BBVA | RESEARCH

Spain Economic Outlook

1ST QUARTER 2016 | SPAIN UNIT

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Growth is expected to stabilise around 2.7%, but the increase in uncertainty threatens the recovery

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Deleveraging has led to a greater reliance on own funds, especially in small companies

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Closing Date: 5 February 2016

1 Editorial

Both the recent evolution of the economy and the factors underpinning recovery lead us to foresee GDP growth stabilising over the next two years at around 2.7%, in a context in which the strength of the data at national level in recent months is tempered by doubts and uncertainties both within Spain and beyond. Activity data from year-end 2015 and early 2016 show that job creation and the growth in domestic demand remain buoyant. Additionally, we expect a more expansionary monetary policy than we did three months ago, while the fall in oil prices -significant and unexpected in November- will help to continue improving Spanish companies' competitiveness and boosting households' income. In addition, exporters have redirected their goods and services to European destinations, which has offset the negative impact of lower demand in emerging countries. Finally, the fiscal stimulus was greater than expected and has supported growth in domestic demand. All this has offset the increased uncertainty associated with the domestic context, geopolitical risks, volatility in the financial markets and the recovery of the world economy. In any case, if these sources of uncertainty were to be prolonged, activity would be negatively affected.

Activity data suggest that over the end of last year and the beginning of this year growth has remained high, with hardly any signs of slowing. In particular, GDP in the fourth quarter of last year was 0.8% up on the third quarter. Moreover, the data available at the time of writing suggest that growth will continue at similar rates (0.8% QoQ) in the first quarter of 2016. Therefore, the momentum in activity is continuing and, on an annualised basis, is larger than 3.0%. The main factor behind growth is the strength being shown by domestic demand, and particularly household consumption, which is growing at rates between 3 and 4% on an annualised basis. Also, a greater deviation is now expected in regards to the public deficit target, largely associated with discretionary policies. The reduction in spending has been lower than expected, which has boosted employment and investment more than what was forecast three months ago. Additionally, exports of goods and services are showing a very positive trend, even though the decline in demand which has occurred in emerging countries. In this regard, destinations such as Germany and the UK have offset the drag entailed by the fall in growth expectations in other geographic areas. Finally, it is noteworthy that all this has occurred despite the fact that recovery in housing investment has been weaker than anticipated a year ago.

Monetary policy and the fall in oil prices will support the recovery. The fall in oil prices is especially significant for an importing economy such as Spain's. Although in recent months uncertainty has increased about how much of the decline is due to factors of supply or demand, the continuing growth in exports of goods and services, along with the evidence pointing to a significant increase in current and expected oil production suggest that the net impact on growth will be positive and significant. In particular, it is estimated that the reduction in the forecast price of oil for the next two years could contribute, on average, more than 1 percentage point to GDP during that period. On the other hand, the European Central Bank announced a reduction in benchmark interest rates in December and an extension of its programme of asset purchases, delaying its completion from September 2016 to March 2017. Also, in January the ECB expressed its willingness to consider additional measures at its next meeting, in order to prop up inflation expectations trying to fulfil its mandate. The result will be a monetary policy that remains expansive for an extended period of time, with historically low interest rates, which will help to continue the process of deleveraging in the businesses and families that need it, as well as stimulating solvent demand for credit.

In any case, the scenario presented here faces a particularly high degree of uncertainty, with an accumulation of atypical risks that could slow or even halt the recovery. In recent weeks there has been increased volatility in the capital markets. It is unlikely that this is due to changes in expectations about the monetary policy of the US Federal Reserve (widely anticipated for several months), or a lower level of

activity in the world economy. Recent data, although weaker than expected in some countries, are not consistent with a sharp slowdown in worldwide growth. It is more likely to be due to increased uncertainty about the potential impact that the fall in oil prices could have in some parts of the world economy (emerging countries, companies related to the energy sector, financial institutions that have financed their debt, etc.) and, above all, the increased probability of occurrence of risk scenarios. Doubts have also been raised about the pace of growth in China, its process of ongoing transition to a new production model and the ability of the authorities to ensure that the changes take place in a calm and orderly manner. If prolonged, this insecurity will inevitably end up affecting economic activity.

Domestically, uncertainty about economic policy stands out as one of the main obstacles to sustaining growth. Being certain about the regulatory, fiscal or institutional environment is one of the necessary conditions for proper decision-making by families and companies. Without this certainty, there can be delays in investment projects or the purchase of goods and services, which would adversely affect domestic demand and expectations of future growth. The current political context may lead to an increase in this kind of uncertainty. As shown in this publication (see Box 1), the costs in terms of growth could be high. The probable deviation from the public deficit target this year is an example. The latest data observed and the current budgets suggest that, given the expected scenario, the deviation from the deficit target at the end of 2016 could reach 0.6% of GDP. In the absence of discretionary policies, this imbalance would not have occurred, since the recovery would have been sufficient to reduce the public deficit to levels consistent with the commitments made. If measures to help correct the deviation cannot be credibly implemented, the recovery may be endangered by a tightening of financing conditions for the Spanish economy, which would limit the impact of monetary policy and increase tensions with the EU. Therefore, it is essential that one of the priorities of the new government should be the announcement of a credible fiscal consolidation plan to ensure the agreed targets are met, relying mainly on reforms that boost growth and job creation.

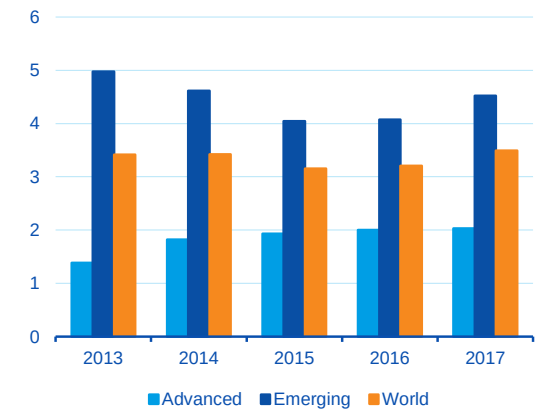
It is necessary to reduce this uncertainty, not only with regard to fiscal policy, but also in other areas. The economic crisis has led to a sharp decrease in private consumption, which could have been greater if the poorest households had not undertaken processes of family reunification. This, together with the greater weight of durable goods - more sensitive to changes in purchasing power - in the consumption basket of households with greater spending power, have allowed the inequality in consumption among families to fall (see Box 3). However, many of its effects may be cyclical, and in any case they are certainly not due to voluntary causes. Therefore, the implementation of policies to reduce temporary employment and increase employability is still needed, to make sure that the jobs created are decent jobs which help to reduce inequality. It is also essential to grant continuity to policies that promote increased productivity. Larger companies have access to better financing instruments (see Box 2), so they are able to take advantage of economies of scale and, in short, be more productive. In this context, digitalization plays an essential role. One prime example is the transformation that is being faced by the financial sector, where the customer - multi-channel, better informed and more demanding than in the past - occupies a central position. But it is not only the commitment of banks to the digitalization of sales offering that is encouraging the penetration of electronic banking; individual characteristics are also important. In this regard, we find that education and, in particular, skill in the use of new technologies significantly affects the propensity to use internet banking in Spain (see Box 4).

2 A global outlook of anaemic and more fragile growth[1]

The intensification of some risk clusters in the last quarter of 2015 has prompted a new downward revision of expected world economic growth this year. The transition to a pattern of slower growth in China, with reforms in the economy and changes in the definition of key objectives such as the exchange rate has been accompanied by episodes of severe financial volatility and declines in raw material prices. All this leads to a much less favourable global panorama for large commodity-exporting economies such as Russia or Brazil, but also for those perceived as more vulnerable financially.

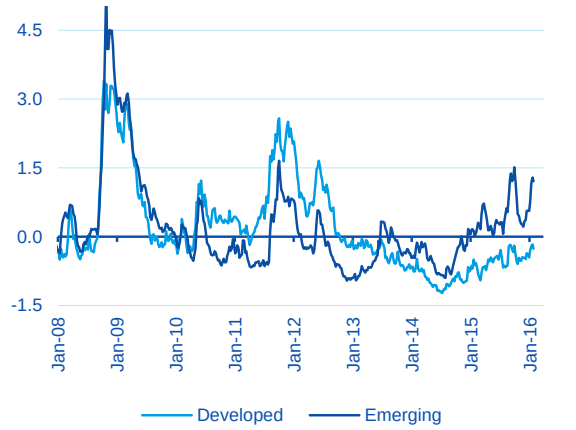
World GDP will grow 3.2% in 2016, repeating the 2015 breakthrough, and accelerate moderately in 2017 to 3.5%. This growth, which remains the lowest since 2009, is conditioned by the decline in demand from the bloc of emerging economies, particularly in Latin America, which look like contracting for two years in a row. The recovery in developed economies remains fragile and highly dependent on the eventual impact of the slowdown in world trade and the effect of financial instability on production, business investment decisions and consumer spending. With the US growing at 2.5% and the euro zone by less than 2%, the tenuous improvement in activity in the developed economies as a whole will not be enough to offset the relatively poor performance expected from the emerging markets.

Figure 2.1
World GDP, (% YoY)



Source: BBVA Research

Figure 2.2
BBVA index of financial stress (normalised values)



Source: BBVA Research and CRB

1: For further detail, see BBVA Research's Global Economic Outlook and Europe Economic Outlook publications for the first quarter of 2016, available at: https://www.bbvaresearch.com/

The recent behaviour of the financial markets is largely explained by doubts about the strength of the world economic cycle. Even regardless of the magnitude of the slowdown China may be experiencing, the fact that the major emerging economies are being jointly affected by the continuing correction in the price of raw materials has contributed to increasing risk aversion on a global scale. China and the Latin American countries are together those with the biggest capital outflows and consequently those in which financial conditions are deteriorating most. The BBVA financial stress index for emerging countries has climbed back up to the levels seen in the summer of 2015 (first wave of the Chinese stock exchange crisis), matching the stress levels of 2011. Unlike then, volatility remains contained in the developed economies, in a context in which the reallocation of capital to financial assets with a lower risk profile is intensifying the flight-to-safety in sovereign bonds of countries such as Japan, the US or Germany.

The orientation of monetary policy adopted by central banks in developed economies will remain decisive. The start of the process of normalisation of interest rates by the US Federal Reserve in December 2015 has not led to any substantial increase in financial volatility, thanks to the Fed's repeated assurances that the process will be a gradual one. The recent correction in inflation figures in developed countries in response to falling oil prices, and the renewed fall in medium-term price expectations may once again change how their central banks react; in the case of the Fed, delaying the next rate hike; in that of the ECB and the Bank of Japan, making their monetary strategy even more accommodative.

The sharp increase in stocks, unprecedented in recent years, is consistent with the steep fall in the price of oil since mid-2014 and with growth in supply far ahead of that seen in consumption, which has been in line with its historical average. Until the spring of 2015, the excess in supply reflected the United States' increase in production to which, since the end of 2014, the oil cartel has added with its policy shift of not cutting production in the face of declining prices. Since September 2015, production has begun to slow down, especially in the US and other non-OPEC countries, where production costs and higher leverage have begun to have an effect. However there is still excess supply equivalent to 1.2% of world consumption. Added to this resistance of supply to a lower price environment, more recently we have started to see a context of financial instability and risk aversion that is symptomatic of a gradual lowering of expectations of demand. All these factors have accelerated the trend toward falling prices in the last part of 2015 and early 2016. In the medium term, as excess supply dwindles, there should be a gradual increase in prices, albeit less intense than that forecast in a scenario in which the world economy were to regain more vigorous growth rates than the current ones.

All the same, **the world economy faces a 2016 of limited growth (3.2%), similar to that of 2015, and with a risk balance showing a negative bias and being concentrated in the emerging bloc.** How China's economy evolves, both in regards to the degree of slowdown in activity and to how the authorities manage the existing financial imbalances, will continue to have a significant influence on capital flows and commodity prices in general, not just oil. The level of corporate indebtedness in those emerging countries most vulnerable to the circumstances described constitutes an additional source of instability, in a context of lower profits and higher financing costs (bigger risk premiums). Allied to this, geopolitical tensions in certain parts of the world and the risk of a scenario of low growth and low inflation in major developed economies complete the outlook for the world economy in 2016.

Euro zone: no changes to expected growth. Inflation forecasts revised sharply downwards. The ECB, prepared to strengthen monetary stimulus measures

Euro zone GDP has matched the behaviour expected three months ago, settling at quarterly growth rates of 0.3-0.4%, giving **an advance expected figure of 1.5% for the whole of 2015**. If the recent recovery dynamic is maintained, **the euro zone could grow by 1.8% this year and 2.0% in 2017**, the same figures that were forecastedlast quarter. The positive effect that the fall in energy prices, a more expansionary fiscal

policy and the continuation of loose monetary conditions would have on domestic demand and specifically on private consumption, would be partly offset by the negative impact of the slowdown in international trade on the export of goods and of increased financial and political instability on investment decisions.

In fact, **the composition of GDP for the third quarter of 2015 and forecast for the fourth shows consumption, both public and private, as the most dynamic item,** thanks to the recovery in employment and the fall in prices due to cheaper oil, in a context in which household confidence has remained high. **The negative surprises come basically from capital expenditure,** despite businesses' improved perception of the economic situation, the increase in new bank lending and the low interest rates.

Doubts about the strength of external demand (trade in euro zone goods is suffering as a result of both falling sales to the emerging bloc and a slowdown in sales to developed countries) **and the climate of political uncertainty prevailing in certain countries could be acting as a drag on investment.** Furthermore**, the delay in meeting public deficit objectives and implementing key structural reforms to revitalise the activity in the medium term are other factors that may also be hindering decision-making on capital expenditure.**

In this context of political instability**, the role of the ECB will continue to be crucial to prevent a serious deterioration in financing conditions.** In December of 2015, faced with deterioration in the global economic context and the fall in commodity prices, the ECB decided to bolster its stimulus measures with a further cut in its deposit facility rate to -0.3% and the extension of its bond-buying programme until at least March 2017. The stability of the euro exchange rate against the dollar, in a range of 1.08 to 1.10 in the past two months, and above all **the fall in inflation rates caused by the downward revision of the oil price forecast for 2016, led the ECB in January to open the door to a new round of stimulus measures**, steps which might be announced as early as March**. If Brent crude trades at an average of $30 a barrel in 2016, euro zone headline inflation would be just 0.2%, 0.9 percentage points less than was forecast three months ago.** The gradual recovery of energy prices in 2017 also reduces expected inflation for the following year, which at an average of 1.4% is far removed from the ECB's objective of price stability. All this without assuming significant second round effects on core inflation deriving from cheaper energy.

3 Growth outlook for the Spanish economy

The recovery continues, in spite of the uncertainty

In 2015 the Spanish economy consolidated the recovery begun in mid-2013. Although the macroeconomic environment was not without risk, the positive trend in economic activity and employment was maintained, encouraged by significant tailwinds (such as the fall in oil prices**), the increased support from fiscal and monetary policies and the structural changes made in recent years**. Among the latter, we can highlight the correction of internal imbalances, some of the reforms set in train and changes in the structure of production, such as the reorientation of investment towards machinery and equipment and of aggregate demand towards exports.

In line with these developments, quarterly growth was at its fastest at the end of the first half of the year, with a rate of 1.0%, while during the second half it stabilised at 0.8% QoQ[2]. Consequently, **the Spanish economy ended 2015 with a higher growth in GDP than expected a year ago (3.2% vs 2.7%)**, which also marked the first annual growth above the historical average since 2007[3]. **As in 2014, the expansion of activity throughout the year was concentrated in domestic (mainly private) demand**. Firstly, it is worth noting the robust growth of consumption and productive investment, and secondly the recovery in residential investment which, despite being less vigorous than expected, resulted in the first annual increase in nine years. **By contrast, net external demand drained growth for the second consecutive year**, despite the fact that exports increased in an environment of slowdown among the emerging economies and gradual recovery in the developed economies. Thus, the balance of trade's negative contribution to growth is explained by the upturn in imports.

Going forward, the fundamentals of the Spanish economy support the continuation of the recovery over the next two years. BBVA Research estimates indicate that activity will grow by 2.7% in both 2016 and 2017, which will allow the creation of around one million jobs during the period as a whole and reduce the unemployment rate to around 17.5%[4].

In the international economic outlook, a global growth similar to that recorded in the previous year (3.2% in 2016 and 3.5% in 2017) is expected, which in the case of the European economy will mean increases in GDP of around 1.8% in 2016 and 2.0% in 2017. This factor, along with the geographical diversification of Spanish exports, will positively contribute to the development of export sales, despite the euro's appreciation against emerging markets' currencies. **Tailwind from the recent fall in oil prices** (more than 40% since the beginning of the third quarter of 2015) **is added to the external factors.** While BBVA Research estimates point to a gradual stabilisation of prices at around $45 per barrel on average for 2017, **the net impact of the downward revision in prices will be positive, and could contribute to economic growth by more than two points in the 2016-2017 two-year period.**

Domestically, we expect fiscal policy to remain slightly expansionary, contributing to growth in the short term, but leading to further failure to meet budgetary targets. In addition**, the gradual recovery of the labour market, the improvement in financing conditions for businesses and households** and the advanced stage of certain internal adjustment processes will support growth in domestic demand.

Nevertheless, there is a perceived higher probability of occurrence of certain risk events. Economic policy uncertainty in Spain has increased, and this could have significant consequences for households' and businesses' consumption and investment decisions. Although at the time of writing real activity and

2: All the figures mentioned regarding the quarterly national accounts have been seasonally and working days adjusted (SWDA).
3: The average annual growth between 1971 and 2014 stood at around 2.5%.
4: In average terms, employment will grow at an annual rate of 3.0% and the unemployment rate will be around 18.3% in 2017.

employment data do not show any deterioration as a result of the increased uncertainty, if it is not solved quickly and favourably, the impact could be negative and significant.

In addition, some external risks remain or have even increased their potential impact on the Spanish economy. In particular, **we are seeing increased risks associated with the slowdown in emerging economies, especially China and oil exporting countries.**

2015: the year in which Spain once again grew above its historical average

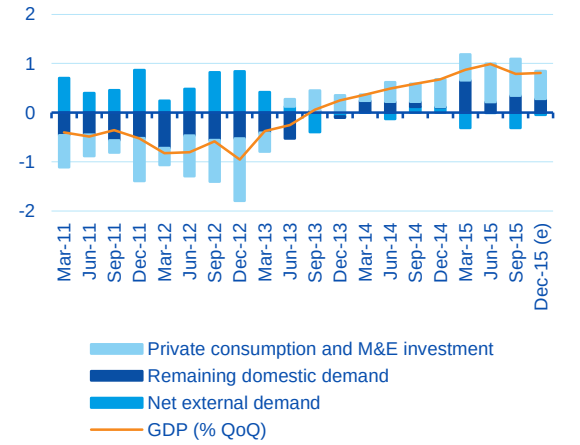
After the Spanish economy posted a positive average annual growth rate in 2014 (1.4%), expectations were that 2015 would be the year in which it would grow by more than its historical average (2.5% between 1971 and 2014) for the first time since 2007. Specifically, the recovery was expected to reach its top speed during the first half of the year, helped by tailwinds, giving way to a gradual slowdown in the latter part of the year. **Confirming the forecasts, the economy gained traction during the first half of 2015, but during the second half it experienced a slowdown that was less pronounced than anticipated.** Thus, in the absence of detailed results**, the GDP advance estimates published by the National Statistics Institute (INE) indicated that growth stabilised at 0.8% QoQ (3.5% YoY)[5] in 4Q15,**. A higher value than the one expected at the beginning of the quarter (BBVA Research: 0.7% QoQ). Thus, 2015 closed with an average annual GDP growth of 3.2%, an improvement of 0.5 pp on the rate estimated a year ago.

With regard to GDP breakdown, **partial short-run economic indicators show that, in 4Q15, activity was again underpinned by domestic demand,** (0.8 pp QoQ), primarily on private demand (see Figure 3.1). In contrast, **external demand made no contribution to growth**, since the increase in imports balanced out the increase in exports. At year-end, domestic demand contributed 3.6 pp to annual GDP growth, while net external demand drained growth for the second consecutive year (-0.4 pp on this occasion).

Looking ahead to the first quarter of 2016, the available information suggests that **the recovery trend of the Spanish economy is being extended (MICA-BBVA forecast[6]:0.8% QoQ)** (see Figure 3.2). However, uncertainty is high, as evidenced by the results of the BBVA Economic Activity Survey (EAE-BBVA)[7], which since mid-2015 have pointed to a slowdown in growth expectations (see Figures 3.3 and 3.4).

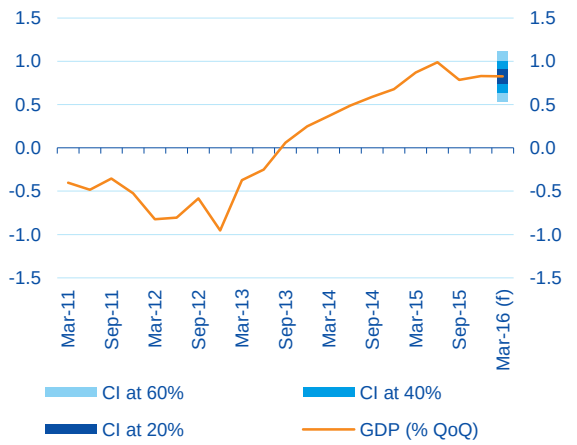
5: The details of the Quarterly National Accounts (CNTR) for 4Q15 are due to be released on 25 February 2016, with a possible revision of the advance estimate.
6: For more details on the MICA-BBVA model, see M. Camacho, and R. Domenech (2010):"MICA-BBVA: A Factor Model of Economic and Financial Indicators for Short-Term GDP Forecasting" BBVA WP 10/21, available at:http://goo.gl/zeJm7g
7: For more information on the BBVA Survey of Economic Activity (EAE-BBVA), see Box 1 of Spain Economic Outlook, Second quarter 2014, available at : http://goo.gl/epUinr

Figure 3.1
Spain: contributions to quarterly GDP growth (%)



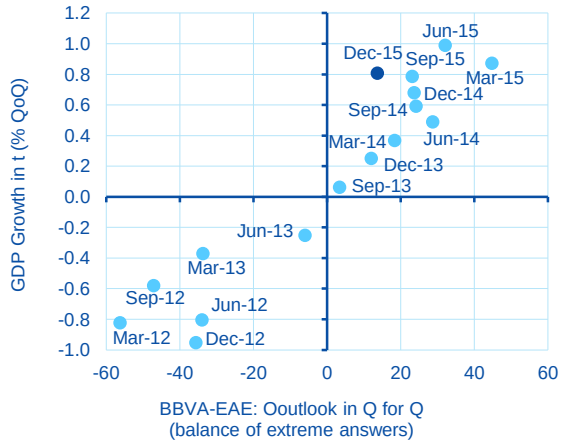
(e): estimate.
Source: BBVA Research based on INE

Figure 3.2
Spain: observed GDP growth and MICA-BBVA model estimates (% QoQ)



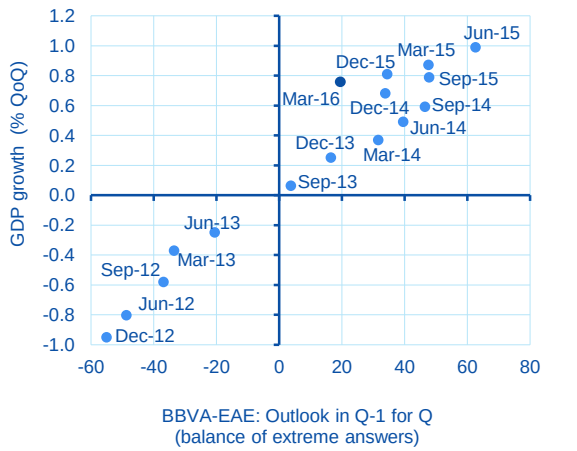
(e): estimate.
Source: BBVA Research based on INE

Figure 3.3
Spain: economic growth and view of respondents in the EAE-BBVA



Source: BBVA Research based on INE

Figure 3.4
Spain: economic growth and expectations of EAE-BBVA respondents in the previous quarter



(e): estimate.
Source: BBVA Research based on INE

Domestic demand contribution to growth doubled over the course of the year, although in 4Q15 it moderated its momentum

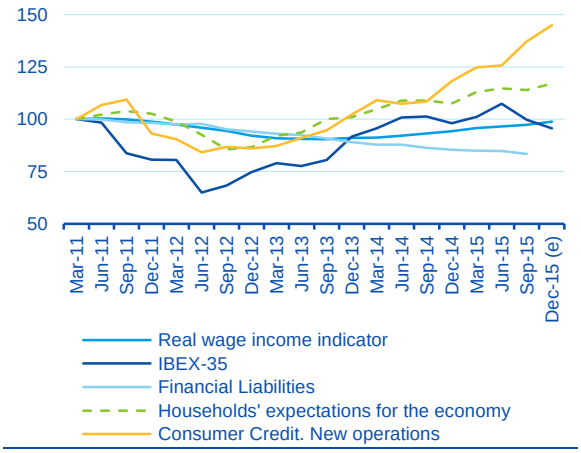
Indicators of household spending, for both goods and services[8], suggest that **household spending grew again in the fourth quarter, although at a slower pace than in the previous one.** Regarding recent developments in its fundamentals, family disposable income is expected to have increased between October and December, due as much to the effect of job creation on the wage component as to the bringing forward of the reduction in the income tax rate that was to have taken effect in 2016. In contrast, the fall in

8: A detailed analysis of the trend in household expenditure by product type can be found in the Consumption Outlook journal covering the second half of 2015, available at: https://goo.gl/VAKSbs.

equity prices was expected to have reduced the contribution of net wealth to the growth in spending, despite the expected reduction in financial liabilities and the increase in housing prices.

