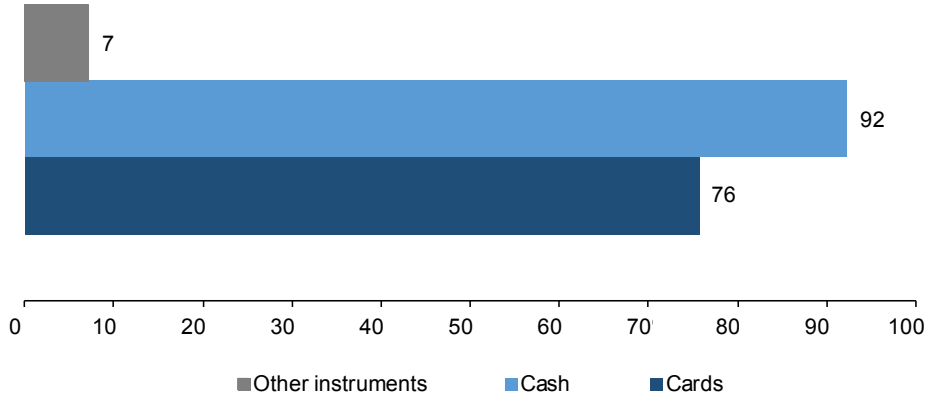
One in every four Spaniards says they pay for all their frequent purchases exclusively in cash.

This finding complements the fact that 23% of the banked population in Spain claims to use only cash to pay for their frequent purchases.

Exhibit 4

Payment instruments used in the past week: Payment cards, cash and other instruments – Banked population – (2016)

(Percentage)



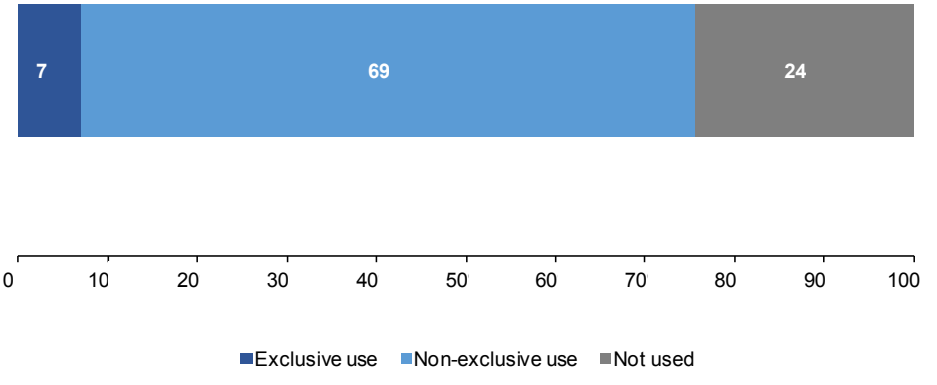
Note: Total banked population (400).
Source: TECNOCOM Report *(2016).*

When asked about the instruments used to pay for the majority of expenses in the past week, the relationship between cash and cards changes substantially. Cards outweigh cash in Spain when it comes to the instrument used to pay for the majority of expenses (60%). Accordingly, it is in the sphere of micro payments (payments of small amounts) that the use of cash is more widespread.

Exhibit 5

Use of cards as payment instrument in the past week – Banked population – (2016)

(Percentage)

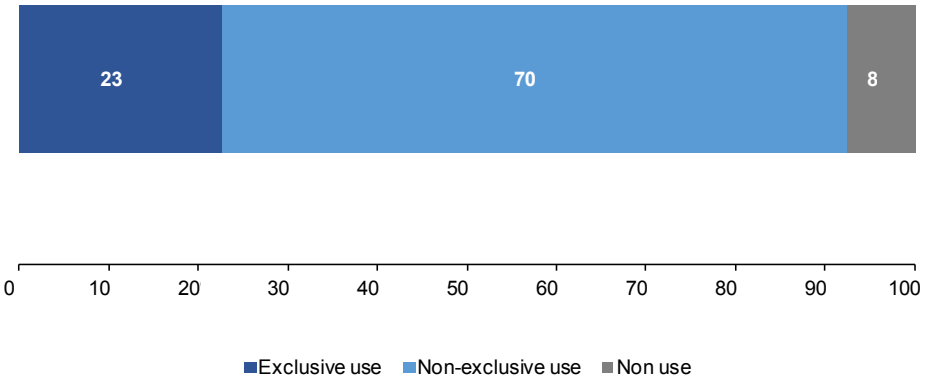


Note: Total banked population (400).
Source: TECNOCOM Report *(2016).*

Exhibit 6

Use of payment instruments in the past week: Exclusive and non-exclusive use of cash – Banked population – (2016)

(Percentage)



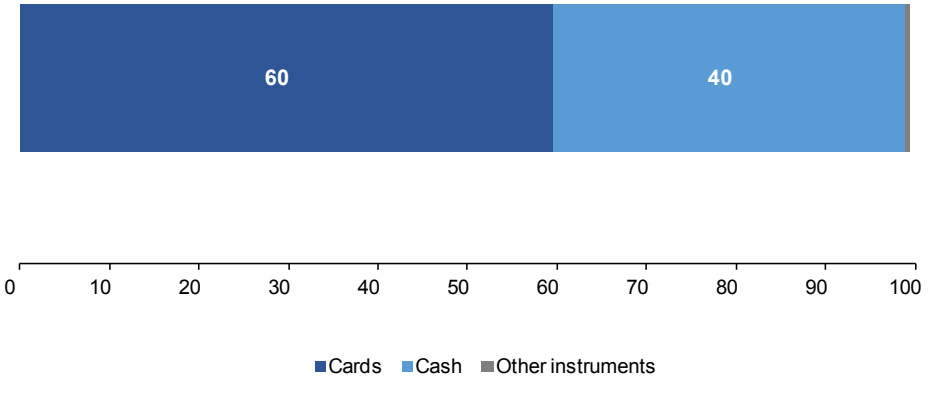
Note: Total banked population (400).

Source: TECNOCOM Report *(2016).*

Exhibit 7

Instrument used to pay for the majority of expenses in the past week – Banked population – (2016)

(Percentage)

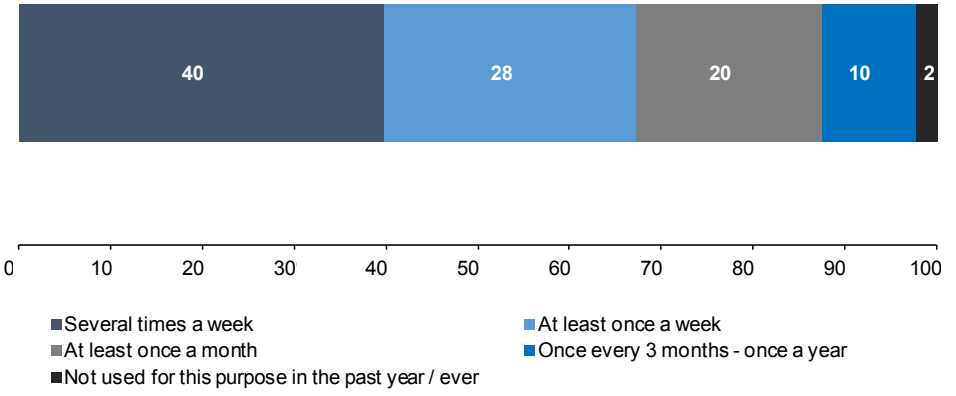


Note: Total banked population (400).

Source: TECNOCOM Report *(2016).*

Exhibit 8

Frequency with which cards are used for payments (2016)
(Percentage)



Note: Total banked population (400).
Source: TECNOCOM Report *(2016).*

The use of cards to withdraw cash (essentially via an ATM) is markedly different than the pattern observed for usage as a means of payment. The 2016 TECNOCOM Report reveals that 49% of banked Spaniards visit an ATM machine to withdraw cash once or more a week. Thirty-two per cent say they make ATM cash withdrawals every month. Seven per cent – presumably the same people who only use cards for frequent payments – claim not to have visited an ATM in the past year.

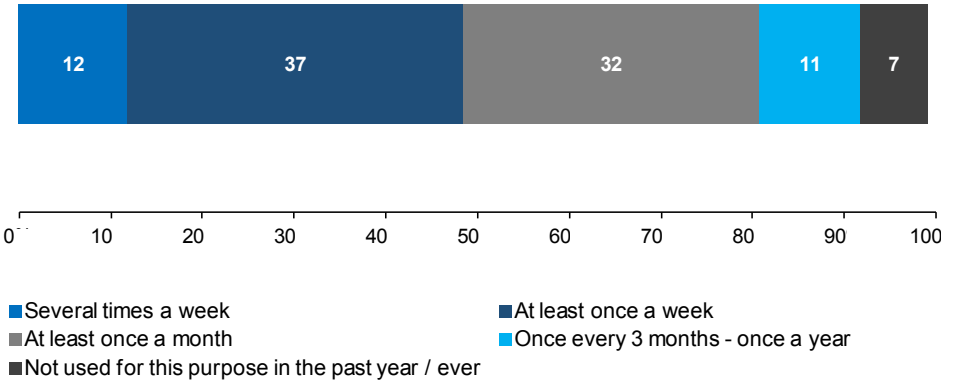
49% of Spaniards visit an ATM machine to withdraw cash once or more a week.

The cash withdrawal landscape (ATM network) has been significantly fragmented by the decision taken by the banks with the largest network of ATMs, subsequently seconded by other ATM network owners, to discontinue the agreements among the three networks operating in Spain (Servired, 4B and Euro 6000) covering the free use of ATMs by customers across the various networks. Although 61% of cardholders said in 2016 that they do not pay a commission to withdraw cash, 31% said they do (when using some or all of their cards), most commonly for the withdrawal of cash from ATMs that do not belong to the financial institution that issued their cards.

Under the former collaboration in place until 2016, the bank that owned the ATM charged the card-issuing bank a previously agreed-upon fee, on a multilateral basis, within the network system in question (*i.e.,* 4B, Servired or Euro 6000). The latter then charged its customers a commission for this service or assumed the cost without passing it on to their customers. Under the new regime, membership of the same network no longer guarantees equal terms of ATM usage for holders of bank cards issued by members of those networks. The commission policy for withdrawing cash from ATMs owned by entities other than the

Exhibit 9

Frequency with which cards are used to withdraw cash from ATMs (2016)
(Percentage)

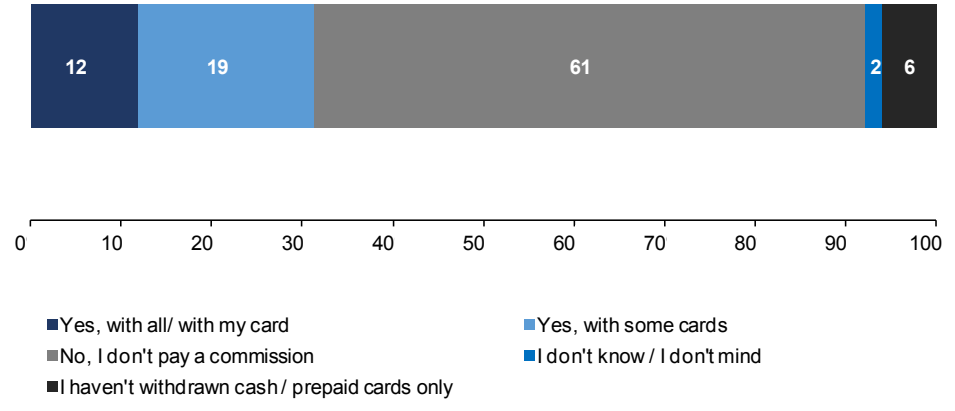


Note: Total banked population (400).
Source: TECNOCOM Report *(2016).*

card-issuing bank, regulated by the Bank of Spain since 2016 (see, Bank of Spain), has virtually fully dismantled the advantages that were to be had from using ATMs belonging to a given network system. The members of the Euro 6000 system are the only ones to have kept their alliance intact.

Exhibit 10

Payment of commissions to withdraw cash with card(s) at ATMs (2016)
(Percentage)



Note: Total banked population (400).
Source: TECNOCOM Report *(2016).*

Table 1

The three main categories of the new bank commission landscape:

Banks that have ruled out alliances and offer their customers free withdrawals only if made from their own ATM networks	Bankia, Banco Sabadell, Euro 6000 alliance	Alliance around Banco Popular
• CaixaBank: 9,599 ATMs • BBVA: 5,950 ATMS • Banco Santander: 5,229 ATMs • Commissions: 0 euros for customers and 1.85-2.00 euros for non-customers	• Bankia • Banco Sabadell • Euro 6000 network • Commissions: 0 euros from Euro 6000 ATMs (excluding Caixabank ATMs); 0.65 euros from Bankia and Sabadell ATMs; 2.00 euros from other ATMs	• EAC: 2,555 ATMs • Bankinter: 396 ATMs • Cajamar, Laboral Kutxa, Grupo Caja Rural: 2,730 ATMs • Evo Banco • Deutsche Bank • Commissions: 0 euros for ING and Bankinter customers / 1.50 euros for the rest

Source: AFI.

It would be interesting to find out whether the act of getting money from the cash machine could be replaced, by means of a simple change of habit, by direct PoS card payments. Because, if this were possible, card holders would stand to save a lot of money in cash withdrawal commissions (looking only from the customer perspective).

It would be interesting to find out whether the act of getting money from the cash machine could be replaced, by means of a simple change of habit, by direct PoS card payments.

Habits are an aspect of our behaviour that are very hard to change. Identifying the main motives underpinning our conduct – in this case an attachment to cash and the comfort it provides us – is a complex but potentially illuminating task.

Insofar as the paying agent (card holder) does not incur any cost to use a card (without considering the card issuance fee, payment for the service associated with holding the card or the possible borrowing cost if used for credit), the next step is to analyse the cost borne by the collecting agent (user of PoS terminals to accept card payments, *i.e.,* the merchants).

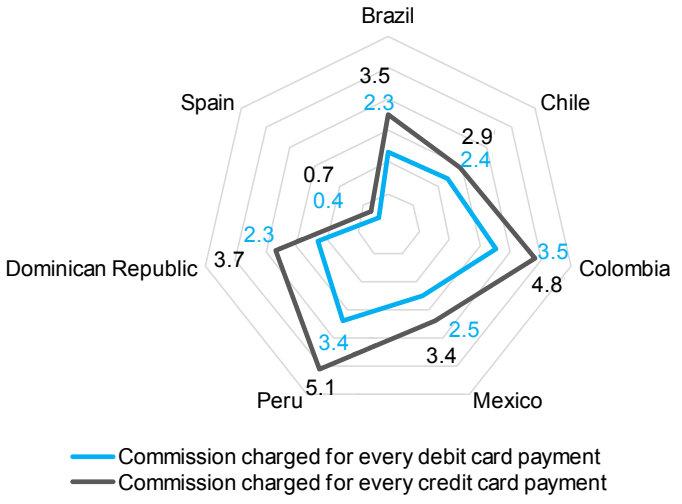
The 2016 edition of the TECNOCOM Report focused its demand survey on the small retailer or merchant angle. Asked about the commissions (merchant discount fees or merchant service charges) they had to pay their acquirer banks for every payment settled with a credit or debit card, small merchants in Spain with PoS devices said that the fee ranged on average between 0.4% (for debit card payments) and 0.7% (credit card payments).

Turning to the data published by the Bank of Spain, what stands out is, firstly, how accurately the merchants calculated their fees – the minimum and maximum fees reported by the PoS device network operators and the merchants themselves fully coincide – and secondly, the trend in those fees in the small merchant segment in Spain. These fees have historically remained below the average rate, in contrast to the "low-value payments" category, which since 2010 are charged at the average maximum commission. According to the Bank of Spain, the "low-value

Exhibit 11

Percentage commission for every payment with credit and debit cards depending on the country of residence of the surveyed merchant, 2015

(Percentage)



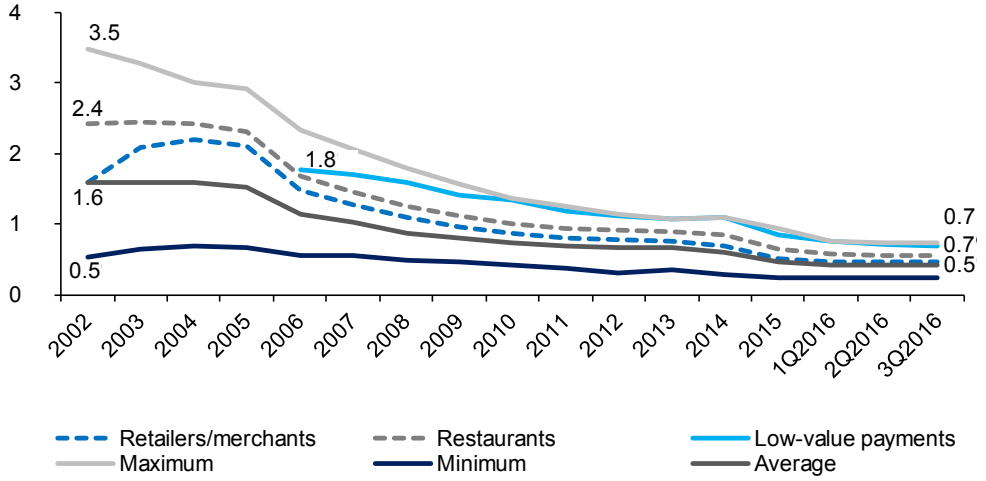
Source: Tecnocom Report on Trends in Payment Instruments, 2016.

payments category" includes "categories of retail payments (other than toll roads) for which card payments on average do not exceed 15 euros and whose prices are, in general, conditioned by a particular regulatory framework, such as urban transportation, metro, commuter trains, car parks and phone cabins, among others". In short, what are currently termed micro-payments.

Exhibit 12

Average discount fees paid by merchants to acquirer banks per transaction

(Percentage)



Source: AFI, Bank of Spain.

The power of negotiation wielded by payment volumes and values is an element that is evident in the discount fee scale published by the Bank of Spain: large merchants pay discount fees that are on average around 50% lower than those borne by their smaller peers (in the past they paid as little as 30% of what small merchants paid). As for the "low-value payments" category, it is worth noting very recent initiatives such as those involving the public transport systems in some Spanish cities. Madrid's public transport manager, the EMT, which carries around 1.5 million passengers every day, has announced plans to upgrade all the ticket validation machines in its bus fleet to configure them for card payments starting this May, having successfully test piloted the initiative in two lines in March 2016 (#27 and the express airport line). Madrid's Metro, meanwhile, eliminated its minimum payment[2] (which was 5 euros) for the purchase of one-way tickets, multiple tickets or monthly top-ups at disbursing machines, as well as broadening the range of cards taken (adding JCB and American Express) in November 2016.

The power of negotiation wielded by payment volumes and values is an element that is evident in the discount fee scale.

International and domestic payment card schemes

Card schemes are payment networks associated with payment cards (debit, credit and prepaid cards) of which a bank or financial institution may form part under a brand licensing agreement, accrediting its ability to issue or acquire cards that operate in that scheme's network.

In card payments there is no company comparable in size or reach to the global leaders, all of which are North American, with the exception of China Union Pay International[3]. Other networks such

Table 2

Domestic (for a selection of European countries) and international card schemes

Domestic/national schemes		International schemes
Domestic segment	**International segment**	
Germany – GiroCard (debit)	Maestro / VPay /JCB	*Four-party schemes*
France (1984) - Carte Bancaire (debit)		Visa
Italy (1986) - PagoBancomat (debit)	JCB	MasterCard
Portugal (985) - Multibanco	Visa / MasterCard / AMEX	JCB (credit)
Denmark (1983) - Dankort	Visa	China Union Pay International
Norway (1991) - BankAxept	Visa	*Three-party schemes*
		AMEX (credit)
China (2002) – Union Pay	Union Pay International – Discover	Diners (credit)
India (2014) – Rupay	Discover, Diners	Discover (credit)
Russia (2015) – MIR	JCB, AMEX. Maestro	

Source: AFI.

[2] Whether or not to establish a minimum charge for card payments is a merchant decision that warrants close attention to see if it is a financially smart move or whether it is the result of force of habit and/or a lack of information about the real costs associated with each payment method (card *vs.* cash).

[3] Created in 2002 with 67 founding members, among which BBVA.

as Japan's JCB and Discover are gradually expanding their issuer network internationally via agreements with domestic payment networks. Maestro is a multinational debit card service owned by Mastercard and created in 1992; VPay is a European Visa card owned by Visa Europe since 2004.

Europe used to be a fragmented market with multiple card schemes that rarely crossed borders in which nearly all countries (Western) had their own national card schemes with their own rules and standards, which only worked locally[4]. The Payment Services Directive and SEPA Cards Framework (SCF) radically changed this landscape: on the one hand, the domestic card schemes in the UK[5], Ireland, Luxembourg, Netherlands and Finland were replaced by the leading international card brands, VISA and MasterCard (in their various credit and debit formats). On the other hand, in countries such as Belgium, Bulgaria, Denmark, France and Germany, the domestic schemes continued to dominate over the international schemes, with which they compete in the domestic sphere[6].

Strong domestic schemes allow banks and payment service providers (PSP) to generate know-how with respect to local idiosyncrasies and user behaviour and preferences, which translates into a refined ability to innovate when developing new products, services and solutions that are more likely to succeed in the local market[7].

As for transaction costs, Veitch and Bott (2014) found evidence that the costs of the domestic schemes are equivalent, on average, to 45% of those associated with using international card brands (the big players, Visa and MasterCard) for domestic payments[8]. To the extent that over 90% of all transactions are domestic (92% in Spain, representing 87% by value, according to the ECB), this cost difference is by no means insignificant for issuer and acquirer banks[9]. Historically, the domestic schemes (in Spain: Servired, 4B and Euro 6000) have agreed with their international counterparts that the domestic agent would handle local transactions and the international agent would handle international transactions under 'co-badging' arrangements with the international brands. This model, however, is beginning to be rendered meaningless due to the growth in

92% of payment card transactions in Spain are domestic transactions.

[4] The European schemes in existence at present are limited to their respective domestic markets; they do not have widely known or accepted brands, as they have traditionally operated under brand licensing agreements with the leading international networks. This is true of Carte Bancaire (France, 1984), Multibanco (Portugal, 1985), GiroCard/ZKE (debit only; Germany, 2007); PagoBancomat (debit only, Italy, 1986) and Dankort (debit only, Denmark).

[5] The Switch scheme was sold to MasterCard in 2002.

[6] Outside of Europe it is worth highlighting the recent creation of new domestic card payments schemes in Brazil, India, Nigeria and Russia.

[7] For example, chip cards were pioneered in France, while Portugal's Multibanco ATM network stands apart for its superior functionality relative to the ATM networks in neighbouring countries.

[8] There are other discrepancies in the existing payment card schemes in terms of how they work and their price patterns: (i) fees / commissions for small merchants versus large merchants: in international networks, small merchants pay 60%-70% more fees than large merchants; in national schemes, this difference narrows to 6%-7%; (ii) higher fees charged to businesses in certain sectors, there being a relationship between discount fees and the margins of the businesses bearing them; (iii) a direct correlation between discount fees and interchange fees: on average, the countries with higher interchange fees also present higher merchant discount fees, demonstrating that interchange fees (the only fees regulated in SEPA) are passed along to merchants via the discount fee.

[9] See the annual reports of the Spanish schemes: Servired, 4B and EURO 6000. This has changed with effectiveness of article 8 of the Interchange Fee Regulation (IFR) in June 2016; however, until then, the international schemes were charging for processing 100% of transactions performed using cards carrying their brands, irrespective of whether they were domestic or international transactions.

competition, coupled with the fact that in Europe the withdrawal of Visa Europe[10] is likely to derive in an increase in the fees charged by Visa Inc. (Visa Europe's fees have historically been around 35% lower than those charged by Visa Inc.) and, as a result, by MasterCard.

Project Monnet was the prevailing force between 2008 and 2012. Originally championed by the European Commission and the ECB along with German and French banks, this initiative sought to create, alongside the leading European banks, the first standard European card accepted throughout the EU, creating an internal market for card-based payments in Europe in parallel. At the time, the banks were contemplating maintaining their *co-badging* arrangements with the international networks to ensure acceptance outside Europe in a context of competitive cooperation; competition in issuance, services and prices; cooperation in the areas of international acceptance, co-badging and standards. This project was interrupted in 2012 by the European authorities and may be replaced by the initiative for the creation of a pan-European instant account-to-account, *i.e.,* IBAN to IBAN, payment scheme; this scheme will be based on the current SEPA credit transfer (SCT) scheme.

According to the *Global Payment Cards Data and Forecasts to 2021 report,* Visa and Mastercard accounted for 87% of the approximately 1.5 billion cards issued in Europe as of year-end 2015; moreover, the presence of exclusively domestic-branded cards is uncommon; most are *co-badged* with one of the international brands. As for usage, this same report states that Visa and Mastercard handled 67% (by value) of transactions paid for using European cards in 2015. This difference is relevant insofar as article 8 of the Interchange Fee Regulation (IFR) states that card schemes cannot oblige their members to "pay" for transactions that do not use the scheme; it is even more relevant in countries with co-badged debit cards.

In terms of ownership structure and governance, the international schemes have transformed radically in recent times, converting from a bank-owned mutual structure to stock market companies. Visa Europe was acquired by Visa Inc. in June 2016, upon which its members went from being owners to customers-cum-competitors, with the attendant political and sovereignty implications. Of the Spanish banks – via Servired, Euro 6000 and 4B – only CaixaBank had a direct interest of a little over 4% in Visa Europe.

Lastly, by no means a small number of countries are motivated to set up domestic card schemes out of concern about possible interference (geopolitical, ownership, residence, governance, sensitive data) (*e.g.* Russia and India).

There are, therefore, good reasons to justify, in today's era of globalisation and digitalisation, the development by European countries of new domestic card schemes, which should be supported and used by the continent's banks, in parallel to continuing to participate actively in the international schemes. Spain is no exception in this respect, as it is equipped to counteract the competitive pressure exerted by the large-scale multinational card operators. Against this backdrop, on December 21st, 2016, the three national schemes (Servired, 4B and EURO 6000) entered into a merger agreement which is expected to result in the creation of a new company in March 2017[11], subject to authorisation

There are good reasons for European countries to develop new domestic card schemes.

[10] A company headquartered in Delaware (US) which operates from London.

[11] According to articles published online, the new company will be approximately 66%-owned by the members of Servired (whose main shareholders are BBVA, CaixaBank, Bankia and Sabadell); 20% by the representatives of 4B (Santander, Popular and Banca March); and 14% by those of Euro 6000 (Unicaja, Ibercaja, Kutxabank, BMN, Liberbank, Evo Banco and Abanca), with the board seats divided up as a function of each entity's stock of issued cards.

by the anti-trust authority (CNMC), Bank of Spain (which supports the initiative along with the ECB) and the Ministry of the Economy. All signs suggest that by the end of this year, Spain will have a single payment scheme to manage transactions performed using national cards.

In addition to growing international competition, an enhanced ability to innovate locally and lower transaction costs, the trend toward the bundling of multiple payment methods (cards and account-to-account payments) in order to offer retail customers a multi-channel value proposition may be more easily implemented by domestic schemes, which enjoy closer relations with the domestic clearing houses (the SNCE in Spain).

The acquiring business: ATMs and PoS terminals

Spain has close to 51,142 cash machines (ATMs) and 1,647,646 point-of-sale (PoS) terminals (twice as many as were installed in 2002) as of the end of the third quarter of 2016, according to Bank of Spain figures.

Today, the merchant acquiring business in Spain is divvied up between two groups of entities: (i) the global monoliners, which began to operate in Spain in 2012 thanks to major acquirers such as Banco Santander (which struck a joint venture with Elavon Merchant Services for the development of the acquiring business in Spain; Caixabank (Global Payments); Banco Popular (Evo Payments); and (ii) BBVA, Banco Sabadell and Bankia, which retain control over either end of the card-based payment industry: issuance and acquiring at merchants and ATMs alike.

Having become less attractive in Spain at the start of this century, the acquiring side of the business has managed to find its way back to profitability thanks to the IFR, in fact emerging as one of the most attractive markets in Europe (partly because it pioneered its implementation, 15 months ahead of the deadline) for penetration by European merchant acquiring service providers not physically established in Spain.

The merchant acquiring business in Spain has found its way back to profitability thanks to the impact of the Interchange Fee Regulation.

Foreseeably, at least for debit transactions, interchange fees will remain among the lowest in Europe (recall that in Spain there is an additional limit on that stipulated in the IFR – 0.2% of the transaction value and 0.1% for payments under 20 euros – 7 euro cents for the entire transaction), so that the Spanish merchant acquiring business should remain attractive.

The new platform expected to emerge in 2017, following the announced merger of the three

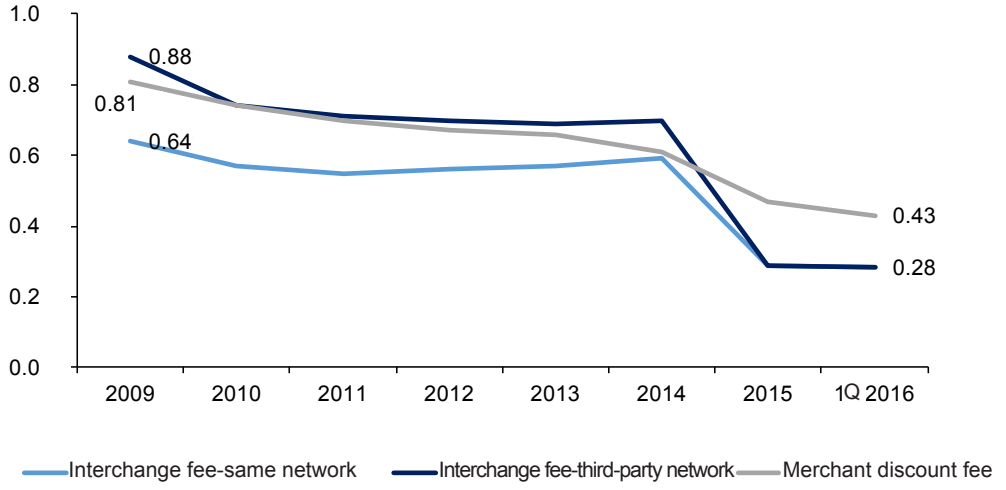
Table 3
Market shares in ATMs and PoS terminals in Spain. December 2015
(Percentage)

	ATMs	PoS terminals
Servired	56	67
4B	14	24
Euro6000	30	9
Total	100	100

Source: Based on reports/annual reports issued by card schemes, 2015, AFI.

Exhibit 13

Average interchange and discount fees in Spain (2009-1Q2016)
(Percentage)



Source: Bank of Spain, AFI.

Spanish card schemes and the possible creation of a domestic debit card network that could conceivably get into the account-to-account (A2A) acquiring business (electronic card-free payments), will attempt to go head to head with third-party providers authorised under the Payment Services Directive in the single euro payments area (SEPA).

Conclusions

Payment habits at small retailers/merchants are shifting in the expected direction but not at the expected speed. The fact that Spaniards still use cash more often than card-based payments, that one in four still only use cash and that just 7% pay for their purchases only with cards suggests that there is still a long way to go in terms of encouraging card usage, particularly in small-sized retailers and, generally speaking, for micro payments.

Mass adoption of card-based payments (whether physical or virtual) or A2A electronic payments as soon as this segment develops acquiring solutions currently faces obstacles that need to be pinned down from the standpoint of all the intervening parties. In a nutshell, it remains to be determined whether or not Spain's relative failure to wholeheartedly embrace e-payments is the result of preferences or rather existing impediments in the electronic payments market.

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Spain's structural unemployment rate: Estimates, consequences and recommendations

María Romero and Daniel Fuentes[1]

Empirical evidence suggests Spain's current high rate of structural unemployment leaves little room for the unemployment rate to fall without distorting prices. Lowering this high rate through structural reforms thus becomes an increasingly important priority to reduce potentially negative consequences for the Spanish labour market and overall economy.

The consolidation of the recovery has opened up a debate about the economy's capacity to continue reducing the unemployment rate without leading to inflationary pressures. The Bank of Spain estimates a structural unemployment rate of 16% of the active population, compared to 17.4% calculated by the European Commission. Our estimates point to a range of between 15% and 19% depending on the methodology employed. This high rate of structural unemployment in the Spanish economy could: (i) limit potential growth; (ii) exclude a large swathe of the population; and, (iii) negatively affect competitiveness. Hence, there is a need to implement structural reforms ranging from efficient retraining and refocused support for the unemployed to defending free market competition.

After two consecutive years of growth which have helped to solidify the economic recovery, one of the key issues that will be a focal point for the coming quarters is identifying how far the Spanish economy can continue to reduce the unemployment rate without generating wage and price tensions that would undermine competitiveness and attenuate the cycle.

This level of unemployment is known as structural unemployment and is related to potential GDP. The orthodox approach to measuring structural unemployment, itself vulnerable to a certain degree of methodological subjectivity, uses the Phillips curve as a starting point. The latter relates unemployment to inflation and enables the non-accelerating inflation rate of unemployment (NAIRU) or wage (NAWRU) to be estimated. Alternatively, the structural unemployment rate can also be inferred from the Capacity Utilisation Rate (CUR).

The methodological debate about the estimation of the structural unemployment rate is not just limited to the relationship between unemployment and wages but also between unemployment and potential output. Ultimately, the key point is that there is a floor on the unemployment rate after which any demand stimulus will be accompanied by an acceleration in unwelcome inflation.

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In addition to comparing different estimates of structural unemployment, this article provides an overview of the implications of having a high structural unemployment rate and identifies a series of recommendations that could help to lower it.

Total and structural unemployment rate

Since reaching a peak in the third quarter of 2016 at 26.9%, the Spanish economy's unemployment rate has declined by 8.3 percentage points to close 2016 at 18.6%. This is a significant reduction, which has been supported by the no less impressive capacity of the Spanish economy to generate employment over the same period. However, the consolidation of the recovery has raised questions about the Spanish economy's ability to continue reducing the unemployment rate in the coming quarters – in the context of a forecast for slowing activity and employment growth – without leading to an acceleration in inflationary pressures. This level is known as the structural unemployment rate.

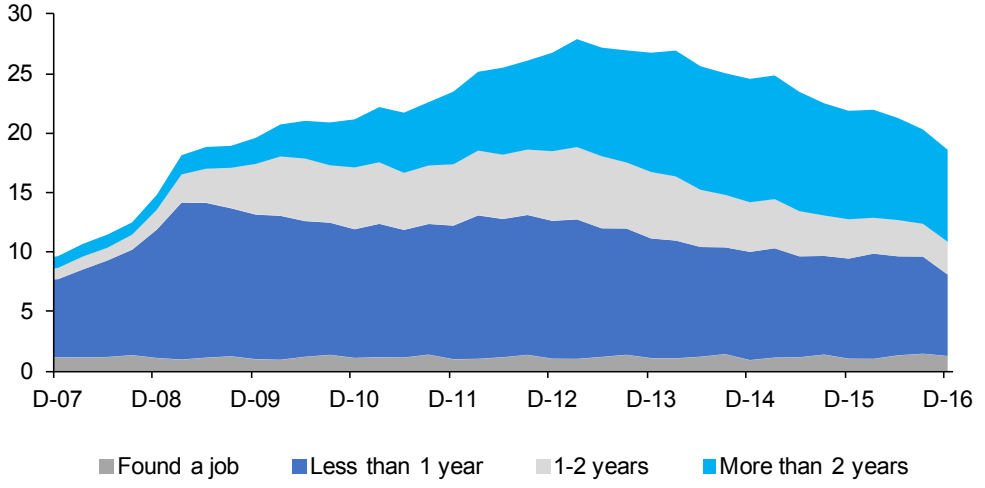
The unemployment malaise continues to impact the most vulnerable groups in society, such as women or those over 45 - they not only tend to be more frequently affected by unemployment, but they are also more likely to be unemployed for longer periods of time. The long-term unemployed, which in Q416 were 56.4% of the total, are primarily formed by these types of groups. Similarly, younger age groups who have the highest rates of unemployment are equally deserving of opportunities to work. The need to reincorporate all of these groups into the labour market requires renewed effort on top of what has been done so far.

The consolidation of the recovery has opened up a debate about the economy's capacity to continue reducing the unemployment rate without resulting in undesirable increases in wages and prices.

In this regard, it is not only important to know the current state of play in the economy and how far the unemployment rate is from its structural level, but also to identify and foresee necessary reforms to lower it.

Exhibit 1

Unemployment rate by time searching for a job (Percentage)

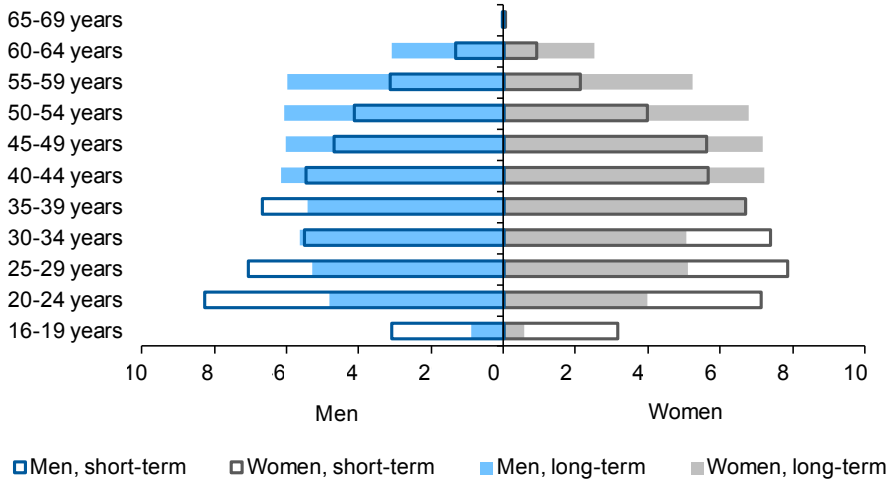


Source: INE, AFI.

Exhibit 2

Unemployment pyramid by age, gender and time searching for a job, Q416

(Total percentage)



Source: INE, AFI.

Methodologies and estimates of structural unemployment

Although there are various estimates of the structural unemployment rate, they are not exactly conclusive. According to the European Commission (EC), the non-accelerating wage rate of unemployment of the Spanish economy stood at 18.4% of the active population at the end of 2015, compared to an observed rate of unemployment of 22.1%. EC forecasts for 2016 and 2017 place the structural unemployment rate at 17.4% and 17.2% respectively, very close to the 18.6% unemployment rate recorded at the end of 2016 (Exhibit 3). Meanwhile, the Bank of Spain in one of its recent occasional papers (Cuadrado and Moral-Benito, 2016) puts the structural unemployment rate of the Spanish economy in the most recent period at between 18% and 19%.

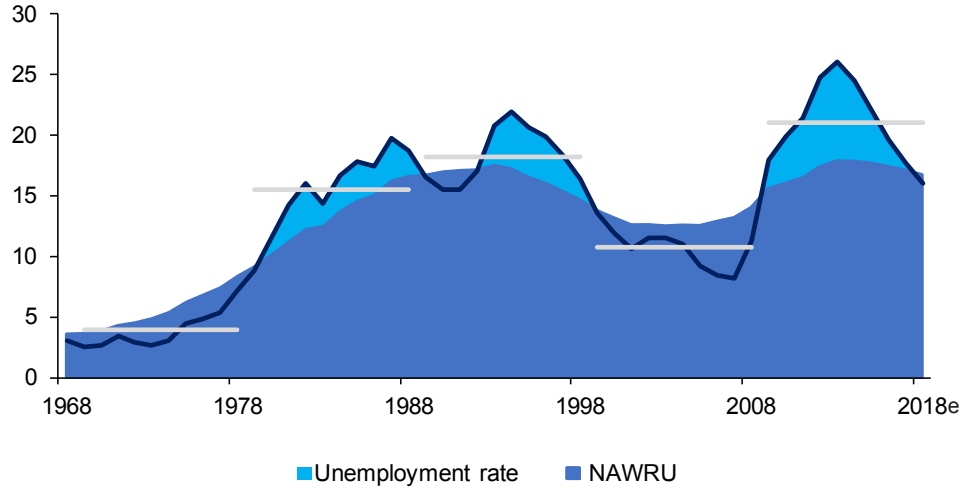
The Bank of Spain estimates a structural unemployment rate of between 18% and 19%, compared to 17.4% calculated by the European Commission. Our calculations, based on Capacity Utilisation and the Phillips curve point to a range of 15% to 19%.

It is difficult to put these estimates into perspective given the lack of a wide range of alternative calculations, unlike other macroeconomic variables estimated by the main research houses and international organisations. In order to calculate the structural rate of unemployment of the Spanish economy, in this article we use the Capacity Utilisation Rate (CUR) and the conventional Phillips curve approach (1958), which we compare with the previously mentioned estimates.

- *Capacity Utilisation.* The Capacity Utilisation Rate measures the degree of utilisation of the different factors of production, specifically, equipment, space and manpower. It is expressed as a percentage of the optimal operating level. The historical average CUR, aside from structural changes, is related to the unemployment rate.

Exhibit 3

NAWRU (European Commission estimate) and unemployment rate (Percentage)



Source: European Commission (AMECO), AFI.

The CUR methodology assumes that use of capital converges to its long-term equilibrium when the capacity utilisation rate returns to its historical average. Under the assumption of efficient competition, labour utilisation will find its structural level at the same time as capital (factor complementarity) with GDP reaching potential and the output gap closing.

Average utilisation of productive capacity in the pre-crisis period was 80.3%, compared to 79.2% in Q416. On this basis, a polynomial estimate of the capacity utilisation rate observed since the start of the crisis provides an interval for the structural unemployment rate ranging between 16.5% and 17.4%, depending on whether raw or smoothed (four-quarter rolling average) data series are used respectively.[2] It is important to bear in mind that the average historical rate of LFS unemployment between 1979 and 2016 stood at 16.4%, almost identical to the upper end of the range estimated using CUR (raw data).

- *Phillips curve.* When the unemployment rate closes in on its structural level, wage tensions start to emerge due to the scarcity of certain types of workers. The Phillips curve illustrates this through the relationship between the price level of an economy and its unemployment rate.

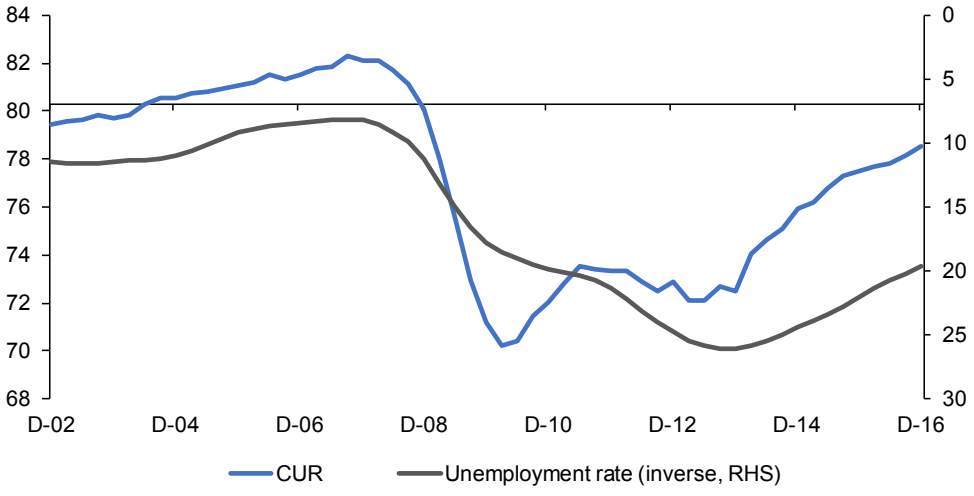
This relationship makes it possible to differentiate between expansionary and crisis phases. We can therefore reach the conclusion that the latter has lead to a shift in the Phillips curve "towards the right", consistent with an increase in the estimated structural unemployment rate of nearly six percentage points to reach a 18% threshold (Exhibit 5).[3] If this result is correct,

[2] We estimate the structural unemployment rate using the following polynomial relation $U = -0.2341 \cdot CUR^2 + 34.337 \cdot CUR - 1.233$, applied to the last economic expansion, where U is the unemployment rate and CUR is the Capacity Utilisation Rate (the average historical CUR of 80.3% has been used). The unemployment rate corresponds to LFS data and CUR comes from the Ministry of Economy.

[3] We estimate the structural unemployment rate from the relationship $\pi = 0.0025 + 0.0012 \cdot Crisis - 0.0208 \cdot \mu$, applied to the period 1986-2016, where π is the quarterly change in inflation (year-on-year change in prices), *Crisis* is a dummy set to 1 in the quarters when the Spanish economy has found itself in a recessionary phase, and μ is the rate of unemployment. The rate of inflation and LFS unemployment rate come from INE.

Exhibit 4

Unemployment rate and Capacity Utilisation Rate



Sources: MINECO, INE, AFI.

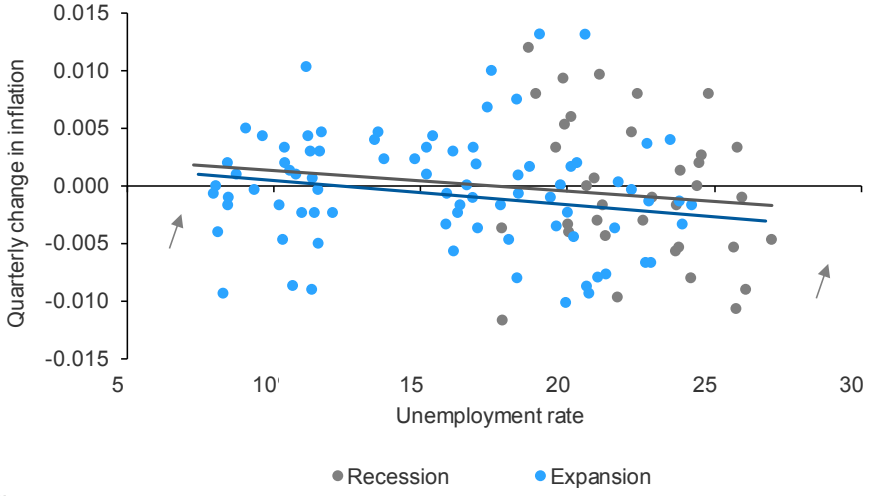
theoretically the coming quarters could see increases in inflation foreshadowing a lack of employable labour, even when the overall number of unemployed people remains very high.

