

Global Economic Outlook

Third quarter 2015
Economic Scenarios Unit

- Global economic growth continues, but at a slightly slower rate than we expected
- Emerging Markets face an uncertain scenario with lower demand from China and the approaching increase of Fed's interest rates
- China's economy in the limelight: size, financial interconnections and potential contagion channels abroad

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Closing date: 30 July 2015

1 Editorial

Global economic growth continues, but at a slightly slower rate than we expected, especially in the EMs, and with some more significant downside risks. The outlook for the DMs remain favourable and in 2015 growth should be at its strongest since 2010, supported by the central banks, lower private-sector debt and lower oil prices. Economic growth in the EMs will slow for the fifth consecutive year, as a consequence of the deceleration in growth in China and lower commodity prices. All in all, **global growth will reflect the impact of Fed rate hikes, the first since January 2004, and the pace of the economic slowdown in China.** In the most likely scenario, global GDP growth in 2015 will repeat the 3.4% increase seen in 2014 and will accelerate to 3.8% in 2016.

The Fed will very possibly start to raise the fed funds rate in September, as the labour market is close to reaching Fed's target strength. Core inflation and wages pose no threat to price stability, which together with the caution appropriate to the first hike in more than a decade, point to a very gradual pace of increases, with the fed funds rate reaching 1.50% by the end of 2016. In line with the Fed's data-dependent strategy, economic deterioration (more likely outside the US), or a fall in inflationary pressures, could delay the first increase and even slow the pace.

China has been the focus of attention, firstly as the stock market bubble formed and then when it burst. China managed to avoid the effects of the 2008-2009 crisis and is now managing its deceleration rhythm by means of intensive policies to increase corporate debt. The collateral effects of those policies are asset price inflation, both real estate and financial, particularly taking into consideration a high household savings rate, an under-developed social welfare system, and all of the above in a context of financial liberalisation. The stock market collapse has led us to revise our forecast for growth in China downwards to 6.7% and 6.2% in 2015 and 2016 respectively, 0.3pp less than our previous forecast, due to the tightening of the corporate credit market (new placements frozen, loss of financial collateral) and the deterioration in confidence. One risk that is difficult to quantify is the loss of credibility on the part of the economic authorities and in the confidence in regulation due to the drastic measures used to bring the rout in the stock market to a halt.

As a result, the EMs – with all the differences between them – are facing an uncertain scenario, with lower demand from China and the approaching increase in USD interest rates, which makes financing themselves more expensive. Currency depreciation comparable to that seen during the 2008-2009 crisis is one reflection of this. In the coming months the economic policy dilemmas faced by the EMs will become more evident, as they try to support the domestic cycle while balancing the risk of deanchoring inflation and the lack of external funding, particularly in the more financially integrated economies and with greater external imbalances. There will be pronounced differences between how the authorities respond, depending on the strengths and vulnerabilities of their respective growth models.

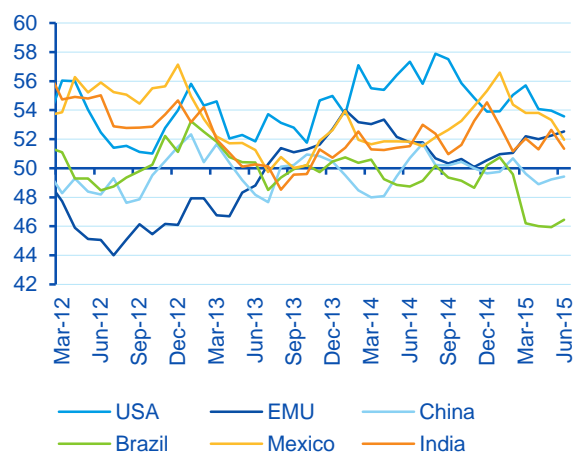
And Europe after Greece? The fall in the price of oil and the support of the ECB are key to approach the GDP growth to 2% in 2016. The discrepancies in the negotiations between the Greek government and the European authorities, and between the latter and the IMF regarding the need to restructure the debt, are evidence of the need to define an aid protocol due to the sustainability problems that go beyond fiscal consolidation. In addition, the Eurozone faces the challenge of making progress in its integration process. Monetary firewalls, the advances in banking union and the reforms undertaken in various countries, as well as the strengthening economic cycle itself, have restricted the financial contagion of the Greek crisis compared to the crises in 2010 and 2012. Nonetheless, further progress needs to be made in banking union and in the capital markets integration to ensure that financial fragmentation can be further reduced, and plans that demonstrate the will to move towards greater fiscal integration and economic flexibility. In the absence of these, the risk of the emergence of disruptive scenarios for the euro area as a whole is high.

2 Moderation in world growth and a marked deceleration in the emerging economies

The growth figures for the major economies confirmed that **world GDP decelerated in 1Q15 by showing the weakest annual rate of growth since early 2014** (2.1% compared to an average of 2.8% for the two preceding quarters) **according to our estimates¹**. The available activity indicators predict **more dynamic growth in the world economy in 2Q15**, on the back of the recovery in the US (after the downturn in GDP observed in the first few months of the year), euro area strength and GDP growth in China of 7% YoY, the same reading as in the first quarter. Despite this, world GDP is likely to have grown at under 3% YoY in the first half of the year, thus justifying our downward revision of growth for 2015 as a whole (3.4%, which is 0.1pp below what we were predicting in April). Looking to 2016, the world economy could pick up pace and attain growth of 3.8%.

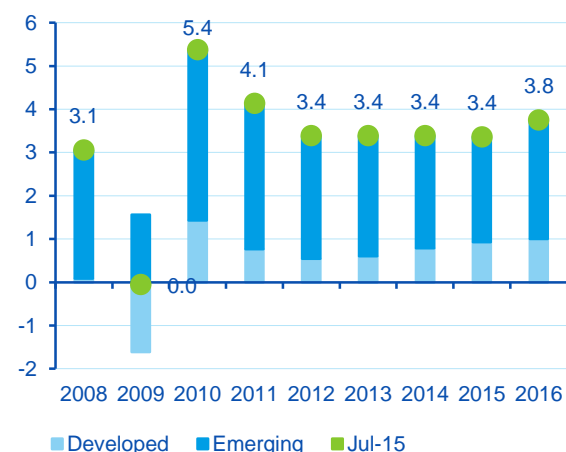
Despite the negative surprise produced by US GDP in the first quarter, **the developed economies continue to share encouraging growth prospects, which will contribute to mitigate the impact on world activity and trade of the current slowdown among the key emerging economies**. Specifically, while in 2015, the developed nations have the potential to grow at their fastest pace since 2010, at a shade over 2% YoY, the major emerging markets could see weaker growth again for the fifth year in succession.

Figure 2.1
Manufacturing PMI (levels of over 50 points indicate an expansion of activity)



Source: BBVA Research and Haver

Figure 2.2
World growth: annual growth (%). 2015-16 forecasts



Source: BBVA Research

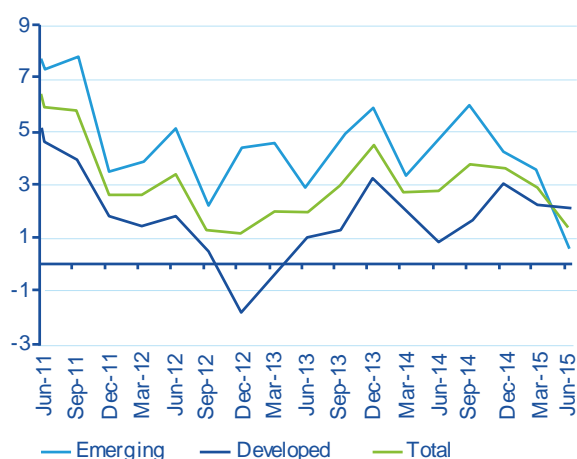
An indication of the stubbornness which has set into the deceleration of the emerging cycle is the deterioration of the readings for trade, industrial production and business confidence in some of the more notable economies since late 2014. Asia's export volume experienced the biggest quarterly correction since 2009 in the course of the first half, which was largely due to the effect of weaker demand from China on the trade flows of the other countries in the region. The industrial activity weakness in Latin America, which has been on the wane for seven consecutive quarters now, is another thermometer which tells a tale of both the impact of the lower growth in China and the loss of domestic demand pull in major economies such as Brazil. The fact that the manufacturing sector sentiment indexes in Asia and Latin

¹: Estimation based on the BBVA Research global activity indicator (GAIN). Details on methodology at <http://bit.ly/1nl5Rln>

America still stand at levels compatible with a contraction in production at the end of the second half does nothing to hint at any reversal in these dynamics in the short term, above all in a context of stabilization of commodity prices at low levels (the price of Brent has come down by 10 dollars per barrel in one month to 55 dollars at the end of July). Eastern Europe's trade exposure to the euro area, and in particular Germany, accounts for the better relative performance of this region at the start of the year.