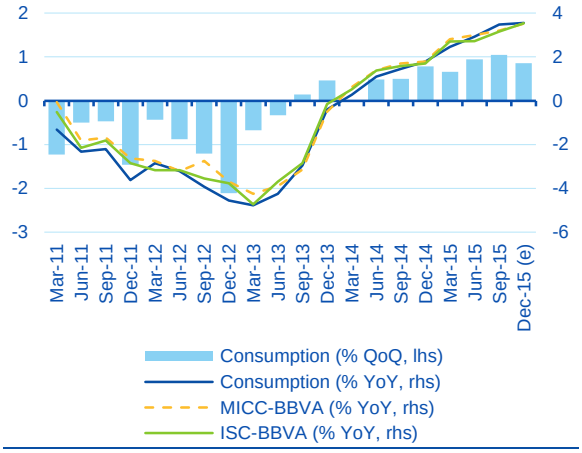
Household spending has also benefited from the rise in new lending transactions, while the view of households regarding the economic situation remained favourable at the end of the year (see Figure 3.5). In summary, both the composite consumption indicator (ISC-BBVA) and the coincident consumption indicators model (MICC-BBVA) suggest that household spending grew by around 0.9% QoQ in 4Q15, a tenth of a point less than in 3Q15 (see Figure 3.6). Thus, **household spending is expected to have increased by about 3.1% in 2015, almost two points more than in 2014.**

Figure 3.5
Spain: drivers of consumption (SWDA data. 1Q11 = 100)



(e): estimate.
Source: BBVA Research based on MINECO, Datastream, CE and Banco de España

Figure 3.6
Spain: observed data and real time estimates of household consumption

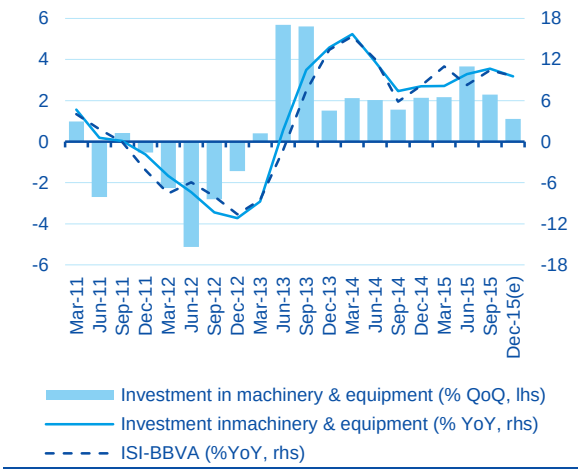


(e): estimate.
Source: BBVA Research based on INE

Machinery and equipment investment is likely to have seen slightly slower growth in 4Q15. Although financing conditions remained favourable at the end of the year, increased uncertainty - associated with emerging economies, volatility in capital markets and the domestic political context - could adversely affect the launching of investment projects.Thus, although some indicators of this demand component performed better than in 3Q15, such as industrial confidence and capital goods order-book, others slowed or even fell, such as industrial output and capital imports. However, **as shown in Figure 3.7, the composite investment indicator (ISI-BBVA) suggests an increase in machinery and equipment investment of 1.1% QoQ (9.5% YoY), 1.2 points less than in the previous quarter.** Thus, 2015 is estimated to have ended with an average annual increase in this component of demand of 9.6%, just one point below that recorded in 2014 (10.6%).

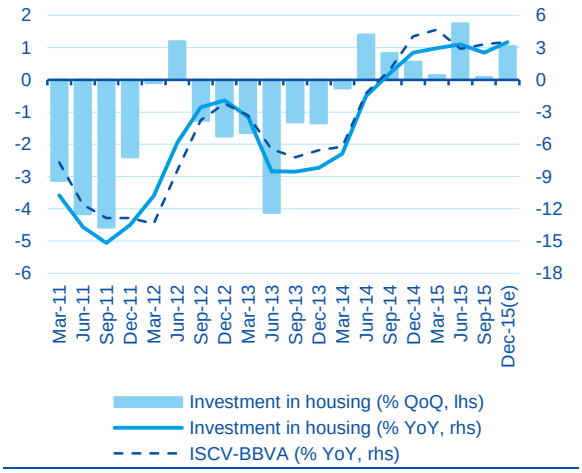
Despite the mixed signals coming from its indicators, **residential investment is expected to have returned to growth in 4Q15 after its virtual stagnation in the previous quarter.** During the fourth quarter, the trend in the construction sector was estimated to have been characterised by a further improvement in employment and a recovery in business confidence. However, the approval of building permits was estimated to have fallen from the previous quarter. All this in an environment in which home sales remained stable compared to 3Q15. As a result, **the composite housing construction investment indicator(ISCV-BBVA) points to an increase in 4Q15 of 1.1% QoQ (3.0% YoY),** and closes its seventh quarter of consecutive growth (see Figure 3.8). Thus, residential investment ended 2015 with an annual increase of 2.9%, the first positive average annual growth since 2007.

Figure 3.7
Spain: observed data and real-time estimates for machinery and equipment investment



(e): estimate.
Source: BBVA Research based on INE

Figure 3.8
Spain: observed data and real-time estimates for housing investment



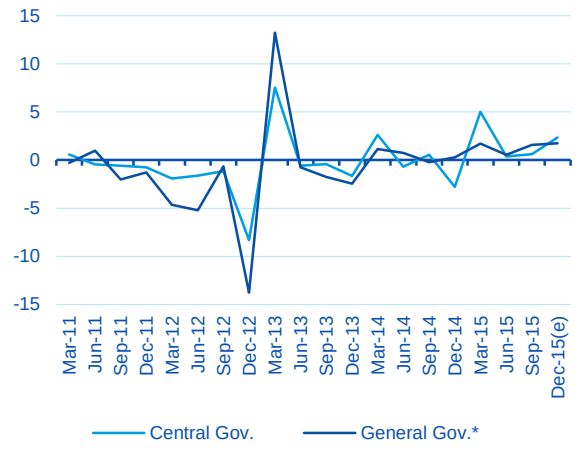
(e): estimate.
Source: BBVA Research based on INE

Public sector demand increased at the end of 2015, in line with the expansionary stance of fiscal policy

After the surprise increase recorded in the third quarter, it is estimated that public spending expanded again in the fourth quarter. Adjusted for season and working day variation (SWDA), the State's budget execution figures outturn to November show a slightly bigger **increase in nominal public sector consumption than in the previous quarter** (see Figure 3.9). Similarly, the trend in public employment according to the Labour Force Survey (EPA in Spanish), together with the return of a portion of the 2012 extra payment to civil servants suggest a **greater contribution of the wage component to public expenditure.** In fact, job creation in the public sector accelerated in the fourth quarter to 1.1% QoQ SWDA (see Figure 3.10). Consequently, it is estimated that the **real expenditure by the administrations taken as a whole grew by 1.0% (4.3% YoY) during the fourth quarter of 2015, 0.1 points more than in 3Q15.** Thus, public consumption is estimated to have closed the year with an increase of around 2.7% over the previous financial year, the first expansion of this component of demand since 2010.

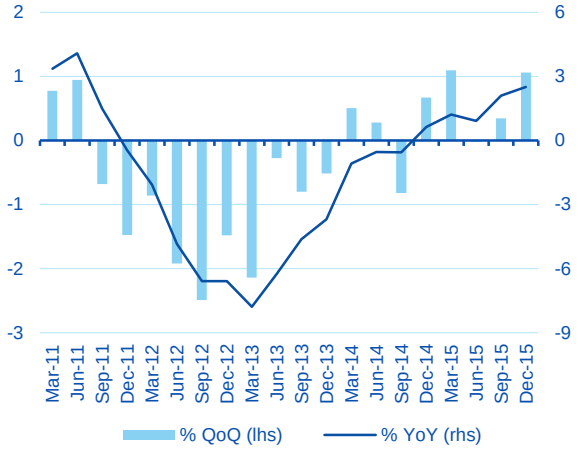
Meanwhile, the fall in official tendering processes registered up to November points to a moderation of public investment in 4Q15, following its upturn in the first half of the year. Consequently, it is estimated that **non-residential construction investment marginally slowed its momentum, with growth in the fourth quarter at around 0.7% QoQ** (6.6% YoY), three tenths of a point less than in 3Q15. Despite this slowdown, investment in other buildings is estimated to have increased by around 7.6% in 2015, almost seven points higher than in 2014.

Figure 3.9
Spain: observed data and estimates for nominal public sector consumption (% QoQ, swda)



(e) estimate.
(*)Among other items, this does not include fixed capital consumption.
Source: BBVA Research based on MINHAP and INE

Figure 3.10
Spain: salaried public sector employees (swda)

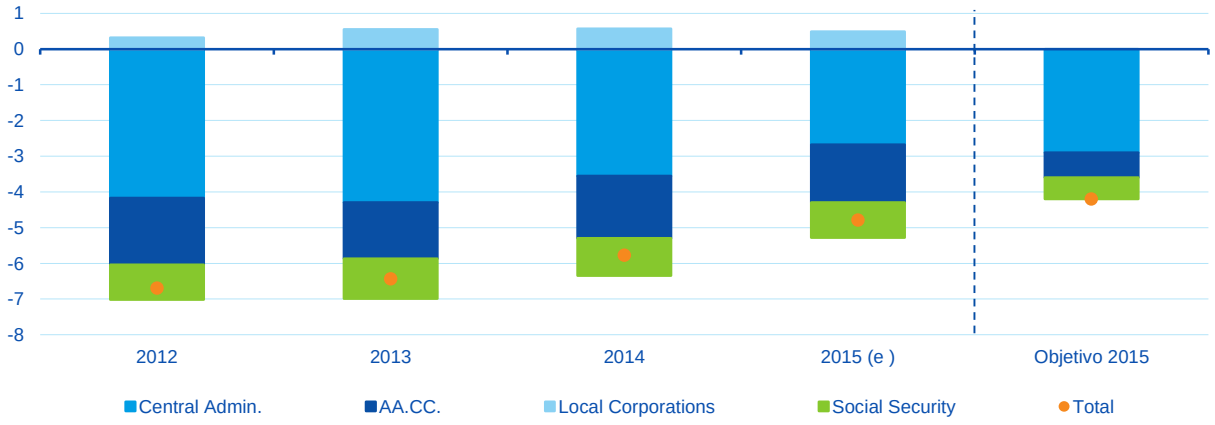


Source: BBVA Research based on INE

In this context, **the improvement in public accounts estimated for 2015 was apparently assisted by the cyclical recovery of the tax bases**, which supposedly offset the structural decline in revenue deriving from the tax cut. In addition, public spending was estimated to have been reduced again, largely due to improvements in the labour market, bringing down the amount of unemployment benefits, and to the reduction in financial costs.

Thus, **it is estimated that at year-end 2015, the public deficit stood at 4.8%**, a reduction of nearly one percentage point of GDP compared to 2014. However, **this would not be sufficient to meet the stability target (4.2%)**. In this regard, the known implementation data confirm a **failure to meet the target by the Autonomous Communities as a whole, although their 2015 deficit was lower than the one recorded in 2014.** Similarly, Social Security recorded a deviation from its target, closing the year with a similar deficit to 2014. These deviations were estimated to have been partly offset by the **good performance of local governments and, above all, of the central government**, which improved its figures from the previous year in 2015 (Figure 3.11).

Figure 3.11
Spain: net funding capacity (+) or requirement (-) of the Public Administrations by sub-sector (% GDP)



Source: BBVA Research based on MINHAP and INE

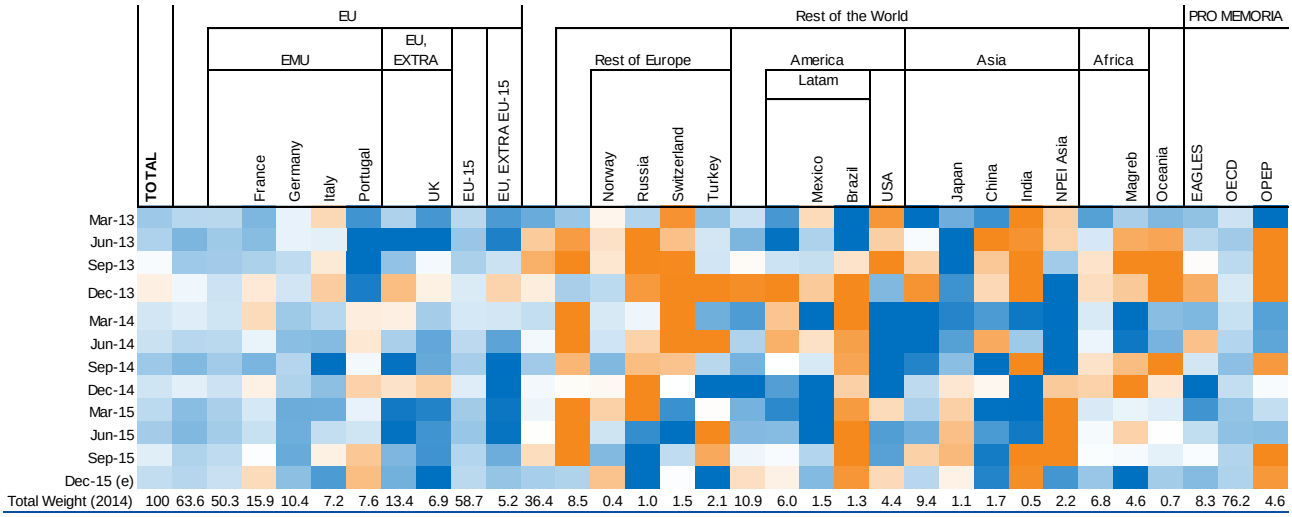
Trade flows slowed at the end of 2015, but this did not negatively affect the progress made over the whole year

The second half of 2015 was marked by **a global situation less favourable for Spanish exports than the one recorded in the first.** Although oil prices fell again and pushed down costs, the euro real effective exchange rate appreciated and the growth of emerging countries lost momentum. Accordingly, the foreign trade indicators available confirm the **fall in external demand for goods from some of the large emerging economies** (such as Brazil, India and Turkey)[9]. However, the positive trend in demand in most of the EU countries was estimated to have partially offset the weakness of non-EU countries, and gave way to a **modest expansion of the export of goods in 4Q15 (0.7% QoQ, 5.2% YoY)** (see Figure 3.12). All in all, sales of goods abroad were estimated to have closed 2015 with high growth (5.1%), slightly higher than the previous year (4.5%).

Also, **the growth in the exports of services during the last quarter of 2015 (0.9% QoQ, 8.5% YoY) was expected to be lower than in the previous quarter**. With regard to tourism, tourist inflows in 4Q15 maintained the positive trends for the major countries of origin (see Figure 3.13). Thus, it is estimated that **the growth rate of non-resident consumption in Spain reached 0.8% QoQ (3.2% YoY)**, which would mean an increase of 3.2% over the full year (4.3% in 2014). Meanwhile, **non-tourism services exports are likely to rise by 1.0% QoQ in the fourth quarter of 2015 (12.0% YoY)**, so that the financial year closed with an annual increase of 11.2%, exceeding the increase in 2014 (7.9%). **Overall, the increase in total exports was estimated to have slowed in 4Q15 to 0.8% QoQ (6.2% YoY)**, although growth for 2015 as a whole is likely to be solid (5.9%) and slightly higher than that recorded in 2014 (5.1%).

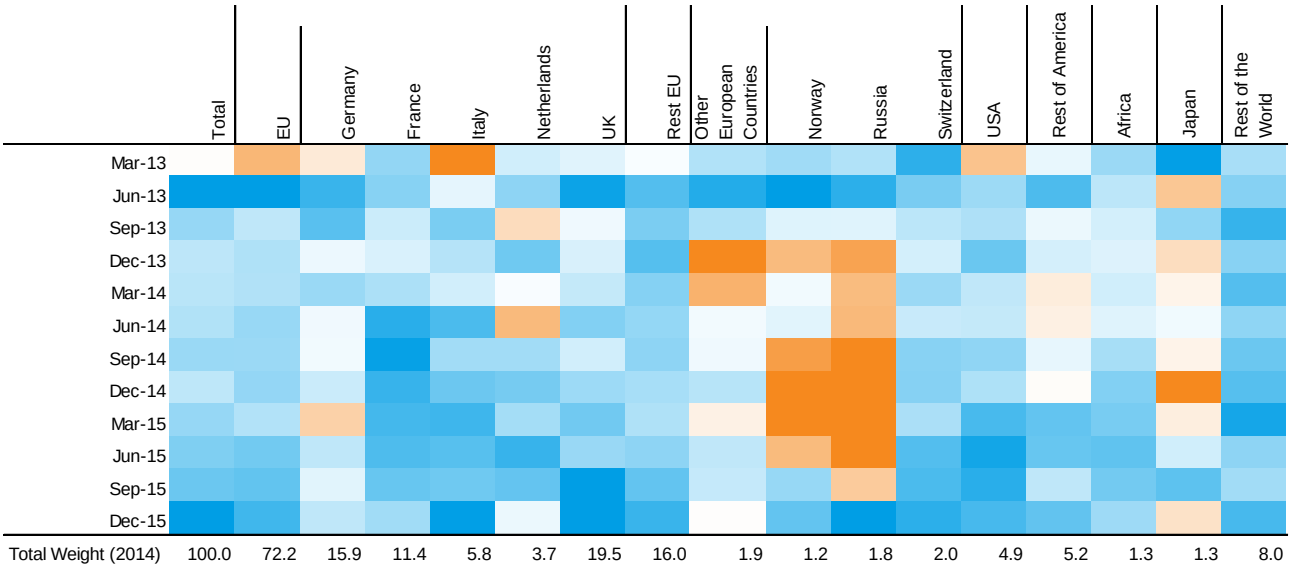
9: For greater detail regarding through which th activity shocks in China and Greece can be transmitted, see the Spain Economic Watch of September 2015, which is available at: https://goo.gl/qIgDn4

Figure 3.12
Spain: goods exports (% QoQ, swda)



(e) estimate.
(*): EAGLES: Emerging and Growth Leading Economies
Note: A deeper blue indicates a more positive value. A deeper orange indicates a more negative value.
Source: BBVA Research based on INE and the Customs Office

Figure 3.13
Spain: entry of foreign visitors in hotels (QoQ, % trend)



Note: A deeper blue indicates a more positive value. A deeper orange indicates a more negative value.
Source: BBVA Research based on IET and INE

In line with the trend for final demand, the information available as this Outlook goes to print suggests that import **growth slackened in the fourth quarter to 0.9% QoQ (8.8% YoY).** In 2015 as a whole, purchases of goods and services from abroad were estimated to have risen by 7.7%, 1.3 percentage points above the increase in the previous year.

In summary, the above elements suggest a non-existent **contribution by net external demand to growth in 4Q15** and a negative one for the year as a whole (-0.4 percentage points). However, developments in aggregate external sector did not prevent the **consolidation of the current account surplus which, supported by the gradual decrease of the structural deficit and the energy deficit, was estimated to have amounted to 1.8% of GDP at the end of 2015**, 0.8 pp more than in 2014.[10]

Job creation exceeded half a million jobs in 2015

In the fourth quarter of last year, the labour market regained the momentum it had lost in the third. Allowing for variations caused by seasonal factors, average Social Security affiliation increased by 0.8% QoQ, five tenths more than in 3Q15, and had its ninth successive quarter of growth. Hiring also picked up to reach 2.4% QoQ swda, driven by the increased in temporary work. By contrast, the decline in registered unemployment - for the tenth successive quarter - stayed at around 1.6% QoQ between October and December[11] (see Figure 3.14).

The 4Q15 Labour Force Survey (EPA) confirmed the employment pattern noted by the affiliation records. In gross terms, employment climbed by 48,800 people over October to December, in line with what was anticipated by BBVA Research[12]. Seasonally adjusting for the period, employment grew by around 0.7% QoQ, one tenth of a point more than in the third quarter. The private sector and, in particular, services led job creation.

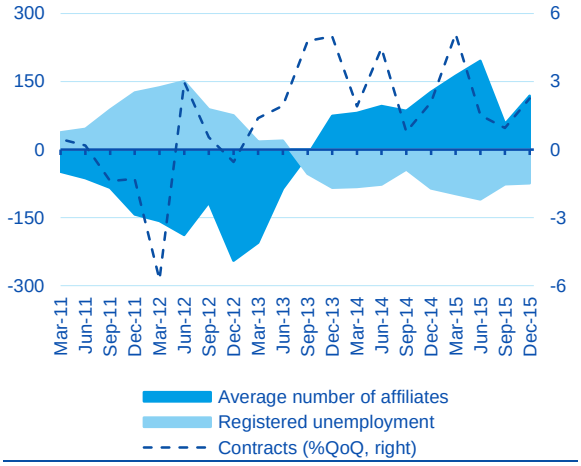
The rise in the number of salaried employees with a permanent contract (103,400 people) and the fall in recruitment under temporary contracts (63,600 people) caused a seasonal decline of 0.5 points in the temporary employment rate in 4Q15 to 25.7%. After seasonal adjustment, **the percentage of salaried personnel with a temporary contract has risen by three percentage points from its cyclical low of 1Q13**.

The rise in employment and the fall in the labour force (120,700 people), which was greater than expected, brought about a drop in **in the unemployment rate to 20.9%** (20.9% swda). Since its cyclical peak in 1Q13, the swda unemployment rate has declined by 5.4 percentage points (see Figure 3.15).

The 4Q15 figure ended the second consecutive year of job creation since 2007. Employment increased by 525,100 people during 2015 (521,900 in average terms), 64.9% of them in services and 54.7% in temporary work. These results led to a fall in the unemployment rate of nearly three points over the last year to 20.9% (annual average: -2.4 pp to 22.1%) despite the reduction in the active population (153,200 individuals at the close of the period; -32,600 as an annual average).