In summary, estimates of the structural unemployment rate of the Spanish economy vary between 14.7% and 16.5% under the CUR approach and between 18% and 19% on the basis of the Phillips curve.

Exhibit 5

Phillips curve (quarterly data), 1986-2016

(Percentage)



Source: INE, AFI.

A vein of literature has emerged which is rather critical in regard to the second set of estimates, which according to some authors (OECD 2014; Ball, 2014) could contain an upward bias due to the imperfect treatment of hysteresis effects. These effects describe the persistence of high unemployment rates even once the initial causes have disappeared. This literature has opened up both an academic and institutional debate about the specification of the NAWRU employed by the European Commission itself (Havik *et al.,* 2014), which is being used not only to determine the structural unemployment rate but also for the cyclical component of the structural deficit.

Meanwhile, the lack of current wage tensions suggests that the structural unemployment rate of the Spanish economy could be closer to the 16% inferred from the Capacity Utilisation Rate than the 18% derived from the Phillips curve. Either way, the key point is that the current high rate of structural unemployment leaves little room for the unemployment rate to fall without distorting prices.

Implications of a high rate of structural unemployment

Among the most significant consequences of a high structural unemployment rate (or an effective unemployment rate that is close to the structural rate) are: (i) the limitation on the relatively modest growth potential of the Spanish economy (which consensus currently puts at around 1.5%); (ii) exclusion from the labour market of a non-negligible group of workers who are currently unemployed; and, (iii) pressure on wages and prices in the economy, which could undermine competitiveness.

The high rate of structural unemployment in the Spanish economy: (i) limits potential growth; (ii) excludes a large swathe of the population; and, (iii) erodes competitiveness.

Firstly, a high structural unemployment rate implies an underutilisation of productive capacity, insofar as a proportion of the available labour force is kept idle, weighing down on potential growth. In theory, once the structural floor of the labour market has been reached, additional reductions in the unemployment rate can only occur through increasing wages above their equilibrium level. This means that any type of demand stimulus will lead to an acceleration in the general level of prices. The higher the structural unemployment rate, the lower the potential growth and more vulnerable the economy is to inflationary spirals.

High structural unemployment also has a twin negative impact on public finances. Not only does it diminish capacity to raise revenues, but it also increases demand for resources to sustain income levels (in the form of unemployment benefits or other social protection support).

Secondly, a high structural unemployment rate also results in exclusion from the labour market of a significant proportion of potential workers who are unemployed. Rigidities in the Spanish labour market, reflected in the high structural unemployment rate, exclude more that just the long-term unemployed (those who have been unemployed for more than one year) who are by definition harder to employ. Indeed, the proportion of long-term unemployed, despite being very high, is less than the threshold marked by the structural unemployment rate. This means that even though short-term unemployed people have a higher probability of finding a job than those who have been out of work for years, the market could even exclude them – effectively creating chronic long-term unemployment.

The profile of people who have been unemployed for less than a year is different from the long-term unemployed, given that there is no particular gender bias in the former and the short-term unemployed tend to be made up of young people. It is worth bearing in mind that Spain has the highest youth unemployment rate in the European Union. Part of this group is affected by a specific

type of "unemployability", which could come to the fore as the labour market closes in on the structural rate of unemployment.

Finally, the proximity of the effective unemployment rate to its structural level could increase wage and salary tensions which would hamper the competitiveness of the Spanish economy. As previously mentioned, there is no sign of this happening for the time being. Either way, it is worth paying attention to wage developments over the coming quarters, given both high unemployment and modest improvements in productivity, which means that possible wage increases would have negative repercussions on firms' competitiveness.

Proposals to reduce structural unemployment

A variety of policies could help to reduce the Spanish economy's high structural unemployment rate, relating both to the supply side (workers) and the demand side (companies), as well as labour regulation. Some of the measures which could serve as a starting point for determining a suitable package of reform are as follows.

Reducing the structural unemployment rate requires: (i) efficient retraining and refocused support for the unemployed; (ii) supporting self-employment; (iii) defending free competition; and, (iv) reducing labour market rigidities, among other policies.

- *Efficient retraining and refocused* support for unemployed people over 45 years old (long-term) and young people (short-term) who could end up being excluded from the labour market. This measure would require the following:
  - *Enhanced spending on active labour market policies.* Spain is one of the coutries with the lowest spending per unemployed person in the EU-15. According to the State Budget, 5.2 billion euros were destined to active labour market policies, the equivalent of 1,100 euros per unemployed person. In comparison to the most advanced European economies, which spend 6,500 euros per unemployed person, Spain is lagging well behind the EU-15 average. There is scope to improve both support for this budgetary heading, as well as how it is oriented, to ensure that it is really spent on improving workers' employability and their labour market performance. This suggests there should be a greater focus on spending on training, as is the case in the EU-15 average, and to a lesser degree on hiring subsidies. Average spending on training by countries making up the EU-15 accounts for 36% of the total budget for active labour market policies, compared to barely 25% in Spain.
  - *Focused training on the acquisition of skills* that are needed by the production system and which help raise labour productivity. In this regard, digital skills are increasingly important for jobs in an ever more digitalised economy. The decision by the last Council of Ministers of 2016 to launch a support programme to foster training and employment of young people (under 30 years) in the Digital Economy is a step in the right direction. However, the budgetary allocation does not look to be sufficient (the equivalent of a maximum of 200 support measures for companies). It is also important to remember the urgent need for ongoing training of existing workers to mitigate the adverse effects arising from digital transformation.
- *Increasing self-employment through improving the business climate.* Self-employment accounts for barely 17% of total employment in Spain. The development of economic activities that are emerging in the new economy requires a supportive business environment in which business projects can be unleashed. It would

therefore be desirable for Spain to improve its ranking in the World Bank's Doing Business survey. The 2017 report (using data for 2016), places Spain in 32nd place, a long way behind key EU-15 countries such as Denmark (3rd), United Kingdom (7th) or Sweden (9th). In particular, it would be desirable for Spain to make progress in areas such as business start-up, construction permits or obtaining electricity, where the Spanish economy is lagging behind its European peers.

- *Defending free competition.* Removing entry barriers in protected sectors and proper compliance with conditions for free competition would reduce market prices and stimulate trade in goods and services. In this regard, the corporatism involved in certain professional activities as well as collusive and oligopolistic practices not only directly impact on the distribution of income (to the detriment of the consumer) but also negatively impact on employment creation.

- *Reducing labour market rigidities.* The last two labour market reforms that took place during the crisis have attempted to move labour market regulation towards a more liberal approach than has traditionally been the case in Spain. The current challenge is to balance the necessary reduction in rigidities with creating quality employment. Identifying effective forms of public-private collaboration, giving a greater role to job placement services and introducing simpler labour contracts are some of the best practices offered up by European countries, which might be worth emulating.

Conclusions

The unemployment rate in Spain is close to its structural level, which we could place (with the range of available estimates) at around 16% of the active population.

The limited space between the observed and structural rate of unemployment has potential implications: (i) on the Spanish economy's potential GDP; meaning (ii) it could lead to professional exclusion that goes beyond the long-term unemployed, with repercussions on the growing and worrying social exclusion of a considerable part of the population; and, (iii) it could lead to pressures on wages and prices in the coming months which could negatively affect the overall competitiveness of the Spanish economy.

Reducing the high rate of structural unemployment is therefore a pressing concern in order to avoid these repercussions. In order to tackle this problem, it will be necessary to: (i) strengthen spending on active labour market policies, focusing them on improving workers' skills and knowledge (particularly, the unemployed); (ii) boost self-employment, through improving the business climate; (iii) introduce measures to defend free competition; and, (iv) reduce labour market rigidities without disregard to the quality of jobs being created; among other structural measures.

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The relationship between the recovery in Spain's current account and labour productivity

Ramon Xifré[1]

Since 2013, Spain's current account entered into surplus – reversing a recent history of deficits. Unlike the years prior to the crisis, an apparent rise in labour productivity across most sectors is presumably underpinning recent favourable developments in the current account.

Spain's current account deteriorated sharply between 2003 and 2007 but went on to recover just as swiftly, entering into surplus territory in 2013, where it has remained since then – an unprecedented phenomenon in Spain's recent economic history. An analysis of Spain's current account dynamics dating back to 2000 relative to the main eurozone benchmark economies (Germany, France, Italy and the Netherlands) reveals that the biggest component, the balance of trade in goods, continues to present a deficit, despite having narrowed in recent times. The goods trade deficit is significant because it sets the Spanish economy apart not only from the eurozone's most competitive economies, Germany and the Netherlands, but also Italy. As for apparent labour productivity, the results reveal two discrete patterns, pre- and post-crisis. Before the crisis, the Spanish economy was growing because the number of workers and hours worked were increasing but in the general absence of any improvement in apparent productivity. Since the crisis, and although it is still too soon to make a definitive assessment of the situation, there are arguments to support the notion that productivity is rising in most sectors of the Spanish economy, presumably shoring up the current account.

Although the Spanish economy has exhibited a noteworthy recovery on a number of fronts since 2013, certain economic indicators, such as those related to the labour market, remain of the utmost concern.

One of the areas in which the improvement has been most significant is the current account, the snapshot of the country's net economic position with the rest of the world. The current account deteriorated sharply between 2003 and 2007, plummeting from a deficit of 4% of GDP to 10%. However, it also recovered sharply thereafter, entering into surplus territory in 2013. The scale and speed of the adjustment in the current account in both directions makes Spain somewhat of an outlier relative to other advanced economies. This prompts an important question about the state of the Spanish economy, namely whether the observed adjustment in external imbalances

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is attributable to a structural change or rather to cyclical factors that could therefore be reversible (see ECB, 2014: 47-50 and 2015:1-3).

The scale and speed of the adjustment in the current account in both directions makes Spain somewhat of an outlier relative to other advanced economies.

This paper attempts to provide information to help answer this question, albeit without purporting to constitute an exhaustive analysis. Firstly, the trend in the current account balance in Spain since 2000 is analysed relative to that observed in the other four major eurozone economies (Germany, France, Italy and the Netherlands, hereinafter, the EA4). The comparison is performed at the aggregate level and also for the main components of the current account balance. The goal of this comparative exercise is to better isolate the idiosyncrasies of the trend in Spain's current account balance relative to current account patterns in comparable neighbouring economies. Against this backdrop, other economic data deemed necessary to analysing the current account dynamic, such as GDP growth and the unemployment rate, are also analysed.

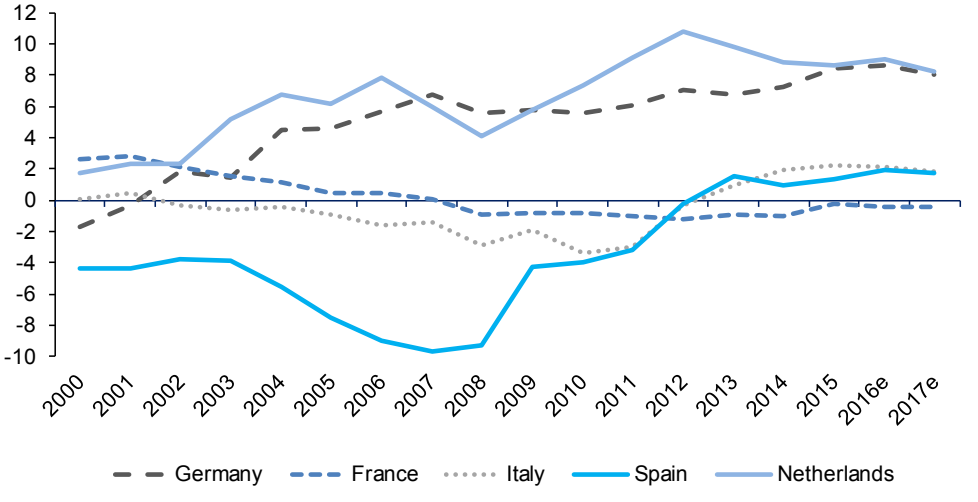
Secondly, we attempt to relate the trend in the current account balance with the basic indicators of apparent labour productivity. To this end, we analyse the trend in labour productivity in terms of hours worked and number of employees at the sector level and also comparing Spain with the average of the four benchmark economies (EA4).

Trend in the current account balance in Spain

As shown in Exhibit 1, between 2000 and 2003 Spain's current account balance hovered around a moderate deficit of 4% of GDP. In the years prior to the onset of the crisis, as a result of the

Exhibit 1

Current account balance as a % of GDP



Note: The 2016 and 2017 figures are estimates.
Source: IMF.

exacerbation of several imbalances, both internal and external, the deficit gradually deteriorated, bottoming out at 10% of GDP in 2007.

As is also observed in Exhibit 1, throughout the period analysed – 2000 to 2017 (the 2016 and 2017 figures are IMF estimates) – none of the other four EA4 economies presented a current account deficit of greater than 4%. In fact, the Netherlands recorded a surplus throughout the entire period and Germany was not far off. Moreover, both countries' balances clearly improved over the horizon analysed. In contrast, France saw its current account balance erode slowly but surely although it has never presented a deficit of more than 1% of GDP. Italy's current account deficit exceeded 2% of GDP during just three of the 18 years analysed.

This EA4 background paves the way for a better assessment of the trajectory of the current account balance in Spain. What is unusual about Spain's situation relates not only to the years of high deficits (between 2004 and 2009) but also to the fact that in the run-up to that period (2000-2003), Spain presented a deficit that was not commensurate with that of a major eurozone economy.

What is unusual about Spain's situation relates not only to the years of high deficits, but also to the fact that in the run-up to that period, Spain presented a deficit that was not commensurate with that of a major eurozone economy.

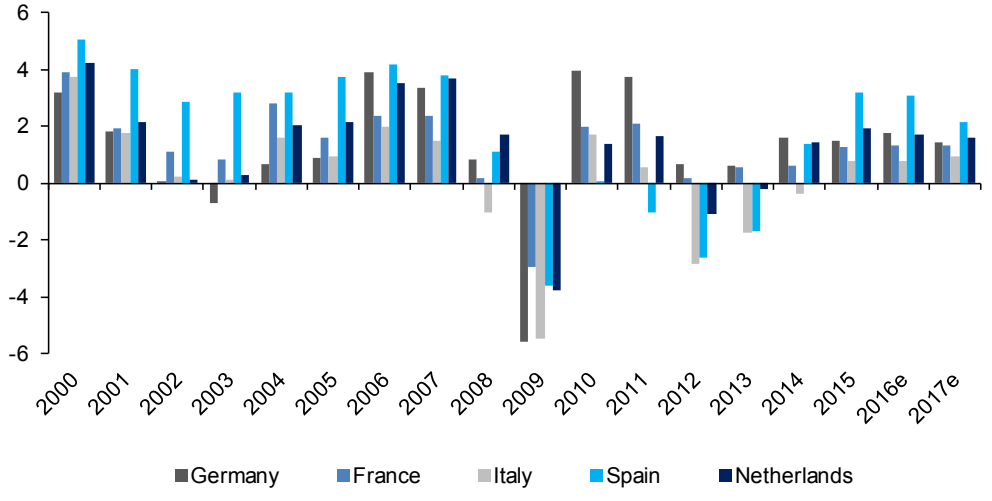
In order to better pin down the trend in the current account balances, it is useful to analyse the numbers in tandem with annual GDP growth (Exhibit 2) and unemployment rates (Exhibit 3).

As shown in Exhibit 2, Spain is the country to have registered the fastest economic growth in both the run-up to the crisis (2000 - 2007) and,

Exhibit 2

Year-on-year GDP growth

(Percentage)

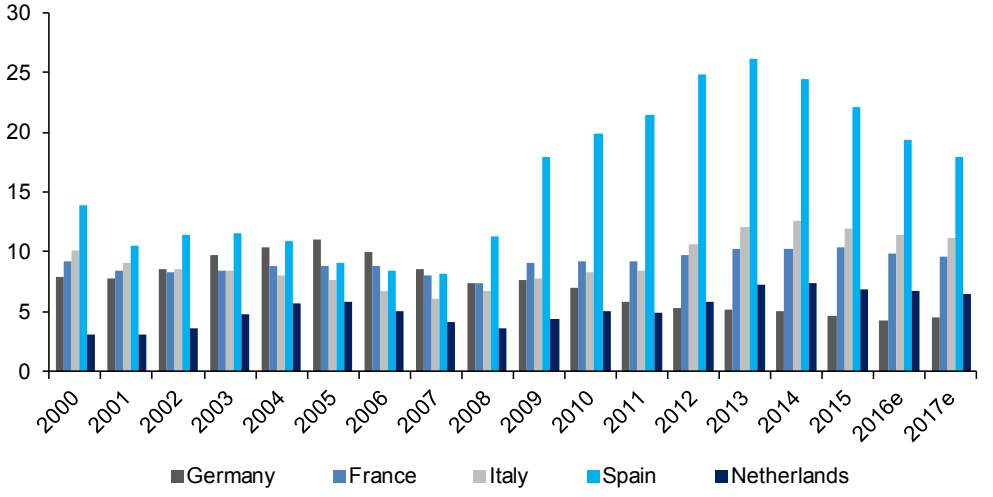


Note: The 2016 and 2017 figures are estimates.

Source: IMF.

Exhibit 3

Unemployment rate, as a % of the active population



Note: The 2016 and 2017 figures are estimates.
Source: IMF.

post-crisis, between 2015 and 2017 (the 2016 and 2017 figures correspond to IMF estimates). In fact, the numbers suggest that the Spanish "growth model" has differed from that of the rest of the EA4 economies both before and after the crisis, albeit following different patterns in each period.

Before the crisis, the growth model was based on a level of leverage and dependence on trade that were unusual for a major eurozone economy. In contrast to the EA4 economies, Spain presented a high-growth/high-current-account-deficit binomial. Since the crisis, the main difference is that Spain is once again growing faster than the EA4 economies yet also presenting unemployment rates that are almost triple the EA4 average (Exhibit 3). The binomial that identifies the Spanish case in this period is therefore high-growth/high-unemployment. For a detailed analysis of these matters, see Andrés and Doménech (2015), Xifré (2016) and García-Santana *et al.* (2016).

Components of the current account balance

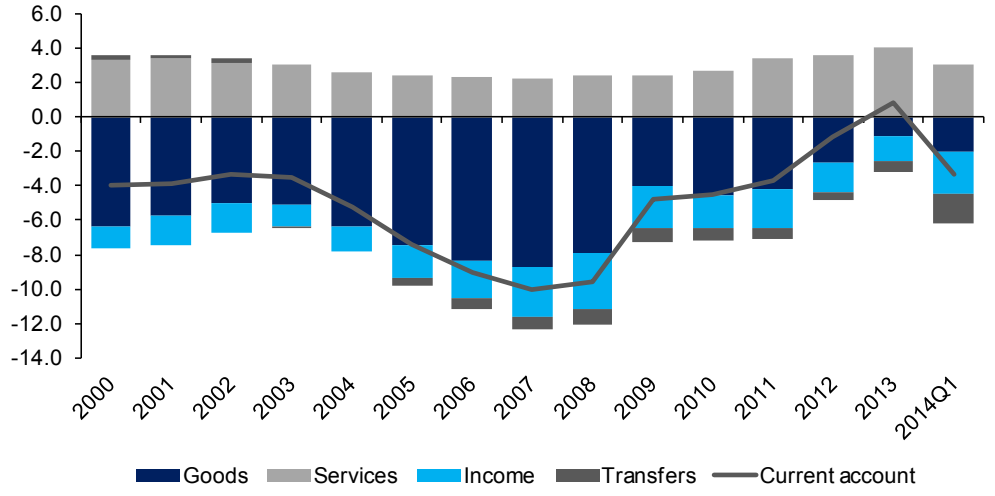
The current account encompasses four balances: it is the tally of international transactions in goods and services, plus net income abroad and net current transfers (see Feenstra and Taylor, 2017 for a systematic and expanded explanation). The current account balance records total net flows of resources in and out of a country; each of the four sub-balances is also presented separately.

Exhibit 4 illustrates the current account balance and its components as a percent of GDP for Spain and Exhibits 5.a, 5.b, 5.c and 5.d show the same figures for Germany, France, Italy and the Netherlands, respectively. The figures are annual with the exception of the last entry, which relates to the first quarter of 2014 (the most updated figure available).

As the Exhibit shows, the only component of Spain's current account balance that has been

Exhibit 4

Current account balance and its determinants in Spain, as a % of GDP



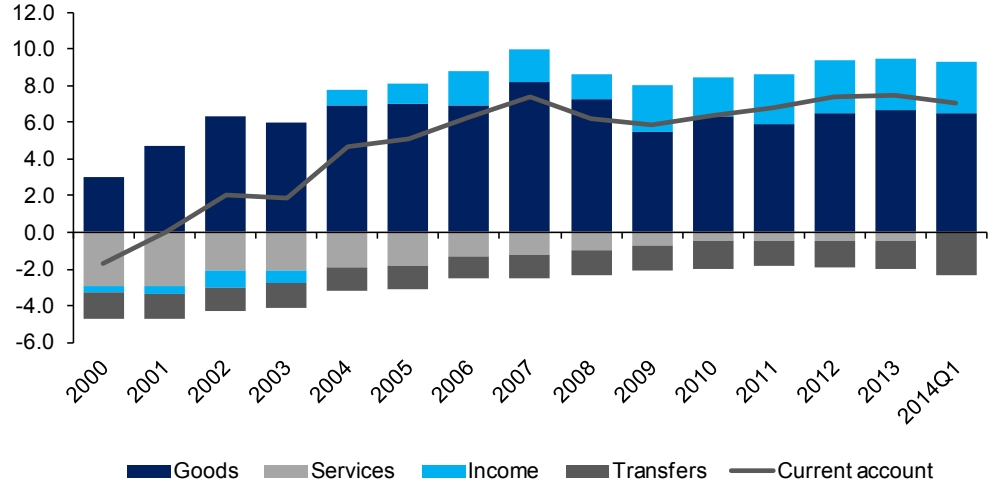
Note: The 2014 figures correspond to the first quarter.

Source: Eurostat.

in surplus consistently over time has been the services trade balance, which evidences the net inflow of funds generated by tourist expenditure. The biggest determinant of the overall balance is the balance of trade in goods, *i.e.,* net exports of merchandise, a component that has registered

Exhibit 5a

Current account balance and its determinants in Germany, as a % of GDP

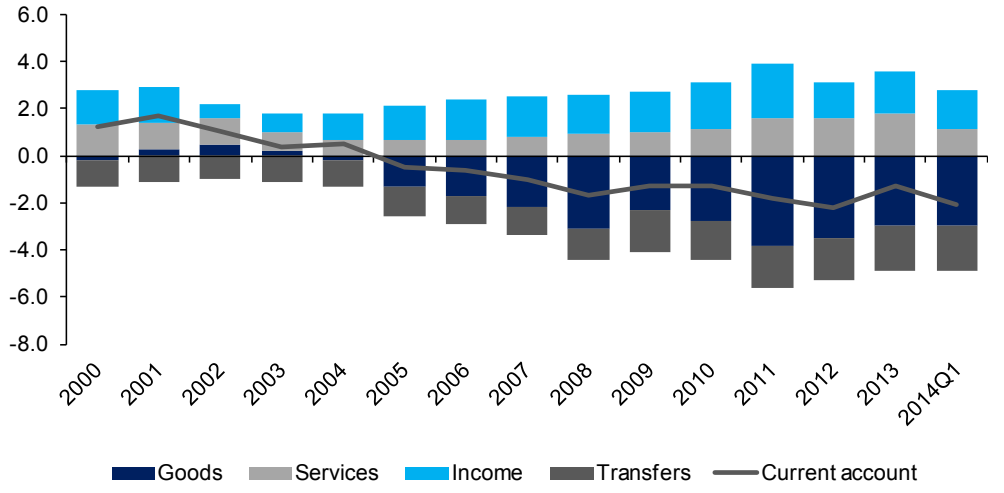


Note: The 2014 figures correspond to the first quarter.

Source: Eurostat.

Exhibit 5b

Current account balance and its determinants in France, as a % of GDP



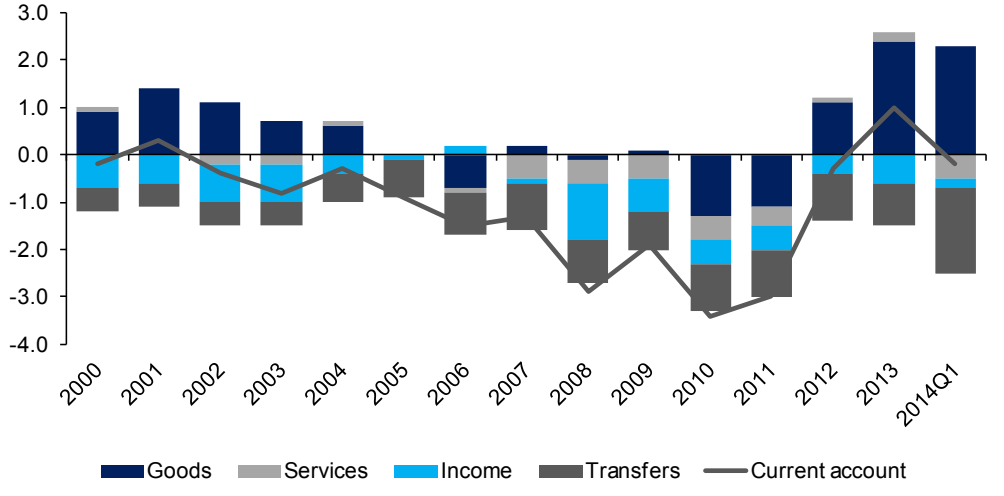
Note: The 2014 figures correspond to the first quarter.
Source: Eurostat.

systematic and, in some years, very significant deficits (over 6% of GDP between 2004 and 2008). Although the goods trade deficit corrected sharply between 2009 and 2013, the data available for 2014 points to renewed widening.

The net income balance has also registered systematic deficits with somewhat of a tendency to widen in time, suggesting that the payments made by Spanish companies for the foreign resources they use (capital and labour) grow

Exhibit 5c

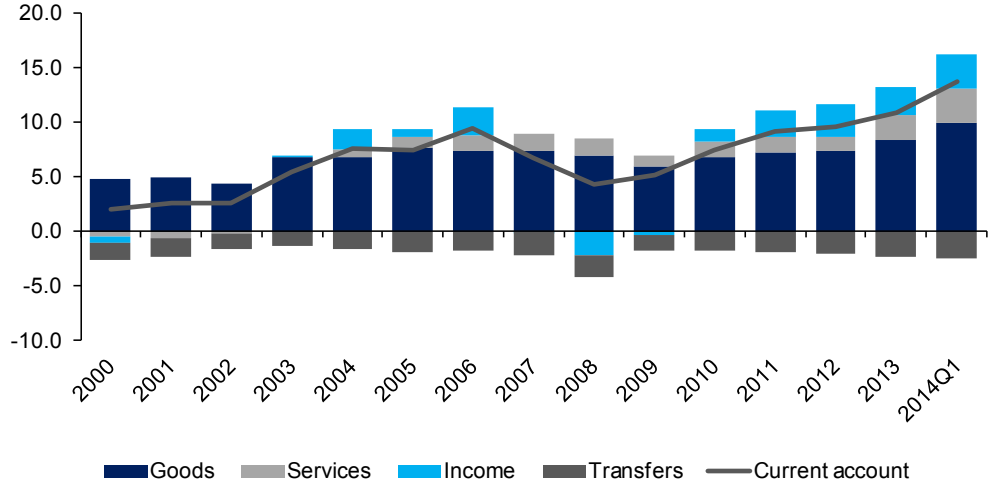
Current account balance and its determinants in Italy, as a % of GDP



Note: The 2014 figures correspond to the first quarter.
Source: Eurostat.

Exhibit 5d

Current account balance and its determinants in the Netherlands, as a % of GDP



Note: The 2014 figures correspond to the first quarter.
Source: Eurostat.

faster than the remuneration obtained for the use of Spanish resources by foreigners. The net current transfers deficit has also been widening, reflecting growth in remittances by immigrants in Spain to their home countries.

The trend and composition of the German (Exhibit 5.a) and Dutch current accounts (Exhibit 5.d) have multiple elements in common. In both instances, the overall balance presents a clearly positive trend throughout the period analysed, underpinned by a systematic and sizeable goods trade surplus of close to 10% of GDP in the Netherlands and 7% in Germany. In both nations, the trend in the net income balances has also been positive, with their respective surpluses widening over time (Germany has presented a net income surplus since 2004 and the Netherlands has presented a surplus under this account every year except 2008).

The erosion of France's current account balance is attributable almost entirely to its burgeoning goods trade deficit. Having presented a surplus until 2003, France's balance of trade in goods presented a deficit of around 3% of GDP in 2013 and 2014. In Italy, it is harder to establish a clear pattern. Perhaps the most remarkable trend is the fact that the overall balance has been relatively stable with both the surpluses and deficits (the latter more frequent than the former) contained at under 3% of GDP.

Trend in labour productivity and its relationship with the current account

What does the current account balance depend upon – particularly the balance of trade in goods, which, as we have seen – is its largest component? The factors that affect net exports, *i.e.,* the difference between a country's exports and its imports, are numerous. In general terms, it can be said that a country's exports to the rest of the world depend on three key factors.

Firstly, on the products exported, in the broadest possible sense. By this we mean their value added (vertical diversification), the diversity of products

Table 1

Gross added value per hour worked, constant prices. Annual growth rates, period average

					2000-2015	2000-2007	2008-2012	2013-2015
A_U: Total				**EA4**	**0.9**	**1.4**	**0.4**	**0.7**
				Spain	**1.0**	**0.4**	**1.9**	**0.8**
A_U: Total	A: Agriculture, forestry and fishing			EA4	2.0	2.7	3.2	1.2
				Spain	2.9	3.6	0.8	4.4
	BNEXCL: Non-agriculture business sector excluding real estate			EA4	1.1	1.8	0.1	0.9
				Spain	0.7	-0.3	2.0	1.0
	BNEXCL: Non-agriculture business sector	B_E: Industry including energy		EA4	2.1	3.2	1.3	0.9
				Spain	2.2	2.5	2.2	1.2
		B_E: Industry including energy	BDE: Mining and utilities	EA4	-0.1	0.8	-3.9	-1.8
				Spain	-0.0	0.9	2.2	-6.1
			C: Manufacturing	EA4	2.4	3.6	1.9	1.4
				Spain	2.3	2.4	1.3	3.4
		F: Construction		EA4	-0.2	0.1	-3.4	1.5
				Spain	0.9	-3.8	9.3	-0.4
		GNEXCL: Business sector services excluding real estate		EA4	0.7	-0.1	9.3	0.4
				Spain	1.4	2.1	0.6	0.9
		GNEXCL: Business sector services excluding real estate	G_I: Wholesale retail trade accommodation food services, transportation and storage	EA4	1.3	2.0	0.2	1.2
				Spain	-0.0	-1.0	1.0	1.0
			J: Information and communication	EA4	2.8	4.1	1.7	1.1
				Spain	2.6	2.8	1.1	4.5
			K: Financial and insurance activities	EA4	1.4	1.3	2.8	0.8
				Spain	2.6	7.5	-1.8	-3.3
			MN: Professional, scientific and technical activities, Administrative and support service activities	EA4	-0.8	-0.8	-0.6	0.2
				Spain	-0.8	-2.7	-0.5	3.6

Note: Classification of economic activities as per ISIC Rev.4.

Source: OECD.

Table 2

Gross added value per worker, constant prices. Annual growth rates, period average

					2000-2015	2000-2007	2008-2012	2013-2015
A_U: Total				**EA4**	**0.5**	**1.0**	**0.3**	**0.6**
				Spain	**0.7**	**0.1**	**1.9**	**0.6**
A_U: Total	A: Agriculture, forestry and fishing			EA4	1.4	2.2	2.3	1.0
				Spain	2.3	2.7	0.9	3.5
	BNEXCL: Non-agriculture business sector excluding real estate			EA4	0.7	1.3	0.0	0.7
				Spain	0.5	-0.6	2.0	0.8
	BNEXCL: Non-agriculture business sector	B_E: Industry including energy		EA4	1.8	2.9	1.2	1.1
				Spain	2.3	2.5	2.7	1.4
		B_E: Industry including energy	BDE: Mining and utilities	EA4	-0.3	0.5	-3.6	-1.5
				Spain	0.1	1.0	2.5	-6.4
			C: Manufacturing	EA4	2.1	3.3	1.8	1.7
				Spain	2.5	2.4	1.8	3.6
		F: Construction		EA4	-0.5	-0.1	-3.7	1.4
				Spain	1.0	-3.5	8.8	0.2
		GNEXCL: Business sector services excluding real estate		EA4	0.4	0.9	0.4	0.4
				Spain	-0.1	-0.9	0.7	0.9
		GNEXCL: Business sector services excluding real estate	G_I: Wholesale retail trade accommodation food services, transportation and storage	EA4	0.7	1.4	0.0	0.8
				Spain	-0.3	-1.6	1.2	0.6
			J: Information and communication	EA4	2.7	3.9	1.9	1.3
				Spain	2.5	2.1	1.7	4.7
			K: Financial and insurance activities	EA4	1.1	0.7	2.9	0.7
				Spain	2.4	7.5	-1.7	-4.1
			MN: Professional, scientific and technical activities, Administrative and support service activities	EA4	-1.0	-1.0	-0.6	-0.1
				Spain	-1.5	-3.9	-0.5	3.5

Note: Classification of economic activities as per ISIC Rev.4.

Source: OECD.

within the export mix (horizontal diversification), the after-sales services accompanying these products, their technological component and any other attribute that makes them attractive in the international markets. Secondly, the prices of these products; all other attributes being equal, a product or service will sell better abroad if it costs less. Here it is important to note that if a product or service is exported to a jurisdiction with a different currency, what counts is the effective price, *i.e.,* the price times that rate of exchange between the two currencies. Lastly, the third key driver of a country's exports is external demand, which, ultimately, depends on the situation of the destination economies to which the exports of the companies in the country of origin are targeted.

This third factor, external demand, is exogenous and does not depend on the domestic economic conditions prevailing in the exporting country. In contrast, the first two factors are largely shaped by how the home economy is faring. Indeed, the production of value-added products and services at a competitive price is precisely what is known as an economy's competitiveness.

Against this backdrop, the work performed recently by Crespo and García Rodríguez (2016) shows that Spanish exports are far more sensitive to changes in external demand than to changes in competitiveness. However, because the performance of external demand is exogenous, from the standpoint of the domestic economy, it makes sense to focus policy on the internal factors that have the biggest influence on competitiveness.

There is broad consensus that productivity is the most important of these factors. In this paper, we analyse the most basic, albeit most direct, measure of productivity: apparent labour productivity, which is defined as value added generated per unit of labour, the latter measured either in hours worked or number of workers. For a more precise analysis, this paper looks at productivity broken down by sector and, as in the earlier sections, in relation to the EA4, in this instance presenting the average for this group of four countries.

Table 1 and Table 2 provide the two main labour productivity indicators: gross value added or output per hour worked and gross value added per person employed, respectively. The figures are provided for the economy as a whole and broken down for a group of sectors (using the OECD's ISIC Rev. 4 classification of economic activities) and for four periods of time: the full study span for which there is data available (2000-2015) and three sub-periods, namely the pre-crisis years (2000-2007), the crisis years (2008-2012) and the post-crisis years (2013-2015). For each period, the average rate of growth is presented as a percentage.

As illustrated in Tables 1 and 2, during the pre-crisis years, productivity across the Spanish economy as a whole rose on average by one percentage point less than the productivity gains recorded by the EA4, both in terms of hours worked (annual growth of 1.4% in the EA4 vs. 0.4% in Spain) and number of people employed (1.0% *vs.* 0.1%, respectively).

The productivity gap, *i.e.,* the difference between productivity growth in Spain compared to the EA4, was relatively widespread sector-wise during the pre-crisis years but was particularly pronounced in the construction sector, professional services and scientific activities, trade and food service, information and communication activities, financial and insurance activities and the manufacturing industry.

The construction and professional services sectors stand out: in these two sectors average labour productivity growth was negative (-3.8% and -2.7%, respectively, by number of hours worked and -3.5% and -3.9%, respectively, by number of employees).

Table 3 and Table 4 provide complementary information for the purpose of analysing

Table 3

Number of hours worked. Annual growth rates, period average

					2000-2015	2000-2007	2008-2012	2013-2015
A_U: Total				**EA4**	**0.2**	**0.5**	**-0.0**	**-0.0**
				Spain	**0.8**	**3.3**	**-2.9**	**0.1**
A_U: Total	A: Agriculture, forestry and fishing			EA4	-1.7	-2.0	-2.5	-0.8
				Spain	-2.3	-2.4	-2.6	-1.3
	BNEXCL: Non-agriculture business sector excluding real estate			EA4	0.1	0.5	-0.1	-0.1
				Spain	0.6	3.9	-4.3	0.1
	BNEXCL: Non-agriculture business sector	B_E: Industry including energy		EA4	-1.3	-1.2	-2.1	-0.4
				Spain	-1.4	0.1	-4.6	-0.1
		B_E: Industry including energy	BDE: Mining and utilities	EA4	0.1	-0.5	1.6	0.7
				Spain	2.0	3.5	0.9	-0.2
			C: Manufacturing	EA4	-1.4	-1.2	-2.5	-0.5
				Spain	-1.7	-0.1	-5.1	-0.1
		F: Construction		EA4	-0.4	0.8	0.0	-2.3
				Spain	-2.2	6.9	-16.3	-3.2
		GNEXCL: Business sector services excluding real estate		EA4	0.6	1.2	0.5	0.3
				Spain	2.0	4.5	-1.3	0.7
		GNEXCL: Business sector services excluding real estate	G_I: Wholesale retail trade accommodation food services, transportation and storage	EA4	0.0	0.5	0.3	-0.3
				Spain	1.5	3.9	-1.8	0.6
			J: Information and communication	EA4	1.1	1.8	1.0	0.7
				Spain	2.0	3.4	0.7	0.3
			K: Financial and insurance activities	EA4	-0.4	-0.0	0.5	-1.0
				Spain	-0.1	1.6	-1.1	-2.8
			MN: Professional, scientific and technical activities, Administrative and support service activities	EA4	2.0	3.0	0.9	1.4
				Spain	4.2	8.0	-0.4	1.7

Note: Classification of economic activities as per ISIC Rev.4.

Source: OECD.

Table 4

Number of employees. Annual growth rates, period average

					2000-2015	2000-2007	2008-2012	2013-2015
A_U: Total				**EA4**	**0.6**	**1.0**	**0.1**	**0.2**
				Spain	**1.0**	**3.7**	**-2.9**	**0.3**
A_U: Total	A: Agriculture, forestry and fishing			EA4	-1.2	-1.5	-1.6	-0.7
				Spain	-1.7	-1.5	-2.8	-0.4
	BNEXCL: Non-agriculture business sector excluding real estate			EA4	0.5	1.0	0.0	0.0
				Spain	0.8	4.2	-4.3	0.3
	BNEXCL: Non-agriculture business sector	B_E: Industry including energy		EA4	-1.0	-0.8	-2.0	-0.7
				Spain	-1.5	0.1	-5.0	-0.3
		B_E: Industry including energy	BDE: Mining and utilities	EA4	0.3	-0.2	1.4	0.4
				Spain	1.9	3.4	0.6	0.2
			C: Manufacturing	EA4	-1.1	-0.9	-2.4	-0.8
				Spain	-1.8	-0.1	-5.6	-0.3
		F: Construction		EA4	-0.1	1.0	0.3	-2.2
				Spain	-2.4	6.5	-15.9	-3.7
		GNEXCL: Business sector services excluding real estate		EA4	1.1	1.7	0.5	0.6
				Spain	2.4	5.2	-1.5	1.0
		GNEXCL: Business sector services excluding real estate	G_I: Wholesale retail trade accommodation food services, transportation and storage	EA4	0.9	1.8	0.7	0.4
				Spain	1.2	1.7	0.8	0.7
			J: Information and communication	EA4	1.2	2.0	0.8	0.5
				Spain	2.1	4.1	0.0	0.0
			K: Financial and insurance activities	EA4	-0.1	0.6	0.4	-0.9
				Spain	0.1	1.6	-1.2	-2.0
			MN: Professional, scientific and technical activities, Administrative and support service activities	EA4	2.2	3.2	0.8	1.6
				Spain	4.9	9.4	-0.3	1.8

Note: Classification of economic activities as per ISIC Rev.4.

Source: OECD.

productivity growth as they present, using the same format as Tables 1 and 2, the changes in the number of hours and number of employees, respectively. In short, they isolate the change in the denominator of the apparent productivity equation, permitting analysis of the cause of a productivity gain in a given sector. Such a productivity gain can be the result of faster growth in output relative to the growth in labour units (whether hours or employees) or a drop in the labour units used in that sector.

The productivity gap in Spain compared to the EA4, was relatively widespread sector-wise during the pre-crisis years. Specifically, in construction and professional services, the number of hours worked and number of people employed rose.

This analysis reveals how the number of labour units employed in Spain during the pre-crisis years (hours and workers) rose in all sectors except for agriculture (where they fell sharply) and the manufacturing industry (where they were relatively flat). Specifically, in the two sectors mentioned above that presented productivity losses, construction and professional services, the number of hours worked and number of people employed rose. The conclusion is, therefore, that the value added generated by these sectors grew by less than the additional human resources taken on.

A similar phenomenon, albeit less pronounced, is observed in the other main productive sectors listed above which, as already noted, presented lower average productivity growth relative to the EA4.

The key takeaway is, therefore, that during the pre-crisis years, economic growth in Spain was driven more by growth in the units of labour employed in the main economic sectors than to sector-specific productivity gains. In turn, this pattern helps to partially explain the current account deficits recorded during the period (Exhibit 1). As shown in Table 3, the number of hours worked in the Spanish economy as a whole increased at an average annual rate of 3.3%, compared to 0.5% in the EA4, while, looking at Table 4, the number of people employed increased by 3.7% per annum in Spain, compared to 1% in the EA4.

The key takeaway is, therefore, that during the pre-crisis years, economic growth in Spain was driven more by growth in the units of labour employed in the main economic sectors than to sector-specific productivity gains.

What form did the adjustment take and how has the relationship between productivity and the current account changed post-crisis?

The crisis years were marked by a widespread and pronounced drop in the number of labour units, measured by both hours and workers, deployed in virtually every productive sector (Table 3 and Table 4). The sharp contraction in the construction sector stands out: by 2013 this sector was using just 20% the amount of labour it had been using in 2008. Albeit without sustaining such a drastic contraction, the norm during the crisis years, as is well known, was a pervasive slowdown in activity. As a result, the apparent labour productivity 'gains' observed in certain sectors (Table 1 and Table 2) do not reflect an improvement in sector efficiency but rather a massive expulsion of labour resources.

During the post-crisis years, between 2013 and 2015, the figures reveal that labour productivity in Spain in aggregate terms has increased at roughly the same pace as in the EA4 in terms of both hours worked (Table 1) and number of workers (Table 2). This top line trend of productivity gains in line with those of the EA4 masks two sub-patterns: (i) sectors in which productivity growth is outpacing that of the benchmark economies (notably professional services, scientific activities and the manufacturing industry); and (ii) the

sectors in which productivity growth its trailing that of the EA4 (notably the financial sector and construction industry).

In short, the most noteworthy aspect of the situation in Spain since the crisis is the fact that, in general, labour productivity gains are not being driven by a reduction in the number of units of labour the various sectors are using (in contrast to what happened during the crisis years). This indicates, therefore, that the foundations of the recovery in labour productivity in Spain are relatively solid, suggesting that the structural factor is outweighing cyclical factors. It is a little soon, however, to take a definitive position on this matter which would require a longer time horizon and more detailed analysis of the sector dynamics.

Conclusions

This paper analyses the trend in the Spanish economy's current account, its main determinants and the sector dynamics underpinning the labour productivity trend.

Spain's current account deteriorated sharply in the run-up to the crisis but went on to recover just as swiftly. Nevertheless, the analysis shows that the structural weak link in Spain's current account balance remains the persistent goods trade deficit.

In Spain, since the crisis, labour productivity gains are generally not being driven by a reduction in the number of units of labour the various sectors are using, a preliminary indication that the foundations of the recovery in labour productivity are relatively solid, and suggesting that structural factors are outweighing cyclical ones.

Given that the balance of trade in goods is determined by an economy's competitiveness and this in turn depends, directly but not exclusively, on labour productivity, it is opportune to analyse the trend in the latter variable.

The information available suggests that the productivity trend has improved in most of Spain's productive sectors in the wake of the crisis. This improvement may explain part of the high rates of GDP growth and the improvement in the current account balance being observed.

Nevertheless, important questions remain regarding how to get Spain's labour market back on its feet as the strong growth, current account and productivity figures coexist with a rate of unemployment that is nearly three times that of its benchmark economies. Indeed, until the Spanish labour market begins to create jobs in the quantity and of the quality needed, it cannot be said that the economy is moving towards effective recovery.

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Strengthening manufacturing: A new industrial policy for Spain

Rafael Myro[1]

Increasing the weight of manufacturing in the overall economy could make an important contribution to Spanish GDP growth and job creation. But to help achieve this goal, Spain needs a reform-minded public sector capable of launching a new industrial policy.

Export promotion and productivity enhancement- two linked, mutually-reinforcing objectives, are the keys for rebuilding the Spanish industrial fabric and increasing its weight in the overall economy. A new, more robust, proactive and better-funded industrial policy that addresses specifically these issues, among others, may be the solution. Increasing manufacturing exports will create room for more imports and faster and sustained growth without external imbalances, providing new opportunities for employment. Productivity gains through greater innovation, skilled labour and other intangible assets will create the basis for wage recovery, greater aggregate demand and bigger and better equipped companies.

Spain's economy has undergone a deep crisis in the past nine years from which it is only now beginning to recover. The manufacturing industry has been hit particularly hard by the contraction in internal demand, which has eroded one of its core growth drivers. Fortunately, Spain's companies proved very astute at leveraging the growth in international demand until 2013, staving off even greater underutilisation of their productive capacity and an even more pronounced spike in unemployment.

Towards the end of 2013, the Spanish economy began to register growth, spearheaded by the manufacturing sector, so that 2015 and 2016 were years of clear-cut growth and job creation in the industry. 2017 is likely to extend this trend, which may well continue for longer, if the fragile international scenario, which is making investors very nervous, does not lead to a fresh recession.