Figure 2.3

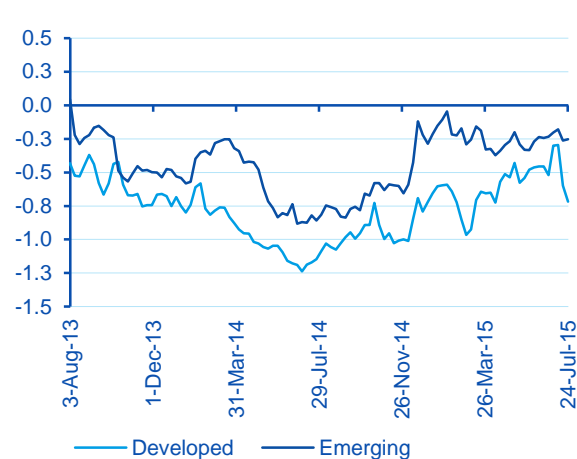
World trade (YoY change of goods export volume, %)



Source: BBVA Research and CPB

Figure 2.4

BBVA financial tensions index



Source: BBVA Research

Besides the downward revision of growth forecasts for the world economy, a hallmark of the global context in the last quarter has been **the manifestation of some of the risk events that we singled out three months ago** and, if they take a turn for the worse, this could bring the global economic recovery to a halt. The first of these involves the **bout of financial instability in China**. This was brought about by the sharp correction of its stock market, within a situation of trend deceleration in growth, which has drawn on substantial borrowing, and a process of financial liberalisation still underway. The second, which is equally significant, is the **Greek crisis**, and the constraints to reach an agreement that ensures that the country will face its financial commitments in the short term, as well as the sustainability of its debt via reforms to enhance the economy's capacity to grow in the long term.

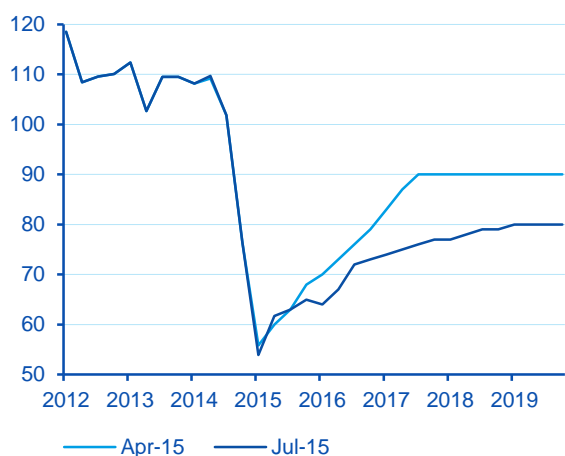
The combination of these two risk events, together with the approach of the Fed's rate hike, has heightened financial disruption the world over, particularly in the form of greater volatility in stock and currency markets, with a heavier impact on the euro area and Asia. **The upturn in the BBVA financial tensions index has been significant, both among the block of developed countries and in their emerging counterpart, since the end of 2014.** In this regard, **the maintenance of loose monetary policies**, above all in the wake of the implementation of the ECB's public debt purchase programme, is proving decisive. Even so, the risk that we might see a further outbreak of financial volatility when the US rate hike cycle takes place remains high.

The strength of the US labour market and the transient nature of the recent correction of activity continue to suggest that the first fed funds rate hike is set to take place in September. As the Fed continues to say that monetary tightening will be very gradual and the global context has worsened on events in China and Greece, the market is discounting a pace of hikes, and therefore the level of the fed funds rate in late 2016, substantially below FOMC forecasts. The need for the monetary normalisation process to take place makes the case for 2015 as the year when the first rate hike occurs. Nonetheless, the

path of the hikes will be conditioned by the soundness of economic recovery and inflation expectations. We think that any further deterioration in the external environment of the US could delay the lift-off of the hike cycle, which in any event would take the Fed funds rate to a level of 1.50% at the end of 2016. If the Fed chooses a pattern of hikes which is more aggressive than the recovery suggests, the increases in financial volatility could be substantial; however, whatever happens, the room for manoeuvre of the central banks in the emerging economies to make further cuts in rates, which are at historically low levels in most of them, would be minimal given the risk of a reallocation of capital flows towards developed countries.

With respect to the **situation regarding prices**, one of the distinguishing factors of the global scenario in the past quarter has been the **moderation of the decline in rates of inflation in response to the stabilization of the oil price and the scale of monetary stimuli**. Even so, in the block of developed countries these remain some way below the levels that are compatible with the price stability targets of monetary authorities. The **correction of oil price forecasts** due to both supply factors and the slowdown in demand in China could become a burden on the fledgling recovery in consumer prices and lead to heavier falls in industrial and import prices. The increase in the oil supply from Iran after its nuclear agreement with the US and the improved efficiency in US production channels herald a larger supply increase than was forecast early on in the year. Although lower energy prices arising from a more readily available supply provide a kick-start for world economic growth in the medium term, they might hold it back in the short term given their negative impact on the revenues of net producers and energy sector investment in economies such as the US.

Figure 2.5
Oil price (USD/bbl) and forecasts



Source: BBVA Research

Figure 2.6
Medium term inflation expectations (inflation swaps, %)



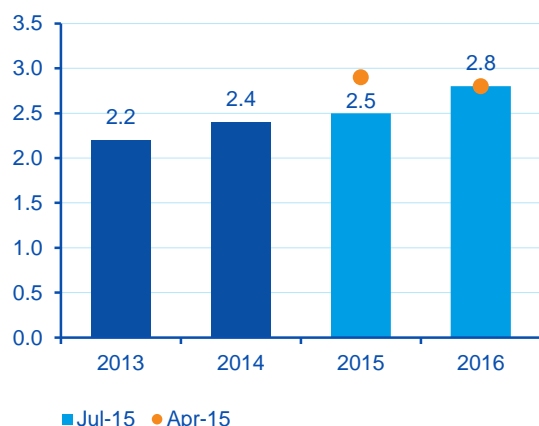
Source: BBVA Research and Bloomberg

The direction of monetary policies, and developments regarding risk flashpoints and the commodities market will continue to set the course for capital flows and, therefore, financial variables. The expected divergence between the monetary policies of the Fed and the ECB, as well as uncertainty over the resolution of the Greek crisis, will continue to bolster the dollar's exchange rate against the euro in a scenario where the long-term yield spread between sovereign assets in the two areas will remain more favourable to the US. Meanwhile, the slower growth in the bulk of the emerging economies will limit the appreciation of their currencies.

Looking in more detail at the key areas, note the sharp slowdown in the **US** economy, with a contraction of GDP in the first quarter, while the progress made in 2Q15 was only modest, judging by the available indicator readings for activity and confidence. The worse than expected first half on balance warrants a

downward revision for growth for 2015 as a whole, which could amount to 2.5%, or some 0.4pp below the level we forecast in April. The uncertainty over how the economic cycle will perform in the coming quarters has now been heightened bearing in mind the impact of the persistent dollar appreciation on exports, the weakness of private investment and the deterioration in the global situation. Even so, US GDP could grow by 2.8% in 2016.

