

# Peru Economic Outlook

FOURTH QUARTER 2015 | PERU UNIT



01  
Less than 3.0% growth in 2015 and 2016. GDP forecasts for next year are conditional on El Niño

02  
Local financial markets remain bearish. We still see greater depreciation of Peruvian currency

03  
Inflation will exceed 5% in 1Q16, making it difficult to anchor expectations, so another preventative monetary adjustment cannot be ruled out

04  
Main risks: more pronounced slow-down in China and confidence eroded further. Also a less intense El Niño phenomenon

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**Closing date: 12 November 2015**

# 1 Summary

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**External factors affecting the Peruvian economy continued to deteriorate over recent months,** stemming from doubts about China's capacity to control its transition towards lower growth rates. Along with impending rate hikes by the United States Federal Reserve (Fed), this has triggered a sharper fall in raw material prices, increased perceived risk in the emerging economies, capital flight from these countries and depreciation of their currencies. **Against this backdrop of greater weakness than expected, especially in the emerging economies, we expect world GDP to grow by 3.2% in 2015 (3.4% the previous year) and 3.5% in 2016,** two-tenths of a percentage point below our previous forecast in both cases. The forecast for next year is coherent with: i) a 2.5% expansion of the US economy, similar to this year's growth; ii) an additional slowdown of growth in China, which will grow by more than 6% in 2016, stemming from the orderly rebalancing process among its sources of growth; iii) virtual stagnation in Latin America; iv) a process of very gradual adjustment of interest rates by the Fed, reaching 1% by the end of next year, and v) terms of trade that deteriorate further in 2016.

With these exogenous factors generating pressure from outside, **we forecast 2.5% growth for the Peruvian economy this year (or perhaps slightly more) and around 2.8% next year.** There will be two main factors underpinning growth in 2016. First, increased copper production, which we estimate will increase by 22% against a backdrop of the Toromocho and Constancia projects operating at full capacity for the whole year and two new mining projects – Las Bambas and the Cerro Verde extension – coming into the production stage. Second, greater progress in the construction of major infrastructure works such as Line 2 of the Lima Metro, the gas pipeline in the south of Peru, the Energy Node and the modernisation of the Talara refinery. The forecast also takes into account two factors that will attenuate growth in 2016. On the one hand, general elections in the second quarter of this year will raise uncertainty about expenditure decision-making among households, but even more so among businesses, which will be corrected in the second half of 2016 after the elections. On the other, there will be the normalisation of inventories built up over recent quarters, which will happen gradually going forward in our baseline scenario. Finally, it is important to mention that the **forecast of 2.8% growth for next year factors in the effects of a strong El Niño phenomenon in the summer (according to the local meteorological agency, this is the most likely scenario).**

**On the fiscal side of the accounts,** the government introduced greater flexibility in its structural debt target when drawing up the budget for next year. The target path thus becomes more coherent with the need to continue driving the reform of public administration, expenditure on infrastructure, including education and health. However, it also entails a **deterioration of public finances: on average, the fiscal deficit will be equivalent to 2.8% of GDP over the next four years. Against this backdrop, gross public debt (as a percentage of GDP) will grow in future, albeit within manageable levels.** Due to the magnitude of funding required, the Peruvian state will have to resort to global markets more frequently, which implies increasing the proportion of gross public debt denominated in foreign currency, and thus the state's exposure to exchange rate risk.

**On the currency markets, the Peruvian sol has depreciated almost 12% in the year to date and we expect it to continue to weaken over the coming months.** After a pause in September, when the Fed opted to postpone hiking its interest rates, upside pressure on exchange rates renewed against a background of increased likelihood of the Fed making its move in December, uncertainty around the slowdown in China and commodity prices that have fallen even further. The central bank intervened in an attempt to keep depreciation orderly, but less aggressively than on previous occasions. This is understandable bearing in mind that the USD/PEN exchange rate has lagged behind in comparison with

other regional currencies, eroding competitiveness, and the dollarisation of loans has fallen rapidly so far this year, thus softening the negative impact of depreciation on businesses and families of a currency mismatch. By allowing the exchange rate to slip further, the monetary authorities have avoided additional upside pressure on interest rates in local currency, which would compromise the fragile recovery of private-sector spending. We believe that depreciation pressure will continue in the short term, particularly because many of the global markets (around one third) have yet to take on board the fact that the Fed will probably raise its interest rate in December (new baseline scenario). As a result, we believe that the exchange rate will be just above 3.38 at the close of 2015. The trend will continue its upward path, not just because of the usual uncertainty surrounding the elections, but also because there are structural elements that point in that direction, including the significant deficit on the current account of the balance of payments. Hence we forecast that the exchange rate will be around 3.50 at the end of 2016, which we consider to be closer to the equilibrium point. Despite a fall in its net foreign currency assets over the last three years (due to interventions in the currency markets) the central bank still has the capacity to ensure an orderly transition towards this equilibrium point.

**Things have deteriorated on the price front.** Inflation is currently running at 3.7%, above the target range, as are all the measurements of inflationary pressures and inflation expectations over the next year or two. The deviation in inflation is mainly due to the significant increase that has been seen in the exchange rate over the last few months. We expect prices to rise faster for a period over the coming months, especially as renewed pressure on the local currency to depreciate filters through to prices, coupled with the impending negative impacts of the El Niño phenomenon (expected to be strong), especially on food supplies. Against this backdrop, we expect inflation to reach 4% by the year end and it may even exceed 5% over the summer. In the second half of 2016, when depreciation pressures will be more contained and the impacts of El Niño will dissipate, inflation will start to converge on the target range and will close the year around 3.9%.

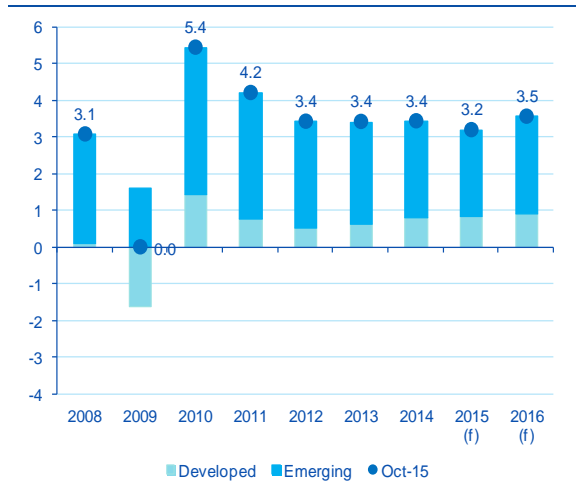
Finally, **the central bank made a surprise 25bp adjustment to its target interest rate in September.** This was suggested by high inflationary expectations, but weak expenditure and employment indicators and the transitory nature of the deteriorating price panorama, on the other hand, suggested acting with caution. Bearing these factors in mind, and the fact that inflation will pick up in the coming months, probably dragging expectations of inflation up with it, **we cannot rule out an additional adjustment to the reference rate in the immediate future, perhaps in December, but more likely during the summer,** when upside pressures on inflation will be clearer.

## 2 Slower global growth in 2015 and a limited improvement in 2016

According to our estimates, global GDP has chalked up four consecutive quarters of growth below the 2010-14 average, mainly due to the ongoing deceleration in the principal emerging economies, in a context in which doubts over the strength of the economic cycle and the financial stability of China have triggered a significant spike in financial tensions and further corrections in commodity prices.

