BBVA | RESEARCH

Economic Outlook

Spain

Second Quarter 2013
Economic Analysis

- **Differences in economic growth widen,** particularly among developed countries.
- **Banking union, correcting structural imbalances and commitment to reform** are the keys to growth in Europe.
- **Spain's economy will bottom out in 2013.** Growth in 2014 will be buoyed by a better international environment, smaller internal imbalances and structural reforms.
- **Salary moderation in 2012** avoided higher job losses.

Index

Closing date: May 6, 2013

1. Editorial

Global economic growth continued its gradual recovery in the first quarter, although the outlook differs among the major economies. Global GDP growth in 1Q13 was around 0.7% according to BBVA Research estimates, slightly higher than the 0.6% in the last quarter of 2012. **We estimate that global growth will slow to 3.3% in 2013, just a tenth of a percentage point above estimated 2012 growth;** growth will be close to 4% in 2014. However, the indicators available to date point to a scattered pattern of activity, particularly in more developed economies, with the Eurozone continuing to lag behind the USA and even Japan.

In Europe, the effectiveness of the ECB's support as the guarantor of the euro has been overwhelming, particularly given events such as the chaotic rescue of Cyprus, the lack of a government in Italy for several weeks and the Portuguese constitutional court ruling on extraordinary payments to public-sector workers. Despite the greater certainty in capital markets, **economic indicators point to general cyclical weakness even outside the periphery, justifying the ECB's rate reduction in early May.** Whilst this is a positive measure, **it will be difficult for the rate cut alone to reduce financial fragmentation** in the EMU, as, even though this has fallen for sovereign issuers and larger corporates over the last few months, it continues to affect households and companies due to **uneven functioning of the banking channel.** Reducing this fragmentation requires progress on fiscal consolidation at an appropriate pace, firmer commitment to structural reforms in periphery countries and, above all, more decisive progress towards banking union.

Figures for Spain show that its economy is still contracting, and this is likely to persist throughout the first half of the year. The continuing recession is explained by the absorption of accumulated imbalances, and by **lower growth** in Spain's main European partners, **the acceleration of the fiscal adjustment process** in the last half of the year and the **continuing fragmentation** of the European financial system. Despite the weight of Eurozone countries in Spanish exports falling by 10 percentage points since the outset of the crisis, they still account for 50% of the total; the larger than projected contraction in European GDP has therefore hit exports more than expected. Secondly, the Government has announced that the public-sector deficit (excluding aid to the financial system) has fallen to 7% of GDP, a significant effort at a time of recession. BBVA Research estimates that measures equivalent to 4.6% of GDP would have been required in 2012 to achieve this figure. Moreover, a significant part of the effort was concentrated in the final part of the year, impacting spending in both 4Q12 and 1Q13. Finally, the spread in borrowing costs among Eurozone countries hampers monetary policy transmission, making borrowing more expensive in the countries where the recession is worst, and increasing the probability of a vicious circle between recession and fiscal adjustment measures. Taken together, this paints a picture slightly more negative than expected three months ago, justifying a downward revision to our forecast for 2013 GDP to **-1.4%.**

However, the economic outlook for the coming quarter remains qualitatively the same as it was three months ago: **the economy will bottom out in 2013 (-1.4%), with moderate growth in 2014 (+0.9%).** This is, firstly, because of a **better than expected improvement in Spain's borrowing conditions** in capital markets. The return of borrowing flows has caused a significant decrease in sovereign borrowing costs, and this should in principle feed through into the economy over the coming months. Secondly, **fiscal policy should be slightly less contractionary than expected,** if the European Commission ratifies the new deficit objectives announced by the Government in its updated 2013-2016 Stability and Growth Plan. Finally, there are also signs that the labour market is starting to work more efficiently, with **salary restraint** in 2012 (aided by the Agreement on Employment and Collective Bargaining and employment reforms) having saved around 300,000 jobs over the medium term. This increased flexibility will be crucial to exploiting the expected recovery in the global economy and, as a result, Spanish exports.

Regionally, we expect the **current excessive unevenness to persist, with fiscal adjustments and exposure to foreign demand again being** the driving factors in the performance of the Autonomous Communities. In this regard, **a deficit target of 1.2% for the regions as a whole is ambitious, and will require** significant efforts. Much of the credibility of the adjustment process for public finances rests with the ability of the Autonomous Communities to meet their commitments. The Government should continue to apply the instruments that were successful in enabling it to reduce the deficit in 2012, requiring robust measures at the slightest sign of deviation from the path.

It is essential that the **window of opportunity** provided by the reduction in capital market stress should be grasped to consolidate the reforms the country so desperately needs. Firstly, the longer period granted by the European Commission to meet deficit objectives offers an opportunity to improve the **composition of the adjustment,** increasing the efficiency of public expenditure and the tax system, and replacing some temporary measures with permanent ones. In this regard, it would be desirable to progress towards a fiscal framework with lower marginal rates and fewer deductions, increasing the burden on consumption and reducing the burden on employment. Likewise, the reforms to **reduce structural spending that have been delayed** (the draft Local Government Rationalisation and Sustainability Act) **or for which we do not yet have the details** (Public Sector Reforms) must be implemented.

However, **the Independent Fiscal Responsibility Authority,** (AIRF, for the Spanish acronym) is developing, and this should ensure future budget stability. In order to achieve this objective, this body must be **clearly independent from the executive;** it is therefore preferable **that it should report to the legislature.** The creation of an advisory council of leading experts to assess the AIRF's methodology, calculations and reports could also help. In addition, it would also be useful to increase the term of its chairman. Finally, progress is essential on the ambitious proposals to ensure the sustainability of the pension system, guaranteeing its solvency in the medium and longer term.

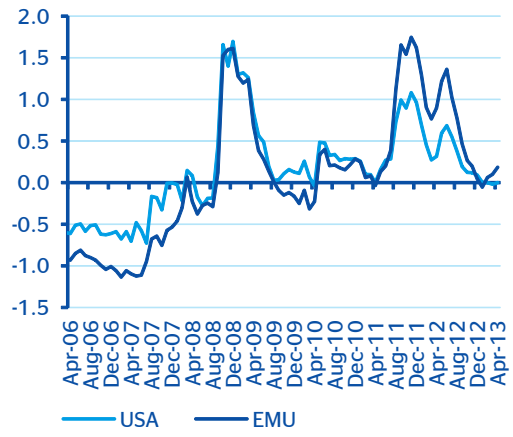
With regard to the reforms needed to make the economy more competitive, **we have a favourable view of the National Reform Plan (PNR, for the Spanish acronym), which accurately diagnoses** the main weaknesses of the Spanish economy. Given the high unemployment rate, **additional measures are required to complement the labour reforms approved last year** to reduce labour-market segmentation, promote part-time employment and improve the effectiveness of active and passive labour-market policies. Despite this assessment, there is little new in the PNR compared to the measures announced in February, or even the commitments undertaken in the middle of last year. Therefore, the PNR should be implemented as quickly and ambitiously as possible. It would also seem appropriate to bear in mind the importance of having a clear road map for reform -shared with the public- setting out the changes Spain needs.

2. Growing divergences in the global economy

Over the last three months some of the threats to global economic recovery have receded, but there is now growing divergence between the different areas. There is growing disparity between the economic performance of the US and the eurozone, where weakness has reached the core economies. In addition, despite doubts about the long-term sustainability of growth in China (or even the final growth in 2013), the country does not appear to be headed towards a sharp adjustment in the short term. There is some disappointment in the rest of the emerging Asian economies when compared with earlier growth expectations, though these were probably too high. Japan is on the crest of a wave of economic optimism, although so far this has only manifested itself in the valuations of some financial assets and confidence indicators, rather than indicators of the real economy.

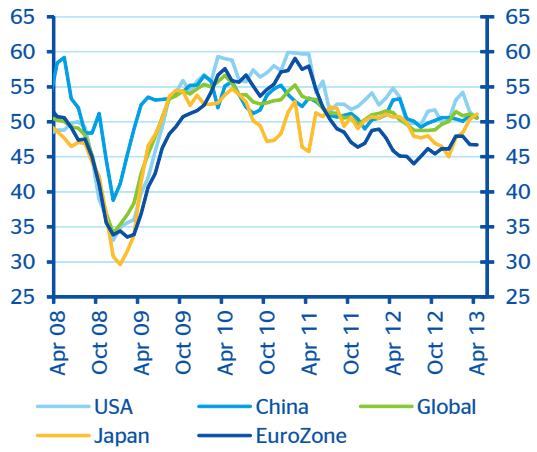
There has only been a limited response in the financial markets to events such as the continued uncertainty regarding the definition of long-term fiscal policy in the US, the internal political paralysis in Italy and the events in Cyprus and Portugal (see Chart 1). Thus **risk premiums have fallen in the eurozone, largely due to the implicit support from the ECB's OMT programme and the abundant global liquidity,** which is benefiting the dash for return and the ensuing financial risk-on mood at the global level. Nearly all assets are benefiting from this change in perception, with practically only one exception: the upturn in the credit risk indicators of the eurozone's banking sector.

Chart 1
BBVA Financial Stress Indicator



Source: BBVA Research

Chart 2
Confidence Indicators (PMI)

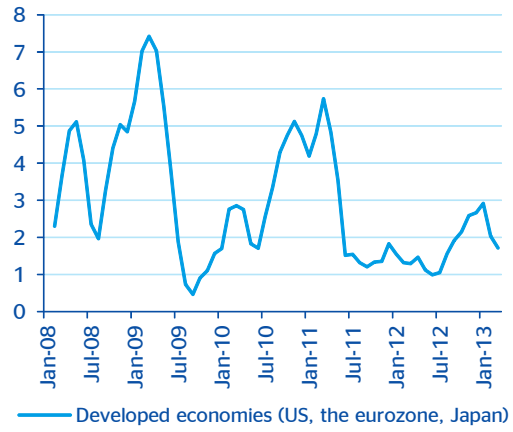


Source: Markit and BBVA Research

The most recent economic indicators reflect the divergence between areas. In all, the trend towards stability in global manufacturing confidence has been maintained, although with growing divergence between regions (see Chart 2 and Chart 3). In any event, the positive tone in the financial markets and divergence in cyclical prospects have not yet led to any significant change in activity or trade at a global level. According to our global BBVA-GAIN[1], activity indicator, even the most recent data confirm our expectations of continuing global GDP growth at a quarterly 0.7% (see Chart 4). **However, more varying prospects between the main economies** (in particular due to the downward revision in GDP growth in the eurozone and also in some economies in emerging Asia) **have put a brake on the strength of the recovery expected in 2013 and 2014. As a result, we have revised down our growth forecasts for the world economy to 3.3% in 2013 and 3.9% in 2014, from 3.6% and 4.1% respectively.**

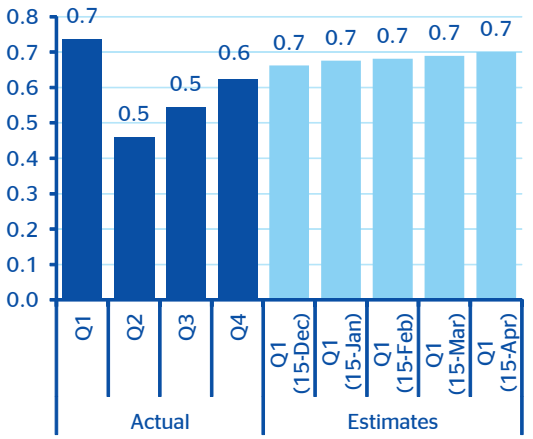
1: For more details, see BBVA Research's Economic Outlook published on 6th March, 2013: http://www.bbvaresearch.com/KETD/fbin/mult/130306_EcWatch_BBVAGAIN_tcm348-379375.pdf?ts=2942013

Chart 3
Developed economies*:
manufacturing PMI standard deviation



*: USA, eurozone and Japan
Source: Markit and BBVA Research

Chart 4
Global growth based on BBVA-GAIN (% qoq)



Source: BBVA Research

The eurozone stagnates and the ECB springs into action

The newest element in the situation of the eurozone is the way weak economic activity is extending from peripheral economies to the core of the area, particularly to France but also Germany and Holland. In **France,** uncertainty regarding tax policy and fiscal consolidation, together with the lack of reforms, is undermining confidence. Similarly, Germany's confidence indicators renewed their downward trend in April. The country's exports are suffering, despite the resilience of demand from emerging countries. **Holland** has also been heading for recession as a result of falling investment and household consumption, and despite the positive performance of its exports. Finally, **on the periphery of the eurozone there has been strong appetite for risk, in particular for sovereign debt,** thanks to the ECB's OMT programme and abundant global liquidity after Japan implemented a new round of monetary easing. The yield on 10-year Italian bond hit its lowest level since November 2011, despite the political uncertainty. Showing a similar drop in risk premiums, Spain's 10-year bond yields have remained below 4.5% over recent weeks.

Although the most recent data for retail sales and industrial output in February suggest activity in the eurozone stabilised to some extent early in the year, **the deterioration in the confidence surveys indicates that recovery is far from settled.** Meanwhile, the authorities in the eurozone continue with the process of constructing an economic architecture for the area (e.g. the move towards a single banking union). At the same time, there is growing debate about the appropriate level of fiscal consolidation needed to create a credible path for reducing the public deficit and ensuring debt sustainability without deteriorating economic activity to such an extent that the efforts at adjustment become futile.

In terms of progress towards banking union, **the agreement finally reached in the Cyprus crisis has meant the practical application of a model of bailout that is being negotiated for the sector as a whole in the area.** Before bailout funds are injected, banking creditors (including, if necessary, uninsured depositors) will have to take losses. With respect to **fiscal consolidation,** recent statements by the European Commission supporting Spain's postponement of its 3% public deficit target until 2016 are in line with giving **greater importance to the quality and composition of the adjustment than to the fast achievement of targets at the expense of possible negative effects on growth.**

Overall, our scenario involves a downward revision of growth forecasts for the eurozone. **We estimate a fall of 0.1% in GDP in 2013 and a rise of 1% in 2014,** 0.4 and 0.3 percentage

points, respectively, below the forecasts in our January publication. **In any event, the risks continue tilted to the downside. The key point is that Germany should not remain as the only source of growth** in the area because of its easy access to finance, high level of competitiveness and greater exposure to the best performing sources of global demand.

The reduction in financial tensions is a support for growth[2], It has been achieved through the ECB OMT programme, ensuring the transmission of monetary policy to the whole economy. But the **falling funding cost and improved market access for sovereign borrowers is not enough;** the fragmentation of the financial markets in the area is reflected in the very different availability and cost of credit for households and firms across the eurozone.

Against a backdrop of lingering and spreading weak activity and inflation below the target, the ECB cut its refi rate by 25 basis points to 0.50%. It also narrowed the corridor between the credit rate and the deposit rate from +/-75 basic points (bp) to +/-50 bp. Similarly, the ECB also announced the extension of its liquidity auctions at a fixed rate with no restriction for as long as necessary and at least until July 2014. Additionally, the ECB started consultations with other European institutions (European Investment Bank and European Commission) to bolster the market of financial instruments backed by corporate loans, aimed at tackling the mounting problem of scarce credit to firms in the periphery. However, the impact of rate cuts on the real economy may be limited. Since risks remain tilted to the downside, the ECB has said that it is ready to take additional measures, if the economic outlook deteriorate further. Among the measures that the ECB could implement is worth mentioning the use of negative interest rates on the deposit facility, other non-conventional measures and support for European institutions to provide credit to SMEs.

What lies behind the sustained growth in the US, despite fiscal uncertainty? Strong private consumption and continued monetary expansion

In the US, GDP growth figures in the first quarter of 2013 confirmed the continued healthy tone shown so far by private consumption. This is due to an improvement in job creation, in terms of jobs and wages, and the financial situation of households (wealth effect). **Private spending has become a support for growth in the US.** Furthermore, American financial markets have not been affected by external contagion from risk events such as those from the euro area. However, the most recent indicators of cyclical prospects (manufacturing expectations), have fallen in March and April to levels compatible with a slump of activity, so we expect an additional GDP slowdown in the second quarter.

In all, **we maintain our forecasts for the US economy in 2013 and 2014 without major changes, with growth rates at 1.8% and 2.3%,** respectively, mainly for two reasons. First, despite the uncertainty regarding the fiscal cliff and the entry into force of the sequester (automatic public spending cuts), **private spending has given clear signs of resilience, and fiscal restriction have been less intense than expected.** Second, since inflation expectations are fairly anchored, **quantitative easing (QE) may continue without problems until there is significant improvement in labour market prospects.** Although some of the data at the start of the year could have prompted an early withdrawal of stimuli, the most recent information shows that the American economy is still far from sufficiently robust growth rates, so monetary policy will continue to be a support for growth.

2: See Box 1 in this publication.

In Asia, doubts linger about the strength of the Chinese growth. Optimism in Japan on the back of its massive quantitative expansion

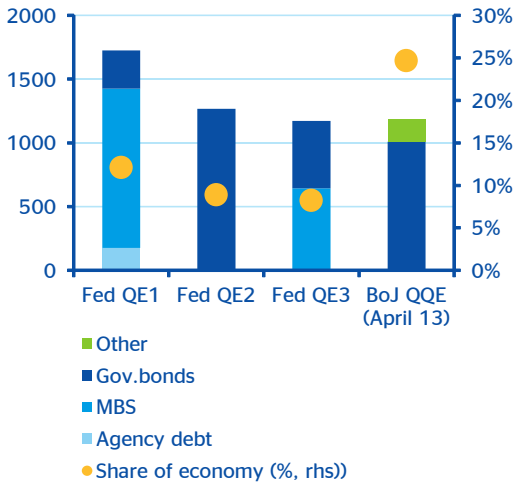
The Chinese economy has lost some of its strength in the first quarter of 2013, when investment was weak, despite increased external demand and while growth remains in line with the government target of 7.5% for 2013. **The measures implemented to tackle the financial fragility appear to have contributed to the slowdown.** However, the change in the growth model towards a more consumption-oriented economy continues. With inflation also lower than expected, pressure for tighter monetary conditions has eased. As a result, the authorities have room for manoeuvre, given their commitment to sustainable growth. **In all, our forecast for growth in China remains unaltered at 8% for 2013 and 2014.**

In contrast, the Japanese economy **will benefit from a package of more aggressive than expected recovery policies.** Among them is the massive quantitative easing, whose size amounts to around 25% of Japan's GDP (each of the QE implemented by the Fed represented an average of 10% of America's GDP), aimed at changes in inflation expectations and boosting demand (see Chart 5). This monetary boost will be more effective if it is accompanied by effective fiscal measures and, in particular, structural reforms. Thus **our growth forecast for the Japanese economy for 2013 and 2014 remains at 1.7%, above the 1.3% consensus.**

In any event, it is **difficult to quantify the impact** of this new move in monetary policy and know how investors will react, **given that many uncertainties still exist.** For example, if this policy is successful in promoting growth and confidence at a national level, it could generate greater net capital inflows globally (instead of outflows). In addition, its impact at a domestic level in Japan is also uncertain, as the Bank of Japan's policy involves some risks: strong volatility in sovereign bonds (JGB), risks for bank's balance sheets and the costs of debt for the government when nominal yields grow, provided the Bank of Japan is successful in complying with its inflation target of 2%.