Figure 2.7

USA: economic growth, % y/y


Source: BBVA Research

Figure 2.8

Fed's economic outlook

	Unemploy. rate, %	3MMA Change in Nonfarm Payrolls	PCE Core Inflation (YoY, %)	Average Hourly Earnings (YoY, %)
Goal	5.2-5.5	200K	2.0	2.5
QE3 Start (Sep-12)	7.8	157K	1.7	1.4
QE3 End (Oct-14)	5.7	228K	1.5	2.3
May/June 2015	5.3	221K	1.2	1.9

Source: BBVA Research and Haver

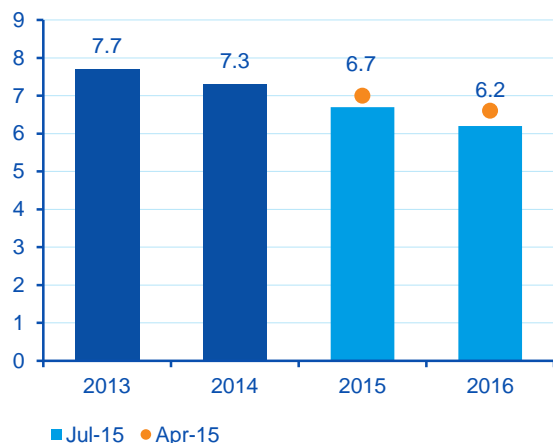
Expectations of improved economic activity to a large extent hang on growth in private consumption backed by sustained job creation (the US continues to create jobs at a rate of 200,000 a month and the unemployment rate has dropped to 5.3%), the steady recovery in housing prices and the relief provided to the household debt burden from interest rates remaining at low levels. Despite this, modest real wage growth, which still stands at slightly below 2% YoY, and the upturn in the family savings ratio account for the slower rise in consumption compared to other periods of similar activity levels in the labour market and low prices. The gradual convergence of inflation towards the 2% monetary policy target also hinges on an increase in private consumption. This target might not be achieved until as late as 2017 (0.5% and 1.8% are the headline inflation forecasts being mentioned for 2015 and 2016) and is what is determining the Fed's response function.

China has become the focus of attention in the last quarter on account of the sharp correction to its stock market and the potential impact that this might have on both its domestic economic cycle and world growth. For the moment, the first half of the year has produced a 7% increase in GDP YoY, although the pace of the economy's growth is likely to ease up owing to the impact of the recent bout of financial tensions. Besides the negative effect on the confidence of private sector, there might also potentially be some reversal of consumption decisions as a result of the drop in households' financial wealth². More than anything though, **there is likely to be a deterioration in financing conditions for corporates**, which is associated with both the suspension of new placements and the loss of value of collateral backing bank loans. These are the factors responsible for the **downward revision in the growth forecast for China in 2015 and 2016 to 6.7% and 6.2% respectively** (0.3pp and 0.4pp lower than in our April scenario).

2: Based on available information as of 2012 from the Household Financial Survey, 8% of Chinese households acknowledged having investments in the stock market, while the percentage almost doubled in the case of urban households.

Figure 2.9

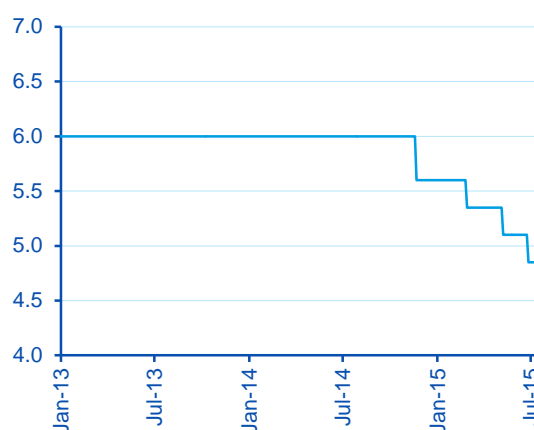
China: economic growth, % annual change



Source: BBVA Research

Figure 2.10

China: official interest rates, %



Source: BBVA Research and Haver

The battery of stimulus measures implemented by the country's authorities to stave off the possibility of even worse contagion to the economic activity cycle is the reason why we do not expect a more intense correction to the rate of growth. This is even taking into account the ongoing deceleration in the economy (the stabilisation of headline inflation rates at below 2% is a good example of this). In addition to the three cuts in the reference rate and the two cuts in the reserve requirement since the end of 2014, there has been a programme to inject liquidity into the banking sector by means of discounting local government debt (pseudo quantitative easing) and recent decisions have targeted stock market stabilisation, which has received a decisive boost from the state-owned companies. It is likely that loose monetary policy will be continued for the rest of the year, with a further 50bp cut in the reference rate, and that fiscal policy will gradually be made more flexible.

The pattern in the euro area is still one of sustained recovery, with quarterly GDP growth rates in the order of 0.4% in the first two quarters of the year. Domestic demand, and in particular, private consumption, are continuing to underpin improved activity, which is beginning to become a common feature among the key economies as a whole. The improved dynamics in France and Italy are combining with the strength of Germany and Spanish GDP growth, which is advancing at a quarterly pace of close to 1%. The emergence of certain risk hotspots with differing impacts on the region could slightly reduce estimated growth for 2015 and 2016 but, even so, the forecasts are still positive (+1.4% in 2015 and +1.9% in 2016, 0.1pp and 0.3pp below those we forecast in April).

The economic recession in Russia and the deceleration in China could affect export dynamics in a situation where euro depreciation might be more contained than expected at the start of the year. Investment growth is still one of the outstanding issues in euro area recovery, as it is still languishing at a low level (less than 22% of GDP), for which reason any tighter financing linked to uncertainty over the Greek crisis could eventually affect new lending decisions (higher costs and/or a reduction of loan principal granted) and, in the end, investment. On the other hand, the fall in the oil price and the ECB monetary stimuli³ constitute key elements of support if GDP growth is to achieve the rates forecast. The improvement in demand and the scale of the ECB's liquidity injections are in fact reducing the risk of deflation, judging by the

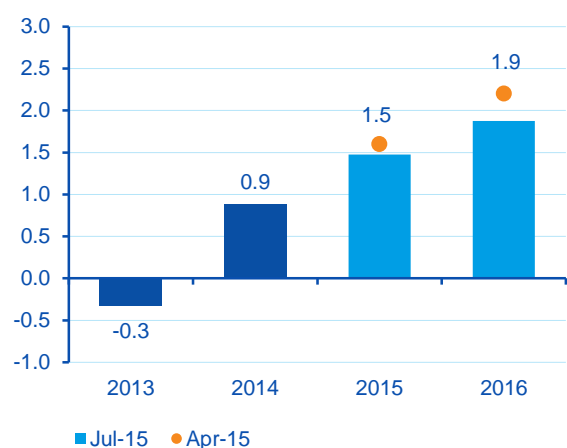
3: The monetary authority has repeated its intention to see its asset purchase programme through and keep it going until at least September 2016.

stabilisation of inflation readings and the upturn in medium-term price expectations. We will nonetheless have to wait until 2017 to see inflation rates converging towards 2%.

In addition to consolidating the economic recovery, the euro area faces major challenges in the medium term. Without a doubt the most significant of these is to try and dispel any scepticism about the irreversibility of the monetary union project. The financial firewalls, progress in banking union and the reforms undertaken in the area's various economies, as well as the reinforcement of the economic cycle, have substantially reduced the financial contagion from the Greek crisis compared to 2010 and 2012. Even so, in the absence of greater progress towards unifying banking and capital markets which might allow a reduction in financial fragmentation, plans that demonstrate the will to move towards greater fiscal integration, and without any rethinking of potential bailout programmes, the risk of disruptive scenarios emerging in the euro area as a whole is high. The discrepancies observed in the negotiations between the Greek government and the European authorities, and between the latter and other official organisations such as the IMF in relation, for example, to the need to deal with the issue of debt restructuring, are evidence of the need to define a framework for handling financial assistance for countries with debt sustainability problems that goes beyond fiscal consolidation.