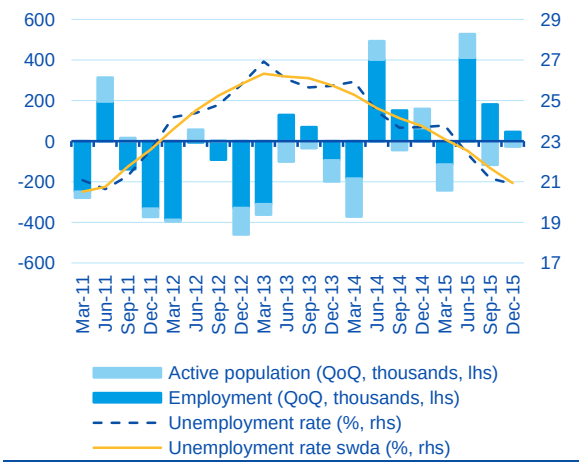
10: See Economic Watch: "Un análisis de la evolución y los determinantes del saldo por cuenta corriente en España" ("An analysis of the trend and determinants of the current account balance in Spain"), available at: https://goo.gl/UzNSeu
11: The January figures extended the positive trend of 2015. Adjusted for seasonality, BBVA Research estimates indicate that the increase in Social Security membership was around 35,000 people, while the fall in unemployment was 40,000. For more information, see https://goo.gl/bL2k4X
12: The detailed evaluation of the data from the EAPS of 4Q15 can be found at https://goo.gl/Shn4Pt

Figure 3.14
Spain: labour market figures (QoQ var. in thousands of persons, unless otherwise stated, swda)



Source: BBVA Research based on ME and SS

Figure 3.15
Spain: labour market indicators



Source: BBVA Research based on INE

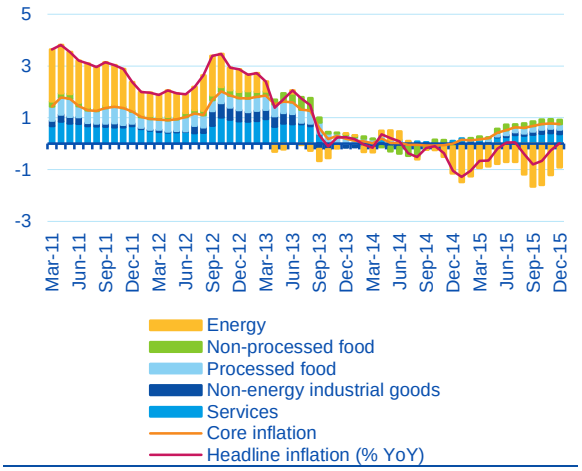
Core inflation was positive in 2015 despite the fall in oil prices

Headline consumer prices stopped falling in December 2015 (annual average: -0.5%), but they returned to negative territory in January 2016, according to the advance indicator published by the INE[13]. The downward pressure on prices is concentrated in the energy component (-13.6% YoY in December) mainly attributable to the decline in oil prices (down to around $35 a barrel as at the publication of this report). Despite the lower imported inflation, **core prices maintain a path of steady growth (0.9% YoY in 4Q15 and 0.6% as an annual average)**, to which improving domestic demand and the monetary policy measures implemented by the ECB will continue to contribute. Thus, core inflation's contribution to the YoY price growth stood at around 0.8 pp in December, while that of the residual component was at -0.8 pp (energy: -0.9 pp and non-processed food: 0.1 pp) (see Figure 3.16).

According to BBVA Research estimates, the increase in core prices in the Spanish economy continues to take place in an environment of low inflation in Europe, which is starting to moderate the price-competitiveness gains in Spain. Thus**, the inflation differential with respect to the euro area, as measured by the trend component has been reduced from -0.6 pp in December 2014 to -0.4 pp in the same month of 2015** (see Figure 3.17)[14].

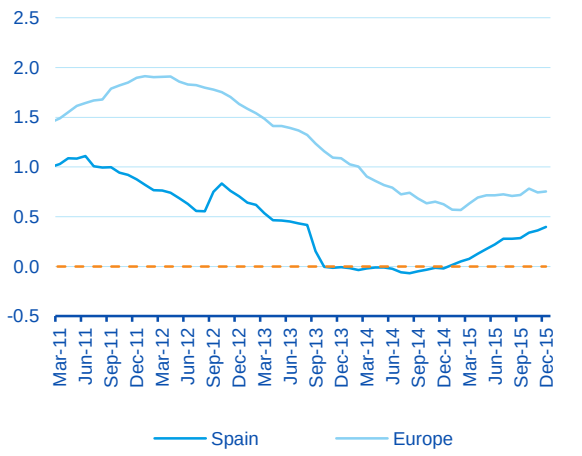
13: The advance CPI indicator showed a decline in overall inflation in January of -0.3% YoY due to the fall in fuel prices. Our estimates suggest that core inflation may have remained between 0.6% and 0.7% YoY. For more details , please see https://goo.gl/oLilby
14: For more details on the calculation of trend inflation through the trimmed mean method, see Box 1 of the Spain Economic Outlook journal for the first quarter of 2014, available at: http://goo.gl/j0rlT8

Figure 3.16
Spain: contribution to CPI growth(pp YoY)



Source: BBVA Research based on INE

Figure 3.17
EMU: trend inflation (trimmed mean method, % YoY)



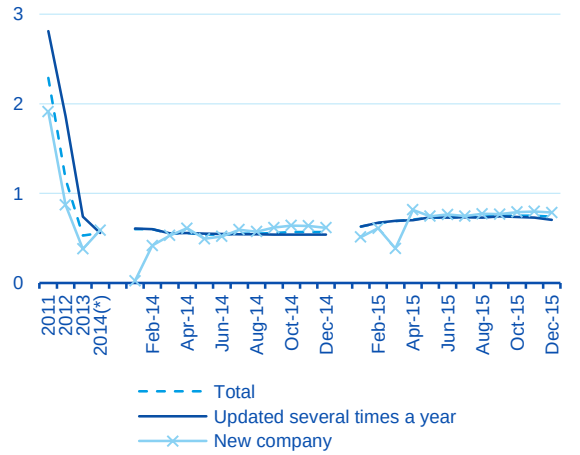
Source: BBVA Research based on INE and Eurostat

Wage demands remained stable during the fourth quarter despite the rise in core inflation. The average wage increase agreed in collective agreements increased by around 0.7% YoY over October to December for those agreements subjects to multi-year review process and 0.8% for those signed during the year, involving 2,487,000 workers[15] (see Figure 3.18). Therefore, the average wage rise agreed in 2015 was less than the 1% set as a maximum limit in the III Agreement on Employment and Collective Bargaining (AENC) for the full year[16].

As Figure 3.19 shows, wage moderation evidenced following the entry into force of the labour market reform in 1Q12 represents an accumulated gain of 5% in cost-competitiveness relative to the EMU.

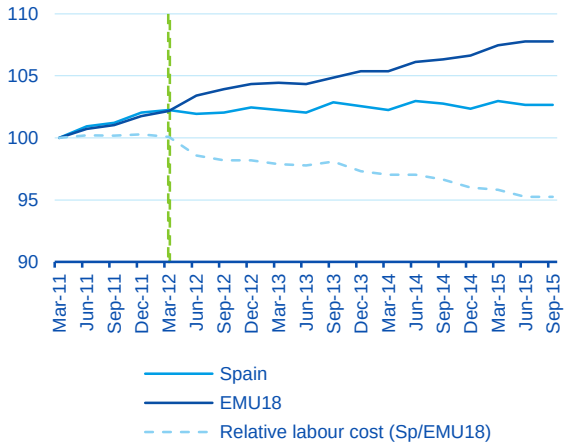
15: The number of workers covered by collective agreements was around 6.5 million up to December when those affected by the agreements signed before 2015 were incorporated (3,998,000). This figure is 36.4% higher than that recorded up to December 2014.
16: The III AENC, signed in early June 2015 by CEOE, CEPYME, Comisiones Obreras and UGT (employers associations and trade unions) establishes a set of recommendations to guide the negotiation of collective agreements over the next three years. Like its predecessor, the 3rd AENC sets limits on the wage increases agreed in the collective agreement. In 2015 they may not exceed 1% and in 2016 the figure is 1.5%. The increase in 2017 will depend on the development of GDP growth in 2016 and the Government's macroeconomic forecasts. Although the agreement does not expressly impose the inclusion of wage revision clauses, it does indicate that the wage growth agreed in the 2015-2016 two-year period must be greater than the sum of the inflation in both years.

Figure 3.18
Spain: average wage increase under collective bargaining agreements (%)



The annual data includes agreements registered after December each year and incorporates the review under the wage guarantee clause.
(*) Provisional data. The figures since 2013 are not comparable with years previous to this. See: http://goo.gl/WQkvNU
Source: BBVA Research based on ME and SS

Figure 3.19
EMU: labour cost per effective hour worked in the market economy (1Q11 = 100)



Source: BBVA Research based on Eurostat

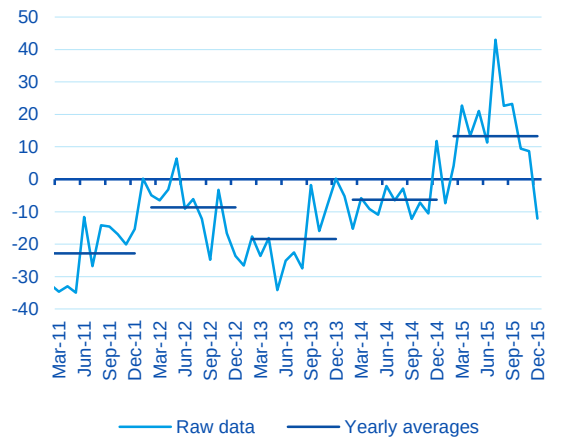
New credit flows grow 12.0% in 2015 after falling 5.9% in 2014

The stock of credit continued to fall during the second half of 2015, albeit at an ever slowing pace (-3.4% YoY in November). Meanwhile**, the inflow of credit (new lending transactions granted) increased by 12.0% in 2015**, although with a profile that declined throughout the year (see Figure 3.20). Thus, in the fourth quarter, new transactions slowed to match the levels of the same period in 2014, dragged down by lending to larger companies (transactions being classified as those of over one million euros). This portfolio, which is the most voluminous, managed to accumulate an increase of 7.7% in 2015. However, in the last quarter, the uncertainties in international markets, along with the ability to finance their credit needs in other non-bank markets at competitive rates, may have influenced businesses' demand for credit.

In contrast, **the pace of growth in lending retail transactions (households and SMEs) quickened during 2015 to 16.4%**, five percentage points higher than in the previous year, and relatively stable in the last quarter (see Figure 3.21). Transactions by SMEs (transactions classified as those of less than one million euros) increased by 12.8% in 2015, nearly four percentage points more than in the previous year. In addition, loans to households showed a marked growth in all categories during 2015, such that flows for mortgages rose by 33.4%, consumer credit by 20.1% and other loans by 17.2%.

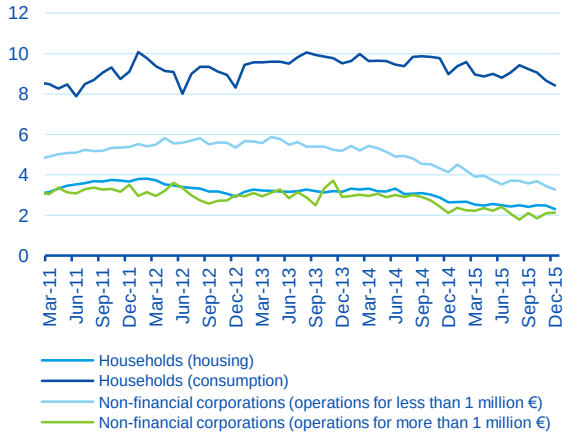
The cost of new credit has maintained its downward trend. For example, the APR on mortgage lending was 2.31% in December, some 33 basis points (bps) lower than a year ago, and those for consumer credit transactions at 8.43% (APR), approximately 55 bps below the same month in 2014. The average interest rate on new SME loans declined by 85 bps in the last twelve months to 3.28% (APR), and that of larger companies loans stood at 2.13% (APR), the same level as a year ago. This development has been favoured by the reduction in EURIBOR, the lower level in the sovereign risk premium and the lower credit risk faced by banks.

Figure 3.20
Spain: new lending transactions (% YoY)



Source: BBVA Research based on Banco de España

Figure 3.21
Spain: interest rates on new lending transactions (% APR)



Source: BBVA Research based on Banco de España

2016-2017 Scenario: the recovery continues

As previewed in the introduction to this section, **the elements incorporated in the updating of the macroeconomic scenario suggest keeping, at least for now, the growth forecasts for the Spanish economy** for the next two years. **Both in 2016 and in 2017 activity will grow by 2.7%**, a pace sufficient to accumulate net job creation of around a million jobs at the end of the period.

The expansion of activity will rest on both domestic and external factors. The global economy will continue to grow slightly above 3.0%, which together with the fall in oil prices will support the increase in Spanish exports, despite the exchange rate appreciation against emerging currencies. Similarly, the expansionary monetary policy will stimulate demand. Domestically, the continued recovery of fundamentals, the progress in correcting imbalances and a moderately expansionary fiscal policy will contribute to in the expansion of domestic demand (see Table 3.1). The increase in final demand will cause a notable upturn in imports, which is likely to result in a **negative contribution to growth from net external demand.**

However, the increased economic policy uncertainty in Spain does not allow us, at least for the time being, to improve the growth expectations for the current two-year period. Although a favourable trend of activity and employment has so far been maintained, if the uncertainty does not dissipate quickly and favourably, it could have a significant impact on the economic decisions of businesses and households (see Box 1).

Table 3.1
Spain: macroeconomic forecasts

(% YoY save indication to the contrary)	1Q15	2Q15	3Q15	4Q15(e)	2014	2015(e)	2016 (f)	2017 (f)
Domestic Final Consumption Expenditure	2.1	2.7	3.3	3.7	0.9	3.0	2.7	2.4
Private FCE	2.4	2.9	3.4	3.5	1.2	3.1	2.8	2.5
General Government FCE	1.3	2.1	3.0	4.3	0.0	2.7	2.5	1.9
Gross Fixed Capital Formation	6.0	6.3	6.5	6.1	3.5	6.2	4.2	5.6
Machinery & Equipment	8.1	9.9	10.7	9.5	10.6	9.6	4.8	5.0
Construction	6.2	5.5	5.5	5.0	-0.2	5.6	3.8	5.9
Housing	2.9	3.3	2.5	3.0	-1.4	2.9	4.2	8.2
Other Buildings and structures	8.8	7.3	7.8	6.6	0.8	7.6	3.5	4.2
Domestic demand (*)	2.9	3.3	3.9	4.2	1.6	3.6	2.9	3.0
Exports	5.9	6.2	5.6	6.2	5.1	5.9	4.8	5.7
Imports	7.2	7.0	7.7	8.9	6.4	7.7	5.8	6.8
External balance (*)	-0.2	-0.1	-0.5	-0.7	-0.2	-0.4	-0.2	-0.2
Real GDP at market prices (mp)	2.7	3.2	3.4	3.5	1.4	3.2	2.7	2.7
Nominal GDP (mp)	3.1	3.7	4.2	4.5	1.0	3.9	4.1	5.2
Memorandum items								
GDP ex housing investment	2.6	3.2	3.4	3.5	1.5	3.2	2.6	2.5
GDP ex construction	2.3	2.9	3.1	3.3	1.5	2.9	2.6	2.4
Total employment (LFS)	3.0	3.0	3.1	3.0	1.2	3.0	2.9	2.6
Unemployment rate (% labour force)	23.8	22.4	21.2	20.9	24.4	22.1	19.8	18.3
Total employment (fte)	2.9	3.0	3.1	3.1	1.1	3.0	2.5	2.2

(*) Contributions to growth.
(e): estimatef; (f): forecast.
Source: BBVA Research based on INE and Banco de España

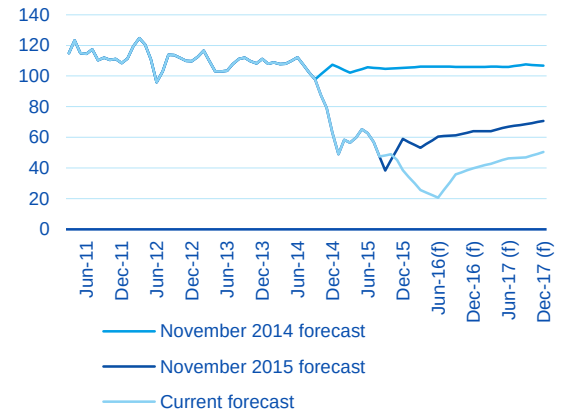
Low oil prices provide new impetus to activity

In recent months, **the oil price has resumed a downward path**, with Brent crude price falling to around US$35 a barrel at the time of writing, about 40% below the price at the beginning of the third quarter of 2015 (in euros, 43%) and 70% lower than the closing price of the first half of 2014 (in euros, 62%), when the first change in trend took place (see Figure 3.22). Although the uncertainty as to the nature of this disturbance still rides high**, the available information suggests that it mainly relates to supply factors[17].** Among these are the increase in Iran's exports following the lifting of international economic sanctions, the unconventional oil production in the United States (shale oil) and the OPEC's decision not to cut production quotas.

Since it is mainly a supply side shock, a positive and significant effect on activity is to be expected: it will increase households' disposable income and reduce companies' production costs, thereby benefiting consumption, business margins, investment and trade flows. BBVA Research estimates point to a **gradual steadying of prices at around $30 and $45 per barrel in 2016 and 2017 respectively**, 30% and 20% lower than was expected three months ago. Given the high energy dependency of the Spanish economy**, the lifeline that this new drop in oil prices provides could mean, on average, more than one additional point to growth in the current two-year period** (see Figure 3.22)[18].

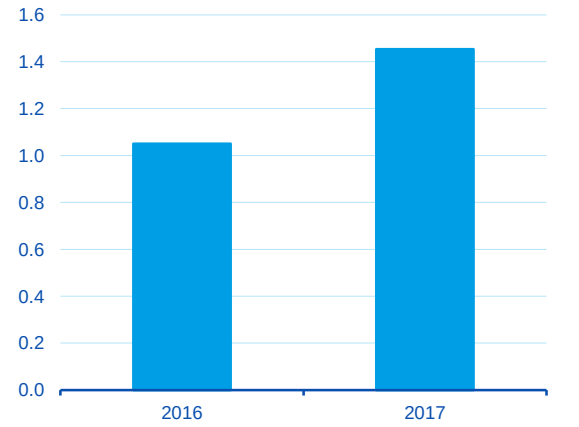
17: Falling oil prices also reflected some moderation in global growth prospects, especially in emerging countries. However, estimates by BBVA Research suggest that this factor has played a secondary role in the latest episode.
18: For greater details about on the estimation of the effects of oil prices by type of shock on activity and prices in the Spanish economy, please see Box 1 of the Spain Economic Outlook, second quarter of 2011, available at: http://goo.gl/42s7N9

Figure 3.22
Oil price scenario (USD/bbl, Brent)



Source: BBVA Research based on Bloomberg

Figure 3.23
Spain: impact of the oil price slump (pp of annual growth)



Source: BBVA Research

Monetary policy will continue to act as a support

Amid the increasing downside risks for growth and inflation in the European economy, **the ECB has confirmed its readiness to use all the stabilising instruments envisaged within its mandate, if necessary.** In December, the Governing Council (GC) of the monetary authority has already adopted a cut in the interest rate of the deposit facility by 10 bps to 0.3% and a six month extension of the asset purchase programme until March 2017 among other measures. More recently, the GC said that it will reconsider its monetary policy stance at the next meeting in March, which could lead to a further easing of unconventional measures, or even additional cuts in interest rates[19].

In the most likely scenario, it is expected that these measures - along with expectations that the Federal Reserve will continue the process of normalisation of monetary policy in the US - will help to keep the euro exchange rate against the dollar at a low level and contain the downside risks for growth and inflation in the euro zone.

The improvement of financing flows will be consolidated in the next two years

Facing 2016, the total of new transactions can be expected to continue to grow as long as uncertainties do not materialise and economic activity does not deteriorate. The trends suggest that new credit will exceed the flow of repayments and bad debts by the summer of 2016, meaning that outstandings will start to grow. New credit is expected to increase for reasons of both demand and supply. On the demand side, while waiting for economic uncertainties to dissipate, the improved financial situation of companies (especially exporters) and lower interest rates will encourage loan applications. On the supply side, the improvement experienced in liquidity conditions (thanks to the banking union and the ultra-expansionary policy of the ECB), the lower risk of portfolios and the progress made in bank restructuring will contribute positively.

19: For further details, please see the ECB Watch by BBVA Research that was published on December 3, 2015 and January 21, 2016. Available at https://goo.gl/GA306o and https://goo.gl/Etwfs0

Fiscal policy will remain moderately expansionary over the next two years

The latest available budget execution information confirms that **the government has made the most of the recovery of activity and the improvement in the cost of borrowing by implementing an expansive fiscal policy in the short term[20]. In a scenario with no change in economic policy, the tone of fiscal policy will remain slightly expansionary during the coming two years.** Thus, real public sector consumption growth is expected to be 2.5% in 2016 and to slow to 1.9% in 2017, while non-residential construction investment will present growth rates of around 3.5% in 2016 and 4.2% in 2017.

In this context, the momentum of the improved economic environment will be offset in part by the combined effects of the expansionary policies implemented during 2015-2016. For this year it is expected that the economic cycle will benefit public finance again, both through the effect of automatic stabilisers such as a lower burden from interest and social benefits (pensions and unemployment, mainly). Some containment of the other items of expenditure, more intense in current expenditure than in capital expenditure (see Table 3.2) is also foreseen. However, the tax rate reduction will continue to adversely affect the structural revenue of the administrations. Thus, given the policies announced so far, **the deficit in 2016 would be reduced by around 1.3 pp to 3.4%, above the stability target (-2.8%).**

Looking forward, it is expected that the economic cycle will continue correcting the deterioration in public accounts, so that in a scenario with no change in fiscal policy**, the deficit would be reduced by 2017 and would be around 2.3% of GDP** (see Figure 3.24). If this scenario occurs, the cycle-adjusted public deficit will be around -1.7% in late 2017**. If interest payments are deducted, a primary structural surplus of around 1% would already be recorded, which would mean a correction of over 10 pp of GDP since 2009** (see Figure 3.25).

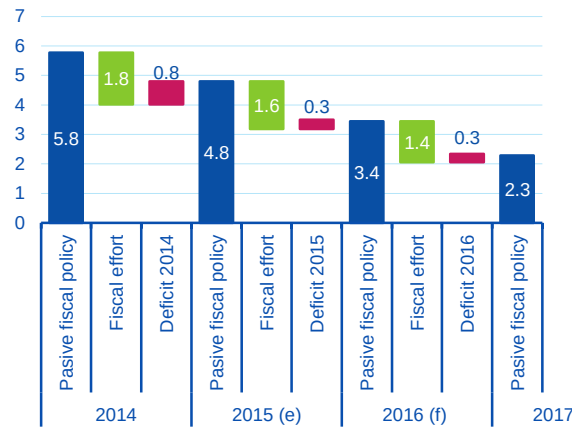
20: On the revenue side it is worth noting the tax cut (brought into force in two stages, in January and July 2015); and on the expenditure side, measures include the payment to public servants of part of the extra payment withdrawn in December 2012, and the stimulus in 2015 from capital spending.

Table 3.2
Genral government: net borrowing *

(% GDP)	2014	2015 (e)	2016 (f)	2017 (f)
Employee compensation	11.0	10.9	10.8	10.7
Intermediate consumption	5.3	5.2	4.9	4.8
Interest	3.4	3.1	2.8	2.6
Unemployment benefit	2.4	1.9	1.7	1.6
Other social benefits	14.0	14.0	13.8	13.6
Gross capital formation	2.2	2.4	2.3	2.4
Other expenditure	6.1	5.9	5.6	5.5
Non-financial expenditure	**44.4**	**43.4**	**42.0**	**41.3**
Taxes on production	11.5	11.8	11.8	12.0
Taxes on income, wealth, etc.	10.1	10.4	10.4	10.8
Social Secutiry contributions	12.5	12.2	12.2	12.1
Taxes on capital	0.5	0.6	0.6	0.6
Other income	4.0	3.5	3.5	3.5
Non-financial funding	**38.6**	**38.6**	**38.5**	**39.0**
Net borrowing	**-5.8**	**-4.8**	**-3.4**	**-2.3**
Stability target	-5.5	-4.2	-2.8	-1.4

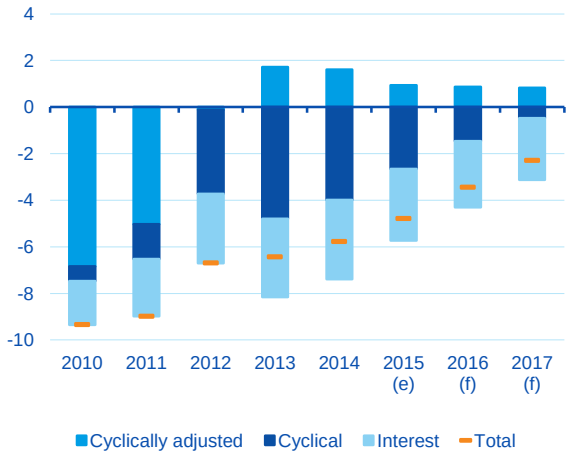
(*): Excluding aid to the financial sector.
(e): estimate; (f): forecast.
Source: BBVA Research based on MINHAP and INE

Figure 3.24
General Government.: breakdown of fiscal adjustment (pp of GDP)



(e): estimated; (p): forecast.
Source: BBVA Research based on MINHAP and INE

Figure 3.25
General Government.: funding capacity /requirement (% of GDP)



(e): estimated; (p): forecast.
Source: BBVA Research based on MINHAP and INE

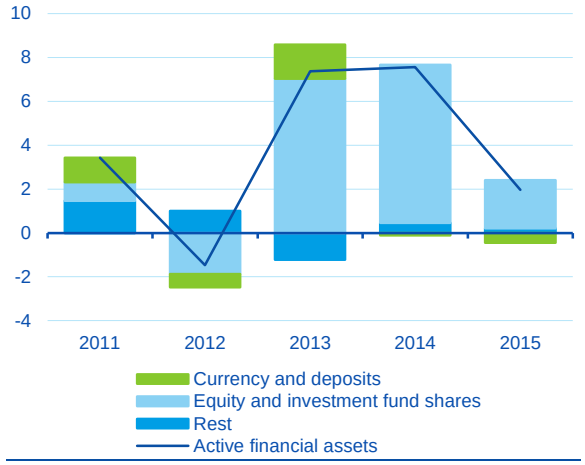
In short, it is expected that the slightly expansionary stance of fiscal will be maintained policy over the next few years. However, in the medium term, there is still uncertainty about the ability of the government sector to generate primary surpluses of sufficient magnitude to significantly reduce the high level of public debt reached (expected to have exceeded 100% of GDP in 2015). The continuation of policies to control public spending is therefore essential, but the implementation of measures to increase the growth capacity of the economy will be even more important.