To shore up the Spanish economy's growth, articulating it around firm and balanced foundations (external versus domestic), requires changes in the way we produce, in the quality of what is produced and diversification of business endeavours into new activities and products. Industry, on account of its importance for innovation and exports, must play a leading role in this transformation of the productive model, winning back some of its lost share of output.

[1] Universidad Complutense, Madrid. This paper is a short summary of the book published under the same name by the Economic and Social Council in November 2016. It is the result of a broad group investigation directed by the author.

The goal of this brief article is to outline an industrial policy capable of increasing the weight of manufacturing in Spanish GDP and its ability to generate jobs, reverting some of the trends of recent years, in line with the objectives set in the European Commission's agenda for 2020. Underpinning the formulation and presentation of the above programme is an analysis, on the one hand, of the status and performance of Spanish industry in the run-up to the crisis and during the eight years to have elapsed in the interim and, on the other, of the gap and scope for public intervention in the industrial arena in the developed economies, *i.e.,* the role of industrial policy.

Status and performance of Spanish industry

In contrast to what is commonly believed, Spanish industry performed reasonably well until the start of the crisis, particularly considering the suboptimal environment as a result of: (i) the mass arrival of immigrants who, while fortifying internal demand, impeded productivity gains by encouraging labour intensive and low-wage production; and (ii) tremendous growth in property construction, which proved an overwhelming draw for a substantial chunk of the financial resources tapped by the banks. More than significantly curbing the flow of financing into manufacturing, this real estate boom perhaps fuelled a culture of speculative and short-term investing which does a great disservice to innovation and longer-term challenges.

Nevertheless, Spanish industry stood out among its international competitors, withstanding well – better than most of its European counterparts – the rapid rise of the emerging economies, with China at the fore. Productivity gains lagged those of Germany by very little, exports continued to grow strongly, outpacing those of France, Italy or the UK, and companies' returns on equity hit the double digits in 2007, similarly setting themselves apart from their European peers by this measure.

The problems arrived with the crisis and the sharp contraction in internal demand, which hit the manufacturing companies disproportionately on the back of the drop in property construction and civil works and in expenditure on gross fixed capital formation and durable consumer goods. Industrial output contracted sharply between 2008 and 2013, while employment fell even harder, impacted by the disappearance of less productive small businesses that saw their markets and financing dry up (Exhibit 1). In contrast, manufacturing sector productivity rose, mainly thanks to the closure of these less productive firms.

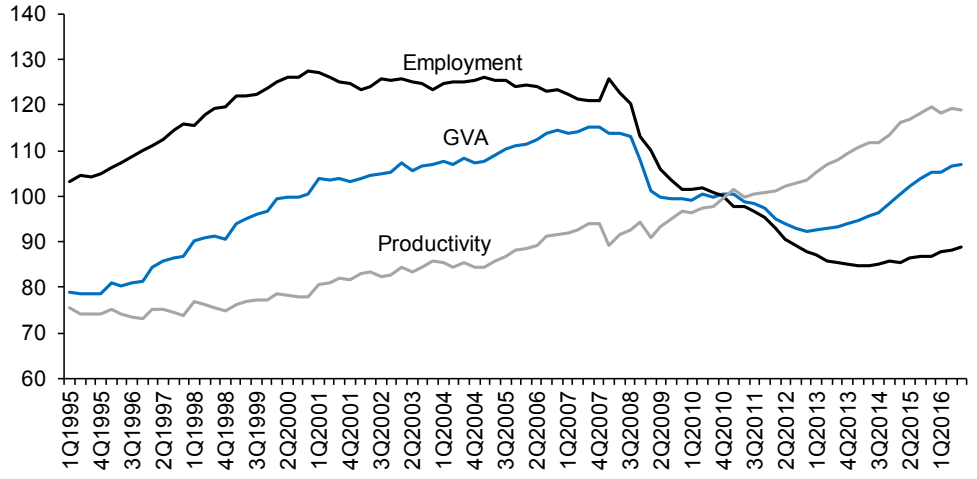
Nevertheless, the growth in exports during the central years of the crisis made a significant contribution to maintaining sector output, preventing even greater upheaval and curbing the downward trend in the sector's contribution to GDP (Exhibit 2). The Spanish companies drew on the experience already built up overseas to offset home-market weakness with exports targeted at the countries that were still growing strongly, the emerging markets. And they succeeded, outperforming their German peers on export growth, even though the latter were better entrenched in some of these economies, namely in Asia. These noteworthy competitive advantages have been on display once again since 2013, as the Spanish economic recovery is being spearheaded by the manufacturing industry.

The growth in exports during the central years of the crisis made a significant contribution to maintaining sector output, preventing even greater upheaval and curbing the downward trend in the sector's contribution to GDP.

The surprising strength of Spanish exports, a phenomenon not new to this crisis, albeit evident throughout, is the best proof of the sector's competitiveness, often critiqued without reason and without substantiating data. In fact this competitiveness is attributable to a varied offering

Exhibit 1

Spanish manufacturing companies: Output, employment and productivity
(Rebased to 100: 2010)

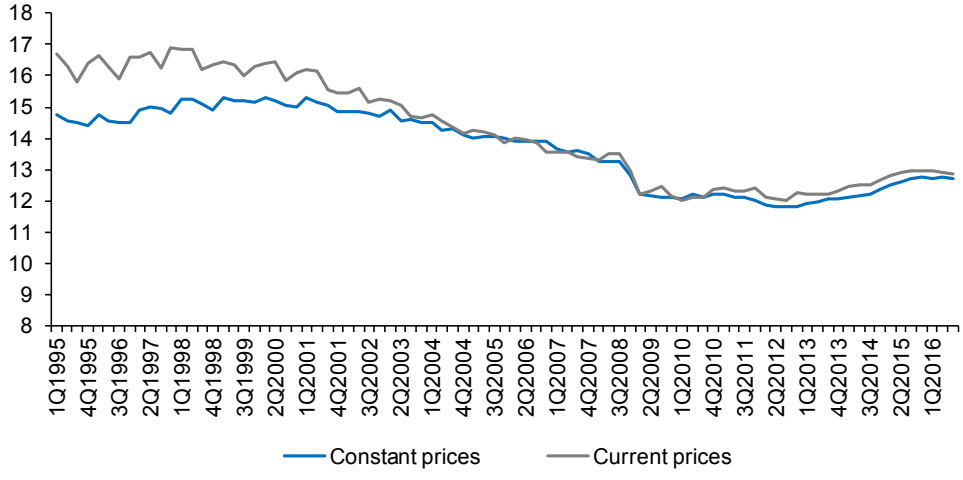


Source: National Quarterly Accounts of Spain, INE.

of exports (medium to high-tech), well adapted to global demand; improvements in product quality and differentiation; a good combination of old markets (EC) and young and growing markets (Latam/Asia/Africa); and a roster of large companies that are highly productive on a comparative basis. It is also attributable to the effort made to become inserted in global value chains, thanks to the help of foreign multinational companies located in Spain.

Exhibit 2

Percentage weight of manufacturing firms in Spanish GDP



Source: National Quarterly Accounts of Spain, INE.

That being said, not everything is working well in Spanish industry: a host of competitive disadvantages are curbing its growth and these should be addressed in the form of a more robust, proactive and better-funded industrial policy. Starting with exports – already flagged as one of Spain's greatest assets – overly concentrated among a limited number of products, markets and companies. Next, the productive structure: sorely lacking in presence in the ITC sectors, which is where the seeds of new production are often found, making it imperative to nurture them. Meanwhile, productivity is making slow progress and the gains are being driven by greater mechanisation of operations rather than higher utilisation of intangible assets, which should be the key force in an economy as advanced as Spain's. The sector is restricted, in short, by the wide sea of micro-companies that are not even able to reach the efficiency levels presented by their similarly-sized peers in other countries. Deficiencies in management and the delegation of tasks rank as important causes of Spanish companies' relatively reduced size, perhaps ultimately a tribute to the level of mistrust among individuals, which translates in the labour arena into employee distrust vis-a-vis business owners and *vice versa* (Huerta and Salas, 2014). This distrust prevents a participative leadership style capable of defining objectives well and involving all members of the company in delivering them.

Spanish industry, alongside all European industries, has lost share in the productive landscape, which is why the European Commission has placed the spotlight on re-industrialisation, setting ambitious targets for 2020.

Spanish industry therefore needs the help of an industrial policy. It is not alone in this respect. All the European industries have lost share in the productive landscape, which is why the European Commission has placed the spotlight on re-industrialisation, setting ambitious targets for 2020 (European Commission Communication, 2014).

The role of industrial policy

Industrial policy can and should play an important role in this process. Several models substantiate this notion. There is of course, the Asian model, often criticised, and certainly hard to evaluate, but which nevertheless has had its successes, from that of Japan in the post-war years to that of China, passing through Korea, perhaps its finest and most complete manifestation. The problems facing Japan today and the Asian crisis of the end of the 1990s appear to be more the result of abandoning the model than sticking with it (Weis, 2011). Turning to the developed world, this theory is also borne out by the German and US models, both characterised by the vigour and scale of their innovation policies, unquestionably the focal point of industrial policy in the world's most advanced economies. It is also underpinned by various applied studies evaluating the effectiveness of support for industry. Lastly, the globalisation phenomenon and the significant technological challenges facing today's economies (nanotechnology and biology or industry 4.0, marked by 3D printing, product and transaction digitalisation and artificial intelligence), so threatening to jobs, require concerted action not only to ensure the right level of progress but also to facilitate the required transition to new productive structures.

Europe's industries are paying the price today for notable abandonment since the early 1990s by the authorities, which, rejecting the interventionism that had been sometimes excessive and above all poorly conceived of in the prior decades, took a more bureaucratic approach and became less willing to provide financial support. The logical rejection of an administration that aspired to defining which industries should lead their economies gave way, accordingly, to the opposite

extreme: a vacuum of public guidance and objectives in the industrial development arena. Europe embraced the key tenets of the liberal discourse regarding the non-need for an industrial policy *per se* and the advisability of limited intervention in terms of shaping the apparition and growth of businesses, without grasping the reality palpable behind the American model, a policy of fostering research and innovation, highly nurturing of its innovative small companies and very invested in large-scale and costly scientific programmes. Only Germany grasped this reality, far more obvious today. As noted by Mazzucato (2014), in the US, the state not only defines the technological development mission, it acts as guide and executive arm.

In Europe, the logical rejection of an administration that aspired to defining which industries should lead their economies gave way, accordingly, to the opposite extreme: a vacuum of public guidance and objectives in the industrial development arena.

In short, an industrial policy that defines cross-cutting objectives in response to several market failures is called for (Rodrik, 2004; Chang *et al,* 2014). There are multiple forms of public intervention that generate positive externalities: boosting auxiliary products, needed for the development and exploitation of economies of scale in other high-potential areas of primary production, avoiding coordination failures; patronage of innovation and the discovery of new products by entrepreneurs (self-discovery); or the provision of resources and skills to SMEs that they cannot afford themselves on account of their lack of scale (expenses associated with training, investment in new management models or international expansion). These forms of intervention can be particularly effective in regional strategies, which have given rise to the rollout of smart specialisation clusters (McCann and Ortega Argilés, 2016).

Industrial policy needs to forge a closer relationship with the private sector, overcoming its fear of succumbing to private interests. To do so, all that is required is a well-trained administration and clear operating criteria. Such a policy needs the support of specialised agencies and public-private partnerships that can provide government with deep knowledge of the productive activity, while showing companies the range of public-support options that are truly necessary and effective, underscoring the importance of developing their interventions in pro-competitive environments.

Industrial policy needs to forge a closer relationship with the private sector, overcoming its fear of succumbing to private interests.

Needless to say, the various levels of government, on the one hand, and all industrial organisations, particularly employer associations and unions with their various sector and regional chapters, need to participate in these agencies and partnership platforms. These organisations bring vital information for the authorities which need to learn about the industrial reality in order to better coordinate their actions and define new technology- and production-related initiatives.

Industrial policy objectives

In our opinion, industrial policy should pursue two interrelated objectives:

- *Labour productivity gains;* and
- *Internationalisation of firms and the economy as a whole,* via exports, integration in global value chains and the creation or acquisition of productive subsidiaries in other countries.

Without neglecting the need to draw foreign multinationals, another integral part of the broader goal of internationalising the Spanish economy.

Progress on productivity, as well as crucial to industry's competitiveness abroad and, by extension, its growth, is a solid and necessary step in a company's international expansion, which in turn provides invaluable knowledge about the product manufactured, other related products and the productive processes which translates into fresh labour productivity gains and a positive spillover in the form of knowledge of new markets which the authorities can and should use in their trade development policies.

Specifically, it is vital to boost exports: this paves the way for job-creating growth and imports, without creating trade imbalances, unlike in the past, while making progress on foreign debt reduction.

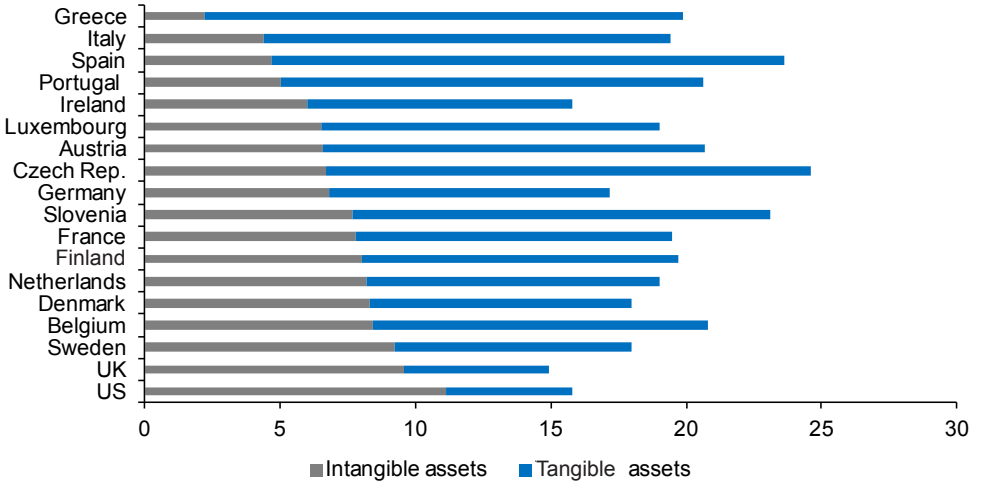
Productivity gains should be underpinned by the incorporation of skilled human capital and technology – in other words intangible assets – into the productive process; these assets are still scantly present across Spain's firms, as shown in Exhibit 3. This is the change in productive model that Spanish industry requires.

Innovation and how it is financed

The lead role in industrial policy in advanced economies has to go to innovation. Spain consistently lost innovative companies during the crisis. Their number has halved since 2007, from 31,000 to 15,300. Behind that surprising trend lies not only a sparse innovation effort during the crisis (Exhibit 4), leaving Spain lagging further behind the leading innovating nations, but also the fragility of its innovation system. Spain belongs to the group of countries known as "moderate innovators", alongside Italy, Hungary, Portugal, Greece, Croatia, Cyprus, the Czech Republic, Estonia, Lithuania, Malta, Poland and Slovakia. Clearly not the peer set it should aspire to in light of its level of development.

Exhibit 3

Investment in intangible and tangible assets
(As a percentage of GDP)

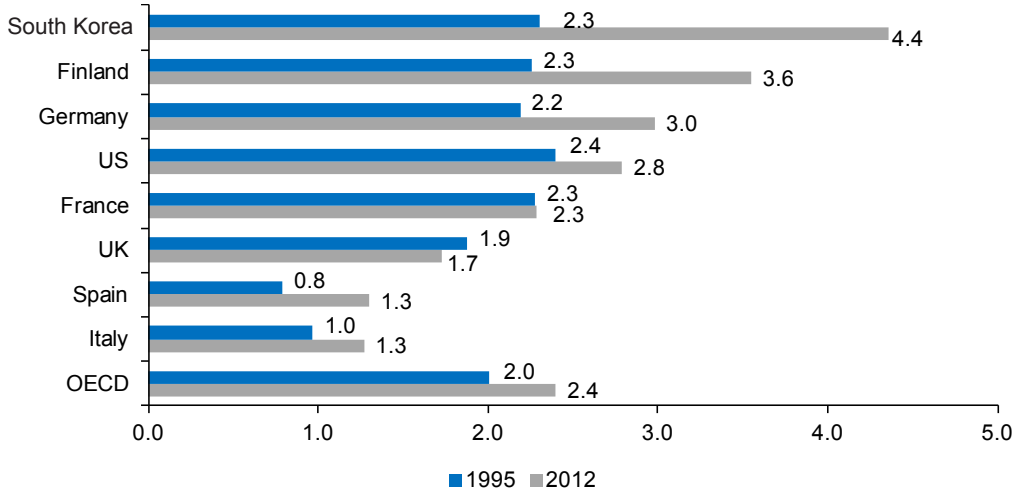


Source: Falk (2013).

Exhibit 4

Technological effort in a selection of countries

(R&D expenditure as a percentage of GDP)



Source: OECD.

This fragility is even more evident in Spain's position on the ranking of the 122 countries included in the Global Innovation Index (GII), at #28, far below the tenth spot commanded by Germany and South Korea's eleventh place and in line with Italy (#29), a country that has registered annual per-capita GDP growth of just 0.8% in the last 30 years. It is vital to avoid a similar fate.

Spain's laggard position is explained by its low scores on some of the sections used to calculate the GII, such as innovation efficiency, on which Spain ranks #48, and the level of business sophistication, which refers to the existence and operation of innovation networks: research partnerships between universities and companies, the development and role of clusters in the economy, external funding for R&D and patent families, among others. Even the IMF recently warned Spain that it stands apart for being one of the countries to provide the least financial support to innovation by private firms.

The big paradox in the innovation field lies with the fact that although Spain has the institutions befitting of a science and technology or "innovation system", it is far from having a genuine "innovation ecosystem", using the term coined to define smart territories in which all the agents interact in such a way as to contribute value-generating collaborative innovations. What's more, this weakness appears to be the main reason why the European Commission agreed with the Spanish government a notable concentration

Although Spain has the institutions befitting of a science and technology or "innovation system", it is far from having a genuine "innovation ecosystem".

of the resources contemplated in the Cohesion Fund for 2014-2020 in the programme dedicated to *strengthening and supporting research, technological development and innovation.* The comparison, leaving aside countries of the calibre of Germany, with less developed economies with similar performances to that of Spain, such as South Korea, is also worrisome.

An "innovation ecosystem" does not come about without the state playing a leading role and without close interaction between the latter and the private sector. And it requires the awareness that technology is a top-priority matter to which major resources must be devoted. The idea that the state is a mere provider of financing for innovation, at a remove from and ignorant of the risks and difficulties faced by its companies, is the surest way for a country to head toward technological insignificance.

The recent creation of the so-called State Innovation Agency (AEI for its acronym in Spanish) has created a new tool with which to restructure the country's science and technology system. However, its first steps have not been very promising as the model being pursued looks more like the French model than its German counterpart as it appears to be emulating the bureaucratic-administrative culture characteristic of France. Governance of R&D and innovation policies in Spain falls, in terms of promotion and financing, since creation of this agency, to two main agents: the agency itself and the CDTI (acronym in Spanish for the Centre for the Development of Industrial Technology), both of which fall under the Ministry of the Economy and Competitiveness (specifically the Secretary of State for Research, Development and Innovation or SEIDI). The former plays the role of instrument for the management and public financing of R&D; the latter focuses on funding business innovation and development projects.

Regrettably, this initial design does not guarantee progress on articulation of an innovation ecosystem given the fact that other key organisms, such as Ministry of Industry's ENISA, the national innovation company, have been left out.

A key aspect of the innovation thrust is its financing, which must be based on multiplying the spectrum of financing instruments so as to ensure the right kind of financing for each stage of development of an innovative business. This requires the development of alternatives to bank credit, of limited use in this field. It can be observed how, indeed, in recent years, using formulae similar to those embraced by the main European countries, new forms of alternative financing have proliferated, from the innovation incubators and accelerators devised by large companies (corporate venture capital) such as Telefónica (*Open Future*) and several of the banks (La Caixa: Caixa Capital Risc; BBVA: BBVA Ventures; Banco Santander: Innoventures; and Banco Sabadell: Bstartup) to expansion of business angels, crowdfunding, alternative stock markets for SMEs and above all venture capital and private equity funds which are growing very rapidly, with an increasing presence of foreign capital. The aforementioned public entities have contributed to their development, as has Spain's Official Credit Institute, the ICO.

Although this rapid growth in funding has gone some way to reducing the impediments to the creation of start-ups in Spain, these instruments are still substantially less developed than in other European countries. Less developed too is the direct role played by the public institutions in this arena, which continue to play a very small part. Also, the financing issues intensify when companies have moved on from the start-up stage and are looking to grow and expand internationally. The reduction in funds devoted to R&D during the crisis is indicative of this financing difficulty, among other things. Not even the shrinking budgets devoted to research funding were put to full use during the crisis. A common

An analysis of the countries with the best innovation practices reveals that innovation policy is also a supply-side policy, which should stimulate the emergence of new projects and their associated financing needs.

interpretation of this paradoxical situation is that it is a problem of limited demand (from firms). A similar interpretation of the facts results from a passive approach to innovation policy, as already questioned, which assumes that companies demand funds and the authorities are there merely to help get them or offer them directly. However, an analysis of the countries with the best innovation practices – the US, Germany and Korea – reveals that innovation policy is also a supply-side policy, which should stimulate the emergence of new projects and their associated financing needs.

Human capital and management skills

Labour skills have depended largely until now on the education system, which could be significantly improved upon organisationally and quality-wise, as suggested at multiple times. One improvement, crucial in our opinion, is to inject it with a greater business/entrepreneurial bias, firstly by encouraging professional training and its dual character, *i.e.,* learning fuelled simultaneously by the corporate segment and the education system, and, secondly, by encouraging companies to spend externally on training.

This latter idea is very important as the most internationalised companies present employee training costs that are well above the average, which in Spain is very low, as just 25% of industrial companies spend money on training, devoting an average of 0.2% of their labour costs (average expenditure by companies with less than 50 employees is less than 1,000 euros a year, rising to 12,500 euros at companies with between 50 and 200 employees). The figures speak to a certain rejection by business owners of the idea of involving their employees in the company's tasks and objectives. They also reflect the prevalence of temporary work arrangements, which needs to be reduced if we are to upgrade skills.

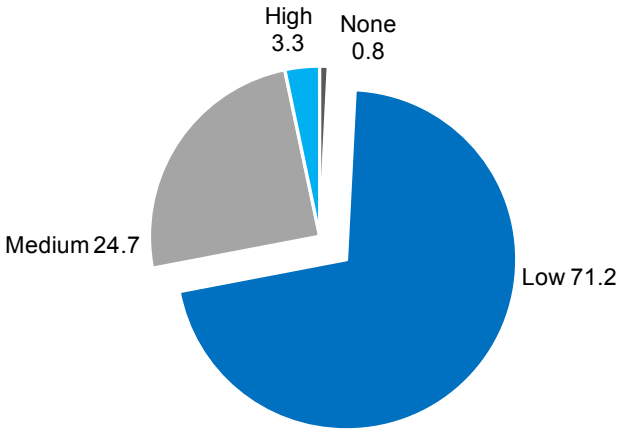
Corporate productivity also depends on the quality of its management skills, which determine how well a company is managed. An examination of multiple indicators of best management practices suggests that in Spain, companies with poor management quality predominate. In our analysis, applied to industrial companies, these companies account for 71% of the total (Exhibit 5). These are companies at which objectives are not well defined, their delivery is not controlled, efforts to learn about new technologies are lean, as are the resources devoted to market analysis/intelligence, to engaging with other peers or experts, to digitalising productive processes or to marketing. So the authorities need to find a way to provide companies with the knowledge and assistance needed to fine-tune their management practices. In reality, all support extended by the public authorities to companies, just as it should be tied to delivery of certain performance undertakings, to some results-driven, measurable conditionality, should be linked to improved management guidelines. The authorities should work with the universe of companies that are willing to do things better, stretch themselves and share the results of their efforts transparently.

The low scores achieved by Spanish companies on the most important aspect of good management practices – leadership – stand out. Definition of objectives and their control, know-how in the area of innovation and environmental demands, outreach by executives, experience and initiative sharing with workers and diversification of markets. Over 60% of manufacturing companies fall short on good leadership practices, presenting low or non-existent levels.

Improving the quality of management is of vital importance because, as already stressed, there is a clear link between this and productivity. Unfortunately, however, this does not depend only on taking direct action in this field (something which is, moreover, not easily done). Good management practices are also fostered by means of innovation and internationalisation policies, as well as measures designed to build company scale (eliminating regulations that encourage staying small) or increase market competition. This is because size, innovation, internationalisation,

Exhibit 5

Breakdown of Spanish companies by level of good management practices, 2013 (Percentage)



Source: SEPI Foundation, Survey on Business Strategies.

labour productivity and management quality are interrelated factors. Acting on each has a spillover effect on the rest.

As a result, in trying to eliminate impediments to company growth and regulations that favour staying small, policy should also address innovation, intangible assets, international expansion and good management practices: the upshot will be bigger and more productive companies.

Brand equity

As with human capital and innovation, brand equity is another intangible asset on which Spanish companies fall notably short. Only 20% of manufacturing companies conduct market studies or marketing, which according to our analysis are key to their market positioning[2]. Industrial policy should champion the creation of private brands with the aim of embedding Spanish products with a good reputation and associating them with quality. Above all, however, it should take advantage of the huge potential implicit in the collective brands (protected designations of origin (PDO), protected geographic indications (PGI), traditional specialities guaranteed and quality seals). And, certainly, Brand Spain. In some sectors, such as the food sector, these collective brands have a major and largely untapped role to play but so far only 12% of agri-food sector companies sell their products under the PDO or PGI quality schemes, representing 1.1% of total sales.

Digitalisation

The digitalisation phenomenon is a technological revolution which in reality encompasses multiple technological changes, some of which are advancing swiftly, such as the use of big data, ultra-rapid communication, cloud computing, 3D

[2] This percentage rises to 27% in the food sector which is more directly oriented towards the end consumer.

printing, mass automation and artificial vision, while others are progressing more slowly, such as cognitive computing and artificial intelligence (natural language processing, machine learning and voice recognition). These innovative technologies will become available increasingly rapidly and at a declining cost and will change many products' existing business models and value chains, from how they are designed to how they are sold and marketed. However, this multiple technology change is not likely to catch Spain's industrial companies too well prepared judging by the limited progress being made on the most basic developments. Although 80% of companies now use the Internet proficiently, only 30% carry out internal web hosting and the percentage selling online is even smaller (Exhibit 6). Industrial players face a major challenge to their competitiveness, one that is, however, also a great opportunity to reinforce their competitiveness by building it on solid foundations. Here industrial policy has a key and urgent role to play, by helping to activate an intense and complex digitalisation agenda.

With digitalisation, industrial players face a major challenge to their competitiveness, one that is, however, also a great opportunity to reinforce their competitiveness by building it on solid foundations.

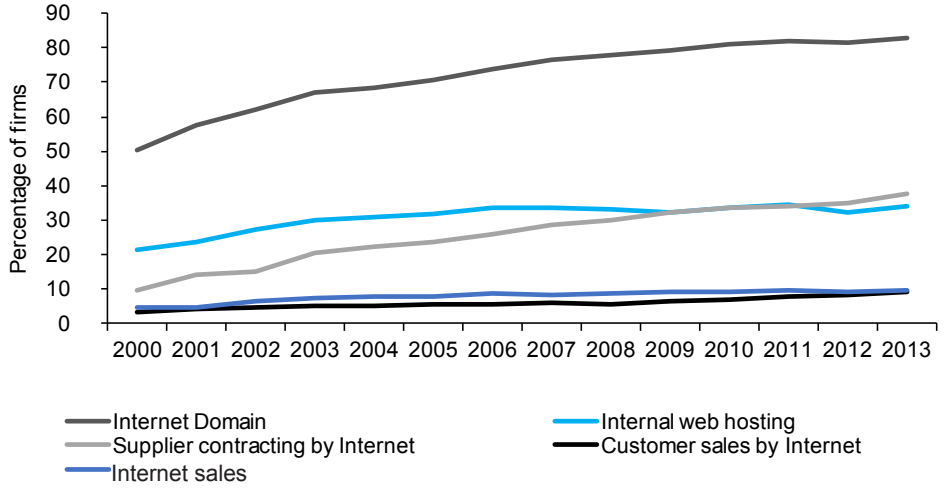
Internationalisation

Internationalisation is the other end goal – coupled with productivity – of the programme outlined in the book summarised in this paper. This is aided by boosting productivity but requires vigorous measures for promoting and developing 'market intelligence', knowledge of new markets, their characteristics and their players. The experience built up by companies that have already expanded internationally is crucial, which is why it is important for the authorities to reach out to them and involve them in their actions (encouraging business networks, scant in Spain).

Exhibit 6

Trend in Spanish company practices in the digital arena, 2000-2013

(Percentage)



Source: SEPI Foundation, Survey on Business Strategies.

Our research assessed, firstly, the role of becoming integrated in international production networks: the global value chains. Spain's companies, and not just the industrial ones but also its service providers, have made significant progress on inserting themselves in these chains (Exhibit 7), which has had positive effects on their productivity and the regularity and persistence of their exports. The factors driving business insertion into these global chains were studied, with the following results: a minimum company size threshold is a key enabler; in its absence, however, labour productivity is crucial, once again a decisive factor for SMEs. Product innovation also facilitates involvement in global value chains, as does the presence of international firms in their shareholder ranks or the fact of having manufacturing subsidiaries abroad.

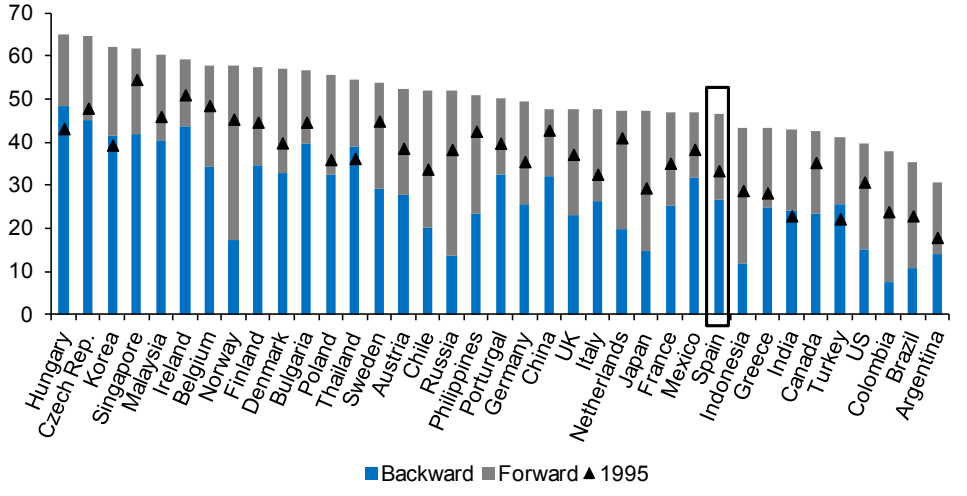
There is room for Spain to improve its presence and position in these global chains, particularly in the links of the chain that add the most value at either end: innovation at one extreme and a sophisticated marketing network at the other.

In the broader sphere of exporting, it is even possible for policy to provide specific sector guidance, as is reflected in our work. Using the analysis performed by Hausmann and Klinger (2007), we looked for products well connected with Spain's productive system that additionally present high levels of sophistication with a view to identifying new and highly-promising lines of development and tapping the know-how accumulated in Spain's human capital. Against this backdrop, there are good prospects for diversifying the products Spain exports in some of the sectors that are already highly developed and competitive internationally: the textile and garment industry, food, drink and tobacco, mechanical machinery and equipment, chemical products, scientific and optical instruments and metallic products industries.

There is also scope for the provision of guidance with respect to markets. Generally speaking, the markets to be targeted are relatively obvious considering the fact that the areas set to register the fastest growth in the coming years are already

Exhibit 7

Participation in global value chains. An international comparison, 2011
(Percentage)



Source: Trade in Value Added 2015, OECD.

well identified: Latin America, Asia, Africa and the Pacific. A significant effort should be devoted to the Pacific, necessarily overcoming the obstacles posed by a potential shift towards protectionism by the US administration. However, there are also less obvious markets worth exploring for Spanish exports, even if not among the fastest growing.

These export promotion policies should also be targeted at investing abroad, which is just another way of accessing foreign markets that is often more profitable and beneficial in terms of competitiveness, *i.e*. with important positive ramifications for companies' productivity and product differentiation. Spanish investment overseas, which registered sharp growth at the turn of the century, has continued to grow, more slowly yet surely, throughout the crisis and there is substantial room for further growth (Álvarez *et al,* 2016).

Policy attempts to promote investment overseas should prioritise the manufacturing firms, which are lagging in this respect, given that a high percentage of Spanish investment abroad stems from foreign multinationals based in Spain. There is a broad universe of medium-sized enterprises, those with between 200 and 500 employees, which have made no progress on this front in the last 15 years but should.

It is also vital to pay attention at the policy level to attracting foreign capital. Foreign multinationals have played a very significant role in Spain's industrialisation; and they continue to do so today, increasingly so, as their share continues to rise. Although their presence intensifies Spain's dependence on imports from other countries, these firms are also active exporters and they help embed Spanish companies in the global value chains. They also stimulate competition in the home market, boosting technological rearmament and generating positive externalities in terms of knowledge which in turn fuels technical progress. It is therefore crucial to draw more foreign capital to Spain and although there is plenty of scope for doing so, it is necessary to modernise the promotion effort, currently spearheaded by the ICEX (Spain's foreign trade institute).

Final considerations

In short, these brief pages summarise a more extensive study which analyses Spanish industry and the role of industrial policy as the basis for defining a specific programme of initiatives designed to fortify the industrial fabric and increase its contribution to the economy. The basic idea underpinning this programme is to boost corporate productivity and international expansion. Its success depends on a necessarily-reformed public administration, updated for modern times, up-to-speed with the opportunities and threats posed by globalisation, endowed with a breadth of vision, one that is capable of interacting closely with the private sector without bowing to its interests, championing and coordinating initiatives and catching all implicated agents in new cooperative networks. A public administration must possess the skill-sets needed as well as a keen sense of public service.

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Spain's fiscal consolidation: 2016 performance and outlook for 2017

Santiago Lago Peñas[1]

A relaxation of original deficit targets should help the government stay on track to meet fiscal consolidation goals in 2016. However, meeting targets in 2017 will be a more ambitious task, which will be difficult to achieve in the absence of additional adjustment measures.

Even in the face of greater political stability, a more favourable economic backdrop, and substantial upward revisions to original deficit targets, fiscal consolidation has been far from an easy task to achieve in 2016. Nevertheless, there is a high probability that Spain will meet its 2016 deficit targets. Consolidation in 2017 appears to be more challenging, given that, at present, neither the social security system, nor the regions are expected to be able to bring down their deficits substantially, while the surplus at the local corporation level is not expected to increase and may even be reduced. Deviation from these subsectors means that the central government will likely have to bear the brunt of fiscal adjustment. Under current conditions, consensus expects slippage in 2017. However, reaching agreed upon fiscal objectives may still be feasible, but unlikely without additional measures, particularly in the area of tax revenues.

The process of preparing and debating the General State Budget for 2016 (PGE-2016) was brought forward by a quarter to allow it to be approved before general elections, which were finally called in December 2015. The approach posed risks but it also had advantages (Lago-Peñas, 2015). Faced with the likely loss of absolute majority, there was a high probability that the PGE-2016 would be changed at the start of the year to adapt it to a different government and/or Parliamentary configuration. Furthermore, the government faced criticism from the opposition that it was assuming responsibility for something (planning the budget for the upcoming year) that was not necessarily to be under its mandate, given the upcoming elections. On the other hand, bringing forward the budget ensured certainty and continuity in the management of public finances and the consolidation process. Hindsight suggests the government's decision may have been the right one. Repeated elections and the difficulties in forming a government, let alone approving a new PGE, increased the value of having a budget already in place for 2016. Without it, we would still be with the extended PGE-2015 today.

Even so, during a large part of 2016, the interim government and difficulties in reaching political consensus have meant that budgetary execution and planning have been overseen

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by a sort of "autopilot", which has only been disengaged sporadically to respond to alarms, mainly originating from external sources (*i.e.* the European Commission). It is also true that the economic backdrop has been favourable. Real GDP grew by 3.2% in 2016, clearly above what was anticipated when the Budget was being prepared. But it is equally true that the fiscal consolidation process is far from over, with significant challenges stacking up on various fronts. In particular, the reduction of the cyclical deficit remains clearly insufficient.

The aim of the article is to analyse recent developments and short-term perspectives for the Spanish public sector as a whole and for each of the four sub-sectors of the public administration (local, regional, central government and social security). Specifically, the article reviews budgetary execution using latest available data to November 2016, as well as identifying the risks to fiscal consolidation and lines of action in 2017 in each of the four sub-sectors.

The General government

Table 1 presents budgetary execution by the central government, social security system and autonomous regions to November 30th, 2016. The values refer to borrowing (-) needs or lending (+) capacity as a percentage of GDP, according to National Accounting methodology. They are accompanied by data for 2015 to provide context to the analysis. Table 2 summarises the deficit (-) or surpluses (+) of the four sub-sectors and for General government as a percentage of GDP. Both tables exclude financial support measures.

Table 1

Budgetary execution to November 2016. Deficit figures in percentage of GDP
(Excluding financial assistance to credit institutions)

	2015	2016	Difference 2015-16
Central Government	-2.16	-2.20	+0.04
Social Security	-0.27	-0.65	+0.38
Regions	-1.36	-0.49	-0.87
General (excluding Local Governments)	-3.79	-3.33	-0.44

Source: IGAE (2017).

Table 2

Borrowing (-) Needs or Lending (+) Capacity of the Spanish Public Administrations in 2014 and 2015
(Excluding financial assistance to credit institutions, figures in percentage of GDP)

	2014	2015	Difference 2014-15
Central Government	-3.57	-2.53	-1.06
Social Security	-1.04	-1.26	+0.22
Regions	-1.75	-1.66	-0.09
Local Governments	0.57	0.44	-0.13
General	-5.79	-5.00	-0.79

Source: Ministry of Finance and Public Administration (2016a).

The data depict a progressive reduction in the deficit, albeit at a slow pace. Barely 0.8 percentage points (ppts) of adjustment occurred in 2015 and less than 0.5 ppts in 2016 according to November data. Despite registering real GDP growth of over 3% in 2015 and 2016, and a concurrent reduction in the output gap, the Spanish economy is showing certain shortcomings in its ability to reduce the structural disparity between public revenues and expenditures. The latest forecasts underline this assessment. Funcas Consensus for January 2017 points to a deficit of -4.5% of GDP; the Bank of Spain is slightly more upbeat, at -4.4%; meanwhile the European Commission increased their estimate to -4.7% in the winter 2017 forecasts. Meanwhile, the Independent Authority for Fiscal Responsibility (AIReF) projected in July that the deficit for the year would be over -4% (AIReF, 2016a).

Despite registering real GDP growth of over 3% in 2015 and 2016, and a concurrent reduction in the output gap, the Spanish economy is showing certain shortcomings in its ability to reduce the structural disparity between public revenues and expenditures.

At the same time, it is important to keep in mind the substantial upwards revisions to the deficit targets that have taken place since approval of the PGE-2016 in September 2015 (Table 3). These have led to the target being revised up from the original -2.8% to -3.6% presented in the Stability Programme update 2016-19 in April and to the eventual -4.6% approved by the European Council in August, which now applies to the government. As such, the target has been moving and adapting to the reality revealed by budgetary execution data. The current target looks likely to be achieved. AIReF (2016b) puts the probability of compliance at two-thirds, thanks to the impact of measures relating to payments on account in corporate tax and the spending freeze. However, repeated upward revisions of targets push Spain further away from the -3% threshold, which it should have already met in 2016, and raise concerns about the country's capacity to reduce the deficit in the absence of more ambitious reforms, particularly in the tax realm.

The target has also been softened for 2017 (Table 4), but nonetheless implies reducing the deficit by 1.5 percentage points in the context of weaker real economy growth (around 2.5%), albeit with a rising deflator.The final outturn for 2016 will be key to determining the likelihood of reaching the -3.1% target for 2017. The Draft Budgetary Plan for 2017 sent by the Spanish government in December 2016 (Finance Ministry, 2016) sets out the scenario. In the absence of PGE-2017, the previous year's Budget will be rolled over, maintaining the spending ceiling at the

Table 3
Changes in 2016 deficit objectives
(Figures in percentage of GDP)

	PGE-2016 (September 2015)	Stability Programme Update 2016-19 (April 2016)	Revised deficit approved by the European Council (August 2016)
Central Government	-2.2	-1.8	-2.2
Social Security	-0.3	-1.1	-1.7
Regions	-0.3	-0.7	-0.7
Local Governments	0.0	0.0	0.0
General	-2.8	-3.6	-4.6

Sources: Ministry of Finance and Public Administration (2016b) and Ministry of Finance and Civil Service (2016).

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Table 4
2017 deficit targets
(Figures in percentage of GDP)

Central Government	-1.1
Social Security	-1.4
Regions	-0.6
Local Governments	0.0
General	-3.1

Source: Ministry of Finance and Civil Service (2016).

level forecast for 2016 (below the initial budget), through a non-availability agreement amounting to 5 billion euros, and the approval of a package of tax measures with an estimated impact of 7.5 billion euros[2]. On top of this, 900 million euros of savings are expected to come from the public administration reform programme (the so-called CORA programme). In total, 13.4 billion euros of adjustment, which equate to 1.2% of GDP, are forecasted for 2017. All of these measures would have to be applied by the central government, which would therefore take on the lion's share of the deficit adjustment. Subsequent sections of this article set out some of the discretionary measures envisaged for the other sub-sectors.

Will it be enough? According to the European Commission's winter forecasts published in February, the answer is no. Spain's deficit will only fall to -3.5% of GDP this year – for various reasons. Firstly, real GDP growth will be weaker than forecast by the Spanish government (2.3% compared to 2.5%). Secondly, the deficit will end 2016 at 0.1 percentage points above target (-4.7% instead of -4.6%). Thirdly, the revenue and expenditure forecasts for the different discretionary measures that have been announced are optimistic. Funcas Consensus for January 2017 believes that the 2016 deficit should be met (-4.5%), but that the government will overshoot the 2017 target (-3.4%,[3] in line with the European Commission).

The end of March will shed some light on some of these uncertainties. Firstly, we will find out about budgetary execution and the final deficit for 2016. Secondly, we will have new macroeconomic forecasts from a range of public and private institutions; although the signs are that optimism regarding the economy's performance will continue to prevail and consensus will be around 2.5%, *i.e.* close to the government's growth forecast. The government also intends to present the PGE-2017 at the end of March with the aim of securing sign-off in June. This will create a new scenario for the development of deficit targets.

In the absence of additional measures, the majority of estimates point to Spain overshooting its deficit targets for 2017.

[2] The breakdown is as follows: 4.7 billion euros as a result of the elimination of subsidies and deductions on Corporation Tax; 150 million euros relating to the increase in excise duty rates on tobacco and alcohol; 200 million euros from a new tax on sugary drinks pending approval; 500 million euros from the first phase of the "green tax reform" which will launch in 2017 with a focus on greenhouse gases; 1.5 billion euros relating to changes in tax administration (specifically, the elimination of the possibility to grant deferments on VAT charged, instalment payments or frozen debts while an appeal is being processed); finally, 500 million euros from the fight against fraud, thanks to the new instantaneous VAT information system and the new limit on payments in cash, which will fall to 1,000 euros per transaction.

[3] Funcas Consensus forecasts for March provide deficit projections for 2017 and 2018. The latest forecast for 2017 is now -3.4%.

The government is set to once again take a grip of the budget and the fiscal consolidation process, switching off the "autopilot" over the last year and a half. This will provide a clear opportunity to review the coherence of the current accounts, but it is also true that relative inactivity in recent quarters will condition the extent of spending execution. Reactivating execution will require sufficiently ambitious compensating adjustments.

The central government

The central government significantly reined in its deficit between 2014 and 2015 but the reduction appears to have attenuated in 2016. Execution data to November point to stagnation with a marginal increase of 0.04 ppts relative to 2015. This is not an expenditure story; spending remains under control. In fact, spending fell by 0.8% to November compared with 2015, thanks in a large degree to the reduction in interest outlays and subsidies to companies (specifically, related to covering the energy deficit), the non-availability of credit agreements and the early shut-down of PGE-2016 accounts in July (Ministry of Finance, 2016c). The deterioration is instead due to the poor performance of tax revenues. Specifically, current revenues from income, wealth and capital taxes (General State Comptroller, IGAE), which suggest there has been a larger impact from the direct tax cuts than originally anticipated by the government (AIReF, 2016b). This, despite the very positive impact in October from changes to payments on account in corporation tax, which were approved by the central government in September under Royal Decree 2/2016.

Following the revision to the global target in August 2016, the central government's target went back to the objective set out in the PGE-2016: -2.2% of Spanish GDP (Table 3). However, the deficit was already above this target by November 30th. It should also be remembered that budgetary execution typically deteriorates between November and December. In 2015, the deficit jumped from -2.16% to -2.53% and in 2016 from -3.15% to -3.57%. Nonetheless, AIReF (2016b) believes the target could still be achievable, although their central estimate (the most likely) is for an outturn of 2.3%, a deviation of 0.1 percentage points.

Social security system

The social security system has been a clearly source of fiscal slippage in the public accounts in 2016, as it was in 2014 and 2015. Revenues are not recovering in line with growth in employment, this is due to: the effect of hiring subsidies; the reduction in wages in recent years, which particularly affects new workers and those who have changed jobs; reduced transfers from the central government to finance the State Employment Service (SEPE); and even the reduction in interest income accruing to the reserve fund itself. According to AIReF (2016b), the social security deficit could come in at close to 1.6% of GDP, with a very high probability of complying with the revised target. But it is important to keep in mind the information set out in Table 3. The initial target has been revised up from -0.3% to -1.7%. This increase of 1.4 percentage points accounts for nearly 80% of the additional margin granted to the public finances overall. The social security system is currently the biggest fiscal consolidation hurdle facing Spain.

The social security system is currently the biggest fiscal consolidation hurdle facing Spain.