Figure 2.11

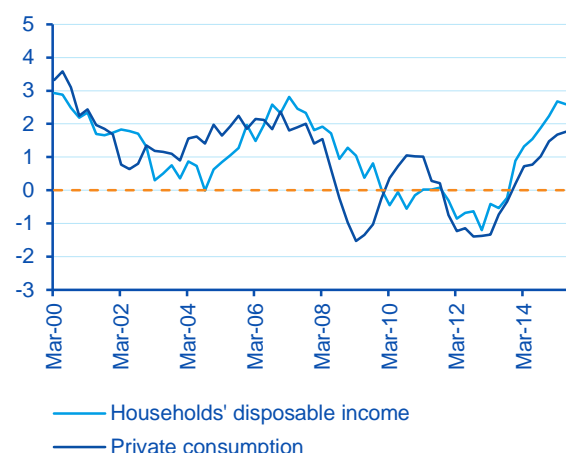
Eurozone: economic growth, % annual change



Source: BBVA Research

Figure 2.12

Euro area: private consumption and households' real disposable income, % YoY change



Source: BBVA Research and Eurostat

3 China's economy in the limelight: size, financial interconnections and potential contagion channels abroad

All eyes have been centred on the swelling and bursting of China's stock market bubble, given its potential impact on the domestic economic cycle, as well as global financial stability and economic growth. **There are basically three channels for contagion abroad, and all of them are significantly or increasingly far-reaching.** The first of these is deterioration in local private-sector confidence, which causes the private sector to hold back on its investment decisions and **amplifies the slowdown in activity, thereby spreading to the rest of the world via trade and foreign investment.** The second is a **widespread tightening of financing conditions among the emerging markets**, which is exacerbated by the effect of lower Chinese demand on commodity prices and the imminent Fed rate hike. The third, though not the least significant, relates to how **the Chinese economy is financially interconnected elsewhere**, both by virtue of its status as a net creditor of the rest of the world and its positions in terms of purely financial capital flows⁴.

It may be concluded from inspection of China's relative critical mass within global economic and financial channels that the **biggest risk to world economic growth lies in any sharp contraction of its activity levels, which moreover could translate into increased risk aversion in the EM** and affect those economies which have the most trade exposure, the greatest dependence on the commodity cycle and/or the largest external imbalances. **A scaling down of decisions by China to invest in the rest of the world could also deteriorate global financing conditions, given that China is the world's largest net creditor and the biggest foreign holder of US sovereign bonds.**

As for financial exposure to China, this is basically within the banking sector, which has played a key role in increasing the country's external debt in the last decade. Thus, **and taking into account financial centrality metrics developed by BBVA Research, if the shock were to affect the local banking sector, the financial channel could take on global significance:** the interconnectedness of China's banking sector with the world financial system comfortably outstrips the average for the EMs and is even above the average for developed markets, although considerably far behind countries such as the US.

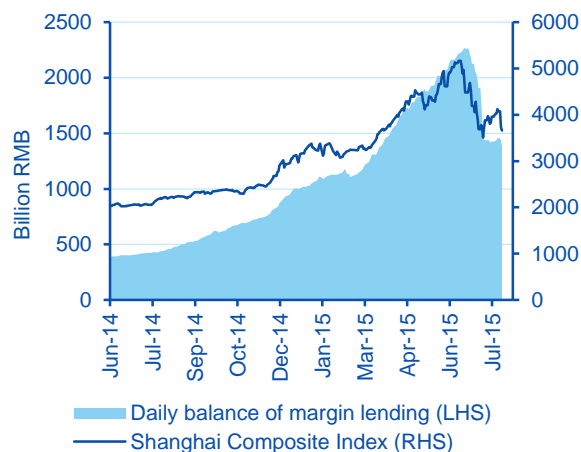
Factors behind the Chinese stock market correction

Every market crash starts from its preceding run-up. China's case is no exception. Prior to the sell-off of mid-June, China's Shanghai Composite shot up from 2,181 points to 5,166 points in less than one year. For many small stocks, their magnitude of price increase outperformed the stock index substantially.

4: China's capital account is not completely closed, although there are still many restrictions in place. Through some programmes (QFII and RQFII), foreign investors can invest in China's domestic bond and stock markets. In the meantime, domestic investors can invest abroad through the QDII programme. The Shanghai-Hong Kong stock exchanges link programme, which was implemented last year, provided another channel for two-way cross-border investment between Hong Kong and China. Moreover, after several years of efforts, China has successfully established an offshore RMB market in Hong Kong and other financial centres. The offshore RMB deposit amounts to above RMB1trn (or USD160bn). There are other offshore RMB markets such as Dim Sum bond market and the RMB derivatives market.

Figure 3.1

Margin lending fuelled China's stock market boom



Source: BBVA Research

Table 3.1

Measures to stabilise the Chinese stock exchange

Regulator	Date	Measure
1 PBoC	June 24	PBoC scraps loan to deposit ratio cap
2 PBoC	June 27	Rate cut by 25bp with a targeted RRR cut of 50bp
3 CSRC	July 5	IPOs suspended
4 PBoC	July 5	Establishment of USD19bn Financial Stabilization Fund by 21 brokers
5 PBoC	July 5	Liquidity support for China Securities Finance Corporate for the latter to buy shares in the market directly
6 CSRC	July 7	QFII told not to take new positions in future markets
7 CFFEX	July 8	Raise margin requirements for sell orders on CSI 500 index futures

Source: BBVA Research

A confluence of measures led the market to rally in such a short period: first, the government's support for HI-Tech listing firms have greatly lifted investors' expectations; second, in the face of growth slowdown the People's Bank of China (PBoC) have implemented a series of easing measures since November including interest rates and Required Reserve Ratio (RRR) cuts; third, the government, for the purpose of reducing corporates' reliance on debt financing, wrongly favoured retail investors into the equity market. More importantly, investors increasingly used margin loans from banks, security firms, trust companies and other shadow banking institutions to maximise their investment returns.

The market rally ended in mid-June when the trends in some of above-mentioned factors reversed. As the market rocketed up, the valuation of many stocks had gone far beyond levels justified by fundamentals. With some positive signs of growth stabilisation emerging in the second quarter, investors grew suspicious of the continuation of the PBoC's easing stance. Even worse is that **the authorities, in the wake of investors' fast-rising leverage, started to tighten margin loans through the shadow banking sector.**

When a large number of investors attempted to reduce their positions at the same time it soon translated into a text-book sell-off in the equity market. The initial correction of share prices caused by selling orders alerted other investors, in particular those who borrowed margin loans. To manage their risk exposure to the market, many leveraged investors opted to sell part of their shares, which magnified the supply in a short time and put more downward pressure on share prices. **The market thus entered a vicious circle: the more leveraged investors wanted to sell their shares, the further share prices fell, which encouraged more leveraged investors to sell.**

The authorities' rescue package is controversial

To stop the sell-off in the market the government has unleashed a set of bailout measures to stabilise it, including suspending IPOs, raising short-selling costs of stock index futures, directing insurance funds towards the stock market, etc. (Figure 3.1). And more importantly, the authorities instructed banks to lend money to the China Securities Finance Corporate so that the latter can prop up share prices through a buying spree in the market.

Although these measures have stabilised the market for a while, they failed to address a number of factors that spawned the sell-off, some of which have even been exacerbated by the authorities' actions. For example, the excessive use of margin lending has been widely blamed as one of the culprits for the run-up of share prices and the ensuing market plummet. As of 22 July, the official statistics of margin lending stood at RMB1.44trn, which is down from its peak of RMB2.27trn on 18 June but is still way above its daily average level of RMB0.52trn last year. These figures do not include margin lending through shadow banks.