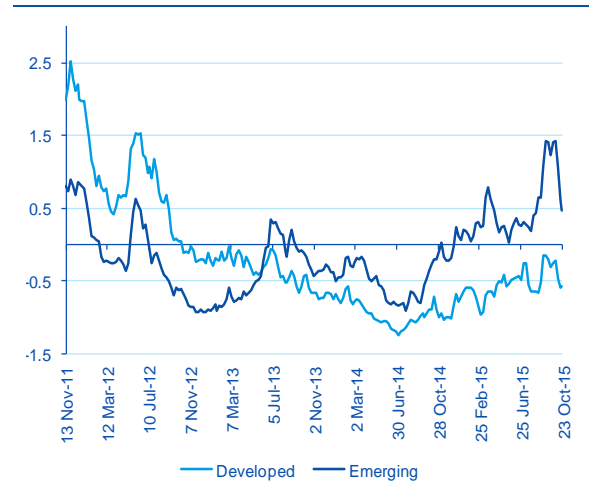
As a result, global GDP should grow at 3.2% in 2015 (0.2% less than we forecast three months ago), the lowest since 2009 (see Figure 2.1), with growth in the emerging markets moderating to barely 4% YoY, compared to average growth in the five previous years of more than 5.5%. The outlook for 2016 is slightly more favourable, with global growth recovering to 3.5% (0.3% below our forecast three months ago), sustained by a better relative performance of both the developed and the emerging economies.

Figure 2.1  
World GDP: annual growth (%)



Source: BBVA Research

Figure 2.2  
BBVA Financial Tensions Index (Index)



Source: BBVA Research and Bloomberg

All in all, the stabilisation of commodity prices at low levels and the sustained rise in financial tensions in the emerging economies — accompanied by heavy capital outflows, sharp currency depreciation and a widening of sovereign spreads — are evidence that the balance of global risks is still to the downside. Even though monetary policy in the developed countries could mitigate the impact of a scenario of slower growth, the scope it has to kick-start the economic cycle is reduced, taking into account the low levels of interest rates and the high volume of liquidity already in existence. The combination of a financial shock in China, that takes the annual growth of that economy well below 6%, with an even slower recovery of the developed economies block than has been observed to date, is without a doubt a significant risk scenario, both because of its degree of plausibility (limited, but not extreme) and its severity, given its potential impact on the world economy generally and on Latin America in particular (see Box 1 regarding the specific impact on Latin America).

## USA: downward growth revision due to the deterioration in the external environment

An overview of the principal economic areas shows a notable stabilisation of economic growth in the US at lower rates than in other recovery episodes. Private consumption remains key to the dynamics of economic recovery, although it will probably not be sufficient to wholly offset the drops in both exports (owing to the dollar's appreciation and the weakness of the emerging economies) and investment in the energy sector. GDP growth should thus be 2.5% in 2015 and 2016 as well.

The risks for the US economy in a more unfavourable global environment are influencing the Fed response and when the initial rate hike takes place, which ought to be in December. Whatever happens, the pace of rate increases is expected to be very gradual, probably reaching levels at end-2016 below those that we expected a quarter ago, and no higher than 1%.

## China: upward revision of GDP growth expected for 2015, although this will not dispel the uncertainties over the pace of future economic deceleration

China's cyclical position is obviously one of the principal variables to watch at a global level. The sharp stock market correction in August served as a warning of the risks posed by a financial shock in the country of a severity to compromise the growth in domestic spending. The magnitude of the capital outflows and the spike in financial volatility resulted in the introduction of a considerable battery of monetary policy measures directed at easing the deterioration in liquidity and its potential impact on the financing model of the corporate sector, which is heavily leveraged. The unexpected official announcement of change regarding the daily yuan exchange rate and the progressive cuts in reference rates fall into the same context, and are also characterised by a progressive deceleration of economic activity, which has taken GDP growth below 7% YoY in the third quarter.

It seems that the authorities will continue to employ monetary stimulus measures (further interest-rate cuts have not been ruled out) and to exploit the central government's scope to use fiscal policy to ensure that economic growth does not fall below 6% YoY. Our forecasts suggest GDP growth of 6.9% for 2015 and 6.2% for 2016.

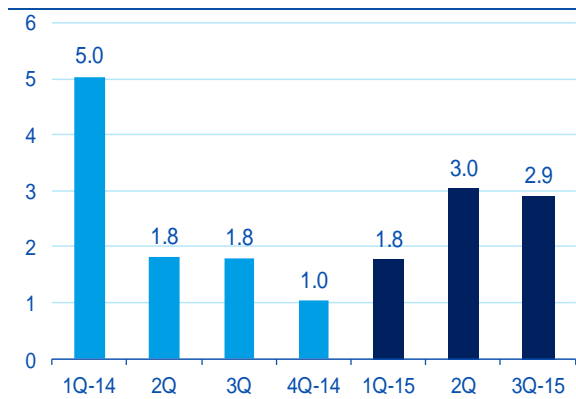
## Eurozone: resilient domestic demand with the ECB ready to avoid further declines in inflation

In the Eurozone, the economic recovery continues although the pace has not intensified as we anticipated some months ago. The pace of Eurozone GDP growth could increase to 1.8% in 2016 (only 10bp less than we expected last quarter) due to the upturn in Italy and France. The accentuation of the risks to the downside to inflation forecasts, largely due to cheaper imported goods, together with the recent appreciation of the euro, appears to be pushing the ECB towards adopting new stimulus measures in the short term, as it has suggested.

### 3 Peru: Growth remains below potential in 2015 and 2016

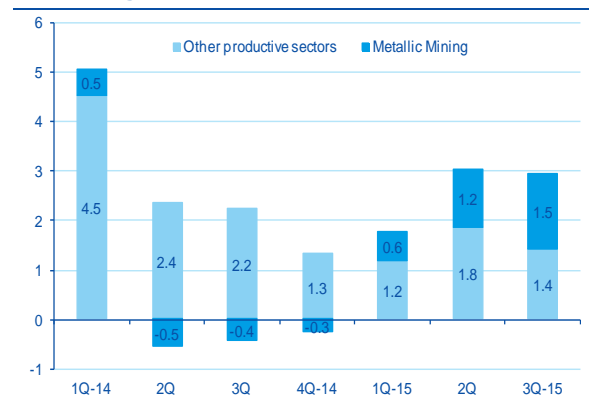
The economy has shown a gradual recovery this year, driven by mining, but... Economic growth has increased from 1.0% in 4Q14, to flatten off at around 3.0% between 2Q15 and 3Q15 (see Figure 3.1). The main driver behind this acceleration has been greater metal mining output, which grew 16% YoY in the third quarter, its best performance since mid-2002, thus accounting for half of the total growth (see Figure 3.2).

Figure 3.1  
Quarterly GDP  
(YoY % var.)