In his recent appearance before the Pacto de Toledo committee in Parliament on February 9th, 2017, AIReF's President stated that it was unlikely that the social security system would meet its 2017 target (-1.4%) in the absence of additional measures. He explained that AIReF's central best estimate for this year was currently very similar that at the close of 2016, at around -1.7%.

Autonomous Regions

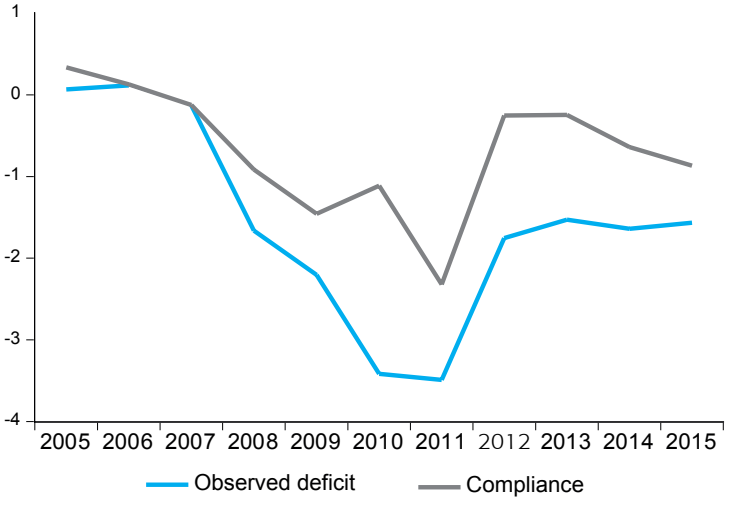
Since the outbreak of the economic crisis in 2008 the regions have consistently failed to comply with their deficit targets. Exhibit 1 from Lago-Peñas *et al.* (2017) shows both the registered deficit and the degree of compliance with targets, defined as the difference between the target and outturn. Thus, compliance with the target implies a 0 variable and the degree of non-compliance increases as the value becomes more negative. In both cases, the averages are not weighted. Following improvements in 2012 and 2013, regional consolidation deteriorated in 2014 and 2015. This is more due to the reduction in the targets than an increase in the deficit itself. In fact, it had appeared as though the regions overall had run into a floor in terms of bringing down their deficit, at around -1.5% of GDP.

Regardless, it is important to emphasise that throughout the period, there has been a wide disparity in performance by regions around the average, which is explained by various factors. It particularly reflects the differences in resources received from the regional financing system by each autonomous region and differing degrees of effort in pursuit of consolidation targets. Some regions have been broadly compliant: Andalusia, Castile-Leon, Asturias, La Rioja, Aragon and – especially – the Canary Islands, Galicia and Madrid. Meanwhile, Mediterranean-facing regions have dominated the other end of the spectrum: Murcia, the Valencian Community, Catalonia and the Balearic Islands have systematically breached their targets (Lago-Peñas *et al.,* 2007).

While faced with a similar target to 2015 (-0.7%), 2016 has seen a substantial and widespread reduction in the regional deficit. According to AIReF, on the basis of data to the third quarter, the deficit for the regions as a whole stood at -0.9% of GDP. This outturn has less to do with discretionary adjustment measures taken by the regions (spending cuts and tax increases), but rather the increased revenues provided by the regional

Exhibit 1

Evolution of the regional deficit and compliance with targets in the period 2005-2015
(Figures in percentage of GDP. Simple average for each year)



Source: Lago-Peñas et al. *(2017).*

financing system (common regime)[4]. Even so, performance will once again be patchy across regions. It is highly likely that Extremadura, Murcia, Cantabria, the Valencian Community, Aragon, Catalonia, Castile La Mancha and Castile-Leon will overshoot the 0.7% deficit target. Overall, the aggregate regional deficit could come in around 0.2 percentage points above target, but this will put the deficit back at pre-crisis levels. FEDEA (2016) is somewhat more optimistic, judging that the 0.7% objective could be achievable based on extrapolating data for the first half of the year.

Since the outbreak of the crisis in 2008, the regions have consistently failed to comply with their deficit targets. Regardless, it is important to emphasise that throughout the period, there has been a wide disparity in performance by regions.

In terms of 2017, AIReF has published its report on the probability of non-compliance, believing the -0.6% of GDP stability objective for the sector as a whole could be achievable. However, AIReF's central estimate is for a deficit of -0.7%, highlighting the difficulties in continuing to reduce the deficit. The problem centres on eight regions who are judged to be very unlikely (Aragon, Cantabria, Extremadura and Murcia) or unlikely to be compliant (Catalonia, Castile La-Mancha, Navarre, Valencian Community) (AIReF, 2017).

Local governments

Once more the local governments will end the year with a surplus, helping to compensate deficit deviations in other administrations in 2016. Good fiscal compliance by the local tier is strongly related to central government restrictions on spending on non-mandatory competences, the application of the spending rule and increases in Property Tax rates (IBI) imposed by the central government. Data on execution for the first three quarters of the year point to a substantial increase in the surplus compared to the same period last year, reaching +0.52% of GDP (+0.33% in 2015). This is mainly due to the liquidation of the financing system, which has produced a favourable outcome for local entities in 2016 of around 923 million euros, compared to a negative outturn of 772 million euros in favour of the central government in 2015 (IGAE, 2016).

BBVA Research (2017) estimates that the local governments ended 2016 with a surplus of +0.5%. AIReF (2016b) analysis prepared before receiving third quarter data is somewhat less optimistic, forecasting a surplus for the year of 0.4% of GDP, slightly below 0.5% in 2015. AIReF (2016c) expects the 2017 target (0.0%) will be amply met, although the surplus looks to be on a downward path and their central estimate is for a surplus of around +0.3% due to the decision not to extend revenue measures (increase in IBI rates) and increased flexibility introduced on the spending rule.

Conclusion

There is a high probability that Spain will meet its 2016 deficit targets. This is mainly because the objectives have moved in line with data on budgetary execution. The surplus at the local level will compensate overshooting by the regions and the central government, with the social security system likely to come in at close to target (1.7%). 2017 looks set to be a more ambitious undertaking. The overall target is 1.5 percentage points lower than that in 2016, with the central government set to bear the brunt of the adjustment. Neither the social security system nor the regions will significantly bring down their deficit in the absence of additional measures. The surplus at the local

[4] Particularly the ex-post liquidation of the 2014 financial year, which is paid in 2016. This liquidation is worth 7.6 billion euros (Ministry of Finance and Civil Service, 2017), equivalent to nearly 0.7% of Spanish GDP and accounts for around 90% of the reduction in the deficit in the 2016 forecast by AIReF.

level will likely not increase, in fact it is more likely to move in the opposite direction. Overall, these three sub-sectors could close the year at around 2% – similar to 2016 and requiring the central government to halve its 2016 deficit. The task is a feasible one against a favourable economic climate, but will require additional measures either on the central government accounts, in the social security system or to address less compliant regions.

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Recent key developments in the area of Spanish financial regulation

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

Royal Decree-Law on urgent measures to protect consumers with regard to floor clauses (Royal Decree-Law 1/2017, published in the *Official State Gazette* of January 21st)

The Royal Decree-Law establishes a channel to help consumers reach an agreement with credit institutions that resolves the controversies arising from the judgment of the Court of Justice of the European Union, without recourse to the courts.

The purpose of the Royal Decree-Law is to **establish measures that facilitate the reimbursement of the amounts unduly paid by the consumer** to credit institutions through the application of certain floor clauses contained in loan or credit agreements secured with a mortgage on real estate.

The **main characteristics** of the Royal Decree-Law refer to the following:

- It applies to **mortgage credit or loan agreements** secured with a mortgage on real estate that include a floor clause, where the borrower is a consumer.

- Credit institutions must set up a **claims system before filing lawsuits,** which is voluntary for the consumer, guaranteeing that all consumers who had floor clauses in their loans are aware of it.

- The consumer must declare if he/she is in agreement with the calculation, in which case the credit institution will agree the cash reimbursement with the consumer. **The deadline for reaching an agreement will be three months.** Otherwise, it will be deemed that the **out-of-court procedure has ended without agreement** when any of the following circumstances are present:

  - The credit institution expressly rejects the consumer's request.

  - The three-month period ends without any communication from the credit institution to the consumer making the claim.

  - The consumer is not in agreement with the calculation of the amount to be repaid or rejects the amount offered.

  - Upon expiry of the three months, the amount offered has not been effectively made available to the consumer.

- During the time in which the out-of-court procedure is being dealt with, **the parties cannot take any out-of-court or court action between them** referring to the same claim which they are dealing with, and the court procedure is suspended if the claim is filed prior to the end of the procedure.

- **Procedural costs** will be payable by the credit institution if the consumer rejects the calculation

of the amount to be returned or declines the cash repayment and subsequently files a lawsuit and obtains a judgment that is more favourable than the offer made by the credit institution.

- Credit institutions must **take the necessary measures** to comply with the provisions contained in the Royal Decree-Law **within one month,** and they must:
  - Have a department or service specialising in dealing with the claims;
  - Make their customers aware, in all offices open to the public and on their websites, of the information referring to the out-of-court procedure;
  - Inform their customers of the possible tax obligations that agreed repayments may generate, and notify the Tax Agency of the information relating to such repayments.
- In addition, it raises the option of agreeing a **compensation measure** other than the cash repayment.
- The out-of-court claim procedure will be **free of charge** and the **formal execution of the public deed and the registry registration** will accrue only the corresponding notary and registry fees, respectively, of a no-amount document and a minimum registration, whatever the base may be.
- The Government is authorised to create a **body to monitor, control and evaluate the claims,** that:
  - Will issue a six-monthly report on its activity, and will count on the participation of representatives of consumers and the legal profession.
  - It will collect from credit institutions the information needed to check that the prior communication has been made, especially to vulnerable persons.
  - It may propose such measures that it deems necessary to ensure the correct implementation of the envisaged out-of-court mechanism.
- With regard to the **tax effects** arising from the repayment, by credit institutions, of the interest previously paid by the taxpayers as a result of clauses limiting the interest rates agreed with them, both if the repayment of such amounts arises from an agreement reached between the parties and if it is the consequence of a court judgment or arbitration award.

  The Royal Decree-Law establishes, **with effect from January 21st, 2017:**
  - The repayment of interest paid previously by the taxpayer as a result of the floor clauses will not be included in the taxable base of the personal income tax, both if the repayment of such amounts arises from an agreement reached between the parties, and if it is the consequence of a court judgment or arbitration award.
  - Nor will the compensatory interest relating to them be included in the taxable base.
  - The following **regularization** situations are established:
- **Regularization of the reduction for habitual dwelling:**
  - When the taxpayer applied at the time the reduction due to investment in a habitual dwelling for the amounts received, he/she will lose the right to its deduction. In this case, the amounts deducted must be included in the personal income tax declaration of the year in which the judgment, arbitration award or agreement with the credit institution arises, but without including late payment interest.

- This regularization will not be applicable to amounts directly allocated by the credit institution, after the agreement with the affected taxpayer, to reduce the loan principal.

■ **Regularization of dwellings for rent:**

- In the event that the taxpayer included, in tax returns of past years, the amounts now received as a deductible expense, for the purposes of calculating the return on real estate capital or economic activity, these will cease to be deemed as such, and additional tax returns must be filed for the corresponding years, eliminating such expenses, without any penalty or late payment interest or surcharge of any kind.

■ The regularizations, both of the dwelling reductions and of the deductible expenses, will only affect the years with respect to which the authorities' right to determine the tax debt has not lapsed due to expiry of the limitation period.

Spanish economic forecasts panel: March 2017[1]

Funcas Economic Trends and Statistics Department

GDP growth in 2017 forecast at 2.6%, 0.2 percentage points higher than the previous Panel

According to consensus, the economy will grow by 2.6% in 2017, 0.2 percentage points above the previous Panel (Table 1). The majority of analysts have revised their forecasts upward. Available indicators point to sustained growth in activity, albeit with a slight deceleration in comparison to the final part of last year. Consensus puts quarterly growth at 0.6% in the first quarter, 0.1 percentage points lower than in the fourth quarter of 2016. This growth rate is set to be sustained to the end of the year (Table 2).

Domestic demand will grow by 2.3%, 0.6 percentage points less than in 2016. The slowdown is mainly due to private consumption, which is forecast to moderate due to the impact of the pick-up in inflation on household purchasing power, to the stagnation in public spending, following the rollover of the General State Budget and the end of tax reductions. By contrast, consensus points to a modest acceleration in gross capital formation, especially in residential construction.

The export boom is set to continue, thanks to the favourable competitiveness position in both goods and services and positive developments in international markets. Meanwhile imports should recover after weakening somewhat in 2016. Overall, the external sector is set to contribute 0.4 percentage points to growth, 0.1 percentage points less than in 2016.

2.3% growth forecast for 2018

The Panel includes the first set of forecasts for 2018. The consensus forecast is for 2.3% GDP growth, which while below the 2017 forecast, remains elevated in comparison to the European Central Bank's overall eurozone forecast. The slowdown in growth reflects further weakening of private consumption, which will grow 0.4 percentage points less rapidly than in 2017, underpinning a moderation in the contribution from domestic demand. Public consumption is set to be anaemic, as a result of efforts to clean-up public sector finances. However, investment in both capital goods and construction is forecast to be more buoyant.

The external sector will sustain its positive contribution to growth, thanks to strong momentum in goods and services exports. Imports are set to be even more dynamic, closing in on their historic elasticity.

[1] The Panel of Projections for the Spanish economy is a survey of sixteen analysis services carried out by Funcas and presented in Table 1. The survey has been undertaken since 1999 and is published every two months during the first fortnight of January, March, May, July, September and November. Panellists' responses to this survey are used to create consensus forecasts, which are based on the arithmetic mean of the sixteen individual forecasts. For comparison purposes the Government, Bank of Spain and main international institutions' forecasts are also presented; however, these do not form part of the consensus.

Spike in inflation in 2017 and moderation in 2018

Inflation reached 3% during the first two months of the year, due to the increase in oil prices and the evolution of electricity prices. However, core inflation has remained at moderate levels.

A stable oil price is assumed over the forecast horizon, which is coherent with fulfilment of the agreement between oil producing countries. Under these conditions, inflation is expected to decline from the second quarter onwards. The consumer price index will climb to 2.3% in 2017, 0.4 percentage points more than forecast in the previous Panel. Progressive price moderation will push inflation down towards 1.6% in 2018. The pick-up in energy prices will barely affect core inflation, which will stay at moderate levels over the forecast horizon.

Positive employment developments

The labour market has continued to perform strongly since the start of the year as illustrated by data on registered unemployment and Social Security registrations. Consensus forecasts employment to grow by 2.3% in 2017 – 0.1 percentage points more than in the previous Panel – and by 1.9% next year. Combined with a slight decline in labour participation, this will serve to push the unemployment rate down to 16.1% in 2018.

Considering consensus forecasts for GDP, employment and wage remuneration, productivity will increase by a scant 0.3% in 2017 and 0.4% in 2018. Meanwhile, labour costs will rise by 1.1% and 1.3% respectively, *i.e.* less rapidly than inflation.

Solid current account surplus maintained

The current account on the balance of payments is estimated to have recorded a surplus of 1.8% of GDP in 2016, 0.5 percentage points more than in the previous year. This result is explained by the increase in the combined goods and services surplus and a reduction in the primary income deficit.

Consensus forecasts a slight reduction in the current account surplus, which could reach 1.7% of GDP in 2017, 0.3 percentage points more than in the previous Panel, and 1.5% in 2018. These developments reflect the increase in the energy bill and the forecast recovery in imports.

Public deficit to shrink but failing to meet targets

The consolidated Public Sector accounts, excluding local corporations, registered a deficit of 37.2 billion euros to November 2016 or 3.33% of GDP. This compares to a deficit of 3.79% recorded over the same period last year. The State and Social Security system deficits increased, while the autonomous regions markedly reduced their deficit.

The Panel expects a significant reduction in the overall public sector deficit in 2017, which could fall to 3.4% of GDP, 0.1 percentage points lower than forecast in the last consensus publication. Undoubtedly the public spending freeze and consolidation measures adopted at the end of 2016 will contribute to this outturn, albeit remaining insufficient to meet the 3.1% of GDP target. A deficit of 2.7% of GDP is forecast for 2018, 0.5 percentage points above the target set for this year.

Improvement in global economic outlook

The majority opinion of panellists regarding the external environment, both the EU and the rest of the world, continues to be neutral with few changes anticipated over the next six months. However, the number of analysts that consider the

current environment to be favourable and likely to improve over the next six months has increased compared to the previous Panel (Table 4).

Long-term interest rates continue ticking up

Short-term interest rates (3-month Euribor) have remained stable in recent weeks at -0.33%. This level is still considered low given current cyclical conditions and is expected to remain stable over the next six months.

Yields on long-term debt (10-year sovereign debt) have climbed to around 1.8% in recent weeks, with a modest increase in the risk premium. Fears regarding elections taking place across various European countries over the coming months have spurred similar movements in debt across the continent. Panellists continue to believe that yields on long-term debt are low given the current cyclical position of our economy and that they will continue to track upwards over the coming months.

Euro close to equilibrium levels

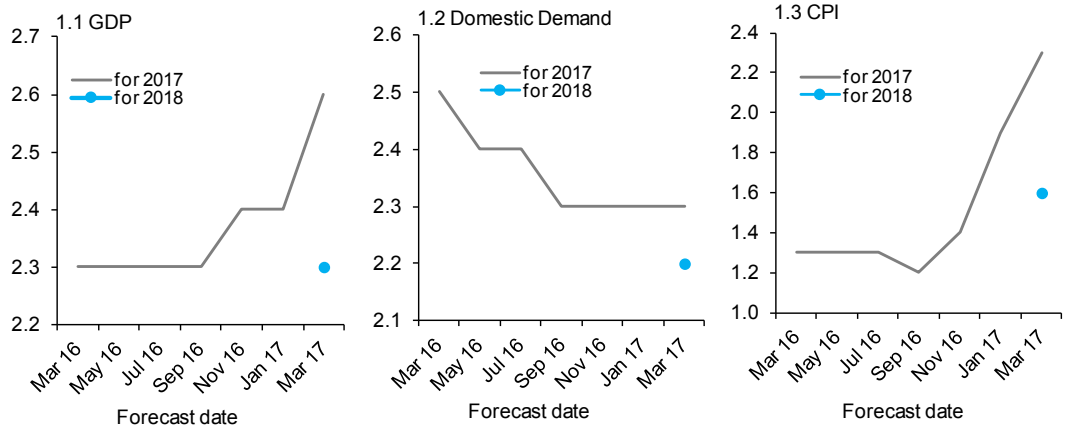
The Euro-Dollar exchange rate rose to 1.07 following Mario Draghi's comments after the European Central Bank's last monetary policy meeting. Most panellists believe the Euro is at equilibrium level, but that it is on course to weaken over the coming months.

Fiscal policy is no longer expansionary

Overall opinion regarding fiscal policy has changed compared to previous Panels. While previously the majority of panellists judged the stance expansive, most now consider it to be neutral. The bulk believe this is appropriate. The panellists remain unanimous in considering monetary policy to be expansive, and while the majority continue to believe this to be appropriate, there has been an increase in the number who think it should be neutral.

Exhibit 1

Change in forecasts (Consensus values)
Percentage annual change



Source: Funcas Panel of forecasts.

Table 1

Economic Forecasts for Spain – March 2017

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	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Analistas Financieros Internacionales (AFI)	2.8	2.4	2.8	2.4	0.7	0.6	3.2	2.7	4.4	3.7	2.6	2.2	2.4	2.1
Axesor	2.7	2.3	2.2	1.8	1.2	1.6	2.8	3.4	2.6	3.4	2.6	3.0	2.2	2.2
Banco Bilbao Vizcaya Argentaria (BBVA)	2.7	2.7	2.5	2.4	1.8	1.9	3.3	4.4	4.1	4.3	2.5	4.2	2.4	2.6
Bankia	2.5	2.0	2.6	2.0	1.1	0.8	3.8	3.3	5.5	4.4	3.0	2.7	2.5	2.1
CaixaBank	2.6	2.2	2.6	1.9	0.5	0.8	2.7	2.9	2.1	2.8	3.1	3.0	2.3	1.9
Cemex	2.7	2.3	2.7	2.3	1.1	1.0	4.0	3.9	3.4	4.0	4.4	4.1	2.6	2.3
Centro de Estudios Economía de Madrid (CEEM-URJC)	2.4	2.4	2.4	2.3	1.3	1.6	3.3	3.1	4.1	3.9	2.7	2.9	2.3	2.3
Centro de Predicción Económica (CEPREDE-UAM)	2.7	2.4	2.7	2.1	1.0	1.4	3.1	4.1	4.2	5.0	2.7	4.0	2.4	2.4
CEOE	2.5	2.3	2.4	2.2	0.6	0.7	2.9	2.9	4.0	4.0	2.1	2.5	2.1	2.0
Funcas	2.5	2.2	2.3	1.7	0.6	0.6	4.0	4.0	4.0	3.9	3.8	4.1	2.2	1.9
Instituto Complutense de Análisis Económico (ICAE-UCM)	2.5	--	2.8	--	1.8	--	3.1	--	3.6	--	2.9	--	2.3	--
Instituto de Estudios Económicos (IEE)	2.5	2.2	2.3	2.3	0.7	0.6	3.1	2.8	5.1	5.2	2.7	1.9	2.0	2.0
Intermoney	2.5	1.9	2.5	1.9	0.8	0.9	2.4	1.7	2.9	2.5	1.8	1.0	2.1	1.7
Repsol	2.8	2.7	2.6	2.3	1.1	2.1	3.7	4.4	4.1	5.5	3.6	3.8	2.5	2.6
Santander	2.5	2.0	2.0	1.9	0.5	0.8	2.6	3.1	2.1	1.8	3.0	4.4	2.2	2.1
Solchaga Recio & asociados	2.8	2.3	2.6	2.0	1.0	0.8	3.9	3.7	5.2	4.2	3.4	3.5	2.6	2.1
CONSENSUS (AVERAGE)	2.6	2.3	2.5	2.1	1.0	1.1	3.3	3.4	3.8	3.9	2.9	3.1	2.3	2.2
Maximum	2.8	2.7	2.8	2.4	1.8	2.1	4.0	4.4	5.5	5.5	4.4	4.4	2.6	2.6
Minimum	2.4	1.9	2.0	1.7	0.5	0.6	2.4	1.7	2.1	1.8	1.8	1.0	2.0	1.7
Change on 2 months earlier[1]	0.2	--	0.1	--	-0.2	--	-0.1	--	-0.7	--	0.0	--	0.0	--
- Rise[2]	11	--	10	--	4	--	4	--	3	--	6	--	6	--
- Drop[2]	0	--	2	--	9	--	11	--	11	--	6	--	7	--
Change on 6 months earlier[1]	0.3	--	0.1	--	0.4	--	-0.7	--	-1.4	--	-0.6	--	0.0	--
Memorandum ítems:														
Government (December 2016)	2.5	--	2.7	--	0.9	--	3.4	--	5.0	--	2.6	--	--	--
Bank of Spain (December 2016)	2.5	2.1	2.1	1.5	0.8	0.8	3.8	4.6	5.1 [3]	5.7 [3]	3.5	4.4	--	--
EC (February 2017)	2.3	2.1	2.1	1.8	0.9	0.8	3.4	3.8	4.0 [3]	3.8 [3]	3.0	3.6	2.1	2.0
IMF (January 2017)	2.3	2.1	--	--	--	--	--	--	--	--	--	--	--	--
OECD (March 2017)	2.5	2.2	2.2	1.6	0.9	1.2	3.6	4.7	--	--	--	--	2.3	2.2

[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 – March 2017

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

	Exports of goods & services		Imports of goods & services		CPI (annual av.)		Core CPI (annual av.)		Labour costs[3]		Jobs[4]		Unempl. (% labour force)		C/A bal. of payments (% of GDP)[5]		Gen. gov. bal. (% of GDP)[7]	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Analistas Financieros Internacionales (AFI)	4.6	3.2	3.8	2.4	2.4	1.8	1.2	1.3	1.1	1.3	2.5	2.1	17.1	15.6	1.9	1.8	-3.6	-2.8
Axesor	4.7	4.3	3.6	4.1	2.5	2.1	1.4	1.6	1.6	1.7	2.3	2.0	18.1	16.3	1.1	0.2	-3.8	-2.9
Banco Bilbao Vizcaya Argentaria (BBVA)	4.5	5.2	3.8	5.5	2.1	1.9	1.2	1.6	0.5	1.4	2.3	2.1	17.5	15.8	1.9	1.8	-3.1	-2.2
Bankia	4.7	4.2	5.0	4.7	2.2	1.6	1.1	1.2	1.2	1.4	2.3	1.7	17.8	16.5	1.6	1.4	--	--
CaixaBank	4.4	4.1	3.6	3.2	2.6	1.6	1.3	1.6	1.1	1.6	2.0	2.0	17.8	16.5	1.6	1.4	-3.4	-2.4
Cemex	4.7	4.4	4.8	4.9	2.5	1.8	1.3	1.5	--	--	2.5	2.5	17.8	16.1	1.5	1.5	-3.6	-3.1
Centro de Estudios Economía de Madrid (CEEM-URJC)	4.1	4.8	3.9	4.9	2.1	1.7	1.2	1.5	--	--	2.3	2.2	17.4	15.4	1.7	1.6	-3.2	-2.5
Centro de Predicción Económica (CEPREDE-UAM)	5.2	4.9	4.7	5.2	2.2	1.8	--	--	1.2	1.5	2.2	1.9	17.7	16.3	1.6	1.9	-3.1	-2.7
CEOE	4.3	3.9	3.3	3.4	2.0	1.1	0.9	0.9	0.5	0.8	2.3	2.1	17.5	15.8	1.7	1.6	-3.6	-3.0
Funcas	3.6	4.6	3.1	4.0	2.2	1.1	1.0	1.2	1.6	1.6	2.0	1.7	17.8	16.0	1.5	1.5	-3.4	-2.4
Instituto Complutense de Análisis Económico (ICAE-UCM)	4.4	--	3.0	--	2.2	--	1.3	--	--	--	2.3	--	17.8	--	1.5	--	-3.6	--
Instituto de Estudios Económicos (IEE)	4.0	3.6	2.9	3.4	2.5	1.3	1.1	1.0	0.7	1.0	2.0	1.5	17.9	16.6	1.9	1.8	-3.3	-3.1
Intermoney	3.1	2.7	2.5	2.2	1.9	1.5	1.1	1.5	--	--	2.2	1.6	17.7	16.7	1.8	--	-3.2	--
Repsol	4.5	4.6	4.0	4.8	2.6	1.8	1.2	1.3	0.8	0.6	2.4	2.2	17.5	15.4	1.8	1.6	-3.1	-2.2
Santander	4.0	2.9	3.4	3.5	2.3	1.4	--	--	1.5	1.8	2.1	1.6	17.8	16.3	2.0	1.8	-3.1	-2.8
Solchaga Recio & asociados	4.3	4.2	3.8	3.9	2.2	1.8	1.2	1.5	--	--	2.5	2.0	17.7	16.0	1.8	1.7	-3.6	-2.9
CONSENSUS (AVERAGE)	4.3	4.1	3.7	4.0	2.3	1.6	1.2	1.4	1.1	1.3	2.3	1.9	17.7	16.1	1.7	1.5	-3.4	-2.7
Maximum	5.2	5.2	5.0	5.5	2.6	2.1	1.4	1.6	1.6	1.8	2.5	2.5	18.1	16.7	2.0	1.9	-3.1	-2.2
Minimum	3.1	2.7	2.5	2.2	1.9	1.1	0.9	0.9	0.5	0.6	2.0	1.5	17.1	15.4	1.1	0.2	-3.8	-3.1
Change on 2 months earlier[1]	0.4	--	-0.1	--	0.4	--	0.1	--	0.0	--	0.1	--	-0.4	--	0.3	--	0.1	--
- Rise[2]	13	--	5	--	14	--	9	--	4	--	9	--	0	--	11	--	5	--
- Drop[2]	2	--	11	--	2	--	0	--	5	--	3	--	13	--	2	--	2	--
Change on 6 months earlier[1]	-0.4	--	-1.4	--	1.1	--	0.3	--	0.0	--	0.2	--	-0.6	--	0.1	--	0.2	--
Memorandum items:																		
Government (December 2016)	5.9	--	5.9	--	--	--	--	--	--	--	2.4	--	17.6	--	1.8	--	-3.1	-2.2
Bank of Spain (December 2016)	4.2	4.5	3.7	4.6	1.6	1.5	1.0	1.4	--	--	2.3	1.8	17.0	15.6	2.1 [6]	1.9 [6]	-3.6	-3.2
EC (February 2017)	4.0	4.3	3.5	4.3	1.9	1.7	--	--	1.4	1.6	2.0	1.7	17.7	16.0	1.7	1.6	-3.5	-2.9
IMF (January 2017)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OECD (March 2017)	4.3	4.4	3.7	4.5	1.9	1.8	1.1	1.5	--	--	2.4	1.9	17.5	16.1	2.2	2.2	-3.4	-2.8

[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 - March 2017[1]

Quarter-on-quarter change (percentage)

	17-IQ	17-IIQ	17-IIIQ	17-IVQ	18-IQ	18-IIQ	18-IIIQ	18-IVQ
GDP[2]	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6
Household consumption[2]	0.6	0.6	0.5	0.5	0.6	0.5	0.5	0.5

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

[2] According to series corrected for seasonality and labour calendar.

Table 3

CPI Forecasts – March 2017[1]

Monthly change (%)				Year-on-year change (%)	
Mar-17	Apr-17	May-17	Jun-17	Dec-17	Dec-18
1.0	1.3	0.8	0.8	1.5	1.6

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

Table 4

Opinions – March 2017

Number of responses

	Currently			Trend for next six months		
	Favourable	Neutral	Unfavourable	Improving	Unchanged	Worsening
International context: EU	7	9	0	4	9	3
International context: Non-EU	5	11	0	4	9	3
	Low[1]	Normal[1]	High[1]	Increasing	Stable	Decreasing
Short-term interest rate[2]	14	2	0	3	12	1
Long-term interest rate[3]	13	3	0	10	6	0
	Overvalued[4]	Normal[4]	Undervalued[4]	Appreciation	Stable	Depreciation
Euro/dollar exchange rate	2	8	6	3	6	7
	Is being			**Should be**		
	Restrictive	Neutral	Expansionary	Restrictive	Neutral	Expansionary
Fiscal policy assessment[1]	1	8	7	6	9	1
Monetary policy assessment[1]	0	0	16	0	5	11

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

[2] Three-month Euribor.

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

[4] Relative to theoretical equilibrium rate.

KEY FACTS:

Table 1

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

Forecasts in blue

		GDP	Private consumption	Public consumption	Gross fixed capital formation					Exports	Imports	Domestic Demand (a)	Net exports (a)
						Construction							
					Total	Total	Housing	Other construction	Equipment & other products				
Chain-linked volumes, annual percentage changes													
2010		0.0	0.3	1.5	-4.9	-10.1	-11.6	-8.5	5.4	9.4	6.9	-0.5	0.5
2011		-1.0	-2.4	-0.3	-6.9	-11.7	-13.3	-10.2	0.9	7.4	-0.8	-3.1	2.1
2012		-2.9	-3.5	-4.7	-8.6	-12.3	-10.3	-13.9	-3.5	1.1	-6.4	-5.1	2.2
2013		-1.7	-3.1	-2.1	-3.4	-8.6	-10.2	-7.3	2.8	4.3	-0.5	-3.2	1.5
2014		1.4	1.6	-0.3	3.8	1.2	6.2	-2.6	6.6	4.2	6.5	1.9	-0.5
2015		3.2	2.9	2.0	6.0	4.9	3.1	6.4	7.2	4.9	5.6	3.3	-0.1
2016		3.2	3.2	0.8	3.1	1.9	3.7	0.4	4.3	4.4	3.3	2.8	0.5
2017		2.5	2.3	0.6	4.0	3.8	5.1	2.7	4.1	3.6	3.1	2.2	0.3
2018		2.2	1.7	0.6	4.0	4.1	4.9	3.3	3.9	4.6	4.0	1.9	0.3
2016	I	3.4	3.6	1.7	4.3	2.3	4.8	0.3	6.4	3.8	4.5	3.5	-0.1
	II	3.4	3.4	0.7	3.4	1.8	3.0	0.7	5.0	6.5	5.4	2.9	0.5
	III	3.2	3.0	0.8	2.6	1.6	3.2	0.3	3.6	2.9	1.0	2.5	0.7
	IV	3.0	3.0	0.0	2.2	1.9	3.8	0.2	2.6	4.4	2.3	2.2	0.8
2017	I	2.9	2.7	-0.1	3.1	3.0	4.2	1.8	3.3	5.1	3.2	2.2	0.7
	II	2.6	2.4	0.8	3.2	3.1	4.6	1.8	3.3	2.4	1.5	2.2	0.3
	III	2.4	2.2	0.6	4.4	4.3	5.7	3.0	4.6	4.3	4.4	2.3	0.1
	IV	2.2	1.8	1.0	5.1	5.0	6.0	4.0	5.2	2.8	3.3	2.3	-0.1
2018	I	2.1	1.6	0.6	4.5	4.7	5.5	3.9	4.2	3.3	3.4	2.0	0.0
	II	2.1	1.6	0.6	3.8	4.3	5.2	3.4	3.2	4.0	3.6	1.9	0.2
	III	2.2	1.7	0.6	3.7	3.9	4.7	3.1	3.5	5.0	4.1	1.9	0.4
	IV	2.4	1.9	0.7	3.9	3.4	4.0	2.8	4.5	5.9	4.9	2.0	0.5
Chain-linked volumes, quarter-on-quarter percentage changes, at annual rate													
2016	I	3.1	3.6	0.9	1.6	0.2	4.5	-3.2	3.1	0.8	-0.7	2.6	0.5
	II	3.4	2.9	-2.3	5.5	4.2	3.5	4.9	6.8	14.4	10.9	2.0	1.3
	III	2.8	2.5	2.1	-0.3	0.4	1.8	-0.6	-1.0	-4.9	-7.6	2.0	0.8
	IV	2.8	3.0	-0.7	2.1	2.7	5.7	0.1	1.6	8.4	7.5	2.3	0.5
2017	I	2.6	2.5	0.5	5.2	4.5	6.0	3.0	5.9	3.5	3.0	2.5	0.1
	II	2.2	1.7	1.5	6.0	5.0	5.0	5.0	7.0	3.0	3.8	2.4	-0.2
	III	2.0	1.5	1.2	4.5	5.0	6.0	4.0	4.0	2.4	3.6	2.1	0.0
	IV	2.0	1.5	1.0	4.7	5.4	7.0	4.0	4.0	2.4	2.8	2.0	0.0
2018	I	2.0	1.6	-1.1	2.7	3.4	4.0	2.8	2.0	5.4	3.6	1.3	0.7
	II	2.4	1.6	1.2	3.2	3.4	4.0	2.8	3.0	5.8	4.4	1.8	0.6
	III	2.6	2.2	1.3	4.2	3.4	4.0	2.8	5.0	6.3	5.8	2.3	0.2
	IV	2.8	2.2	1.3	5.6	3.4	4.0	2.8	8.0	6.3	5.8	2.6	0.2
		Current prices (EUR billions)	**Percentage of GDP at current prices**										
2010		1,080.9	57.2	20.5	23.0	14.3	6.9	7.4	8.7	25.5	26.8	101.3	-1.3
2011		1,070.4	57.8	20.5	21.5	12.5	5.7	6.8	9.0	28.9	29.2	100.2	-0.2
2012		1,039.8	58.8	19.7	19.8	10.9	4.9	6.0	8.9	30.7	29.2	98.5	1.5
2013		1,025.6	58.4	19.7	18.8	9.7	4.1	5.6	9.0	32.2	29.0	96.7	2.2
2014		1,037.0	58.7	19.5	19.1	9.7	4.3	5.3	9.5	32.7	30.2	97.6	2.4
2015		1,075.6	58.1	19.4	19.7	9.9	4.4	5.4	9.8	33.2	30.7	97.6	2.4
2016		1,113.9	57.8	18.9	19.9	10.0	4.7	5.2	10.0	33.1	30.2	97.1	2.9
2017		1,159.6	58.1	18.5	20.3	10.3	4.9	5.3	10.0	33.4	30.8	97.4	2.6
2018		1,200.9	57.8	18.1	20.7	10.7	5.2	5.5	10.1	34.1	31.3	97.2	2.8

**Seasonally and Working Day Adjusted.*

(a) Contribution to GDP growth.

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

Chart 1.1.- GDP
Percentage change

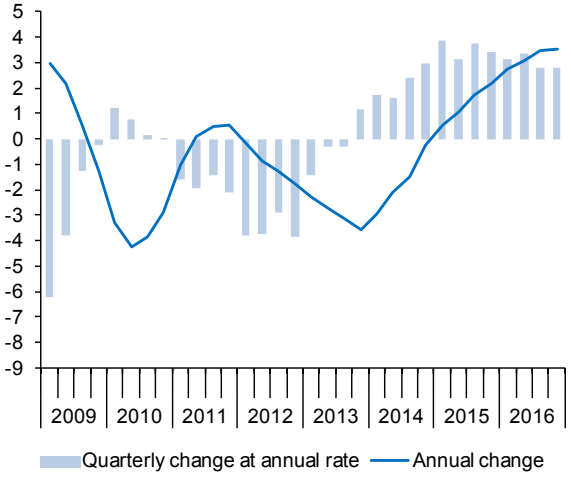


Chart 1.2.- Contribution to GDP annual growth
Per cent points

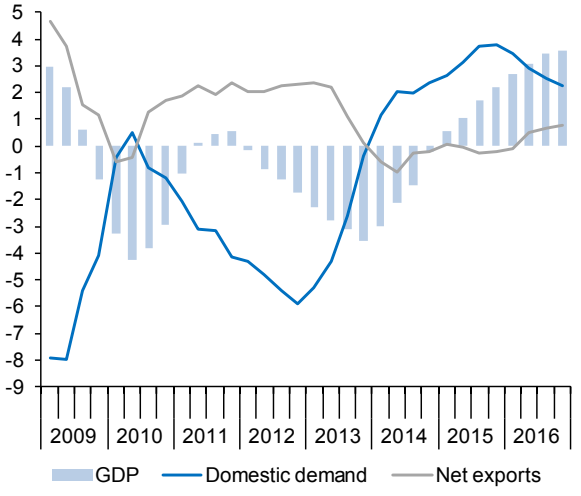


Chart 1.3.- Final consumption
Annual percentage change

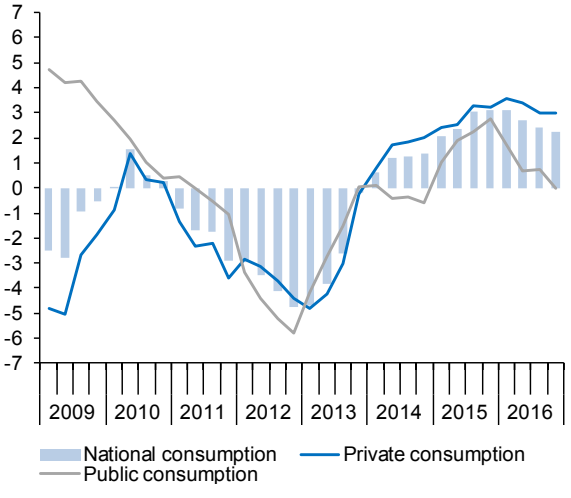


Chart 1.4.- Gross fixed capital formation
Per cent points

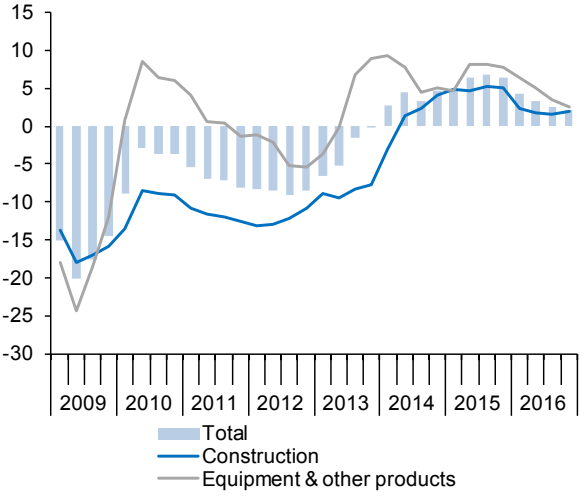


Table 2

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

Forecasts in blue

	Gross value added at basic prices								
	Total	Agriculture, forestry and fishing	Industry		Construction	Services			Taxes less subsidies on products
			Total	Manufacturing		Total	Public administration, health, education	Other services	
Chain-linked volumes, annual percentage changes									
2009	-3.4	-3.6	-10.0	-10.9	-7.6	-1.0	-3.7	0.6	-5.9
2010	0.0	2.1	3.6	0.0	-14.5	1.3	1.5	3.9	0.1
2011	-0.6	4.4	-0.2	-1.3	-12.8	0.7	-0.1	-0.2	-5.6
2012	-2.8	-9.7	-4.9	-5.2	-8.8	-1.5	-1.9	1.6	-4.0
2013	-1.5	13.6	-3.9	-0.2	-10.5	-0.6	-1.7	3.3	-4.3
2014	1.2	-1.6	1.8	3.1	-1.2	1.4	-0.5	2.0	2.9
2015	2.9	-2.9	5.5	7.0	0.2	2.6	1.7	3.0	6.7
2016	3.1	3.4	2.4	3.1	2.5	3.4	2.5	3.7	4.2
2017	2.5	3.7	2.8	2.6	3.1	2.4	2.5	2.3	2.4
2018	2.2	2.0	2.1	2.1	3.5	2.2	2.3	2.2	1.9
2016 I	3.2	5.0	2.7	4.4	2.1	3.4	2.5	3.6	4.8
II	3.3	2.7	2.8	3.8	2.0	3.6	2.8	3.8	4.3
III	3.1	3.1	1.7	2.4	2.9	3.4	2.5	3.7	4.2
IV	3.0	2.9	2.2	2.0	3.0	3.1	2.1	3.5	3.6
2017 I	2.8	2.4	3.2	2.8	2.5	2.7	2.1	2.9	3.9
II	2.6	5.4	2.8	2.5	2.5	2.5	2.3	2.5	2.5
III	2.5	5.4	3.1	2.7	3.2	2.2	2.5	2.1	1.4
IV	2.2	2.0	2.3	2.4	4.4	2.1	3.0	1.7	1.8
2018 I	2.1	2.0	2.1	2.1	4.1	1.9	2.5	1.7	1.8
II	2.1	2.0	2.0	2.0	3.7	2.0	2.3	1.9	2.0
III	2.3	2.0	2.1	2.1	3.3	2.2	2.2	2.3	2.0
IV	2.5	2.0	2.1	2.2	2.8	2.6	2.2	2.7	2.0
Chain-linked volumes, quarter-on-quarter percentage changes, at annual rate									
2016 I	3.4	4.3	-0.8	-0.3	6.3	4.1	2.5	4.7	0.8
II	3.1	-9.1	3.9	4.1	4.4	3.3	2.5	3.5	6.0
III	2.5	1.9	0.7	1.3	1.4	3.1	2.6	3.2	5.4
IV	2.8	16.2	5.1	2.8	0.2	2.1	0.7	2.5	2.1
2017 I	2.7	2.0	2.9	3.2	3.9	2.5	2.5	2.5	2.0
II	2.4	2.0	2.5	2.6	4.4	2.2	3.5	1.8	0.4
III	2.1	2.0	2.0	2.0	4.4	2.0	3.2	1.6	1.0
IV	1.8	2.0	1.8	1.8	4.8	1.6	3.0	1.1	4.0
2018 I	2.0	2.0	1.9	1.9	2.8	1.9	0.4	2.5	1.9
II	2.6	2.0	2.2	2.3	2.8	2.6	2.7	2.6	1.0
III	2.7	2.0	2.2	2.3	2.8	2.9	2.8	2.9	1.0
IV	2.7	2.0	2.2	2.2	2.8	2.8	2.8	2.8	4.0
	Current prices (EUR billions)	**Percentage of value added at basic prices**							
2009	1,006.1	2.3	16.6	13.2	10.6	70.4	18.2	52.2	7.2
2010	989.9	2.6	17.2	13.3	8.8	71.4	18.7	52.7	9.2
2011	983.7	2.5	17.4	13.5	7.5	72.6	18.7	53.8	8.8
2012	954.0	2.5	17.4	13.2	6.7	73.5	18.5	54.9	9.0
2013	935.7	2.8	17.5	13.4	5.8	74.0	19.0	55.0	9.6
2014	943.8	2.5	17.6	13.8	5.7	74.2	18.8	55.4	9.9
2015	975.8	2.6	18.0	14.2	5.6	73.8	18.8	55.0	10.2
2016	1,011.0	2.6	17.8	14.1	5.6	74.1	18.9	55.2	10.2
2017	1,050.4	2.8	17.9	14.1	5.7	73.7	18.8	54.9	10.4
2018	1,086.8	2.9	17.7	13.9	5.8	73.6	18.8	54.8	10.5