Even the government's interventions themselves bear significant risks. The bailout measures functioned at the expense of market-based rules. This has largely dampened investors' confidence in China's stock market and driven away "smart money" institutional investors. As a consequence, market trading is expected to be increasingly dominated by retail investors and even more susceptible to their herd behaviour.

The recent sell-off could lead both foreign and domestic investors to rebalance their portfolio and reduce their positions in China's stock market. Additionally, if the market crash leads to large-scale capital flight, China's government might need to tap the foreign reserves to guard against the free-fall of its currency. That means China could need to unwind part of its holdings of US treasury bonds, which could have an impact on global financial market.

Adverse impact of the market crash on the outlook for China's economic growth

Looking ahead, we expect the stock market crash to have an adverse impact on the real economy. The channels from the financial market to the real economy include: i) the diminished brokerage services as part of total GDP; ii) firms' constrained financing channels due to the suspension of IPOs; iii) shrinking household wealth⁵; and iv) the impact of the deterioration in confidence of foreign capital on China's economy and financial system. We have therefore lowered our growth projection for FY15 to 6.7% and to 6.2% for FY16.

Worse is that the market crash has avoidably added uncertainty to the ongoing liberalisation of the capital account. The authorities could become more conservative after such a hard hit. The flaws in China's regulatory framework which were exposed by the market crash might make policymakers reluctant to open the domestic market to foreign investors. On the contrary, the authorities should not halt the opening of its capital account. By inviting more foreign investors, in particular institutional investors, into the domestic market, the authorities could balance the dominance of retail investors and make the market less susceptible to herd behaviour. Moreover, opening the capital account could also help domestic households to diversify their investments. The lack of suitable alternative investment choices for retail investors contributed to the overheating in both property and equity markets.

China's economy: heightened global importance including financial interconnectedness

Analysis of China's relative significance in global economic and financial channels are key to gauging the systemic nature of any bout of financial instability in the country, regardless of the fact that this might also have an impact on its growth dynamics.

China's participation in global chains of goods and services (interconnectedness in real economic flows) has been expanding at a particularly brisk rate since the mid-1990s. The most direct way to measure a country's degree of interconnectedness within overall real economic flows (its share in global

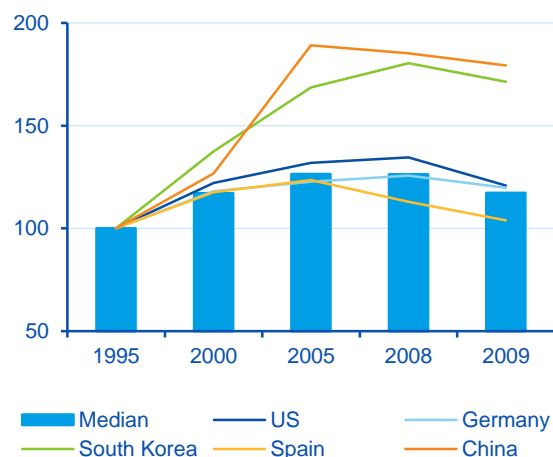
5: According to the Financial Survey of Families (2012), around 8% of Chinese households own financial assets in the form of shares, which figure reaches 60% for those owning bank deposits. In value terms, only 5% of total household wealth is of a financial nature.

value chains-GVC-) is to find the sum of the imports of goods and services required to, in turn, sell goods and services abroad and the percentage of these exports which are intermediate inputs of sales of goods and services in third economies⁶. According to the indicator constructed by the OECD⁷, China is the economy which increased its degree of interconnectedness the most between 1995 and 2009⁸.

Since 2014, China has been the world's leading economy in terms of GDP, overtaking the US, with comparable positions in goods trade flows. In the mid-1990s China represented less than 6% of GDP and close to 3-5% of total exports and imports of goods; **in 2014, it accounted for 16% of output and exports and 12% of imports.** The nature of its trade structure means that, besides this, its share in global value chains is one of the highest among comparable countries in terms of size of economy and openness to trade.

Figure 3.2

Grade of connection through trade of goods and services, 1995=100

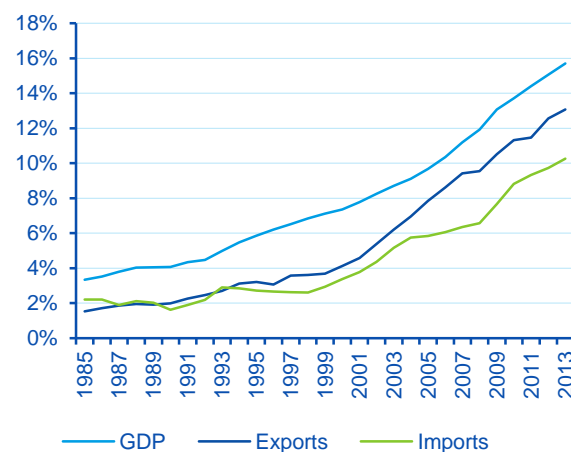


Share of imported inputs in the overall exports of a country and of its exported goods and services used as imported inputs to produce other countries' exports

Source: OECD (2015), Import content of exports (indicator)

Figure 3.3

China: share in World GDP and global trade of goods, % of total



Source: BBVA Research, IMF and WTO

The fact that China imports over USD500bn a year in commodities (30% of the buying from abroad) puts some perspective on its role as one of the biggest sources of demand for these goods worldwide, for which reason any reduction in its level of activity places significant downward pressure on the prices of some of these, such as oil or copper.

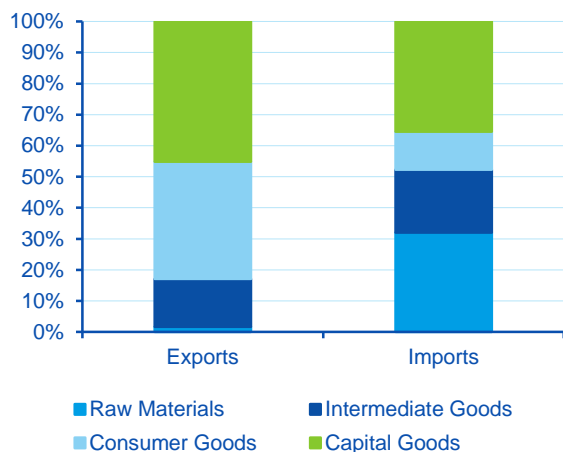
6: For further details on Global Value Chains, see the OECD at <http://www.oecd.org/sti/global-value-chains-library.htm>

7: Details at: <https://data.oecd.org/trade/import-content-of-exports.htm>

8: For the most recent period, it seems reasonable to assume that the intensiveness of China's share in global flows of goods and services has held up if one bears in mind that a little over one half of its imports and two thirds of its exports are capital and intermediate goods.

Figure 3.4

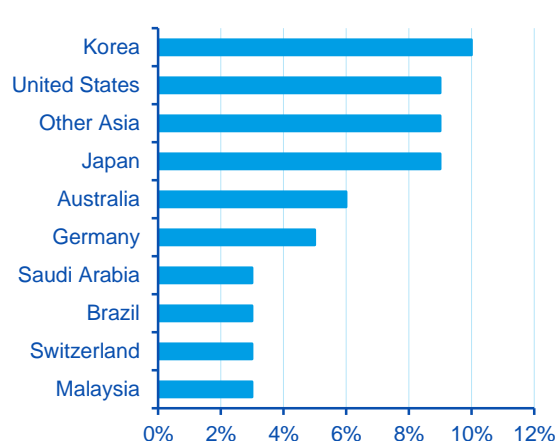
Structure of Chinese exports and imports by type of product, % of total, 2013



Source: BBVA Research, UNCTAD

Figure 3.5

China: total imports by trade partner, % of total, 2013



Source: BBVA Research, UNCTAD

The US, Japan and emerging Asia are China's key trading partners. The US accounts for 17% of total exports and 9% of imports, while Japan represents slightly below 10% of both flows. Hong Kong, Korea and other Asian countries such as India are also prominent among China's chief export destinations. Australia, Germany, Saudi Arabia and Brazil, on the other hand, are major import markets, above all due to the commodities they purchase, but also on account of the capital goods they buy. All in all, and despite the lack of overlap as regards some of its exports and import main markets, **China's centrality in world trade is very high, given that it does business with practically all of the countries in the world**⁹. As was pointed out by the IMF¹⁰, this leads one to suppose that, in the event of a shift in China's demand there is more likely to be bias towards a spreading of the correction via successive rounds of drops in demand from other countries rather than any moderating effect of absorption of the shock, which could only be the case for a select few of China's trading partners, essentially the oil producers.