Source: BCRP, INEI and BBVA Research

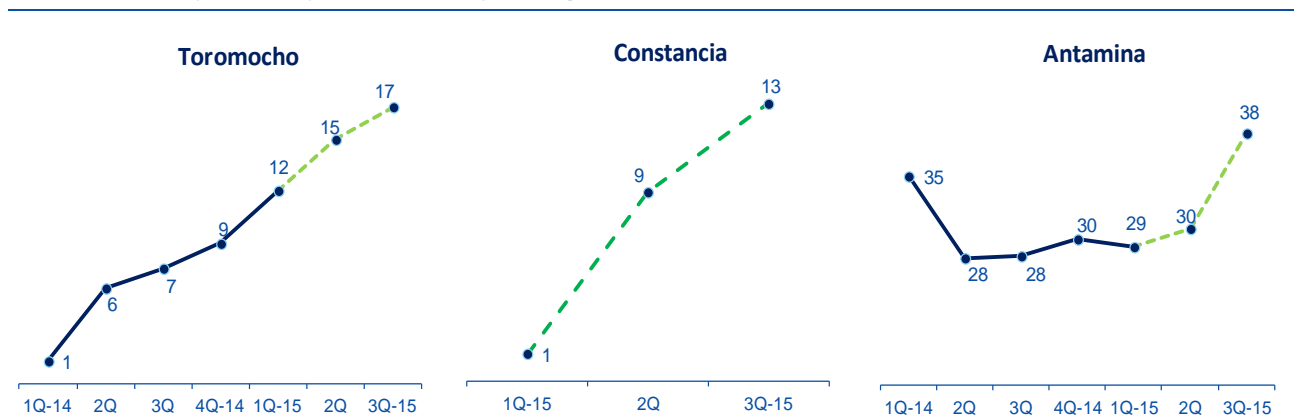
Figure 3.2  
Contribution to growth by productive sectors  
(Percentage points)



Source: INEI, MINEM, BCRP and BBVA Research

The spike in the metal mining sector in turn, is mainly due to increased copper production as new projects have started commercial production, such as Constancia, which attained maximum operating capacity a mere four months after starting operations (December 2014), and Toromocho, which reached production figures in line with the estimated target for the year (182,000mtn) in the second quarter. Moreover, Antamina, the largest copper mining project in Peru, has recovered after a dip last year, producing an average of 38,000mtn a month in the third quarter, way above the 28,000mtn recorded in the same quarter of the previous year (see Figure 3.3).

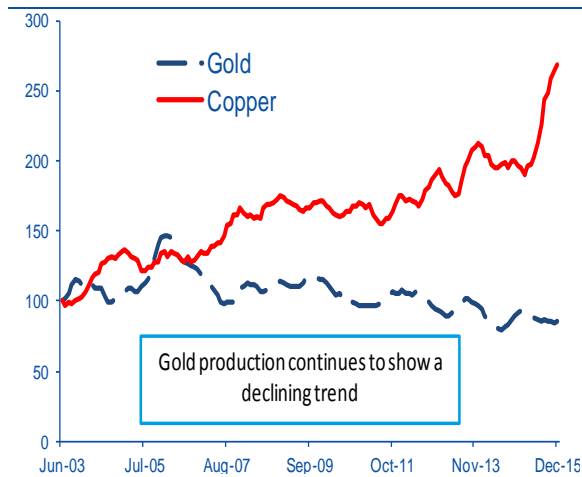
Figure 3.3  
Copper output by company (MTN, monthly average)



Source: MINEM, BBVA Research

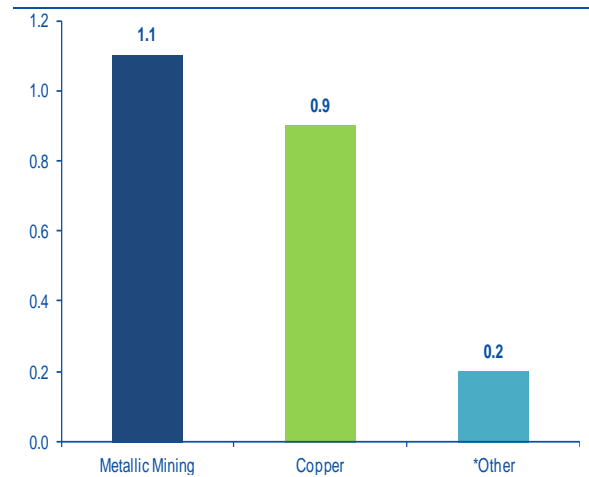
We believe that this positive trend in metal mining will continue in Q4. Copper, in particular, will continue to show strong growth, with a 23% increase in 2015, thus accounting for almost one percentage point of the GDP growth rate over the year (see Figure 3.5).

Figure 3.4  
Metal output, moving 6-month average (MTN, 6-month moving average, index base June 03 = 100)



Source: MINEM, BCRP and BBVA Research

Figure 3.5  
Metal mining contribution to GDP 2015 (Percentage points)

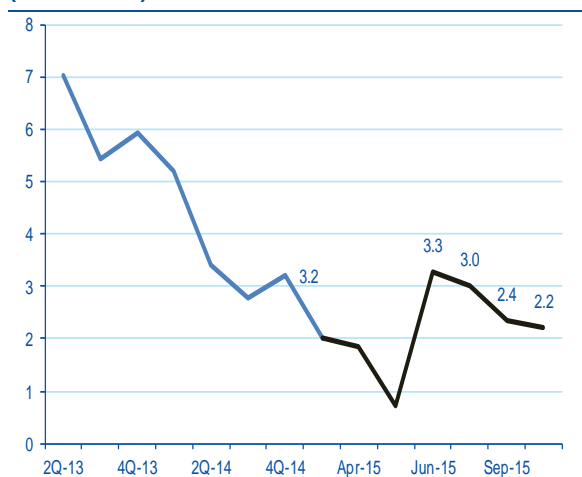


\*Considers other metals.  
Source: INEI, MINEM and BBVA Research

... the non-extractive sectors as a whole (non-primary GDP) continue to perform poorly against a backdrop of weak domestic demand

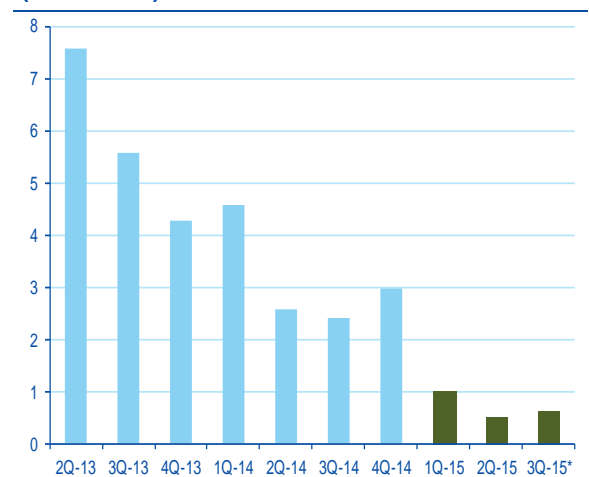
After a transitory spike in June (3.3% YoY), non-GDP growth (which groups together activities more linked with domestic demand, such as non-primary Manufacturing, Construction, Trade, Services and Electricity) has tailed off, growing 2.5% in Q3 (see Figure 3.6).

Figure 3.6  
Non-primary GDP (YoY % var.)



Source: INEI, BCRP and BBVA Research

Figure 3.7  
Domestic demand ex stocks (YoY % var.)