**Seasonally and Working Day Adjusted.*

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

Chart 2.1.- GVA by sectors
Annual percentage change

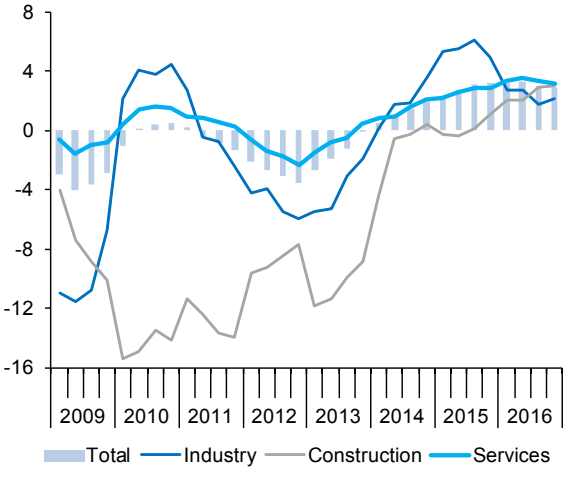


Chart 2.2.- Industry
Annual percentage change

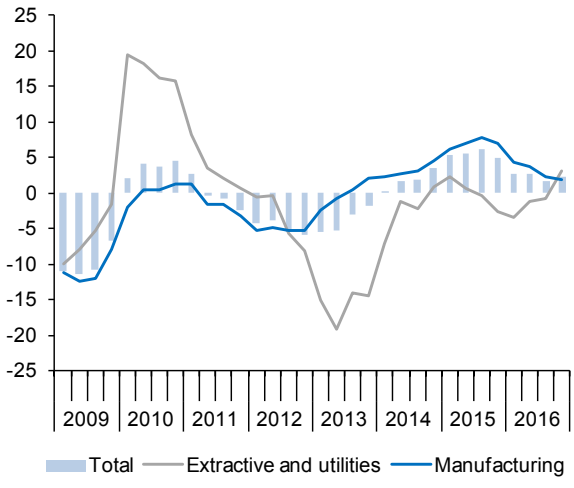


Chart 2.3.- GVA, services
Annual percentage change

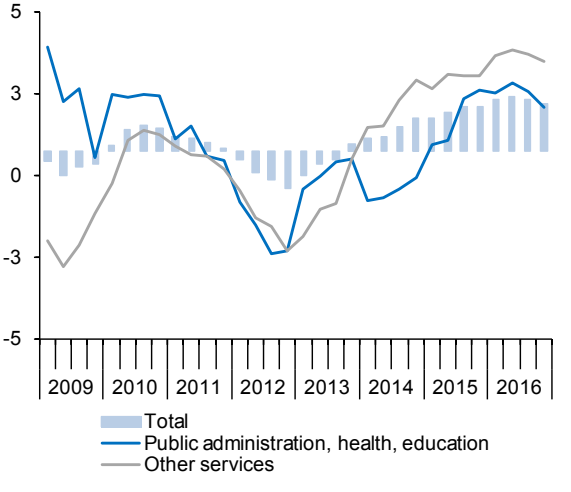


Chart 2.4.- GVA, structure by sectors
Percentage of value added at basic prices

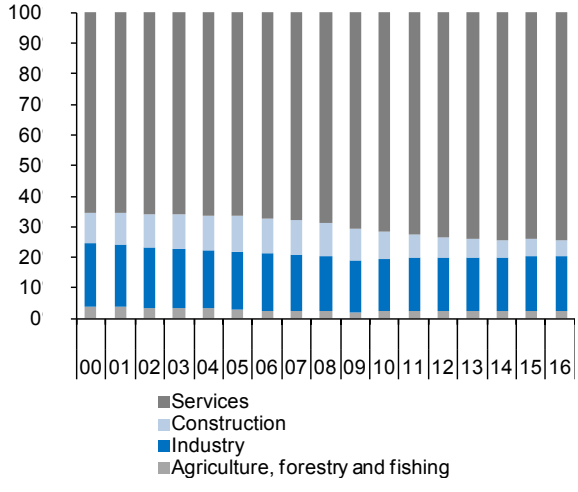


Table 3a

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													
2010		124.5	114.0	109.3	145.9	133.5	99.4	100.1	78.9	126.9	155.6	122.6	97.7
2011		123.3	110.8	111.3	147.1	132.2	98.4	98.8	75.9	130.1	159.0	122.1	95.3
2012		119.7	105.5	113.5	146.2	128.9	95.9	93.7	70.3	133.2	161.6	121.4	94.4
2013		117.6	101.9	115.5	148.2	128.4	95.2	93.5	67.0	139.6	164.2	117.6	91.5
2014		119.3	103.0	115.8	148.2	128.0	95.1	96.4	66.1	145.8	164.8	113.1	87.7
2015		123.1	106.0	116.1	148.9	128.2	94.8	103.1	67.4	152.9	163.8	107.1	83.2
2016		127.1	109.1	116.5	148.9	127.8	94.2	106.4	69.0	154.0	164.4	106.7	83.1
2017		130.3	111.3	117.1	151.3	129.2	93.8	109.1	--	--	--	--	--
2018		133.1	113.1	117.8	153.7	130.5	93.5	111.4	--	--	--	--	--
2015	I	121.5	104.0	116.9	148.4	126.9	94.0	98.4	66.6	147.7	164.8	111.6	86.5
	II	122.5	104.7	117.0	149.0	127.4	94.2	100.8	66.8	150.8	163.7	108.5	84.0
	III	123.6	105.9	116.8	148.6	127.2	94.1	102.4	67.3	152.0	163.8	107.8	83.6
	IV	124.7	106.5	117.1	148.6	127.0	93.8	104.1	67.8	153.7	163.6	106.4	82.7
2016	I	125.6	107.1	117.3	149.2	127.1	94.2	105.3	67.9	155.1	163.9	105.7	82.3
	II	126.7	108.0	117.3	148.8	126.8	93.4	105.2	68.5	153.7	164.7	107.2	83.5
	III	127.5	108.7	117.3	148.9	126.9	93.7	106.3	68.6	154.9	164.5	106.2	82.8
	IV	128.4	109.6	117.2	148.6	126.8	93.0	106.6	69.3	153.9	164.3	106.7	83.3
Annual percentage changes													
2010		0.0	-2.7	2.7	1.1	-1.6	-1.8	0.0	-4.0	4.2	1.9	-2.1	-1.3
2011		-1.0	-2.8	1.8	0.9	-0.9	-1.0	-1.3	-3.8	2.6	2.2	-0.4	-2.4
2012		-2.9	-4.8	2.0	-0.6	-2.5	-2.6	-5.2	-7.4	2.3	1.7	-0.6	-1.0
2013		-1.7	-3.4	1.8	1.4	-0.4	-0.7	-0.2	-4.8	4.8	1.6	-3.1	-3.0
2014		1.4	1.1	0.3	0.0	-0.3	0.0	3.1	-1.3	4.5	0.4	-3.9	-4.2
2015		3.2	3.0	0.2	0.4	0.2	-0.3	7.0	2.0	4.9	-0.7	-5.3	-5.1
2016		3.2	2.9	0.4	0.0	-0.4	-0.7	3.1	2.4	0.7	0.4	-0.3	-0.1
2017		2.5	2.0	0.5	1.6	1.1	-0.4	2.6	--	--	--	--	--
2018		2.2	1.6	0.6	1.6	1.0	-0.3	2.1	--	--	--	--	--
2015	I	2.7	2.4	0.3	0.1	-0.3	-0.7	4.5	0.5	3.9	0.3	-3.5	-3.7
	II	3.1	2.8	0.3	0.8	0.5	-0.1	6.1	1.6	4.5	-0.5	-4.8	-4.8
	III	3.4	3.0	0.4	0.2	-0.2	-0.8	6.9	2.3	4.5	-0.8	-5.1	-5.0
	IV	3.6	3.0	0.5	0.2	-0.4	-0.8	7.9	2.2	5.6	-0.8	-6.0	-5.9
2016	I	3.4	3.0	0.4	0.6	0.2	0.2	7.0	1.9	5.0	-0.5	-5.3	-4.9
	II	3.4	3.1	0.3	-0.1	-0.5	-0.9	4.4	2.5	1.9	0.6	-1.3	-0.6
	III	3.2	2.7	0.4	0.2	-0.3	-0.4	3.8	1.9	1.9	0.4	-1.4	-1.0
	IV	3.0	2.9	0.1	0.0	-0.1	-0.8	2.4	2.2	0.2	0.4	0.3	0.6

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

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

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

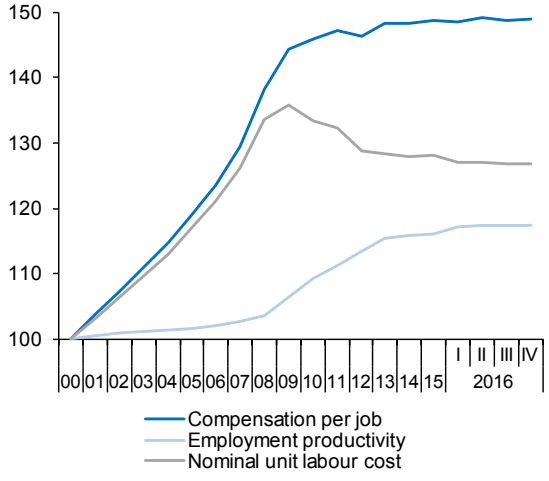
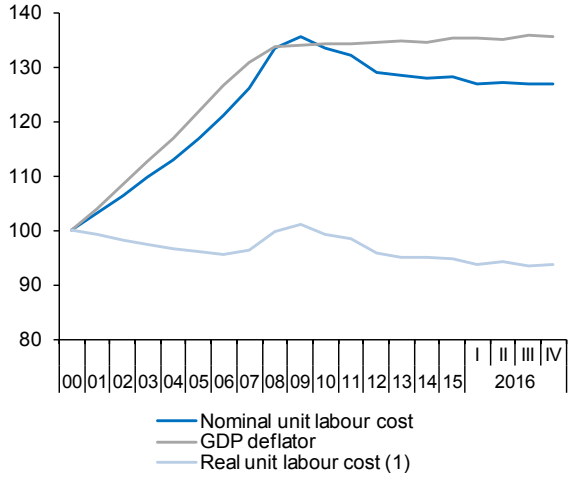


Chart 3a.2.- Real ULC, total economy
Index, 2000=100



(1) Nominal ULC deflated by GDP deflator.

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

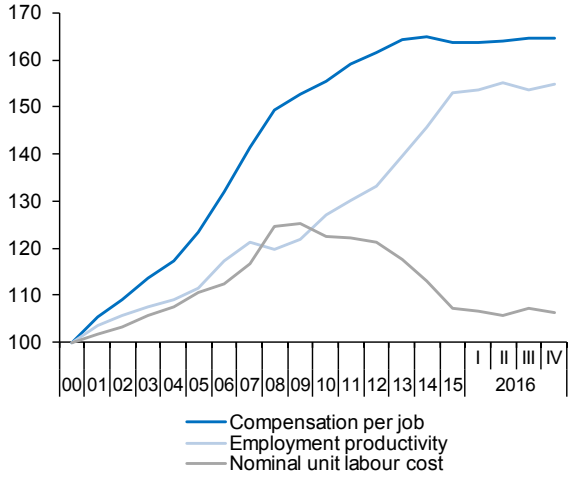
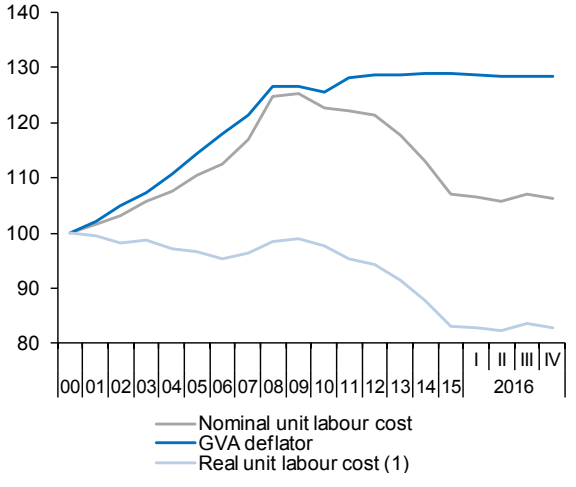


Chart 3a.4.- Real ULC, manufacturing industry
Index, 2000=100



(1) Nominal ULC deflated by industrial sector 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													
2010		93.5	85.2	109.7	172.1	156.9	99.2	137.5	132.0	104.2	139.1	133.4	96.7
2011		81.5	72.2	112.8	169.6	150.3	98.0	138.5	130.5	106.1	140.2	132.2	97.2
2012		74.4	59.2	125.6	170.5	135.8	94.0	136.4	126.4	107.9	138.5	128.3	96.5
2013		66.5	51.7	128.8	170.4	132.3	96.5	135.6	123.2	110.1	140.5	127.7	95.7
2014		65.7	50.1	131.2	171.1	130.4	94.7	137.5	125.4	109.6	140.5	128.2	95.6
2015		65.8	53.4	123.3	169.4	137.4	98.0	141.1	129.2	109.2	141.6	129.7	95.0
2016		67.5	54.5	123.7	166.9	134.9	94.3	145.9	133.1	109.6	141.8	129.4	93.9
2017		69.6	56.9	122.4	--	--	--	149.3	135.6	110.1	--	--	--
2018		72.0	59.4	121.1	--	--	--	152.6	137.6	110.9	--	--	--
2015	I	65.7	52.6	124.9	170.9	136.8	99.4	137.7	127.6	107.9	140.7	130.3	96.8
	II	65.1	53.5	121.7	172.4	141.6	100.7	138.7	128.9	107.7	140.5	130.5	97.0
	III	65.4	53.5	122.2	170.2	139.3	99.4	139.6	129.7	107.6	141.6	131.6	96.9
	IV	66.2	53.8	122.9	169.1	137.6	99.2	140.4	130.5	107.5	141.4	131.5	96.6
2016	I	65.8	53.4	123.2	170.0	138.0	98.4	141.7	131.8	107.5	141.4	131.6	96.5
	II	65.8	54.3	121.2	168.3	138.9	98.2	142.8	132.9	107.5	142.1	132.2	96.1
	III	66.8	55.1	121.2	167.6	138.2	98.4	144.2	133.7	107.9	141.6	131.2	95.3
	IV	67.5	55.4	121.9	166.5	136.6	97.1	145.4	134.1	108.5	141.8	130.8	94.2
Annual percentage changes													
2010		-14.5	-14.0	-0.6	1.3	1.9	6.0	1.3	-1.2	2.5	1.0	-1.5	-0.2
2011		-12.8	-15.3	2.9	-1.4	-4.2	-1.2	0.7	-1.1	1.8	0.8	-0.9	0.5
2012		-8.8	-18.0	11.3	0.5	-9.7	-4.1	-1.5	-3.2	1.7	-1.2	-2.9	-0.7
2013		-10.5	-12.7	2.5	-0.1	-2.6	2.6	-0.6	-2.5	2.0	1.5	-0.5	-0.8
2014		-1.2	-3.1	1.9	0.5	-1.4	-1.9	1.4	1.8	-0.4	0.0	0.4	-0.1
2015		0.2	6.6	-6.0	-1.0	5.3	3.5	2.6	3.0	-0.3	0.8	1.1	-0.6
2016		2.5	2.2	0.3	-1.5	-1.8	-3.8	3.4	3.0	0.3	0.1	-0.2	-1.2
2017		3.1	4.2	-1.0	--	--	--	2.4	1.9	0.5	--	--	--
2018		3.5	4.5	-1.0	--	--	--	2.2	1.5	0.7	--	--	--
2015	I	-0.3	7.9	-7.6	0.5	8.8	8.5	1.6	3.1	-1.4	-0.1	1.4	0.7
	II	0.4	7.5	-6.6	0.6	7.7	6.2	2.2	3.0	-0.8	0.0	0.8	-0.2
	III	-0.2	5.8	-5.7	-0.3	5.7	3.4	2.2	3.0	-0.7	0.9	1.6	-0.1
	IV	-0.4	5.2	-5.3	-0.8	4.8	2.3	2.6	3.0	-0.4	0.5	1.0	-0.8
2016	I	0.1	1.5	-1.4	-0.5	0.8	-1.0	2.9	3.3	-0.4	0.6	0.9	-0.3
	II	1.1	1.6	-0.5	-2.3	-1.9	-2.5	2.9	3.1	-0.2	1.1	1.3	-0.9
	III	2.1	2.9	-0.8	-1.6	-0.7	-1.0	3.4	3.1	0.3	0.0	-0.3	-1.6
	IV	2.0	2.9	-0.9	-1.6	-0.7	-2.1	3.6	2.7	0.9	0.3	-0.6	-2.5

(a) Nominal ULC deflated by GVA deflator.

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

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

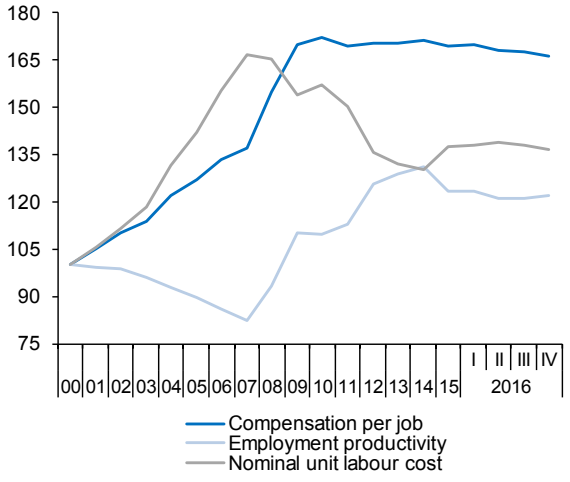
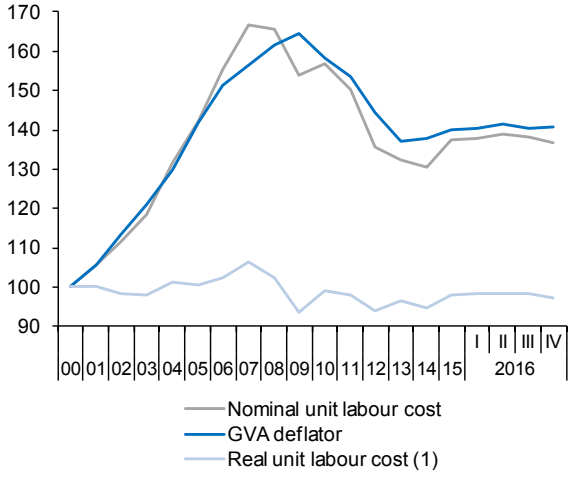


Chart 3b.2.- Real ULC, construction
Index, 2000=100



(1) Nominal ULC deflated by construction sector GVA deflator.

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

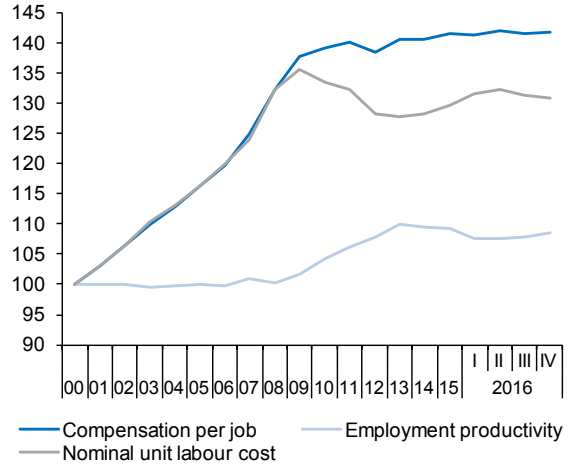
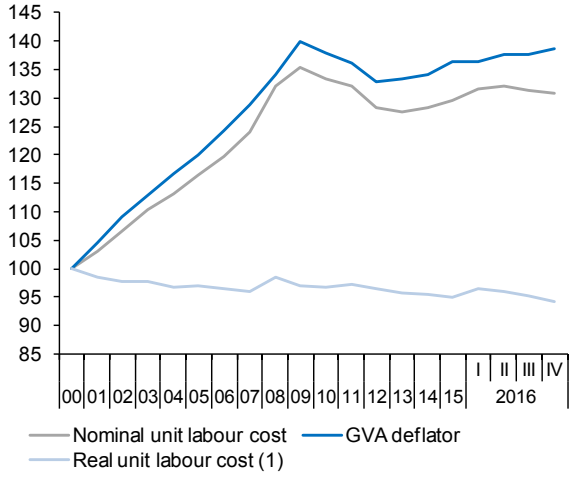


Chart 3b.4.- Real ULC, services
Index, 2000=100



(1) Nominal ULC deflated by services sector GVA deflator.

SEFO - Spanish Economic and Financial Outlook
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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**		
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		1,039.8	498.8	446.7	94.2	-7.3	1,032.4	-12.6	1,019.9	816.6	203.3	48.0	43.0	9.1
2013		1,025.6	485.3	440.4	99.9	-5.3	1,020.3	-13.1	1,007.2	800.3	206.9	47.3	42.9	9.7
2014		1,037.0	491.8	441.0	104.2	-3.3	1,033.7	-11.4	1,022.3	810.9	211.4	47.4	42.5	10.1
2015		1,075.6	510.3	453.0	112.3	-0.8	1,074.9	-11.3	1,063.6	833.5	230.0	47.4	42.1	10.4
2016		1,113.9	526.1	473.0	114.7	1.9	1,115.7	-11.5	1,104.2	854.1	250.1	47.2	42.5	10.3
2017		1,159.6	545.9	491.1	122.6	2.5	1,162.1	-12.4	1,149.7	888.2	261.5	47.1	42.4	10.6
2018		1,200.9	563.7	508.4	128.9	-0.2	1,200.7	-12.4	1,188.3	911.4	276.9	46.9	42.3	10.7
2015	I	1,044.7	496.2	443.3	105.3	-2.8	1,041.9	-11.4	1,030.5	814.9	215.6	47.5	42.4	10.1
	II	1,054.6	500.5	446.0	108.0	-0.1	1,054.4	-11.2	1,043.2	820.6	222.6	47.5	42.3	10.2
	III	1,064.9	504.9	450.2	109.8	-0.1	1,064.8	-11.1	1,053.6	827.0	226.7	47.4	42.3	10.3
	IV	1,075.6	510.3	453.0	112.3	-0.8	1,074.9	-11.3	1,063.6	833.5	230.0	47.4	42.1	10.4
2016	I	1,083.9	513.9	457.4	112.6	0.0	1,083.9	-10.9	1,073.0	838.4	234.6	47.4	42.2	10.4
	II	1,095.1	518.2	463.3	113.5	-0.5	1,094.6	-10.2	1,084.4	843.2	241.2	47.3	42.3	10.4
	III	1,104.3	522.2	467.0	115.1	0.3	1,104.6	-11.4	1,093.2	848.2	244.9	47.3	42.3	10.4
	IV	1,113.9	526.1	473.0	114.7	--	--	--	--	854.1	--	47.2	42.5	10.3
		Annual percentage changes										**Difference from one year ago**		
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		-2.9	-6.1	-0.6	4.7	-60.5	-1.8	-11.0	-1.7	-2.6	2.1	-1.6	1.0	0.7
2013		-1.4	-2.7	-1.4	6.0	-27.3	-1.2	3.9	-1.2	-2.0	1.8	-0.7	0.0	0.7
2014		1.1	1.3	0.1	4.3	-37.4	1.3	-13.1	1.5	1.3	2.2	0.1	-0.4	0.3
2015		3.7	3.8	2.7	7.7	-76.6	4.0	-0.7	4.0	2.8	8.8	0.0	-0.4	0.4
2016		3.6	3.1	4.4	2.2	-342.6	3.8	1.9	3.8	2.5	8.7	-0.2	0.4	-0.1
2017		4.1	3.8	3.8	6.9	31.9	4.2	7.6	4.1	4.0	4.6	-0.2	-0.1	0.3
2015	I	1.8	2.5	0.4	4.4	-20.2	1.8	-15.9	2.1	1.6	4.0	0.3	-0.6	0.3
	II	2.5	3.0	1.1	6.7	-97.7	3.1	-13.6	3.4	1.8	9.3	0.2	-0.6	0.4
	III	3.2	3.3	2.2	7.1	-97.2	3.8	-6.1	3.9	2.2	10.3	0.1	-0.4	0.4
	IV	3.7	3.8	2.7	7.7	-76.6	4.0	-0.7	4.0	2.8	8.8	0.0	-0.4	0.4
2016	I	3.7	3.6	3.2	6.9	-98.8	4.0	-4.4	4.1	2.9	8.8	-0.1	-0.2	0.3
	II	3.8	3.5	3.9	5.1	268.3	3.8	-9.7	4.0	2.8	8.4	-0.1	0.0	0.1
	III	3.7	3.4	3.7	4.8	-320.1	3.7	2.6	3.8	2.6	8.1	-0.1	0.0	0.1
	IV	3.6	3.1	4.4	2.2	--	--	--	--	2.5	--	-0.2	0.4	-0.1

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

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

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

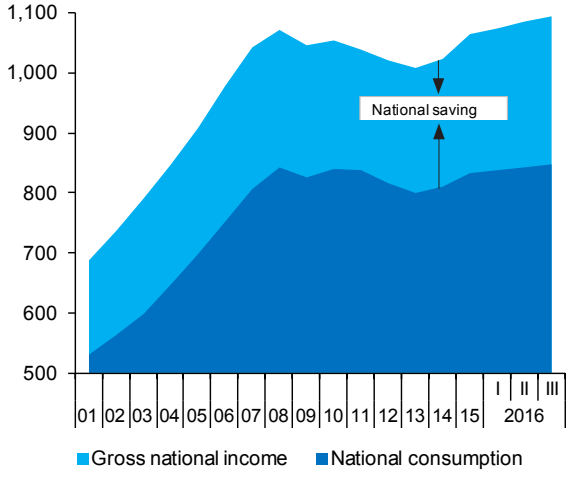

Chart 4.2.- National income, consumption and saving rate
Annual percentage change and percentage of GDP, 4-quarter moving averages

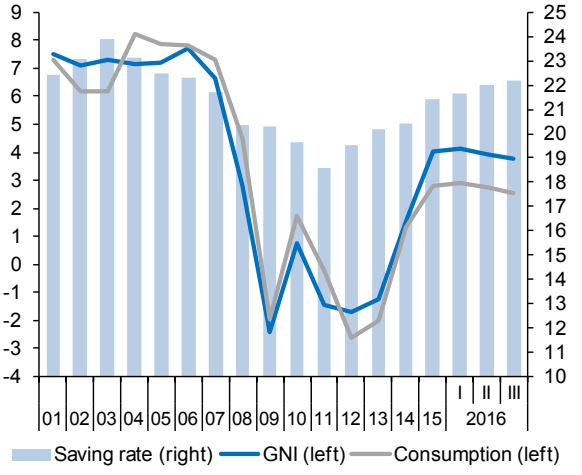

Chart 4.3.- Components of National income
Annual percentage change

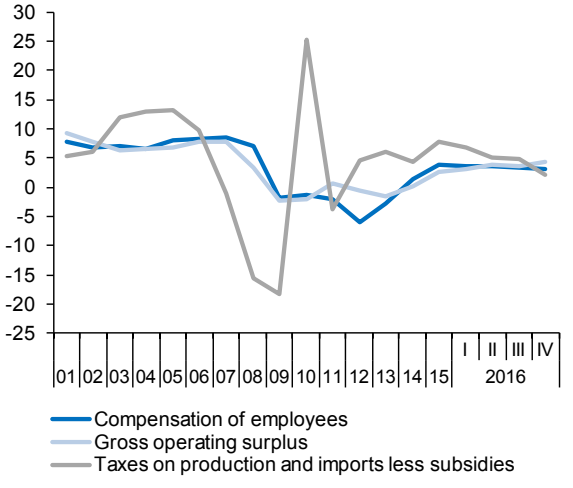

Chart 4.4.- Functional distribution of income
Percentage of GDP, 4-quarter moving averages

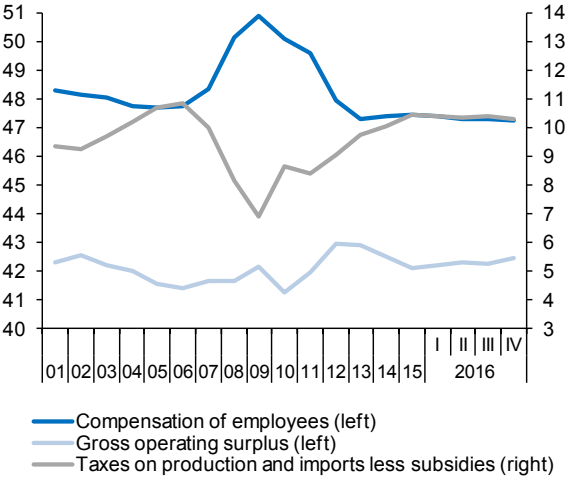

Table 5

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

Forecasts in blue

		Goods and services				Income	Current transfers	Current account	Capital transfers	Net lending/ borrowing with rest of the world	Saving-Investment-Deficit		
		Total	Goods	Tourist services	Non-tourist services						Gross national saving	Gross capital formation	Current account deficit
		1=2+3+4	2	3	4	5	6	7=1+5+6	8	9=7+8	10	11	12=7=10-11
EUR Billions, 4-quarter cumulated transactions													
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	-29.2	27.1	17.5	-7.3	-12.6	-4.6	5.4	0.8	203.3	207.9	-4.6
2013		33.4	-14.0	28.3	19.1	-5.3	-13.1	15.0	6.6	21.6	206.9	191.9	15.0
2014		25.1	-22.4	28.7	18.8	-3.3	-11.4	10.4	5.0	15.4	211.4	201.0	10.4
2015		26.3	-21.7	28.5	19.6	-0.8	-11.3	14.3	7.0	21.3	230.0	215.8	14.3
2016		32.4	-17.5	29.7	20.2	1.9	-11.5	22.8	6.3	29.1	250.1	227.3	22.8
2017		30.5	-22.6	30.8	22.4	2.5	-12.4	20.6	6.7	27.3	261.5	240.9	20.6
2018		33.7	-23.3	32.2	24.8	-0.2	-12.4	21.1	6.8	27.9	276.9	255.8	21.1
2014	IV	25.1	-22.4	28.7	18.8	-3.3	-11.4	10.4	5.0	15.4	211.4	201.0	10.4
2015	I	26.4	-21.3	28.6	19.1	-2.8	-11.4	12.1	4.9	17.0	215.6	203.5	12.1
	II	26.6	-21.5	28.5	19.6	-0.1	-11.2	15.2	5.2	20.4	222.6	207.4	15.2
	III	26.7	-21.5	28.4	19.8	-0.1	-11.1	15.5	6.1	21.5	226.7	211.2	15.5
	IV	26.3	-21.7	28.5	19.6	-0.8	-11.3	14.3	7.0	21.3	230.0	215.8	14.3
2016	I	26.1	-22.1	28.5	19.8	0.0	-10.9	15.2	6.8	22.0	234.6	219.4	15.2
	II	29.4	-19.7	29.2	19.9	-0.5	-10.2	18.7	6.4	25.2	241.2	222.5	18.7
	III	31.4	-18.1	29.7	19.8	0.3	-11.4	20.3	5.5	25.8	244.9	224.6	20.3
Percentage of GDP, 4-quarter cumulated transactions													
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	19.5	20.0	-0.4
2013		3.3	-1.4	2.8	1.9	-0.5	-1.3	1.5	0.6	2.1	20.2	18.7	1.5
2014		2.4	-2.2	2.8	1.8	-0.3	-1.1	1.0	0.5	1.5	20.4	19.4	1.0
2015		2.4	-2.0	2.7	1.8	-0.1	-1.0	1.3	0.7	2.0	21.4	20.1	1.3
2016		2.9	-1.6	2.7	1.8	0.2	-1.0	2.0	0.6	2.6	22.5	20.4	2.0
2017		2.6	-2.0	2.7	1.9	0.2	-1.1	1.8	0.6	2.4	22.6	20.8	1.8
2018		2.8	-1.9	2.7	2.1	0.0	-1.0	1.8	0.6	2.3	23.1	21.3	1.8
2014	IV	2.4	-2.2	2.8	1.8	-0.3	-1.1	1.0	0.5	1.5	20.4	19.4	1.0
2015	I	2.5	-2.0	2.7	1.8	-0.3	-1.1	1.2	0.5	1.6	20.6	19.5	1.2
	II	2.5	-2.0	2.7	1.9	0.0	-1.1	1.4	0.5	1.9	21.1	19.7	1.4
	III	2.5	-2.0	2.7	1.9	0.0	-1.0	1.5	0.6	2.0	21.3	19.8	1.5
	IV	2.4	-2.0	2.7	1.8	-0.1	-1.0	1.3	0.7	2.0	21.4	20.1	1.3
2016	I	2.4	-2.0	2.6	1.8	0.0	-1.0	1.4	0.6	2.0	21.6	20.2	1.4
	II	2.7	-1.8	2.7	1.8	0.0	-0.9	1.7	0.6	2.3	22.0	20.3	1.7
	III	2.8	-1.6	2.7	1.8	0.0	-1.0	1.8	0.5	2.3	22.2	20.3	1.8

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

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

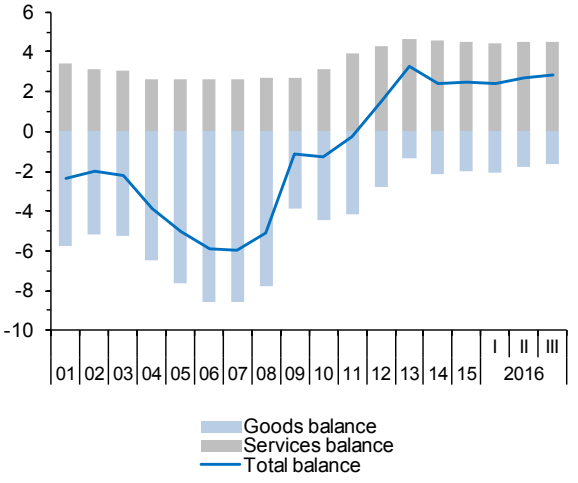

Chart 5.2.- Services balance
Percentage of GDP, 4-quarter moving averages

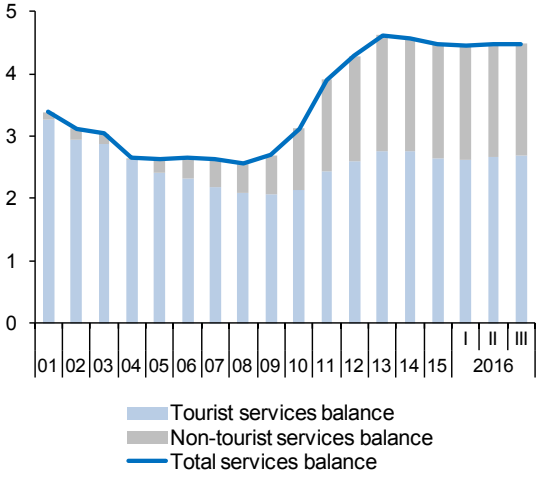

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Chart 5.3.- Net lending or borrowing
Percentage of GDP, 4-quarter moving averages

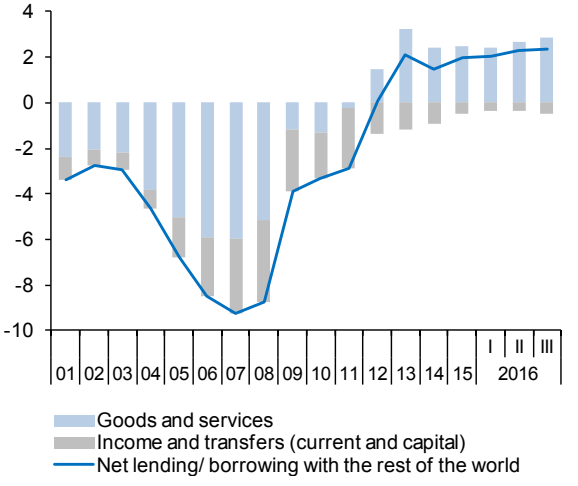

Chart 5.4.- Saving, investment and current account balance
Percentage of GDP, 4-quarter moving averages

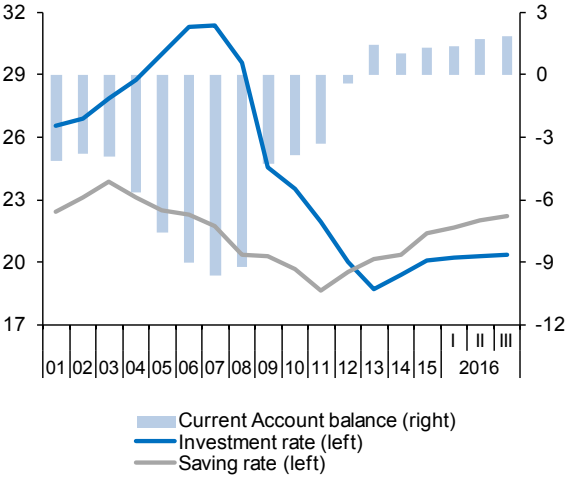

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Table 6

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

Forecasts in blue

	Gross disposable income (GDI)						Final consumption expenditure	Gross saving (a)	Saving rate (gross saving as a percentage of GDI)	Net capital transfers	Gross capital formation	Net lending (+) or borrowing (-)	Net lending or borrowing as a percentage of GDP
	Total	Compensation of employees (received)	Mixed income and net property income	Social benefits and other current transfers (received)	Social contributions and other current transfers (paid)	Personal income taxes							
	1=2+3+4-5-6	2	3	4	5	6	7	8=1-7	9=8/1	10	11	12=8+10-11	13
EUR Billions, 4-quarter cumulated operations													
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	52.2	27.6	2.6
2012	670.5	500.1	208.6	244.7	199.3	83.6	611.3	57.2	8.5	4.8	38.8	23.2	2.2
2013	664.4	487.3	209.6	246.1	195.1	83.6	598.5	63.9	9.6	2.8	25.7	41.1	4.0
2014	670.0	493.8	213.2	241.6	194.4	84.2	608.9	60.0	9.0	1.3	27.7	33.6	3.2
2015	682.4	512.4	211.2	240.2	197.8	83.6	625.0	55.8	8.2	1.8	30.5	27.2	2.5
2016	701.5	528.2	217.1	242.7	202.3	84.2	643.8	56.1	8.0	1.6	32.8	24.9	2.2
2017	727.8	548.1	226.9	249.1	209.0	87.3	674.1	52.1	7.2	1.5	35.8	17.7	1.5
2018	752.4	565.9	237.5	255.8	215.2	91.7	693.9	56.9	7.6	1.4	38.9	19.3	1.6
2014 IV	670.0	493.8	213.2	241.6	194.4	84.2	608.9	60.0	9.0	1.3	27.7	33.6	3.2
2015 I	675.0	498.2	213.7	241.6	194.5	83.9	611.6	61.9	9.2	1.1	27.8	35.1	3.4
II	680.4	502.6	216.8	241.1	195.7	84.3	615.4	63.5	9.3	1.4	29.2	35.7	3.4
III	683.7	507.0	217.2	240.7	196.8	84.3	620.8	61.4	9.0	1.8	29.4	33.8	3.2
IV	682.4	512.4	211.2	240.2	197.8	83.6	625.0	55.8	8.2	1.8	30.5	27.2	2.5
2016 I	687.7	516.0	213.1	240.1	198.4	83.2	629.4	56.8	8.3	1.4	30.6	27.7	2.6
II	692.9	520.3	214.7	240.9	200.0	83.0	632.9	58.5	8.4	0.7	30.1	29.1	2.7
III	695.4	524.4	215.4	242.3	202.0	84.8	637.0	56.9	8.2	0.2	31.4	25.6	2.3
Annual percentage changes, 4-quarter cumulated operations									**Difference from one year ago**	**Annual percentage changes, 4-quarter cumulated operations**			**Difference from one year ago**
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	-17.1	--	1.3
2012	-3.4	-6.0	-1.6	0.7	-5.2	1.5	-1.2	-23.4	-2.2	-6.3	-25.6	--	-0.3
2013	-0.9	-2.6	0.5	0.6	-2.1	-0.1	-2.1	11.7	1.1	-41.4	-33.9	--	1.8
2014	0.9	1.3	1.7	-1.9	-0.4	0.7	1.7	-6.1	-0.7	-55.3	7.7	--	-0.8
2015	1.9	3.8	-0.9	-0.6	1.7	-0.6	2.6	-7.0	-0.8	42.9	10.1	--	-0.7
2016	2.8	3.1	2.8	1.0	2.3	0.6	3.0	0.5	-0.2	-11.0	7.8	--	-0.3
2017	3.7	3.8	4.5	2.6	3.3	3.7	4.7	-7.2	-0.8	-8.0	9.1	--	-0.7
2018	3.4	3.3	4.7	2.7	2.9	5.1	2.9	9.2	0.4	-5.0	8.7	--	0.1
2014 IV	0.9	1.3	1.7	-1.9	-0.4	0.7	1.7	-6.1	-0.7	-55.3	7.7	--	-0.8
2015 I	2.3	2.5	2.7	-0.9	-0.2	0.1	2.0	6.2	0.3	-55.9	2.9	--	0.1
II	3.2	3.0	5.1	-0.9	0.7	0.9	2.0	16.2	1.1	-20.6	8.4	--	0.5
III	3.6	3.3	5.3	-0.2	1.5	0.0	2.4	18.0	1.1	31.2	11.1	--	0.6
IV	1.9	3.8	-0.9	-0.6	1.7	-0.6	2.6	-7.0	-0.8	42.9	10.1	--	-0.7
2016 I	1.9	3.6	-0.3	-0.6	2.0	-0.9	2.9	-8.2	-0.9	34.7	9.9	--	-0.8
II	1.8	3.5	-0.9	-0.1	2.2	-1.5	2.8	-8.0	-0.9	-45.3	3.1	--	-0.7
III	1.7	3.4	-0.8	0.7	2.6	0.5	2.6	-7.3	-0.8	-90.7	7.1	--	-0.9

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

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

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

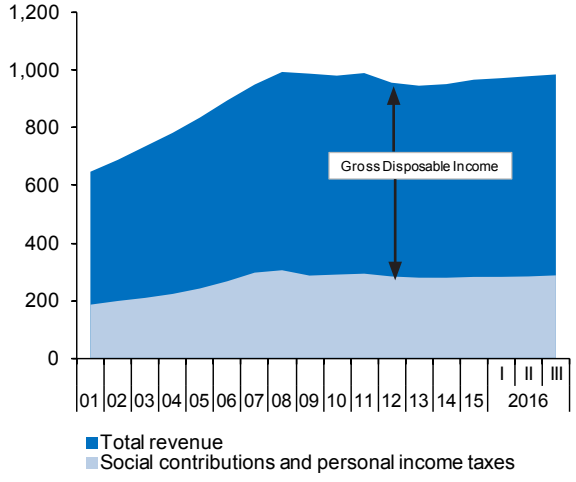
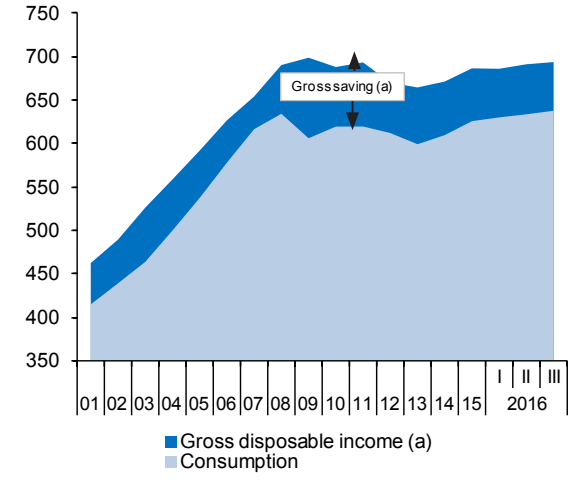


Chart 6.2.- Households: Gross saving
EUR Billions, 4-quarter cummulated



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

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

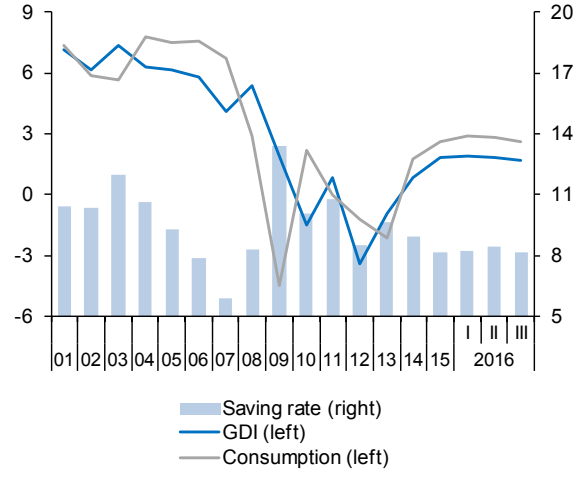
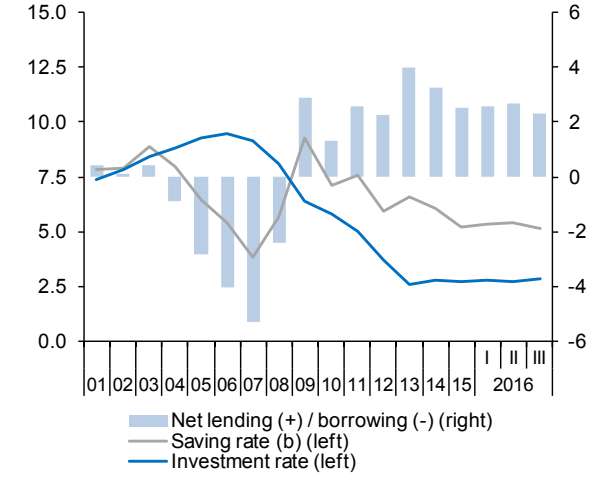


Chart 6.4.- Households: Saving, investment and deficit
Percentage of GDP, 4-quarter moving averages



(b) Including net capital transfers.

