BBVA | RESEARCH

Economic Outlook

Global

Second Quarter 2013
Economic Analysis

- **The world economy continues growing,** but recovery loses some momentum on the back of faltering growth in some regions.
- **The slowdown hits Europe's core economies** and now the recovery is expected from 2014 onwards. The US withstands fiscal uncertainties, whereas China's growth slows amid mounting risks.
- **Central banks underpin global growth** with Japan embarking on a massive expansionary stimulus. The ECB cuts interest rates and is poised to introduce new measures.

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Closing date: May 7, 2013

1. A more uneven global scenario

Global growth continued its gradual recovery in 1Q13, but more varied prospects for the main economies have slowed the expected pace of improvement in GDP in 2013 and 2014. Quarterly global GDP growth, estimated by BBVA Research at 0.7%, was slightly above the 0.6% of the last quarter of 2012. However, available indicators point to a growing unevenness of economic growth, particularly within the advanced economies, where the eurozone is once more lagging behind the US and even Japan. China will grow by around 8%, although with a downside bias due to doubts about whether the authorities will use room for manoeuvre (taking into account decreasing inflation) to beat the 7.5% GDP growth target. The expected growth for 2013 (3.3%) **is just 0.1 percentage points above the estimated growth for 2012**. The rate will be close to 4% in 2014, although the balance of risks continues tilted to the downside.

In the euro area, recovery is being delayed to 2014, despite the role of the ECB as a firewall against financial tensions, helped by the boost given to banking union. The ECB has surprised by its effective role as a guarantor of the euro against shocks such as the disordered bailout of Cyprus, the political situation in Italy and the Constitutional Court ruling in Portugal. On the negative side, indicators of the economic situation show **a general cyclical weakness that goes beyond the periphery.** That justifies the recent cut in rates by the ECB. This is a positive measure, although **it is unlikely by itself to reduce a financial fragmentation** that is already having less impact on sovereign issuers and even large corporations, but continues affecting households and companies due to the **uneven operation of the banking channel.** The bank lending conditions in the area as a whole continue to tighten while in peripheral countries such as Spain demand for credit is still falling. The eurozone needs to go beyond the extension of liquidity support for banks and should implement measures to boost lending to firms with the participation of institutions such as the European Investment Bank

One additional consequence of the weakening of the European cycle is the growing debate on the appropriate level of fiscal consolidation to achieve a credible path of a falling deficit without such a severe short-term deterioration in growth that it makes the adjustment effort a failure. The support offered by the European Commission to the delay of two years in achieving the public deficit target of 3% in Spain is in line with paying more attention to quality and the composition of the fiscal adjustment, and emphasising structural reforms over short-term objectives. **What is wrong in Europe?** There is a need for a more decisive move towards banking union, to take the debate on deficit targets to structural measures and provide a firmer commitment to reforms in the peripheral countries.

In the US the strength of private demand, against a backdrop of fiscal adjustment, is sustaining growth prospects. Uncertainty on fiscal policy in the short term has eased compared with scenarios that included the closure of government offices. However, the US still lacks credible fiscal-consolidation measures. The removal of some tax breaks and the entry into force of spending cuts did not finally cause a significant halt to private expenditure, thanks to **monetary expansion that maintains very favourable** financing conditions and helps increase income and wealth. It is therefore reasonable to maintain the growth forecasts despite the downside surprise in GDP in 4Q12 and 1Q13 in its public demand component.

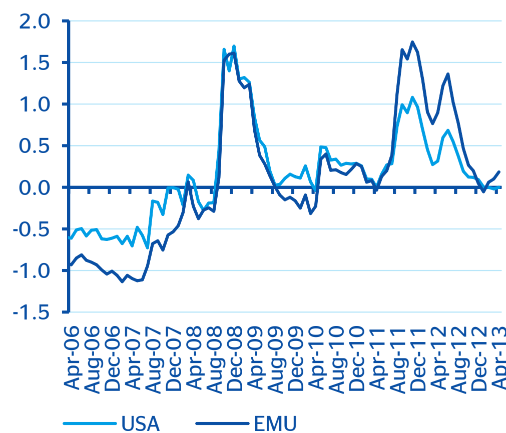
Sustaining monetary expansion over time, in which the Central Bank of Japan is now also involved, is a challenging prospect. The aim that investors searching for returns should move to higher risk assets may in some markets favour valuations that are far from their long-term fundamentals, and this may lead to disorderly adjustments as the stimuli are withdrawn. This risk is growing given the lack of coordination between the different central banks with quantitative easing policies, each of them looking out for its respective domestic objectives of anchored inflation and sustainable growth. The emerging economies are coping well with inflows, but their effects should receive additional attention.