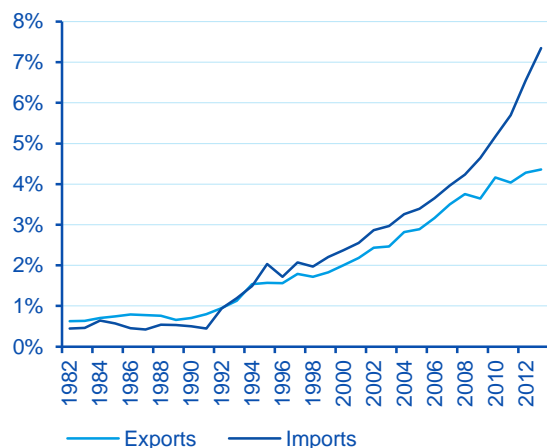
With respect to exchanges of services, China has less of a trade presence in the world compared to goods, although the recent trends regarding this item are indicative of China's development from an industrial and export economy to one more oriented towards consumption and services, in keeping with the increase in the country's income per capita. **Something over 4% of total services exports are provided by China, which is in turn responsible for 7% of imports worldwide.** These are still low levels, but the growth is rapid, above all in the case of imports. Both shares are double what they were one decade ago, thus far exhibiting a high level of geographical concentration, mainly in terms of the flow of exports, where Hong Kong accounts for 40% of the total.

9: See "Network Effects of International Shocks and Spillovers", IMF Working Paper, July 2015 <https://www.imf.org/external/pubs/ft/wp/2015/wp15149.pdf>

10: See previous note.

Figure 3.6

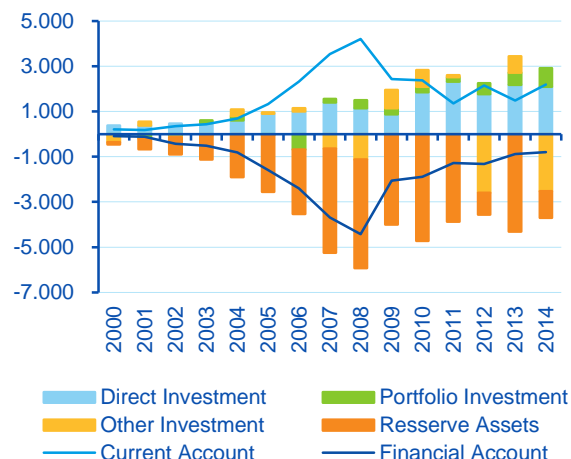
China: share in global services trade % of total



Source: BBVA Research, UNCTAD

Figure 3.7

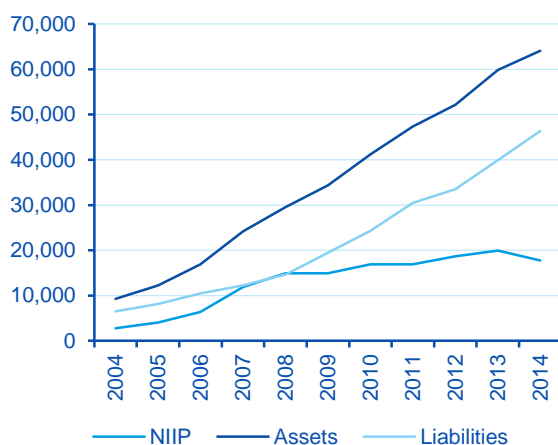
China: balance of payments (USD100mn)



Source: BBVA Research, SAFE

Figure 3.8

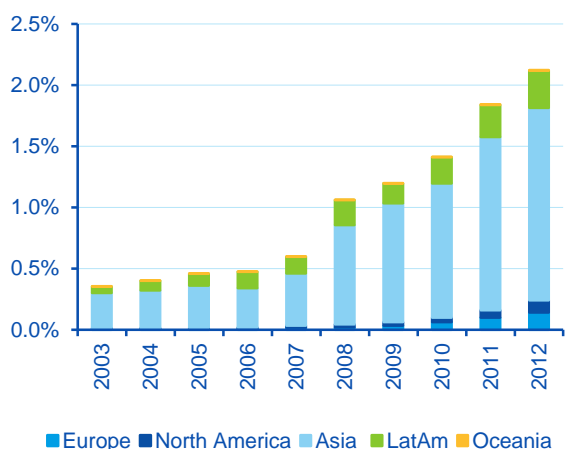
China: Net international investment position (USD100mn)



Source: BBVA Research, SAFE

Figure 3.9

China: outstock FDI, % of total



Source: BBVA Research, UNCTAD

Aside from the potential trade impact, which is evidenced by the size of China's economy and export and import flows, **China also stands out for being the largest net holder of financial assets of the rest of the world** (net creditor) as a result of persistently amassing current account surpluses¹¹. **A portion of these surpluses has been channelled out into the rest of the world in the form of portfolio investments (mainly), while another and more significant part has been set aside for building up reserves which, at the end of 2014, totalled some USD3.9trn.**

Consequently, **China's net international investment position** (the difference between the value of its assets and liabilities against the rest of the world) **has been systematically positive, at around 20% of GDP in 2014.** Asset purchases in the rest of the world, together with the appreciation in their value, have

11: After reaching USD400bn in 2008, these have since stabilised at around USD200bn, or 2% of China's GDP.

lifted China's investment position in the rest of the world to USD6.4trn, which more than outweighs the increase in liabilities in the form of external debt and which, according to SAFE (State Administration of Foreign Exchange), measured approximately USD1.6trn at the close of 1Q15 (barely 16% of GDP and 35% of the country's total liabilities with the world outside it).

This leads us to draw a twofold distinction when trying to gauge the financial interconnection and potential contagion channels in the event of a crisis of this nature. The first lies with **a potential sale of assets abroad and/or a scaling down of acquisitions by China** for the sake of preserving financial stability at home and compensating for the recent outflow of capital in the wake of doubts over the robustness of the economic cycle. The second focusses on the structure of Chinese external borrowing to determine its **financial interconnectedness with the global nodes of influence**.

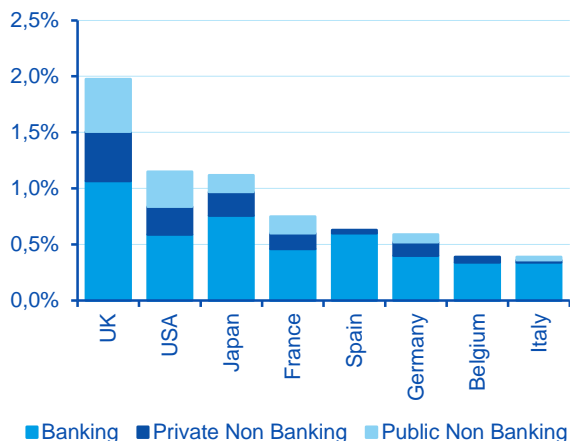
The lion's share of China's credit position is in the form of reserve assets, which represent over 50% of the country's overall assets in its external relations. A considerable part of these reserve assets is invested in US government debt; in fact, 20% of total US sovereign debt in foreign hands is owned by the Chinese. Since 2013 and in 2015 to date, buying from China has managed to offset net sales of US debt by all other foreign investors. Therefore any slowdown in the pace of buying from China or net selling process could prompt a spike in US yields which would imply tougher financing conditions worldwide.