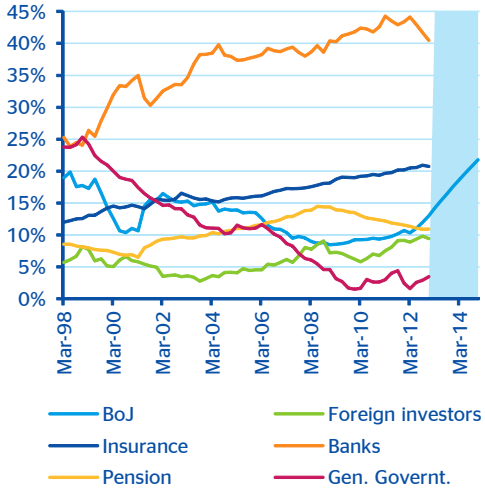
However, the new monetary facility provides **arguments in favour of Japanese investors investing increasingly abroad.** The Bank of Japan's demand will push private Japanese investors away from domestic assets, as the central bank plans to buy around 70% of all the new issuance of sovereign bonds. As a result, by 2014 the BoJ will own 20% of Japanese government bonds The appetite of Japanese investors for US bonds has increased since the start of the eurozone crisis, but they also returned to the European stock markets last year. In particular, they invested in countries at the core of the eurozone, such as France, the Netherlands and Germany, while limiting sales in peripheral securities. In this context, **we expect demand for assets in euros to increase, provided that the euro-convertibility risk does not emerge again.**

Chart 5
Successive rounds of QE (USD bn), Fed and BOJ



Source: BBVA Research based on Haver

Chart 6
JGB holders since 1998, porcentual estructure (%)



* (Including T-bills and FILP bonds) Public sector includes fiscal loan fund while excluding public pension funds which is included in pensions.
Source: BBVA Research based on Haver

3. The growth outlook for the Spanish economy

Financial stress has relaxed over the last three months. Despite the increase in political uncertainty in Italy and the financial uncertainty in Cyprus, the economic policy decisions implemented in mid-2012 are still contributing to a substantial reduction in volatility. **In Spain, this improvement is being accompanied by a gradual return of capital flows and increased resistance to rising risk premiums** paid by both the public and private sectors. **This is a positive development in the consensus view of the outlook for the Spanish economy since last summer.**

However, the economic performance of Spain's main trading partners has been worse than expected, with activity practically stagnant throughout Europe whilst robust in the rest of the world, risk-free interest rates at historically low levels and a slight depreciation of the euro. As Europe remains the main market for Spanish exports, **this inevitably puts downward pressure on growth; however, this is offset to an extent by increasing diversification in export markets.**

Domestically, **the economy has performed slightly worse than expected,** both during the fourth quarter of 2012 and the first quarter of 2013. However, information at the time of writing confirms that the pace of contraction in **1H13 is being lower than in 2H12.**

Despite this, some domestic factors will act as counterweights. In the short term, **the Government has announced an extension to its supplier payment plan, and has left open the possibility of launching another such plan.** This would probably cover funds amounting to around 2%of GDP and, like its predecessor, could have a significant, though temporary, effect on activity. In the medium and longer term, **a number of reforms have been initiated that, taken as a whole, have the objective of continuing to reduce structural imbalances in** the Spanish economy, **establishing the basis for a more robust recovery.**

In summary, **we expect the Spanish economy to remain in recession over the coming quarters, with the fall of GDP in 2013 being similar to that in 2012, under our most likely scenario.** The continuing recession this year is explained by the need to correct the public deficit and the continuing process of absorbing accumulated imbalances. **Moving forward, a number of factors continue to point to a return to growth in 2014.** Worldwide, we expect an acceleration in activity, with the Eurozone returning to growth. Domestically, some internal adjustment processes will be almost completed, with fiscal policy becoming somewhat less contractionary than in 2012 and 2013. Thus, **while we have revised our forecasts downwards slightly** over the last three months, **we continue to hold to our diagnosis for the underlying performance of the Spanish economy:** it will bottom out in 2013, with recovery starting in 2014.

Nevertheless there are some risks to this expected recovery. Whilst the measures launched in 2012 have so far outweighed recent increases in uncertainty following events in Italy and Cyprus, the additional relaxation in financial pressure continues to be dependent on progress with structural reform, both in Europe and in Spain.

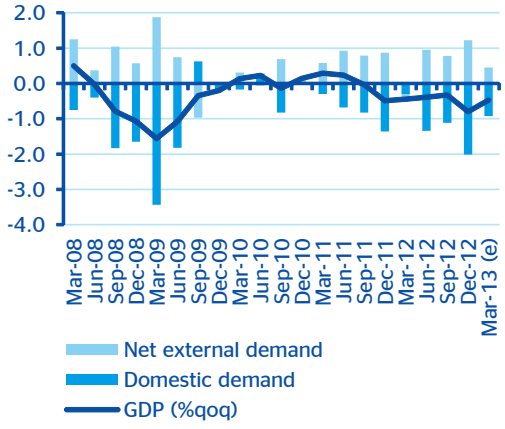
The Spanish economy will continue contracting in 1Q13, although more slowly than in 4Q12

Flash GDP released by the National Statistics Institute (INE) indicate that the Spanish economy contracted 0.5% qoq in 1Q13[3]. If this estimate is confirmed, the fall in activity between January and March would have been lower than in the final part of 2012, although somewhat worse than expected at the end of 4Q12 (BBVA Research: -0.3% qoq). Regarding the composition of growth, **preliminary indicators released to date point to a slower contraction in domestic demand** (contribution of -0.9 pp of GDP) following the substantial fall in the second half of 2012 due to the fiscal measures introduced in July. **Export sales recovered in the first quarter of the year** following a fall in late 2012, confirming the consolidation of net foreign trade as a permanent support for the recovery, with a quarterly contribution to growth of 0.5pp (Chart 7).

3. All figures related to the Quarterly National Accounts (CNTR) are seasonally and working-day adjusted (SWDA)

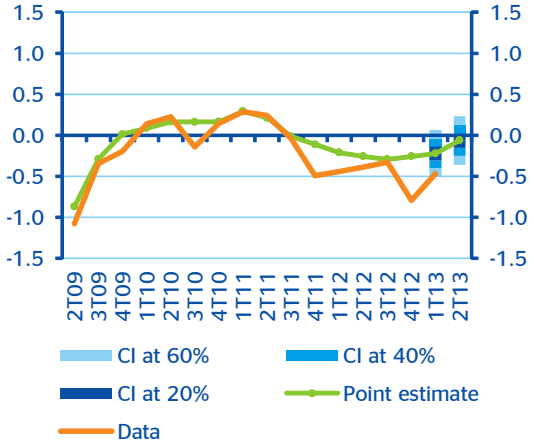
Looking to the second quarter of 2013, the available information indicates that the economy would continue to shrink but, in any case, at a lower pace (MICA-BBVA Research: between -0.1% and -0.3% qoq) (Chart 8)[4].

Chart 7
Spain: contributions to quarterly GDP growth



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

Chart 8
Spain: GDP growth and forecasts using MICA-BBVA model (% qoq)



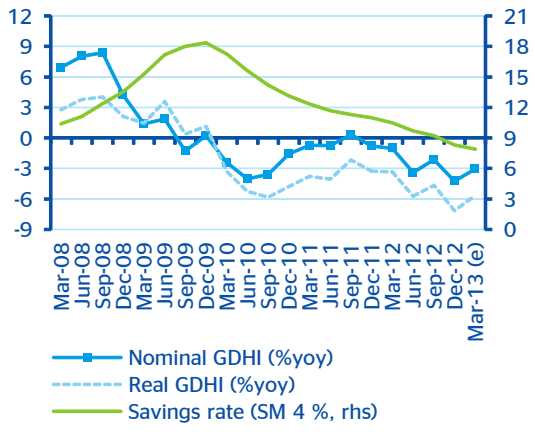
Current forecast: 6 May 2013.
Source: BBVA Research based on INE data

The fall in private domestic demand slows following the fiscal measures introduced in 4Q12

After a fourth quarter characterised by an abrupt decline in private spending, preliminary demand indicators –mainly for durable goods and, to a lesser extent, services- show that the decline in household spending eased in 1Q13[5] This will be affected by the base effect of the VAT changes (increase in the general and reduced rates and changes to tax bases) and the cut of Christmas extra-pay to public-sector employees in 4Q12. Furthermore, the lower than expected reduction in real household disposable income, improved net financial worth, the expected reduction in the savings rate and renewal of the Efficient Vehicle Incentives Plan (PIVE-2)[6] contributed to maintaining private consumption between January and March (Chart 9). BBVA's synthetic consumption indicator (SCI-BBVA) and our coincident consumption indicators model (MICC-BBVA) suggest that household spending contracted by around 0.3% qoq (-3.8% yoy) in 1Q13, compared to the 2.0% qoq reduction in the previous quarter (Chart 10).

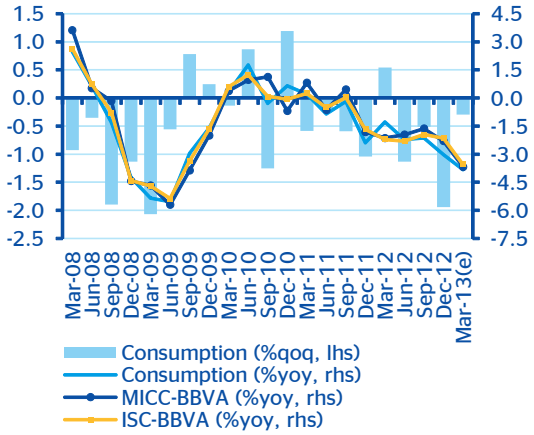
4. For more details on the MICA-BBVA model, see Camacho, M. and R. Doménech (2010): "MICA-BBVA: A Factor Model of Economic and Financial Indicators for Short-Term GDP Forecasting", BBVA WP 10/21, available at: http://www.bbvaresearch.com/KETD/fbin/mult/WP_1021_tcm348-231736.pdf?ts=2542012
5. Refer to section of 3 Consumption Outlook for the second half of 2012 for detailed analysis of consumer spending by type of goods and services. http://www.bbvaresearch.com/KETD/fbin/mult/1212_Situacionconsumo_tcm346-363646.pdf?ts=2312013
6. PIVE-2 has been in effect since 4 February. This aims to replace cars and light commercial vehicles over 10 and 7 years old respectively (compared to 12 and 10 years old in PIVE-1) with more energy-efficient vehicles. 150 million euros have been budgeted for this plan -twice the amount of PIVE-1- and the campaign will run for 1 year or until all the funds are used. The scheme benefits individuals, the self-employed, professionals, micro-enterprises and SMEs. The Ministry of Industry, Energy and Tourism contributes 1,000 euros per vehicle, in addition to a further 1,000 euro discount per vehicle provided by the manufacturer or importer. Unlike PIVE-1, the amount for large families that purchase "M1" vehicles with more than 5 seats has increased to 3,000 euros.

Chart 9
Spain: GDHI and households' savings rate



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

Chart 10
Spain: observed data and real-time forecast of households' consumption



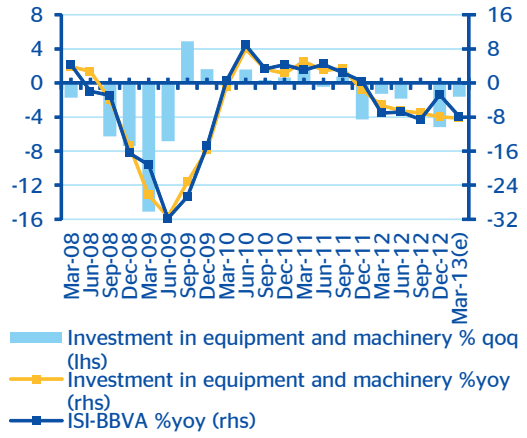
(e): estimate.
Source: BBVA Research based on INE data

Investment in **equipment and machinery** ended 2012 contracting sharply, mainly due to the poor performance of its main driver, export demand, which had been offsetting the continuing weakness in domestic demand. However, **early figures for 2013 point to a slowdown in the pace of deterioration in this component of investment.** Both industrial vehicle sales and the industrial production index reflect smaller contractions than in 4Q12. Furthermore, all the signals suggest that exports performance improved. This, together with consolidation of the relaxation in borrowing stress in the early months of the year, bodes well for a more favourable performance by this demand component. Our synthetic investment indicator (SCI-BBVA) points to a **1Q13 contraction of 1.6% qoq (-8.2% yoy)** (Chart 11).

The trend to slower deterioration in **housing supply consolidated at the start of the year. However, the first housing demand indicators suggest a significant contraction in sales following the increase in the final quarter of 2012.** According to real estate transaction figures from the Ministry of Public Works, during this period housing sales increased by 17.3% qoq SWDA, the largest increase in the last two years. This was due to demand being brought forward to avoid the January 2013 tax changes affecting housing[7]. Our initial estimate is that the tax changes **caused a 13% increase in sales in 2012.** This is lower than that seen in 2010, due to the better economic conditions at the time. Overall, despite the smaller deterioration in supply, investment flows in the sector continue to be weak. Our SHI-BBVA synthetic housing investment indicator **suggests housing investment contracted by 2.6% qoq in 1Q13 (-9.2% yoy)** (Chart 12).

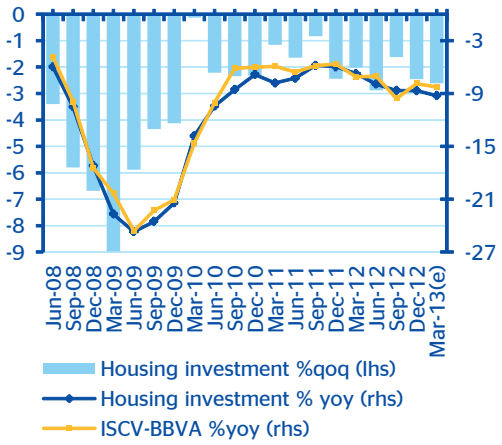
7. VAT on housing increased from 4% to 10% on 1 January 2013, with removal of government credits for home purchasers. Some Autonomous Communities have decided to retain some kind of credit for home purchasers. However, the amounts involved are smaller and, in most cases, apply only to the young and marginalised groups. Local tax authorities in the Basque Country are keeping their credits for home purchasers.

Chart 11
Spain: observed data and real-time forecasts for capital goods investment



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

Chart 12
Spain: observed data and real-time forecasts for housing investment



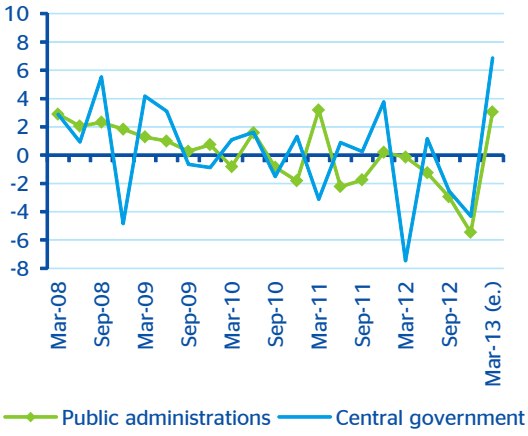
(e): estimate.
Source: BBVA Research based on INE data

Slowdown in public expenditure, but only temporary

Following the major adjustment in public sector demand in 2H12, figures currently available suggest that this segment continued to drain growth throughout 1Q13. Nevertheless, even though the latest Central Government budget execution data (to March 2013) shows that much of the fiscal consolidation effort has focused on cutting investment, it also reveals an increase in final consumption by the Central Government, in nominal terms (Chart 13). However, this is temporary. It is mainly due to the effect of ending the supplementary Christmas extra pay to public sector employees. Meanwhile, public sector employment continued to deteriorate at a similar pace to 4Q12 (Chart 14).

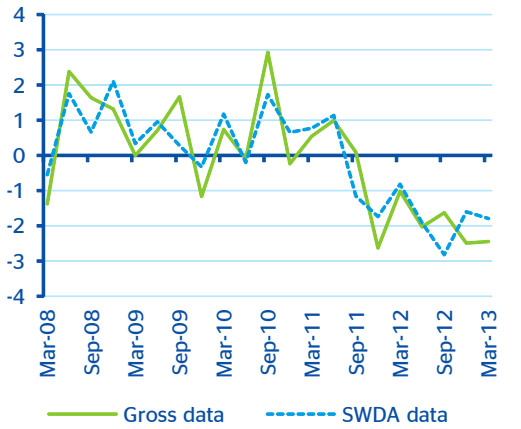
Based on this information, **we expect public sector expenditure to have fallen throughout the first quarter, but at a slower pace than in the second half of 2012,** and non-residential construction investment to have fallen at a similar rate to the previous quarter.

Chart 13
Spain: nominal public consumption (% qoq, SWDA)



(e): estimate.
(*): does not include fixed capital consumption.
Source: BBVA Research, based on MINHAP data

Chart 14
Spain: public sector employment (% qoq)



Source: BBVA Research based on INE data (Labour Force Survey)

We expect exports to recover in the first quarter, with foreign trade making a positive contribution to growth

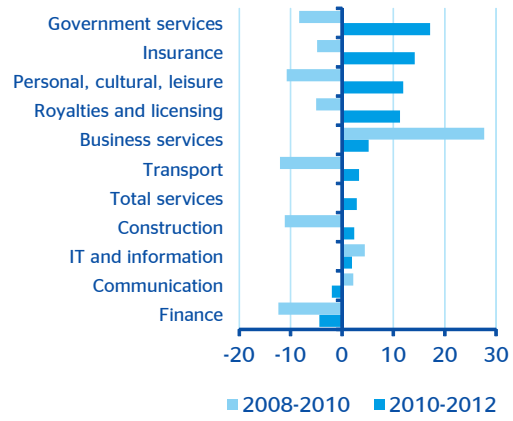
Spanish exports fell in the fourth quarter of 2012 due to recession in Europe and continuing external financing difficulties for the private sector. **Despite this adverse background, the increase in non-tourism service exports in the fourth quarter (+5.1% qoq) partially offset the fall in exports of goods (-1.8% qoq),** resulting in a healthy growth rate for 2012 as a whole (Chart 15).

2013 kicked off with less optimistic growth forecasts for the Eurozone than three months ago, this inevitably put downward pressure on the Spanish economy's export outlook. However, **early indicators show positive signs for 1Q13.** In particular, real exports of goods from the trade balance returned to growth in January and February, whilst the goods and services export indicator for large corporations was also positive in February. Moreover, the industrial exports order book was higher at the end of 1Q13 than for 2012 as a whole. This **points to a recovery in export sales of goods and non-tourist services of 0.8% qoq and 2.6% qoq, respectively (+4.8% and 18.9% yoy).**

Likewise, as a result of the recession in Europe, and after two years of major increases, non-resident consumption in Spain slowed, resulting in a fall of around 5.0% qoq in 4Q12. Nevertheless, **the information available for 1Q13 points to a modest upward correction for export earnings from tourism (+0.2% qoq, +0.9% yoy),** both in terms of the number of tourists and, in particular, their expenditure (Chart 16). But considering the outlook for the main European economies, the largest positive contribution to the sector will come from countries outside the EMU.

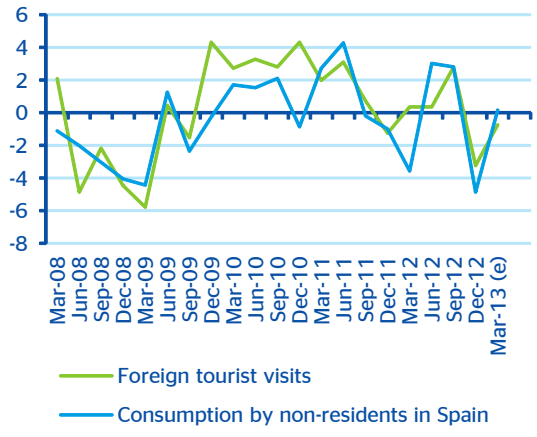
Therefore, the information available at the time of writing points to increased exports of goods and non-tourist services, with a virtual standstill of tourism. This would result in **a 0.9% qoq (6.8% yoy) increase in export sales in 1Q13.**

Chart 15
Spain: services' external trade index, (yoy change; %)



Source: BBVA Research based on INE data

Chart 16
Spain: tourist services' export indices (% qoq, SWDA)



Source: BBVA Research based on INE data

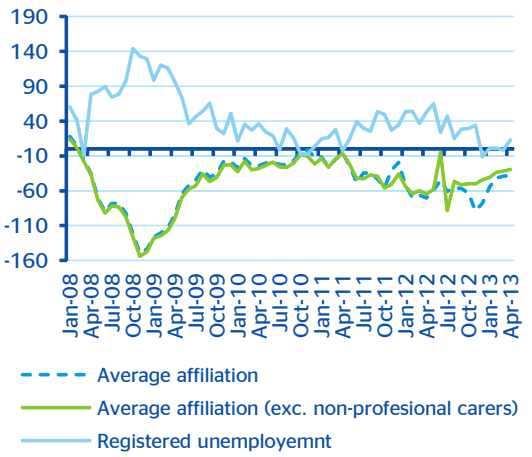
The upward correction in exports, together with slower deterioration in domestic demand allowed for a more **modest contraction in imports between January and March (-0.4% qoq, -3.9% yoy).** Preliminary economic indicators point to export demand making a net positive **contribution to growth slightly below that seen in the previous quarter (+0.5pp compared to +1.2pp),** but with a more virtuous composition, and a gradual correction of the current account deficit.