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 indicators of confidence, rather than indicators of the real economy.

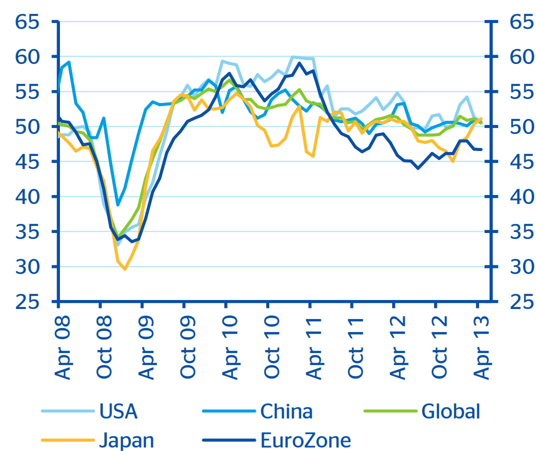
There has only been a limited response in the financial markets to events such as the continued uncertainty regarding the definition of long-term fiscal policy in the US, the internal political paralysis in Italy and the events in Cyprus and Portugal (see Chart 1). Thus **risk premiums have fallen in 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 Tension Indicator



Source: BBVA Research

Chart 2
Confidence Indicators (PMI)

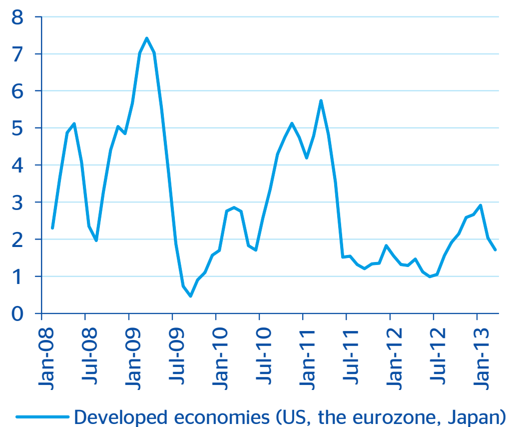


Source: Markit, BBVA Research

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.**

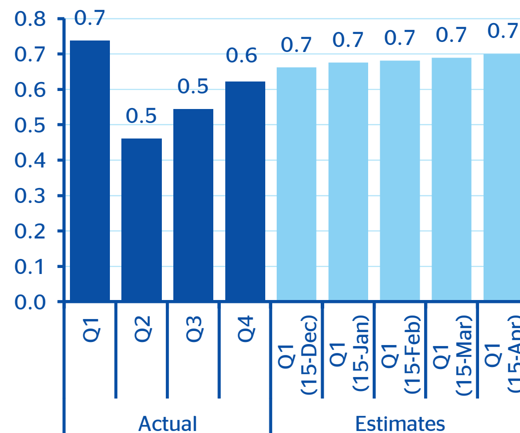
1: For more details, see BBVA Research's Economic Outlook published on 6 March, 2013: http://www.bbvaresearch.com/KETD/fbin/mult/130306_EcWatch_BBVAGAIN_tcm348-379375.pdf?ts=2942013

Chart 3
Developed economies: standard dev. PMI (US, eurozone and Japan)



Source: Markit, BBVA Research

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



Source: BBVA Research

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

Although GDP growth figures in the first quarter of 2013 were below market expectations, they 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 slowdown of the GDP in the second quarter.[2]

In all, **we maintain our forecasts for the US economy in 2013 and 2014 without major changes, with rates of growth 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.** 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.

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 centre 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

2: For further details see our US Economic Watch, available at
http://www.bbvaresearch.com/KETD/fbin/mult/130401_EconomicWatchEEUU_194_tcm348-381612.pdf?ts=352013

its exports. Finally, **on the periphery of the eurozone there has been strong appetite for risk, in particular for peripheral sovereign debt,** thanks to the ECB's OMT programm 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 confirms activity is losing momentum in the area as a whole at the start of 2013 and a sustained recovery is in sight.** Meanwhile, the authorities in the eurozone continue with the process of constructing an economic architecture for the area (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.[3] It has been achieved through the ECB 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 companies 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 main rate and the deposit rate to +/-50 bp. 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, should 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.