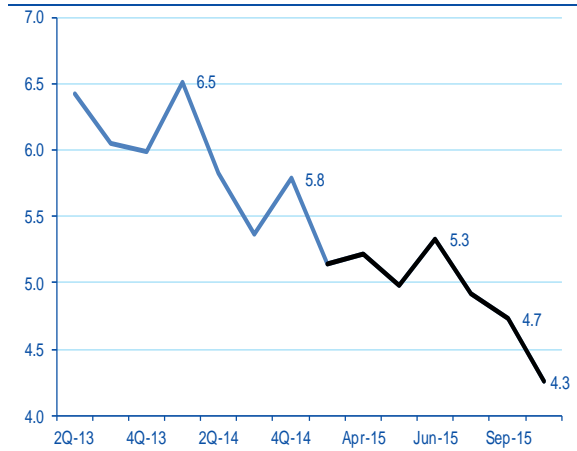


\*Forecast.  
Source: INEI, BCRP and BBVA Research

On the upside, the Services sector is one of the fastest growing non-primary GDP sectors, thus providing support for the economy (see Figure 3.8). The trend however, shows a gradual moderation over the year, especially in financial and business services (see Figure 3.9).

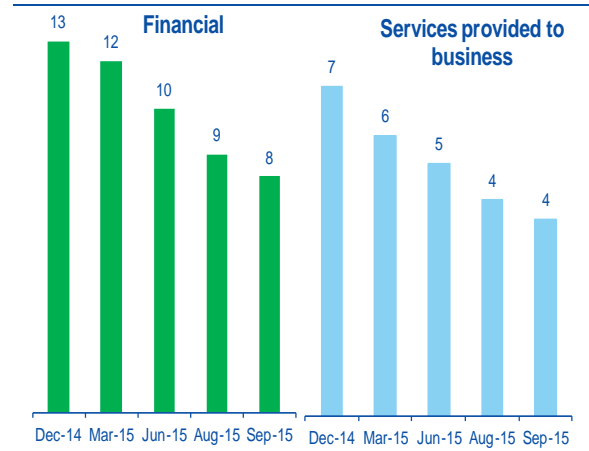


**Figure 3.8**  
**Services sector**  
**(YoY % var.)**



Source: INEI, BCRP and BBVA Research

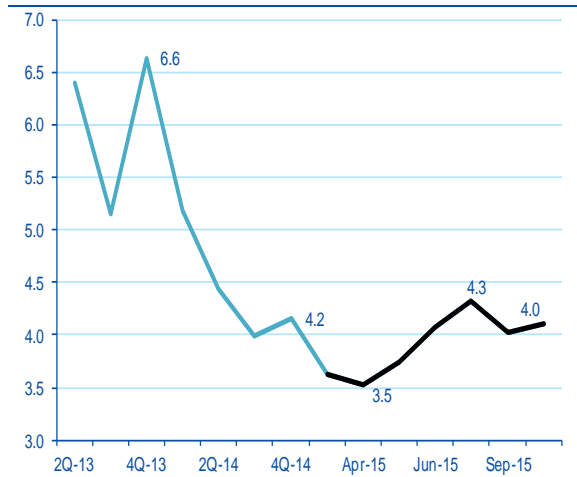
**Figure 3.9**  
**Components of the Services sector\***  
**(YoY % var.)**



\*Financial services account for around 9% of the sector. Business services, in turn, represent 11%. Source: INEI, BCRP and BBVA Research

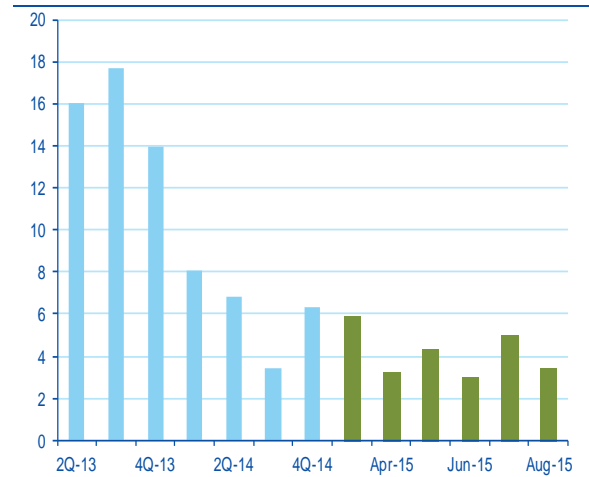
Trade is another non-primary sector that has supported growth. It has even shown improvement in recent months (see Figure 3.10). Within Trade, wholesale trade has shown the best performance. Domestic retail trade, on the other hand, seems to have stabilised somewhat below 4% YoY (see Figure 3.11), lower than for Q1 (6%).

**Figure 3.10**  
**Trade sector**  
**(YoY % var.)**



Source: INEI, BCRP and BBVA Research

**Figure 3.11**  
**Domestic retail trade\***  
**(YoY % var.)**



\*Comprises department store sales and supermarkets, improvement in household goods and domestic appliances, books, newspapers and other products, and chemists and drug stores. Source: PRODUCE and BBVA Research

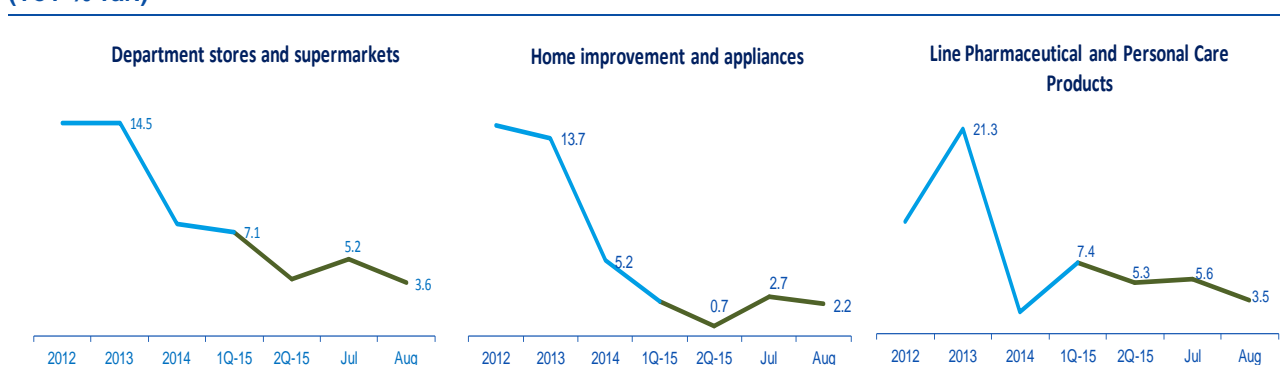
The poorer performance of domestic retail trade is explained by weaker sales shown by most of its components (see Figure 3.12):

- Department store and supermarket sales continued to show a downward trend over the year: from 7% YoY growth in Q1 to just half of that in the last three months. Lower numbers of new shops opening has

probably had an impact on this slowing growth. Fewer new shops opened between January and August (8 compared with 27 last year).

- Sales of household improvement goods and household appliances show no signs of recovery either, despite more shops opening in this sector than last year (28 in January-August compared with 17 last year).
- Sales of Pharmaceuticals and Personal Care products<sup>1</sup> remain similar to the last two years. Within this group, sales of pharmaceutical products continue to show strong growth (9%), but sales of personal care products have fallen (3%) over the last three months.