Private domestic demand will continue to lead growth

Consumption outlook for households are favourable despite the expected trends in financial wealth and the decline of some temporary stimuli. Job creation, less tax pressure and the absence of inflation pressure will boost real disposable income in the coming quarters. The expected growth in real estate asset value and the expectation of official interest rates remaining at historic lows will also encourage private consumption. In addition, new consumer finance transactions will continue to increase and will sustain spending in the medium term, especially on durable goods.

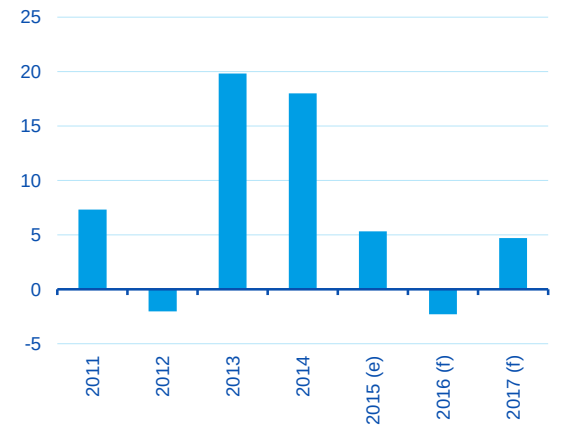
In contrast, the trend in share prices, which explained a significant part of the increase in financial assets held by households since 2013 (see Figure 3.26) - will be more modest than in recent years, thus reducing the contribution of financial wealth to consumption growth[21], mainly in 2016 (see Figure 3.27). As a result**, private consumption will increase by about 2.8% in 2016**, in line with the forecasts in the latest edition of the Consumption Outlook[22]. In 2017, some of the temporary factors favouring household spending during the current year, such as the tax cuts, will no longer be present. Consequently, **growth in private consumption will moderate back to 2.5%.**

Figure 3.26
Spain: contribution of financial assets held by households to growth in consumption (annual averages in %)



(*): Data to 3Q15
Source: BBVA Research based on Banco de España

Figure 3.27
Spain: real net financial wealth of households* (change in annual averages)



(*) Deflated using the private consumption deflator
Source: BBVA Research based on INE

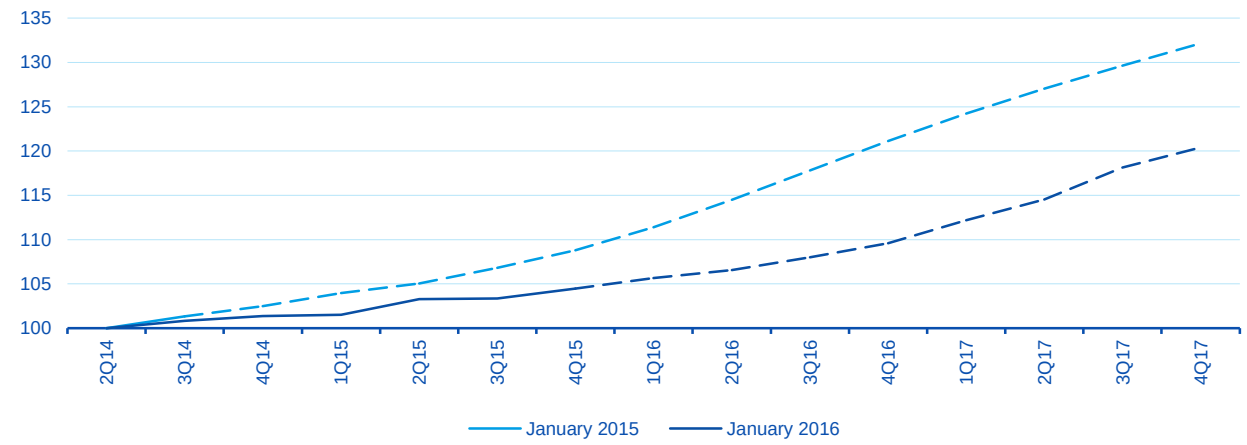
Several factors will continue to encourage the growth in machinery and equipment investment during the next two years. Firstly, the increase in both domestic demand and exports will continue to encourage the expansion of installed productive capacity. Secondly, the expansionary stance of monetary policy will ensure that financing cost remains at relatively low levels and that new credit increases. Finally, the latest drop in oil prices will lead to cost savings and thereby to increasing profit margins and the freeing up of additional resources that can be allocated to productive investment. However, the increased uncertainty envisaged in the macroeconomic scenario will have an adverse effect on investment decisions. Thus, after two years growing at an annual average of 10.1%, there is a **downward revision of the expected growth in machinery and equipment investment (by 1.5 pp) to 4.8% YoY in 2016. In 2017 this component of demand is expected to grow at an annual rate of 5.0%.**

21: Estimates by BBVA Research indicate that a quarterly reduction in real net financial wealth of 1% would cause a cumulative decline in private consumption by almost 0.1% over the next 4 quarters.
22: See: https://goo.gl/78uhh1

The real estate sector continues to make progress in its recovery, although investment is growing at a slower rate than expected a year ago (see Figure 3.28). Nevertheless, the fundamentals in the sector remain at healthy levels and are expected to evolve positively in the next two years. The recovery of the labour market and household income and the forecast for low interest rates will support growth in residential demand in the next two years. Thus, **construction activity will respond to increasingly strong demand**, with housing starts improving from the current rock-bottom levels.

However, given the sensitivity of the sector to economic policy uncertainty (which could be higher than in other sectors because of the high weight of regulation in the execution of building projects) and the fact that the start of the recovery is proving less vigorous than was expected a year ago, **growth in housing investment for 2016 has been revised downwards to 4.2%. Therefore, the significant rise in this component of investment is delayed until 2017, when an annual growth of 8.3% is expected.**

Figure 3.28
Spain: recovery scenarios for real investment in housing (2Q14 = 100)



Source: BBVA Research based on INE

Exports will continue to grow, but will be offset by increased imports

The downward revision of growth prospects in emerging economies, together with the appreciation of the euro against these countries' currencies **entails a somewhat less favourable environment for Spanish exports in the short-term.** However, the expected growth of the world economy for the period 2016-2017 and cheaper transport costs as a result of falling oil prices continue to support the outlook for strong demand for exports. Thus, **even if forecasts for export growth over the two years are revised downwards, they will remain favourable: the totals will increase at an average annual rate of 5.3%**, the goods component will grow an average of 4.9% and non-resident consumption will rise by around 2.3%.

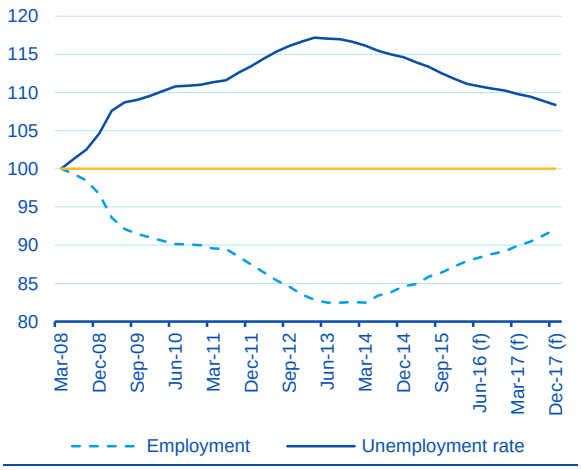
The growth in final demand will have a positive impact on imports (5.8% in 2016 and 6.8% in 2017), again surpassing the increase in exports. Thus, the **contribution to economic growth of net external demand will be slightly negative in both 2016 and 2017 (-0.2 pp in both cases).** Over the next two years cheaper oil prices will continue to alleviate the Spanish economy's energy import bills, which will help to **maintain positive current account balances (average:3.0% of GDP).**

The recovery of the labour market will continue, but pre-crisis levels are still a long way off

The economy will continue to drive job creation over the next two years. Given the expected economic growth, employment could rise by around 2.9% in 2016, while the unemployment rate would fall by 2.2 points to 19.8%, more than expected in November given the less favourable outlook for the recovery of the labour force. In 2017, job creation would be slightly lower (2.6%), while the unemployment rate would drop to 18.3%.

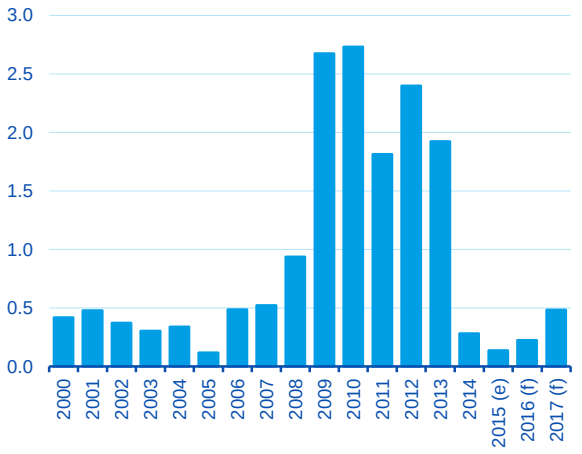
Although prospects for employment are positive, it will still be significantly below pre-crisis levels at the end of next year. As Figure 3.29 shows, in the fourth quarter of 2017 employment would be about 8% lower than at the beginning of 2008, while the unemployment rate would be more than 8 points higher. In addition, the expected development of activity and full-time equivalent employment – which will grow by more than 2% in 2016 and 2017 – **suggests a meagre rebound in the apparent labour productivity until it converges in 2017 with pre-crisis figures** (see Figure 3.30).

Figure 3.29
Spain: employment level and unemployment rate (1Q08 = 100. SWDA)



(f): forecast.
Source: BBVA Research based on INE

Figure 3.30
Spain: growth of apparent labour productivity (%)



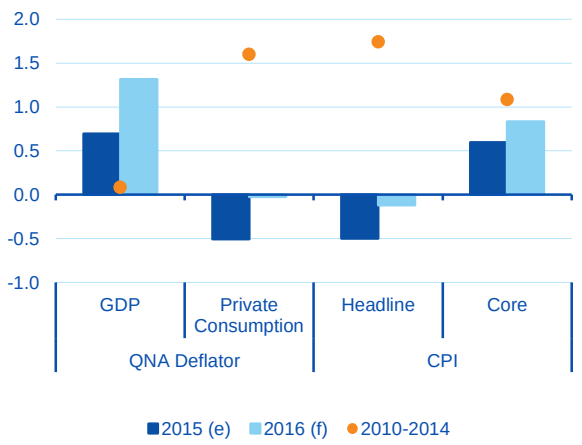
(f): forecast.
Source: BBVA Research based on INE

The oil price leads general inflation into negative territory in the short term, but core inflation will remain positive

Although the euro appreciation against the dollar will be somewhat less than expected three months ago, the downward revision of the oil price leads to lower **headline inflation for this year than previously anticipated (down by 1.3 points, to -0.1% as an annual average).** However, domestic determinants indicate that both core inflation and the implied GDP deflator will remain in positive territory this year (0.7% and 1.3% as an annual average, respectively) (see Figure 3.31).

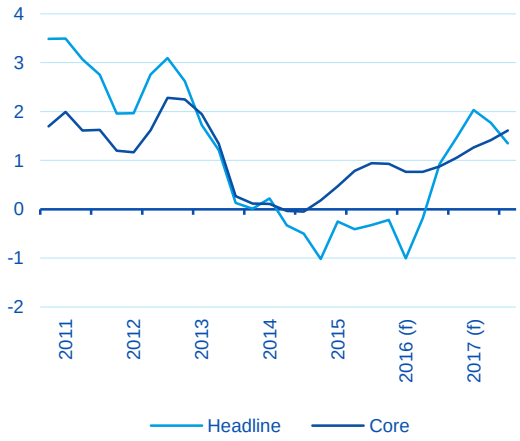
In 2017, both headline and core inflation will be clearly positive (1.7% and 1.3% as an annual average, respectively), but will still remain at relatively low levels (see Figure 3.32). As was previously said in earlier Outlooks, the expected improved trend in inflation is supported both by the recovery in domestic demand and the labour market, and by the **current monetary policy stimulus measures** (interest rate cuts, promoting the availability of credit, and quantitative easing).

Figure 3.31
Spain: price indicators (% YoY)



(e): estimate; (f): forecast.
Source: BBVA Research based on INE

Figure 3.32
Spain: observed data and expectations for inflation (% YoY)



(f): forecast.
Source: BBVA Research based on INE and Consensus Forecast Inc.

The scenario is not without risks

Although the Spanish economy is still growing at a healthy rate, some external and domestic risks remain or have even increased. Among the former, we note **those associated with the slowdown in emerging economies, especially China and oil exporting countries.**

In domestic terms, economic policy uncertainty has increased, and if it intensifies or persists, the possibility of its exerting greater pressure on the recovery cannot be ruled out. Finally, **it is estimated that the public deficit again exceeded the stability target in 2015** which, in the absence of measures, raises the probability of the target's being missed for the next two years. Maintaining credibility in the control of public finances affects the ability to contain the cost of financing of an economy with excessive external indebtedness.

Box 1. Economic policy uncertainty in Spain: measurement and impact

The current uncertainty about public policies to be implemented over the coming years in Spain, together with the possibility of this uncertainty's persisting, merit an analysis of the effects that this situation may have on the business cycle. In general, **studies agree that there is a negative correlation between this source of uncertainty and economic performance**. The channels through which this uncertainty may be conveyed are several. Regarding the behaviour of financial markets, Białkowski *et al.* (2008) find that volatility increases during election campaigns, with this effect being magnified when the coalition forming a government fails to gain a parliamentary majority. On the investment side, agents may have incentives to postpone the launch of new projects until the situation allows them to have a better view of the time horizon (see Bernanke, 1983 and Bloom, 2009)[23]. On the consumer side, the evidence points to a positive correlation between lack of visibility and precautionary saving decisions (see Carroll and Samwick, 1997). In addition, numerous studies have documented a positive correlation between political fragmentation and deterioration of the fiscal deficit (see, for example, Volkerink and De Haan, 2001), which may have negative consequences for a country's perceived solvency.

Considering some of these possible channels of transmission to the business cycle, **the objective** of this box is twofold. On the one hand, **to identify early signs of political uncertainty** by isolating behaviour that is idiosyncratic to Spain in the dynamics of financial and real variables, and from the Economic Policy Uncertainty index (EPU). This index was proposed by Baker *et al.* (2015) and it is based on the number of articles published in national newspapers that simultaneously contain terms related to uncertainty, economics and policy-relevant terms[24]. On the other hand, **the effects of this uncertainty on economic activity are estimated.**

In line with the evidence, the results of the analysis indicate that **increases in the level of economic policy uncertainty translate into a significant reduction in activity.** In particular, they confirm that, depending on the extent and persistence, increased economic policy uncertainty in Spain **could lead to reductions in the rate of GDP growth ranging between 0.2 and 0.5 pp in 2016 and between 0.3 and 1.1 pp in 2017.** However, these results need to be interpreted with caution, since during the sample period used to estimate the model there have been no episodes similar to the one currently being experienced in Spain.

Distinguishing the idiosyncratic behaviour of variables

Aiming to provide early signals of effects linked to economic policy uncertainty, apart from EPU, four other variables (two financial and two activity-related) that can potentially reflect in advance a deterioration in the perception of the economic growth expectations were selected: the implied stock market volatility (30 days), the Spain 10-year bond risk premium relative to German bonds and indicators of industrial and consumer confidence prepared by the European Commission.**To remove the developments attributable to movements common to Europe[25] from these variables and retain only those that are idiosyncratic to Spain**, dynamic factor models are used[26].

As an example, Figure B.1.1 shows the development of the common factor of the industrial confidence indicators of the European Commission for those countries included in the

23: For their part, Julio and Yook (2012), using a sample of 48 countries, have documented lower business investment in election years, a reduction which continues until the election uncertainty is resolved
24: While according to Knight (1921), uncertainty is not measurable, we believe that the news item index created by Baker *et al.* (2015) is a valid approach as long as the possible limitations inherent in it are taken into account.
25: In general, it includes Spain, Italy, Portugal, United Kingdom, Germany, France and Greece, although the sample of countries varies depending on the availability of data for each of the variables.
26 See the Appendix for details on the methodology.

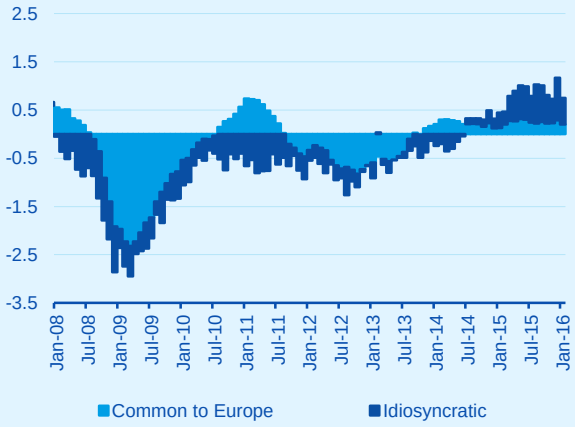
exercise together with the industrial confidence indicator for the euro zone[27]. The similarity of the dynamics in both variables gives evidence of a correct identification of the European common movements that are behind the confidence indicators for each country. The results are qualitatively similar for the other variables[28].

Figure B.1.1
Industrial confidence: common factor for Europe and indicator for the euro area

Source: BBVA Research based on European Commission

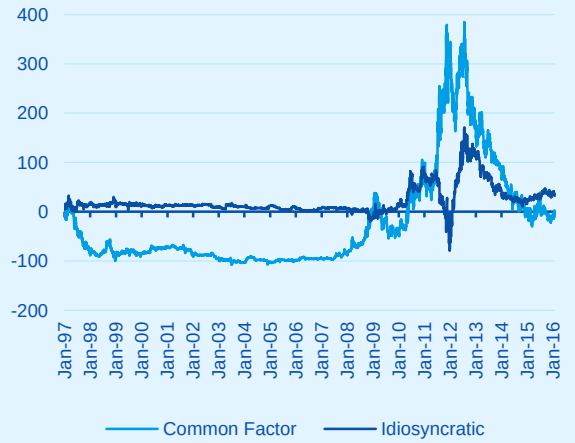
Figure B.1.2 shows the decomposition for the Spanish industrial confidence indicator. As can be seen, since July 2014, the importance of the idiosyncratic factor has played a positive differentiating role regarding the development attributable to Europe. Similarly, Figure B.1.3 shows the decomposition for the Spanish risk premium. The developments for the common factor suggests that its momentum is closely related to that of the Eupropean periphery countries. Regarding the performance of the idiosyncratic component for Spain, it is worth noting what occurred between June 2011 and January 2012, with a favourable differentiation compared to the development of the common factor. Also, an increase in the idiosyncratic part has been observed from the end of 2014.

Figure B.1.2
Spain: contributions of the common factor and of the idiosyncratic component to industrial confidence (normalised data)



Source: BBVA Research based on European Commission

Figure B.1.3
Spain: contributions of the common factor and of the idiosyncratic component to the risk premium on 10-year bonds (deviation from the historical average)



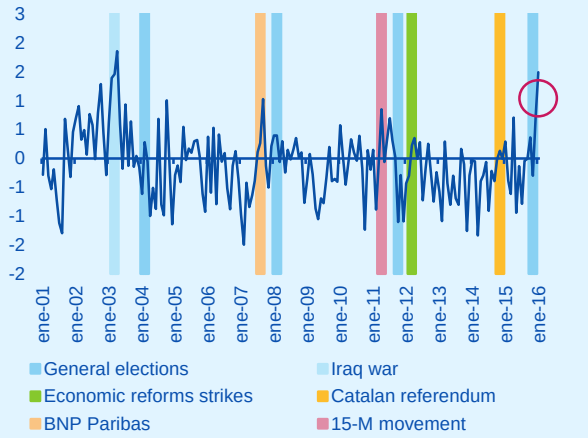
Source: BBVA Research based on Bloomberg

In analysing the development of the idiosyncratic part for Spain in the EPU, it is appropriate to link it to various political events in recent years (see Figure B.1.4). As can be seen, **the increases coincide with some of the events that indeed raised tensions in the country.** Furthermore, they also reflect the fact

27: It should be pointed out the euro zone is not included as additional 'country' to estimate the model, only the indicators of the selected countries.
28: The indicators at European level for the rest of the variables are the consumer confidence indicator for the euro zone, the volatility of the Eurostoxx 50 and the EPU by Baker *et al*. (2015) for Europe. In the case of risk premiums, there is no common indicator for Europe.

that, **except for the last elections, the holding of general elections has not reflected significant idiosyncratic increases in the EPU.** Indeed, to find one with a similar magnitude to January 2016, we need to go back to the events surrounding the invasion of Iraq in 2003.

Figure B.1.4
Spain: idiosyncratic component of the EPU (normalised data)



Source: BBVA Research based on the EPU by Baker et al (2015). The shading corresponds to a period of three months surrounding each political event

Effects on activity of an economic policy uncertainty shock

The idiosyncratic components for Spain of each of the above variables have been used to analyse the potential effects on activity of increases in economic policy uncertainty. To differentiate the latter from those episodes where uncertainty increases due to political events without a deterioration in economic expectations being perceived, a structural vector autoregression (SVAR) model identified with sign restrictions has been estimated[29].

Four possible model specifications have been contemplated, which differ in the number of variables included and restricted. The sign identification restrictions imposed for each of the models are summarised in Table B.1.1.

Table B.1.1
Identification scheme of uncertainty shocks in each of the models studied

	Model 0	Model 1	Model 2	Model 3
EPU	(+)	(+)	(+)	(+)
Risk premium	(+)	(+)	(+)	(+)
Industrial confidence		(-)	(-)	(-)
Stock market volatility			(+)	(+)
Consumer confidence				(-)

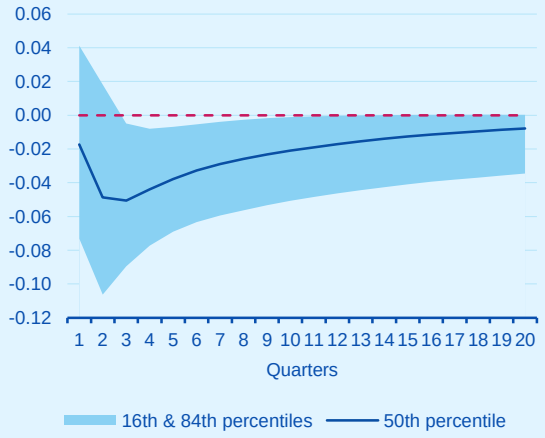
Source: BBVA Research

In Model 3, for example, it is assumed that increases in economic politicy uncertainty should simultaneously and negatively affect the development of the idiosyncratic components of both the EPU and the variables associated with the financial markets and the confidence of agents. It should be noted that the model does not impose any restrictions on the response of GDP (MICA-BBVA), an essential condition for ensuring the results obtained in this study have not been imposed by construction.