In terms of foreign direct investment decisions, China's position seems less awkward as regards the global situation (China's stock of FDI abroad represents scarcely 2.3% of the total worldwide and is mainly concentrated in Asia), even though a deterioration in the domestic economy might translate into less of an appetite to invest, in spite of the fact that the Chinese authorities have committed to buttressing the internationalisation process by buying business interests in regions with a low presence up to now (such is the case of the European Union).

Turning to the share of global financial flows as measured on the basis of total external liabilities and drawing on BIS statistics¹², China **hardly even accounts for 3% of world financial liabilities**. Furthermore, intermediation for half of China's external debt is handled through the financial sector and represents **7% of the banking sector's liabilities globally, which is still a low percentage if compared with China's relative importance in economic activity and trade**. The banking sectors in the UK, the US and Japan are, in that order, the Chinese financial sector's top external creditors but, in all these cases, with the exception of the UK, the exposure which this represents with respect to bank lending granted externally is modest (Figures 3.10 and 3.11).

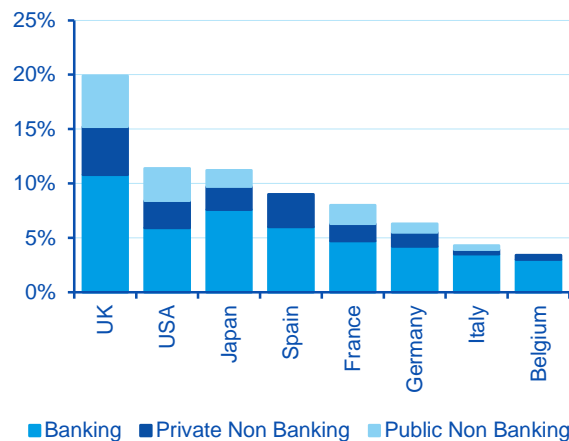
12: See https://www.bis.org/statistics/r_qa1509_hanx9e_u.pdf

Figure 3.10
Claims on China
(% of total claims)



Source: BBVA Research & BIS CBS Table 9E

Figure 3.11
Claims on China
(% of total claims held by each country)



Source: BBVA Research & BIS CBS Table 9E

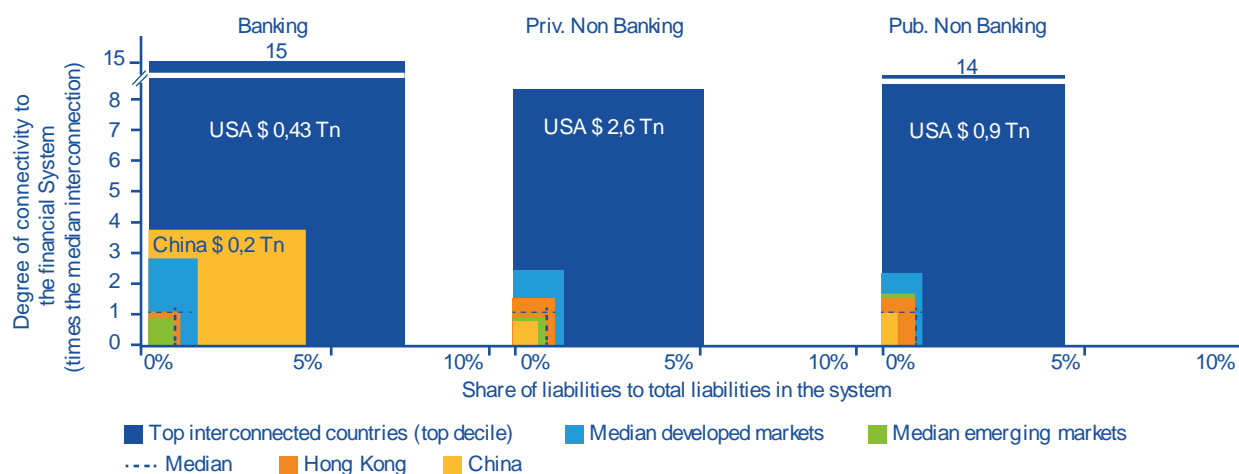
Even so, as with the case of global flows of goods and services¹³, **the exposure to a financial shock emanating from China does not merely depend on the scale of the Chinese economy's financial liabilities, or who the holders of these liabilities are, but also on the degree of creditors' interconnectedness, their centrality within the world financial system.**

Calculation of measures of interconnectedness, which are being developed by BBVA Research, is based on the number of financial links an economy has with the global system as a whole, both inbound (the country's liabilities) and outbound (assets) and these are weighted by the relative size of each exposure. This measure locates the degree of centrality of each country (node) within the whole but does not make it possible to establish the proximity of each of these nodes in relation to the centre of the system. To add in this aspect we weight the significance of each link according to its relationship with those clusters which have the highest degree of interconnectedness with the rest. The synthesis of the two metrics mentioned enables the fusion of the connectedness criterion with the degree of overall integration within the global financial system and gives us an idea of the capacity an economy (node) has for spreading contagion to the system as a whole.

The results for China (Figure 3.12) makes it clear that **only if the shock affects the banking sector will the financial channel be able to take on global proportions**: the interconnectedness of the Chinese banking sector with the world financial system comfortably outstrips the median value for EMs and is even ahead of the median for DMs, although it is a very considerable distance short of countries such as the US or even the group of the most highly financially interconnected countries.

13: See IMF reference in note 6.

Figure 3.12

Interconnectivity and exposure of financial systems as of 4Q14

Source: BBVA Research, BIS Consolidated Banking Statistics Table 9E

Potential impact of an economic shock in China

From analysing the channels for contagion mentioned above it may be deduced that the greatest risk to the global situation of deterioration in China's economic situation is from a contraction in activity which affects the rest of the world via trading and investment ties, whereas there is less vulnerability to purely financial contagion.

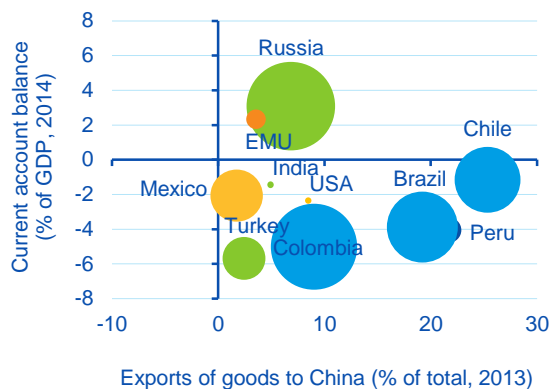
This can also entail an increase in global risk aversion, which would be more intense in the EMs, with an increase in sovereign bond spreads and a depreciation of their currencies given a possible outflow of foreign capital. Those countries with greater trade exposure to China, and those relying more heavily on the commodity cycle and/or more dependent on sizeable disequilibrium in terms of their external position, could possibly experience worse relative responses, both economically and financially. The recent trends in the currency market support this pattern (Figure 3.13).

A marked correction in the pace of China's economic growth, together with an upturn in the perceived risk in the bulk of the EMs to levels on a par with those observed in 2008-09, could translate into a widespread contraction in economic activity across the world, but with a major difference among the various economies. In the US the deterioration in financial conditions would be mitigated by the view of the dollar as a safe-haven asset, whereas among the EMs, and especially in those that are more financially vulnerable owing to their reliance on external capital flows, the impact would be greater, even possibly worse than the initial shock from China¹⁴.

14: Calculation of impacts based on the BBVA Research GVAR model.