The labour market deteriorated more gradually in 1Q13

Excluding seasonal factors and balancing for working days and the distorting effects of the special agreement for non-professional carers under the Dependency Act[8], **labour market figures shown that the pace of job losses between January and March was slightly lower than in 4Q12.** The average number of Social Security affiliates fell by 0.8% qoq SWDA in 1Q13 (-1.1% qoq including the loss of non-professional carers), almost 0.2 percentage point less than in 4Q12. **Seasonally adjusted unemployment stagnated in 1Q13 after increasing for six months consecutively,** this would suggest further shrinkage in the economically active population (Chart 17)[9].

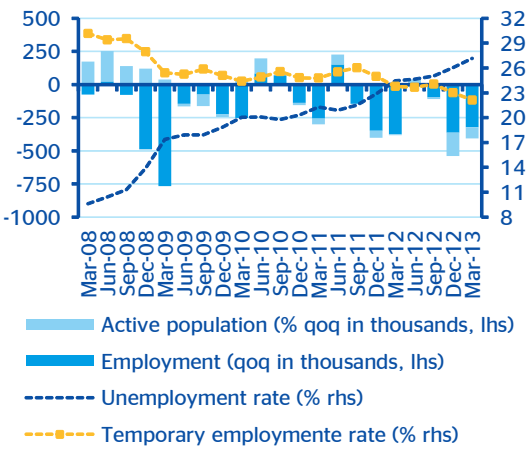
Broadly speaking, the Labour Force Survey (LFS) for 1Q13 confirmed the trend shown by social security affiliates and registered unemployment. Despite the labour force reduction (-85,000 people, -87,000 SWDA), the fall in employment (-322,400 people, -200,000 SWDA) caused a 1.1pp increase in the unemployment rate to 27.2% (26.7% SWDA). **The fall in public-sector employment (-71,400 in 1Q12 and -374,800 from the peak in 3Q11) contributed to the service sector accounting for 50% of all jobs lost,** followed by industry and agriculture. The number of salaried employees fell by 118,400, whilst temporary workers fell by 194,400 due to unfavourable seasonal factors. As a result the temporary employment rate further decreased by almost 1pp to 22.1% (22.7% SWDA) (Chart 18).

Chart 17
Spain: average social security affiliation and registered unemployment (monthly change, thousand people, SWDA)



Source:BBVA Research based on Ministry of the Economy and Social Security data

Chart 18
Spain: labour market indicators



Source: BBVA Research based on INE data

Downward pressure in consumer prices continued helping to contain wages

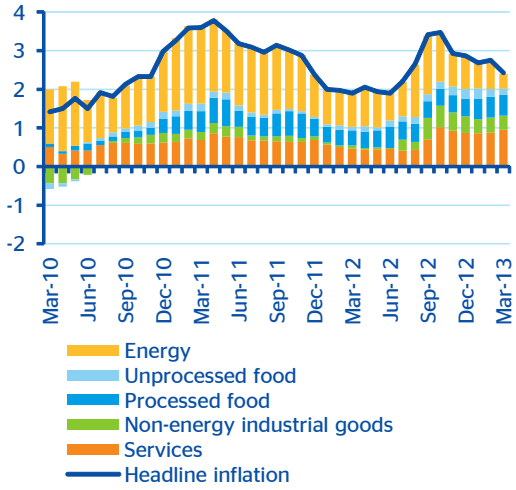
Headline inflation slowed 0.4pp in the first quarter **to 2.4% yoy in March[10].** This was due to a larger than expected slowdown in energy prices, although these were passed through more quickly than expected into other components of core inflation (Chart 19). Despite this, **core inflation accelerated 0.2pp between December and March (to 2.3% yoy),** mainly due to the effect of changes to the timing of Easter Week on year-on-year service price increases.

8. Royal Decree-Law 20/2012, of 13 July, on measures to ensure budget stability and improve competitiveness modified certain special agreements in the Social Security system for non-professional carers of dependent persons. This established that those who signed up to the agreement -which became voluntary- would be obliged to pay Social Security Contributions from 31 August (85% until 31 December and 100% thereafter). This has reduced the number of affiliates by 145,000 since November. See: http://www.boe.es/boe/dias/2012/07/14/pdfs/BOE-A-2012-9364.pdf
9. Figures for April show the labour market continuing to deteriorate, although less rapidly than expected. Correcting for seasonal and calendar effects, we estimate a decline in the number of social security affiliates of 30,000 (discounting the loss of non-professional carers) and a 13,000 increase in registered unemployed. See: http://www.bbvaresearch.com/KETD/fbin/mult/130506_Flash_Espana-Paro_abr13_tcm346-385155.pdf?ts=652013
10. The CPI leading indicator for April points to a slowdown in annual inflation to 1.4%; according to the INE press release, this is due to lower inflationary pressure from energy prices. See: http://serviciodeestudios.bbva.com/KETD/fbin/mult/130429_Flash_Espana-IPCA_abr13_tcm346-384617.pdf?ts=352013

Meanwhile, the Harmonised Index of Consumer Prices (HICP) showed that the inflation differential between Spain and the Eurozone remained positive in the first quarter. The gap in March was around 0.8pp for both general and core inflation (historic average of +0.8pp in both cases). As this continues to **reflect the increase in indirect taxes** in July 2012, **this does not embody a direct loss of competitiveness for Spanish exports.**

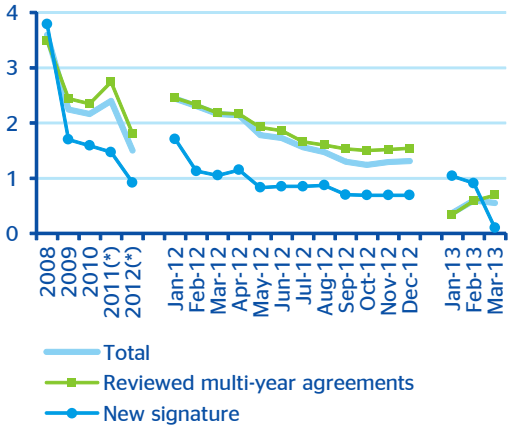
Overall, given the weakness of the labour market and the wage moderation that began in 2012, mainly resulting from the 2nd Agreement on Employment and Collective Bargaining (AENC) and the labour market reform[11], **we still do not expect any significant second-round effects from the increase in energy prices and VAT. In this regard, the average salary increase agreed in the collective agreement continued to slow in the first quarter,** as shown in Chart 20[12]. In fact, agreed salaries stood at around 0.6% yoy, the maximum limit set in the 2nd AECB for 2013 as a whole.

Chart 19
Spain: contributions to annual CPI growth



Source: BBVA Research based on INE data

Chart 20
Spain: Average salary increase agreed in collective agreements (%)



Annual data includes agreements registered after December of each year and incorporates revisions to the wage guarantee clause.
(*) Provisional.
Source: BBVA Research based on INE data

Outlook for 2013-2014: short-term downside risks

As mentioned in the introduction to this section, the fundamentals of the Spanish economy point to the deterioration **in economic activity continuing over coming quarters. In the most likely scenario, this will result in a 1.4% fall in GDP in 2013. Economic activity will increase by around 0.9%** (Table 1) **in 2014,** due to improvements in the international outlook, some internal adjustment processes nearing conclusion and the expected reduction in the contractionary stance of fiscal policy. **Once again, the regional decoupling cloaked by this economic outlook will be considerable, with exposure to export demand** (especially non-European) and the pace of corrections to structural imbalances and fiscal consolidation, being the most relevant factors (Section 5).

It is worth noting that, despite the economic policy decisions of summer 2012 continuing to contain tension in financial markets, **the pace of recovery forecast in this scenario remains conditional upon consolidation of the improved confidence in the European and, in particular, Spanish economies.**

11. See Box 2.
12. Figures for 1Q13 should be treated tentatively, as only 564 agreements, representing 2.4 million workers, were registered, compared to the 2187 signed in 1Q12, covering 5.0 million workers.

Table 1
Spain: macroeconomic forecasts

(yoy %, unless otherwise indicated)	1Q12	2Q12	3Q12	4Q12	1Q13 (e)	2012	2013 (f)	2014 (f)
National Final Consumption Expenditure (FCE)	-2.0	-2.3	-2.6	-3.3	-3.9	-2.5	-3.6	-0.8
Private FCE	-1.3	-2.2	-2.1	-3.0	-3.8	-2.1	-3.0	-0.5
Household FCE	-1.3	-2.2	-2.1	-3.0	-3.8	-2.2	-3.0	-0.5
Public Administration FCE	-3.8	-2.8	-4.0	-4.1	-4.3	-3.7	-5.1	-1.8
Gross capital formation	-7.1	-8.8	-9.2	-9.7	-10.5	-8.7	-8.5	1.3
Gross fixed capital formation	-7.4	-9.2	-9.7	-10.3	-10.5	-9.1	-8.5	1.3
Fixed material assets	-8.1	-10.0	-10.7	-11.0	-10.9	-10.0	-8.9	1.1
Equipment, machinery and cultivated assets	-5.1	-6.4	-7.0	-7.9	-8.2	-6.6	-4.7	4.9
Equipment and machinery	-5.2	-6.5	-7.0	-7.9	-8.2	-6.7	-4.7	4.9
Construction	-9.5	-11.6	-12.4	-12.3	-12.2	-11.5	-10.9	-1.0
Housing	-6.8	-7.9	-8.7	-8.7	-9.2	-8.0	-9.3	0.8
Other buildings and constructions	-11.9	-14.9	-15.8	-15.7	-14.8	-14.6	-12.4	-2.7
Change in inventories (*)	0.0	0.0	0.1	0.1	-0.1	0.1	0.0	0.0
Domestic demand (*)	**-3.1**	**-3.8**	**-4.0**	**-4.7**	**-5.2**	**-3.9**	**-4.5**	**-0.4**
Exports	2.1	2.7	4.2	3.2	6.8	3.1	4.7	6.4
Imports	-5.9	-5.2	-3.4	-5.4	-3.9	-5.0	-4.9	2.8
Net trade balance (*)	**2.4**	**2.4**	**2.4**	**2.8**	**3.2**	**2.5**	**3.0**	**1.4**
GDP at mp	**-0.7**	**-1.4**	**-1.6**	**-1.9**	**-2.0**	**-1.4**	**-1.4**	**0.9**
Pro-memoria:								
GDP w/o housing investment	-0.3	-0.9	-1.2	-1.5	-1.5	-1.0	-1.0	1.0
GDP w/o construction	0.7	0.3	0.0	-0.4	-0.5	0.2	-0.2	1.2
Employment (LFS)	-4.0	-4.8	-4.6	-4.8	-4.6	-4.5	-4.1	-0.2
Unemployment rate (% active pop.)	24.4	24.6	25.0	26.0	27.2	25.0	27.1	26.4
Employment (FTE)	-3.7	-4.7	-4.6	-4.7	-4.4	-4.4	-3.9	-0.5

(*) Contribution to growth
(e): estimate; (p): forecast
Forecast date: 6 May 2013
Source: BBVA Research based on INE data

Economic recovery will impact positively on private job creation in 2014

The expected decrease in public employment as a result of fiscal consolidation will add to the destruction of private-sector jobs, which will slow as the deterioration in economic activity moderates. As a result, the unemployment rate will peak, despite the expected decrease in the active population, exceeding 27% of the labour force in 2013. **The return to growth in 2014, and the expected improved efficiency of the labour market as a result of the reforms introduced in February last year[13], will result in an increased private sector employment and a slight reduction in unemployment in the second half of the year[14].**

13. An assessment of the labour market reform approved in 2012 is given in Box 4 of our Spain Economic Outlook for the second half of 2012.
14. Labour market reform should provide the necessary rebalancing between the extensive margin (employment) and the intensive margin (hours worked and wages), reduce segmentation and increase productivity. This consequences, together with the change in the Spanish economy's production model, should facilitate greater job creation and a more intensive reduction in the unemployment rate for every percentage point of GDP. For more details, see: Andrés. J, J. E. Boscá, R. Doménech and J. Ferri: "Job Creation in Spain: Productivity Growth, Labour Market Reforms or both", BBVA Working Paper 10/13, Madrid. Available:http://www.bbvaresearch.com/KETD/fbin/mult/WP_1013_tcm348-221513.pdf?ts=15112011.

External demand will consolidate as a support for the Spanish economy, whilst the negative contribution of domestic activity to growth will ease in 2014

Firstly, **we expect fiscal consolidation to continue to weigh negatively on growth in** 2013 and, to a lesser extent, 2014. Despite the recent relaxation of government deficit objectives, the impact of the cyclical deterioration in the public finances and the stubbornly high costs of financing debt mean that challenging fiscal consolidation efforts still lie ahead (Section 5). Given the measures announced by the Government, **we expect public sector consumption to fall by 5.1% in 2013, while investment in non-residential construction will fall by 12.4%.** This contraction in public-sector demand **will slacken off in 2014, taking the fall in actual public sector consumption and non-residential construction investment to around -1.8% and -2.7%,** respectively.

With regard to **private consumption,** the 2012 indirect tax increases and expected deterioration in some other factors lead us to expect **expenditure to fall by around 3.0% this year and 0.5% in 2014.** The worsening employment situation will again decrease the contribution of salaries to household gross disposable income, which will fall in 2013 and remain practically constant in 2014. In addition, the September 2012 VAT increase -and the resulting effect of bringing forward consumption- will have a permanent contractionary effect on consumption levels[15]. Furthermore, real estate wealth will continue to decline over the coming quarters. Conversely, a recovery in net financial wealth, a reduction in the household savings rate to levels considerably below those during the previous cycle, the absence of inflationary pressures from demand and low official interest rates will all cushion the expected contraction in private consumption.

This year continues to appear a transition period for **investment in machinery and equipment.** Although not supported by domestic demand, and given that borrowing costs will remain relatively high due to the economy's cyclical situation, **exports will continue to provide support. However, this will not be sufficient to stop a further contraction in this demand component in 2013 (-4.7% yoy),** although at a slower rate than in 2012. The practical drying up of domestic demand, together with the continuing positive performance of exports, will enable investment in machinery and equipment to grow again in **2014 (4.9% yoy).**

2013 will be a year of corrections in housing investment. We do not expect any particular developments in residential activity. We will have to await the market's reaction to the commitment to rehabilitation in the new approach to housing policy[16]. The plan's objective is to redirect residential construction activity towards redevelopment through subsidies. This was tried in the previous housing plan, and whilst it did not stop rehabilitation work from slipping backwards, it contracted by much less than new house building[17]. Furthermore, **following higher sales in 2012** as a result of decisions to bring forward house purchases to avoid tax increases, **we now expect sales to fall; this will also impact negatively on investment.** It is worth focusing on housing demand by foreigners, which bounced back by over 25% in 2012, a third consecutive year of growth: this has been corroborated by Bank of Spain figures on real estate investment by foreigners showing a 17.3% increase on the previous year.

Overall, **we expect residential investment to contract again in 2013, perhaps by 9.3%** compared to 2012. **2014 continues to appear the likely date for recovery to kick in.** A moderate fall in the unemployment rate, the progressive disappearance of stress in borrowing markets and a lower stock of unsold homes in some parts of Spain will be factors that could lead to housing investment stabilising over the coming year.

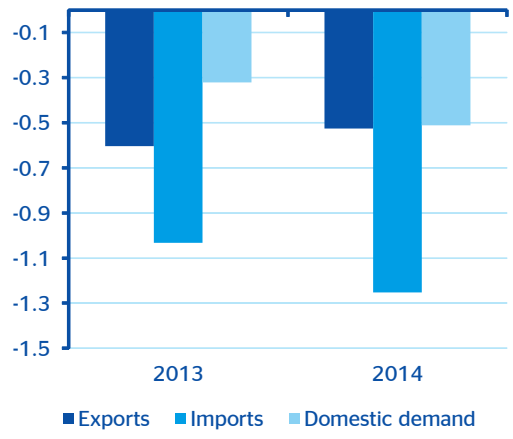
With regard to international trade, global economic growth will remain robust. This leads us to expect exports to grow, on average, by 5.6% in 2013 and 2014, partly boosted by better price competitiveness. **This forecast includes a downward revision of the one published in our last**

15. Box 2 of Spain Economic Outlook for the fourth quarter of 2009 sets out how a 2 percentage point increase in VAT would result in a permanent 0.6 pp reduction in long-term private consumption. See:
http://www.bbvaresearch.com/KETD/fbin/mult/0911_situacionespana_tcm346-204668.pdf?ts=1742013
16. Royal Decree 233/2013, of 5 April, regulating the State Plan to promote home renting, building redevelopment and urban regeneration and renewal, 2013-2016 http://www.boe.es/boe/dias/2013/04/10/pdfs/BOE-A-2013-3780.pdf
17. Figures from SEOPAN, Spain's construction company association, show the contribution of redevelopment to total investment in the sector increasing from 24% to 29% between 2009 and 2012, overtaking residential construction (which fell from 27.4% to 26.6% in the same period) for the first time in 14 years.

publication, as a result of lower expected growth in the EMU. Nevertheless, and as can be seen from the simulation in Chart 21, given the high import content of Spanish exports and the repercussions that slower trade activity have on all other sectors, we are forecasting a slightly larger correction in imports than in exports and a smaller adjustment in internal demand[18] . This will result in higher foreign demand, partially offsetting the direct impact on GDP.

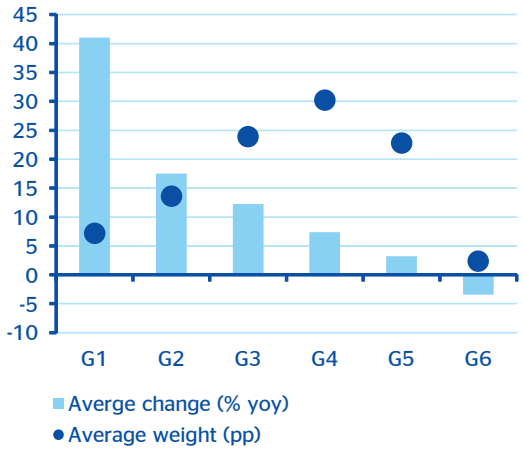
The absence of other factors indicating substantial downward correction, and as the success of Spanish exports during the crisis has been based on **a wide range of products and new export markets** (Chart 22), **the impact could be lower than that derived from historically-based estimates.**

Chart 21
Spain: impact of revised Eurozone growth forecasts (pp over base case scenario)



Source: BBVA Research

Chart 22
Spain: recovery in real exports by product, Jan '10-Feb '13



Note: G1: growth > 20% (electronic components, non-ferrous metals and others), G2: 15%-20% (oil refining, rubber, fats and oils, other chemical products and others), G3: 10%-15% (other textiles, mechanical material and equipment, electric motors and others), G4: 5%-10% (base chemicals, pharmaceutical products, agricultural products, paper pulp and others), G5: 0%-5% (motor vehicles, plastic products, processed fruit and vegetables and others), G6: growth <0% (furniture, audio equipment, motor-bikes, IT equipment and others)
Source: BBVA Research based on Datacomex data

As a result of continuing deterioration in domestic demand components, **imports will continue falling in 2013 (-4.9%). After bottoming out, imports will start to expand again in 2014 (2.8%),** supported by a smaller contraction in domestic demand and a sustained boost from exports. The current situation shows glimpses of greater dynamism in the export sector **in 2013-2014, with net foreign-trade demand making a positive contribution to economic growth. As a result, Spain will enjoy its first current account surpluses since the mid-1980s, amounting to around 0.7% of GDP, on average, in 2013-2014,** facilitating the economy's external deleveraging.