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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														
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	131.7	22.0	2.1	40.6	23.0
2012		555.6	320.9	234.7	-59.9	-10.2	19.8	144.8	6.6	136.5	14.9	1.4	42.2	24.6
2013		543.0	308.0	235.0	-46.9	-9.4	18.0	160.8	5.0	136.3	29.5	2.9	43.3	25.1
2014		553.6	317.2	236.4	-50.5	-8.0	17.7	160.2	6.9	147.1	20.1	1.9	42.7	26.6
2015		574.3	329.4	244.9	-40.7	-6.0	20.4	177.9	6.0	153.3	30.6	2.8	42.6	26.7
2016		598.6	341.3	257.3	-39.7	-5.0	18.9	193.7	6.0	164.9	34.9	3.1	43.0	27.5
2017		622.6	357.3	265.3	-35.3	-6.5	22.0	201.5	6.0	174.6	33.0	2.8	42.6	28.0
2014	IV	553.6	317.2	236.4	-50.5	-8.0	17.7	160.2	6.9	147.1	20.1	1.9	42.7	26.6
2015	I	557.7	320.0	237.7	-48.1	-7.7	17.0	165.0	6.8	148.9	22.8	2.2	42.6	26.7
	II	562.5	322.3	240.2	-47.7	-7.2	18.4	167.0	6.6	153.6	20.0	1.9	42.7	27.3
	III	568.8	325.6	243.2	-46.9	-6.5	19.5	170.3	6.6	153.1	23.8	2.2	42.8	26.9
	IV	574.3	329.4	244.9	-40.7	-6.0	20.4	177.9	6.0	153.3	30.6	2.8	42.6	26.7
2016	I	579.9	332.7	247.1	-40.7	-5.6	20.3	180.5	6.4	157.1	29.8	2.7	42.6	27.1
	II	586.9	335.5	251.4	-40.6	-5.4	18.0	187.5	6.6	159.0	35.1	3.2	42.8	27.1
	III	591.9	338.1	253.8	-40.2	-5.2	18.0	190.4	6.5	163.2	33.7	3.1	42.9	27.6
Annual percentage changes, 4-quarter cumulated operations												**Difference from one year ago**		
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	-12.9	-0.2	--	-1.6	0.1	0.3
2012		-3.0	-5.7	0.8	-5.5	16.5	25.3	0.0	-26.1	3.6	--	-0.6	1.6	1.6
2013		-2.3	-4.0	0.1	-21.8	-8.1	-9.0	11.0	-24.1	-0.1	--	1.4	1.0	0.5
2014		2.0	3.0	0.6	7.7	-14.7	-1.9	-0.3	37.4	7.9	--	-0.9	-0.6	1.5
2015		3.8	3.8	3.6	-19.5	-24.8	15.5	11.0	-12.1	4.2	--	0.9	-0.1	0.1
2016		4.2	3.6	5.0	-2.2	-17.3	-7.5	8.9	0.0	7.5	--	0.3	0.3	0.9
2017		4.0	4.7	3.1	-11.2	30.1	16.9	4.0	0.0	5.9	--	-0.3	-0.4	0.5
2014	IV	2.0	3.0	0.6	7.7	-14.7	-1.9	-0.3	37.4	7.9	--	-0.9	-0.6	1.5
2015	I	2.4	3.9	0.6	8.0	-12.7	-5.9	0.0	30.0	7.9	--	-1.0	-0.8	1.4
	II	2.8	3.7	1.6	-0.4	-13.9	-2.4	3.4	14.2	11.3	--	-0.9	-0.5	2.1
	III	3.5	3.8	3.1	1.8	-21.2	6.2	4.3	12.8	8.6	--	-0.5	-0.2	1.3
	IV	3.8	3.8	3.6	-19.5	-24.8	15.5	11.0	-12.1	4.2	--	0.9	-0.1	0.1
2016	I	4.0	4.0	4.0	-15.5	-27.0	19.8	9.4	-5.9	5.5	--	0.6	0.0	0.4
	II	4.3	4.1	4.7	-14.9	-24.9	-2.1	12.3	-0.7	3.5	--	1.3	0.1	-0.2
	III	4.1	3.8	4.4	-14.2	-19.5	-7.5	11.8	-2.1	6.6	--	0.8	0.1	0.6

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

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

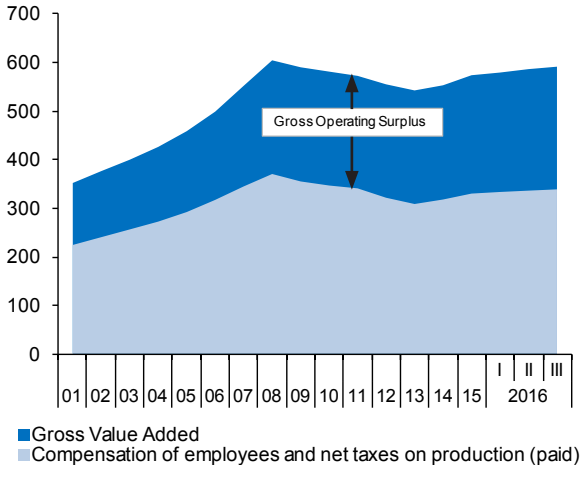


Chart 7.2.- Non-financial corporations: GVA, GOS and saving
Annual percentage change, 4-quarter moving averages

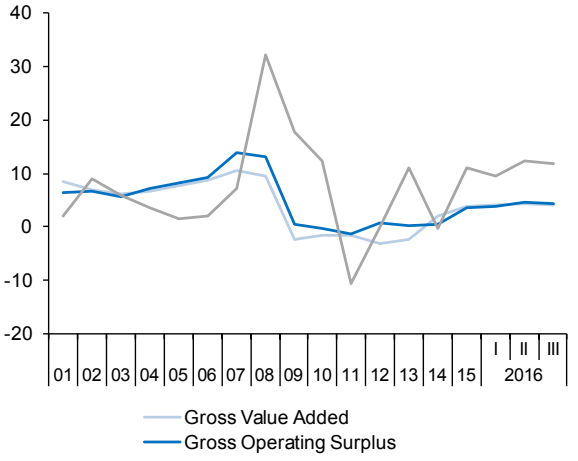
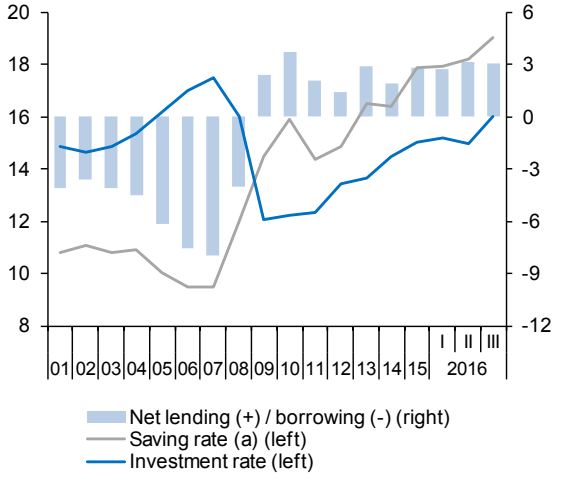


Chart 7.3.- Non-financial corporations: Saving, investment and deficit
Percentage of GDP, 4-quarter moving averages



(a) Including net capital transfers.

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

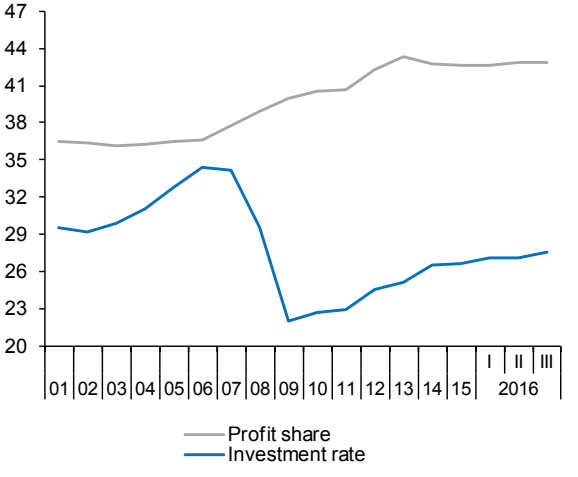


Table 8

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

Forecasts in blue

	Gross value added	Taxes on production and imports receivable	Taxes on income and wealth receivable	Social contributions receivable	Compensation of employees	Interests and other capital incomes payable (net)	Social benefits payable	Subsidies and net current transfers payable	Gross disposable income	Final consumption expenditure	Gross saving	Net capital expenditure	Net lending(+)/ net borrowing(-)	Net lending(+)/ net borrowing (-) excluding financial entities bail-out
	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														
2010	152.0	110.1	100.6	138.6	124.9	10.8	162.7	21.4	181.5	221.7	-40.2	61.3	-101.4	-102.2
2011	150.3	106.2	102.0	137.8	122.6	16.2	164.2	22.6	170.7	219.7	-49.0	53.9	-102.9	-99.4
2012	142.2	108.2	106.3	131.9	113.9	20.3	168.5	18.7	167.1	205.2	-38.1	70.8	-108.9	-70.6
2013	142.9	114.6	105.2	128.2	114.7	24.1	170.8	20.9	160.5	201.8	-41.3	30.5	-71.9	-68.6
2014	143.4	119.2	105.6	130.1	115.2	25.7	171.1	20.9	165.4	202.0	-36.6	25.6	-62.2	-60.8
2015	147.2	127.1	109.1	132.3	119.1	24.5	170.4	21.7	179.9	208.5	-28.6	26.6	-55.2	-54.6
2016	149.1	129.9	107.6	135.9	122.1	23.4	172.2	20.8	184.1	210.3	-26.2	26.8	-53.0	-51.3
2017	151.8	138.3	115.5	140.1	124.3	22.8	176.5	21.2	200.9	214.1	-13.1	25.8	-38.9	-38.9
2018	154.4	145.1	121.5	144.0	126.3	21.2	181.1	21.7	214.6	217.5	-2.8	27.1	-29.9	-29.9
2014 IV	143.4	119.2	105.6	130.1	115.2	25.7	171.1	20.9	165.4	202.0	-36.6	25.6	-62.2	-60.8
2015 I	144.4	120.9	106.3	130.2	116.2	26.0	170.9	22.0	166.7	203.3	-36.6	25.9	-62.5	-61.0
II	145.2	123.4	107.9	131.0	117.1	25.7	171.0	21.3	172.5	205.1	-32.7	24.9	-57.6	-56.1
III	145.6	125.6	109.0	131.4	117.5	25.2	170.8	21.4	176.6	206.2	-29.5	26.8	-56.4	-55.6
IV	147.2	127.1	109.1	132.3	119.1	24.5	170.4	21.7	179.9	208.5	-28.6	26.6	-55.2	-54.6
2016 I	147.2	127.0	106.9	132.9	119.2	23.9	171.0	20.6	179.2	208.9	-29.7	26.1	-55.8	-55.5
II	148.3	128.2	104.5	134.2	120.3	23.4	172.0	19.6	179.7	209.9	-30.2	27.3	-57.5	-55.6
III	149.0	129.3	106.4	135.3	121.0	23.1	172.7	20.5	182.7	211.0	-28.3	25.2	-53.5	-51.2
Percentage of GDP, 4-quarter cumulated operations														
2010	14.1	10.2	9.3	12.8	11.6	1.0	15.1	2.0	16.8	20.5	-3.7	5.7	-9.4	-9.5
2011	14.0	9.9	9.5	12.9	11.5	1.5	15.3	2.1	15.9	20.5	-4.6	5.0	-9.6	-9.3
2012	13.7	10.4	10.2	12.7	11.0	2.0	16.2	1.8	16.1	19.7	-3.7	6.8	-10.5	-6.8
2013	13.9	11.2	10.3	12.5	11.2	2.3	16.6	2.0	15.6	19.7	-4.0	3.0	-7.0	-6.7
2014	13.8	11.5	10.2	12.5	11.1	2.5	16.5	2.0	15.9	19.5	-3.5	2.5	-6.0	-5.9
2015	13.7	11.8	10.1	12.3	11.1	2.3	15.8	2.0	16.7	19.4	-2.7	2.5	-5.1	-5.1
2016	13.4	11.7	9.7	12.2	11.0	2.1	15.5	1.9	16.5	18.9	-2.4	2.4	-4.8	-4.6
2017	13.1	11.9	10.0	12.1	10.7	2.0	15.2	1.8	17.3	18.5	-1.1	2.2	-3.4	-3.4
2018	12.9	12.1	10.1	12.0	10.5	1.8	15.1	1.8	17.9	18.1	-0.2	2.3	-2.5	-2.5
2014 IV	13.8	11.5	10.2	12.5	11.1	2.5	16.5	2.0	15.9	19.5	-3.5	2.5	-6.0	-5.9
2015 I	13.8	11.6	10.2	12.5	11.1	2.5	16.4	2.1	16.0	19.5	-3.5	2.5	-6.0	-5.8
II	13.8	11.7	10.2	12.4	11.1	2.4	16.2	2.0	16.4	19.5	-3.1	2.4	-5.5	-5.3
III	13.7	11.8	10.2	12.3	11.0	2.4	16.0	2.0	16.6	19.4	-2.8	2.5	-5.3	-5.2
IV	13.7	11.8	10.1	12.3	11.1	2.3	15.8	2.0	16.7	19.4	-2.7	2.5	-5.1	-5.1
2016 I	13.6	11.7	9.9	12.3	11.0	2.2	15.8	1.9	16.5	19.3	-2.7	2.4	-5.1	-5.1
II	13.5	11.7	9.5	12.2	11.0	2.1	15.7	1.8	16.4	19.2	-2.8	2.5	-5.3	-5.1
III	13.5	11.7	9.6	12.2	11.0	2.1	15.6	1.9	16.5	19.1	-2.6	2.3	-4.8	-4.6

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

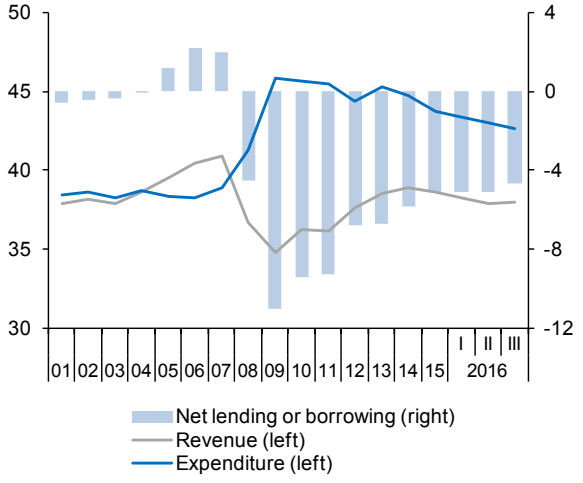
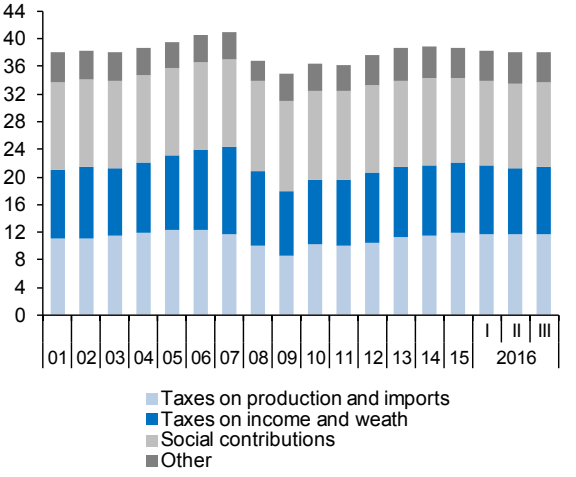


Chart 8.2.- Public sector: Main revenues
Percentage of GDP, 4-quarter moving averages



(a) Excluding financial entities bail-out expenditures.

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

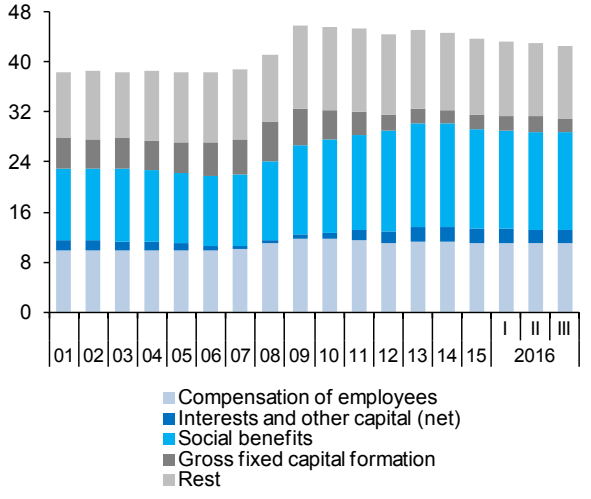
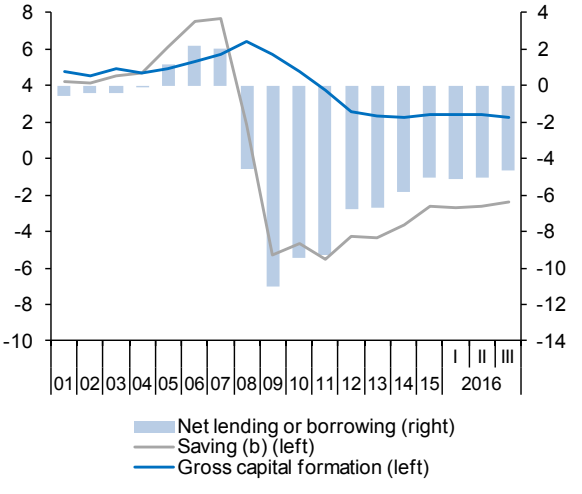


Chart 8.4.- Public sector: Saving, investment and deficit (a)
Percentage of GDP, 4-quarter moving averages



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

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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**				
2010		-52.5	-40.2	-7.1	-2.4	-102.2	551.6	123.4	35.5	17.2	649.3
2011		-35.0	-54.8	-8.5	-1.1	-99.4	624.2	145.1	36.8	17.2	743.5
2012		-44.3	-19.4	3.3	-10.2	-70.6	761.9	188.4	44.0	17.2	890.7
2013		-46.5	-16.2	5.7	-11.5	-68.6	850.2	209.8	42.1	17.2	978.3
2014		-37.0	-18.5	5.5	-10.8	-60.8	902.5	237.2	38.3	17.2	1,040.9
2015		-27.9	-18.7	5.1	-13.2	-54.6	940.4	262.5	35.1	17.2	1,073.2
2016		-30.4	-6.7	3.3	-17.5	-51.3	--	--	--	--	1,105.6
2017		-19.4	-7.0	2.9	-15.4	-38.9	--	--	--	--	1,143.5
2018		-10.7	-3.6	2.4	-18.0	-29.9	--	--	--	--	1,172.4
2014	IV	-37.0	-18.5	5.5	-10.8	-60.8	902.5	237.2	38.3	17.2	1,040.9
2015	I	-38.1	-17.6	6.0	-11.4	-61.0	912.8	240.7	38.3	17.2	1,052.1
	II	-31.8	-17.1	6.4	-13.6	-56.1	922.7	250.3	37.7	17.2	1,057.6
	III	-28.7	-18.5	5.0	-13.5	-55.6	938.8	253.6	36.9	17.2	1,067.6
	IV	-27.9	-18.7	5.1	-13.2	-54.6	940.4	262.5	35.1	17.2	1,073.2
2016	I	-28.1	-18.0	4.7	-14.1	-55.5	962.1	265.3	35.1	17.2	1,096.2
	II	-28.1	-16.9	5.0	-15.5	-55.6	964.7	272.8	35.1	17.2	1,106.3
	III	-32.5	-9.4	7.3	-16.7	-51.2	968.8	272.0	34.7	17.2	1,107.7
		Percentage of GDP, 4-quarter cumulated operations					**Percentage of GDP**				
2010		-4.9	-3.7	-0.7	-0.2	-9.5	51.0	11.4	3.3	1.6	60.1
2011		-3.3	-5.1	-0.8	-0.1	-9.3	58.3	13.6	3.4	1.6	69.5
2012		-4.3	-1.9	0.3	-1.0	-6.8	73.3	18.1	4.2	1.7	85.7
2013		-4.5	-1.6	0.6	-1.1	-6.7	82.9	20.5	4.1	1.7	95.4
2014		-3.6	-1.8	0.5	-1.0	-5.9	87.0	22.9	3.7	1.7	100.4
2015		-2.6	-1.7	0.5	-1.2	-5.1	87.4	24.4	3.3	1.6	99.8
2016		-2.7	-0.6	0.3	-1.6	-4.6	--	--	--	--	99.3
2017		-1.7	-0.6	0.3	-1.3	-3.4	--	--	--	--	98.6
2018		-0.9	-0.3	0.2	-1.5	-2.5	--	--	--	--	97.6
2014	IV	-3.6	-1.8	0.5	-1.0	-5.9	87.0	22.9	3.7	1.7	100.4
2015	I	-3.6	-1.7	0.6	-1.1	-5.8	87.4	23.0	3.7	1.6	100.7
	II	-3.0	-1.6	0.6	-1.3	-5.3	87.5	23.7	3.6	1.6	100.3
	III	-2.7	-1.7	0.5	-1.3	-5.2	88.2	23.8	3.5	1.6	100.3
	IV	-2.6	-1.7	0.5	-1.2	-5.1	87.4	24.4	3.3	1.6	99.8
2016	I	-2.6	-1.7	0.4	-1.3	-5.1	88.8	24.5	3.2	1.6	101.1
	II	-2.6	-1.5	0.5	-1.4	-5.1	88.1	24.9	3.2	1.6	101.0
	III	-2.9	-0.8	0.7	-1.5	-4.6	87.7	24.6	3.1	1.6	100.3

(a) Excluding financial entities bail-out expenditures.

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

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

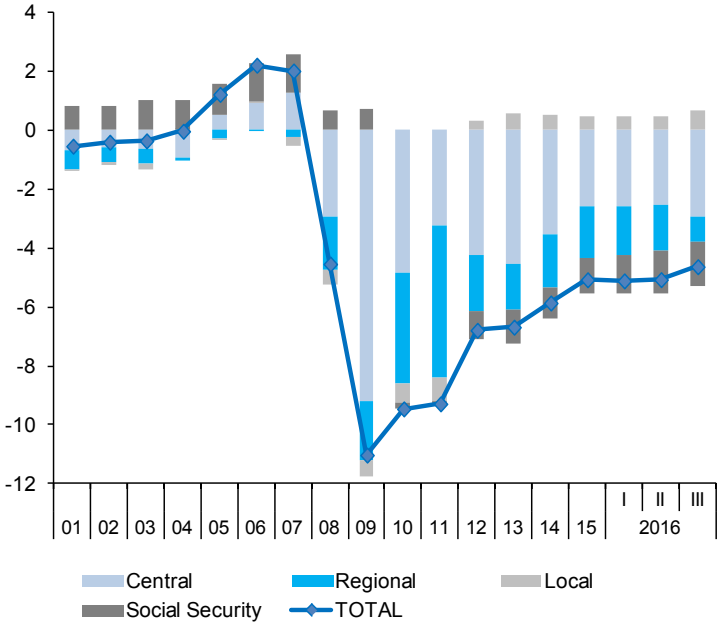


Chart 9.2.- Government debt
Percent of GDP

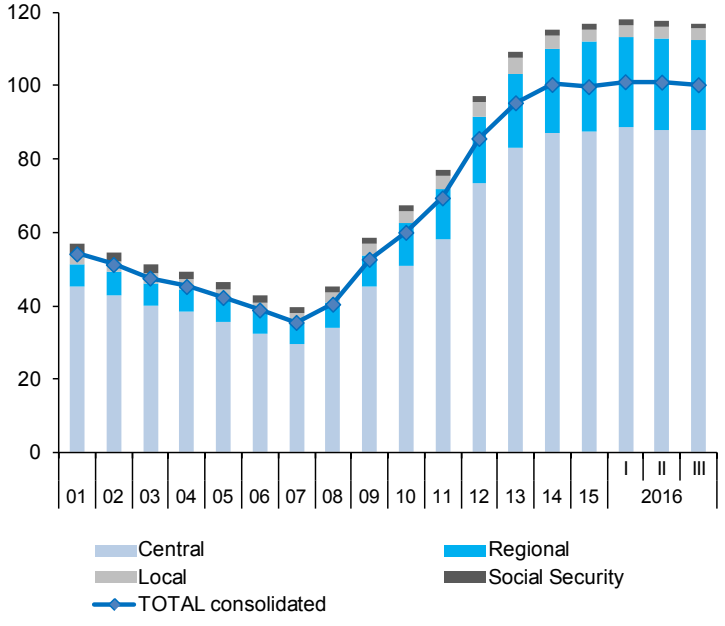


Table 10

General activity and industrial sector indicators (a)

		General activity indicators				Industrial sector indicators					
		Economic Sentiment Index	Composite PMI index	Social Security affiliates (f)	Electricity consumption (temperature adjusted)	Industrial production index	Social Security affiliates in industry	Manufacturing PMI index	Industrial confidence index	Manufacturig turnover index deflated	Industrial orders
		Index	**Index**	**Thousands**	**1000 GWH (smoothed)**	**2010=100**	**Thousands**	**Index**	**Balance of responses**	**2010=100 (smoothed)**	**Balance of responses**
2010		92.7	50.0	17,244.0	263.8	100.0	2,294.6	50.6	-13.8	100.0	-36.7
2011		92.7	46.6	16,970.3	261.3	98.4	2,231.9	47.3	-12.5	101.1	-30.8
2012		88.0	43.1	16,335.3	255.7	91.9	2,113.9	43.8	-17.5	97.0	-37.1
2013		92.1	48.3	15,855.2	250.2	90.5	2,021.6	48.5	-13.9	93.8	-30.7
2014		102.2	55.1	16,111.1	249.7	91.6	2,022.8	53.2	-7.1	95.1	-16.3
2015		108.7	56.7	16,641.8	254.0	94.7	2,067.3	53.6	-0.3	96.5	-5.4
2016		106.3	54.9	17,157.5	253.9	96.4	2,124.7	53.1	-2.3	97.7	-5.4
2017 (b)		108.1	55.9	17,277.2	47.9	93.9	2,144.1	55.2	0.9	--	-3.5
2015	II	109.1	57.7	16,605.1	63.3	94.8	2,061.7	54.9	0.9	96.4	0.2
	III	109.0	57.2	16,700.9	63.5	95.2	2,074.2	52.9	0.7	96.6	-4.0
	IV	109.5	55.4	16,821.1	63.4	95.7	2,088.1	52.5	0.3	96.4	-5.3
2016	I	107.1	55.0	16,945.6	63.4	95.7	2,103.4	54.3	-1.9	96.4	-7.6
	II	105.9	55.3	17,073.1	63.6	96.2	2,117.1	52.5	-2.8	96.8	-2.9
	III	105.0	54.2	17,227.2	63.8	96.9	2,132.0	51.4	-3.8	98.1	-6.7
	IV	107.2	55.0	17,381.7	64.0	97.4	2,147.1	54.4	-0.6	100.0	-4.2
2017	I(b)	108.1	55.9	17,507.5	42.7	97.9	2,161.8	55.2	0.9	--	-3.5
2016	Dec	106.0	55.5	17,421.3	21.3	97.6	2,152.3	55.3	-2.6	100.7	-2.8
2017	Jan	107.4	54.7	17,482.4	21.4	97.9	2,159.0	55.6	0.1	--	-4.4
	Feb	108.7	57.0	17,532.6	21.4	--	2,164.7	54.8	1.7	--	-2.6
		Percentage changes (c)									
2010		--	--	-2.3	2.7	0.8	-4.8	--	--	3.6	--
2011		--	--	-1.6	-0.9	-1.6	-2.7	--	--	1.2	--
2012		--	--	-3.7	-2.2	-6.7	-5.3	--	--	-4.1	--
2013		--	--	-2.9	-2.2	-1.6	-4.4	--	--	-3.3	--
2014		--	--	1.6	-0.2	1.3	0.1	--	--	1.4	--
2015		--	--	3.3	1.7	3.4	2.2	--	--	1.5	--
2016		--	--	3.1	-0.1	1.8	2.8	--	--	1.2	--
2017 (d)		--	--	3.5	3.1	2.5	2.9	--	--	--	--
2015	II	--	--	4.3	0.1	6.8	3.2	--	--	2.8	--
	III	--	--	2.3	2.5	1.7	2.5	--	--	0.6	--
	IV	--	--	2.9	2.5	2.3	2.7	--	--	-0.6	--
2016	I	--	--	3.0	-1.0	0.1	3.0	--	--	-0.2	--
	II	--	--	3.0	0.8	1.9	2.6	--	--	1.9	--
	III	--	--	3.7	0.2	3.1	2.8	--	--	5.1	--
	IV	--	--	3.6	-0.2	2.2	2.9	--	--	8.0	--
2017	I(e)	--	--	2.9	3.1	2.1	2.8	--	--	--	--
2016	Dec	--	--	0.2	0.1	-0.5	0.2	--	--	0.7	--
2017	Jan	--	--	0.4	0.1	0.3	0.3	--	--	--	--
	Feb	--	--	0.3	0.1	--	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

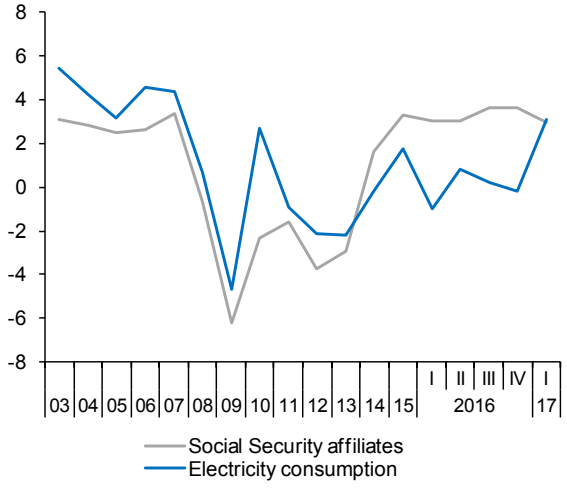


Chart 10.2.- General activity indicators (II)
Index

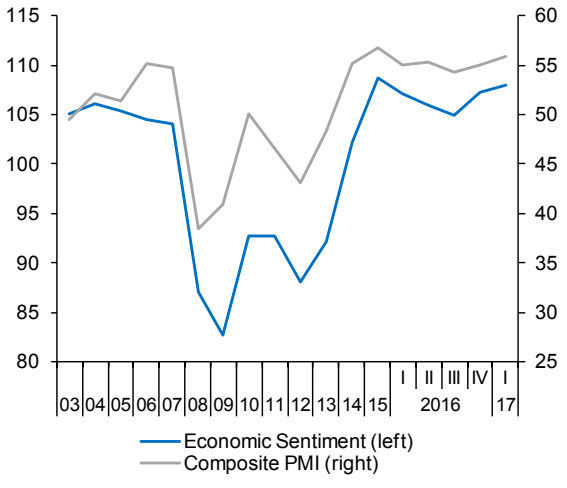


Chart 10.3.- Industrial sector indicators (I)
Annualized percent change from previous period

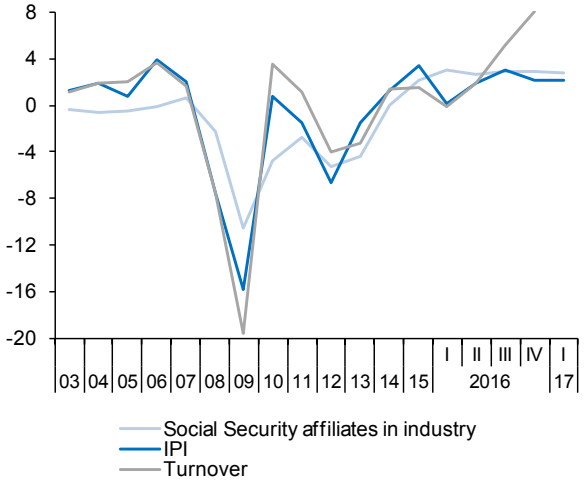


Chart 10.4.- Industrial sector indicators (II)
Index

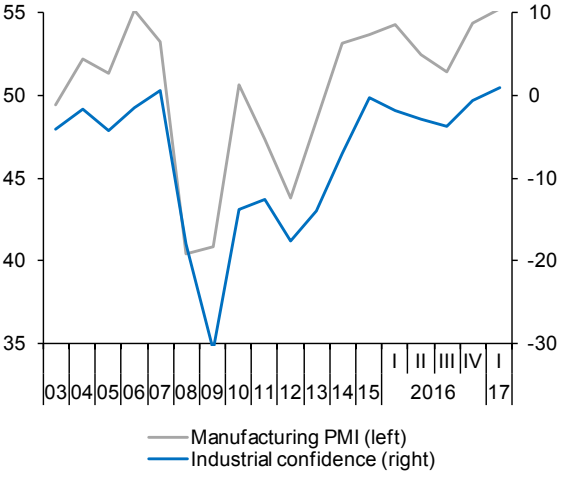


Table 11

Construction and services sector indicators (a)

	Construction indicators						Service sector indicators					
	Social Security affiliates in construction	Consumption of cement	Industrial production index construction materials	Construction confidence index	Official tenders (f)	Housing permits (f)	Social Security affiliates in services (g)	Turnover index (nominal)	Services PMI index	Hotel overnight stays	Passenger air transport	Services confidence index
	Thousands	**Million Tons**	**2010=100 (smoothed)**	**Balance of responses**	**EUR Billions (smoothed)**	**Million m²**	**Thousands**	**2010=100 (smoothed)**	**Index**	**Million (smoothed)**	**Million (smoothed)**	**Balance of responses**
2010	1,559	24.5	100.0	-29.7	26.2	16.3	12,186	100.0	49.3	267.2	191.7	-22.4
2011	1,369	20.4	91.6	-55.4	13.7	14.1	12,176	98.9	46.5	286.8	203.3	-20.8
2012	1,136	13.6	66.9	-54.9	7.4	8.5	11,907	92.8	43.1	280.7	193.2	-21.5
2013	997	10.7	63.0	-55.6	9.2	6.8	11,728	91.0	48.3	286.0	186.5	-15.3
2014	980	10.8	62.1	-41.4	13.1	6.9	11,995	93.3	55.2	295.3	194.9	9.9
2015	1,027	11.5	66.9	-25.3	9.4	9.9	12,432	97.8	57.3	308.2	206.6	19.4
2016	1,054	11.1	69.2	-39.6	9.3	12.7	12,852	102.0	55.0	330.1	229.4	17.8
2017 (b)	1,066	1.8	64.4	-45.3	0.6	--	12,911	--	56.0	15.0	28.1	19.7
2015 II	1,027	2.9	66.2	-27.7	2.5	2.5	12,395	97.2	58.3	76.3	50.9	20.1
III	1,029	2.8	68.0	-28.5	2.2	2.5	12,477	98.2	58.1	77.7	52.1	19.7
IV	1,036	2.9	68.8	-21.7	2.0	2.7	12,571	99.0	55.9	79.4	53.5	20.2
2016 I	1,041	2.8	68.7	-31.7	2.2	3.4	12,683	99.9	54.6	81.0	55.0	18.8
II	1,048	2.7	68.6	-40.4	2.4	3.2	12,786	101.1	55.5	82.2	56.4	17.5
III	1,057	2.7	69.5	-44.3	2.4	2.9	12,909	102.6	54.9	82.9	57.7	16.0
IV	1,071	2.9	71.5	-42.0	2.3	3.2	13,024	104.3	54.9	83.7	59.1	18.7
2017 I (b)	1,090	2.0	73.1	-45.3	0.7	--	13,115	--	56.0	28.1	40.2	19.7
2016 Dec	1,075	1.0	72.3	-43.1	0.7	1.0	13,060	104.9	55.0	28.0	19.9	20.0
2017 Jan	1,087	1.0	73.1	-56.7	0.7	--	13,096	--	54.2	28.1	20.0	18.8
Feb	1,094	1.0	--	-33.8	--	--	13,134	--	57.7	--	20.2	20.5
Percentage changes (c)												
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	-26.9	--	-45.5	-39.9	-2.2	-6.1	--	-2.1	-5.0	--
2013	-12.2	-20.9	-5.8	--	23.2	-20.3	-1.5	-2.0	--	1.9	-3.5	--
2014	-1.7	0.8	-1.4	--	42.6	2.2	2.3	2.6	--	3.2	4.6	--
2015	4.7	6.1	7.7	--	-28.2	42.6	3.6	4.8	--	4.4	6.0	--
2016	2.6	-3.4	3.4	--	-0.8	29.0	3.4	4.4	--	7.1	11.0	--
2017 (d)	4.8	9.9	3.9	--	18.0	--	3.6	--	--	3.5	7.5	--
2015 II	5.0	13.1	16.2	--	-25.8	37.3	3.8	5.3	--	5.6	7.8	--
III	0.8	-6.4	11.6	--	-33.1	31.9	2.7	4.3	--	7.9	9.9	--
IV	2.9	12.4	4.6	--	-32.0	85.9	3.0	3.3	--	9.1	11.5	--
2016 I	1.7	-19.4	-0.5	--	-21.9	60.4	3.6	3.6	--	8.2	11.8	--
II	2.7	-7.6	-0.5	--	-6.9	28.4	3.3	5.0	--	5.7	10.3	--
III	3.6	3.3	5.2	--	9.8	13.7	3.9	6.2	--	3.6	9.6	--
IV	5.3	18.7	12.0	--	11.7	19.6	3.6	6.9	--	3.9	10.2	--
2017 I (e)	7.5	29.8	9.5	--	3.8	--	2.8	--	--	2.9	8.3	--
2016 Dec	0.2	1.5	1.1	--	26.0	1.0	0.2	0.6	--	0.4	0.8	--
2017 Jan	1.1	4.6	1.1	--	18.0	--	0.3	--	--	0.4	0.8	--
Feb	0.7	-0.6	--	--	--	--	0.3	--	--	--	0.8	--

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

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

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

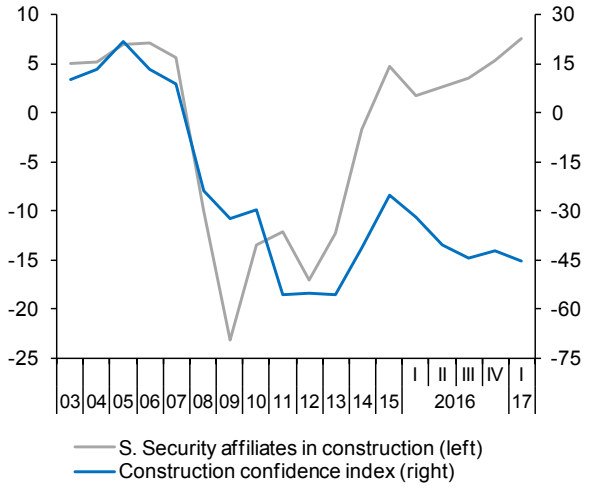


Chart 11.2.- Construction indicators (II)
Annualized percentage changes from previous period

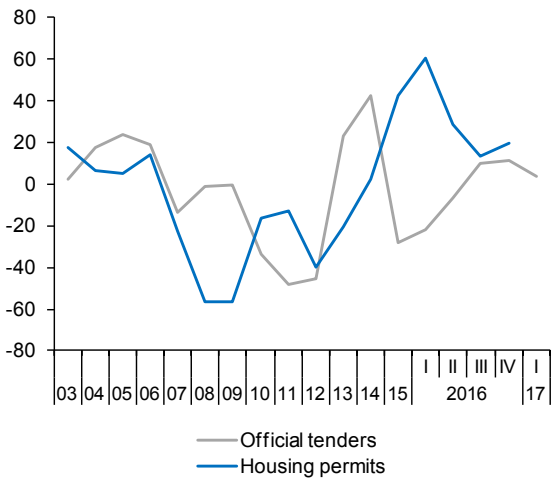


Chart 11.3.- Services indicators (I)
Percentage changes from previous period

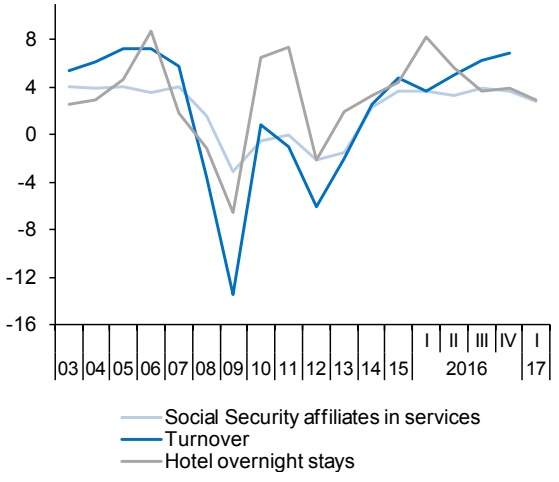


Chart 11.4.- Services indicators (II)
Index

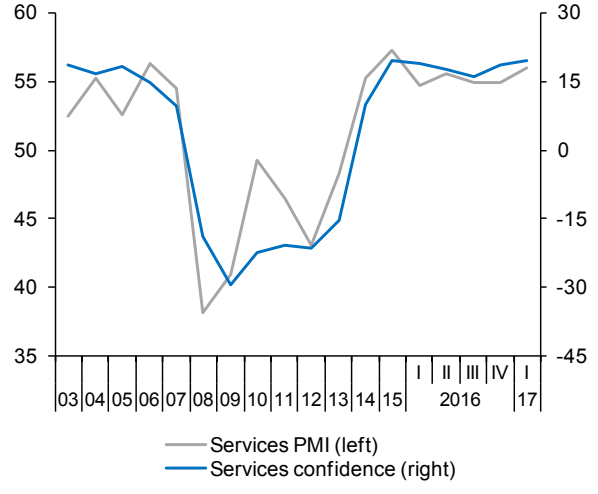


Table 12

Consumption and investment indicators (a)

	Consumption indicators					Investment in equipment indicators		
	Retail sales deflated	Car registrations	Consumer confidence index	Hotel overnight stays by residents in Spain	Industrial orders for consumer goods	Cargo vehicles registrations	Industrial orders for investment goods	Import of capital goods (volume)
	2010=100 (smoothed)	**Thousands (smoothed)**	**Balance of responses**	**Million (smoothed)**	**Balance of responses**	**Thousands (smoothed)**	**Balance of responses**	**2005=100 (smoothed)**
2010	100.0	1,000.1	-20.9	113.2	-26.7	152.1	-31.1	70.3
2011	94.4	808.3	-17.1	111.5	-21.7	142.0	-23.0	68.0
2012	87.4	710.6	-31.7	102.1	-24.2	107.7	-38.6	60.6
2013	84.0	742.3	-25.3	100.6	-21.8	107.6	-33.5	68.9
2014	84.9	890.1	-8.9	104.7	-9.1	137.5	-16.5	81.6
2015	87.9	1,094.0	0.3	110.3	-3.1	180.3	0.2	93.3
2016	91.1	1,230.1	-3.8	113.7	-1.4	191.3	-0.2	97.2
2017 (b)	92.1	91.9	-3.2	5.1	5.8	14.9	0.0	--
2015 II	87.4	264.9	1.6	27.3	-5.1	44.0	5.7	92.8
III	88.3	276.0	-1.3	27.6	-3.2	45.5	-0.7	94.0
IV	89.3	286.5	1.6	27.9	1.2	46.0	4.9	94.6
2016 I	90.2	294.8	-2.5	28.2	0.3	46.0	-2.3	96.0
II	90.9	301.8	-3.2	28.3	-4.3	46.9	1.9	97.6
III	91.3	308.9	-6.1	28.1	-1.7	48.7	2.3	97.6
IV	91.2	318.2	-3.2	27.9	0.0	50.7	-2.6	96.0
2017 I (b)	91.0	108.3	-3.2	9.2	5.8	17.4	0.0	--
2016 Dec	91.1	107.2	-2.7	9.3	-0.5	17.1	0.4	95.3
2017 Jan	91.0	108.3	-2.5	9.2	4.5	17.4	-5.5	--
Feb	--	--	-3.8	--	7.2	--	5.5	--
Percentage changes (c)								
2010	-1.7	3.0	--	3.2	--	7.0	--	6.1
2011	-5.6	-19.2	--	-1.5	--	-6.6	--	-3.2
2012	-7.4	-12.1	--	-8.4	--	-24.2	--	-10.9
2013	-3.9	4.5	--	-1.4	--	-0.1	--	13.7
2014	1.1	19.9	--	4.1	--	27.8	--	18.4
2015	3.6	22.9	--	5.3	--	31.1	--	14.4
2016	3.6	12.4	--	3.1	--	6.1	--	4.1
2017 (d)	-1.3	12.5	--	-6.1	--	16.6	--	--
2015 II	3.5	18.7	--	5.0	--	30.3	--	13.1
III	4.0	17.9	--	3.9	--	14.8	--	5.3
IV	4.5	16.2	--	4.0	--	4.0	--	2.3
2016 I	4.2	12.0	--	4.4	--	0.1	--	6.2
II	3.3	9.8	--	1.3	--	7.8	--	6.6
III	1.6	9.8	--	-1.7	--	16.6	--	0.2
IV	-0.3	12.6	--	-3.2	--	18.0	--	-6.3
2017 I (e)	-0.9	8.8	--	-2.6	--	11.2	--	--
2016 Dec	-0.1	1.1	--	-0.3	--	1.3	--	-0.7
2017 Jan	-0.1	1.1	--	-0.3	--	1.3	--	--
Feb	--	--	--	--	--	--	--	--

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

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

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

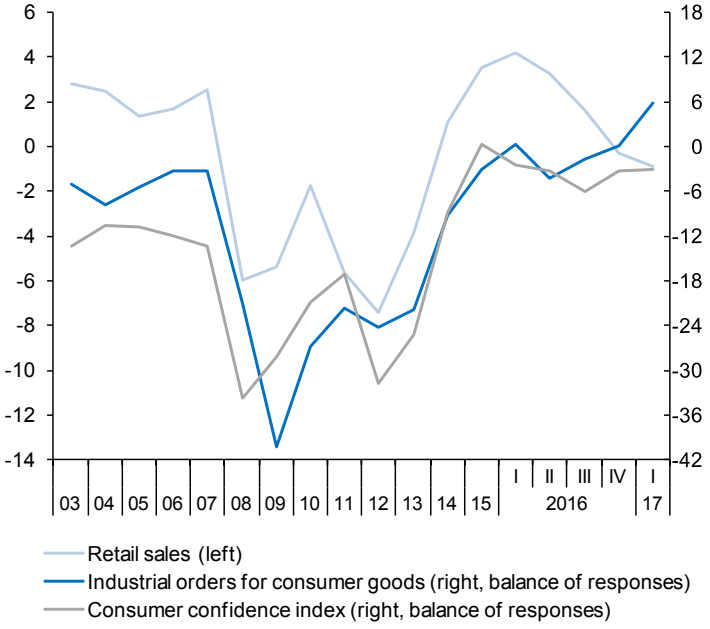


Chart 12.2.- Investment indicators
Percent change from previous period and balance of responses

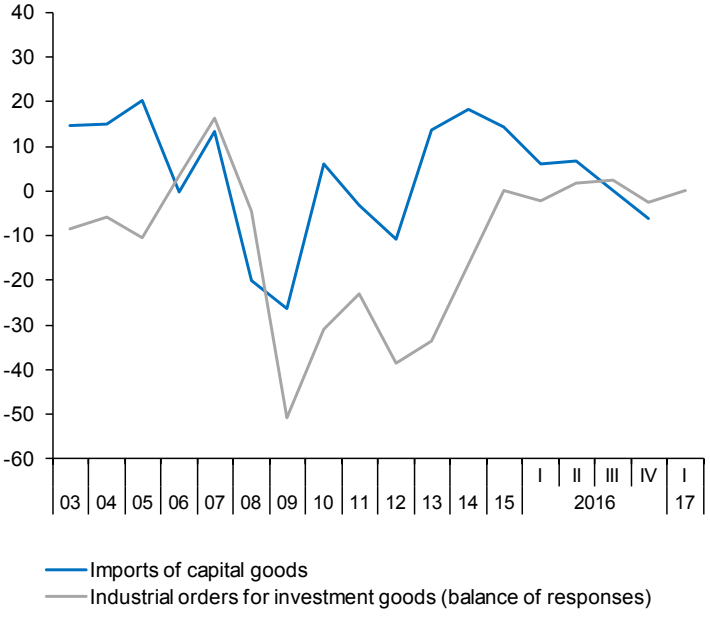


Table 13a

Labour market (I)

Forecasts in blue

		Population aged 16-64	Labour force		Employment		Unemployment		Participation rate 16-64 (a)	Employment rate 16-64 (b)	Unemployment rate (c)			
											Total	Aged 16-24	Spanish	Foreign
			Original	Seasonally adjusted	Original	Seasonally adjusted	Original	Seasonally adjusted	Seasonally adjusted					
		1	2=4+6	3=5+7	4	5	6	7	8	9	10=7/3	11	12	13
		Million							**Percentage**					
2010		31.1	23.4	--	18.7	--	4.6	--	74.6	59.7	19.9	41.5	18.1	29.9
2011		31.1	23.4	--	18.4	--	5.0	--	74.9	58.8	21.4	46.2	19.5	32.6
2012		30.9	23.4	--	17.6	--	5.8	--	75.3	56.5	24.8	52.9	23.0	35.9
2013		30.6	23.2	--	17.1	--	6.1	--	75.3	55.6	26.1	55.5	24.4	37.0
2014		30.3	23.0	--	17.3	--	5.6	--	75.3	56.8	24.4	53.2	23.0	34.5
2015		30.2	22.9	--	17.9	--	5.1	--	75.5	58.7	22.1	48.3	20.9	30.5
2016		30.1	22.8	--	18.3	--	4.5	--	75.4	60.5	19.6	44.4	18.7	26.6
2017		30.0	22.8	--	18.7	--	4.1	--	75.4	61.9	17.8	--	--	--
2018		29.9	22.7	--	19.0	--	3.7	--	75.4	63.2	16.1	--	--	--
2015	I	30.2	22.9	23.0	17.5	17.6	5.4	5.3	75.4	57.3	23.2	50.3	21.9	32.1
	II	30.2	23.0	23.0	17.9	17.8	5.1	5.1	75.7	58.7	22.4	48.7	21.2	31.1
	III	30.2	22.9	22.9	18.0	17.9	4.9	5.0	75.4	59.4	21.6	47.9	20.5	29.9
	IV	30.1	22.9	22.9	18.1	18.1	4.8	4.8	75.4	59.5	21.0	46.4	19.9	28.6
2016	I	30.1	22.8	22.9	18.0	18.2	4.8	4.7	75.5	59.4	20.4	45.7	19.3	28.3
	II	30.1	22.9	22.8	18.3	18.3	4.6	4.6	75.4	60.3	20.0	45.4	19.0	27.5
	III	30.1	22.8	22.8	18.5	18.4	4.3	4.4	75.4	61.1	19.4	43.5	18.5	25.6
	IV	30.0	22.7	22.7	18.5	18.5	4.2	4.3	75.1	61.1	18.7	43.0	17.9	24.9
		Percentage changes (d)							**Difference from one year ago**					
2010		-0.1	0.4	--	-2.0	--	11.7	--	0.4	-1.2	2.0	3.8	2.1	1.7
2011		-0.2	0.3	--	-1.6	--	8.0	--	0.4	-0.9	1.5	4.7	1.4	2.7
2012		-0.5	0.0	--	-4.3	--	15.9	--	0.4	-2.3	3.4	6.7	3.5	3.3
2013		-1.1	-1.1	--	-2.8	--	4.1	--	0.0	-0.9	1.3	2.6	1.5	1.1
2014		-0.9	-1.0	--	1.2	--	-7.3	--	0.0	1.2	-1.7	-2.3	-1.4	-2.5
2015		-0.5	-0.1	--	3.0	--	-9.9	--	0.2	1.9	-2.4	-4.9	-2.1	-4.0
2016		-0.4	-0.4	--	2.7	--	-11.4	--	-0.1	1.8	-2.4	-3.9	-2.2	-3.8
2017		-0.3	-0.2	--	2.0	--	-9.4	--	0.0	1.5	-1.8	--	--	--
2018		-0.3	-0.3	--	1.8	--	-9.8	--	0.0	1.3	-1.7	--	--	--
2015	I	-0.4	0.1	-1.1	3.0	2.0	-8.2	-10.5	0.3	1.8	-2.2	-4.0	-1.9	-4.0
	II	-0.5	0.2	0.7	3.0	4.8	-8.4	-12.1	0.4	1.9	-2.1	-4.2	-1.9	-3.3
	III	-0.5	-0.1	-1.7	3.1	2.1	-10.6	-14.0	0.2	2.1	-2.5	-5.8	-2.2	-4.0
	IV	-0.5	-0.7	-0.4	3.0	3.1	-12.4	-12.4	-0.2	1.9	-2.8	-5.2	-2.5	-4.8
2016	I	-0.5	-0.3	0.3	3.3	3.2	-12.0	-10.2	0.1	2.1	-2.8	-4.6	-2.6	-3.8
	II	-0.4	-0.6	-0.6	2.4	1.5	-11.2	-8.4	-0.2	1.6	-2.4	-3.3	-2.2	-3.6
	III	-0.3	-0.2	-0.2	2.7	2.9	-10.9	-12.1	0.0	1.8	-2.3	-4.4	-2.0	-4.2
	IV	-0.3	-0.6	-1.6	2.3	1.6	-11.3	-14.3	-0.2	1.5	-2.3	-3.4	-2.0	-3.7

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

Sources: INE (Labour Force Survey) and Funcas.