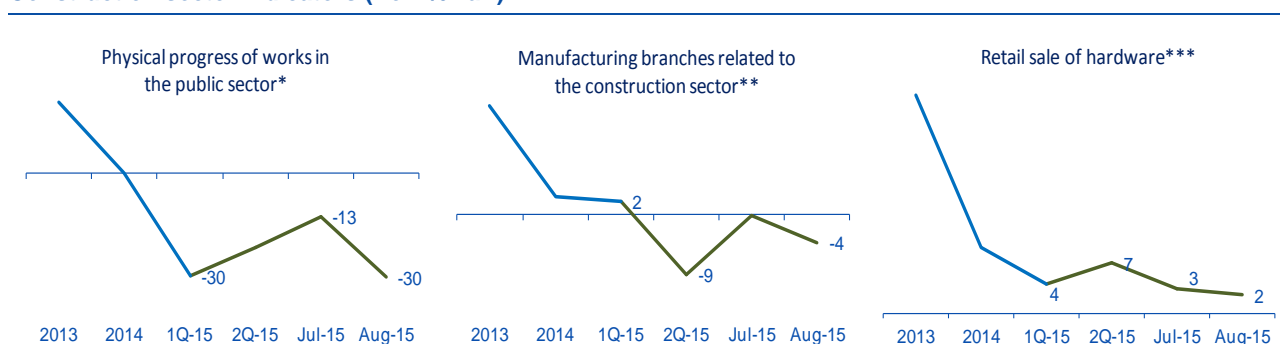
Figure 3.12  
**Components of domestic retail trade (YoY % var.)\***



\* Share within domestic retail trade: department stores and supermarkets (56%), home improvements and household appliances (22%), drug stores and chemists (20%) and books and newspapers (2%).  
Source: PRODUCE and BBVA Research

Unlike Services and Trade, which continue to grow, Construction and non-primary Manufacturing have curbed the growth rate of non-primary GDP, showing negative figures generally. In the case of Construction, falls are linked to: i) slow implementation of public works (physical progress of works); ii) slower real estate development, and iii) possible lower spending on self-construction in a context of a cooling labour market. One indicator that would suggest this latter situation is the slowdown in retail sales of hardware articles, which grew at a rate of 4% in the first three months of the year, but which are currently growing at only half that rate (see Figure 3.13).

Figure 3.13  
**Construction sector indicators (YoY % var.)**



\*Represents 20% of the construction sector.  
\*\*Comprised of the following branches: manufacture of cement, lime and plaster, manufacture of articles of concrete, cement, basic iron and steel industries and the manufacture of metal products for structural use.  
\*\*\*Represents approximately 15% of the domestic retail trade sector.  
Source: INEI, BCRP, PRODUCE and BBVA Research

1: Sales of pharmaceutical products account for 73% of this group.

As for non-primary Manufacturing, the negative results have been linked to falls in the production of consumer goods (due to cyclical weakness and lower external demand) and intermediate goods (due to lower investment). In the case of consumer goods, there has been a slowdown in the different branches of the textile sector<sup>2</sup>, which shrunk by 13% YoY between January and August, due to weaker overseas demand from the countries of the region<sup>3</sup>. In the case of intermediate goods, the striking factor is the slowdown in branches linked to the construction sector, which recorded a 13% fall between January and August<sup>4</sup>.

Figure 3.14  
**Non-primary manufacturing: Consumer goods production (YoY % var, 6-m moving avg.)**



Source: INEI and BBVA Research

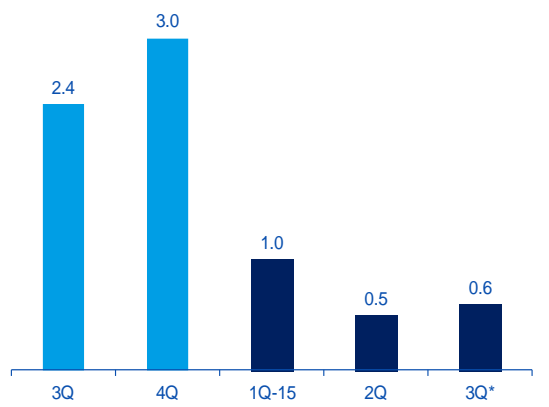
Figure 3.15  
**Non-primary manufacturing: Intermediate goods production (YoY % var, 6-m moving avg.)**



Source: INEI and BBVA Research

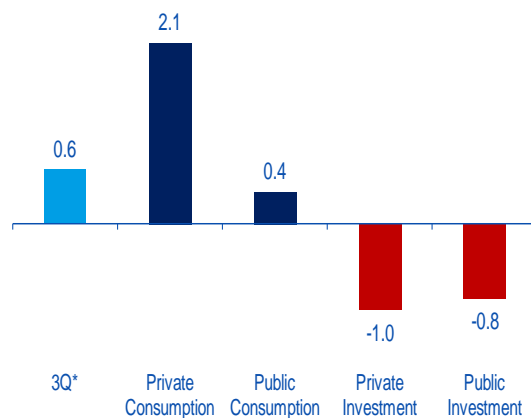
Non-primary GDP generally reflects the weakness of domestic demand (see Figure 3.16). Growth of this indicator, ex stocks, has been approximately 0.6% in the last two quarters (3.0% in 4Q2014). In terms of contributions, we estimate that private and public-sector investment have each reduced the growth of domestic demand, ex stocks, by around one percentage point, which has been offset by private consumption (see Figure 3.17).

Figure 3.16  
**Domestic demand ex stocks (YoY % var.)**



\*Estimated  
Source: BCRP, INEI and BBVA Research

Figure 3.17  
**Contribution to growth of demand ex stocks 3Q2015 (Percentage points)\***

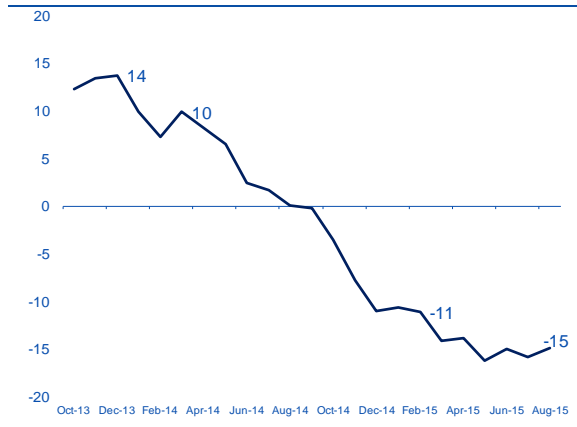


\*Estimated  
Source: BCRP, INEI and BBVA Research

2: Comprises the manufacture of articles made from textiles, manufacture of garments of clothing and other textile products.  
3: Sales to countries of South America account for approximately 30% of the total. There was a 47% fall in sales to this block of countries in January-September.  
4: Manufacture of cement, lime and plaster, basic iron and steel industries and manufacture of metal products for structural use.