In summary, **the latest European economic-activity figures, and the continuing absorption of the imbalances accumulated prior to the crisis and the fiscal consolidation process, impose a downward bias on the contraction of economic activity in Spain** in 2013. Going forward, **Spain will face lower borrowing constraints than** three months ago. **If this is consolidated, the impact will take at least a couple of quarters to feed through into the real economy,** particularly if it is not accompanied by an intensification of the reforms generating expectations of higher growth in future. **The National Reform Plan submitted on 26 April includes an accurate diagnosis of the situation.** However, we will have to wait to see whether the timescales defined are actually achieved, and whether the ambition of the changes is sufficient. **Finally, we should see a return to growth in 2014 as a result of recovery in the global economy and a smaller negative effect of some domestic adjustments.**

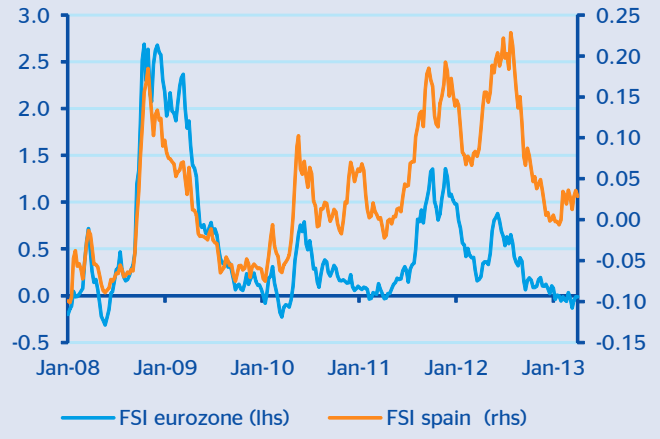
18: The impact on domestic demand is likely to be concentrated mainly on business investment, although there may be more minor knock-on effects on other components of domestic demand.

Box 1. Tensions in financial markets and economic growth in Spain

Tensions in financial markets in the eurozone in general and, more particularly in Spain, have relaxed since mid-2012. The announcement at the end of July 2012 by the President of the ECB Mario Draghi, that any necessary measures would be taken to ensure the survival of a euro that was being questioned by the financial markets,[19] relieved them significantly, as reflected by BBVA's Financial Stress Index (FSI)[20]. Chart 23 shows the significant fall in the Spanish FSI, starting on July 26 (date of Draghi's statement), while as for the eurozone as a whole, the index began to fall a few weeks earlier, in the wake of the agreements reached during the European summit on single banking supervision, which approved long-term plans relating to banking and fiscal union and measures to support growth.

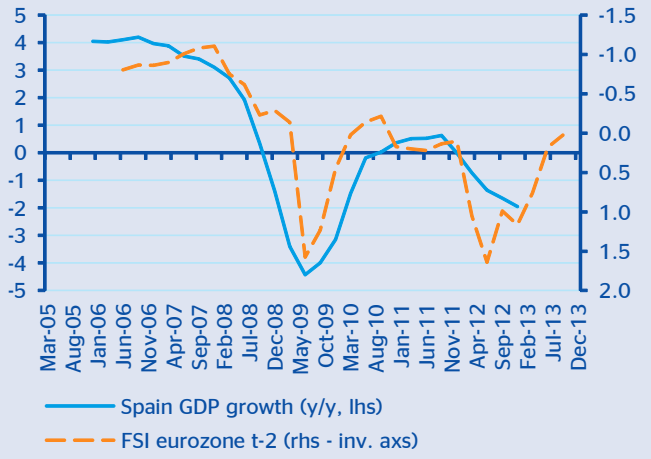
Stress on markets tends to be negatively correlated with the economic cycle. In the case of the Spanish economy, not only has there been a high level of correlation, but financial tensions anticipate annual GDP growth by two quarters. As Chart 24 shows, comparison between GDP growth in Spain and the figure for FSI in the eurozone two quarters earlier (on an inverted scale),[21] show similar behaviour. In addition, beyond this graphical evidence, a statistical analysis reveals that year-on-year GDP growth in Spain has a negative and significant correlation both with respect to the eurozone index (83%) and with the Spanish index, both indices anticipated two quarters[22].

Chart 23
FSI, eurozone and Spain



Source: BBVA Research

Chart 24
Spain's GDP (% yoy) and eurozone's FSI



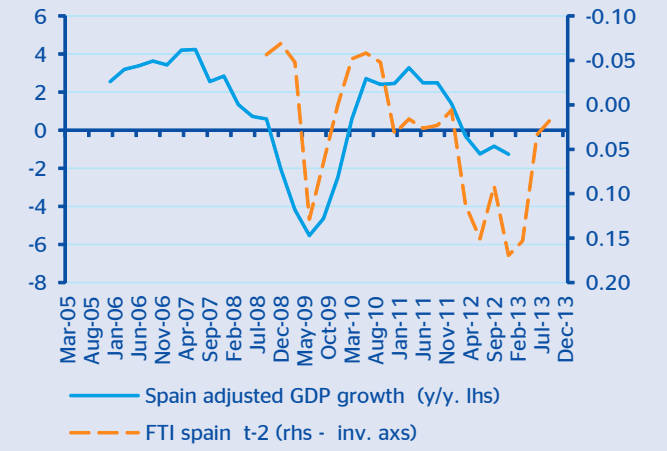
Source: BBVA Research

Similar results are obtained by measuring Spain's economic growth with a **GDP** (denominated **adjusted**) that does not include the sectors in which adjustments are pending, as the construction, public and financial sectors (see Chart 25).

In addition, the results obtained for Spain can also be verified for the eurozone, where its FSI anticipates the **region's GDP, although in this case only by one quarter.** As in the case of Spain, the FSI of the eurozone has a negative and high correlation (72%) with respect to the growth of the eurozone, and anticipates it by a quarter (see Chart 26).

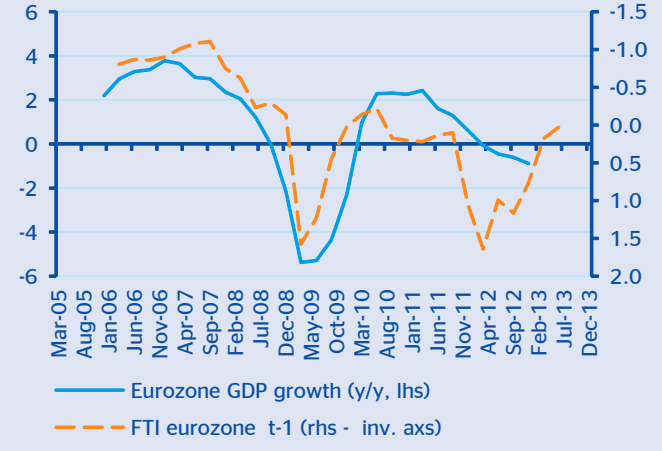
19: This announcement led to specific results at the start of September, with the establishment of a programme of sovereign debt purchases in secondary markets (the OMT programme) to ensure the transmission of monetary policy in the whole of the eurozone. As of the end of April 2013, it has not been necessary to put this into effective practice.
20: The FSI synthesises in a single indicator the dynamics of a set of variables that measure the volatility of capital markets, interest rates and currencies, credit risk (including sovereign) and liquidity tensions. For more details, see the Economic Outlook "Tensiones financieras y actividad económica en EEUU y la zona euro", available online at:
http://www.bbvaresearch.com/KETD/fbin/mult/111006_Observatorio_economico_escenarios_ec_tcm346-270914.pdf?ts=2642013
21: Despite the fact that the analysis is on the Spanish economy and that there is a specific index for it, the FSI for the eurozone is equally used, as the sample available for it is more extensive. This is of great importance when checking the robustness of the econometric models presented below.
22: The correlation found with respect to Spain's FSI is somewhat lower. The reason is simply because there is a smaller sample for this index.

Chart 25
Spain: adjusted* GDP (% yoy) and FSI



* GDP excluding the public sector, construction and the financial sector.
Source: BBVA Research

Chart 26
Eurozone: GDP (% yoy) and FSI



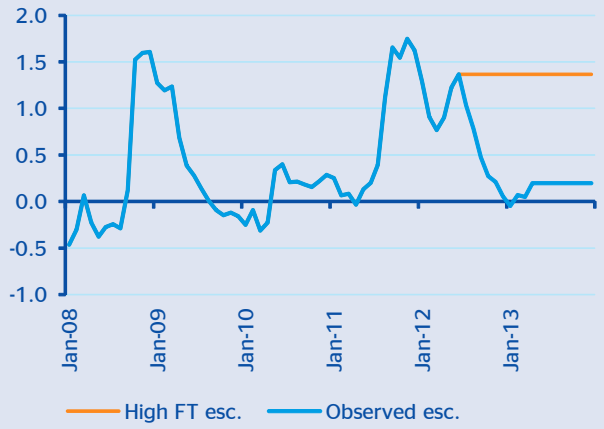
Source: BBVA Research

Given the relationship between financial tensions and growth, it is worth considering to what extent the ECB action **has supported economic activity** in the eurozone as a whole, and in particular in Spain. For example, it may be interesting to compare a scenario of ECB inaction (maintaining the financial stress at the level of the observed during last July) with the scenario of improvement observed since then (see Chart 27). **The modelling strategy used is part of a family of structural vector autoregression models (SVAR)**[23]. The estimated model takes Spain's GDP as a dependent variable, and includes the eurozone's FSI and the activity of the OECD countries as explanatory variables. With respect to the FSI, and because of the size of the sample (as commented above), we have used the FSI of the eurozone as well as that of Spain. In addition, we propose an additional specification that includes adjusted GDP instead of total GDP as dependent variable, which reflects the gains achieved by adjusted GDP in terms of correlation with Spain's FSI.

To sum up, we use four specifications of the SVAR model that include alternatively the FSI of the eurozone and Spain, and the total GDP compared with the adjusted GDP. All the specifications tested show reasonable impulse response functions (IRF) (e.g. see Chart 28), where in particular the impact of the FSI on GDP (in overall terms) gives a correct sign, and a magnitude similar to that obtained in previous studies[24]. At the same time, the response of GDP after 12 months is not significantly different from zero. This means that a shock on the stress levels disappears over time (around a year), and does not have permanent effects on the growth of the economy, but on its levels.

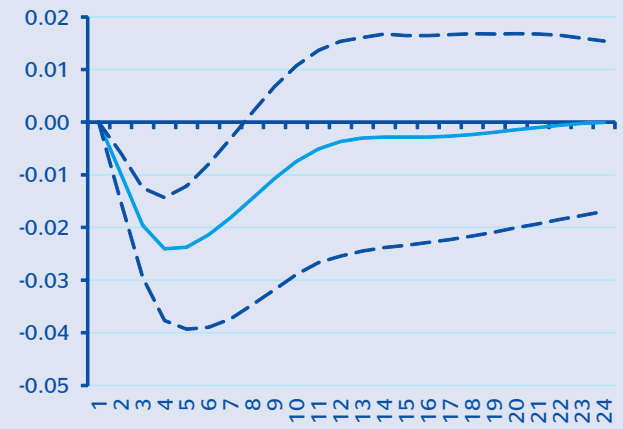
23. A VAR is a model of simultaneous equations where only the lag values of the variables in the model appear in each equation as explanatory variables. In practice VAR models do not verify restrictions, so their shocks are not identified; however, they can be identified by using different criteria. In this case, we have identified the model by a Cholesky decomposition, which means an order of exogeneity of the variables is imposed.
24. In particular, a similar analysis for the US economy and the eurozone can be seen at: "Tensiones financieras y actividad económica en EEUU y la zona euro", published in our Global Economic Outlook, fourth quarter of 2011. Available online at: http://www.bbvaresearch.com/KETD/fbin/mult/1111_Situacionglobal_tcm346-275670.pdf?ts=2642013

Chart 27
FSI scenarios: observed vs. negative



Source: BBVA Research

Chart 28
GDP response (% mom) to a FSI shock

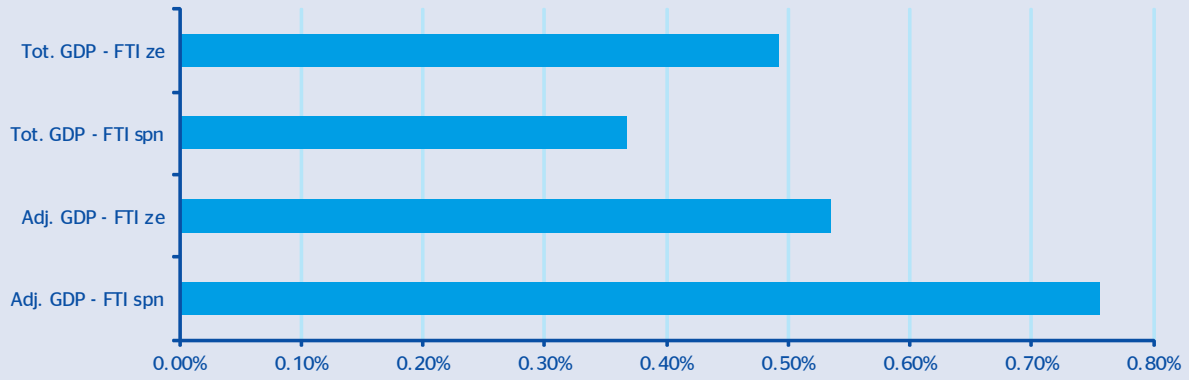


Source: BBVA Research

Chart 29 **shows that the cumulative differential impact of a scenario of high financial tensions, compared with the observed one, is between 0.4pp and 0.8pp of growth from the third quarter of last year to the second quarter of 2013.** Analysing the impacts shown by the different specifications of the SVAR model, it can be seen that the configuration including total GDP and Spain's FSI estimates the lowest impact in terms of GDP (0.4 pp), while the specification including adjusted GDP and Spain's FSI gives an impact of around double this (0.8 pp).

This range of impact in terms of growth is due to differences in the IRF obtained from the level of historical correlation between the different GDP and FSI used. In this sense, even when the IRF movements are similar, the size of the responses presents some significant differences that give rise to the different impacts mentioned. However, it is possible that the results obtained in terms of gains in growth, consistent with a scenario of financial tensions plus falls, may result somewhat limited if the modelling strategy (the SVAR model) that lies behind the exercise cannot capture the non-linearity that arises in a scenario (e.g. of an extreme fall in the FSI).

Chart 29
Spain, differential impact in growth from July 12 to July 13 (%): observed scenario vs. high financial tension scenario



Source: BBVA Research

Box 2. Persistent unemployment and wages in Spain

The Spanish economy has had a **persistently high unemployment rate over the last four decades.** Even so, in the current recession, this tripled to 27.2% in the first quarter of 2013. As we show below, **much of this poor employment performance is explained by price and wage formation deficiencies; this is particularly true during the present crisis. As a result, wage moderation over the last year has helped soften the fall in employment, and so the increase in the unemployment rate.** The employment and collective bargaining agreement sealed in January 2012 and the labour-market reform approved in February last year have made the labour market more flexible. The results presented here indicate that if **salary demands had not moderated in 2012, an additional 60,000 jobs would have been lost in the short term, increasing the unemployment** rate by 0.6pp. In the medium and longer-term, wage moderarion in 2012 will save 300,000 jobs, knocking 1.7pp of the unemployment rate. Furthermore, **if the labour institutions in Spain's labour market had been more appropriate** at the start of the crisis, **this would have saved 1,000,000 jobs** over the longer term, reducing the unemployment rate by 6pp.

Employment adjustments as a response to salary and price rigidity

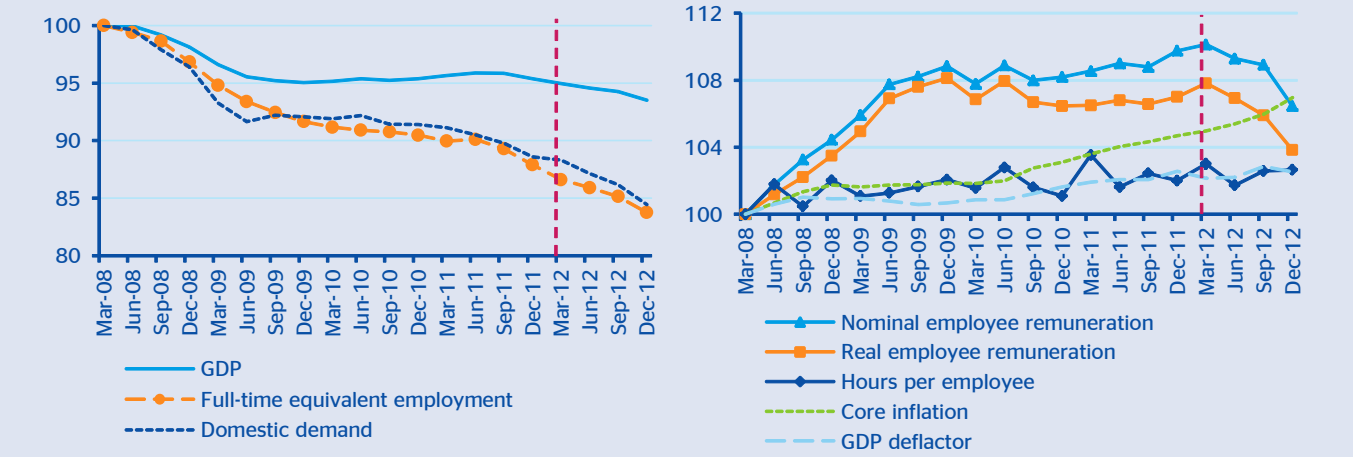
Considering what has happened in previous recessions, and given the macroeconomic disturbances that have afflicted Spain over the last five years, **the labour market adjustment over the current cycle comes as no surprise.** It was to be expected that the wage rigidity resulting from a system of collective bargaining, the absence of internal flexibility mechanisms in companies, the segmentation caused by the size of the cost difference between laying off workers with permanent compared to temporary contracts, the scanty conditionality of passive labour market policies and the mistaken approach of active policies all conspired to reduce employment. However, the fall in demand and other aggregate factors that have occurred did not impact on remuneration or on the number of hours worked per employee[25].

Despite the expansionary nature of fiscal and monetary policy at the start of the crisis, **domestic demand (consumption and investment) has fallen by 15.5% since 1Q08,** leading to an **accumulated 6.5% reduction in GDP. This contraction has resulted in a 16.2% decrease in employment** (Chart 30). The causes of this exceptionally high elasticity are the increase in the number of hours worked per worker and, above all, salary increases. As explained in the panel to the right of Chart 30, nominal wage per employee increased by 10.1% between 1Q08 and 4Q11, whilst real wage increased by 7.8%. These increased salary costs, together with limited competition in product markets, tax changes and increases in regulated prices contributed to inflation continuing to rise persistently despite the fall in domestic demand, exacerbating the fall in demand for labour.

This mass job destruction and the countercyclical development of the labour force -particularly during the early stages of the crisis[26] - led to a 16.9 percentage point (pp) increase in the unemployment rate (Chart 31). But whilst the scale of unemployment is worrying enough in itself, the real cause for concern is the possibility that it could remain high for a prolonged period. This difficulty in reversing increasing unemployment, known as the hysteresis effect, resulting amongst other factors from price and wage formation deficiencies, has been well documented for the Spanish economy in previous recessions[27].