Figure 3.13

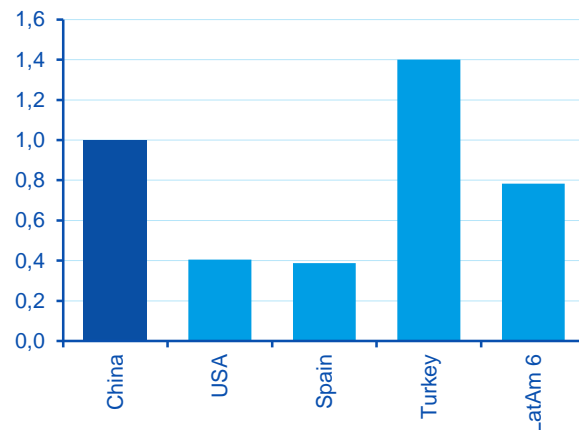
Exposure to China and foreign funding needs*



* Size of bubble: magnitude of currency depreciation against USD since May15
Source: BBVA Research, UNCTAD, IMF

Figure 3.14

Impact on GDP due to an activity and risk premia shock triggered by China, %



Source: BBVA Research

4 Tables

Table 4.1

Macroeconomic Forecasts: Gross Domestic Product

Annual Average, %	2012	2013	2014	2015	2016
United States	2.3	2.2	2.4	2.5	2.8
Eurozone	-0.8	-0.3	0.9	1.5	1.9
Germany	0.6	0.2	1.6	1.5	1.9
France	0.3	0.7	0.2	1.3	1.7
Italy	-2.8	-1.7	-0.4	0.7	1.3
Spain	-2.1	-1.2	1.4	3.2	2.7
UK	0.7	1.7	3.0	2.5	2.3
Latin America *	2.8	2.5	0.8	0.3	1.2
Mexico	4.0	1.4	2.1	2.5	2.7
Brazil	1.8	2.7	0.2	-1.5	0.5
EAGLES **	5.7	5.6	5.2	4.8	5.2
Turkey	2.1	4.1	2.9	3.0	3.9
Asia Pacific	5.7	5.9	5.7	5.7	5.6
Japan	1.8	1.5	-0.1	1.3	1.2
China	7.8	7.7	7.3	6.7	6.2
Asia (exc. China)	4.1	4.5	4.3	4.9	5.1
World	3.4	3.4	3.4	3.4	3.8

* Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.

** Bangladesh, Brazil, China, India, Indonesia, Iraq, Mexico, Nigeria, Pakistan, Philippines, Russia, Saudi Arabia, Thailand and Turkey.

Forecast closing date: 30 July 2015.

Source: BBVA Research and IMF

Table 4.2

Macroeconomic Forecasts: Inflation

Annual Average, %	2012	2013	2014	2015	2016
United States	2.1	1.5	1.6	0.5	1.8
Eurozone	2.5	1.4	0.4	0.3	1.3
Germany	2.1	1.6	0.8	0.5	1.4
France	2.2	1.0	0.6	0.3	1.2
Italy	3.3	1.3	0.2	0.2	1.1
Spain	2.4	1.4	-0.2	-0.2	1.3
UK	2.8	2.6	1.5	0.1	1.5
Latin America *	7.8	9.2	12.6	15.7	26.3
Mexico	4.1	3.8	4.0	2.9	3.3
Brazil	5.4	6.2	6.3	8.7	6.1
EAGLES **	5.2	5.2	4.6	4.9	4.3
Turkey	8.9	7.6	8.9	7.5	7.5
Asia Pacific	3.9	4.1	3.4	2.6	3.0
Japan	0.0	1.6	2.7	1.0	1.6
China	2.6	2.6	2.1	1.6	2.0
Asia (exc. China)	4.8	5.2	4.4	3.5	3.9
World	4.5	4.2	3.9	3.9	5.0

* Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.

** Bangladesh, Brazil, China, India, Indonesia, Iraq, Mexico, Nigeria, Pakistan, Philippines, Russia, Saudi Arabia, Thailand and Turkey.

Forecast closing date: 30 July 2015.

Source: BBVA Research and IMF

Table 4.3

Macroeconomic Forecasts: Current Account

Annual Average, % GDP	2012	2013	2014	2015	2016
United States	-2.8	-2.3	-2.9	-3.1	-2.7
Eurozone	1.2	1.8	2.1	2.6	2.5
Germany	6.8	6.5	7.6	7.7	7.2
France	-1.5	-1.4	-0.8	-0.9	-0.8
Italy	-0.5	0.9	1.9	2.1	2.4
Spain	-0.3	1.4	0.8	1.3	1.4
UK	-3.7	-4.5	-5.9	-5.3	-4.7
Latin America *	-1.6	-2.5	-2.8	-3.1	-2.5
Mexico	-1.3	-2.1	-2.1	-2.2	-2.0
Brazil	-2.4	-3.4	-4.5	-3.9	-3.1
EAGLES **	0.9	0.5	0.7	0.5	0.8
Turkey	-6.1	-7.9	-5.7	-5.0	-5.4
Asia Pacific	1.1	1.3	1.8	2.1	1.8
Japan	1.0	0.7	0.5	1.0	0.8
China	2.6	2.0	2.1	2.5	2.8
Asia (exc. China)	-0.1	0.8	1.5	1.7	1.0

* Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.

** Bangladesh, Brazil, China, India, Indonesia, Iraq, Mexico, Nigeria, Pakistan, Philippines, Russia, Saudi Arabia, Thailand and Turkey.

Forecast closing date: 30 July 2015.

Source: BBVA Research and IMF

Table 4.4

Macroeconomic Forecasts: Government Balance

Annual Average, % GDP	2012	2013	2014	2015	2016
United States	-6.8	-4.1	-2.8	-2.8	-2.5
EMU	-3.6	-2.9	-2.4	-2.2	-1.8
Germany	0.1	0.1	0.7	0.3	-0.1
France	-4.8	-4.1	-4.0	-3.6	-3.0
Italy	-3.0	-2.9	-3.0	-3.0	-2.4
Spain	-6.6	-6.3	-5.7	-4.5	-3.0
UK	-8.3	-5.7	-5.7	-4.1	-3.5
Latin America *	-2.4	-2.5	-4.3	-3.8	-3.2
Mexico	-2.6	-2.3	-3.2	0.0	0.0
Brazil	-2.5	-3.1	-6.7	-6.7	-5.8
EAGLES **	-1.3	-2.0	-2.6	-3.4	-2.9
Turkey	-2.1	-1.2	-1.6	0.0	0.0
Asia Pacific	-2.7	-3.0	-2.9	-3.1	-2.9
Japan	-7.6	-9.2	-7.9	-7.0	-6.5
China	-1.1	-1.5	-1.8	-2.5	-2.5
Asia (exc. China)	-3.9	-4.1	-3.7	-3.6	-3.2

* Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.

** Bangladesh, Brazil, China, India, Indonesia, Iraq, Mexico, Nigeria, Pakistan, Philippines, Russia, Saudi Arabia, Thailand and Turkey.

Forecast closing date: 30 July 2015.

Source: BBVA Research and IMF

Table 4.5

Macroeconomic Forecasts: 10-year government bond yield

Annual Average, %	2012	2013	2014	2015	2016
United States	1.8	2.3	2.5	2.3	2.6
Germany	1.6	1.6	1.2	0.6	1.0

Forecast closing date: 30 July 2015.

Source: BBVA Research and IMF

Table 4.6

Macroeconomic Forecasts: Exchange Rates

Annual Average	2012	2013	2014	2015	2016
USD-EUR	0.78	0.75	0.75	0.92	0.91
EUR-USD	1.29	1.33	1.33	1.09	1.10
GBP-USD	1.59	1.56	1.65	1.53	1.65
USD-JPY	79.8	97.5	105.8	123.3	131.7
USD-CNY	6.31	6.20	6.14	6.18	6.22

Forecast closing date: 30 July 2015.

Source: BBVA Research and IMF

Table 4.7

Macroeconomic Forecasts: Official Interest Rates

End of period, %	2012	2013	2014	2015	2016
United States	0.25	0.25	0.25	0.50	1.50
Eurozone	0.75	0.25	0.05	0.05	0.05
China	6.00	6.00	5.60	4.60	4.60

Forecast closing date: 30 July 2015.

Source: BBVA Research and IMF

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