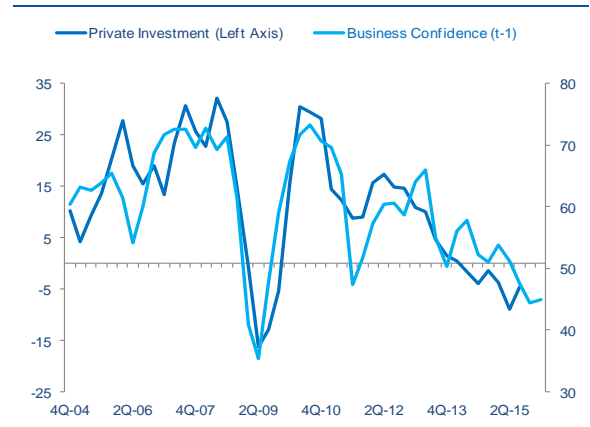
With respect to private-sector spending, we estimate that investment spending has been cut back by 4.5% in Q3, falling for six consecutive quarters. These negative figures reflect lower investment in mining (it fell 12% YoY in January-August, see Figure 3.18) and quite a cautious tone on the business sector side due to weak economic growth, volatility in external markets and political uncertainty. In this context, business confidence remains at its lowest point since 2009, in the area of pessimism, suggesting that the private sector capital accumulation rate will remain weak, possibly until the first quarter of next year (see Figure 3.19).

Figure 3.18  
**Mining investment, accumulated balance over the last twelve months (YoY % var.)**



Source: MINEM and BBVA Research

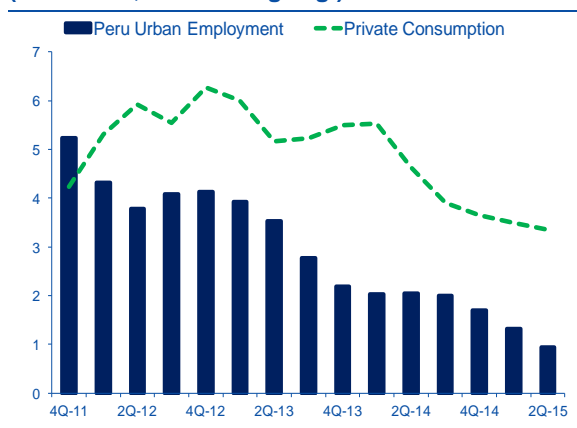
Figure 3.19  
**Private investment and business confidence (YoY % var. and percentage points)**



Source: INEI and BBVA Research

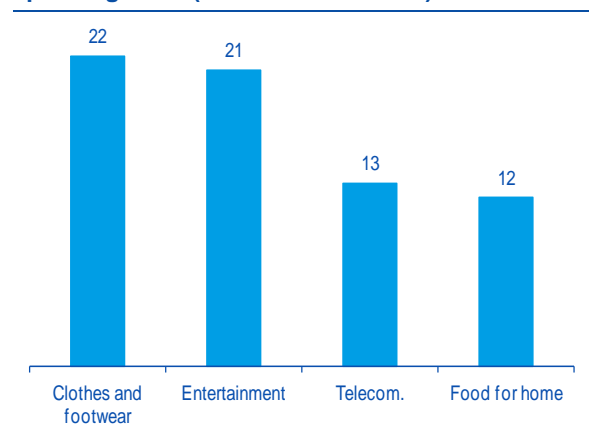
A gradual slowdown can be observed in household consumer spending (see Graph 3.20). This has happened against a backdrop of a cooling labour market and a slowdown in the creation of good jobs (see labour market section for further details). Household purchasing power has been affected by this scenario, leading families to cut back some of their expenditure (see Figure 3.21).

Figure 3.20  
**Private consumption and urban employment (YoY % var, 6-m moving avg.)**



Source: INEI and BBVA Research

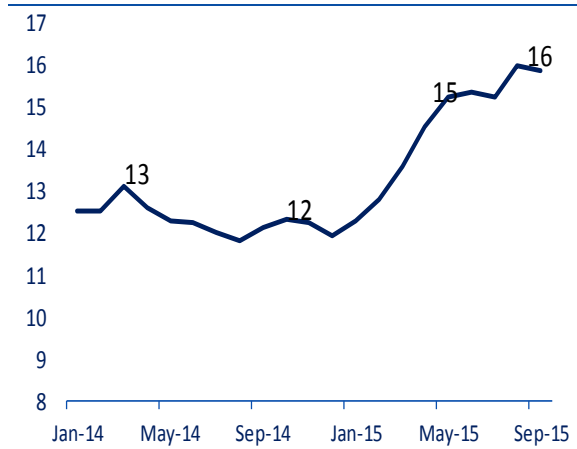
Figure 3.21  
**Expenditure category most affected by household spending cuts\* (% of all households)**



\*Multiple choice.  
Source: APOYO consultoría, Ipsos Peru.

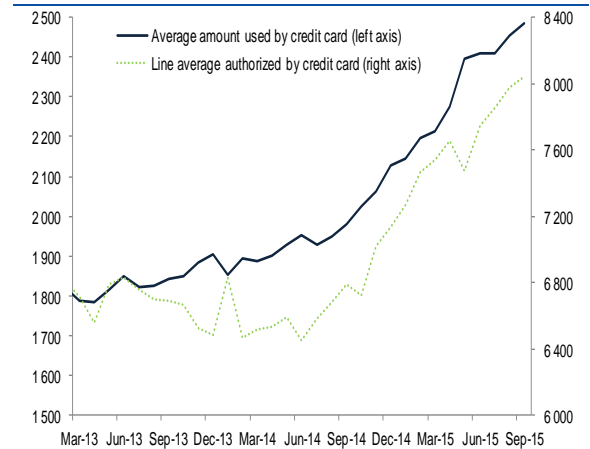
Despite a major slowdown in the labour market and the continuing deterioration in job conditions, the reduction in household spending has not been very pronounced. One of the main elements that have provided support for this is increased borrowing from the banks. Consumer loans have sustained growth rates of over 12% since early 2014, accelerating to almost 16% in Q3 (see Figure 3.22). Greater demand for consumer loans is linked to a more intensive use of credit cards (see Figure 3.23).

Figure 3.22  
**Consumer loans\***  
(YoY % var.)



\*Financial System.  
Source: SBS and BBVA Research.

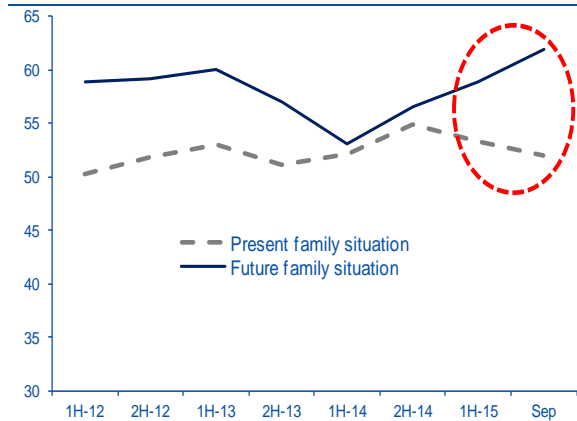
Figure 3.23  
**Credit card use for funding consumption**  
(Bank business in PEN)



Source: Asbanc and BBVA Research

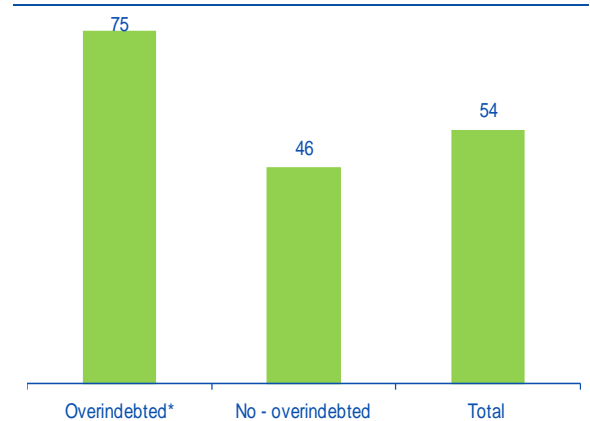
It is important to point out that households are borrowing more due to the perception that the slowdown in the economy and jobs will be transitory (see Figure 3.24). But the situation of households is unlikely to recover rapidly in an environment of continuing timid economic activity 2016, which will continue to inhibit the creation of quality jobs. Moreover, several surveys show that a large percentage of households with debts say they have problems paying their expenses (see Figure 3.25), so it is unlikely that the growth in consumer lending will continue at current levels for very long (demand will be corrected, with the consequent adjustment to expenditure, or supply-side credit conditions will be squeezed further in this environment of higher risk).