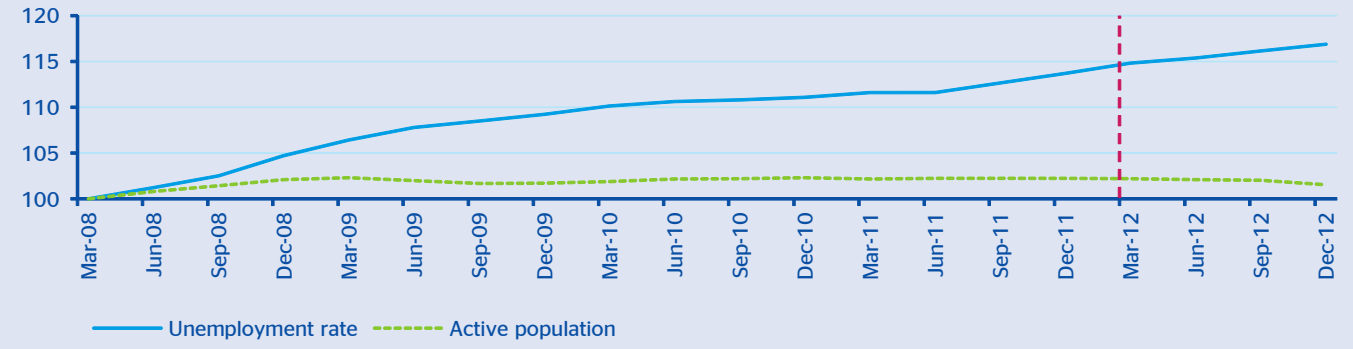
25: Detailed analysis of how labour institutions affect labour market operations and results is given in Blanchard and Wolfers (2000), BBVA (2009) and García (2011), among others.
26: As explained in Box 1 of Spain Economic Outlook for the fourth quarter of 2008, growth in the economically-active population at the start of the crisis was explained by an added-worker effect, characterised by an increased propensity to participate for groups with a traditionally low probability of entering the labour market (women, young people, the poorly qualified, etc.).
27: Refer to Chapter 8 of Cahuc and Zylberberg (2004) for analysis of the determining factors in the hysteresis effect, and Dolado and López-Salido (1996) for the causes of the persistence of Spain's unemployment rate.

Chart 30
Spain: labour market performance (corrected for calendar, seasonal and exceptional effects, 1Q08=100)



Source: BBVA Research based on INE data

Chart 31
Spain: active population and unemployment rate (corrected for calendar, seasonal and exceptional effects, 1Q08=100)



Source: BBVA Research based on INE data

However, unlike in the past, in 2012 two factors started to introduce a degree of flexibility into determining salaries; this should help to offset hysteresis in the labour market. The first of these is the Agreement on Employment and Collective Bargaining 2012-2014, signed by the CEOE, CEPYME, CCOO and UGT at the end of January[28]. Furthermore, in addition to promoting internal flexibility as an alternative to destroying jobs, the agreement includes other positive aspects, such as a commitment to salary moderation and promotion of performance-related pay (Box 2).

Table 2
2nd Agreement on Employment and Collective Bargaining 2012-2014: salary moderation

	2012	2013	2014
Wage growth agreed upon through collective bargaining	≤ 0,5%	≤ 0,6%	≤ 0.6% if ΔGDP2013 < 1% ≤ 1.0% if 1% ≤ ΔGDP2013 < 2% ≤ 1.5% ifΔGDP2013 ≥ 2%
Salary revision clause		(inflation -2%) if inflation > 2% The lower of (Spain, EMU)	
Benchmark inflation		The energy component is excluded if the yoy increase in Brent crude at December is > 10%	

Source: BBVA Research

28: Resolution of 30 January 2012 from the Employment Department publishing and regulating the 2nd Agreement on Employment and Collective Bargaining 2012, 2013 and 2014 http://www.boe.es/boe/dias/2012/02/06/pdfs/BOE-A-2012-1778.pdf

The second is the sweeping labour market reform approved in February through a Royal Decree-Law and in July as a Law[29]. There were three main changes in this reform that facilitated rebalancing the extensive margin (workers employed) and the intensive margin (hours worked and remuneration) in the face of shocks:

1. Decentralisation and modernisation of the collective bargaining system, granting priority to company agreements and removing the indefinite extension of the agreement in the event of a claim being lodged (known as "ultractividad" in Spain).
2. A significant reduction in the costs of removing workers from the payroll, whether through redundancy (removal of 'express' layoff with widespread application of severance packages of compensation of 33 days' pay for every year worked up to a limit of 24 months' salary) or fair dismissal (simplifying the financial grounds for fair dismissal and removing back pay except in the event of the worker being reemployed).
3. Encouragement of internal flexibility mechanisms, by: i) facilitating substantial modifications to employment contract conditions (particularly salary), and removing the requirement for official authorisation prior to suspension of the contract or reduction of working hours for financial, technical, organisational or productive reasons; ii) reducing uncertainty about the financial grounds that can be argued to justify breaking a collective bargaining agreement, and extending the areas in which the company can break the agreement (working day, hours, shift work, work system, job description, etc.); iii) permitting job mobility among professional groups, not just levels.

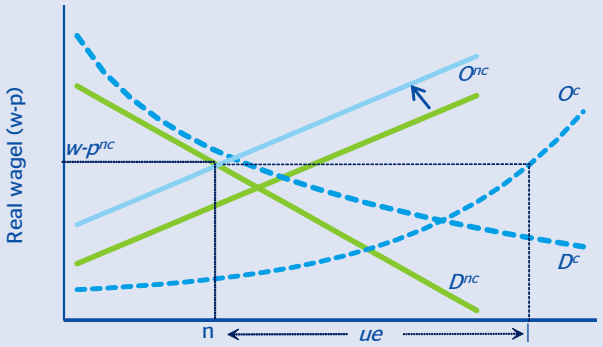
The **consequences** of the agreement between union and business organisations and the employment reforms include an **accumulated reduction in nominal employee pay of 3.3% in 2012** (-3.7% in real terms), as shown in Chart 30. **But what about jobs?**

Model and results

In order to analyse how price and wage formation deficiencies affect the level and persistence of the unemployment rate, we estimated a structural VAR model to identify the impact of the main unobservable structural disturbances to Spain's labour market[30]. In particular, we considered a simplification of the Spanish economy in which fluctuations derive from shocks to aggregate supply and demand, labour-market participation and uncompetitive labour supply and demand. The latter derive from changes to the market power of economic agents in price fixing (uncompetitive labour demand) and salaries (uncompetitive labour supply), together with tax distortions in the market for goods and factors of productions (uncompetitive labour demand and supply).

Much of the discussion and the results below concentrate on the two most recent shocks. Charts 32 and 33 show the long-term behaviour of the labour market under the assumptions of the theoretical framework considered. As we can see, uncompetitive labour demand and supply results in a higher real wage than that at which the market would clear (w-pnc) and, therefore, a positive structural unemployment rate (ue). A positive shock from uncompetitive labour supply (displacement of the Onc curve to the left) permanently reduces the employment level, raising both the unemployment rate and real wages (Chart 32). A positive uncompetitive labour demand shock (displacement of the Dnc curve to the left) also permanently reduces the employment level and raises the unemployment rate, but reduces real wages (Chart 33).

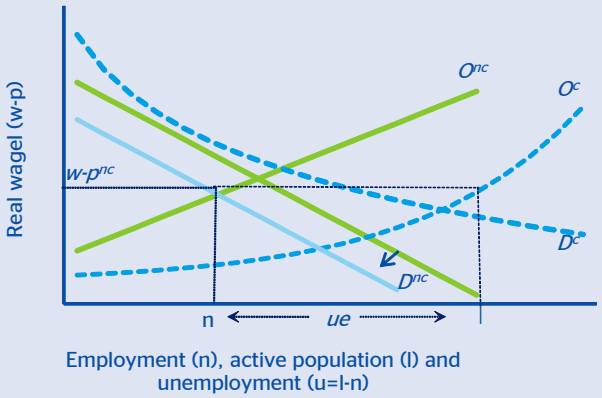
Chart 32
Employment market response to a positive uncompetitive labour supply shock



Note: D^{c} and O^{c} denote competitive demand and supply, whilst D^{nc} and O^{nc} denote uncompetitive demand and supply.
Source: BBVA Research

29: See Box 4 of BBVA (2012) for an assessment of the labour market reforms and expectations of their results.
30: Appendix 1 sets out the stylised details of the model and its long-term solution. The model features a standard Blanchard-Quah (1989) structure extended with Layard-Nickell (1991) pricing and salaries variables, in a closed economy with price and salary formation rigidity and a single, homogeneous, factor of production, labour, i.e. there is no distinction between public and private employment, or between temporary and permanent employment. Whilst these sources of heterogeneity are relevant to the Spanish economy, we should be cautious in interpreting these results and only do so in aggregate terms.

Chart 33
Employment market response to a positive uncompetitive labour demand shock

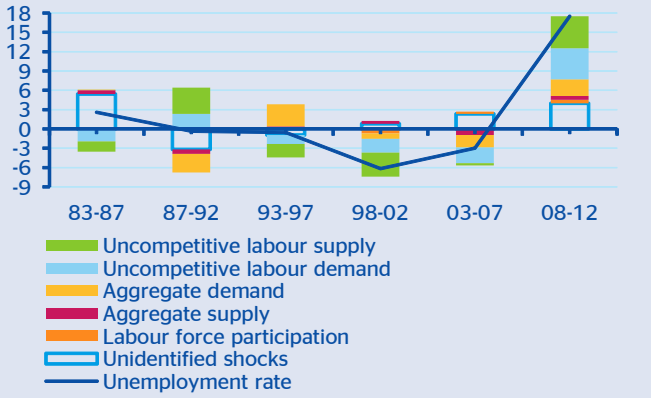


Note: D^{c} and O^{c} denote competitive demand and supply, whilst D^{nc} and O^{nc} denote uncompetitive demand and supply.
Source: BBVA Research

Appendix 2 presents the estimated impulse response functions for positive uncompetitive labour demand and supply shocks, quantifying their impact on the main variables for the Spanish economy over time. In general, **the results confirm the predictions drawn from the theoretical model.** Firstly, it finds that both shocks **have a permanent, negative effect on activity and employment.** Secondly, it can be seen that uncompetitive labour supply shocks have a permanent, positive impact on real wages and their share of national wealth, whilst the response of these variables to an uncompetitive labour demand shock is both negative and persistent. Finally, both shocks put upward pressure on apparent labour productivity and downward pressure on the active population, which implies a larger deterioration in employment than activity and the unemployment rate, as we have seen in this recession.

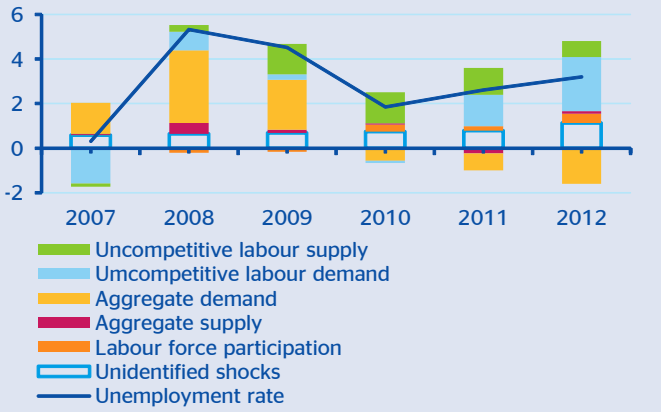
Charts 34 and 35 show the contributions of identified and unidentified shocks on Spain's unemployment rate over the last four decades. Focusing on the most recent contraction, Chart 34 shows that **most of the increase in the unemployment rate between 2008 and 2012 (17.5 pp) can be explained by rigidities in price and wage formation (almost 10 points)**, as seen in the economic crisis in the early 1990s. Shocks to aggregate supply and demand and labour-market participation explain 3.7pp, whilst the causes of the remaining 4.0pp are not identified.

Chart 34
Historical breakdown of accumulated changes in the unemployment rate (pp)



Source: BBVA Research

Chart 35
Historical breakdown of annual changes in the unemployment rate (pp)



Source: BBVA Research

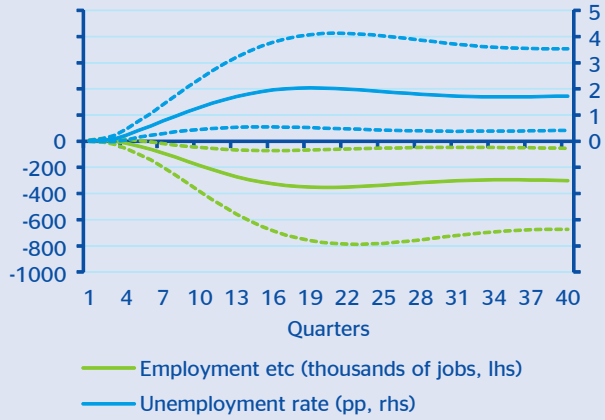
The wage moderation observed over the last year would have relaxed negative uncompetitive labour supply pressures in the Spanish labour market. As can be seen in Chart 35, the contribution of this shock to the annual increase in the unemployment rate fell from 1.2pp in 2011 to 0.7pp in 2012. Naturally, much of this -still positive- contribution in 2012 is due to past uncompetitive labour supply behaviour, as this disturbance -as we have already mentioned- has significant and persistent effects on the behaviour of the Spanish labour market.

As a result, we performed two counterfactual experiments to enable us to assess the reduction in the uncompetitive component of labour supply in 2012. As the methodology used enables identification of the structural disturbances that govern the economy's fluctuations, we can simulate what would have happened: i) in the absence of one of these; or ii) if one of these disturbances had a different sign or scale than in reality. In this case, we were interested in the following questions:

- **Counterfactual experiment 1:** How many additional jobs[31] would have been destroyed if the wage moderation in 2012 had not occurred?
- **Counterfactual experiment 2:** How many jobs would have been saved if the wage moderation had begun at the start of 2008?

In answer to the first of these, the results show that if salary demands had not eased in **2012, 60,000 additional jobs would have been lost in the short term,** increasing the unemployment rate by a further 0.6 pp (Chart 36). **In the medium and longer-term, 300,000 jobs might have been destroyed,** increasing the unemployment rate by a 1.7pp. In answer to the second question, the results in Chart 37 reveal that **if salary demands had adjusted in 2008** or, said in another way , if the Spanish labour market had had more appropriate labour institutions at the start of the crisis, **1,000,000 jobs would have been saved in the long term, and the unemployment rate would be 6pp lower.**

Chart 36
Results for counterfactual experiment 1 (difference from baseline scenario)*



* The broken lines represent the confidence intervals for percentiles 16 and 84.
Source: BBVA Research

Chart 37
Results for counterfactual experiment 2 (difference from baseline scenario)*

* The broken lines represent the confidence intervals for percentiles 16 and 84.
Source: BBVA Research

In summary, price (resulting from insufficient competition) and wage (resulting from archaic labour-market institutions) formation deficiencies explain much of the poor performance of the Spanish unemployment rate over the last four decades, particularly during the "Great Recession". These rigidities explain almost 10 percentage points of the observed increase in the unemployment rate since 2008. However, in 2012 labour market reform and the employment and collective bargaining agreement resulted in a fairer adjustment to the labour market, by distributing the effects of the negative shock between the extensive margin (employment) and wages. This wage moderation in 2012 has avoided the loss of some 60,000 jobs in the short term, and 300,000 over the medium and longer term. If labour institutions had been more flexible when the recession began, and had therefore adjusted remuneration to the new conditions, 1,000,000 jobs would have been saved in the long term.

31: Full-time equivalent.

References

Balmaseda, M., J. J. Dolado, D. López-Salido (2000): "The dynamic effects of shocks to labour markets: evidence from OECD countries", *Oxford Economic Papers*, 52, 3-23.

Blanchard, O. J. y D. Quah (1989): "The Dynamic Effects of Aggregate Demand and Supply Disturbances", *The American Economic Review*, vol. 79(4), 655-673.

Blanchard, O. J. y J. Wolfers (2000): "The Role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence", *The Economic Journal*, 110: 462, C1-C33.

BBVA (2008): Spain Economic Outlook. November 2008. Madrid. Available at: http://serviciodeestudios.bbva.com/KETD/fbin/mult/ISTES_0811_SpainWatch_16_eng_tcm348-179409.pdf?ts=2452013

(2009): Spain Economic Outlook. March 2009. Madrid. Available at: http://serviciodeestudios.bbva.com/KETD/fbin/mult/0903_spainwatch_tcm348-189472.pdf?ts=2452013

(2012): Spain Economic Outlook. *Second Quarter 2012*. Madrid. Available at: http://serviciodeestudios.bbva.com/KETD/fbin/mult/1205_Spaineconomicoutlook_tcm348-326621.pdf?ts=2452013

Cahuc, P. y A. Zylberberg (2004): *Labor Economics*. The MIT Press. Cambridge.

Dolado, J. J. y J. F. Jimeno (1997): "The causes of Spanish unemployment: A structural VAR approach", *European Economic Review*, vol. 41(7), 1281-1307.

Dolado, J. J. y D. López-Salido (1996): "Histéresis y fluctuaciones económicas (España, 1970-1994)", *Moneda y Crédito*, 202, 117-149.

Fabiani, S., A. Locarno, G. P. Oneto y P. Sestito (2001): "The sources of unemployment fluctuations: an empirical application to the Italian case," *Labour Economics*, vol. 8(2), 259-289.

García, J. R. (2011): "Desempleo juvenil en España: causas y soluciones", BBVA Research Working Paper 11/30. BBVA. Disponible en: http://www.bbvaresearch.com/KETD/fbin/mult/WP_1130_tcm346-270043.pdf?ts=1542013

Gonzalo, J. y C. Granger (1995): "Estimation of common long-memory components in cointegrated systems", *Journal of Business & Economic Statistics*, vol. 13(1), 27-35.

Layard, R., S. Nickell y R. Jackman (1991): *Unemployment: Macroeconomic Performance and the Labour Market*. Oxford University Press.

Stock, J. H. y M. W. Watson (1988): "Testing for Common Trends", *Journal of the American Statistical Association*, vol. 83, 1097-1107.

Appendix 1. Model and estimation

The basic model structure is based on the work of Fabiani et al. (2000), who built a Layard-Nickell-type model for the Italian economy[32]. The model is represented as:

(1) $y_t = \Phi (d_t - p_t) + a\theta_t$

(2) $y_t = n_t + \theta_t$

(3) $p_t = \mu_t + w_t - \theta_t + \beta u_t$

(4) $l_t = \alpha E_{t-1} (w_t - p_t - \theta_t) + \tau_t$

(5) $w_t = E_{t-1} (p_t + \theta_t) + k_t - \sigma E_{t-1} u_t$

(6) $u_t = l_t - n_t$

(7) $d_t = d_{t-1} + \varepsilon_t^d$

(8) $\theta_t = \theta_{t-1} + \varepsilon_t^s$

(9) $\tau_t = \tau_{t-1} + \varepsilon_t^l$

(10) $\mu_t = \lambda\mu_{t-1} + \varepsilon_t^\mu$

(11) $k_t = \rho k_{t-1} + \varepsilon_t^k$

where y_t, p_t, w_t, n_t, y l_t denote the logarithms of GDP, prices, nominal salaries, employment and labour force, respectively, and u_t is the unemployment rate.

Equation (1) implies that aggregate demand (y_t) depends on the economic policy stance (d_t) *in real terms* ($d_t - p_t$) and productivity (θ_t), with the latter capturing impact on permanent income. Equation (2) is the production function with constant returns to scale, omitting capital which is assumed in the long term to be a constant fraction of output. Equation (3) is the price-setting rule, implying the existence of uncompetitive supply of goods and services and, as a result, uncompetitive employment demand: prices depend on the economy's unemployment rate (u_t) and are set with a mark-up (μ_t) over unit labour costs ($w_t - \theta_t$). Equation (4) is the competitive supply of labour (l_t), This depends on demographic factors (τ_t) and, in the longer term, the difference between real wages ($w_t - p_t$) and productivity[33]. Equation (5) describes the nominal salary setting system, which takes place at the start of the period, and implies an uncompetitive labour supply: wage are set in such a way that in real terms their expected value exceeds expected output by a certain mark-up (k_t) Equation (6) defines the unemployment rate. Equations (7) to (11) describe the dynamics of exogenous sources of fluctuations in the economy, where the (independent, identically distributed and uncorrelated) structural shocks are: nominal aggregate demand (ε_t^d), aggregate supply (ε_t^s), labour-market participation (ε_t^l), uncompetitive labour demand (ε_t^μ) and uncompetitive labour supply (ε_t^k).