In Figure B.1.5 it is shown the main result emerging from the estimations, taking as reference the most parsimonious model specification that includes at least one financial and real variable (Model 1). As can be seen, the impulse response function suggests that increases in the idiosyncratic component of political uncertainty have a negative impact on the real economy. This effect is statistically significant from the third quarter and dissipates after nine quarters[30].

29: The methodology, initially introduced by Faust (1998), Uhlig (1999 and 2005) and Canova and De Nicolo (2002) to identify monetary policy shocks, generally consists in estimating a VAR in reduced form, and then entering restrictions on the signs of the impulse response functions of the VAR to identify the shocks to be studied and to obtain a structural representation of the VAR.
30: See the Appendix for impulse-response figure of the rest of the variables included in Model 1. The results for the rest of the estimated models are available to the reader on request from the authors.

Figure B.1.5
Spain: GDP response to a political uncertainty shock (pp of quarterly growth rate, Model 1)



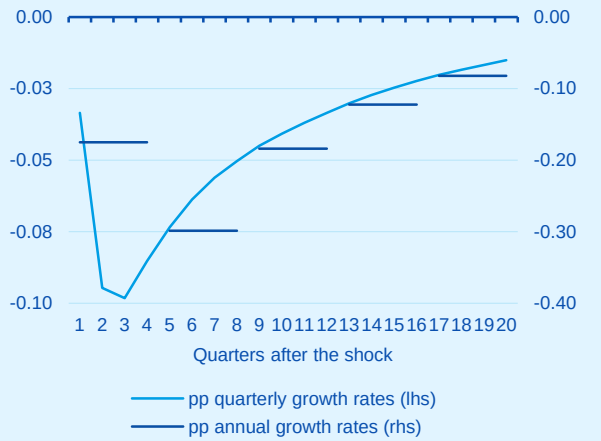
Source: BBVA Research

Results for Models 2 and 3 are qualitatively similar. By contrast, Model 0, which excludes the idiosyncratic part of industrial confidence, does not exhibit statistically significant changes in GDP. This result, together with the above-mentioned delay in the response by GDP to the shock, is in line with theories suggesting that increased uncertainty would affect growth through changes generated in agents' savings and investment decisions.

Possible responses by the Spanish economy to increased political uncertainty

The unprecedented elements in the current Spanish political scene mean it is not possible to use past experiences to gain a sense of the potential magnitude and duration of the political uncertainty shock. For this reason, three simulation exercises have been performed aimed at exemplifying the possible effects on activity. The first simulation consists in relying on the **idiosyncratic increase in economic policy uncertainty observed in January 2016** (one month after the general election). In simulating a shock of this kind, we find that the **decrease in the rate of GDP growth would be 0.2 pp in the first year and 0.3 pp in the second** (see Figure B.1.6)[31].

Figure B.1.6
Spain: GDP response to a political uncertainty shock similar to the one observed in Jan-16

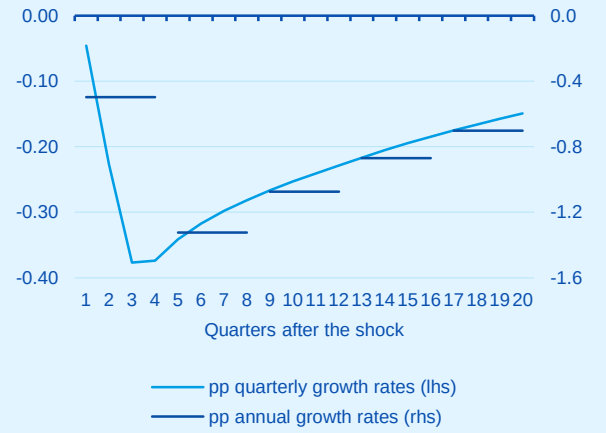


Source: BBVA Research

In the second exercise we study the consequences of the **increased uncertainty in January being maintained in the short term.** To do this, we assumed that the increase uncertainty observed in January will remain constant for six months and then subside. The results of the exercise indicate that the effects on GDP would be deeper and more lasting than those described for the previous case. In particular, **a decrease of GDP of 0.5 and 1.3 pp in the growth rate is estimated during the first and second year**, respectively (see Figure B.1.7).

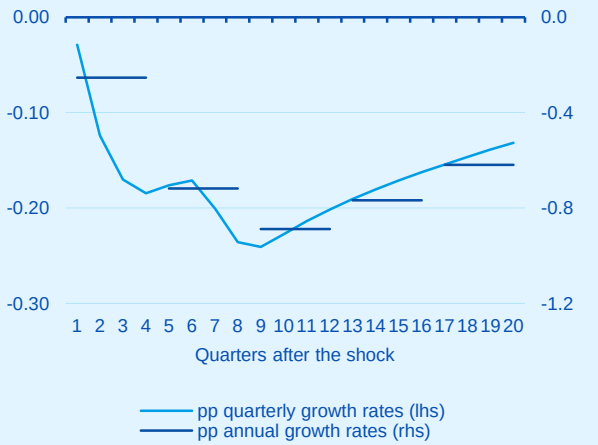
30: See the Appendix for impulse-response figure of the rest of the variables included in Model 1. The results for the rest of the estimated models are available to the reader on request from the authors.
31: These results are in line with those recently obtained by Fernandez-Villaverde and López Salido in a similar exercise which also analysed the potential impact of political uncertainty (see http://goo.gl/A329D4). The main differences in the exercise lie in the variables used for estimation, the non-distinction of the idiosyncratic behaviour of variables and the identification of the VAR model through a Cholesky breakdown and not using sign restrictions.

Figure B.1.7
Spain: GDP response to a persistent (6 months) political uncertainty shock



Source: BBVA Research

Figure B.1.8
Spain: GDP response to a political uncertainty shock similar to the Italian case



Source: BBVA Research

The last exercise consists in **replicating, for the Spanish case, the increase in political uncertainty that occurred in Italy after the elections in February 2013[32].** To do so, the model described above has been used to study the Italian case and both, the duration of the shock and its contribution to the deterioration of the variables included in the model were estimated. In particular, our estimates suggest that the idiosyncratic part of the Italian EPU may have been affected for two years. It is worth noting that, despite the high persistence, in the Italian case a moderate increase in the idiosyncratic component of the EPU was observed. For example, in the first month after the start of the crisis, the shock was only two-thirds of that observed in Spain in January 2016. Simulating a shock of similar characteristics for the Spanish case shows that the impact on GDP would involve **a decrease of 0.3 pp in the rate of growth during the first year, and 0.7 and 0.9 pp in the following two years** (see Figure B.1.8).

However, the results obtained are purely indicative and should be interpreted with caution. On the one hand, the confidence bands reveal the estimates are relatively broad. On the other hand, the magnitude and duration of the shock induced by the current political uncertainty are still uncertain, with the simulations being presented for illustrative purposes only.

Also, following the municipal and regional elections of 2015 there have been changes in regulations, projects, licences, contracts and awards, the impact of which on the economic policy uncertainty might not have been fully reflected in the EPU. In the absence of more precise indicators or surveys set up for this purpose, it should be remembered that the EPU is only an approximation of this uncertainty source, which it is not possible to observe.

Finally, to evaluate the effects of political uncertainty in the coming months it will be necessary, once the data become available, to develop a counterfactual exercise that reports what the growth of the economy could have been in the absence of this shock.

32: The general elections of February 2013 in Italy led to a coalition government because of the constant threat of breakdown and a call for new elections. The lack of an EPU estimate for countries such as Greece or Portugal prevents our transferring their experiences to the Spanish case.

Conclusions

The uncertainty about economic policy measures to be implemented during the next few years seems to be increasing. The analysis of the impact this might have on the real economy has become relevant. With this aim in mind, different scenarios have been evaluated and analysed in this box. The simulation results indicate that increased economic policy uncertainty **could lead to reductions in the rate of growth of GDP which, depending on its extent and persistence, vary between 0.2 and 0.4 pp for the first year and between 0.3 and 1.1 pp for the second.** However, these results need to be interpreted with the caution which comes from the lack of similar episodes of political uncertainty at national level to the one which exists today in Spain.

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Appendix

Methodological description: dynamic factor model

The source of variation of any observable variable x_t^j (e.g. industrial confidence) for each of the j countries included in the sample ($j = 1, \dots, J$) is assumed to depend on a common to all J countries component (F_t) and on a idiosyncratic to each country (e_t^j) component. Using a vector representation, $X_t = [x_t^1, \dots, x_t^J]'$ and $e_t = [e_t^1, \dots, e_t^J]'$, it is possible to write:

$$X_t = \sum_{s=0}^{S} BF_{t-s} + \sum_{s=0}^{S} e_{t-s} \qquad (1)$$

where $B = [\beta^1, \dots, \beta^J]'$ is the vector of parameters measuring the importance of the common factor for each x_t^j. Depending on the variable under study, it is assumed that X_t is dependent on $s = 0, .., S$ lags of the factor. On the other hand, the dynamic of the model is given by:

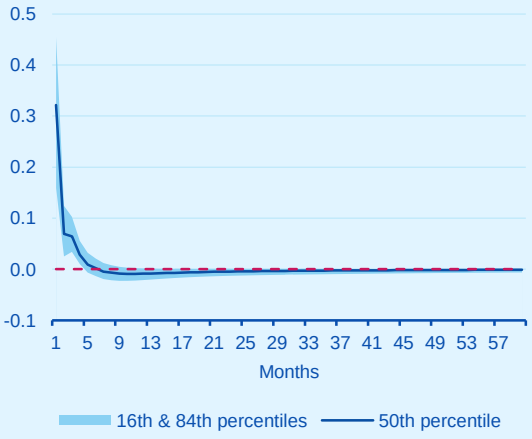
$$F_t = \varphi_h F_{t-h} + \varepsilon_t \qquad \varepsilon_t \sim N(0,1)$$

$$e_t^j = \varphi_h^j e_{t-h}^j + \epsilon_t^j \qquad \epsilon_t^j \sim N\left(0, \sigma_\epsilon^j\right), \forall j$$

where φ_h and φ_h^j define an autoregressive process of order h. It is further assumed that the errors ε_t and ϵ_t^j are independent and not serially correlated with each other. Writing the model in a space-state form, the parameter estimation can be done through maximum likelihood using the Kalman filter.

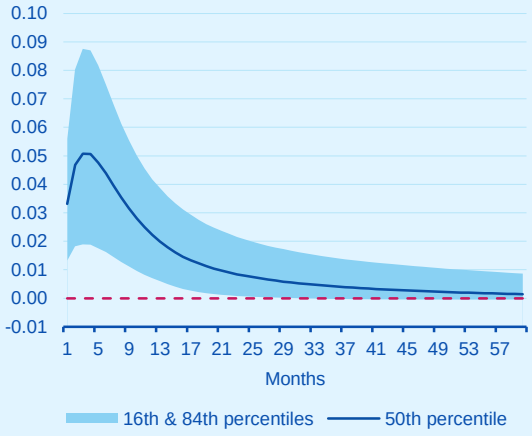
Additional Impulse Response Figures (Model 1)

Figure B.1.A.1
Spain: response of the idiosyncratic component of EPU to a political uncertainty shock (standard deviations)



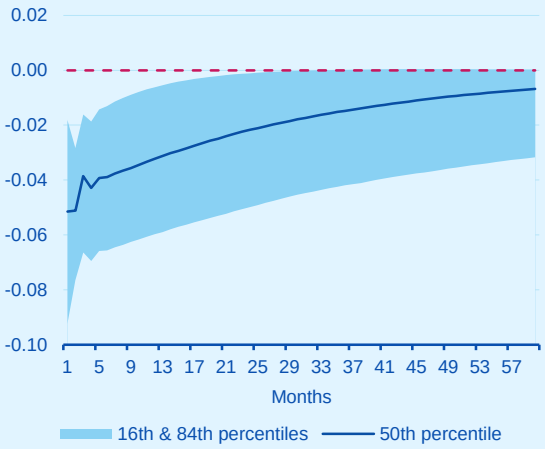
Source: BBVA Research

Figure B.1.A.2
Spain: response of the idiosyncratic component of the risk premium to a political uncertainty shock (pp)



Source: BBVA Research

Figure B.1.A.3
Spain: response of the idiosyncratic component of industrial confidence to a political uncertainty shock (standard deviation)



Source: BBVA Research

Box 2. Savings and financing of businesses during the crisis

As highlighted in Box 2 of the previous issue of this publication[33], the strong growth in savings by companies observed since 2007 has enabled them to generate net lending capacity, even in recent years when investment has started to grow again. This generation of savings influences corporate financing mechanisms, which differ according to their size. This box analyses the use that non financial corporations have made of such resources, differentiated by type of instrument and taking into account the size of the production unit.

Data: description and some preliminary remarks

In the analysis we have used the information contained in the Integrated Central Balance Sheet Data Office (CBI) at Banco de España which, compared with other databases[34], provides more detail about the characteristics of the companies. In total, the CBI includes data from about 600,000 businesses and concentrates around 40% of the business census according to the Central Companies Directory (CCD)[35]. Similarly, the selected sample represents about 45% of Gross Value Added (GVA) generated by non-financial companies. However, the CBI has some limitations, such as the lack of representativeness of the sample (e.g. it is not a statistical sample, de-registration of companies is not well reflected, there is a greater presence of large companies, etc.) and lack of uniformity in the series (NACE-93 and SEC-95 in the period 2003-2007, and NACE-09 and SEC-2010 between 2008 and 2013). Therefore, the conclusions presented should be viewed with caution.

The crisis forced companies to change their financing structure

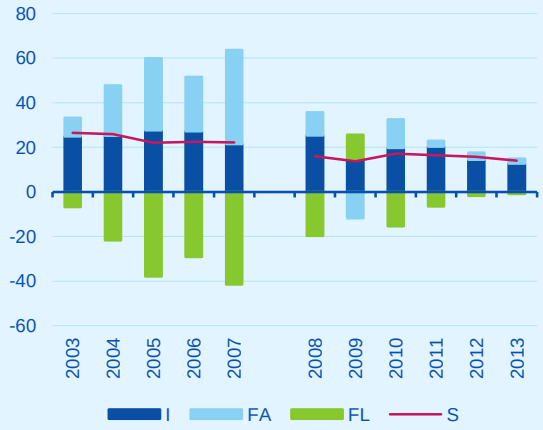
The analysis presented here is based on the following identity:

$$S + FL \equiv I + FA,$$

where S is gross corporate savings, FL is net transactions in financial liabilities, I is investment and FA is net transactions in financial assets. The left side of the identity shows corporations' financing resources and mechanisms, while the right shows their application.

During the period 2003-2007 companies generated an average saving of around 24% of GVA, a figure in line with the investment rate observed between 2005 and 2006. To this we need to add a significant increase in the acquisition of financial assets, mainly in the form of equity, and particularly related to the acquisition of assets abroad[36] (see Figure B.2.1). Consequently, **Spanish companies generated a net borrowing which was covered by an increase in financial liabilities.**

Figure B.2.1
Companies: saving, investment and financial transactions (% GVA)



Source: BBVA Research based on Banco de España (CBI)

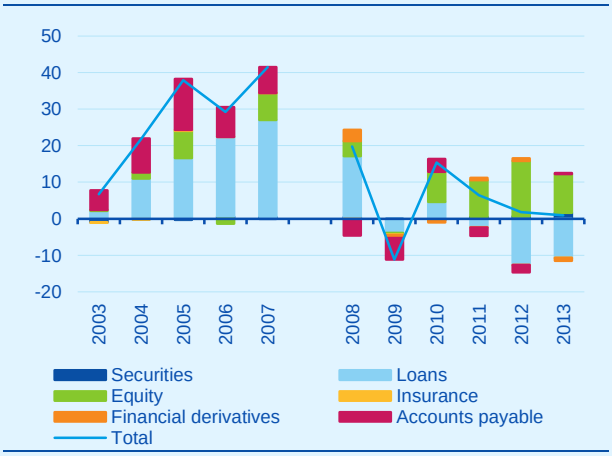
33: Spain: the trend in corporate savings, available at https://goo.gl/ITd1l9
34: Such as the Financial Accounts of the Spanish Economy, also from Banco de España.
35: Central Companies Directory of the National Statistics Institute.
36: See Maudos and Fernández de Guevara (2014).

By instrument, this increase **in company financing in the years before the crisis came mainly from loans.** Note the higher intensity of those taken out with resident financial institutions, although loans from the rest of the world and the issuance of securities gained significance during the period of expansion.

However, the crisis changed the methods with which companies financed themselves. In particular, it significantly reduced the use of loans in favour of more issuance of own funds. As stated by Maudos and Fernández de Guevara (2014), the conditions of access to external financing changed over the course of the crisis. While during the expansion phase, excess liquidity and low interest rates led to a significant growth in bank lending, during the crisis it was baldy hampered by liquidity constraints, market shut-downs and increased risk premiums. This situation forced companies to change their sources of financing, increasing the use of self-financing, as can be seen in Figure B.2.2.

Similarly**, the onset of the crisis reduced the importance of trade credit**[37] **as a means of financing.** This decline is related in part to the fall in business activity, although in recent years it has been more intense than the decline in sales (see García-Vaquero and Mulino, 2015). On the other hand, the reduction in trade credit could be associated, among other factors, with the decline in the average payment period derived from some policy measures, such as laws combating late payment or the Fund for financing payments to suppliers[38].

Figure B.2.2
Companies: net incurrence of liabilities. Net transactions (% GVA)

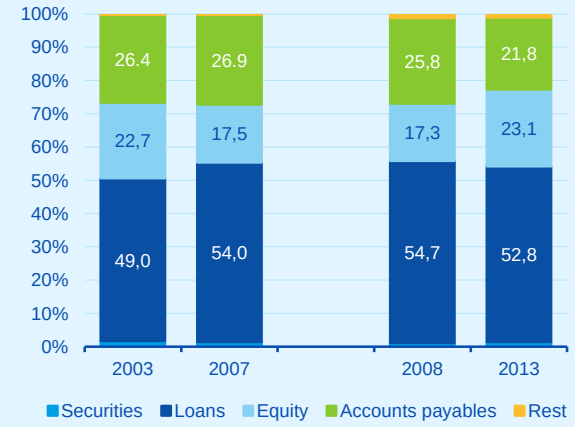


Source: BBVA Research based on Banco de España (CBI)

All the transactions described above had an impact on companies' balance sheet structure. Thus, although **loans remained the main source of financing**, the onset of the crisis led to a change in the trend. Thus, until 2007 loans were gaining importance in companies' balance sheets, while equity (issuance of own funds) was being reduced. Meanwhile, trade credit represented just over 25% of the balance sheet. **After the crisis, and at the end of 2013, equity gained weight in balance sheets at the expense of loans and, especially, of accounts payable** (see Figure B.2.3).

37: Represented in the financial accounts as part of the item Other accounts payable/receivable.
38: Among others: Law 15/2010, of 5 July (BOE (Official State Gazette)-A-2010-10708); RD (Royal Decree)-Law 4/2013, of 22 February (BOE-A-2013-2030); RD-Law 7/2012, of 9 March (BOE-A-2012-3395).

Figure B.2.3
Companies: financial balance sheet structure. Outstanding liabilities (% of total liabilities)



Source: BBVA Research based on Banco de España (CBI)

The changes in the financing structure varied with the size of the companies

Analysing companies based on size, it can be seen that **the effect of the crisis on financing was not uniform.** Although the general trend is as described above, there are significant differences depending on the size of the companies.

For the purposes of this analysis, the classification of company size in the CBI is based on the average number of employees. Microenterprises are considered to be those with 0-9 employees; small companies are those with 10-49 employees; medium-sized companies are those with 50-199 employees; and large companies are those with 200 or more employees.

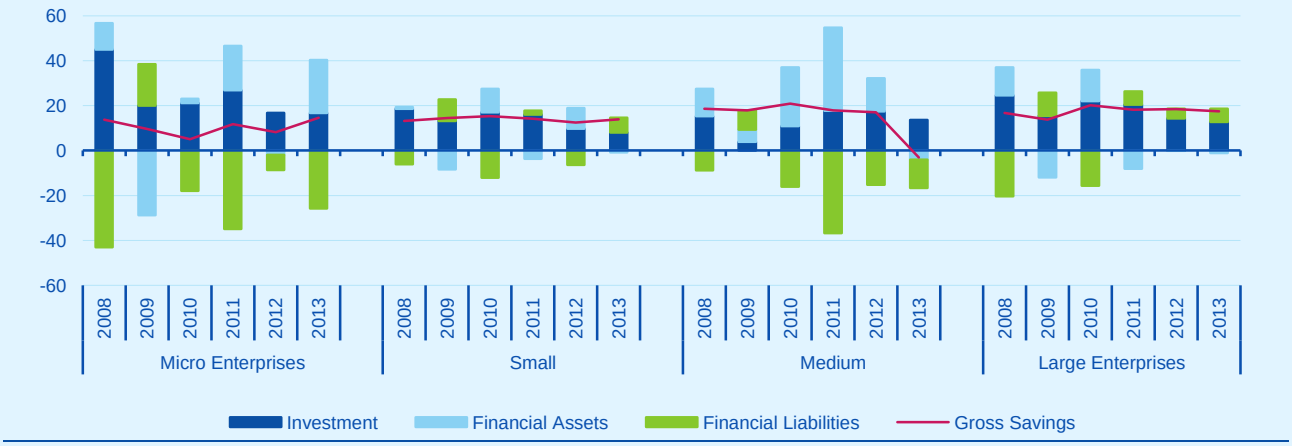
Using this breakdown, Figure B.2.4 shows that changes in **companies' rates of saving differ with their size.** Thus, in microenterprises (more vulnerable to changes in activity), the savings generation capacity fell sharply. Nevertheless, they were able to maintain a certain level of investment, financed mainly by an increase in their financial liabilities.

Meanwhile, in small companies, the financing capacity generated in the expansive period allowed them to maintain their levels of investment in the early years of the crisis. Only since 2012 has a fall in the rate of investment been observed. As a result, the volume of financial transactions remained low.

In the medium-sized companies segment, the generation of precautionary savings is implied, since the level of investment fell sharply but that of savings did not.

Finally, larger companies maintained their levels of both saving and investment in the early years of the crisis. From 2012, as a result of the fall in investment, they began to generate financing capacity which they allocated to reducing their financial liabilities.

Figure B.2.4
Companies: gross savings, investment and financial transactions by size (% GVA of each segment)



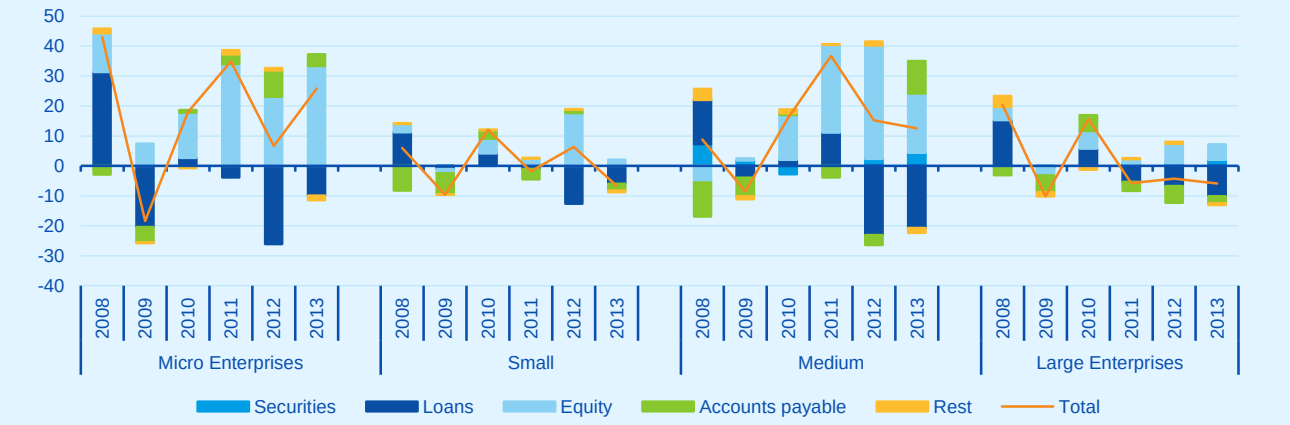
Source: BBVA Research based on Banco de España (CBI)

By instrument, net transactions show that the change in the companies' **financingshowed a similar trend in all business segments, although there were differences in intensity** (see Figure B.2.5). Between 2003 and 2007, the expansion of investment by microenterprises and small companies was financed by loans from resident financial institutions. **From the beginning of the crisis, these companies resorted to increasing own funds to finance investment spending and initiating a process of reduction of financial liabilities.** This greater reliance on own funds may stem from the difficulties faced by small companies in gaining access to bank loans, given the limited security they have to offer (which could be affected by falling housing prices), low negotiating power in an environment of financial sector restructuring and information asymmetries (Santero Sánchez *et al*., 2015).