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

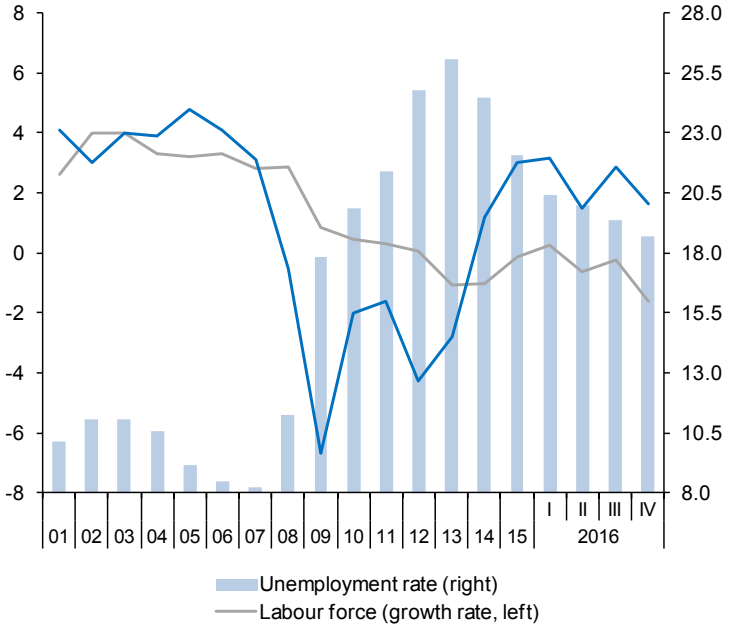


Chart 13a.2.- Unemployment rates, SA
Percentage

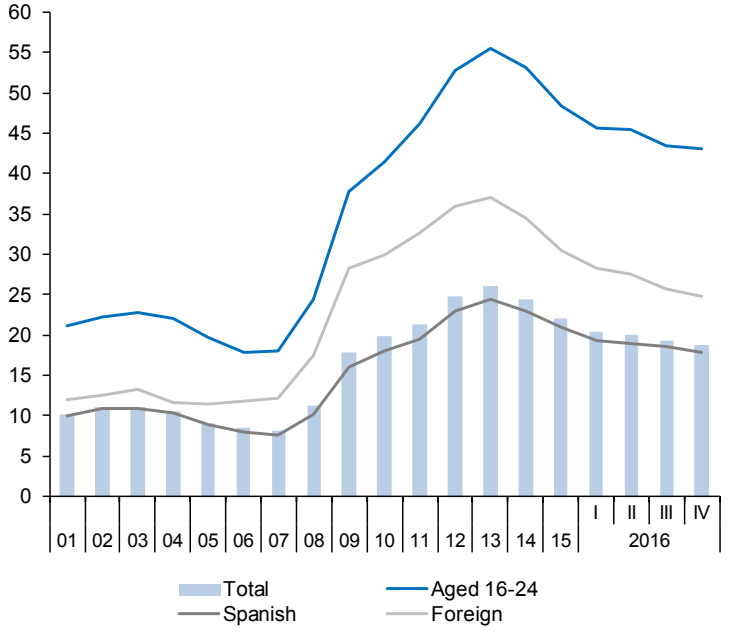


Table 13b

Labour market (II)

	Employed by sector				Employed by professional situation					Employed by duration of the working-day		
	Agriculture	Industry	Construc-tion	Services	Employees				Self- emplo-yed	Full-time	Part-time	Part-time employ-ment rate (b)
					Total	By type of contract						
						Temporary	Indefinite	Temporary employment rate (a)				
	1	2	3	4	5=6+7	6	7	8=6/5	9	10	11	12
Million (original data)												
2009	0.79	2.81	1.89	13.62	15.88	4.00	11.88	25.2	3.23	16.71	2.40	12.5
2010	0.79	2.65	1.65	13.64	15.59	3.86	11.73	24.7	3.13	16.29	2.44	13.0
2011	0.76	2.60	1.40	13.66	15.39	3.87	11.52	25.1	3.03	15.92	2.50	13.6
2012	0.74	2.48	1.16	13.24	14.57	3.41	11.16	23.4	3.06	15.08	2.55	14.5
2013	0.74	2.36	1.03	13.02	14.07	3.26	10.81	23.1	3.07	14.43	2.71	15.8
2014	0.74	2.38	0.99	13.23	14.29	3.43	10.86	24.0	3.06	14.59	2.76	15.9
2015	0.74	2.48	1.07	13.57	14.77	3.71	11.06	25.1	3.09	15.05	2.81	15.7
2016 (c)	0.76	2.50	1.07	13.95	15.18	3.93	11.24	25.9	3.11	15.51	2.78	15.2
2015 I	0.72	2.44	1.06	13.24	14.39	3.40	11.00	23.6	3.06	14.62	2.84	16.3
II	0.74	2.51	1.09	13.53	14.76	3.70	11.06	25.1	3.10	15.05	2.82	15.8
III	0.71	2.52	1.08	13.74	14.95	3.91	11.04	26.2	3.10	15.30	2.75	15.2
IV	0.78	2.46	1.06	13.79	14.99	3.85	11.14	25.7	3.11	15.25	2.84	15.7
2016 I	0.78	2.48	1.03	13.74	14.94	3.74	11.19	25.0	3.09	15.20	2.83	15.7
II	0.76	2.50	1.08	13.97	15.19	3.91	11.28	25.7	3.11	15.50	2.80	15.3
III	0.74	2.53	1.11	14.15	15.40	4.15	11.25	27.0	3.12	15.83	2.70	14.6
IV	0.82	2.58	1.08	14.03	15.39	4.07	11.31	26.5	3.12	15.68	2.83	15.3
Annual percentage changes								**Difference from one year ago**	**Annual percentage changes**			**Difference from one year ago**
2009	-4.8	-13.3	-23.2	-2.3	-5.8	-18.4	-0.6	-3.9	-10.6	-7.5	-0.4	0.8
2010	-0.3	-5.6	-12.6	0.1	-1.8	-3.6	-1.2	-0.5	-2.9	-2.5	1.7	0.5
2011	-3.9	-1.7	-15.0	0.2	-1.3	0.3	-1.8	0.4	-3.3	-2.2	2.5	0.5
2012	-1.6	-4.6	-17.3	-3.0	-5.3	-11.8	-3.1	-1.7	1.1	-5.3	2.3	0.9
2013	-0.9	-5.2	-11.4	-1.7	-3.5	-4.6	-3.1	-0.3	0.4	-4.3	6.0	1.3
2014	-0.1	1.0	-3.5	1.7	1.5	5.3	0.4	0.9	-0.4	1.1	1.9	0.1
2015	0.1	4.3	8.1	2.6	3.4	8.3	1.9	1.1	1.1	3.2	1.9	-0.2
2016 (d)	5.3	0.6	-0.6	3.3	3.2	7.2	1.9	1.0	0.7	3.5	-0.9	-0.6
2015 I	-11.3	6.2	12.6	2.6	3.3	5.4	2.7	0.5	1.3	2.9	3.3	0.1
II	0.1	6.4	11.6	1.9	3.1	8.0	1.6	1.1	2.3	3.7	-0.9	-0.6
III	6.5	3.8	5.9	2.6	3.7	10.1	1.6	1.5	0.3	2.8	4.8	0.2
IV	7.0	1.0	2.7	3.2	3.5	9.5	1.6	1.4	0.6	3.4	0.8	-0.3
2016 I	8.4	1.7	-2.7	3.8	3.8	10.1	1.8	1.4	1.1	4.0	-0.2	-0.6
II	2.7	-0.4	-1.4	3.2	2.9	5.5	2.0	0.6	0.3	3.0	-0.6	-0.5
III	4.8	0.5	2.3	3.0	3.0	6.2	1.9	0.8	0.7	3.5	-1.9	-0.7
IV	4.7	4.7	2.0	1.7	2.6	5.9	1.5	0.8	0.6	2.8	-0.4	-0.4

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

Source: INE (Labour Force Survey).

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

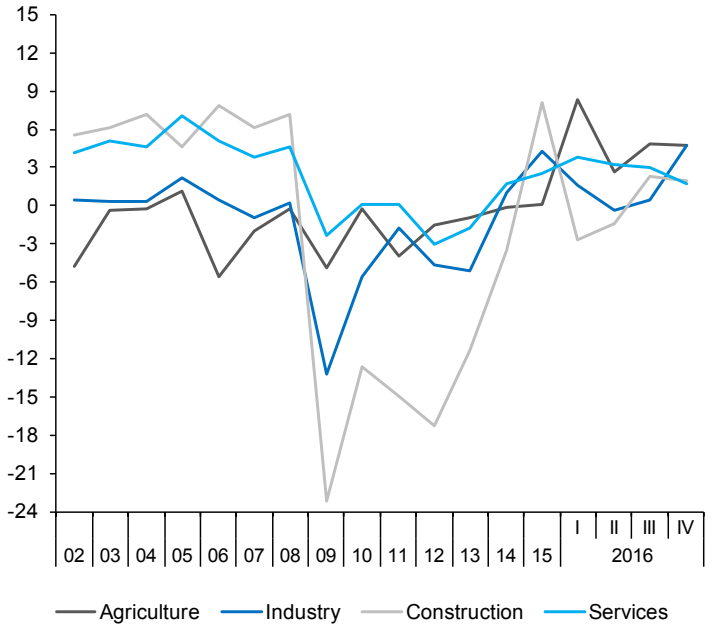


Chart 13b.2.- Employment by type of contract
Annual percentage changes and percentage over total employees

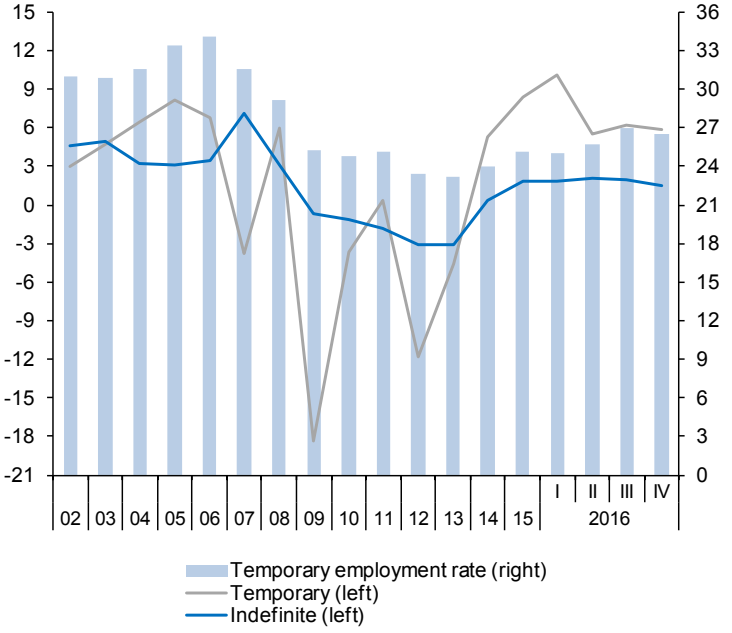


Table 14

Index of Consumer Prices

Forecasts in blue

		Total	Total excluding food and energy	Excluding unprocessed food and energy				Unprocessed food	Energy	Food
				Total	Non-energy industrial goods	Services	Processed food			
% of total in 2017		100.0	66.01	81.28	24.76	41.25	15.27	7.52	11.20	22.79
Indexes, 2016 = 100										
2011		97.1	96.4	95.6	98.2	95.3	92.1	91.8	111.4	92.0
2012		99.5	97.6	97.1	99.0	96.8	94.9	93.9	121.2	94.6
2013		100.9	98.7	98.5	99.6	98.1	97.9	97.3	121.3	97.7
2014		100.7	98.7	98.6	99.2	98.3	98.2	96.0	120.3	97.6
2015		100.2	99.2	99.2	99.5	98.9	99.2	97.7	109.4	98.7
2016		100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0
2017		102.2	101.1	101.0	100.6	101.3	100.8	102.7	110.9	101.4
2018		103.4	102.0	102.2	101.1	102.5	102.9	104.6	111.5	103.5
Annual percentage changes										
2011		3.2	1.3	1.7	0.6	1.8	3.8	1.8	15.7	3.2
2012		2.4	1.3	1.6	0.8	1.5	3.1	2.3	8.9	2.8
2013		1.4	1.1	1.4	0.6	1.4	3.1	3.6	0.0	3.2
2014		-0.2	0.0	0.0	-0.4	0.1	0.4	-1.2	-0.8	-0.1
2015		-0.5	0.5	0.6	0.3	0.7	0.9	1.8	-9.0	1.2
2016		-0.2	0.8	0.8	0.5	1.1	0.8	2.2	-8.6	1.3
2017		2.2	1.1	1.0	0.6	1.3	0.8	2.8	10.9	1.4
2018		1.1	0.9	1.2	0.5	1.2	2.1	1.9	0.5	2.1
2017	Jan	3.0	1.2	1.1	0.8	1.3	0.3	4.0	17.5	1.1
	Feb	3.0	1.2	1.0	0.6	1.3	0.0	5.4	16.8	1.7
	Mar	2.6	1.0	0.8	0.7	1.0	0.2	4.1	14.7	1.4
	Apr	2.6	1.2	1.1	0.7	1.5	0.5	2.5	14.1	1.1
	May	2.1	1.0	0.9	0.6	1.3	0.5	1.6	11.4	0.8
	Jun	1.9	1.1	1.0	0.6	1.3	0.6	1.6	8.8	0.9
	Jul	2.1	1.3	1.2	0.8	1.4	0.8	-0.2	10.1	0.6
	Aug	2.3	1.2	1.2	0.5	1.4	0.9	1.0	11.3	1.0
	Sep	2.3	1.1	1.1	0.6	1.3	1.1	3.6	10.0	1.9
	Oct	1.8	1.0	1.0	0.4	1.3	1.3	3.2	6.5	1.9
	Nov	1.8	0.9	1.0	0.4	1.2	1.4	3.6	6.5	2.1
	Dec	1.3	0.7	0.9	0.4	0.9	1.7	2.9	3.4	2.1
2018	Jan	0.8	0.9	1.1	0.4	1.2	1.9	1.6	-1.7	1.8
	Feb	1.0	1.0	1.2	0.6	1.2	2.3	-0.5	0.6	1.4
	Mar	1.1	1.0	1.2	0.5	1.2	2.1	0.8	0.5	1.7
	Apr	1.2	1.0	1.2	0.4	1.3	2.0	2.3	0.7	2.1
	May	1.2	0.9	1.2	0.4	1.2	2.0	2.8	0.7	2.3
	Jun	1.2	0.9	1.1	0.4	1.2	2.1	2.5	0.7	2.2
	Jul	1.2	0.9	1.1	0.4	1.1	2.1	2.7	0.7	2.3
	Aug	1.2	0.9	1.1	0.4	1.2	2.2	2.4	0.7	2.2
	Sep	1.2	0.9	1.2	0.4	1.2	2.2	2.3	0.7	2.2
	Oct	1.2	0.9	1.2	0.4	1.2	2.2	2.0	0.7	2.1
	Nov	1.2	0.9	1.2	0.4	1.3	2.2	2.0	0.7	2.2
	Dec	1.2	0.9	1.2	0.4	1.3	2.2	2.2	0.7	2.2

Sources: INE and Funcas (Forecasts).

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

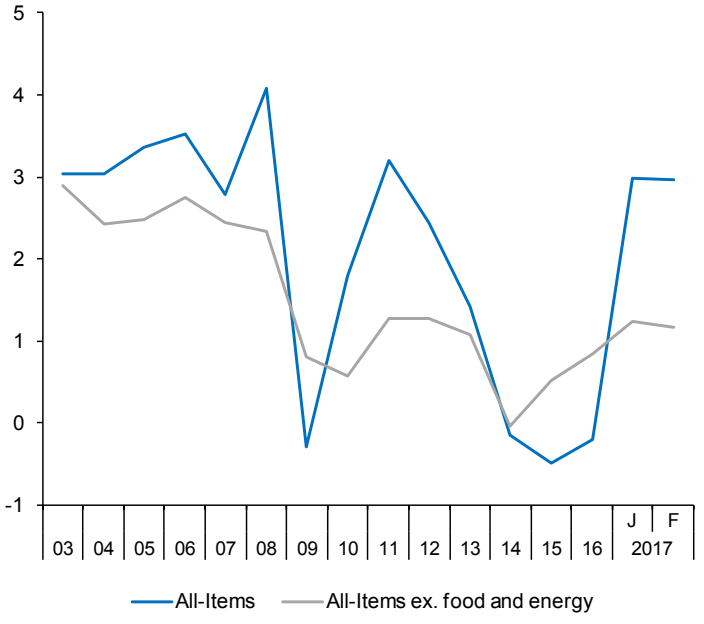


Chart 14.2.- Inflation rate (II)
Annual percentage changes

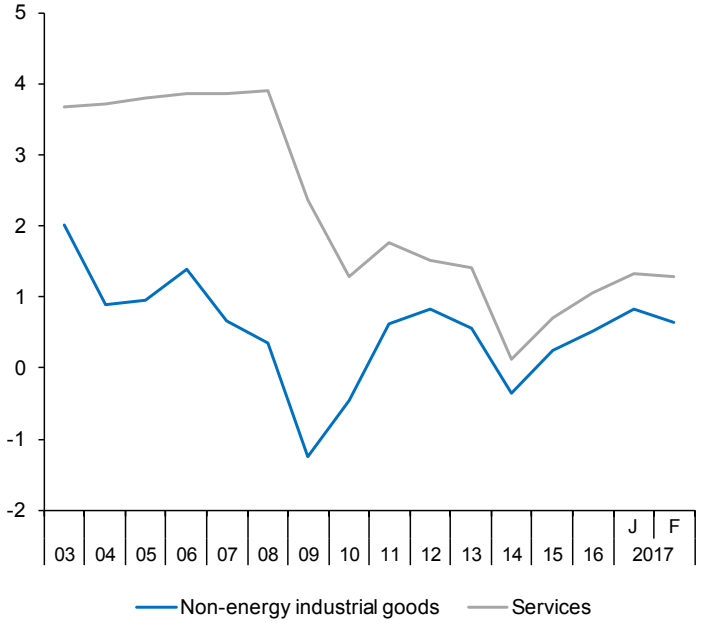


Table 15

Other prices and costs indicators

	GDP deflator (a)	Industrial producer prices		Housing prices		Urban land prices (M. Public Works)	Labour Costs Survey				Wage increases agreed in collective bargaining
		Total	Excluding energy	Housing Price Index (INE)	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				
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	100.5	111.7	106.7	64.3	72.7	55.1	143.8	141.1	152.2	155.2	--
2014	100.2	110.2	105.9	64.5	71.0	52.6	143.3	140.9	150.7	155.5	--
2015	100.7	107.9	106.2	66.8	71.7	54.9	144.2	142.5	149.6	156.5	--
2016	101.0	104.5	105.8	70.0	73.1	57.8	143.6	142.1	148.3	156.2	--
2017 (b)	--	110.6	107.3	--	--	--	--	--	--	--	--
2015 II	100.7	109.2	106.5	67.3	71.8	55.0	146.5	145.4	149.8	154.3	--
III	100.7	108.5	106.6	67.8	71.8	56.1	138.8	135.5	149.0	160.0	--
IV	100.8	106.1	105.7	67.7	72.5	54.5	151.0	151.7	148.6	164.5	--
2016 I	100.5	102.3	105.2	68.7	72.6	56.6	140.3	137.3	149.8	147.5	--
II	101.1	103.4	105.6	69.9	73.3	58.7	146.2	145.5	148.6	154.3	--
III	100.9	105.0	106.0	70.5	72.9	54.2	138.2	135.1	147.7	159.4	--
IV	101.5	107.4	106.3	70.8	73.5	61.6	149.8	150.6	147.3	163.7	--
2017 I (b)	--	--	--	--	--	--	--	--	--	--	--
2016 Dec	--	108.6	106.6	--	--	--	--	--	--	--	--
2017 Jan	--	110.6	107.3	--	--	--	--	--	--	--	--
Feb	--	--	--	--	--	--	--	--	--	--	--
Annual percent changes (c)											
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	0.1	3.8	1.7	-13.7	-8.7	-6.4	-0.6	-0.6	-0.8	-0.1	1.0
2013	0.4	0.6	0.7	-10.6	-5.8	-15.7	0.2	0.0	0.6	0.3	0.5
2014	-0.3	-1.3	-0.8	0.3	-2.4	-4.6	-0.3	-0.1	-1.0	0.2	0.5
2015	0.5	-2.1	0.3	3.6	1.1	4.3	0.6	1.1	-0.7	0.6	0.7
2016	0.3	-3.1	-0.4	4.7	1.9	5.3	-0.4	-0.3	-0.8	-0.2	1.1
2017 (d)	--	7.5	1.8	--	--	--	--	--	--	--	1.2
2015 II	0.6	-1.2	0.7	4.0	4.2	4.7	0.4	0.6	-0.2	0.5	0.7
III	0.6	-2.4	0.5	4.5	0.7	9.7	0.3	0.5	-0.5	-0.1	0.8
IV	0.4	-2.8	-0.1	4.2	-0.1	-2.4	1.2	1.7	-0.3	1.4	0.7
2016 I	0.0	-5.1	-0.7	6.3	1.5	5.3	-0.2	0.1	-0.8	0.3	1.1
II	0.4	-5.4	-0.9	3.9	1.8	6.6	-0.2	0.0	-0.8	0.0	1.1
III	0.2	-3.3	-0.5	4.0	0.8	-3.5	-0.5	-0.3	-0.9	-0.4	1.1
IV	0.6	1.2	0.6	4.5	0.4	13.0	-0.8	-0.7	-0.9	-0.5	1.1
2017 I (e)	--	--	--	--	--	--	--	--	--	--	--
2016 Dec	--	2.9	1.0	--	--	--	--	--	--	--	1.1
2017 Jan	--	7.5	1.8	--	--	--	--	--	--	--	1.2
Feb	--	--	--	--	--	--	--	--	--	--	--

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

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

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

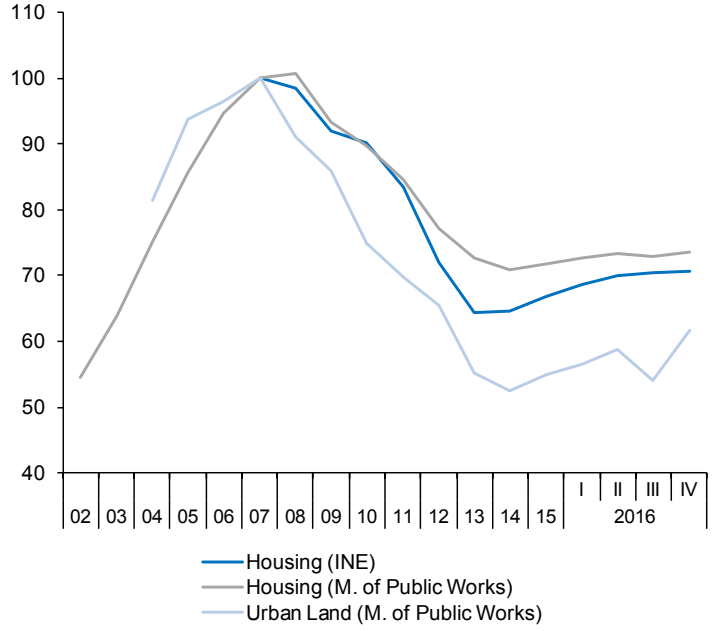


Chart 15.2.- Wage costs
Annual percent change

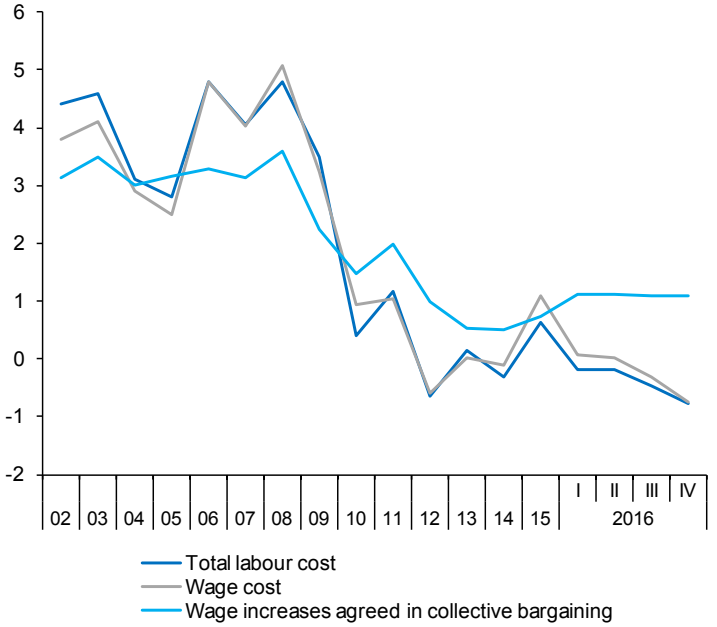


Table 16

External trade (a)

	Exports of goods			Imports of goods			Exports to EU countries (monthly average)	Exports to non-EU countries (monthly average)	Total Balance of goods (monthly average)	Balance of goods excluding energy (monthly average)	Balance of goods with EU countries (monthly average)
	Nominal	Prices	Real	Nominal	Prices	Real					
	2005=100			2005=100			EUR Billions				
2010	120.5	102.9	117.1	103.0	101.0	102.0	10.5	5.0	-4.4	-1.5	-0.4
2011	138.9	107.8	128.9	113.0	109.7	102.9	11.9	6.1	-4.0	-0.3	0.3
2012	145.9	111.3	131.1	110.7	115.9	95.6	11.9	6.9	-2.7	1.2	1.0
2013	152.1	110.2	138.1	108.3	110.0	98.5	12.3	7.3	-1.4	2.1	1.4
2014	155.2	108.6	142.9	114.0	106.9	106.6	12.7	7.3	-2.1	1.1	0.9
2015	161.4	109.0	148.1	117.8	103.8	113.5	13.5	7.3	-2.0	0.3	0.7
2016	164.2	107.1	153.3	117.3	100.6	116.6	14.1	7.2	-1.6	0.1	1.1
2017 (b)	166.0	107.6	154.2	126.6	106.5	118.9	14.5	6.9	-3.1	-0.4	1.8
2015 I	157.4	110.0	143.1	115.0	104.6	110.0	13.3	7.0	-2.1	0.3	0.8
II	162.4	110.6	146.8	119.3	105.4	113.2	13.7	7.4	-2.2	0.2	0.7
III	165.0	109.4	150.8	120.7	104.4	115.6	13.2	7.6	-2.2	0.1	0.6
IV	165.1	109.9	150.2	118.1	103.9	113.7	13.8	7.4	-1.7	0.3	0.7
2016 I	159.3	107.7	147.9	114.6	99.4	115.2	13.8	6.6	-1.7	-0.1	1.1
II	165.9	107.7	154.0	116.9	100.3	116.5	14.8	7.2	-1.3	0.3	1.0
III	164.9	108.3	152.3	117.1	101.6	115.3	13.2	7.3	-1.5	0.3	0.9
IV	171.7	108.8	157.9	122.6	104.0	117.9	14.5	7.5	-1.7	0.1	1.3
2016 Nov	175.3	109.2	160.6	123.0	102.5	119.9	15.9	7.6	-1.3	0.5	1.5
Dec	173.6	109.1	159.1	125.3	106.1	118.1	13.2	7.5	-2.0	0.0	1.3
2017 Jan	181.2	108.7	166.8	132.0	107.2	123.1	14.5	7.7	-2.3	0.4	1.8
	Percentage changes (c)								Percentage of GDP		
2010	16.8	1.1	15.6	16.5	6.7	9.2	14.3	22.5	-4.9	-1.7	-0.4
2011	15.2	4.7	10.1	9.6	8.6	0.9	12.7	20.5	-4.5	-0.4	0.3
2012	5.1	3.3	1.7	-2.0	5.6	-7.2	0.5	14.1	-3.1	1.4	1.2
2013	4.3	-1.0	5.4	-2.2	-5.1	3.1	3.1	6.3	-1.6	2.5	1.7
2014	2.0	-1.4	3.4	5.2	-2.8	8.2	3.5	-0.4	-2.4	1.3	1.0
2015	4.0	0.3	3.7	3.3	-2.9	6.4	6.0	0.5	-2.2	0.3	0.8
2016	1.7	-1.7	3.5	-0.4	-3.1	2.8	4.1	-2.6	-1.7	0.2	1.1
2017 (d)	17.4	0.8	16.5	19.0	7.0	11.2	15.3	21.9	--	--	--
2015 I	8.3	13.4	-4.5	3.2	-11.6	16.7	13.0	-27.4	-2.3	0.4	0.9
II	13.7	2.4	11.0	15.7	3.4	11.8	7.3	24.9	-2.5	0.3	0.8
III	-1.8	-11.8	11.3	4.7	-4.0	9.1	5.3	9.2	-2.4	0.2	0.7
IV	-3.6	-2.1	-1.6	-8.4	-1.9	-6.6	5.1	-8.4	-1.8	0.3	0.7
2016 I	13.2	20.5	-6.0	-11.4	-16.1	5.6	2.1	-37.1	-1.9	-0.1	1.2
II	6.6	-9.2	17.4	8.3	3.8	4.3	7.8	40.3	-1.4	0.4	1.1
III	0.1	4.6	-4.3	0.9	5.1	-4.1	-8.6	10.6	-1.6	0.3	1.0
IV	-13.2	-24.8	15.4	20.1	9.7	9.6	23.5	7.3	-1.8	0.1	1.4
2016 Nov	5.5	1.1	4.3	2.8	-0.7	3.6	6.9	2.8	--	--	--
Dec	-1.0	-0.1	-0.9	1.9	3.5	-1.5	-0.6	-1.9	--	--	--
2017 Jan	4.4	-0.4	4.8	5.3	1.1	4.2	5.0	3.1	--	--	--

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

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

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

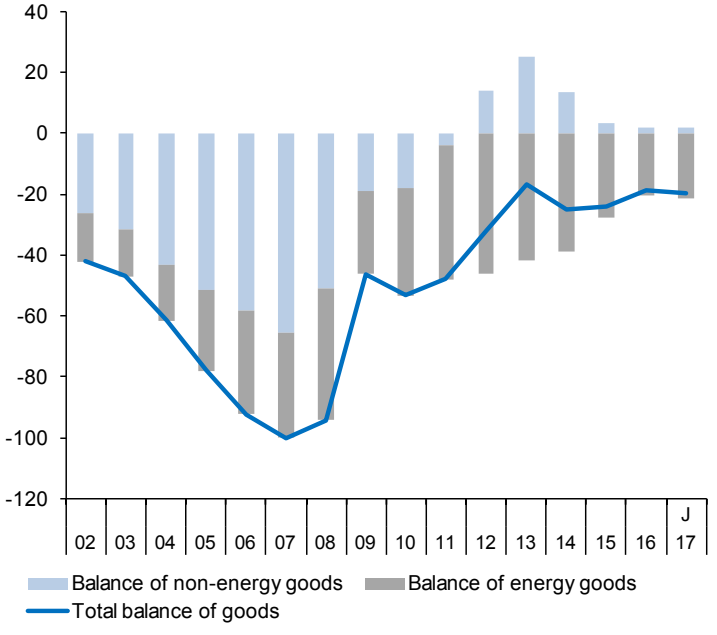


Table 17

Balance of Payments (according to IMF manual)

(Net transactions)

		Current account					Capital account	Current and capital accounts	Financial account						Errors and omissions
		Total	Goods	Services	Primary Income	Secondary Income			Financial account, excluding Bank of Spain					Bank of Spain	
									Total	Direct investment	Porfolio investment	Other invest-ment	Financial derivatives		
		1 = 2 + 3 + 4 + 5	2	3	4	5	6	7=1+6	8 = 9 + 10 + 11 + 12	9	10	11	12	13	14
EUR billions															
2008		-103.25	-87.04	29.82	-30.49	-15.55	4.67	-98.58	-69.23	-1.53	0.96	-75.72	7.07	-30.22	-0.86
2009		-46.19	-41.47	29.54	-19.62	-14.64	3.33	-42.86	-40.70	1.94	-44.04	-4.66	6.05	-10.46	-8.31
2010		-42.39	-47.80	33.93	-15.13	-13.38	4.89	-37.49	-27.24	-1.46	-28.40	11.23	-8.61	-15.70	-5.44
2011		-34.04	-44.48	42.59	-18.36	-13.79	4.06	-29.98	79.51	9.23	26.25	41.96	2.07	-109.23	0.26
2012		-2.40	-29.25	45.25	-7.01	-11.39	5.18	2.77	170.51	-21.12	55.40	144.57	-8.35	-168.76	-1.02
2013		15.59	-14.01	47.78	-5.29	-12.89	6.58	22.17	-84.89	-18.54	-52.99	-14.40	1.04	118.19	11.13
2014		11.24	-22.38	47.88	-3.25	-11.01	5.05	16.29	-15.99	8.04	-6.49	-17.66	0.12	27.49	-4.79
2015		14.72	-21.75	47.97	-0.66	-10.84	7.01	21.73	65.35	29.38	-5.87	43.08	-1.24	-40.16	3.46
2014	IV	8.31	-5.26	10.49	4.61	-1.54	2.39	10.70	-14.30	15.41	-21.81	-8.95	1.05	26.00	1.00
2015	I	-1.26	-4.18	8.60	-0.88	-4.80	0.64	-0.61	11.97	3.60	-3.97	13.32	-0.99	-14.79	-2.21
	II	3.22	-5.21	12.23	-1.28	-2.52	1.52	4.74	19.67	15.53	6.16	-1.54	-0.47	-8.82	6.11
	III	5.72	-6.86	16.93	-2.49	-1.85	1.50	7.23	12.59	6.41	2.29	3.84	0.06	0.24	5.61
	IV	7.03	-5.50	10.21	3.99	-1.67	3.35	10.38	21.11	3.83	-10.35	27.47	0.16	-16.79	-6.05
2016	I	-0.60	-4.58	8.79	-0.13	-4.69	0.44	-0.16	9.63	6.75	22.53	-18.14	-1.51	-7.36	2.43
	II	6.78	-2.74	13.04	-1.76	-1.75	1.13	7.91	41.15	5.71	8.99	26.48	-0.02	-34.90	-1.67
	III	7.45	-5.23	17.28	-1.67	-2.93	0.59	8.05	15.35	1.41	3.85	10.81	-0.72	-6.82	0.49
			Goods and Services		Primary and Secondary Income										
2016	Oct	2.01	3.21		-1.20		0.14	2.14	-7.18	1.39	-3.07	-5.38	-0.13	7.09	-2.23
	Nov	3.26	2.18		1.08		0.23	3.49	24.22	1.31	10.94	12.14	-0.18	-15.13	5.61
	Dec	3.41	0.38		3.03		2.03	5.44	4.46	4.66	-9.53	9.10	0.23	3.53	2.55
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	4.4	-0.7	-1.1	0.5	0.3	16.4	-2.0	5.3	13.9	-0.8	-16.2	-0.1
2013		1.5	-1.4	4.7	-0.5	-1.3	0.6	2.2	-8.3	-1.8	-5.2	-1.4	0.1	11.5	1.1
2014		1.1	-2.2	4.6	-0.3	-1.1	0.5	1.6	-1.5	0.8	-0.6	-1.7	0.0	2.7	-0.5
2015		1.4	-2.0	4.5	-0.1	-1.0	0.7	2.0	6.1	2.7	-0.5	4.0	-0.1	-3.7	0.3
2014	IV	3.1	-1.9	3.9	1.7	-0.6	0.9	4.0	-5.3	5.7	-8.1	-3.3	0.4	9.6	0.4
2015	I	-0.5	-1.6	3.4	-0.3	-1.9	0.3	-0.2	4.7	1.4	-1.5	5.2	-0.4	-5.8	-0.9
	II	1.2	-1.9	4.5	-0.5	-0.9	0.6	1.7	7.2	5.7	2.3	-0.6	-0.2	-3.2	2.2
	III	2.2	-2.6	6.4	-0.9	-0.7	0.6	2.7	4.7	2.4	0.9	1.4	0.0	0.1	2.1
	IV	2.5	-2.0	3.6	1.4	-0.6	1.2	3.7	7.5	1.4	-3.7	9.8	0.1	-6.0	-2.2
2016	I	-0.2	-1.7	3.3	0.0	-1.8	0.2	-0.1	3.6	2.5	8.5	-6.8	-0.6	-2.8	0.9
	II	2.4	-1.0	4.6	-0.6	-0.6	0.4	2.8	14.5	2.0	3.2	9.4	0.0	-12.3	-0.6
	III	2.7	-1.9	6.3	-0.6	-1.1	0.2	2.9	5.6	0.5	1.4	3.9	-0.3	-2.5	0.2

Source: Bank of Spain.