3: See Box 1

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 2012, 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 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 growth (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 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, the Japanese government's share of bonds in 2014 will be over 20% (see Chart 6). The movement of funds will therefore also be uncertain. 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. This trend with respect to peripherals has recently shifted. In this context, **we expect demand for assets in euros to increase, provided that the euro-convertibility risk does not emerge again.**

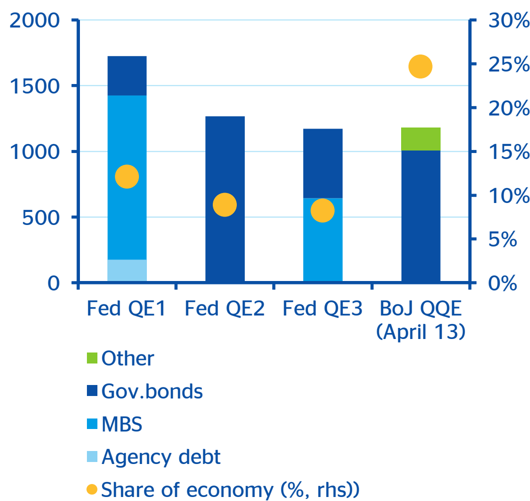
Monetary easing in developed economies favours risk taking, pushes long-term rates down and the appreciation of emerging market currencies

Financial markets are still dominated by flows from central banks, inflation below targets in the eurozone, the U.S. and Japan, a neutral balance of risks to growth in the U.S., downward bias in the eurozone and by pending improvements in real indicators mirroring improvements in confidence indicators.

Against that backdrop, long-term rates on US and German bonds have gone down in recent months. The ensuing dash for yield in a less risk averse environment (partly because of the ECB actions) has also prompt a sharp fall in yields on government bonds in the periphery of Europe to levels not seen since 2010. In this context, there have been capital inflows to emerging fixed-income markets, especially the most liquid (Turkey, Brazil, Mexico), anticipating capital outflows from Japan after its QE program was announced, which includes purchases of public debt by the central bank of Japan.

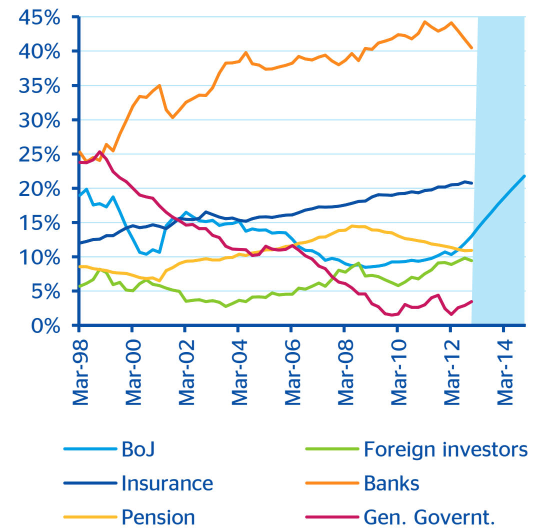
As a result, the euro has shown great resilience to cyclical weakness in the area. The lower probability of high-risk scenarios and a monetary policy less accommodative vis-à-vis other central banks have helped the euro strengthen. In the absence of major risk events in Europe and as long as no surprises in the QE exit strategy by the Fed occurs, the euro could continue trading in its current range of 1.30 to 1.32 dollar per euro until the end of this year. This does not rule out episodes of dollar appreciation as a result of changes in the cyclical-risk balance and different central banks reactions.

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



Source: Haver and BBVA Research

Chart 6
JGB holders since 1998 (%)



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

3. The world economy withstands some shocks but is still vulnerable

Some of the events we had identified as triggers of a risk event that could drag the world economy down have materialized over the past months. However, they have sparked neither significant financial tensions nor a general decline in growth rates. In fact, only the eurozone has seen a significant slowdown and a subsequent downward revision in its prospects. **In our view, that proves the world economy is more resilient to those kinds of shocks than expected and is in better shape than previously thought.** Markets have become relatively immune to these events.

However, we still think the process of normalization could derail. Furthermore, new factors have emerged as sources of uncertainty and a potential drag on the global economy.

Europe: a frightening scenario becomes business as usual

Politics in Europe continues being a source of shocks for economic recovery. In fact, the last three months have seen some of the most threatening events of this lingering crisis. First, politics in Italy reached a gridlock after elections in late February failed to achieve a viable majority. The prospect of a protracted period with no stable government in the third largest economy in the eurozone daunted European politics in most of the quarter amid urgent need for reforms. A coalition government eventually emerged, though the divergence in political views within the new government casts doubt on its ability to implement the much-needed reforms.