Solving this system of equations for the unemployment rate and the wage share in national income gives:

$$\mu_t = \frac{1}{\sigma - \beta} k_t + \frac{1}{\sigma - \beta} \lambda\mu_{t-1} + \frac{1}{1 - \Phi\beta} \left[\varepsilon_t^l - \Phi\varepsilon_t^d - (a + \Phi - 1)\varepsilon_t^s + \Phi\varepsilon_t^\mu\right]$$

and

$$\left[(w_t + n_t) - (p_t + y_t)\right] = -\frac{\beta}{\sigma - \beta} k_t - \frac{\sigma}{\sigma - \beta} \lambda\mu_{t-1} - \frac{1}{1 - \Phi\beta} \varepsilon_t^\mu - \frac{\beta}{1 - \Phi\beta} \left[\varepsilon_t^l - \Phi\varepsilon_t^d - (a + \Phi - 1)\varepsilon_t^s\right]$$

which, together with (10) and (11), implies that in the medium and longer term both variables respond exclusively to shocks in uncompetitive labour demand and supply (i.e. the degree of hysteresis depends on the values of ρ and λ).

In the case of the Spanish economy, unit root tests do not enable us to reject the null hypotheses that both the unemployment rate and wage share in national income are I(1) processes. However, cointegration tests enable us to reject the hypothesis that these are *C*(1)[34]. variables. Therefore, in our theoretical framework model, the data observed over the last four decades justifies the existence of total hysteresis caused by rigidity in price and wage fixing mechanisms ($\rho = \lambda = 1$)[35].

32: Unlike Fabiani et al. (2000), the results for Spain justify the inclusion of uncompetitive employment demand shocks as a source of hysteresis.
33: This is a shortcut for imposing the absence of long-term trends due to technological progress, and is equivalent to assuming that the opportunity cost of work (the value of leisure) is related in the long term to productivity.
34: The samples used in specification testing and subsequent model estimation cover the period 1980-Q1 to 2012-Q4.
35: According to Stock & Watson (1988) and Gonzalo &. Granger (1995), if k variables are I(1) and the cointegration range is r<p, then only (p-r) common I(1) factors plus some I(0) factors explain the performance of the p variables. Therefore, in our case, there are at least two I(1) factors explaining the performance of these two variables.

After resolving the model for the rest of the variables and comparing their degree of integration, we get one of the possible moving average (MA) structural representations of the model[36]:

$$\begin{bmatrix} \Delta\left[(w_t + n_t) - (p_t + y_t)\right] \\ \Delta u_t \\ \Delta(w_t - p_t) \\ \Delta y_t \\ \Delta p_t \end{bmatrix} = C(L)_{5x5} \begin{bmatrix} \varepsilon_t^k \\ \varepsilon_t^\mu \\ \varepsilon_t^s \\ \varepsilon_t^l \\ \varepsilon_t^d \end{bmatrix}$$

where the long-term solution (L=1):

$$\begin{bmatrix} -\frac{\beta}{\sigma-\beta} & -\frac{\sigma}{\sigma-\beta} & 0 & 0 & 0 \\ \frac{1}{\sigma-\beta} & \frac{1}{\sigma-\beta} & 0 & 0 & 0 \\ -\frac{\beta}{\sigma-\beta} & -\frac{\sigma}{\sigma-\beta} & 1 & 0 & 0 \\ -\frac{\alpha\beta-1}{\sigma-\beta} & -\frac{\alpha\sigma-1}{\sigma-\beta} & 1 & 1 & 0 \\ \frac{1+\alpha\beta}{\Phi(\sigma-\beta)} & \frac{1+\alpha\sigma}{\Phi(\sigma-\beta)} & \frac{\alpha-1}{\Phi} & -\frac{1}{\Phi} & 1 \end{bmatrix}$$

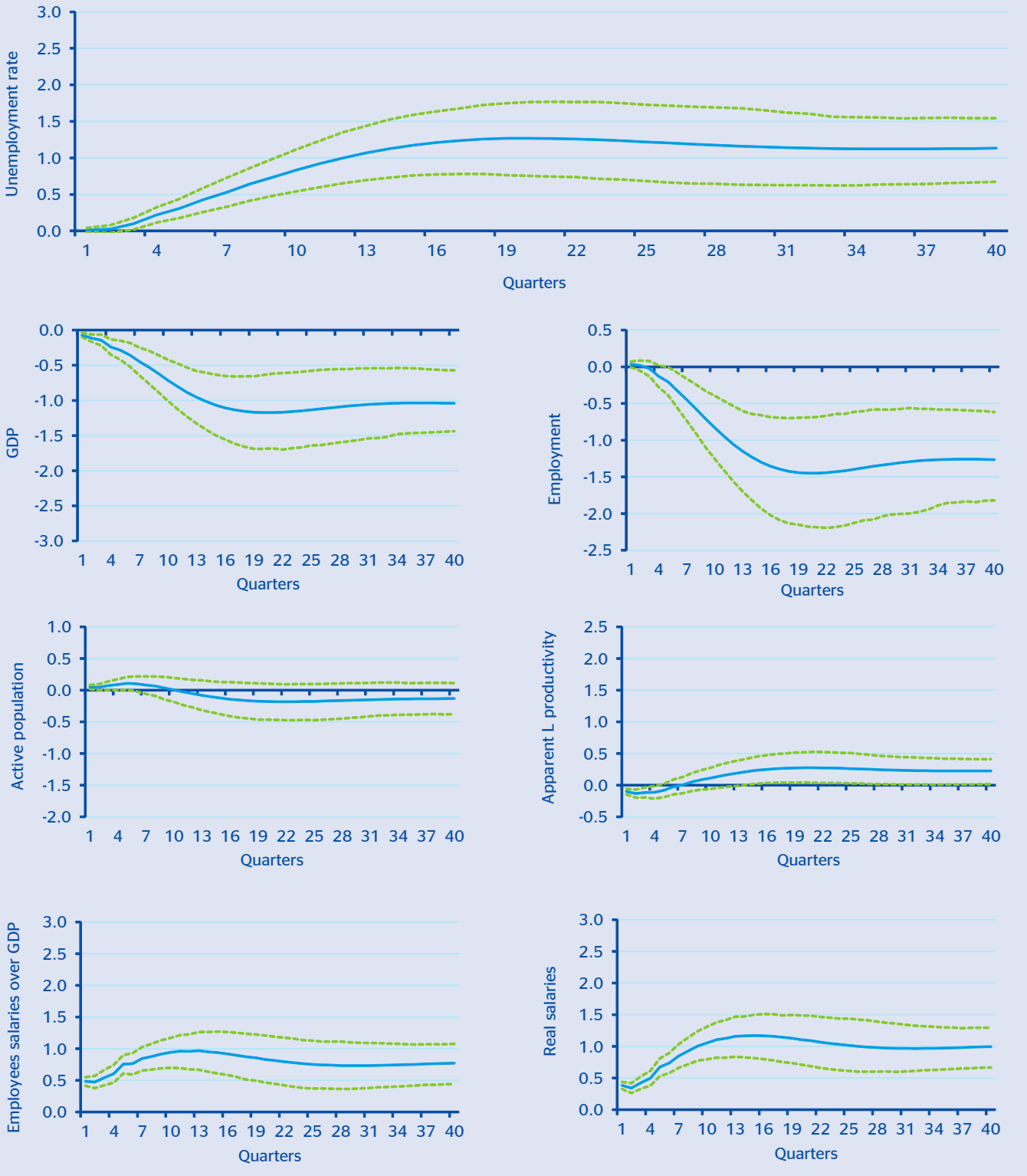
provides the necessary and sufficient restrictions to correctly identify the model[37]. In particular, we imposed the following restrictions:

- C(1)(1,3)=C(1)(1,4)=C(1)(1,5)=C(1)(2,3)=C(1)(2,4)=C(1)(2,5)=0: only uncompetitive labour demand and supply shocks have permanent effects on the share of wages in national income and on the unemployment rate.
- C(1)(3,4)=C(1)(3,5)=0: neither labour supply shocks nor nominal demand shocks have permanent effects on real wages.
- C(1)(4,5)=0: nominal demand shocks have no permanent effects on GDP.
- C(1)(1,2)<0: uncompetitive labour demand shocks have a negative and permanent impact on the share of salaries in national income.

36:Excluding the unemployment rate, which is taken from the Labour Force Survey, all other variables included in our estimations are aggregates from the Quarterly National Accounts (CNTR). Prior to estimating the model, we used the TSW program to correct for additional atypical values and temporary changes. In our estimation we included a deterministic trend and a number of statistically significant dummy variables, of which it is worth noting that corresponding to elimination of the extra payment to public servants in December 2012. Therefore, the salary moderation identified in 2012 is not contaminated by this temporary effect.
37: The orthonormality assumption for structural shocks imposes 15 restrictions. As a result, 10 additional restrictions are needed to identify the 25 elements of C(L). These restrictions should be deployed so that the Xth column of C(L), corresponding to the economies response to the Xth shock, contains X-1 restrictions.

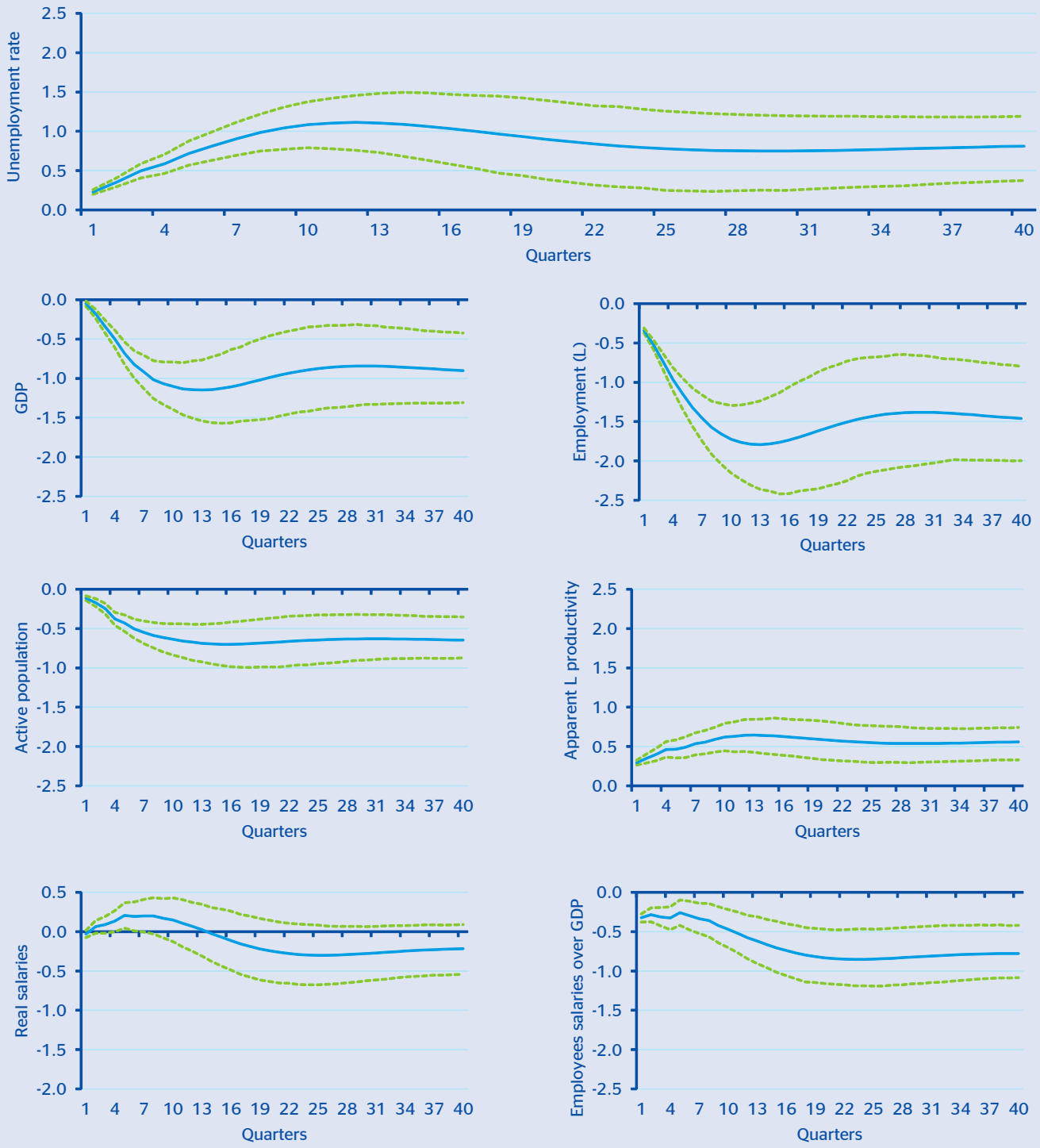
Appendix 2: Impulse-response functions

Chart 38
Response to an uncompetitive labour supply shock equivalent to one standard deviation (change compared to baseline case in pp)*



* The broken lines represent the confidence intervals for percentiles 16 and 84.
Source: BBVA Research

Chart 39
Response to an uncompetitive labour demand shock equivalent to one standard deviation (change compared to baseline case in pp)*



* The broken lines represent the confidence intervals for percentiles 16 and 84.
Source: BBVA Research

Box 3. Looking for the Spanish pension system sustainability factor

The most recent pension reform in Spain (Act 27/2011) put in place a set of measures to improve the financial sustainability of the current system. These measures, basically aimed to re-establish actuarial balance for the system, linking the benefits received to the contributions. In general, this was achieved by delaying the retirement age (reducing the length of time that pension benefits will be received) and taking into account a longer period of pension contributions in pension calculations. **One of the measures proposed in the Act was to establish a sustainability factor from 2027 on to be reviewed every 5 years, linking the retirement pension to changes in life expectancy.** However, this measure was not specified. Recently, the Government has consulted experts on this issue to discuss and bring forward the implementation of this factor. Implementing this measure sooner than originally envisaged is required as this will accelerate and enhance the adjustment process by spreading it across generations, improving the financial sustainability of the system. The sustainability factor involves a technical formula to be approved when it is introduced, removing the reform process from the political debate.

The sustainability factor in the OECD

Many OECD countries have implemented a sustainability factor in their pension systems, automatically linking benefits to life expectancy. However, there is no standard formula for this and each country has applied their own version based on their own institutional structure and adjustment needs (OECD, 2011, 2012).

Some countries have carried out a structural reform, putting in place a defined contribution personal savings pillar[38] by definition, such systems are always in actuarial balance. Others have implemented a notional account structure for their pension system. In such systems, contributors enter their contributions in an individual account, creating a virtual balance that is used in calculating their pension. The value of the pension will then take the increasing life expectancy into account[39]. In other countries, other formulas have been used to link pension provisions directly to increasing life expectancy[40].

There are various formulas for linking the sustainability factor to life expectancy, such as:

- Setting the retirement age according to life expectancy.
- Linking the number of years of contributions required to receive a pension to life expectancy.
- Direct linkage of pension value to life expectancy.
- Linking receipt of pensions to the ageing of the population (changes in dependency) or increasing the contribution rate[41].

In general, the sustainability factor has caused a replacement rate decrease (the relationship between final salary and the pension received); this does not necessarily mean a pension reduction in nominal terms. According to the European Commission (2012), European public pension reforms will need to reduce the replacement rate to 40% in 2060. **To solve this problem, most countries have established complementary public pension mechanisms to offset this decrease.** At present, Spain's replacement rate is a relatively generous 71%, compared to the 49% in the other EU27 countries. The reforms announced to date[42] will reduce this rate to 59% in 2030 and 56% in 2060.

The sustainability factor in Spain

There are many diverse problems affecting the economic sustainability of Spain's Social Security, and the sustainability factor must therefore aim to solve all of these. This is particularly important as proposing a factor that does not resolve all of the problems would mislead contributors, who would then make spending and saving decisions based on incomplete or mistaken information. **The main problems to be addressed by the sustainability factor are.**

38: Austria, Chile, Estonia, Israel, Mexico, Norway, Poland, Slovakia and Sweden.
39: Italy, Norway, Poland and Sweden.
40: Canada, Finland, Germany, Japan and Portugal.
41: For example, Germany.
42: Not including the sustainability factor.

Ageing of the population

The ageing of the population causes a gradual deterioration in the ratio of potential contributors to pension recipients (dependence rate). This will fall from 2.4 contributors per pensioner at present to 1.3 by 2040.

Actuarial imbalance in the pension system

The pension system has a serious actuarial imbalance. To put it simply, pensioners receive a pension from the Social Security for the whole of their lives, the discounted present actuarial value of which is far higher than the contributions they have made. Devesa et al (2011) argue that the last pension reform, Act 27/2011, contributed just a 30% decrease in this imbalance, despite expectations of a 16.5 percentage point reduction in the substitution rate in 2060.

The implicit Social Security debt

A sustainability factor that aims to adjust lifetime contributions and benefits starting now would not correct the benefits currently being received, and which were generated in a context of actuarial imbalance. This is often termed the implicit Social Security debt. Furthermore, prior to introduction of the Reserve Fund, surpluses generated from contributions to the system less benefits paid out were incorporated into the Social Security budget and then in turn in the general Government Budget. Thus these funds were used to pay for current expenditure (on roads, hospitals, etc.), so generating a pension entitlement, but not saving the corresponding provision. If the surpluses generated in this way since 1977 had been saved and capitalised at the legal interest rate, an amount equal to 32% of GDP would have accrued, compared to the 5.9% that the reserve fund currently presents.

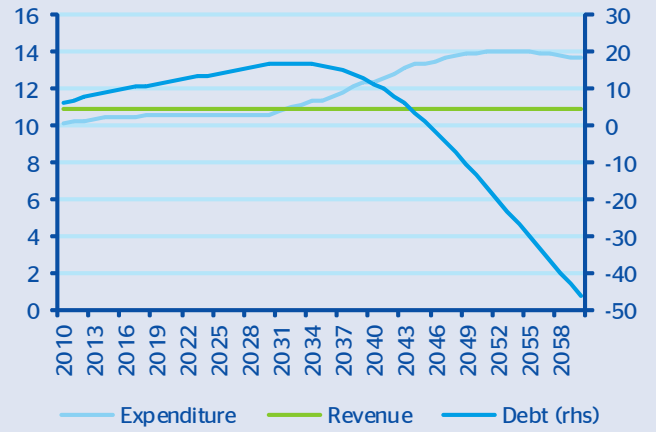
The sustainability factor as a structural element

A sustainability factor that adjusts the system over time as problems appear could result in adjustments being concentrated in just a few generations (e.g. retirement of the *baby boomers*).

Long-term projections

Despite the expected decrease in the replacement rate resulting from implementation of Act 27/2011, the Spanish pension system will still face serious long-term borrowing issues. **According to the European Commission (2012), the pension system may remain in structural surplus[43] until 2032.** In that year, the amounts accrued in the reserve fund may equate to 16.9% of GDP. **However, from 2032, the effects of the ageing population will start to impact with the** gradual retirement of the baby boomers, increasing the pension expense to 14% of GDP in 2055. **The deficits which will then occur would amount to 3% of annual GDP, requiring the gradual disbursement of the Reserve Fund[44],** which will be exhausted by 2045. From 2045, continuing deficits will accumulate as Social Security debt, reaching 46% of GDP in 2060 (Chart 40).

Chart 40
Balance and debt's forecast
of the Spanish pension system



Source: European Commission (2012) and BBVA Research

However, the Commission's projections have been overtaken by Spain's INE statistical institute's demographic projections, which show that the pension system structural deficit could emerge before the end of this decade. De la Fuente and Doménech (2011) find that the current measures would reduce annual pension expenditure by 4 percentage points, reaching 15% of GDP by the middle of the century[45].

43: Ignoring the effects of the economic cycle.
44: Adopting a 1% real term straight-line capitalisation assumption for the Reserve Fund.
45: Other scenarios proposed by the European Commission (2012), such as those resulting from assuming longer life expectancy or lower migratory flows, come closer to the results obtained by de la Fuente and Doménech (2011).

Some conclusions as to what Spain's sustainability factor should cover

As discussed, every country has applied the sustainability factor differently to their pension system, in order to address their own characteristics and problems. The Spanish **sustainability factor should aim to correct the deep imbalances in our pension system.**

1. The population should be fully aware of the pension they would receive from the pay as you go public pension system in order to plan their lifetime consumption and savings.
2. Mechanisms to complement the state pension should be encouraged.
3. The adjustment factor should ensure Social Security budget balance over the economic cycle.
4. The corrective factor should include a further additional element to correct for the ageing of the population, and its design should be structurally specified.