In medium-sized companies, excess savings in the early years of the crisis were used to **increase currency and deposits and loans** (probably intercompany), **and there was a cancellation of trade credit**, both receivables and payables. Financial difficulties are also seen in this business segment, which obtained resources from own funds (equity issuance) and the issue of securities in order to use them, especially in 2012 and 2013**, to cancel loans.**

Finally, during the crisis, **companies with more than 200 employees maintained the equity issuance instruments as the only means of financing** (probably associated with the capital increases of large multinationals), to which we can add a slight increase in issues of other securities. In addition, a more intense **financial loan cancellation process** has been observed since 2011. Also, large companies recovered funds from loans granted (intercompany loans) to intensify the reduction of financial liabilities. As in the case of the medium-sized companies, there was also a clean-up process for trade credit, on both the assets and the liabilities side.

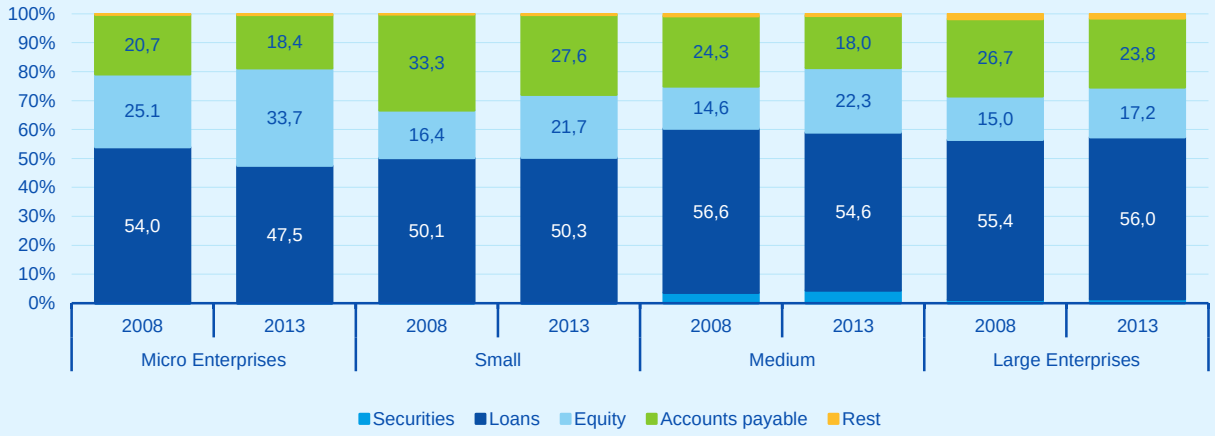
Figure B.2.5
Companies: net incurrence of liabilities incurred by size. Net transactions (% GVA of each segment)



Source: BBVA Research based on Banco de España (CBI)

As for the composition of the balance sheet**, the crisis was felt more intensely in the liabilities of smaller companies (microenterprises and small companies), given the greater reliance they had on both trade credit and financial loans.** While loans remained the main source of financing as at the end of 2013, own funds gained importance at the expense of trade credit. By contrast, in medium-sized and large companies the diversification of sources of financing allowed the reduction of the weight of loans to be lower (see Figure B.2.6).

Figure B.2.6
Companies: balance sheet structure by size. Outstanding liabilities (% of total liabilities)



Source: BBVA Research based on Banco de España (CBI)

The smaller companies have led the process of deleveraging

As we have seen above, in the pre-crisis period, the growth in credit far exceeded the rate of expansion of activity, which placed the level of debt significantly higher than that recorded in other periods of expansion (Garrote, Llopis and Vallés, 2013).

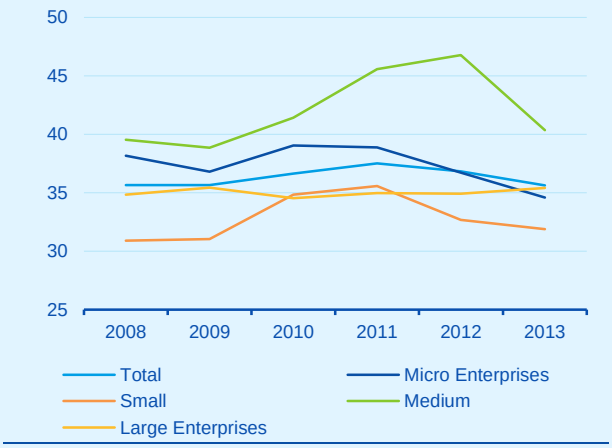
To measure the level of companies' indebtedness, we can use the ratio of financial debt to total assets[39], which indicates the percentage of the balance sheet financed with external funds. Through this ratio, it is possible to analyse not only the degree of companies' vulnerability - high values suggest a greater reliance on external assets - but also the level of deleveraging that began with the crisis.

Thus**, the average of the ratio for all companies during the period 2008-2013 exceeded 36%.** These levels are a source of vulnerability to a possible rise in financing costs. In this sense, medium-sized companies are more exposed to this risk factor (see Figure B.2.7).

In terms of deleveraging, the debt ratio shows that **not only is it the smaller companies that have been leading the process, but that they started before the large companies.** Given these companies' reliance on bank loans, the reduction in the level of debt was concentrated almost exclusively in loans from resident financial institutions. While in medium-sized companies, deleveraging seems to have begun in 2013, in the larger companies it remains largely unchanged. The explanation for this stability in the leveraging of large companies could lie in the importance of intercompany loans as a financing source. In any case, a significant fall has also been observed in loans from resident and foreign financial institutions.

39: Financial debt defined as the sum of loans and securities issued.

Figure B.2.7
Companies: leverage* by size (%)



(*) (Loans + Securities) / Total Assets
Source: BBVA Research based on Banco de España (CBI)

Conclusions

This box analyses the use that companies have made of the savings generated since 2007. **This generation of savings, which differs according to the size of the company, influenced financing mechanisms.**

The analysis confirms that **the financial crisis forced companies to change their financing structure.** During the boom phase, Spanish companies generated a funding requirement which was covered by an increase in financial liabilities, with loans being the main financing instrument.

With the onset of the crisis, companies changed their ways of financing, reducing loans and strengthening the issuance of own funds. Similarly, the fall in business activity and the adoption of new laws on combating late payments reduced the quantitative importance of trade credit.

The effect of the crisis on financing differed according to company size. Microenterprises reduced their savings rate, but maintained a certain level of investment, financed in part by an increase in financial liabilities. In small companies, the financing capacity generated in the boom phase allowed them to maintain investment levels at the beginning of the crisis, so they did not increase their financial transactions.

However, in medium-sized enterprises a significant decline in investment was seen within a context of savings stability, suggesting the generation of precautionary saving. Meanwhile, large companies barely altered their level of savings and, from 2012, with the collapse of investment, they allocated part of this to reducing their financial liabilities.

As for the composition of the balance sheet, the crisis was felt more intensely in the liabilities of smaller firms, given their greater reliance on trade credit and financial loans: own funds gained importance at the expense of trade credit. By contrast, in medium-sized and large companies the diversification of financing sources allowed a smaller reduction in the weight of loans.

In terms of deleveraging, the ratio of financial debt to total assets shows that **smaller companies have led the process**, and that they started before the large companies, especially through the reduction of bank loans.While with larger companies there was little deleveraging during the study period, with medium companies that process seems to have begun in 2013.

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Box 3. Inequality in Spanish household consumption during the crisis

Introduction

One of the characteristics of the last recession cycle of the Spanish economy is the notable drop in households' spending on consumption. This box analyses this decline, paying particular attention to changes that have occurred based on the characteristics of the household and the type of good or service purchased. For this, the Household Budget Survey (HBS) prepared by the Spanish National Statistics Institute (INE) has been used.

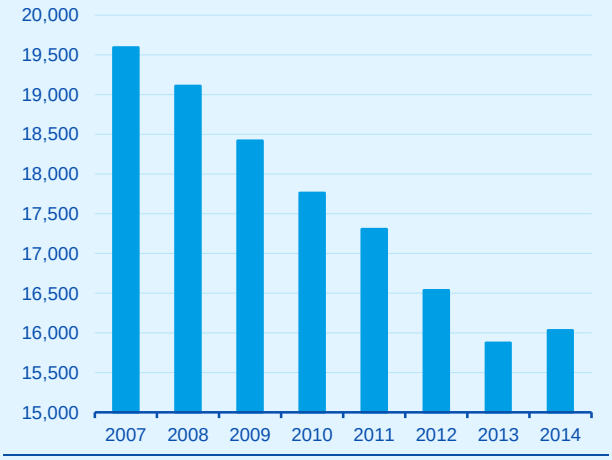
The data show that between 2007 and 2014 the households with the higher consumption are those that have most reduced their spending[40]. Therefore, during the period in question, **a reduction in inequality was estimated to have been produced in consumption among Spanish households. Among the possible causes** behind the above are, first, **the greater weight of durable, semi-durable and non-durable non-essential items in the basket of families with more consumption,** with "superior goods" being the ones whose consumption falls more than proportionally with falls in income[41]. On the other hand, **the smaller decline in household size of families with lower consumption** may have allowed them to exploit economies of scale. **Given their nature, in part temporary,** both factors suggest that the reduction in inequality could be a cyclical phenomenon, and therefore, **it is possible it could be reversed during the recovery.**

Spanish households reduced their average consumption[42] by 18.2% between 2007 and 2014

The drop in activity observed in the Spanish economy in recent years has been reflected in the ability of households to consume. Thus, **between 2007 and 2014 the average consumption per equivalent consumption units (ECU), declined by 18.2%** (see Figure B.3.1) . However, **this decline conceals great disparities among households.** For example, Figure B.3.2 shows how the distribution of families has changed based on their level of consumer spending. So in addition to the fall in the average expense of 18.2%, the figure shows the movement of the density curves leftward and upward, with a reduction in the percentage of households in the right tail of the distribution (higher level of expenditure). **Specifically, compared with the 10% of households in which each member consumed less than €8,600 in 2007, in 2014 the figure rose to 17% of households.** At the opposite end, in 2007 10% of households had consumption of more than €33,000 per member per year, however, in 2014 only 5% of households were able to have a consumption above that figure, a sign of the reduction in inequality.

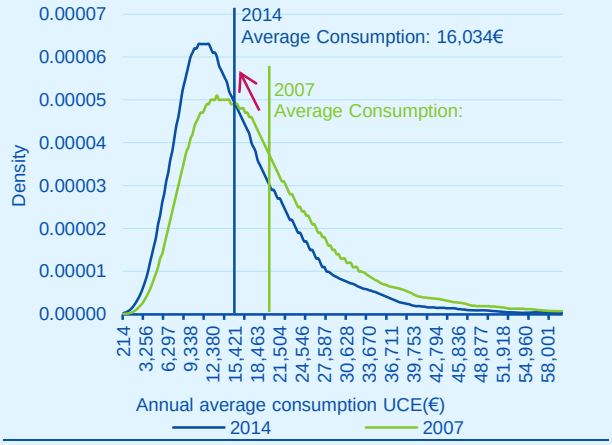
40: In this document, consumption is measured in real terms in 2011, deflating the current values by price indices at household level according to the methodology developed at BBVA Research. Consumption Outlook. First Half 2014. R2: Your CPI is not like mine: inflation differentials per household.
41: For further details see Consumption Outlook. Second Half 2014. R2: Revealed preferences: How does the consumption of a good respond to changes in prices and household income?
42: While the needs of a household grow with each additional member, they do so less than proportionally due to the existence of economies of scale in consumption. Therefore, to make comparisons between households with different compositions it is necessary to calculate the number of equivalent consumption units, hereinafter called ECUs. To this end, an equivalence scale has been used, based on the size of the household and the age of its members.We have opted for the modified OECD scale which calculates the number of equivalent members of a household by assigning a weight of 1 to the main breadwinner of the household, 0.5 to other adults aged ≥ 14 years, and 0.3 to those under 14 years of age.

Figure B.3.1
Spain: Average annual consumption per ECU (€)



Source: BBVA Research based on the Household Budget Survey (INE)

Figure B.3.2
Spain: density functions of the average annual consumption per ECU



Source: BBVA Research based on the Household Budget Survey (INE)

What factors explain the differential trend in consumption by household type?

In this box two possibilities are explored**. The first has to do with differences in consumption baskets** of households based on their income level. **The second is related to the trend in the average household size.**

Durable, semi-durable and non-durable non-essential goods were the hardest hit

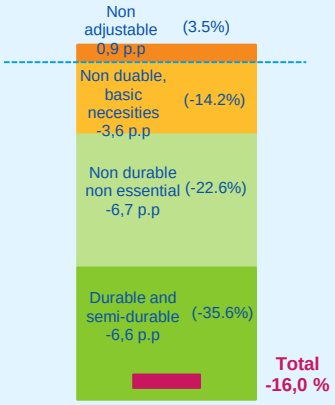
Variations in household spending are not distributed equally among the different types of goods and services. For example, **the response of household consumption to changes in their level of income tends to be different depending on whether the product is an essential or superior goods.** The latter group consists predominantly of durable goods, so a greater weight of such goods in a family's basket may further reduce their total expenditure whenever their income falls.

To analyse how the composition of the basket has affected household's spending on consumption, four categories of goods and services are distinguished, sorted by degree of durability and dispensability, in the following order: non-adjustable, non-durable necessities, non-durable non-essential and durable and semi-durable goods[43].

Analysing the trend in aggregate household consumption from that classification, a clear distinction is observed between non-adjustable goods and the rest[44] (see Figure B.3.3). In fact, **spending on non-adjustable goods has increased during the crisis**, in contrast with the declines observed in other goods and services. Meanwhile**, it is non-durable non-essential and durable and semi-durable goods and services that have shown a worse performance.**

43: See González-Mínguez and Urtasun (2015).
Essential goods: Housing, household running costs, electricity, water and gas. Basic necessities: Food, non-alcoholic beverages, medicines, transport and pre-school and primary education. Non-durable non-essential items: Alcoholic beverages, cigarettes and tobacco, narcotics, medical services, insurance, postal and recreational services, accommodation, personal care and social protection. Durable and semi-durable goods: Clothing, footwear, furniture, home textiles, domestic appliances, household items, purchase of vehicles and electronics.
44: The results are in line with those obtained by González-Minguez and Urtasun. In this case the authors use the real private consumption series from the National Accounts for the period 2008-2013.

Figure B.3.3
Spain: Annual consumption of all households by product type (% Chge. 2014-2007 in parentheses and contribution to change in pp)



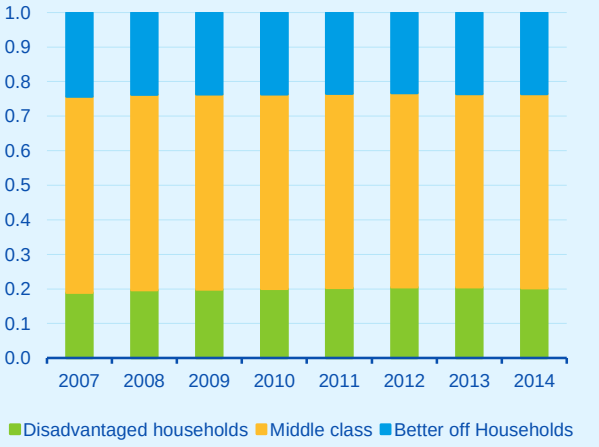
Source: BBVA Research based on the Household Budget Survey (INE)

The fall in consumption in "well-off" households is almost double the decline in consumption in "disadvantaged" households

Based on the analysis by product one might think that **the greater fall in consumption of non-durable non-essential items, durable and semi-durable goods and services is associated with a greater adjustment in households with the higher consumption.**

To break down households by their consumption capacity, we used a classification similar to that used in BBVA Research (2015), based on the Palma theory of income distribution (2011). Thus, it appears that 50% of total consumption in Spain is carried out by middle-class households (deciles 5-9 of the distribution of average consumption per household), so that changes in the degree of redistribution of consumption are focused on the other 50%: 10% of households with the highest average consumption per household (decile 10 or "better-off") and 40% of households with the lowest average consumption per household (deciles 1-4, or "disadvantaged")[45] (see Figure B.3.4).

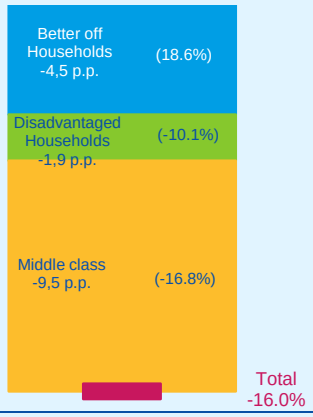
Figure B.3.4
Spain: distribution of annual consumption of all households



Source: BBVA Research based on the Household Budget Survey (INE)

Based on this breakdown of households, a similar analysis to that of products can be performed as shown in Figure B.3.5. In it, we can see that it is middle-class households that have contributed most to the reduction in consumption over the crisis, given their weight in total spending. On the other hand, **against the fall of 16.8% of middle class household consumption, the spending by the better-off has been reduced by 18.6%, almost double the drop of 10.1% among the disadvantaged** (see Figure B.3.6).

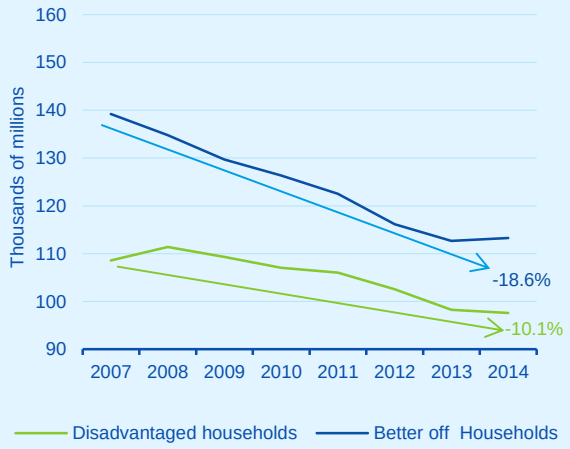
Figure B.3.5
Spain: annual consumption of all households by household type (% Chge. 2014-2007 contribution to variation in pp)



Source: BBVA Research based on the Household Budget Survey (INE)

45: In this document, similar terminology is used to that used in BBVA Research (2015) to refer to households with higher consumption ("advantaged" in the 2015 paper, "better-off" in this one) and lower consumption ("disadvantaged"), but the method differs slightly. While BBVA Research (2015) uses the equivalent consumption unit (ECU) to categorise households, in this box aggregate household consumption has been chosen.

Figure B.3.6
Spain: trend in the annual consumption of all households by household type (% Chge. (€ and % Chge. 2014-2007)



Source: BBVA Research based on the Household Budget Survey (INE)

Household income is a key factor in the differences in consumption between the better-off and disadvantaged

Given the relationship between the trend in consumption by type of product and home, we opted to carry out a joint analysis of both classifications (see Figure B.3.7).

Figure B.3.7
Spain: annual consumption of all households by type of product and household (% Chge. 2014-2007 and contribution to the change in pp)

Source: BBVA Research based on the Household Budget Survey (INE)

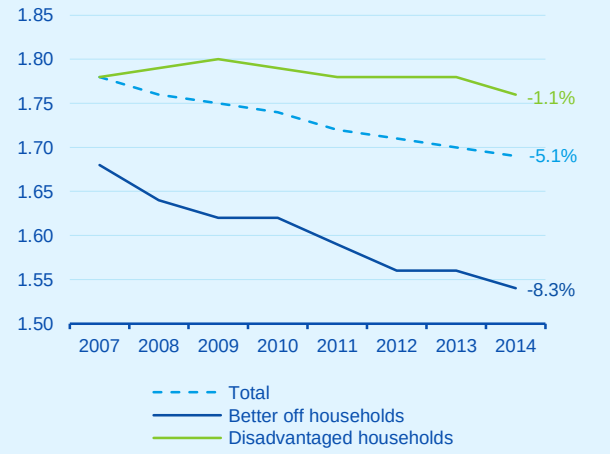
In this regard, Figure B.3.7 confirms that **the reduction in the consumption of non-durable non-essential items and durable and semi-durable goods has occurred with greater intensity in better-off households.** Specifically, spending in better-off households on non-durable non-essential items fell by 24% and on durable and semi-durable goods by 34% between 2007 and 2014. This compares with declines of 18% and 30% in expenditure on these items in disadvantaged households. That, together with the fact that consumption of these goods and services accounted in better-off households for 52% of their shopping basket on average during this period compared to the weight of 30% in the basket in disadvantaged households, explains the larger drop in consumption in better-off households.

For non-adjustable goods, the positive contribution to the trend in consumption by better-off households (1.2 pp) is worth noting, which is four times the contribution to expenditure by disadvantaged households.

The relocation of members may have played a key role in the trend of consumption in disadvantaged households

To the effect of the composition of the consumer basket, we should also add the impact that the change in household size may have had. As Figure B.3.8 shows, compared with a 5.1% reduction in the equivalent average size of Spanish households between 2007 and 2014, disadvantaged households are estimated to have maintained the size of their households at around 1.78 members, while the better-off have shown a fall of more than 8% placing the average size of their households in 2014 at 1.54 members.

Figure B.3.8
Spain: trend in the average size of households (Equivalent consumption units and % Chge. 2014-2007)



Source: BBVA Research based on the Household Budget Survey (INE)

This development would reflect an intensification of the general downward trend in the number of members of better-off households, while **disadvantaged households were possibly forced to initiate a process of family reunification during this period, in an attempt to alleviate the effects of the crisis**. In particular, fixed costs can be shared in a larger home, reducing the average cost of living.

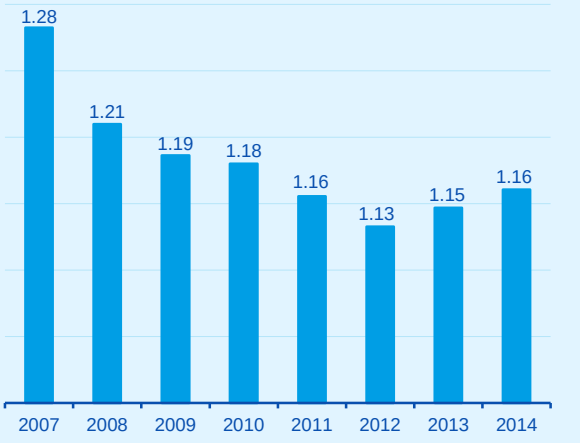
The Palma ratio shows that during the crisis, inequality in consumption by Spanish households fell by 9%

Beyond the individual trend in consumption, the so-called Palma ratio is a simple way to measure the gap between the most and least favoured households. Specifically, the Palma ratio measures the total consumption by the 10% of families with the highest average consumption per household, divided by that of the 40% of households with the lowest consumption:

$$\text{Palma ratio in consumption} = \frac{\text{Total consumption by better-off households (the 10\% of households with the highest average consumption per household)}}{\text{Total consumption by disadvantaged households (the 40\% of households with the lowest average consumption per household)}}$$

Where a higher ratio would indicate greater inequality in terms of consumption between better-off and disadvantaged households.