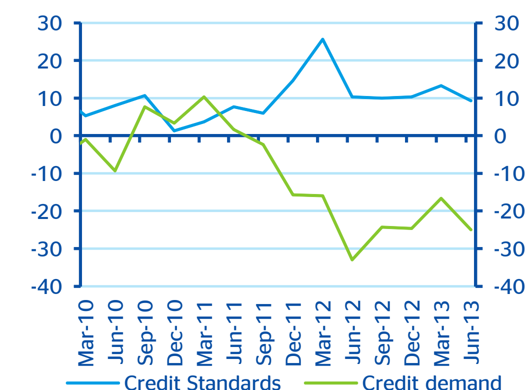
Second, the **Cypriot bail-out is a perfect example of misguided governance in the eurozone.** In the end, Cyprus got its bail-out, at the cost of transitory capital controls, limits to currency transactions and cash availability. Yet the bail-out negotiation (in particular, the wrangle over the details after the first proposal failed to achieve support from the Cypriot parliament) risked sparking a new tide of financial instability, in particular in other peripheral countries.

Third, the Portuguese constitutional court ruled that some parts of the fiscal-consolidation plan were unconstitutional. This was a serious setback for a country that had been conscientiously implementing the bail-out plan agreed with the European authorities (and had received much praise from its European partners) and intended to return to markets this year. Legal (or constitutional) problems add to more common political pushback when implementing reforms in countries with difficulties. Portugal's government continues showing its commitment to reforms, reassuring markets and European authorities that it fully intends to deliver on its pledges.

Chart 7
Ten-year bond rates

Source: BBVA Research and Bloomberg

Chart 8
Eurozone: Three-month change in credit standards and demand (Households and businesses simple average)



Note: positive values: tightening in standards and increasing demand
Source: Haver (ECB survey on credit conditions) and BBVA Research

In our view, any of these events (let alone all of them simultaneously) could have triggered a new wave of financial tensions. In fact, the recent history of the eurozone is full of such events, where financial tensions followed policy fudge. However, **on this occasion, financial tensions have barely increased.** It must be conceded that these kinds of events have less (and short) impact as a significant source of tension. We think the **ECB's OMT program has been key in containing financial tensions** (see Chart 7). Furthermore, the commitment to restoring fiscal soundness by all peripheral governments has also helped to restore market confidence. In addition, and more recently, the European authorities have hinted at a more flexible approach to fiscal consolidation. In our view, putting all those factors together, the sovereign threat (i.e., more countries in need of European funds) has decreased.

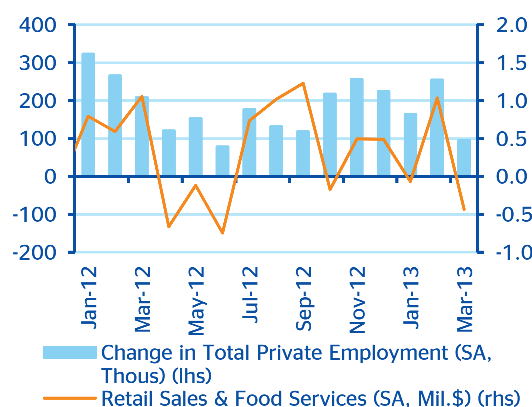
However, not all hurdles have been cleared. The Cypriot bailout has introduced a new risk factor. The resolution of the banking crisis in Cyprus may make other financial sectors in peripheral economies more vulnerable after the agreement was reached to impose losses on Cypriot uninsured deposits. That could happen if an increase in the risk that creditors or depositors perceive prompts bank financing problems. In fact, one of the problems the European economy is encountering relates to difficulties for banks in lending to firms and households. The most recent figures show that credit conditions are tight, amid lack of demand, and this is reflected in decreasing credit hindering growth (see Chart 8). To make things worse, the economies in the core of Europe have also been hit by the slowdown. Germany has lost momentum, and France's challenges loom large. If that situation persists, and those economies do not gain traction, prospects for the eurozone as a whole may worsen.

US: going over the cliff, and beyond

The political uncertainty surrounding the fiscal consolidation process in the US has decreased, but probably for the wrong reasons. In January, tax hikes were implemented as a result of the last-minute agreement between parties to deal with the so-called fiscal cliff. However, parties did not agree on some of the pending details and in March across-the-board spending cuts started. These events are not satisfactory at least for two reasons. First, they did not deal with the long-term fiscal-sustainability problem. The US still lacks a comprehensive plan to restore sustainability to the public sector, which should include reforms on the spending side and to the taxation structure. Second, the fiscal measures now in place account for a significant drag on the economy, at a time when the recovery is still weak, although some heartening signs of recovery have emerged.