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

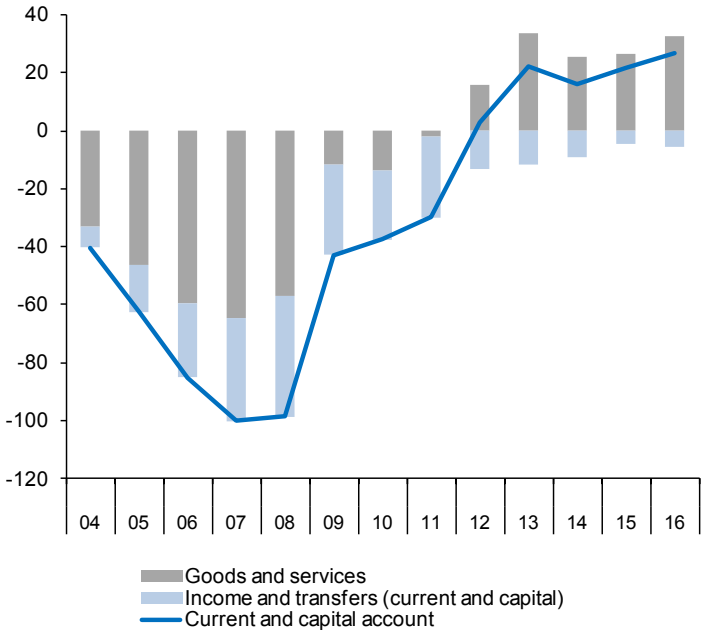


Chart 17.2.- Balance of payments: Financial account
EUR Billions, 12-month cumulated

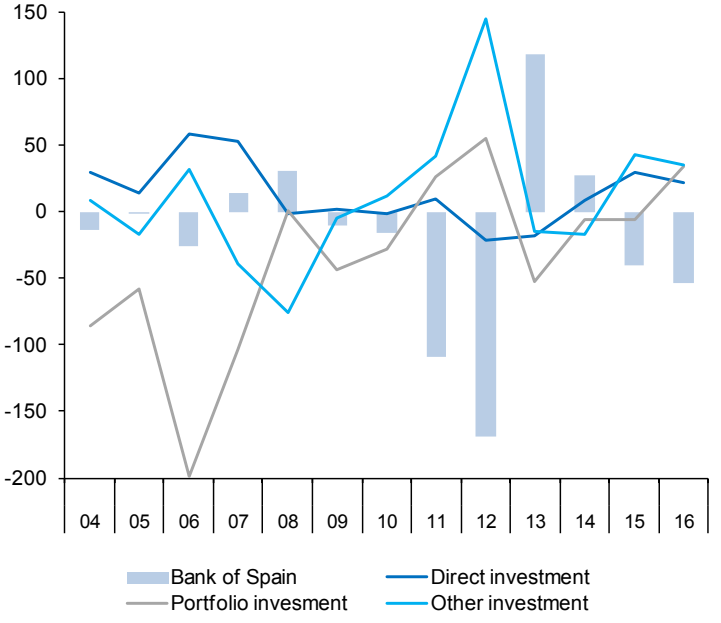


Table 18

State and Social Security System budget

	State							Social Security System (b)				
	National accounts basis			Revenue, cash basis (a)				Surplus or deficit	Accrued income		Expenditure	
	Surplus or deficit	Revenue	Expenditure	Total	Direct taxes	Indirect taxes	Others		Total	of which, social contributions	Total	of which, pensions
	1=2-3	2	3	4=5+6+7	5	6	7	8=9-11	9	10	11	12
EUR billions, 12-month cumulated												
2009	-99.7	134.0	233.6	162.5	87.5	55.7	19.3	8.8	123.7	107.3	114.9	92.0
2010	-50.6	161.2	211.8	175.0	86.9	71.9	16.3	2.4	122.5	105.5	120.1	97.7
2011	-32.0	168.1	200.1	177.0	89.6	71.2	16.1	-0.5	121.7	105.4	122.1	101.5
2012	-44.1	173.0	217.1	215.4	96.2	71.6	47.7	-5.8	118.6	101.1	124.4	105.5
2013	-45.4	169.7	215.1	191.1	94.0	73.7	23.3	-8.9	121.3	98.1	130.2	111.1
2014	-40.2	174.3	214.5	205.9	95.6	78.2	32.1	-14.0	119.3	99.2	133.3	114.4
2015	-30.0	181.0	211.0	217.5	97.8	82.7	37.0	-16.7	123.7	100.5	140.4	117.8
2016 (c)	-26.4	159.1	185.5	196.1	90.7	81.1	24.4	-9.7	114.1	94.8	123.8	106.6
2016 Sep	-35.0	175.3	210.3	210.5	95.0	85.6	30.0	-17.3	123.3	102.6	140.6	120.3
Oct	-30.2	178.8	209.0	216.9	99.8	85.9	31.2	-17.7	123.3	102.9	140.9	120.6
Nov	-31.3	176.7	208.1	214.9	99.4	85.9	29.6	-20.6	123.0	103.2	143.6	123.2
Annual percentage changes												
2009	--	-19.3	17.8	-13.9	-14.2	-21.2	20.4	--	-0.5	-1.3	4.7	5.9
2010	--	20.3	-9.3	7.7	-0.7	29.1	-15.7	--	-1.0	-1.7	4.5	6.2
2011	--	4.2	-5.6	1.1	3.1	-0.9	-0.8	--	-0.7	-0.1	1.7	3.9
2012	--	3.0	8.5	21.7	7.3	0.5	195.9	--	-2.5	-4.0	1.9	3.9
2013	--	-1.9	-0.9	-11.3	-2.2	3.0	-51.1	--	2.3	-3.0	4.6	5.3
2014	--	2.7	-0.3	7.7	1.6	6.1	37.6	--	-1.6	1.1	2.4	3.0
2015	--	3.8	-1.6	5.7	2.3	5.8	15.3	--	3.7	1.3	5.4	3.0
2016 (d)	--	-2.5	-1.7	-1.3	1.8	4.1	-23.3	--	-0.6	2.9	2.6	5.4
2016 Sep	--	-2.5	-0.3	-3.7	-3.0	5.2	-24.1	--	0.5	2.7	1.1	3.0
Oct	--	-0.8	-1.3	-1.3	1.4	5.0	-21.2	--	0.2	2.8	1.0	3.0
Nov	--	-2.9	-1.8	-3.0	0.7	5.1	-28.0	--	-0.5	2.8	2.6	5.0
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	20.9	20.7	9.2	6.9	4.6	-0.6	11.4	9.7	12.0	10.1
2013	-4.4	16.5	21.0	18.6	9.2	7.2	2.3	-0.9	11.8	9.6	12.7	10.8
2014	-3.9	16.8	20.7	19.9	9.2	7.5	3.1	-1.3	11.5	9.6	12.9	11.0
2015	-2.8	16.8	19.6	20.2	9.1	7.7	3.4	-1.6	11.5	9.3	13.1	11.0
2016 Sep	-3.2	15.9	19.0	19.1	8.6	7.7	2.7	-1.6	11.2	9.3	12.7	10.9
Oct	-2.7	16.2	18.9	19.6	9.0	7.8	2.8	-1.6	11.2	9.3	12.8	10.9
Nov	-2.8	16.0	18.8	19.5	9.0	7.8	2.7	-1.9	11.1	9.3	13.0	11.2

(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

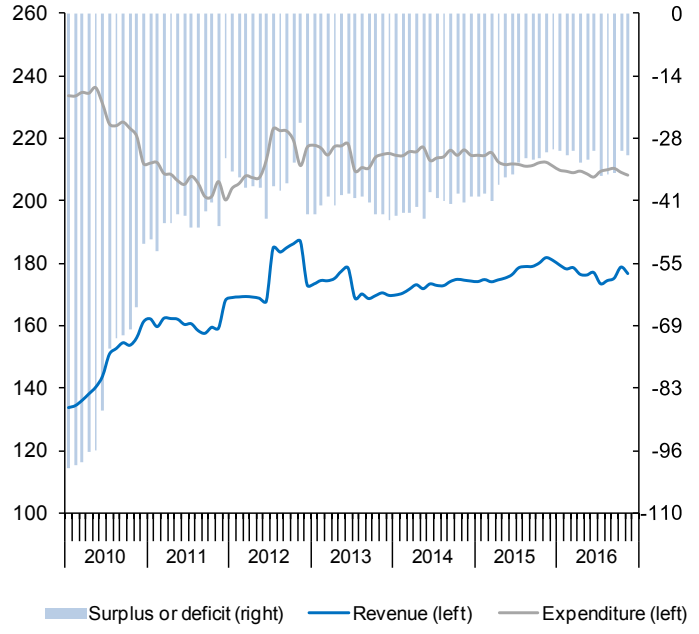


Chart 18.2.- Social Security System: Revenue, expenditure and deficit
EUR Billions, 12-month cumulated

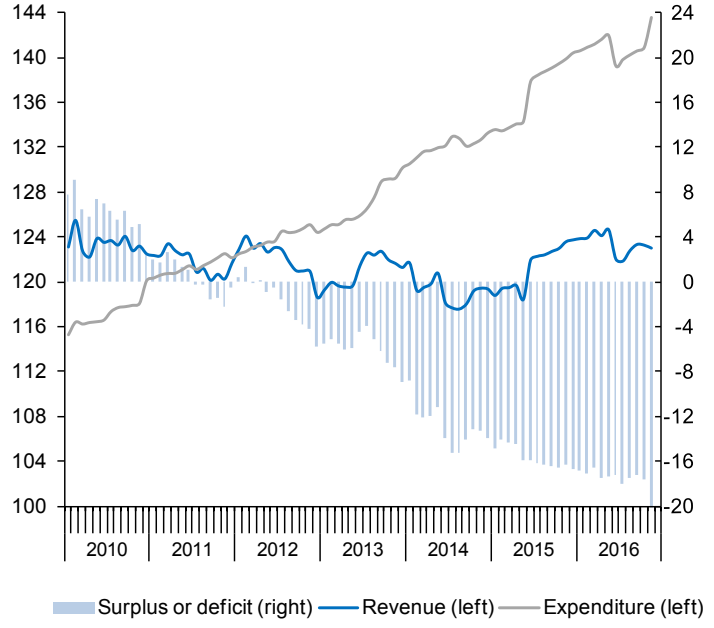


Table 19

Monetary and financial indicators

	Interest rates (percentage rates)					Credit stock (EUR billion)				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**					
2010	4.25	150.8	2.6	8.1	4.3	2,788.5	649.3	1,244.0	895.2	--	9,859.1
2011	5.44	283.3	3.5	8.0	5.1	2,805.5	743.5	1,194.0	867.9	--	8,563.3
2012	5.85	435.1	3.4	8.6	5.6	2,820.8	890.7	1,099.2	830.9	--	8,167.5
2013	4.56	299.2	3.2	9.0	5.5	2,770.7	978.3	1,009.4	783.0	--	9,916.7
2014	2.72	156.0	3.1	8.9	4.9	2,739.8	1,040.9	950.2	748.8	--	10,279.5
2015	1.74	124.0	2.5	8.0	3.8	2,723.8	1,073.2	925.1	725.5	--	9,544.2
2016	1.39	130.1	2.3	7.8	3.2	2,725.3	1,105.6	907.0	712.7	--	9,352.1
2017 (a)	1.59	133.2	2.3	7.7	3.2	2,730.3	1,114.8	905.1	710.3	--	9,555.5
2015 I	1.43	112.3	2.6	8.1	4.2	2,744.9	1,052.1	952.1	740.7	--	11,521.1
II	1.77	128.2	2.5	7.9	3.7	2,738.3	1,057.6	938.2	742.5	--	10,769.5
III	2.03	137.0	2.5	8.1	3.7	2,729.1	1,067.6	931.3	730.1	--	9,559.9
IV	1.71	118.4	2.4	7.8	3.5	2,723.8	1,073.2	925.1	725.5	--	9,544.2
2016 I	1.67	141.1	2.3	8.0	3.4	2,729.3	1,096.2	913.5	719.6	--	8,723.1
II	1.52	144.0	2.3	7.6	3.1	2,748.1	1,106.3	915.3	726.5	--	8,163.3
III	1.07	119.8	2.4	8.0	3.1	2,738.5	1,107.7	915.0	715.9	--	8,779.4
IV	1.31	115.3	2.3	7.3	3.1	2,725.3	1,105.6	907.0	712.7	--	9,352.1
2016 Dec	1.44	118.6	2.2	7.1	3.0	2,725.3	1,105.6	907.0	712.7	--	9,352.1
2017 Jan	1.47	122.0	2.2	7.7	3.4	2,730.3	1,114.8	905.1	710.3	--	9,315.2
Feb	1.70	144.3	--	--	--	--	--	--	--	--	9,555.5
						Percentage change from same period previous year					**(b)**
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	--	--	--	--	--	-0.8	9.8	-6.1	-5.2	-4.4	21.4
2014	--	--	--	--	--	-0.1	6.4	-3.7	-3.6	3.4	3.7
2015	--	--	--	--	--	0.5	3.8	-0.4	-2.1	5.2	-7.2
2016	--	--	--	--	--	0.8	3.0	-0.2	-1.4	6.0	-2.0
2017 (a)	--	--	--	--	--	1.2	3.9	0.1	-1.4	4.8	12.9
2015 I	--	--	--	--	--	0.1	5.7	-1.9	-3.3	4.5	12.1
II	--	--	--	--	--	-0.2	4.5	-2.3	-2.6	3.6	-6.5
III	--	--	--	--	--	0.0	4.6	-2.3	-2.4	4.6	-11.2
IV	--	--	--	--	--	0.5	3.8	-0.4	-2.1	5.2	-0.2
2016 I	--	--	--	--	--	0.5	4.2	-1.8	-1.9	5.5	-8.6
II	--	--	--	--	--	1.3	4.6	-0.2	-1.7	7.8	-6.4
III	--	--	--	--	--	1.3	3.8	0.6	-1.6	7.5	7.5
IV	--	--	--	--	--	0.8	3.0	-0.2	-1.4	6.0	6.5
2016 Dec	--	--	--	--	--	0.8	3.0	-0.2	-1.4	6.0	7.6
2017 Jan	--	--	--	--	--	1.2	3.9	0.1	-1.4	4.8	-0.4
Feb	--	--	--	--	--	--	--	--	--	--	2.6

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

Source: Bank of Spain.

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

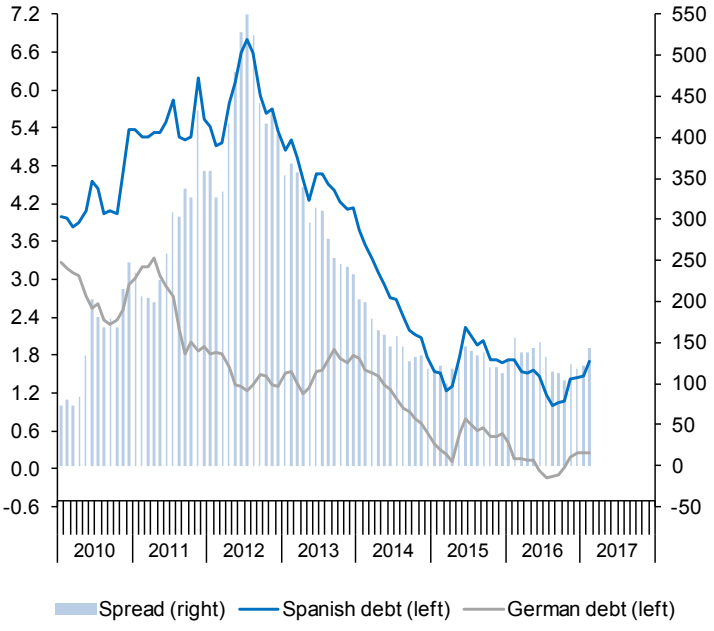


Chart 19.2.- Credit stock growth
Annual percentage change

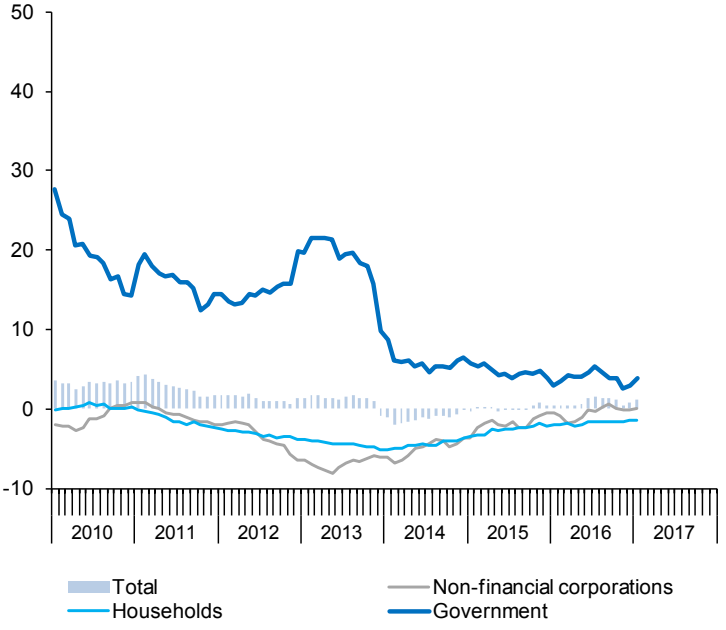


Table 20

Competitiveness indicators in relation to EMU

	Relative Unit Labour Costs in industry (Spain/EMU)			Harmonized Consumer Prices			Producer prices			Real Effective Exchange Rate in relation to developed countries
	Relative hourly wages	Relative hourly productivity	Relative ULC	Spain	EMU	Spain/EMU	Spain	EMU	Spain/EMU	
	1998=100			**2015=100**			**2010=100**			**1999 I =100**
2010	107.4	94.4	113.8	94.1	93.3	100.9	100.0	100.0	100.0	112.8
2011	106.3	94.8	112.1	96.9	95.8	101.2	106.5	105.2	101.2	113.1
2012	105.3	95.8	109.9	99.3	98.2	101.1	110.1	107.9	102.0	111.6
2013	103.6	95.4	108.7	100.8	99.5	101.3	110.0	107.4	102.4	113.4
2014	101.7	97.1	104.7	100.6	100.0	100.7	108.4	105.8	102.4	112.4
2015	99.3	99.3	100.1	100.0	100.0	100.0	106.8	104.0	102.7	109.0
2016	--	--	--	99.7	100.3	99.4	103.9	101.8	102.0	108.8
2017 (a)	--	--	--	100.3	100.7	99.7	109.2	104.8	104.2	--
2015 I	--	--	--	98.8	99.2	99.6	106.6	104.2	102.3	108.7
II	--	--	--	101.2	100.5	100.6	108.0	104.9	103.0	109.6
III	--	--	--	99.8	100.0	99.7	107.4	103.9	103.3	108.6
IV	--	--	--	100.3	100.2	100.0	105.2	102.7	102.4	109.0
2016 I	--	--	--	98.0	99.2	98.8	101.9	100.8	101.1	107.7
II	--	--	--	100.1	100.4	99.7	102.8	101.2	101.6	109.1
III	--	--	--	99.5	100.3	99.2	104.3	102.0	102.2	108.7
IV	--	--	--	101.1	101.0	100.1	106.5	103.3	--	--
2016 Dec	--	--	--	101.5	101.3	100.2	107.6	103.9	103.6	110.0
2017 Jan	--	--	--	100.5	100.5	100.0	109.2	104.8	104.2	110.1
Feb	--	--	--	100.2	100.8	99.3	--	--	--	--
	Annual percentage changes					**Differential**	**Annual percentage changes**		**Differential**	**Annual percentage changes**
2010	-0.8	-3.4	2.7	2.0	1.6	0.4	3.9	3.1	0.8	-1.0
2011	-1.0	0.4	-1.5	3.0	2.7	0.3	6.5	5.2	1.3	0.2
2012	-1.0	1.0	-2.0	2.4	2.5	-0.1	3.4	2.6	0.8	-1.3
2013	-1.6	-0.4	-1.1	1.5	1.3	0.2	-0.1	-0.4	0.3	1.5
2014	-1.8	1.9	-3.6	-0.2	0.4	-0.6	-1.5	-1.5	0.0	-0.9
2015	-2.3	2.2	-4.4	-0.6	0.0	-0.6	-1.5	-1.7	0.2	-3.0
2016	--	--	--	-0.3	0.3	-0.6	-2.7	-2.0	-0.7	-0.2
2017 (b)	--	--	--	3.0	1.9	1.1	6.5	3.7	2.8	--
2015 I	--	--	--	-1.1	-0.3	-0.8	-1.3	-2.2	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	-2.0	0.3	-2.8
IV	--	--	--	-0.5	0.2	-0.7	-2.3	-2.4	0.1	-2.5
2016 I	--	--	--	-0.8	0.0	-0.8	-4.4	-3.2	-1.2	-0.9
II	--	--	--	-1.0	-0.1	-0.9	-4.8	-3.6	-1.2	-0.5
III	--	--	--	-0.3	0.3	-0.6	-2.9	-1.8	-1.1	0.1
IV	--	--	--	0.8	0.7	0.1	1.2	0.6	0.6	--
2016 Dec	--	--	--	1.4	1.1	0.3	1.4	0.8	0.6	0.7
2017 Jan	--	--	--	2.9	1.8	1.1	6.5	3.7	2.8	1.0
Feb	--	--	--	3.0	2.0	1.0	--	--	--	--

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

Sources: Eurostat, Bank of Spain and Funcas.

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

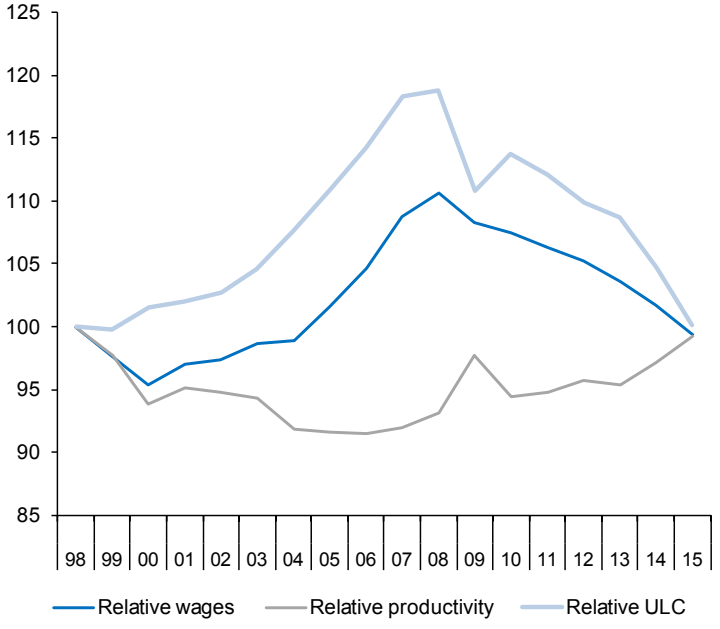


Chart 20.2.- Harmonized Consumer Prices
Annual growth in % and percentage points

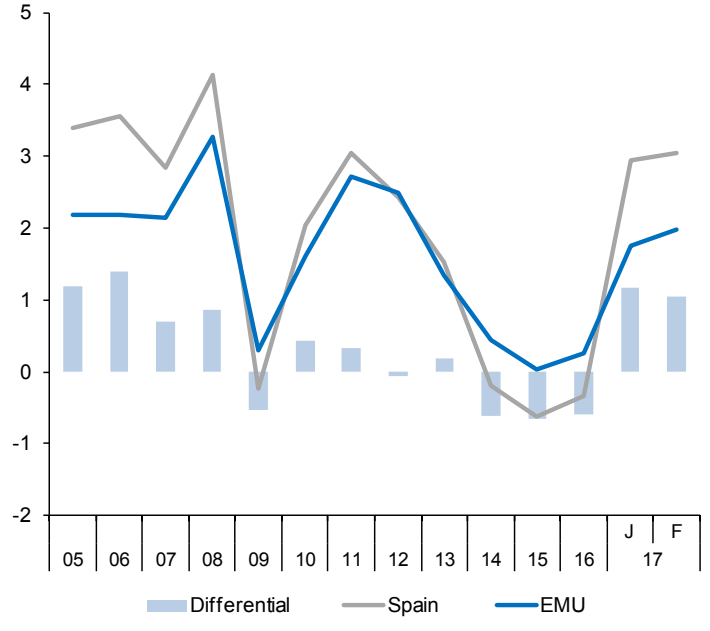


Table 21a

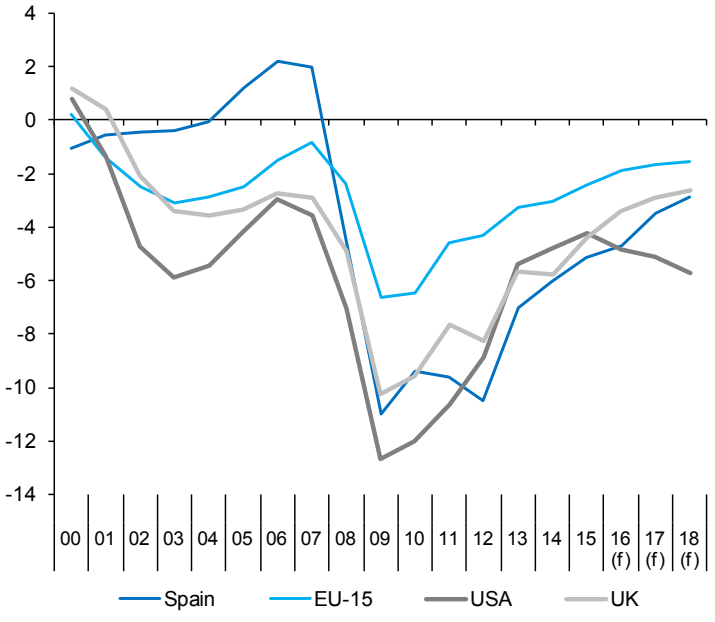
Imbalances: International comparison (I)

In blue: European Commission Forecasts

	Government net lending (+) or borrowing (-)				Government consolidated 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	-267.4	-543.4	-45.8	393.5	6,844.6	8,496.9	552.0	-70.3	45.4	-702.2	-16.7
2006	22.1	-170.5	-411.6	-39.9	392.2	7,057.0	8,818.1	597.1	-90.7	29.3	-584.9	-32.4
2007	21.6	-100.9	-513.6	-44.5	383.8	7,134.7	9,267.8	646.2	-104.1	24.3	-735.6	-37.5
2008	-49.4	-284.8	-1,033.3	-76.4	439.8	7,570.7	10,722.1	786.3	-102.9	-81.4	-791.0	-55.0
2009	-118.2	-751.9	-1,827.4	-155.4	568.7	8,531.5	12,405.0	975.5	-46.5	14.4	-457.2	-44.8
2010	-101.4	-759.8	-1,797.7	-150.3	649.3	9,581.6	14,176.1	1,190.9	-42.0	37.1	-495.1	-43.1
2011	-102.9	-552.4	-1,646.6	-124.0	743.5	10,258.0	15,361.9	1,324.2	-35.3	70.3	-443.2	-29.1
2012	-108.9	-534.5	-1,430.7	-138.6	890.7	10,912.3	16,558.7	1,424.8	-4.6	149.3	-264.9	-61.4
2013	-71.9	-409.2	-894.0	-98.5	978.3	11,274.0	17,462.8	1,499.8	15.0	192.2	-248.2	-76.4
2014	-62.2	-388.5	-834.9	-105.1	1,040.9	11,811.8	18,194.1	1,604.8	10.4	193.4	-143.8	-85.0
2015	-55.2	-326.3	-761.2	-81.7	1,073.2	12,132.7	18,965.9	1,666.0	14.3	283.6	-223.7	-80.2
2016	-52.4	-257.3	-894.0	-65.4	1,112.2	11,988.9	19,918.7	1,710.4	19.6	305.6	--	-96.6
2017	-40.0	-230.2	-986.9	-57.9	1,156.9	12,205.9	21,030.5	1,759.3	19.3	289.2	--	-96.1
2018	-34.6	-224.7	-1,159.4	-54.9	1,196.3	12,439.0	22,234.7	1,804.0	19.7	302.8	--	-81.1
Percentage of GDP												
2005	1.2	-2.5	-4.2	-3.3	42.3	63.0	64.9	40.0	-7.6	0.4	-5.4	-1.2
2006	2.2	-1.5	-3.0	-2.7	38.9	61.7	63.6	41.0	-9.0	0.3	-4.2	-2.2
2007	2.0	-0.8	-3.5	-2.9	35.5	59.2	64.0	42.2	-9.6	0.2	-5.1	-2.4
2008	-4.4	-2.4	-7.0	-4.9	39.4	63.1	72.8	50.3	-9.2	-0.7	-5.4	-3.5
2009	-11.0	-6.6	-12.7	-10.2	52.7	75.2	86.0	64.2	-4.3	0.1	-3.2	-3.0
2010	-9.4	-6.4	-12.0	-9.6	60.1	81.2	94.7	75.7	-3.9	0.3	-3.3	-2.7
2011	-9.6	-4.6	-10.6	-7.6	69.5	84.6	99.0	81.3	-3.3	0.6	-2.9	-1.8
2012	-10.5	-4.3	-8.9	-8.3	85.7	88.2	102.5	85.1	-0.4	1.2	-1.6	-3.7
2013	-7.0	-3.3	-5.4	-5.7	95.4	90.5	104.6	86.2	1.5	1.5	-1.5	-4.4
2014	-6.0	-3.0	-4.8	-5.8	100.4	91.8	104.6	88.1	1.0	1.5	-0.8	-4.7
2015	-5.1	-2.4	-4.2	-4.4	99.8	89.7	105.2	89.0	1.3	2.1	-1.2	-4.3
2016	-4.7	-1.9	-4.8	-3.4	99.7	88.1	107.3	88.6	1.8	2.2	--	-5.0
2017	-3.5	-1.7	-5.1	-2.9	100.0	87.8	108.5	88.1	1.7	2.1	--	-4.8
2018	-2.9	-1.6	-5.7	-2.6	99.7	86.6	109.6	87.0	1.6	2.1	--	-3.9

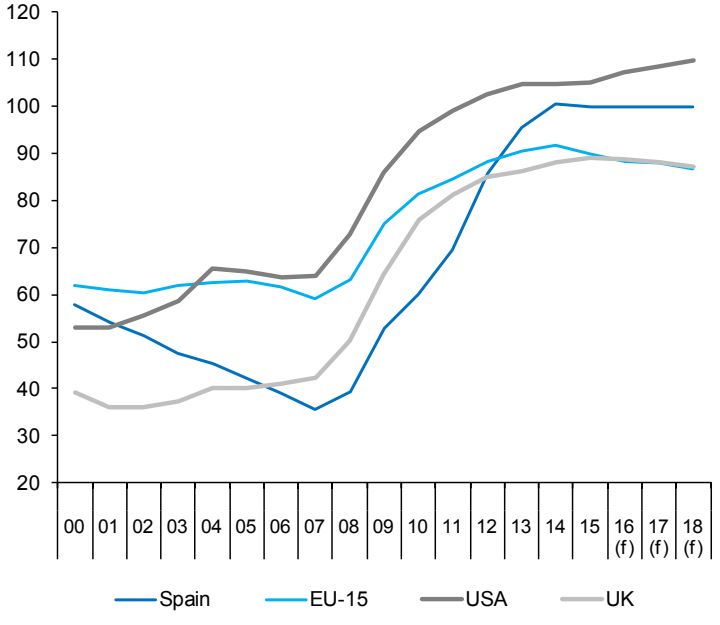
Source: European Commission Forecasts, Winter 2017.

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



(f) European Commission forecast.

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



(f) European Commission forecast.

Table 21b

Imbalances: International comparison (II)

	Household debt (a)				Non-financial corporations debt (a)			
	Spain	EMU-19	USA	UK	Spain	EMU-19	USA	UK
Billions of national currency								
2005	653.5	4,787.8	11,952.9	1,189.8	925.0	7,581.4	8,162.4	1,102.9
2006	780.7	5,198.0	13,232.5	1,310.9	1,158.8	8,229.1	8,978.6	1,201.6
2007	876.6	5,562.9	14,151.4	1,426.4	1,344.5	9,036.4	10,100.3	1,281.6
2008	914.0	5,808.2	14,037.8	1,477.0	1,422.6	9,635.3	10,680.3	1,476.9
2009	906.2	5,937.2	13,800.4	1,473.8	1,406.1	9,569.0	10,153.7	1,414.2
2010	902.5	6,071.9	13,563.9	1,476.9	1,429.4	9,846.5	10,003.2	1,379.5
2011	875.2	6,162.7	13,371.4	1,486.7	1,415.7	10,002.4	10,263.8	1,408.1
2012	838.2	6,150.3	13,439.6	1,509.2	1,309.8	10,148.5	10,773.5	1,481.4
2013	790.6	6,101.5	13,592.6	1,525.5	1,231.2	9,999.9	11,253.2	1,454.1
2014	754.2	6,121.9	13,955.9	1,565.8	1,168.0	10,420.3	11,942.4	1,414.1
2015	729.6	6,190.1	14,290.3	1,612.8	1,133.2	10,932.5	12,753.2	1,394.8
2016 (b)	719.9	6,263.6	14,756.1	1,672.9	1,129.5	11,063.5	13,470.8	1,488.3
Percentage of GDP								
2005	70.2	56.6	91.3	86.3	99.4	89.7	62.3	80.0
2006	77.5	58.3	95.5	90.1	115.0	92.4	64.8	82.5
2007	81.1	59.1	97.7	93.2	124.4	96.1	69.8	83.7
2008	81.9	60.3	95.4	94.4	127.5	100.1	72.6	94.4
2009	84.0	63.9	95.7	97.0	130.3	103.1	70.4	93.1
2010	83.5	63.7	90.6	93.9	132.2	103.3	66.8	87.7
2011	81.8	62.9	86.2	91.3	132.3	102.1	66.1	86.5
2012	80.6	62.5	83.2	90.1	126.0	103.2	66.7	88.4
2013	77.1	61.4	81.4	87.7	120.0	100.6	67.4	83.6
2014	72.7	60.4	80.2	85.9	112.6	102.7	68.7	77.6
2015	67.8	59.2	79.2	86.1	105.4	104.6	70.7	74.5
2016 (b)	64.6	58.4	79.5	86.2	101.4	103.1	72.6	76.7

(a) Loans and securities other than shares, excluding financial derivatives. (b) Until 3rd. quarter, except for USA.

Sources: Eurostat and Federal Reserve.

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

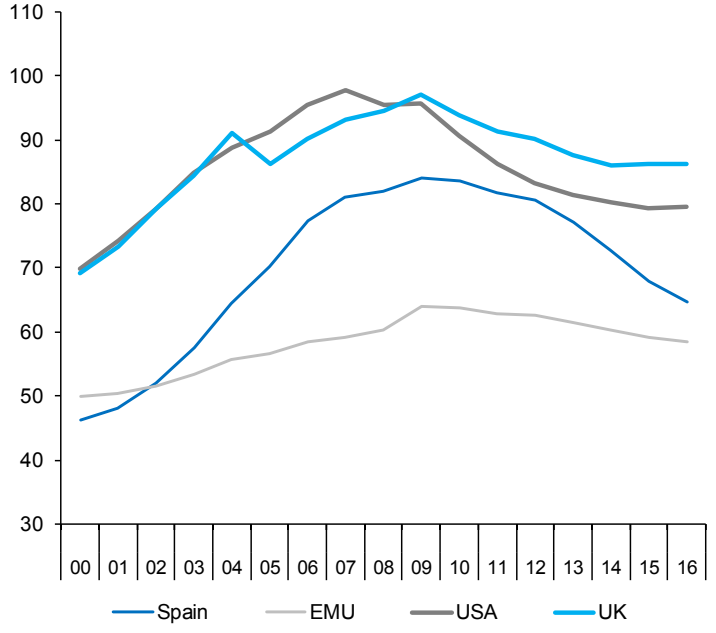
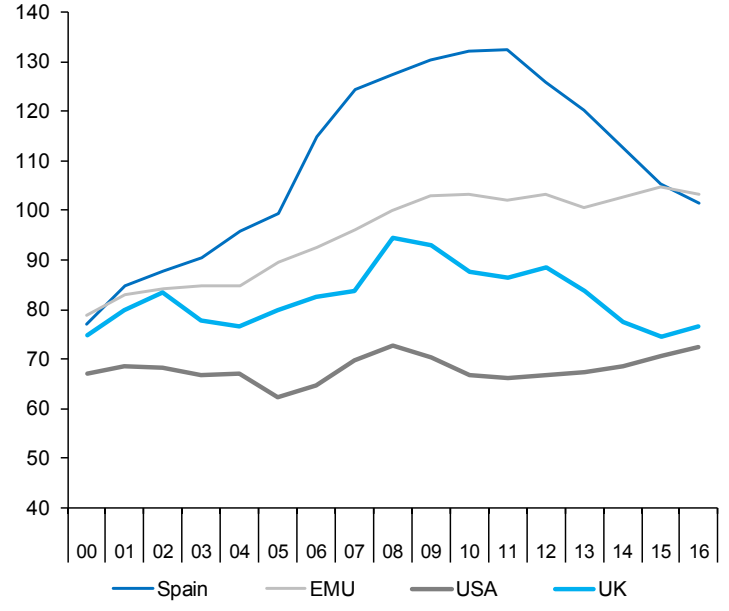


Chart 21b.2.- Non-financial corporations debt
Percentage of GDP



KEY FACTS: 50 FINANCIAL SYSTEM INDICATORS – FUNCAS

Updated: March 15th, 2017

Highlights

Indicator	Last value available	Corresponding to:
Bank lending to other resident sectors (monthly average % var.)	-0.6	December 2016
Other resident sectors' deposits in credit institutions (monthly average % var.)	0.6	December 2016
Doubtful loans (monthly % var.)	-1.5	December 2016
Recourse to the Eurosystem (Eurozone financial institutions, million euros)	554,357	February 2017
Recourse to the Eurosystem (Spanish financial institutions, million euros)	144,184	February 2017
Recourse to the Eurosystem (Spanish financial institutions million euros)- Main L/T refinancing operations	835	February 2017
Operating expenses/gross operating income ratio (%)	54.25	September 2016
Customer deposits/employees ratio (thousand euros)	5,731.21	September 2016
Customer deposits/branches ratio (thousand euros)	38,662.48	September 2016
Branches/institutions ratio	227.33	September 2016

A. Money and interest rates

Indicator	Source:	Average 2001-2014	2015	2016	2017 February	2017 March 15th	Definition and calculation
1. Monetary Supply (% chg.)	ECB	5.4	4.7	5.0	4.5	-	M3 aggregate change (non-stationary)
2. Three-month interbank interest rate	Bank of Spain	2.19	-0.1	-0.26	-0.329	-0.330	Daily data average
3. One-year Euribor interest rate (from 1994)	Bank of Spain	2.5	0.2	-0.03	-0.113	-0.108	End-of-month data
4. Ten-year Treasury bonds interest rate (from 1998)	Bank of Spain	4.4	1.7	1.4	1.6	1.8	Market interest rate (not exclusively between account holders)
5. Corporate bonds average interest rate	Bank of Spain	4.3	2.1	2.3	2.1	-	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 slightly decreased to -0.330% in the first fortnight of March (from -0.329% in February) and the 1-year Euribor has increased to -0.108% (from -0.113% in February). The ECB has announced the continuation of the liquidity program and has also updated its macroeconomic projections, suggesting a more favourable outcome for the Eurozone economy. Meanwhile, the Fed has increased interest rates again in the United States. As for the Spanish 10-year bond yield, it has increased to 1.8%.

B. Financial markets

Indicator	Source:	Average 2000-2013	2014	2015	2016 December	2017 January	Definition and calculation
6. Outright spot treasury bills transactions trade ratio	Bank of Spain	34.6	75.6	75.5	92.55	103.57	(Traded amount/ outstanding balance) x100 in the market (not exclusively between account holders)
7. Outright spot government bonds transactions trade ratio	Bank of Spain	77.7	73.2	65.3	41.23	57.54	(Traded amount/ outstanding balance) x100 in the market (not exclusively between account holders)
8. Outright forward treasury bills transactions trade ratio	Bank of Spain	0.9	2.6	1.3	1.65	0.06	(Traded amount/ outstanding balance) x100 in the market (not exclusively between account holders)
9. Outright forward government bonds transactions trade ratio	Bank of Spain	4.5	4.6	3.4	1.05	1.36	(Traded amount/ outstanding balance) in the market (not exclusively between account holders)
10. Three-month maturity treasury bills interest rate	Bank of Spain	2.3	0.1	0.1	-0.00	0.05	Outright transactions in the market (not exclusively between account holders)
11. Government bonds yield index (Dec1987=100)	Bank of Spain	603.2	1,037.9	1,058.2	1,104.93	1,087.12	Outright transactions in the market (not exclusively between account holders)
12. Madrid Stock Exchange Capitalization (monthly average % chg.)	Bank of Spain and Madrid Stock Exchange	0.4	0.6	0.5	6.6	-0.4	Change in the total number of resident companies
13. Stock market trading volume. Stock trading volume (monthly average % var.)	Bank of Spain and Madrid Stock Exchange	3.7	7.0	-0.2	5.5	13.5	Stock market trading volume. Stock trading volume: change in total trading volume
14. Madrid Stock Exchange general index (Dec1985=100)	Bank of Spain and Madrid Stock Exchange	1,026.8	1,042.5	965.1	943.6	1,006.1[a]	Base 1985=100
15. Ibex-35 (Dec1989=3000)	Bank of Spain and Madrid Stock Exchange	9,767.1	10,528.8	10,647.2	9,352.1	9,982.4[a]	Base dec1989=3000
16. Madrid Stock Exchange PER ratio (share value/ profitability)	Bank of Spain and Madrid Stock Exchange	16.2	26.1	15.4	23.6	18.7[a]	Madrid Stock Exchange Ratio “share value/ capital profitability”

B. Financial markets (continued)

Indicator	Source:	Average 2000-2013	2014	2015	2016 December	2017 January	Definition and calculation
17. Long-term bonds. Stock trading volume (% chg.)	Bank of Spain and Madrid Stock Exchange	4.2	7.4	21.3	-93.1	-26.1	Variation for all stocks
18. Commercial paper. Trading balance (% chg.)	Bank of Spain and AIAF	2.0	-1.3	-0.2	1.6	0.01	AIAF fixed-income market
19. Commercial paper. Three-month interest rate	Bank of Spain and AIAF	2.7	0.6	0.1	-0.24	-0.02	AIAF fixed-income market
20. IBEX-35 financial futures concluded transactions (% chg.)	Bank of Spain	1.3	4.3	1.3	-11.1	-4.5	IBEX-35 shares concluded transactions
21. IBEX-35 financial options concluded transactions (% chg.)	Bank of Spain	8.6	6.4	17.7	35.1	-5.1	IBEX-35 shares concluded transactions

(a) Last data published: March 15th, 2017.

Comment on "Financial Markets:" During January, there was an increase in transactions with outright spot T-bills to 103.57% and also an increase of spot government bonds transactions, which stood at 57.54%, respectively. The stock market has registered an increase by mid-March, with the IBEX-35 up to 9,982 points, and the General Index of the Madrid Stock Exchange to 1006. Additionally, there was a decrease of 4.5% in financial IBEX-35 futures transactions and also a fall of 5.1% in transactions with IBEX-35 financial options.

C. Financial Savings and Debt

Indicator	Source:	Average 2008-2013	2014	2015	2016 Q 2	2016 Q 3	Definition and calculation
22. Net Financial Savings/GDP (National Economy)	Bank of Spain	-2.8	1.6	2.2	2.3	2.4	Difference between financial assets and financial liabilities flows over GDP
23. Net Financial Savings/GDP (Households and non-profit institutions)	Bank of Spain	2.5	3.4	3.6	2.9	3.4	Difference between financial assets and financial liabilities flows over GDP
24. Debt in securities (other than shares) and loans/GDP (National Economy)	Bank of Spain	288.1	320.0	302.3	303.6	301.4	Public debt, non-financial companies debt and households and non-profit institutions debt over GDP

C. Financial Savings and Debt (continued)

Indicator	Source:	Average 2008-2013	2014	2015	2016 Q 2	2016 Q 3	Definition and calculation
25. Debt in securities (other than shares) and loans/GDP (Households and non-profit institutions)	Bank of Spain	81.4	72.4	67.5	66.8	65.2	Households and non-profit institutions debt over GDP
26. Households and non-profit institutions balance: financial assets (quarterly average % chg.)	Bank of Spain	0.6	2.1	1.7	0.9	1.4	Total assets percentage change (financial balance)
27. Households and non-profit institutions balance: financial liabilities (quarterly average % chg.)	Bank of Spain	-1.8	-4.0	-2.9	0.7	-2.9	Total liabilities percentage change (financial balance)

Comment on "Financial Savings and Debt:" During 2016Q3, there was an increase in financial savings to GDP in the overall economy that reached 2.4% of GDP. There was also an increase in the financial savings rate of households from 2.9% in 2016Q2 to 3.4% in 2016Q3. The debt to GDP ratio fell to 65.2%. Finally, the stock of financial assets on households' balance sheets registered an increase of 1.4%, and there was a 2.9% fall in the stock of financial liabilities.

D. Credit institutions. Business Development

Indicator	Source:	Average 2000-2013	2014	2015	2016 November	2016 December	Definition and calculation
28. Bank lending to other resident sectors (monthly average % var.)	Bank of Spain	9.1	-4.6	-4.0	0.9	-0.6	Lending to the private sector percentage change for the sum of banks, savings banks and credit unions
29. Other resident sectors' deposits in credit institutions (monthly average % var.)	Bank of Spain	9.0	-1.5	-0.1	0.1	0.6	Deposits percentage change for the sum of banks, savings banks and credit unions
30. Debt securities (monthly average % var.)	Bank of Spain	10.1	1.2	-15.2	-0.7	-3.6	Asset-side debt securities percentage change for the sum of banks, savings banks and credit unions
31. Shares and equity (monthly average % var.)	Bank of Spain	14.1	-6.8	-6.0	-2.4	1.1	Asset-side equity and shares percentage change for the sum of banks, savings banks and credit unions
32. Credit institutions. Net position (difference between assets from credit institutions and liabilities with credit institutions) (% of total assets)	Bank of Spain	-1.7	-5.9	-5.2	-5.4	-4.5	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 2000-2013	2014	2015	2016 November	2016 December	Definition and calculation
33. Doubtful loans (monthly average % var.)	Bank of Spain	40.5	-12.7	-22.4	0.4	-1.5	Doubtful loans. Percentage change for the sum of banks, savings banks and credit unions.
34. Assets sold under repurchase (monthly average % var.)	Bank of Spain	-0.8	-6.1	-30.8	8.4	5.5	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	11.1	-1.1	-1.8	-0.7	-0.1	Equity percentage change for the sum of banks, savings banks and credit unions.

Comment on "Credit institutions. Business Development:" The latest available data as of December 2016 show a fall in bank credit to the private sector of 0.6%. Data also show an increase in financial institutions deposit-taking of 0.6%. Holdings of debt securities fell by 3.6%. Also, doubtful loans decreased 1.5% compared to the previous month.

E. Credit institutions. Market Structure and Eurosystem Refinancing

Indicator	Source:	Average 2000-2013	2014	2015	2016 June	2016 September	Definition and calculation
36. Number of Spanish credit institutions	Bank of Spain	199	138	135	130	129	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	73	86	82	82	81	Total number of foreign credit institutions operating in Spanish territory
38. Number of employees	Bank of Spain	246,418	203,305	203,305	202,954	202,954	Total number of employees in the banking sector
39. Number of branches	Bank of Spain	40,703	31,817	30,921	30,207	29,492	Total number of branches in the banking sector
40. Recourse to the Eurosystem (total Eurozone financial institutions) (Euro millions)	Bank of Spain	-	406,285	460,858	454,537	554,357[(a)]	Open market operations and ECB standing facilities. Eurozone total
41. Recourse to the Eurosystem (total Spanish financial institutions) (Euro millions)	Bank of Spain	-	111,338	122,706	123,577	144,184[(a)]	Open market operations and ECB standing facilities. Spain total

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

Indicator	Source:	Average 2000-2013	2014	2015	2016 June	2016 September	Definition and calculation
42. Recourse to the Eurosystem (total Spanish financial institutions): main long term refinancing operations (Euro millions)	Bank of Spain	22,794	21,115	10,515	3,265	835[(a)]	Open market operations: main long term refinancing operations. Spain total

(a) Last data published: February 2017.

Comment on "Credit institutions. Market Structure and Eurosystem Refinancing:" In February 2017, recourse to Eurosystem funding by Spanish credit institutions reached 144.18 billion euro.

MEMO ITEM: From January 2015, the ECB also offers information on the asset purchase programs. The amount borrowed by Spanish banks in these programs reached 234.8 billion euro in February and 1.78 trillion euro for the entire Eurozone banking system.

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

Indicator	Source:	Average 2000-2013	2014	2015	2016 June	2016 September	Definition and calculation
43. "Operating expenses/gross operating income" ratio	Bank of Spain	50.89	47.27	50.98	53.79	54.25	Operational efficiency indicator. Numerator and denominator are obtained directly from credit institutions´ P&L accounts
44. "Customer deposits/ employees" ratio (Euro thousands)	Bank of Spain	3,519.51	5,892.09	5,595.62	5,605.73	5,731.21	Productivity indicator (business by employee)
45. "Customer deposits/ branches" ratio (Euro thousands)	Bank of Spain	21,338.27	40,119.97	36,791.09	37,663.62	38,662.48	Productivity indicator (business by branch)
46. "Branches/ institutions" ratio	Bank of Spain	205.80	142.85	229.04	232.36	227.33	Network expansion indicator
47. "Employees/ branches" ratio	Bank of Spain	6.1	6.8	6.57	6.72	6.75	Branch size indicator
48. Equity capital (monthly average % var.)	Bank of Spain	0.11	0.07	0.01	0.02	-0.01	Credit institutions equity capital variation indicator
49. ROA	Bank of Spain	0.45	0.49	0.39	0.40	0.41	Profitability indicator, defined as the "pre-tax profit/average total assets"
50. ROE	Bank of Spain	6.27	6.46	5.04	4.93	4.91	Profitability indicator, defined as the "pre-tax profit/equity capital"

Comment on "Credit institutions. Efficiency and Productivity, Risk and Profitability:" In September 2016, most of the profitability and efficiency indicators improved for Spanish banks. Productivity indicators have also improved since the restructuring process of the Spanish banking sector was implemented.