Figure B.3.9
Spain: Inequality in consumption measured by the Palma ratio



Source: BBVA Research based on the Household Budget Survey (INE)

In Figure B.3.9, the Palma ratio has been constructed during the 2007-2014 period, using the HBS. **From this we can highlight the following conclusions. Firstly**, the consumption of the 10% of households with higher household consumption (better-off households) is higher than that of the 40% of households with lower consumption per household (disadvantaged households). Specifically, in 2014 **the consumption of better-off households was 16% higher than that of disadvantaged households. The second conclusion**, as was shown in the above analysis, is that of **the fall in inequality in consumption of Spanish households between 2007 and 2014, by 9.5%**, with continuous declines between 2007 and 2012 and a slight upturn from 2013.**This is the result of the fall observed in the consumption of better-off households (-18.6%), which was greater than that of disadvantaged households (-10.1%).**

There is no consensus on how best to measure inequality, but doing so through consumer spending has certain advantages

These results can be striking when compared to the increases in inequality in terms of salary or income that occurred during the crisis[46]. As stated by BBVA Research (2015), **there is no general consensus in the literature on the best way to estimate inequality (income or expense)**, although **consumption** is generally considered more appropriate for measuring changes in households' well-being, **showing certain advantages over measurements that use income.** The first of these advantages is **the incorporation of household savings decisions**, which means that variables such as the Palma ratio are less sensitive to economic fluctuations. The second is the wealth of information that is available, since consumption data provided by the INE through the HBS not only allow us to know the monetary flow of goods and services consumed by households, but also includes non-monetary consumption (remuneration in kind, meals or imputed rental income, etc.). The last advantage is related to **the incentives to underestimate consumption, which are lower than those that occur in the case of income.**

It should be noted that the calculations in this box refer to household spending and, thus, to effective private consumption. Therefore, as argued by Andrés and Domenech (2015), they overestimate inequality in total consumption, by not considering the redistributive effects that operate through the public services consumed by households (health, education, etc.), which are a fundamental instrument of redistribution in countries with a developed welfare state. A recent study by Goerlich (2015) shows that the effects of public services in reducing inequality are significant.

Conclusions

The period of recession experienced in Spain in recent years has meant that, **between 2007 and 2014 the consumption of better-off households has been reduced to a greater extent than that of disadvantaged households.** This has led to a drop in consumption inequality as measured by the Palma ratio, unlike the measures targeted by income inequality.

Income and the composition of consumption baskets explain some of the behaviour shown by the consumption of better-off households, which have seen a reduction in their consumption of non-durable non-essential items, durable and semi-durable goods, which have more weight in their basket of products.On the other hand, **the smaller reduction in consumption in disadvantaged households seems to be due, at least in part,** to the lesser **decline in the average size of these families**, a sign of the trend towards grouping of members and taking advantage of economies of scale.

In any case, given the temporary nature of both effects, inked to the recession experienced in recent years**, one would expect the reduction in inequality to be a cyclical phenomenon, and therefore**, as suggested by the developments in household consumption between 2013 and 2014, more favourable for better-off households, **the possibility of its being reversed during the recovery should not be ruled out.**

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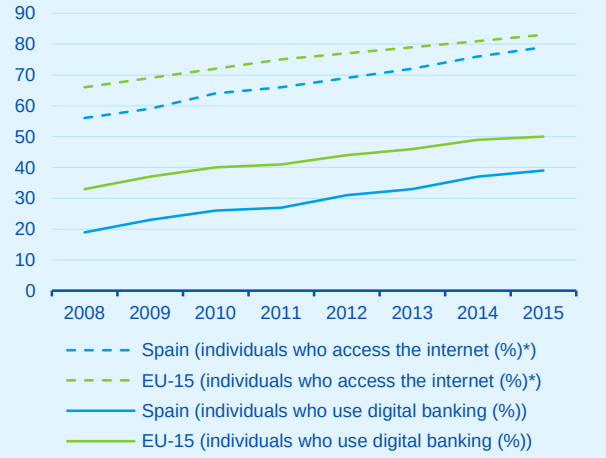
Box 4. A typology of users of digital banking in Spain

Introduction

The financial sector in general and Spanish banks in particular are facing a process of digital transformation in which the customer – multichannel, better informed and more demanding than in the past – occupies a central position. **The purpose of this section is to ascertain the socioeconomic determinants of the decision to access internet banking in Spain and to quantify its effect, in order to establish a digital banking user type.** To achieve this, we have used information from the Survey on Equipment and Use of Information and Communication Technologies in Households (ICT-H), conducted by the National Statistics Institute (INE) every year[47].

Figure B.4.1 shows that **the incidence of online banking has doubled since 2008 to almost 40% of the population between 16 and 74 years of age in 2015.** However, it is still more than 10 points below the average of the EU-15, even though there is little difference in the percentage of people who access the internet[48]. According to the IEB (2015), the incidence of digital banking in Spain is expected to be around 50% by 2020 if the growth pattern remains unchanged, and would not reach 85% - the figure for Denmark at present - until the decade following 2050.

Figure B.4.1
Spain vs EU-15: Internet access and use of digital banking (2008-2015, %)



*Persons aged 16 to 74 who have accessed the internet during the three months prior to the performance of the survey
Source: BBVA Research based on INE and Eurostat

The results of descriptive analysis indicate that the use of digital banking is far from uniform among population groups. The incidence is higher for males, the population between 25 and 44 years of age, natives, those who have higher education, the employed, those in households with dependent children and comparatively high incomes who have computers and wireless broadband internet and those living in cities, especially in Catalonia, Madrid, Navarra and the Basque Country.

It is essential to perform a regression analysis to distinguish the factors influencing the probability of access to electronic banking and to quantify their effects. The results from the estimate confirm some of the intuitions highlighted in the descriptive analysis and qualify others. In particular, we find that the education level of the individual, and particularly his/her skill in the use of new technologies, play a crucial role in the propensity to use digital banking. The likelihood is also higher for males aged between

47: The ICT-H is performed in a harmonised way across the Member States of the EU, which legitimises comparisons among countries. See http://ec.europa.eu/eurostat/web/information-society.
48: OECD (2015) shows that searching for information on the internet and sending e-mails have become generalised in developed economies, while other activities such as e-commerce and digital banking still differ considerably among countries.

25 and 34 years, natives, the employed, those in the top quartile of the income distribution and residents in single-person homes or with dependent children in densely populated cities. Lastly, we find that the presence of ICT equipment and internet in the home encourages access to internet banking.

But not only the aspects related to demand affect the spread of internet banking. The probability of using digital banking is estimated to have increased by more than 12 points between 2008 and 2015 even though the individual, family and idiosyncratic characteristics of the place of residence of the respondent had not changed. This result suggests that **technological progress and the commitment of financial institutions to the digitalisation of their commercial offering, to the detriment of the traditional model, facilitates access to online banking.**

Incidence of internet banking: Spain vs EU-15

In order to establish an initial approach to the groups with the greatest propensity to use online banking, various personal, family and socioeconomic characteristics of the individual are considered. Table B.4.1 provides information for Spain and the whole EU-15, the percentage of population aged 16 and over who have used digital banking services during the three months prior to the date of completion of the survey. It also includes the distribution of on-line banking users in each population group.

Overall, **an increased use of internet banking services can be seen in Spain between 2008 and 2015, greater than that experienced by the average of the EU-15**, which has reduced the digital divide between the two areas. However, this development has not been uniform across population groups.

- Table B.4.1 shows that **men make greater use of online banking services than women.** These gender differences, which have changed little over the analysis period, are higher in Spain than in the EU-15, which may indicate that there are other complementary explanatory factors of a family, work or economic nature which condition the outcome.
- **The proportion of digital banking users increases up to 44 years of age and then starts to descend**, both in Spain and in the average of the EU-15. The trend by section has been uneven. The incidence of online banking has grown more in the intermediate age groups, thereby expanding the differences between the population aged 35 to 44 years (which has similar figures to the EU-15) and younger and elderly individuals, who are less likely to use internet banking than Europeans in their age groups.
- **Figures by nationality reveal a higher incidence of electronic banking among natives, who represent over 90% of users of digital banking in Spain.** While progress between 2008 and 2015 was more positive among foreigners, its difference compared to Europe remains comparatively high.
- **The results suggest the existence of a positive relationship between the propensity to use online banking and the level of education attained.** The role of education seems to have gained importance during the period of analysis, meaning that disparities among groups have been extended. In 2015, the percentage of individuals with higher education accessing internet banking was nearly 70%, 23 points higher than those with high school studies and almost five times higher than the proportion of the population with basic education. While all groups present electronic banking incidence figures lower than the European figures, convergence to the average of the EU-15 among individuals with higher education has advanced significantly over the last seven years.
- **The employment situation also introduces significant differences in the use of digital banking.** The incidence is higher among younger people with employment and lower among retirees and those engaged in housework. Although the figures for use of online banking have increased in all groups

considered between 2008 and 2015, the difference from the European average has fallen only among those with employment.

- **As in the case of age, the incidence of internet banking based on the size of the household has a non-linear profile: it increases up to a certain threshold (four members or two minor dependants) and then decreases.** During the period under review, the increase in the proportion of users of online banking was widespread, especially in the households with the most members.
- **The percentage of individuals using digital banking grows with the level of income.** The incidence among individuals in the upper quartile of the distribution of household income exceeded 70% in 2015, almost five times higher than those located in the bottom quartile. As shown in Table B.4.1, the use of online banking among the 50% of the population with the highest level of income is more widespread in Spain than in the EU-15 today. This result is not seen in any other population group.
- **The presence of ICT equipment and internet in the home encourages access to internet banking.** Among individuals with a computer[49] or access to broadband internet at home, the incidence of digital banking was nearly 50% in 2015 and was more than seven times higher than the percentage of users who do not have a computer or internet connection.
- Finally, **differences can also be seen in the use of online banking based on place of residence.** Thus, access to internet banking increases with the population density of the municipality of residence, both in Spain and in the average of the EU-15, and is comparatively high in Catalonia, Madrid, Navarra and the Basque Country. The incidence of electronic banking has grown in all regions between 2008 and 2015, especially in Melilla, Navarra, Ceuta and Catalonia, but has done so unevenly, which has exacerbated regional differences.

In short, **the descriptive analysis suggests the existence of two speeds in the use of digital banking in Spanish society.** Employed people aged between 25 and 44, with higher education and living in households with higher incomes, have figures of incidence of online banking similar to those of their European counterparts, while the rest of the population still has a lot of room for improvement.

49: Tablets are included in this definition

Table B.4.1
Types of individuals who use electronic banking services (2008-2015)

	Incidence Spain (1) (% of population)		Distribution Spain (2) (% of online banking users)		Incidence EU-15 (1) (% of population)	
	2008	2015	2008	2015	2008	2015
Total	19.0	39.4	100.0	100.0	33	50
Gender						
Female	15.8	36.0	41.6	45.9	30	48
Male	22.1	42.8	58.4	54.1	36	53
Age						
<24 years	14.1	26.7	10.0	7.8	34	46
25-34	29.5	52.3	34.6	22.4	48	67
35-44	24.6	54.2	28.1	30.8	42	61
45-54	18.5	41.6	17.3	21.5	32	52
55-64	10.1	30.6	7.5	12.3	24	41
65-74	4.2	14.0	2.3	4.4	10	28
75 and over	0.3	2.7	0.1	0.8	-	-
Nationality						
Foreign	11.8	28.1	7.7	7.5	-	42
Spanish	20.0	40.7	92.3	92.5	-	51
Educational level (Eurostat definition)						
Basic	5.4	15.3	14.6	16.9	13	24
Secondary	23.0	45.0	25.9	28.4	37	54
University degree or equiv.	41.3	68.0	59.5	54.7	56	73
Labour market situation (Eurostat definition)						
Employed	26.7	55.7	83.7	71.0	43	63
Unemployed	10.3	27.7	3.7	12.1	21	34
Student	13.1	27.8	4.9	6.5	29	43
Other non-employed	5.6	17.6	7.8	10.5	15	31
Household size						
1 member	18.5	37.3	5.1	7.1	-	-
2	18.8	36.8	22.8	24.4	-	-
3	20.7	39.9	30.5	28.1	-	-
4	20.5	44.2	31.3	31.5	-	-
5 or more members	13.2	33.2	10.3	9.0	-	-
Minors under 16 at home						
0	17.6	34.8	62.3	60.6	-	-
1	20.0	44.7	21.5	21.0	-	-
2	24.7	55.3	16.0	17.9	-	-
3 or more	4.3	46.6	0.1	0.5	-	-
Net monthly household income						
1st quartile	3.9	15.8	4.4	9.1	21	38
2nd quartile	13.2	31.2	23.1	26.5	22	44
3rd quartile	30.4	55.8	34.8	30.6	33	55
4th quartile	43.3	71.9	37.7	33.8	45	71

Source: BBVA Research based on INE and Eurostat

Table B.4.1 (cont.)
Types of individuals who use electronic banking services (2008-2015)

	Incidence Spain (1) (% of population)		Distribution Spain (2) (% of online banking users)		Incidence EU-15 (1) (% of population)	
	2008	2015	2008	2015	2008	2015
Computer at home						
No	2.7	6.1	4.3	2.8	-	-
Yes	26.1	46.7	95.7	97.2	-	-
Internet access at home						
Home without internet connection	4.9	5.2	11.1	2.0	-	-
Home with internet access, but not broadband	22.2	12.4	8.0	0.3	30	42
Home with broadband internet access	31.0	45.8	80.9	97.7	50	56
Place of residence						
Densely populated area (>499 inhabitants per km2)	22.9	44.6	61.7	55.5	36	53
Intermediate population density (between 100 and 499 inhabitants per km2)	17.7	40.9	21.4	25.7	31	50
Sparsely populated area (<100 inhabitants per km2)	12.3	28.3	16.9	18.8	30	45
Autonomous Region						
Andalusia	14.1	31.3	13.1	14.4	-	-
Aragon	18.5	40.4	2.8	2.9	-	-
Asturias	17.4	36.1	2.2	2.1	-	-
Balearic Islands	22.7	44.9	2.8	2.8	-	-
Canary Islands	21.0	37.0	5.0	4.5	-	-
Cantabria	18.8	41.0	1.3	1.3	-	-
Castilla y León	15.8	33.3	4.5	4.4	-	-
Castilla-La Mancha	12.4	30.4	2.8	3.4	-	-
Catalonia	24.7	49.1	20.8	19.7	-	-
Valencia	18.0	38.0	10.3	10.3	-	-
Extremadura	10.2	32.3	1.3	1.9	-	-
Galicia	14.0	36.7	4.5	5.5	-	-
Madrid	24.4	47.0	17.8	16.5	-	-
Murcia	14.7	29.5	2.4	2.3	-	-
Navarra	19.8	46.5	1.4	1.6	-	-
Basque Country	24.3	46.3	6.1	5.4	-	-
La Rioja	21.4	30.6	0.8	0.5	-	-
Ceuta	18.6	43.6	0.2	0.2	-	-
Melilla	8.2	38.6	0.1	0.2	-	-

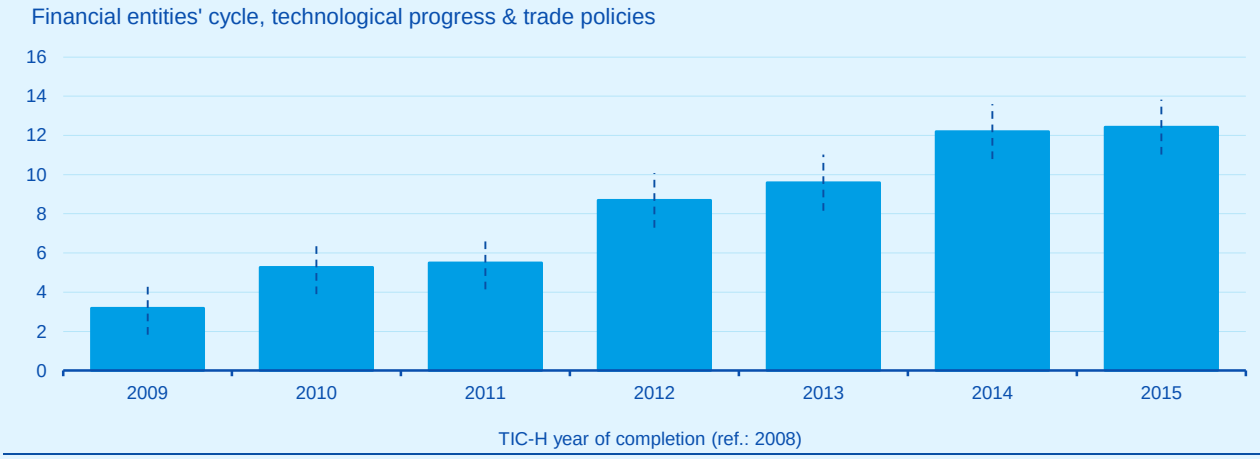
(1) Percentage of population that has used online banking in the last three months.
(2) Percentage of users of online banking in the last three months.
* Population between 16 and 74 years of age, except where indicated otherwise.
Source: BBVA Research based on INE and Eurostat

Determinants of probability of using online banking

Table B.4.1 shows the profile of the online banking user and its development over time, but does not reveal the effect that each characteristic has on the individual likelihood of access to digital banking. For example, the descriptive analysis in the preceding section suggests that individuals who have at least one computer in the house are nearly eight times more likely to use online banking than those without one. However, this difference may be capturing not only the greater access to the internet that the computer provides, but also the effect of education and income levels: data from the ICT-H indicate that having a computer at home is more common among individuals with higher qualifications and a higher level of income, precisely those most likely to use online banking. Furthermore, it is necessary to separate the impact of variables that characterise the demand for the consequences of technical progress, the economic cycle and developments in the commercial policy of financial institutions.

To distinguish what factors influence the likelihood of access to online banking and quantify its effect, it is essential to perform a regression analysis. In the present case, there is an additional difficulty: the group of individuals who use digital banking is a restricted and non-random population sample. The ICT-H only studies the use of online banking by individuals who have accessed the internet during the three months prior to the completion of the survey. If the sample of internet users is not random, estimating the determinants of the likelihood of using electronic banking may offer biased (and inconsistent) results. To avoid the existence of potential bias, it is necessary to correct the effect of each variable on the likelihood of using digital banking due to the distinct individual propensity to connect to the internet[50].

Table B.4.2
Determinants of likelihood of using online banking. Marginal effects (2008-2015, pp)

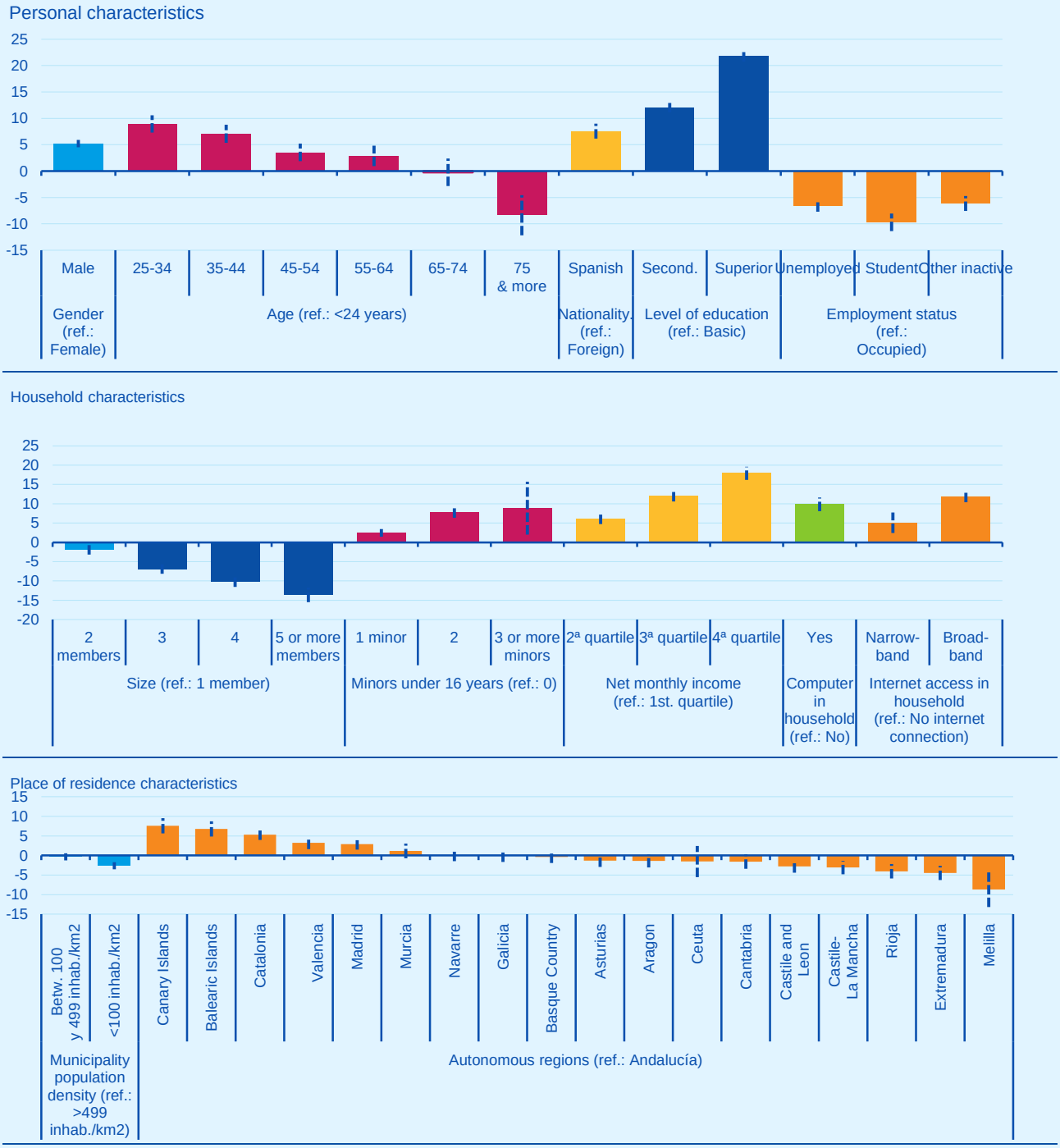


-- Confidence interval at 95%.
Source: BBVA Research based on INE

50: The determinants of using digital banking are estimated through a probit model that considers the possible existence of a selection bias. It is assumed that the propensity (latent) of each individual to use electronic banking (γ^*) is determined by the equation $\gamma^* = X_1\beta_1 + u_1$, where X_1 denotes the set of determinants of y^*. γ^* is unobservable; only the binary variable y is known, which is equal to 1 when the individual has used online banking and 0 if he/she has not done so: $\gamma = (y^* > 0)$. However, γ only takes values (0, 1) when the person claims to have accessed the internet during the three months prior to conducting the survey (z), which will occur when $z = (X_2\beta_2 + u_2 > 0)$ where $X_1 \cap X_2$. Since the correlation between u_1 and u_2 is other than zero, not considering the propensity to connect to the internet in the estimation of the likelihood of using digital banking leads to biased results. The estimate was made using maximum likelihood. More details on the probit model with selection can be found in Van de Ven and Van Praag (1981) and in Wooldridge (2002), Chapter 17.

Table B.4.2 (cont.)

Determinants of likelihood of using electronic banking. Marginal effects (2008-2015, pp)



-- Confidence interval at 95%.

Source: BBVA Research based on INE

The results from the estimate[51] (represented in Table B.4.2) confirm some of the intuitions highlighted in the descriptive analysis and qualify others. Firstly, it highlights the existence of a clear technological trend. As shown in the first of the figures in Table B.4.2, the likelihood of using online banking is estimated to have increased more than 12 points between 2008 and 2015 even though the individual, family and idiosyncratic characteristics of the place of residence of the respondent have not changed. This result suggests that **technological progress and the commitment of financial institutions to the** digitalisation **of their commercial offering are facilitating the access to online banking.**

Secondly**, the importance of level of education as a determinant of the propensity to use online banking stands out among the variables that characterise the respondent.** The second figure in Table B.4.2 shows that, all other things being equal, the likelihood of using digital banking is 22 points higher for individuals who have attained higher education compared to those who only have basic education.

The results of the regression analysis confirmed that **age has a non-linear effect on the likelihood of using online banking**, even after accounting for the greater propensity of young people to connect to the internet[52]: grows up to 34 years of age and decreases thereafter. This evidence, along with the importance of the level of education, suggests **that the degree of computer literacy (greater for the younger generations) plays a crucial role in the propensity of the population to access internet banking.** The likelihood of using online banking is also comparatively higher for men, individuals of Spanish nationality and those who are in employment.

It should be noted that the foregoing results do not depend on the level of family income. As the third figure on Table B.4.2 shows, **the likelihood of using digital banking increases along with household income[53].** The income effect reaches 18 pp for individuals in the upper quartile of the income distribution compared to those located in the bottom quartile.