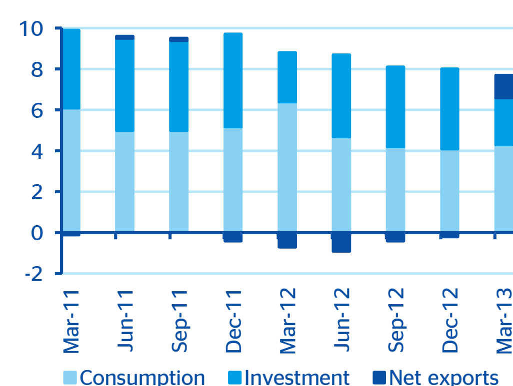
We feared that the combination of January's tax hikes and March's spending cuts could depress growth, yet it is undoubtedly true that the American economy has withstood these events remarkably well. Nevertheless, the most recent data are casting doubts on the sustainability of the recovery (see Chart 9), even with historically low growth rates of around 2%. Therefore, these measures could take a heavy toll on both the American and the world economy.

Chart 9
US: Retail sales and payroll



Source: Haver, BBVA Research

Chart 10
China: Contribution to real GDP y/y growth rate (NSA, percentage points)



Source: Haver

You too, China?

With the eurozone's economy faltering and the US undergoing a vulnerable recovery on the back of fiscal consolidation, **the prospects for the world economy rebounding strongly have relied on China.** Yet GDP figures in the first quarter disappointed. The flip side, though, is that part of the slowdown (in particular in investment) may have been the result of measures intended to curb the fast credit growth China has seen over recent quarters. If that were the case, it would be a welcome event since it diminishes risks related to fragilities in the financial sector. Furthermore, the most recent figures show that the share of consumption in the country's GDP has increased at the expense of investment. That is, again, a welcome feature of the recent data, although the much-vaunted change towards consumption in the Chinese model is still pending (see Chart 10).

The increase in local debt, **the effect of the so-called shadow banking on credit growth and house price levels pose the most significant risks to the Chinese economy.** The authorities may have to introduce new measures to deal with those problems and that may translate into more sluggish growth. However, the **Chinese government has room for manoeuvre if needed.** Inflation has returned within the target and, as a consequence, both fiscal and monetary policies could turn to more accommodative stances in case growth falters.

Japan joins the QE club, but at what cost?

Central banks in most of the advanced economies have embarked on quantitative-easing policies. Japan is the last one to do so, aiming at stamping out deflation and stepping up growth. So far, only financial indicators have reacted: the yen has depreciated significantly over the last few months, whereas Japan's stock markets have boomed. It is too soon to determine whether this last-ditch effort may pay off. That will also depend on changes in other policies (structural reforms and fiscal changes).

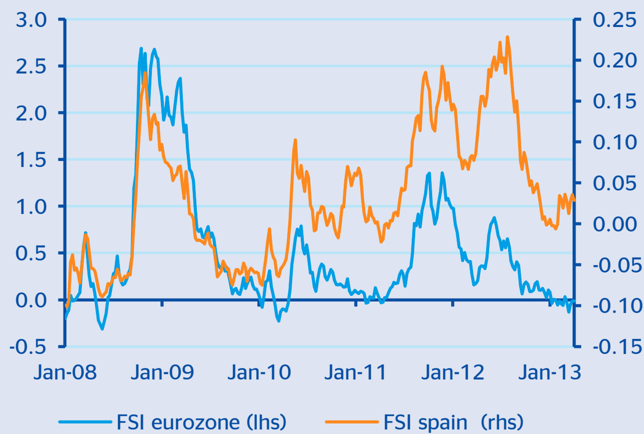
Yet the Japanese monetary expansion also poses risks, in particular to other economies. Against a backdrop of low nominal interest rates, it is feared that part of that tide of new liquidity may end up reaching other economies, in particular in emerging Asia, that are already experiencing appreciation pressures in their currencies. That may force these governments to introduce measures that could reduce growth. At the same time abundant liquidity may exacerbate some asset valuations and risk triggering bubbles in certain asset markets.

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

Tensions in financial markets in the euro area 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,[4] relieved them significantly, as reflected by BBVA's Financial Stress Index (FSI).[5] Chart 11 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.