Bibliography

European Commission (2012); "The 2012 Ageing Report. Economic and budgetary projections for the 27 EU Member States (2010-2060)". *European Economy* 2|2012 y Anexo.

Devesa, J. E., Devesa, M., Encinas, B., Domínguez, I., Nagore, A. y Meneu, R. (2011): "Cuánto mejorará la sostenibilidad del sistema de pensiones de jubilación de la Seguridad Social tras la reforma de 2011", en Asociación Española de Salud y Seguridad Social, *La reforma de las pensiones*, Ediciones Laborum, 69-81.

de la Fuente, A.y R. Doménech (2011): "El impacto sobre el gasto de la reforma de las pensiones: una primera estimación", *Documentos de Trabajo Número 11/09*. BBVA Research.

OECD (2011): *Pensions at a Glance 2011*: *Retirement-income Systems in OECD and G20 Countries*. OECD Publishing. Paris.

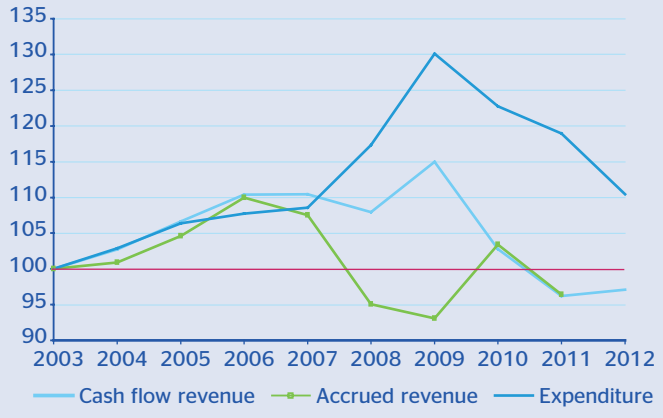
OECD (2012): *OECD Pensions Outlook 2012*. OECD Publishing. Paris.

Box 4. Regional finances in expansion and crisis (2003-12)

Ángel de la Fuente (Instituto de Análisis Económico - CSIC)

In this article we briefly summarise the conclusions of **a recent study by Ángel de la Fuente,** in which he analyses Spain's **regional finances over the last decade**[46] – a period encompassing the peak of the previous boom and the crisis afflicting Spain's economy to this day. This study helps to put the controversy over regional government finances into perspective. We are used to discussion of the harshness of the cuts enforced by the crisis. However, the explosion of spending over the preceding years is often overlooked. This was a period when the regions increased their structural expenditure above their recurrent revenues, leaving them seriously financially exposed when the bubble burst. Taking the last decade as a whole, the budget consolidation process embarked upon in 2010 appears simply a partial and rather belated correction to earlier excesses. Despite the cuts, current spending levels should be sufficient to maintain the basic services for which the regions are responsible at least at the efficiency levels of 10 years ago.

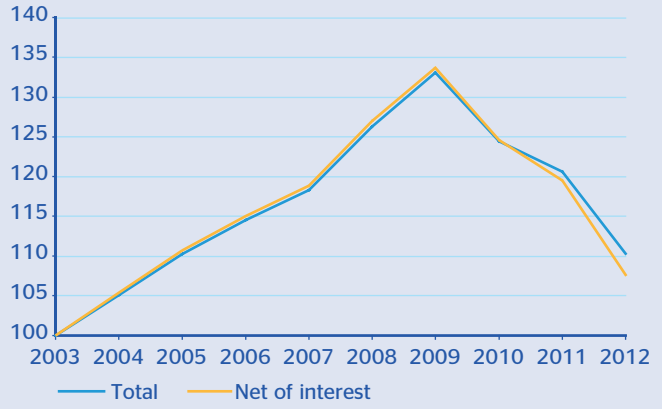
Chart 41
Non-financial costs and revenues as a % of GDP, 2003 = 100
Regions as a whole



Note:revenue in accrual terms fell well below the revenue in cash-flow terms in 2008 and 2009, as a result of the substantial negative balance for tax settlements in those two years, the payment of which has been offset and will be made gradually over 10 years
Source: de la Fuente (2013)

Charts 41 and 42 summarise revenues (with cash-flow and accrual approaches) and the non-financial costs of Spain's regions as a whole between 2003 and 2012. Both revenue and spending are expressed as a percentage of GDP for the regions as a whole in Chart 41, standardising their initial value (2003) at 100. Chart 42 shows costs measured per capita and at constant 2008 prices, both gross and net of interests.

Chart 42
Expenditure per inhabitant at constant 2008 prices, 2003 = 100



Source: de la Fuente (2013)

As we can see from the charts, the **cuts of recent years have been significant.** Between 2009 and 2012, non-financial expenditure for the regions as a whole fell from 16.1% of national GDP to 13.7%, a fall of 15.1%. In terms of expenditure per inhabitant at constant 2008 prices, the cuts in this period were 17.1%, based on total non-financial expenditure, or 19.5% if debt interest is excluded. However, **it should also be remembered that expenditure increased at an unsustainable rate over the preceding years.** Between 2003 (when transfer of health services had already been completed) and 2009, regional expenditure as a fraction of GDP increased by 30.1% (from 12.4% of GDP to 16.1%), increasing by between 33% and 34% in terms of spending per capita at 2008 prices, depending on whether interests are excluded or not. Overall, real regional expenditure in 2012 remains well above its 2003 level: 10.5% in terms of share of GDP and 7.6% in terms of expenditure per capita net of interest at 2008 prices.

46: Available at http://www.bbvaresearch.com/KETD/fbin/mult/WP_1316_tcm346-383117.pdf?ts=1842013

Moreover, this spending increase is almost entirely the responsible for the current budget deficits of the regions as, despite the current adverse cyclical position, regional revenues fell only slightly as a percentage of GDP between 2003 and 2012. This was mainly due to a substantial injection of additional central government funds (around 1.1% of GDP each year) agreed as part of the recent reform of the regional finance system. **Approximately 20% of the imbalances** created during this period (an increase in the regional deficit of 1.66% of GDP) are **explained by loss of revenues** compared to the starting point (0.36 points of GDP); **the remaining 80% is explained by increased spending.**

As a result, **despite the significant reduction in regional expenditure** over recent years, **it remains well above its 2003 level,** both in terms of the ratio of expenditure to GDP and expenditure per inhabitant at constant prices, even excluding interest payments on regional debt, which amounts to just 4.4% of non-financial expenditure. Although the situation varies from region to region, in average, **regional governments still have sufficient spending power to maintain the standards of service current in 2004 and 2005 -** and this **is without considering** the additional cushion of **inefficiency and unnecessary spending** that probably existed at that time.

4. Differences in fiscal adjustment explain the dispersal of regional growth

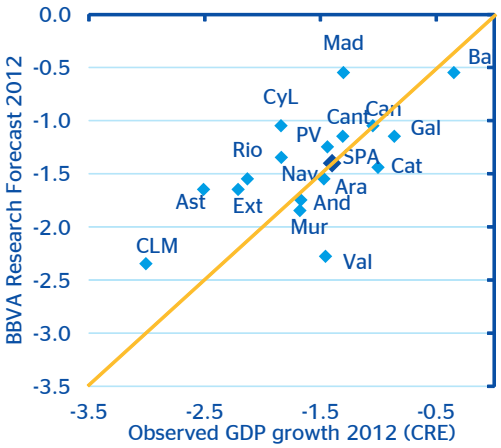
Over the last three months, there have been some important developments in the **economic information available,** not only in terms of the economy as a whole, but also at the regional level, helping to explain differences in regional performance. There are four main items: i) the first estimates of Spain's **2012 Regional Accounts (Contabilidad Regional de España - CRE);** ii) **additional data** for most **economic indicators**; iii) new information on the **external economic situation,** including **changes to growth projections for Spain's main trading partners,** impacting to a different extent on the regions depending on their exposure to export markets, the type of products they offer and the markets they supply; and iv) figures for the **2012 regional deficit.**

The CRE includes some surprises compared to BBVA Research forecasts shown in Chart 43. These include differences in Valencia (upside surprise) and Asturias, Castilla y León, Castilla-La Mancha and Madrid (downside). There are also, to a lesser extent, errors for Extremadura and La Rioja, with minimal differences for the other regions, considering the uncertainty inherent to such models. These deviations have a base effect on future forecasts, and therefore must be taken into consideration.

There are a number of reasons for these forecasting errors. Firstly, given legal changes to control of the regions and the support measures for their finances (supplier payment plan, etc.), **the estimates were made assuming that all** regional governments would **meet their** fiscal deficit targets. This therefore involved accepting significant adjustments in some Communities, particularly those around the Mediterranean, Castilla-La Mancha and Extremadura.

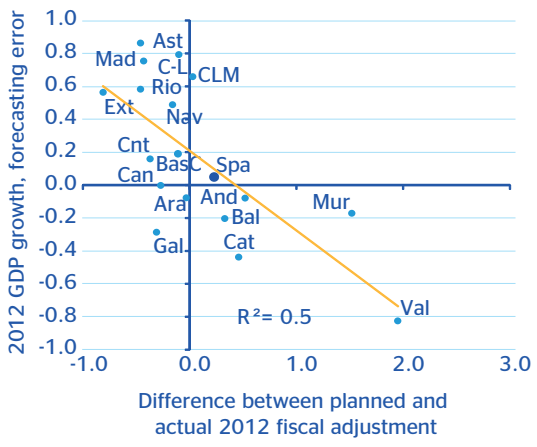
Reality, however, turned out differently. Whilst **Extremadura and Castilla-La Mancha have made strong fiscal efforts, the reduction of the deficit in the Mediterranean regions has been lower than expected. These deviations explain half of the error in the projections by themselves** (Chart 44); additionally, it also implies that those regions that have not achieved their objectives mustmake these efforts (and therefore have their effects on growth) in future years. In particular, the bias caused by the deviation from the deficit target accounts for all of the error in the forecasts for Valencia and Extremadura, and half of the deviation in Asturias, Madrid and La Rioja.

Chart 43
Observed growth and BBVA Research projections, January 2013



Source: BBVA Research based on INE data

Chart 44
Regional fiscal adjustment and growth 2012



Source: BBVA Research, based on MINHAP data

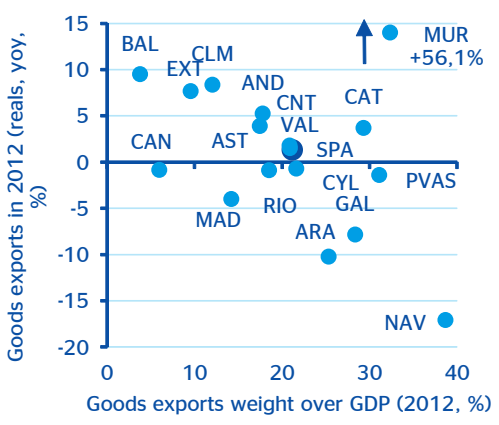
In addition to these fiscal imbalances, **Europe went back into recession** in the second half of 2012; this was particularly acute in France and southern Europe, resulting **in worse export performance than expected.** In particular, as shown in Chart 45, in 2012 the largest increases in exports did not, in general, occur in the regions where exports account for the highest share of GDP; rather, the opposite was the case. There may be two factors behind this. Firstly, the most export-focused regions generally have the highest shares of exports going to Europe, so they are more impacted by recession than other regions. In addition, in the three most strongly affected regions (Navarra, Galicia and Aragón) the importance of the automotive sector means that sales depend, in part, on strategic intra-company production decisions rather than on market performance. Some manufacturers are changing the models they produce, explaining in part the fall in exports in 2012; in turn, this may generate higher growth in 2013.

Secondly, **tourism is continuing to grow** in those regions **most dependent on foreign tourists** (the Balearic Islands, the Canary Islands and, to a lesser extent, Catalonia). However, in the islands, the export flow is strongly interrelated with supplying the transport used in tourist traffic. This gives rise to a strong correlation between tourist transits and exports (basically, energy and various manufactured goods); but as these have a high import content, they have little impact on the region's economic growth. On the other hand, regions strongly exposed to Spanish tourists have performed less well, due to depressed domestic demand.

Going forward, the factors affecting growth over recent years will continue to be important, but their impact will differ across regions. Firstly, **the change in the regional deficit target** (relaxed from -0.7% of GDP to -1.2%) means that, in most regions, fiscal **efforts will be softer than in 2012.** This will **depend on this increased flexibility being distributed symmetrically.** If this is not the case, the criteria used in setting the targets for each region should have to be explained. If **it is seeking to give those regions with the worst economic conditions, and which have made the largest adjustments, the greatest scope for action, one option would be to exclude interest payments from the deficit target** (Chart 46). This will benefit regions such as Catalonia and Valencia that have run persistent deficits over recent years and increased their debt considerably. In exchange, the Government should demand strict compliance, in order to avoid any risk of the regions that were most reluctant to reduce their deficits being rewarded. However, as the 2014 target is 1%, and projections point to a moderate recovery this year, **the objectives remain ambitious.**

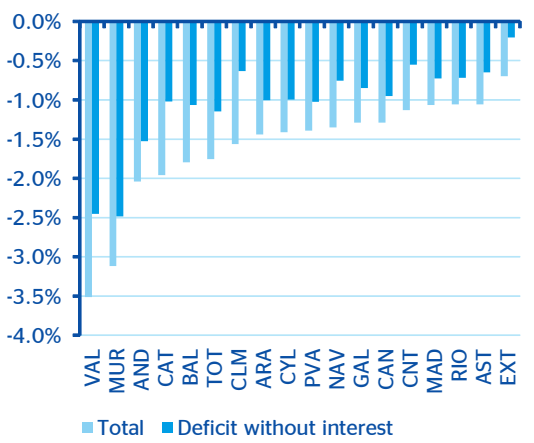
Borrowing difficulties, the risk faced by the Spanish economy and the need to win back the confidence of investors mean that progress needs to be made as quickly as possible to improve the efficiency of managing and reducing these budget deficits. And significant challenges remain for those regions that failed to achieve their 2012 deficit targets (Chart 47). In particular, Valencia and Murcia still need an additional fiscal effort of around two percentage points of GDP this year and next and Catalonia, the Balearic Islands and Castilla-La Mancha need an additional deficit reduction of around one percentage point of GDP. The additional fiscal reductions required in the other regions are relatively small.

Chart 45
Export weight and growth 2012



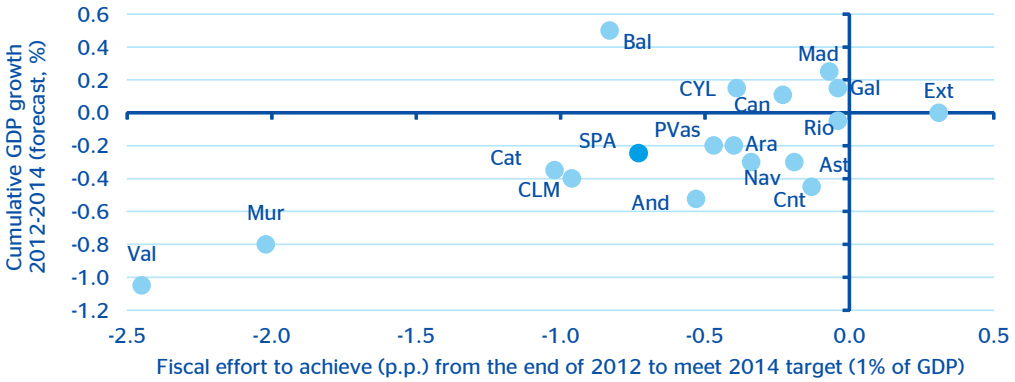
Source: BBVA Research based on Datacomex data

Chart 46
Regional deficits, with and without interest (% GDP)



Source: BBVA Research based on MINHAP and INE data

Chart 47
Fiscal effort needed to achieve 2014 target and average growth forecast 2013-14



Source: BBVA Research based on MINHAP and INE data

Although global growth prospects remain strong (see Section 2), the outlook for Europe and Spain has worsened slightly. This will impact on the regions, depending on their exposure to exports and tourism. Overall, **even if the situation worsens in Europe, we expect exports still to increase,** whilst domestic demand will shrink further. Exports are likely **to increase most in regions more exposed to markets outside the Eurozone.** Initial figures for 2013 show improved performances by Catalonia and Asturias. In Catalonia, the IPI, hotel bookings and, in particular, exports of goods have all improved, and exports have also improved in Asturias. However, in Extremadura the IPI has fallen strongly, dragged down by a fall in exports following two years of strong growth.

Exports are also subject to other forces, in addition to growth in destination markets. Driven by falling domestic demand, companies in traditionally low-exporting regions are now making considerable efforts to sell their products abroad, and, as a result, we have seen increased export growth in these over recent years. And whilst traditional export-oriented regions focus on capital and manufactured goods, particularly vehicles, **new exporters focus more on other sectors, such as agriculture, which is a less cyclical sector.** Although the outlook for a recovery in investment in target markets for capital goods and consumer durables is not clear, they may again enjoy moderate growth, reducing the favourable differential for exporting regions. The exceptions could be Castilla y León and Galicia, where production of new vehicle models represents a positive shock with impact on export sales by winning a larger market share than the models they replace.

The picture changes somewhat for 2014. Internally, growth will only be strongly affected by continuing fiscal consolidation in two regions –Valencia and Murcia; the other regions should by then have relatively similar fiscal correction requirements. Meanwhile, the export sector will benefit from European recovery and global growth, with the EAGLES[47] continuing to perform strongly. As a result, investment in Europe should start to recover, boosting sales of capital goods and consumer durables and providing a spur to growth in traditional exporting regions.

47: See: http://www.bbvaresearch.com/KETD/ketd/esp/nav/eagles.jsp

Table 3
Regional Risks to January 2013 growth forecasts

	January forecast	CRE-12 (A)	New figures	Fiscal adjustment	Foreign trade
Andalusia	-1.6	↑		↓	↑
Aragón	-1.2		↑		↓
Asturias	-1.1	↓↓	↑↑	↑	
Balearic Islands	-0.1	↑	↑	↓	
Canary Islands	-0.7	↑		↑	↑↑
Cantabria	-1.3	↓	↓	↑	↓↓
Castile-León	-0.7	↑			↓
Castile-La Mancha	-1.6	↓		↓	↓
Catalonia	-1.4	↓↓	↑↑	↓	↓
Extremadura	-0.9	↓	↓↓	↑↑	
Galicia	-0.8	↑		↑	
Madrid	-0.6	↓			↑
Murcia	-1.5	↑	↑	↓↓	↓
Navarre	-1.2	↑			↑
Basque country	-1.0	↑↑			
La Rioja	-0.9		↓	↑	↑
Valencia	-2.0			↓↓	↑
Spain	**-1.1**				

Source: BBVA Research

Table 4
Spain: Real GDP growth by region

	2011	2012	2013	2014
Andalusia	0.0	-1.7	-1.9	0.9
Aragón	0.3	-1.5	-1.4	1.0
Asturias	-0.1	-2.5	-1.2	1.1
Balearic Islands	1.6	-0.3	-0.4	1.4
Canary Islands	1.7	-1.0	-0.8	1.0
Cantabria	0.6	-1.3	-1.6	0.7
Castile-León	1.1	-1.8	-1.1	1.4
Castile-La Mancha	-0.4	-3.0	-1.7	1.0
Catalonia	0.6	-1.0	-1.5	0.7
Extremadura	-0.9	-2.2	-1.0	1.0
Galicia	-0.1	-0.9	-1.0	1.3
Madrid	0.6	-1.3	-0.9	1.4
Murcia	0.0	-1.7	-2.1	0.5
Navarre	1.4	-1.8	-1.4	0.8
Basque country	0.8	-1.4	-1.2	0.8
La Rioja	1.0	-2.1	-1.3	0.7
Valencia	-0.1	-1.5	-2.5	0.4
Spain	**0.4**	**-1.4**	**-1.4**	**0.9**

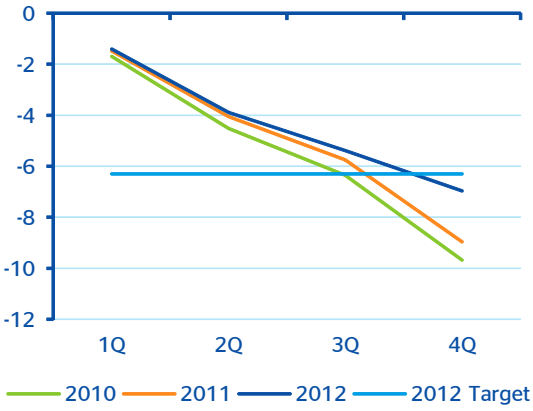
Forecast date: 6 May 2013
Source: BBVA Research based on INE data

5. The deficit adjustment should continue in 2013 and 2014

At the end of 2012 Spanish General Government had a **deficit of 7.0% of GDP, excluding aid to the financial sector** (3.6% of GDP), slightly lower than expected in our previous publication (7.2%) and 0.7pp higher than the year-end target (Chart 48). This is mainly due to some revenues -basically taxes on production and capital- performing slightly better than expected, whilst **expenditure has adjusted somewhat less**, particularly, employee remuneration and interest payments.