As for the other family characteristics, the importance of household composition stands out. Estimates indicate that the presence of dependent children positively affects the likelihood of access to online banking. In fact, the higher the number of children in the home, the more significant the effect, which could suggest that the use of internet banking represents a work-life balance tool for individuals with family responsibilities. The results also suggest that when the number of household members increases, the incentive to use electronic banking is lower. However, since the likelihood of using digital banking is growing with the number of dependent children, the negative effect caused by increased household size evidences the impact of ageing of the nuclear family, in line with the estimated effect of age.

The presence of ICT and internet equipment at home, combined with skill in the use of new technologies, positively affects the likelihood of using online banking. Having a computer at home increases the propensity to use electronic banking by 10 points, while having wireless broadband internet raises it by 12 points compared to individuals who do not have internet access at home[54].

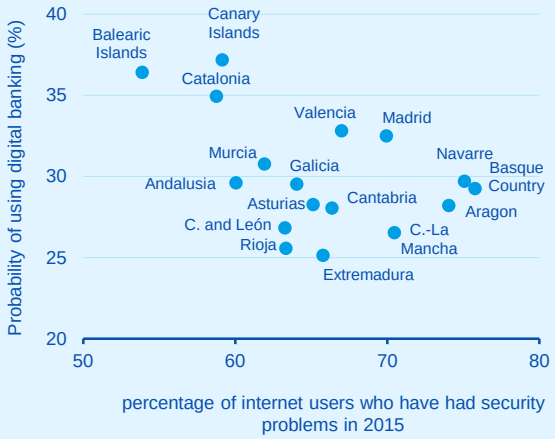
Finally, we see that **the characteristics of the place of residence help explain the differences in the likelihood of accessing internet banking,**

51: While ICT-H is a rotating panel, the public microdata do not contain an identifier which allows us to monitor respondents over the different waves of the survey. Therefore, the data have been used as if they were repeated cross-sections. The detailed results of the regression analysis are available to the interested reader.
52: The estimate of the socioeconomic determinants of the likelihood that an individual accesses the internet is included in the Appendix.
53: As Banco de España (2014) shows, households with more resources have a more diversified range of banking products, which could encourage them to monitor their assets and liabilities more closely through the internet.
54: The importance of having access to the internet at home as a determining factor in the use of electronic banking has declined in recent years as access via smartphones has become more widespread. In fact, our estimates indicate that the presence of internet at home does not help explain the likelihood of using digital banking in 2015. Note that Spain leads the penetration of mobile broadband in Europe: 77% of individuals who accessed the internet in the last three months did so through mobile broadband, compared with 60% on average in the EU-15 according to IEB (2015).

although to a lesser extent than personal and family characteristics. The fourth figure in Table B.4.2 shows that the propensity to use electronic banking is slightly lower for individuals who live in sparsely populated municipalities. In addition, significant idiosyncratic differences are observed among autonomous regions. For example, the likelihood of using digital banking in the Balearic Islands is seven times higher than in Andalusia, even after accounting for the differences in income, employment status, propensity to use the internet, etc. between the two regions. This result suggests that there may be both demand and supply factors which are unobservable (or not available for the entire reporting period) that have differential regional effects.

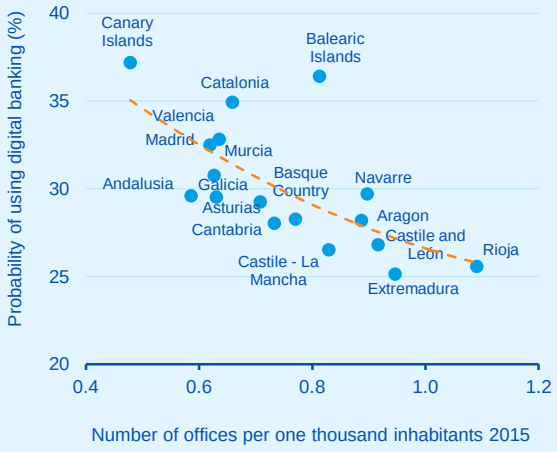
Trust in internet use may be one of the variables that introduce differences between the autonomous regions. As Figure B.4.2 shows, the likelihood of using online banking is higher in regions with lower incidence of computer security problems. **There also appears to be a negative relationship between the propensity to use online banking in each region and the number of bank branches** per capita, which would point to a certain degree of substitutability between digital and traditional banking (see Figure B.4.3).

Figure B.4.2
Likelihood of accessing internet banking and computer security problems by Aut. Region



Source: BBVA Research based on INE

Figure B.4.3
Likelihood of accessing internet banking and number of bank branches per Aut. Region



Source: BBVA Research based on INE and Banco de España

Conclusions

What socioeconomic characteristics explain the decision to access internet banking in Spain? The results of this study, using the Survey on Equipment and Use of Information and Communication Technologies in Households, show that the level of education of the individual and in particular his/her skill in the use of new technologies, play a crucial role in the propensity to use electronic banking. Thus, the likelihood of accessing internet banking for individuals with advanced studies is twice that of those who only have basic education, and that of people between 25 and 34 years of age is more than 17 points higher than people over 74 years of age. Similarly, the importance of the income level is notable. Estimates indicate that the difference between the likelihood of using online banking for individuals in the upper quartile of the income distribution and those located in the lower quartile is 18 points.

The propensity to use digital banking is also higher among men, natives, the employed and residents in densely populated areas, whether in single-person households or with dependent children. Lastly, we find that the presence of ICT and internet equipment in the home encourages access to internet banking.

However, it is not only the aspects related to demand that affect the spread of online banking. The likelihood of using digital banking is estimated to have increased more than 12 points between 2008 and 2015 even though the individual, family and idiosyncratic characteristics of the place of residence of the respondent had not changed. This result suggests that technological progress and the commitment of financial institutions to the digitalisation of their commercial offering are encouraging the access to online banking.

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Appendix

Table B.4.A.1
Types of internet users who use electronic banking services (2008-2015)

	Incidence Spain (1) (% of internet users)		Distribution Spain (2) (% of online banking users)		Incidence EU-15 (1) (% of internet users)	
	2008	2015	2008	2015	2008	2015
Total	33.9	50.0	100.0	100.0	51.0	61.0
Gender						
Female	30.5	46.7	41.6	45.9	49.0	59.0
Male	36.8	53.3	58.4	54.1	52.0	62.0
Age						
<24 years	15.8	27.1	10.0	7.8	37.0	48.0
25-34	38.4	55.4	34.6	22.4	59.0	71.0
35-44	39.6	59.1	28.1	30.8	55.0	67.0
45-54	36.9	50.8	17.3	21.5	50.0	60.0
55-64	41.1	49.8	7.5	12.3	50.0	57.0
65-74	48.1	44.6	2.3	4.4	46.0	55.0
75 and over	13.0	32.0	0.1	0.8	-	-
Nationality						
Foreign	21.6	34.5	7.7	7.5	-	53.0
Spanish	35.6	51.9	92.3	92.5	-	61.0
Educational level (Eurostat definition)						
Basic	17.1	26.7	14.6	16.9	34.0	39.0
Secondary	30.9	48.7	25.9	28.4	50.0	61.0
University degree or equiv.	47.3	69.9	59.5	54.7	63.0	76.0
Labour market situation (Eurostat definition)						
Employed	39.5	61.4	83.7	71.0	55.0	68.0
Unemployed	18.6	34.0	3.7	12.1	37.0	43.0
Student	13.5	28.3	4.9	6.5	31.0	44.0
Other non-employed	28.7	40.4	7.8	10.5	46.0	53.0
Household size						
1 member	43.3	56.9	5.1	7.1	-	-
2	42.0	55.6	22.8	24.4	-	-
3	35.7	48.5	30.5	28.1	-	-
4	31.9	49.4	31.3	31.5	-	-
5 or more members	22.7	40.8	10.3	9.0	-	-
Minors under 16 at home						
0	34.1	47.8	62.3	60.6	-	-
1	31.5	49.7	21.5	21.0	-	-
2	37.3	59.7	16.0	17.9	-	-
3 or more	13.9	65.2	0.1	0.5	-	-
Net monthly household income						
1st quartile	14.9	26.1	4.4	9.1	44.0	54.0
2nd quartile	25.9	42.7	23.1	26.5	42.0	57.0
3rd quartile	41.7	63.4	34.8	30.6	50.0	63.0
4th quartile	50.4	75.1	37.7	33.8	55.0	74.0

Source: BBVA Research based on INE and Eurostat

Table B.4.A.1 (cont.)

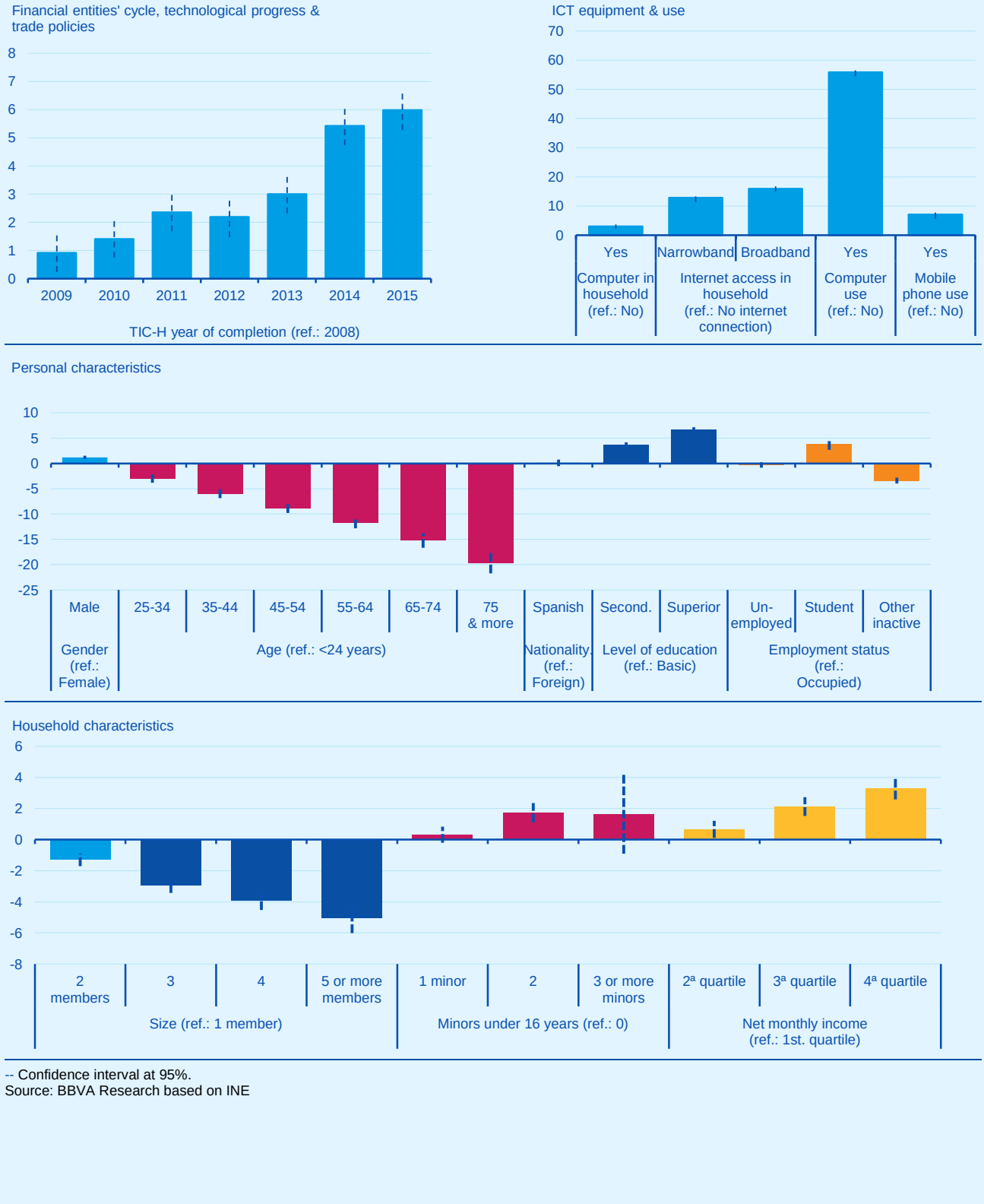
Types of internet users who use electronic banking services (2008-2015)

	Incidence Spain (1) (% of internet users)		Distribution Spain (2) (% of online banking users)		Incidence EU-15 (1) (% of internet users)	
	2008	2015	2008	2015	2008	2015
Computer at home						
No	15.0	19.7	4.3	2.8	-	-
Yes	35.9	52.3	95.7	97.2	-	-
Internet access at home						
Home without internet connection	18.2	22.4	11.1	2.0	-	-
Home with internet access, but not broadband	31.8	21.9	8.0	0.3	38.0	52.0
Home with broadband internet access	38.7	51.5	80.9	97.7	57.0	62.0
Place of residence						
Densely populated area (>499 inhabitants per km2)	36.8	53.8	61.7	55.5	51.0	62.0
Intermediate population density (between 100 and 499 inhabitants per km2)	32.4	51.5	21.4	25.7	49.0	60.0
Sparsely populated area (<100 inhabitants per km2)	27.7	40.1	16.9	18.8	51.0	58.0
Autonomous Region						
Andalusia	27.9	42.3	13.1	14.4	-	-
Aragon	33.3	50.6	2.8	2.9	-	-
Asturias	32.0	46.1	2.2	2.1	-	-
Balearic Islands	37.9	54.4	2.8	2.8	-	-
Canary Islands	36.6	48.9	5.0	4.5	-	-
Cantabria	32.9	52.0	1.3	1.3	-	-
Castilla y León	31.4	42.9	4.5	4.4	-	-
Castilla-La Mancha	25.0	41.0	2.8	3.4	-	-
Catalonia	39.4	59.0	20.8	19.7	-	-
Valencia	33.9	49.3	10.3	10.3	-	-
Extremadura	23.8	44.5	1.3	1.9	-	-
Galicia	30.1	51.1	4.5	5.5	-	-
Madrid	36.4	54.7	17.8	16.5	-	-
Murcia	30.6	37.8	2.4	2.3	-	-
Navarra	34.0	58.5	1.4	1.6	-	-
Basque Country	40.7	56.8	6.1	5.4	-	-
La Rioja	39.0	38.9	0.8	0.5	-	-
Ceuta	32.7	52.6	0.2	0.2	-	-
Melilla	15.9	52.0	0.1	0.2	-	-

(1) Percentage of internet users that have used online banking in the last three months.
(2) Percentage of users of online banking in the last three months.
* Internet users between 16 and 74 years of age, except where indicated otherwise.
Source: BBVA Research based on INE and Eurostat

Table B.A.4.2

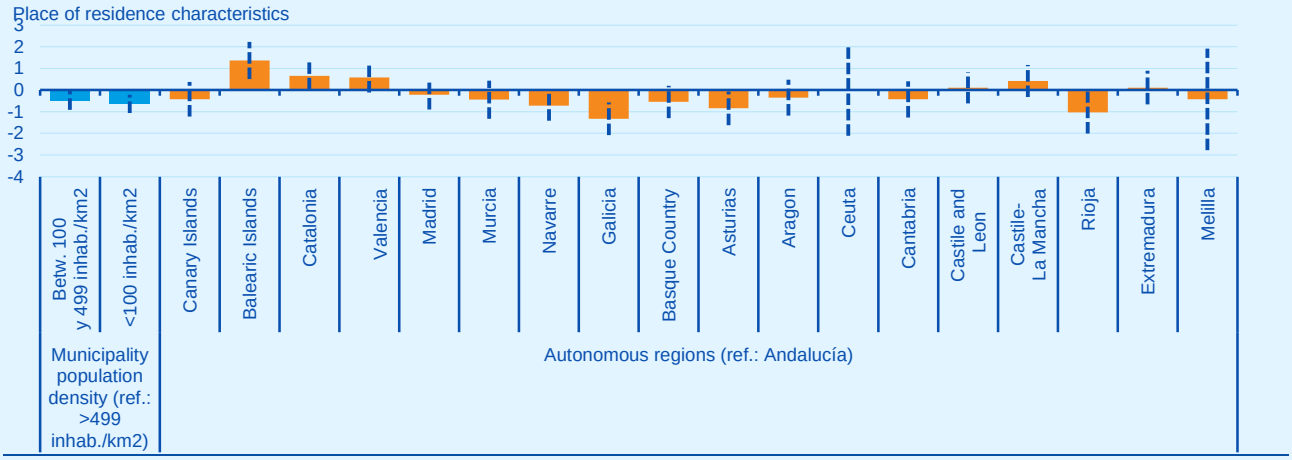
Socioeconomic determinants of the likelihood of using the internet. Marginal effects (2008-2015, pp)



-- Confidence interval at 95%.
Source: BBVA Research based on INE

Table B.A.4.2 (cont.)

Socioeconomic determinants of the likelihood of using the internet. Marginal effects (2008-2015, pp)



-- Confidence interval at 95%.
Source: BBVA Research based on INE

4 Tables

Table 4.1
Macroeconomic Forecasts: Gross Domestic Product

(Annual average, %)	2012	2013	2014	2015	2016	2017
United States	2.2	1.5	2.4	2.5	2.5	2.4
Eurozone	-0.8	-0.3	0.9	1.5	1.8	2.0
Germany	0.6	0.4	1.6	1.5	1.9	1.8
France	0.2	0.7	0.2	1.1	1.4	1.7
Italy	-2.8	-1.8	-0.4	0.7	1.5	1.6
Spain	-2.1	-1.7	1.4	3.2	2.7	2.7
United Kingdom	0.7	2.2	2.9	2.2	2.0	2.0
Latam *	2.9	2.7	0.8	-0.5	-0.9	1.9
Mexico	4.0	1.4	2.1	2.5	2.2	2.6
Brazil	1.9	3.0	0.1	-3.8	-3.0	1.3
Eagles **	5.8	5.6	5.2	4.6	4.7	5.0
Turkey	2.1	4.1	2.9	3.6	3.9	3.9
Asia Pacific	5.7	5.8	5.7	5.5	5.2	5.2
Japan	1.7	1.5	0.0	0.6	1.0	0.7
China	7.7	7.7	7.4	6.9	6.2	5.8
Asia (ex. China)	4.1	4.3	4.2	4.3	4.4	4.6
World	3.4	3.3	3.4	3.2	3.2	3.5

* Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.
** Bangladesh, Brazil, China, India, Indonesia, Iraq, Mexico, Nigeria, Pakistan, Philippines, Russia, Saudi Arabia, Thailand and Turkey.
Forecast closing date: 5 February 2016.
Source: BBVA Research and IMF

Table 4.5
Macroeconomic Forecasts: 10-year government bond yield

Annual Average, %	2012	2013	2014	2015	2016	2017
United States	1.79	2.34	2.53	2.13	2.19	2.62
Germany	1.57	1.63	1.25	0.54	0.54	0.75

Forecast closing date: 5 February 2016.
Source: BBVA Research and IMF

Table 4.6
Macroeconomic Forecasts: Exchange Rates

Annual Average	2012	2013	2014	2015	2016	2017
USD-EUR	0.78	0.75	0.75	0.90	0.93	0.89
EUR-USD	1.29	1.33	1.33	1.1	1.1	1.1
GBP-USD	1.59	1.56	1.65	1.53	1.54	1.65
USD-JPY	79.8	97.5	105.8	121.1	127.9	129.9
USD-CNY	6.31	6.20	6.14	6.30	6.70	6.70

Forecast closing date: 5 February 2016.
Source: BBVA Research and IMF

Table 4.7
Macroeconomic Forecasts: Official Interest Rates

End of period, %	2012	2013	2014	2015	2016	2017
United States	0.25	0.25	0.25	0.50	1.00	2.00
Eurozone	0.75	0.25	0.05	0.05	0.05	0.05
China	6.00	6.00	5.60	4.35	3.85	3.85

Forecast closing date: 5 February 2016.
Source: BBVA Research and IMF

Table 4.5
EMU: macroeconomic forecasts (YoY change, %, unless otherwise indicated)

	2010	2011	2012	2013	2014	2015 (f)	2016 (f)	2017 (f)
Real GDP	**2.0**	**1.6**	**-0.8**	**-0.3**	**0.9**	**1.5**	**1.8**	**2.0**
Private consumption	0.7	-0.1	-1.3	-0.6	0.8	1.6	1.9	2.0
Public consumption	0.8	-0.1	-0.2	0.2	0.8	1.4	1.3	1.0
Gross fixd capital formation	-0.5	1.7	-3.2	-2.5	1.3	2.2	3.0	4.3
Inventories (contribution to growth)	1.0	0.4	-0.9	0.1	0.0	-0.2	0.0	0.0
Domestic demand (contribution to growth)	**1.5**	**0.7**	**-2.3**	**-0.7**	**0.9**	**1.4**	**2.0**	**2.2**
Exports	11.1	6.7	2.8	2.2	4.1	4.8	3.5	3.8
Imports	9.8	4.4	-0.9	1.3	4.5	5.1	4.3	4.7
Net exports (contribution to growth)	**0.5**	**0.9**	**1.5**	**0.4**	**0.0**	**0.1**	**-0.2**	**-0.2**
Prices								
CPI	1.6	2.7	2.5	1.4	0.4	0.0	0.2	1.4
CPI core	1.0	1.7	1.8	1.3	0.9	0.8	1.0	1.6
Labour market								
Employment	-0.5	0.2	-0.5	-0.6	0.7	1.2	1.1	1.1
Unemployment rate (% of labour force)	10.0	10.1	11.3	12.0	11.6	10.9	10.2	9.5
Public sector								
Budget balance (% GDP)	-6.2	-4.2	-3.7	-3.0	-2.6	-2.0	-1.8	-1.5
Debt (% GDP)	84.0	86.7	91.3	93.4	94.5	94.1	92.7	91.0
External sector								
Current account balance (% GDP)	0.3	0.2	1.2	1.9	2.4	3.0	3.3	2.8

(f): forecast.
Forecast closing date: 5 February 2016.
Source: BBVA Research

Table 4.6
Spain: macroeconomic forecasts (Annual rate of change in %, unless otherwise indicated)

	2013	2014	2015 (f)	2016 (f)	2017 (f)
Activity					
Real GDP	-1.2	1.4	3.2	2.7	2.7
Private consumption	-3.1	1.2	3.1	2.8	2.5
Public consumption	-2.9	0.0	2.7	2.5	1.9
Gross Capital Formation	-3.7	4.8	6.3	4.1	5.6
Equipment and Machinery	4.0	10.6	9.6	4.8	5.0
Construction	-7.1	-0.2	5.6	3.8	5.9
Housing	-7.2	-1.4	2.9	4.2	8.2
Internal Demand (contribution to growth)	-2.7	1.6	3.6	2.9	3.0
Exports	4.3	5.1	5.9	4.8	5.7
Imports	-0.5	6.4	7.7	5.8	6.8
External Demand (contribution to growth)	1.4	-0.2	-0.4	-0.2	-0.2
Nominal GDP	-1.1	1.0	3.9	4.1	5.2
(Billions of euros)	1031.3	1041.2	1081.7	1125.7	1184.0
GDP excluding housing investment	-1.4	1.5	3.2	2.6	2.5
GDP excluding construction	-1.0	1.5	2.9	2.6	2.4
Labour market					
Employment, EPA	-2.8	1.2	3.0	2.9	2,6
Unemployment rate (% of labour force)	26.1	24.4	22.1	19.8	18.3
CNTR Employment (full-time equivalent)	-3.3	1.1	3.0	2.5	2.2
Apparent productivity of labour factor	2.0	0.3	0.1	0.2	0.5
Prices and costs					
CPI (annual average)	1.4	-0.2	-0.5	-0.1	1,7
CPI (end of period)	0.3	-1.0	0.0	0.9	1,3
GDP deflator	0.6	-0.4	0.7	1.3	2,4
Compensation of employees	1,7	-0.6	0.6	1.5	1.5
Unit labour cost	-0,3	-0.8	0.4	1.3	1.0
Foreign sector					
Balance of payments on current account (% of GDP)	1.5	1.0	1.8	2.8	3.2
Public sector (*)					
Debt (% of GDP)	93.7	99.3	100.8	100.7	98.5
Balance Public Admin. (% GDP)	-6.4	-5.8	-4.8	-3.4	-2.3
Households					
Nominal disposable income	-0.8	0.9	2.1	3.6	3.6
Savings rate (% nominal income)	10.2	9.8	9.4	10.2	9.5

Annual change in %, unless indicated expressly
(f): forecast.
Forecast closing date: 5 February 2016
(*): Excluding aid to Spanish banks
Source: BBVA Research

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