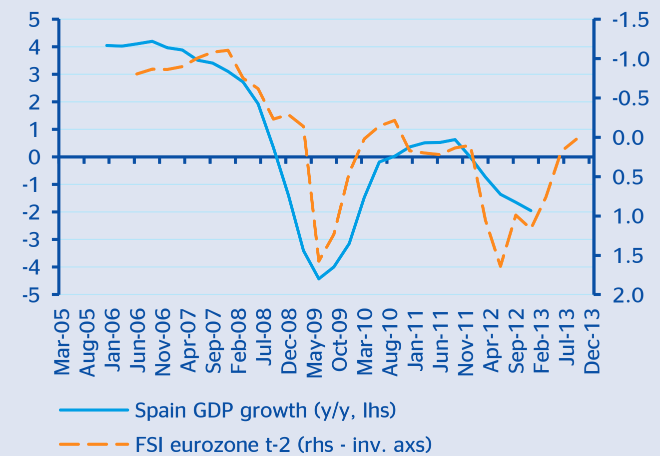
Stress on markets tends to be negatively related with the economic cycle. In the case of the Spanish economy, not only has there been a high level of correlation, but financial tensions anticipate annual GDP growth by two quarters. As Chart 12 shows, comparison between GDP growth in Spain and the figure for FSI in the euro area two quarters earlier (on an inverted scale),[6] 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 indicators anticipate growth figures by two quarters.[7]

Chart 11
FSI, eurozone and Spain



Source: BBVA Research

Chart 12
Spain's GDP (% y/y) and eurozone FSI



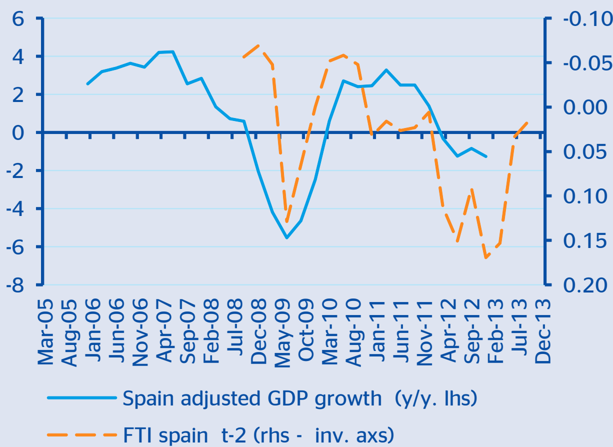
Source: BBVA Research

4: 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.
5: The FSI synthesises in a single indicator the movement 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
6: 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.
7: 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.

Similar results are obtained by measuring Spain's economic growth with a GDP that does not include the sectors in which adjustments are pending due to the accumulation of greater imbalances. The correlations pointed out do not show significant differences if, instead of Spain's total GDP, we use a GDP that excludes the activity of the public, financial and construction sectors. As Chart 13 shows, there is a significant (negative) correlation between this adjusted GDP and Spain's FSI. The level of correlation between adjusted GDP and the FSI is greater if it is compared with the Spanish economy rather than when it is done with the eurozone as a whole.

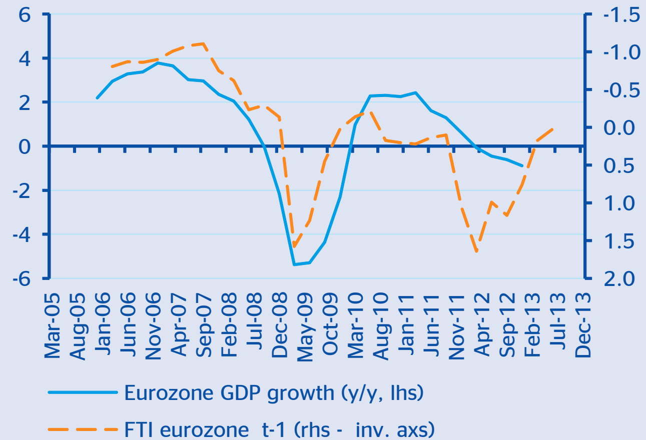
In addition, **the results obtained for Spain can also be verified for the eurozone, where its FSI anticipates the region's GDP, although in this case only by one quarter.** As in the case of Spain, the FSI of the eurozone has a negative and high correlation (72%) with respect to the growth of the eurozone, and anticipates it by a quarter (see Chart 14). However, the difference in terms of correlation if the FSI anticipates the figure by two quarters (as in the case of Spain), is of little significance.

Chart 13
Spain's adjusted* GDP (% y/y) and Spain's FSI



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

Chart 14
GDP eurozone (% y/y) and FSI eurozone



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. The policies undertaken by the ECB by mid-2012, reduced uncertainty over the future of the euro and, in this way, generated a climate of confidence that led to greater strength in the region compared with what could have happened without them.