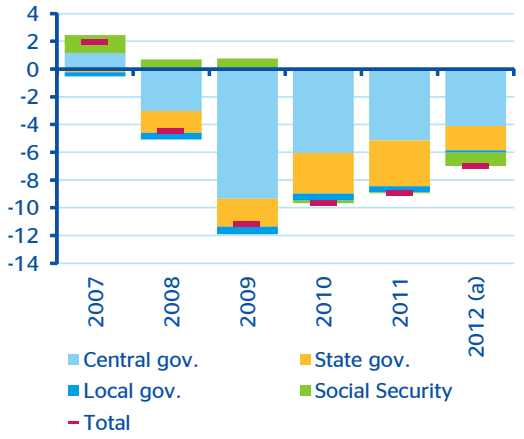
As can be seen from Chart 49, **this adjustment has occurred in all sectors, with the exception of the Social Security administrations, which recorded a 2012** deficit of 1.0% of GDP (0.9pp up on 2011), negatively impacted by lower economic activity and employment. Although Central and Regional Governments contributed the most to the deficit reduction (1.5pp and 1.0pp, respectively), **it is worth noting the significant contribution made by Local Governments,** which reduced their deficit in 2012 by over 60%, to 0.2% of GDP.

Chart 48
General Government: net lending (+) / net borrowing (-) * (Accumulated per year, % of GDP)



* Excludes the amount of aid provided to financial institutions
Source: BBVA Research based on MINHAP data

Chart 49
General Government: net lending (+) / net borrowing (-) by subsector* (% GDP)



* 2011 and 2012: adjusted for the effect of negative settlements in the financial system. 2011 and 2012: excludes the amount of aid provided to financial institutions
Source: BBVA Research based on MINHAP data

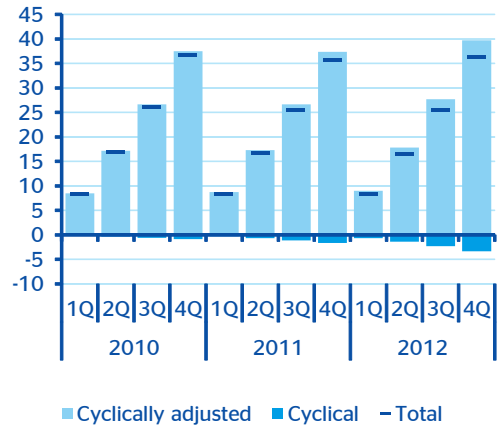
As a result, the combined deficit of Spanish General Government fell by 2pp of GDP in 2012. This might at first glance seem a modest achievement given the large number of fiscal consolidation measures implemented during the year. However, **considering that the cyclical deterioration might otherwise have increased the 2012 deficit by around 1.9pp of GDP,** according to BBVA Research estimates, the structural deficit fell by around 3.9pp to 3.3% of GDP. Moreover, when interest payments on the public debt (which amounted to 3% of GDP in 2012, 0.5pp more than in 2011), are taken out of the analysis, **the adjustment of the structural primary deficit would be in excess of 4.4pp of GDP,** putting it very close to budget balance (-0.3% of GDP).

Breaking this down in terms of revenue and expenditure also shows the extent to which **the cyclical deterioration absorbed most of the measures implemented in 2012.** According to our estimates, the cyclical contraction drained around 1.7pp of GDP from total public sector revenues in 2012. This deterioration offset over 70% of the improvement in structural revenues (2.3pp of GDP) resulting from VAT increases –a structural increase of 0.8pp of GDP– and personal income tax (IRPF) increases and changes to corporate income tax regulations -a structural increase of 1.2pp of GDP-. As a result, **total public-sector revenues grew by just 0.2pp of GDP**, to 36.3% (Chart 50).

Likewise, **the impact of falling economic activity on the public accounts is offsetting many of the spending cuts.** In 2012, there was an **adjustment to the structural component of expenditure** equal to 2.5pp of GDP. Whilst this affected practically all areas of expenditure, **it particularly affected investment,** with a structural fall of 1.3pp of GDP. Nevertheless, this structural adjustment was not sufficient to offset the **increase in interest payments** (0.5pp of GDP), the **effect of the cyclical deterioration** on **unemployment benefits** (0.2pp) and increases **to other welfare provisions** (0.3pp) resulting from the Government's 2012 pension uprating and structural growth in payment obligations. This resulted in public expenditure at the end of 2012 accounting for 43.3% of GDP, 1.4pp less than in 2011 (Chart 51).

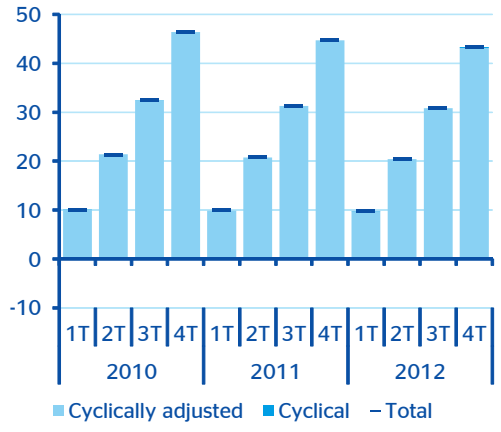
This illustrates the scale of the **fiscal consolidation effort undertaken in 2012.** The deviation of the deficit from its approved stability objective is largely explained by the negative effects of the increased deterioration in economic activity on public spending and revenue, and by higher borrowing costs.

Chart 50
General Government: non-financial revenues (Accumulated per year. % of GDP)



Source: BBVA Research based on MINHAP data

Chart 51
General Government: non-financial expenditures* (Accumulated per year. % of GDP)



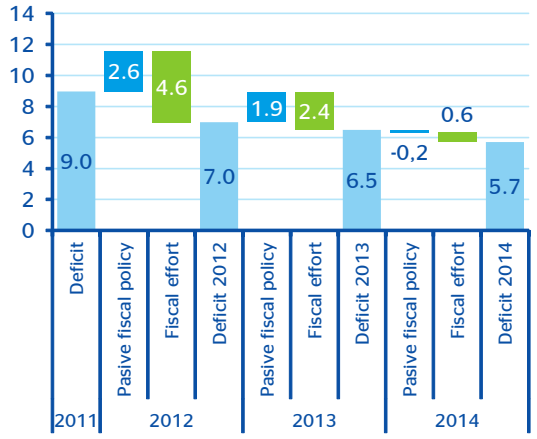
* 2011 and 2012: excludes the amount of aid provided to financial institutions
Source: BBVA Research based on MINHAP data

With regard to 2013, we expect the **fiscal adjustment policies to continue** and to be **sufficient to offset the negative effects of the fall in economic activity** on public revenues and expenditures and expected increases to interest costs. Therefore, our forecasts indicate **the cycle will shave slightly over 1pp of GDP from expected revenues** in 2013, affecting taxes on both production and income and social welfare contributions, and absorbing the structural improvement in these. Therefore, public revenues will represent about 36.8% of GDP, barely 0.2pp up on 2012. In addition, **the adjustment to expenditures in 2013 will be concentrated on public sector salaries** (mainly due to the permanent status of the reform measures relating to the civil service and restructuring of the dependent public sector), on the rest of current spending, and to a lesser degree on investment, which will decline more slowly than in the two previous years (Table 3).

In this context, as we can see in Chart 52, if the measures so far announced were not to be implemented, the public deficit in 2013 would increase by around 1.2pp of GDP due to the deteriorating economic situation, with a further 0.7pp structural increase in social welfare provisions and higher interest payments. **Including both the measures announced and those already implemented, the 2013 deficit will be around 6.5% of GDP**, two percentage points above the Government's new stability target in its 2013-2016 Stability Programme (PEC 2013-2016). This deviation from the target will carry over into **2014, when the General Government deficit will be around 5.7% of GDP,** despite both the economic cycle and the structural improvement in revenue and expenditure starting to correct the fiscal deterioration.

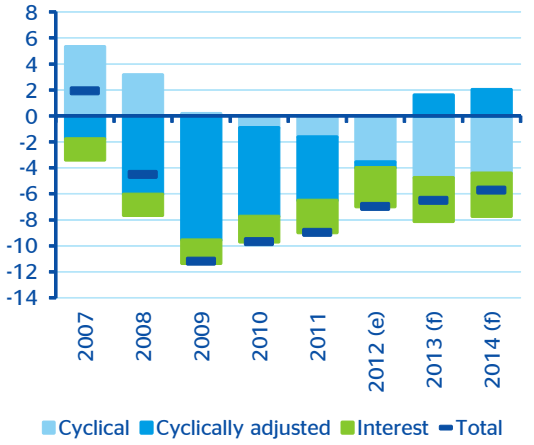
If our forecasts are correct, **the structural budget balance** of Spanish General Government (i.e. discounting the effects of the economic cycle) **will be around -1.3% of GDP in 2014** (Chart 53) a correction of over 6pp since 2011 and the third largest adjustment in the European Union after Ireland and Greece, according to recent Commission forecasts[48].

Chart 52
General Government:
expected fiscal adjustment* (% of GDP)



* Excluding financial aid to banks
Source: BBVA Research based on MINHAP and INE data

Chart 53
General Government:
net lending / net borrowing* (% of GDP)



* Excluding financial aid to banks
Source: BBVA Research based on MINHAP and INE data

To achieve these new targets, the 2013 **National Reform Plan** (PNR) presented together with the updated 2013-2016 Stability and Growth Pact includes measures to clean up the public accounts. On the revenues side, **new tax increases** have been announced, through the creation of new environmental taxes, an increase in excise duties, and further modifications to corporate income tax. In line with the recommendations of the European Commission, these aim to shift the tax load away from work and towards consumption, but do not represent a true fiscal reform. However, **on the spending side, the measures that have already been announced remain in place,** and the main plans entail the expected reform of the Public Administrations, with the draft Local Government Rationalisation and Sustainability Act Project and the Public Administration Reform, which could extend into the second half of the year, **with the expected saving not being seen until into 2014.**

The PNR also establishes that the **Independent Fiscal Responsibility Authority** (AIRF, for the Spanish acronym) will come into operation by the end of the year: **this will make it difficult for it to achieve all of its objectives for this year.** It is essential that the Government ensures the independence and impact of this new body, and it would therefore be appropriate for **it report to the legislative, not the executive.**

This would make the new objectives coherent with a worsening of Spain's economic cycle, whilst still being consistent with an ambitious consolidation path. In this regard, **increased flexibility in deficit targets offers an opportunity** to improve the composition of the adjustment, reducing the tax burden, improving efficiency and refocusing deficit reduction on expenditure. Therefore, if necessary, **further measures** could focus on reducing **public expenditures inefficiencies and reorganising the tax system.**

48: AMECO: ec.europa.eu/economy_finance/db_indicators/ameco/index_en.htm

Table 5
General Government: net borrowing, excluding aid to the financial sector

		Adjustment			2013	2014
(pp of GDP)	2011	to 3Q12	4Q12	2012 (e)	Forecast	Forecast
Non-financial expenditures	44,7	-0,8	-0,5	43,3	43,3	42,3
Compensation of employees	11,6	-0,2	-0,4	11,0	10,9	10,6
Intermediate consumption	5,9	-0,2	0,0	5,6	5,6	5,5
Interest	2,5	0,3	0,2	3,0	3,3	3,3
Unemployment benefits	2,8	0,1	0,1	3,0	3,2	3,1
Social protection	12,6	0,3	0,1	13,0	13,5	13,6
Gross capital formation	2,9	-0,9	-0,3	1,7	1,5	1,3
Other expenditures	6,4	-0,4	-0,2	5,9	5,3	5,0
Non-financial revenue	35,7	-0,4	1,0	36,3	36,8	36,6
Taxes on production	9,9	-0,2	0,5	10,2	10,7	10,7
Income, estate tax, etc	9,6	0,1	0,5	10,1	10,1	10,2
Social contributions	13,2	-0,2	-0,1	12,8	12,6	12,5
Tax on capital gains	0,4	0,0	0,0	0,4	0,4	0,4
Other revenue	2,7	-0,1	0,2	2,8	3,0	2,8
Net lending / net borrowing	-9,0	0,4	1,6	-7,0	-6,5	-5,7

Source: BBVA Research based on MINHAP and INE data

6. Tables

Table 6
Macroeconomic Forecasts: Gross Domestic Product

(YoY growth rate, %)	2010	2011	2012	2013	2014
United States	2.4	1.8	2.2	1.8	2.3
Eurozone	1.9	1.5	-0.5	-0.1	1.0
Germany	4.0	3.1	0.9	0.8	1.8
France	1.6	1.7	0.0	0.0	1.1
Italy	1.7	0.5	-2.4	-1.3	0.8
Spain	-0.3	0.4	-1.4	-1.4	0.9
UK	1.8	1.0	0.3	1.0	1.9
Latin America *	6.2	4.3	2.8	3.4	3.6
Mexico	5.4	3.9	3.9	3.1	3.1
Brazil	7.6	2.7	0.9	3.4	3.8
EAGLES **	8.4	6.6	5.1	5.6	6.0
Turkey	9.2	8.5	2.3	4.0	5.5
Asia Pacific	8.2	5.7	5.3	5.4	5.8
Japan	4.7	-0.6	2.1	1.7	1.7
China	10.4	9.2	7.8	8.0	8.0
Asia (exc. China)	6.7	3.4	3.6	3.8	4.3
World	5.1	3.9	3.2	3.3	3.9

* Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela
** Brazil, China, India, Indonesia, Korea, Mexico, Russia, Taiwan, Turkey
Forecast closing date: May 6, 2013
Source: BBVA Research

Table 7
Macroeconomic forecasts: 10Y interest rates (average)

	2010	2011	2012	2013	2014
US	3.2	2.8	1.8	2.0	2.6
EMU	2.8	2.6	1.6	2.0	2.9

Forecast closing date: May 6, 2013
Source: BBVA Research

Table 8
Macroeconomic forecasts: exchange rates (average)

US dollars ($) per national currency	2010	2011	2012	2013	2014
US (EUR/USD)	0.76	0.72	0.78	0.77	0.77
EMU	1.33	1.39	1.29	1.30	1.30
UK	0.65	0.62	0.63	0.67	0.68
Japan	87.8	79.7	79.8	101.1	112.9
China	6.77	6.46	6.31	6.18	6.02

Forecast closing date: May 6, 2013
Source: BBVA Research

Table 9
Macroeconomic forecasts: official interest rates (end of period)

	2010	2011	2012	2013	2014
US	0.25	0.25	0.25	0.25	0.25
EMU	1.00	1.00	0.75	0.75	0.75
China	5.81	6.56	5.75	6.00	6.50

Forecast closing date: May 6, 2013
Source: BBVA Research

Table 10
EMU: macroeconomic forecasts (yoy change, %, unless otherwise indicated)

	2010	2011	2012	2013	2014
Real GDP	1.9	1.5	-0.5	-0.1	1.0
Household consumption:	1.0	0.1	-1.3	-0.6	0.6
Public consumption	0.8	-0.2	-0.3	-0.3	0.2
Gross fixed capital formation	-0.5	1.6	-3.9	-1.6	3.2
Equipment, machinery and cultivated assets	5.5	4.6	-4.2	-2.2	4.7
Equipment and machinery	5.6	4.6	-4.3	-2.2	4.7
Construction	-4.3	-0.2	-4.3	-2.1	1.8
Housing	-2.6	0.6	-3.4	-1.8	2.4
Other buildings and other constructions	-6.0	-1.1	-5.3	-2.3	1.1
Change in inventories (contribution to growth)	0.6	0.2	-0.6	-0.2	0.0
Domestic demand (contribution to growth)	1.2	0.5	-2.1	-0.9	0.9
Exports	11.0	6.4	2.9	2.3	3.5
Imports	9.5	4.3	-0.8	0.8	3.7
Net exports (contribution to growth)	0.7	1.0	1.6	0.7	0.1
Pro-memoria					
GDP w/out housing investment	2.2	1.5	-0.4	0.0	0.9
GDP w/out construction	2.7	1.7	-0.1	0.1	0.9
Employment (LFS)	-0.5	0.5	-0.7	-0.6	0.4
Unemployment rate (% active pop.)	10.1	10.2	11.4	12.1	11.9
Current account balance (% GDP)	0.0	0.2	1.2	2.0	2.1
Public sector balance (% GDP)	-6.2	-4.1	-3.7	-2.7	-2.2
CPI annual average	1.6	2.7	2.5	1.6	1.5

Forecast closing date: May 6, 2013
Source: official institutions and BBVA Research

Table 11
Spain: macroeconomic forecasts (yoy change, %, unless otherwise indicated)

	2010	2011	2012	2013	2014
Activity					
Real GDP	-0.3	0.4	-1.4	-1.4	0.9
Private consumption	0.7	-1.0	-2.1	-3.0	-0.5
Public consumption	1.5	-0.5	-3.7	-5.1	-1.8
Gross fixed capital formation	-5.5	-5.5	-8.7	-8.5	1.3
Capital goods	3.0	2.4	-6.7	-4.7	4.9
Construction	-9.8	-9.0	-11.5	-10.9	-1.0
Housing	-10.1	-6.7	-8.0	-9.3	0.8
Domestic demand (contribution to growth)	-0.6	-1.9	-3.9	-4.5	-0.4
Exports	11.3	7.6	3.1	4.7	6.4
Imports	9.2	-0.9	-5.0	-4.9	2.8
Net exports (contribution to growth)	0.3	2.3	2.5	3.0	1.4
GDP at current prices	0.1	1.4	-1.1	-0.6	1.9
(Billion euros)	1048.9	1063.4	1051.2	1045.4	1065.8
GDP w/out housing investment	0.5	1.0	-1.0	-1.0	1.0
GDP w/out construction	1.6	2.1	0.2	-0.2	1.2
Labour market					
Employment (LFS)	-2.3	-1.9	-4.5	-4.1	-0.2
Unemployment rate (% active pop.)	20.1	21.6	25.0	27.1	26.4
Employment QSNA (equivalent to full-time)	-2.5	-1.7	-4.4	-3.9	-0.5
Productivity	2.2	2.1	3.0	2.5	1.4
Prices and costs					
CPI (annual average)	1.8	3.2	2.4	1.7	1.2
GDP deflator	0.4	1.0	0.3	0.9	1.0
Household consumption deflator	2.0	2.9	2.7	2.3	1.1
Compensation per employee	0.3	0.7	-0.3	0.3	-0.2
Unit labour cost (ULC)	-2.0	-1.4	-3.3	-2.1	-1.7
Foreign trade					
Current account balance (% GDP)	-4.5	-3.7	-1.1	0.5	1.0
General goverment					
Debt (% GDP)	61.5	69.3	84.1	92.4	96.3
Budget balance (% of GDP)	-9.7	-9.0	-7.0	-6.5	-5.7
Households					
Nominal disposable income	-2.9	-0.5	-2.7	-2.0	0.5
Savings rate (% of nominal income)	13.1	11.0	8.3	7.2	7.1

(*): Excluding financial aid to Spanish banks
Forecast closing date: May 6, 2013
Source: official institutions and BBVA Research

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