Figure 3.24  
**INDICCA: household economic situation**  
(Points)



Source: APOYO Consultoría.

Figure 3.25  
**Households with difficulties paying their expenses by level of borrowing (% of households of each group)**

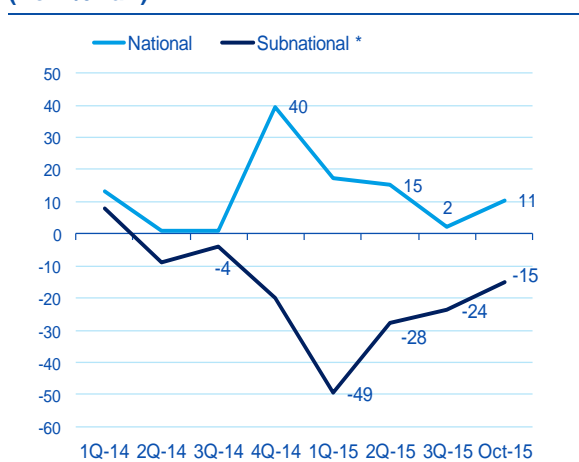


\*Families that spend more than 30% of their income on paying debts are considered over-indebted.  
Source: APOYO Consultoría, Ipsos Peru.

Government spending, in turn, is not taking off, mainly due to the fact that public investment by subnational governments continues to shrink (see Figure 3.26). For the final quarter of the year, however, we expect an improvement in the implementation of regional and local government capital spending. This is due to a low baseline level of comparison against the same quarter of the previous year (in fact, investment made by regional governments in October grew by around 30% driven by this factor) and the greater experience acquired by the subnational authorities that took office at the beginning of the year.

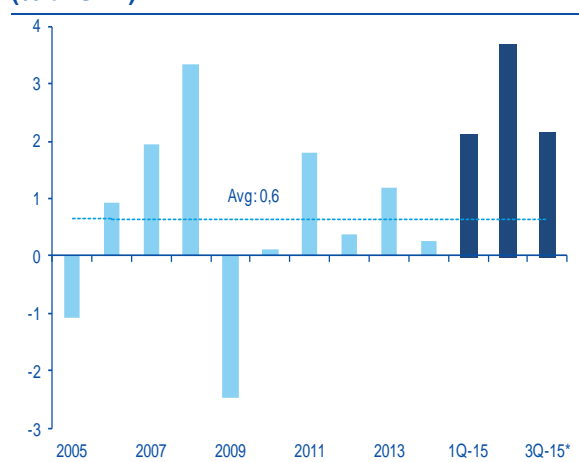
Finally, we believe that stocks will continue to accumulate in Q3, accounting for around three percentage points of GDP (see Figure 3.27), above the average for the last 10 years (0.6% of GDP). In other words, around 70% of the expansion of GDP in Q3 will be explained by the greater build-up of stocks. This and the stocks accumulated in the two previous quarters will probably curb output growth as the situation returns to normal (demand will be met by stocks, rather than with greater production).

Figure 3.26  
**National and subnational government spending (YoY % var.)**



\*Considers spending by regional and local governments.  
Source: INEI and BBVA Research

Figure 3.27  
**Variation in stocks (% of GDP)**

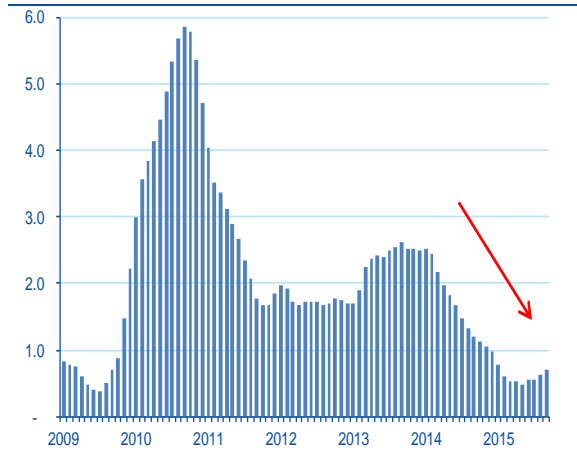


\*Estimated.  
Source: BCRP and BBVA Research

### The labour market cools more significantly

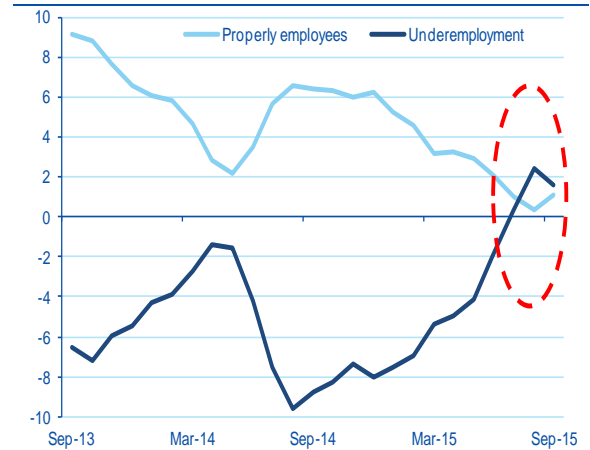
In a context of weak domestic demand, especially investment, the labour market has continued to cool. Hence the economically active population in work (EAP in work) in Metropolitan Lima has been falling since early 2014 (see Figure 3.28), especially in smaller companies. Employment in large companies (with over 51 employees), accounting for around 30% of the EAP in work, continues to show positive growth rates. Although the unemployment rate (around 6%) is not a problem in the Peruvian labour market, recent trends show that fewer quality (stable) jobs are being created and that sub-contracting has grown (see Figure 3.29).

Figure 3.28  
**EAP in work in Metropolitan Lima**  
(YoY % var, moving 12-m average)



Source: INEI and BBVA Research

Figure 3.29  
**EAP adequately employed and sub-employed**  
(YoY % var, moving 3-m average)

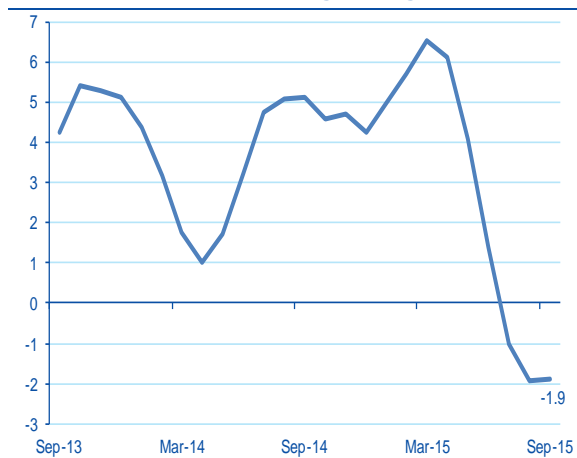


Source: MINTRA and BBVA Research

The creation of more inadequate jobs is related to the reduction in real earned income, which has a negative impact on the margin that households have for spending. There has been a significant slowdown in income in Metropolitan Lima since the beginning of 2015; reaching negative growth rates (see Figure 3.30). Income has remained relatively constant in small enterprises (less than 10 employees), which account for 60% of the EAP in work. But there has been a fall in earned income in large and medium-sized companies, which, together with the fact that employment in this category remains dynamic, suggests that hiring cheap labour is on the increase.