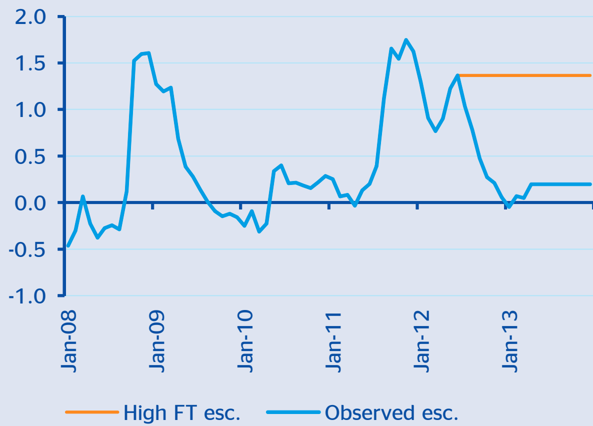
Thus, the exercise that we present here compares the changes in the FSI, both in the eurozone and the Spanish economy from mid-2012, and projecting the tensions present at that time over the last 12 months. This second scenario (high financial stress, see Chart 15) is consistent with supposing that the ECB did not implement the policies mentioned above, and that the positive effects seen on the financial markets were not generated. The modelling strategy used is part of a family of structural vector autoregression models (SVAR), and the criterion for identification is the level of exogeneity of the variables used.[8]

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.

8: 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.

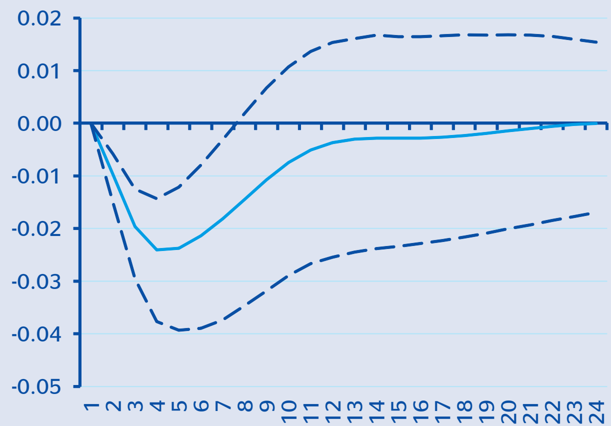
To sum up, we use four specifications of the SVAR model that include alternatively the FSI of the eurozone and Spain, and the total GDP compared with the adjusted GDP. All the specifications tested show reasonable impulse response functions (IRF) (e.g. see Chart 16), where in particular the impact of the FSI on GDP (in overall terms) gives a correct sign, and a magnitude similar to that obtained in previous studies[9]. 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.

Chart 15
FSI scenarios: observed vs. negative



Source: BBVA Research

Chart 16
GDP response (% m/m) to an FSI shock

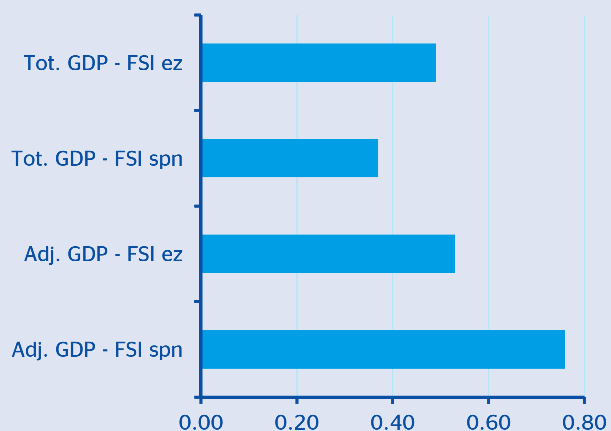


Source: BBVA Research

Chart 17 **shows that the cumulative differential impact since July 2012 of a scenario of high financial tensions, compared with the observed one, is between 0.4pp and 0.8pp of growth.** 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 17
Spain, differential growth from July 12 to date (pp): observed scenario vs. high financial tension



Source: BBVA Research

9: 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

4. Tables

Table 1

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	1.1
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 7, 2013
Source: BBVA Research

Table 2

Macroeconomic Forecasts: Inflation (Avg.)

(YoY growth rate)	2010	2011	2012	2013	2014
United States	1.6	3.1	2.1	2.1	2.2
Eurozone	1.6	2.7	2.5	1.6	1.5
Germany	1.2	2.0	2.0	1.7	1.8
France	1.5	2.1	2.0	1.4	1.5
Italy	1.5	2.8	3.0	2.0	1.7
Spain	1.8	3.2	2.4	1.7	1.2
UK	3.3	4.5	2.8	2.7	2.2
Latin America *	6.4	8.0	7.5	8.4	8.4
Mexico	4.2	3.4	4.1	3.9	3.5
Brazil	5.0	6.6	5.4	6.2	5.4
EAGLES **	5.3	6.0	4.2	4.4	4.6
Turkey	8.6	6.2	8.5	6.9	5.9
Asia Pacific	3.6	4.7	3.0	3.1	3.6
Japan	-0.7	-0.3	0.0	0.1	0.7
China	3.3	5.4	2.6	3.0	4.0
Asia (exc. China)	3.7	4.3	3.3	3.2	3.4
World	3.7	5.1	4.1	3.9	4.0

* Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela
** Brazil, China, India, Indonesia, Korea, Mexico, Russia, Taiwan, Turkey
Forecast closing date: May 7, 2013
Source: BBVA Research

Table 3

Macroeconomic Forecasts: Current Account (% GDP)

	2010	2011	2012	2013	2014
United States	-3.1	-3.1	-3.1	-3.0	-3.5
Eurozone	0.0	0.1	1.2	2.0	2.1
Germany	6.0	5.7	7.0	6.0	5.5
France	-1.6	-2.0	-2.3	-1.6	-1.5
Italy	-3.5	-3.1	-0.7	0.1	0.0
Spain	-4.5	-3.7	-1.1	0.5	1.0
UK	-3.9	-1.6	-4.6	-3.0	-2.8
Latin America *	-0.6	-0.8	-1.4	-1.7	-1.9
Mexico	-0.1	-0.8	-0.7	-1.1	-1.4
Brazil	-2.2	-2.1	-2.4	-3.0	-3.3
EAGLES **	1.6	0.5	0.4	0.4	0.6
Turkey	-6.4	-10.0	-5.9	-6.5	-6.8
Asia Pacific	3.3	1.6	1.2	1.4	1.8
Japan	3.6	2.3	1.7	1.5	1.7
China	4.0	1.9	2.3	2.8	3.5
Asia (exc. China)	2.0	1.4	0.4	0.4	0.6

* Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela
** Brazil, China, India, Indonesia, Korea, Mexico, Russia, Taiwan, Turkey
Forecast closing date: May 7, 2013
Source: BBVA Research

Table 4

Macroeconomic Forecasts: Government Deficit (% GDP)

	2010	2011	2012	2013	2014
United States	-8.9	-8.7	-7.0	-5.4	-3.8
EMU	-6.2	-4.1	-3.7	-2.7	-2.2
Germany	-4.1	-0.8	0.2	-0.5	0.0
France	-7.1	-5.3	-4.8	-3.8	-3.0
Italy	-4.3	-3.8	-2.8	-2.9	-1.8
Spain *	-9.7	-9.0	-7.0	-6.5	-5.7
UK **	-10.2	-7.8	-6.3	-6.8	-5.7
Latin America ***	-2.5	-2.3	-2.6	-2.2	-2.2
Mexico	-3.4	-2.6	-2.8	-2.4	-2.3
Brasil	-2.5	-2.6	-3.0	-2.3	-2.5
EAGLES ****	-2.8	-1.9	-2.1	-2.2	-2.1
Turkey	-3.6	-1.4	-2.1	-1.9	-1.1
Asia Pacific	-3.6	-3.7	-3.5	-3.7	-3.2
Japan	-9.5	-10.0	-9.5	-10.0	-8.0
China	-2.5	-1.1	-1.6	-2.0	-1.8
Asia (exc. China)	-4.5	-5.4	4.8	4.9	-4.1

* Excluding aid to financial sector
** Fiscal year from 1 April to 31 March
*** Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela
**** Brazil, China, India, Indonesia, Korea, Mexico, Russia, Taiwan, Turkey
Forecast closing date: May 7, 2013
Source: BBVA Research

Table 5

Macroeconomic Forecasts: 10-year Interest Rates (Avg.)

	2010	2011	2012	2013	2014
United States	3.2	2.8	1.8	2.1	2.6
Eurozone	2.8	2.6	1.6	1.6	2.4

Forecast closing date: May 7, 2013
Source: BBVA Research

Table 6

Macroeconomic Forecasts: Exchange Rates (Avg.)

US Dollar per national currency	2010	2011	2012	2013	2014
United States (EUR per USD)	0.76	0.72	0.78	0.77	0.77
Eurozone	1.33	1.39	1.29	1.30	1.30
UK	0.65	0.62	0.63	0.67	0.68
Japan (JPY per USD)	87.8	79.7	79.8	101.1	112.9
China (RMB per USD)	6.77	6.46	6.31	6.18	6.02

Forecast closing date: May 7, 2013
Source: BBVA Research

Table 7

Macroeconomic Forecasts: Official Interest Rates (End period)

	2010	2011	2012	2013	2014
United States	0.25	0.25	0.25	0.25	0.25
Eurozone	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 7, 2013
Source: BBVA Research

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