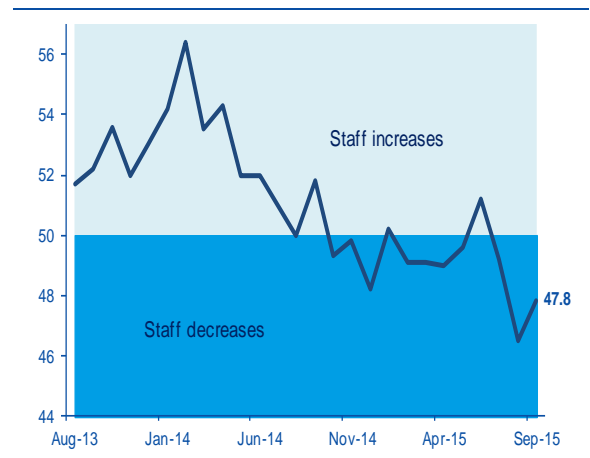
The dynamics of the labour market will not improve in the coming months. In fact, expectations of hiring labour over the next three months are down (see Figure 3.31); which would continue to push down already falling levels of employment, income, household spending and the payment of debts.

Figure 3.30  
**Real earned income in Metropolitan Lima**  
(YoY % var, 3-month moving average)



Source: INEI and BBVA Research

Figure 3.31  
**Hiring expectations**  
(Points)



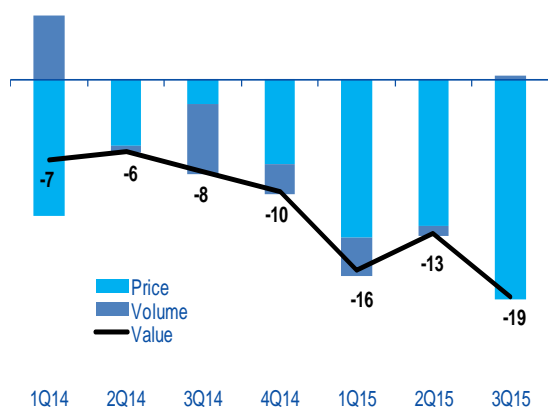
Source: BCRP and BBVA Research

### Outside, the value of exports fell faster in the third quarter due to lower export prices

The value of total exports fell 19% in Q3 (see Figure 3.32), the largest fall since mid-2009. The main factor influencing this fall was the sharp drop in export prices (19%), particularly for metals and oil. Altogether, these two kinds of goods account for more than 60% of the value of Peruvian exports and their international prices have fallen significantly in the last year, around 20% in the case of minerals and around 50% in the case of oil.

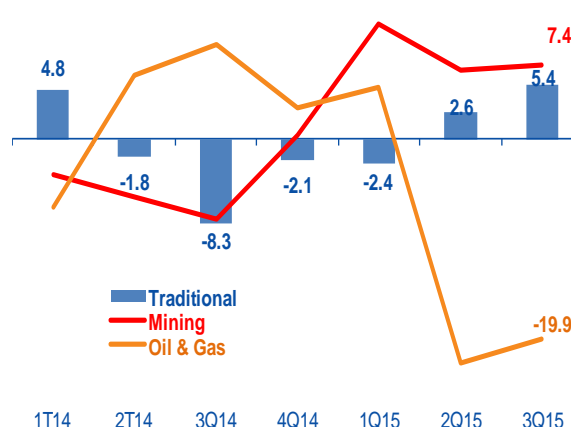
Traditional products (extractive sectors, such as oil and mining for instance) were the hardest hit by the fall in prices, shrinking by 21% in Q3. Greater export volumes limited the fall (see Figure 3.33) and greater mining exports were important in this case, especially copper which increased by 17% due to larger shipments by new companies such as Hudbay (in the Constancia project) and Chinalco (in the Toromocho project)<sup>5</sup>. Larger mining export volumes contrasted with the fall in oil and natural gas exports, affected by lower local production in response to lower crude oil prices - which, in turn, affected company margins - temporary shut-downs due to one-off technical problems and social unrest. The positive trend of copper exports is expected to continue for the final quarter, along with more stable prices (see Box 1: Commodity prices: copper, gold and oil for further details).

Figure 3.32  
**Total exports: volume and price (YoY % var.)**



Source: BCRP and BBVA Research

Figure 3.33  
**Traditional volumes by main sectors (YoY % var.)**



Source: BCRP and BBVA Research

In the case of non-traditional exports (of greater aggregate value), a nominal fall of almost 13% has been seen in Q3. Unlike traditional exports, the fall in exports (close to 10%) was greater. The fall in sales to the rest of Latin America was striking (20%), due to the slowdown in economic growth of Peru's main trading partners in the region (which explains around 40% of total demand for non-traditional products). Exports to USA and Europe, on the other hand, show a moderate fall (0.1% and 2.4% respectively). The sharpest drop in sales was seen among goods aimed at Latin America (see Figure 3.34), such as textiles for example (down 28%), iron and steel (13%) and chemicals (12%)<sup>6</sup>. Growth in terms of competitiveness also continued to slow against Peru's regional peers, due to lower depreciation in the effective exchange rates for these exports and because of the strong depreciation of the currencies of the other countries of the area (see Figure 3.35). Thus, real year-on-year depreciation in Q3 in Peru was almost non-existent, less than in Chile (1.3%), Mexico (16.0%), Brazil (31.3%) and Colombia (39.1%). As a result, the more challenging

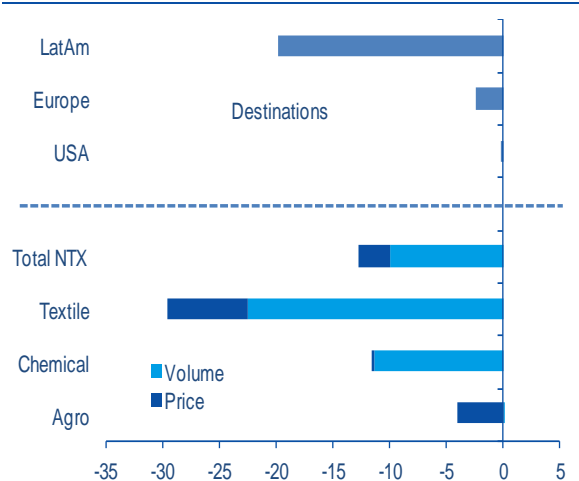
5: Copper exports would have grown 5.1% without these two companies (and mining volumes 4.4%).

6: The sectors most exposed to LatAm are chemicals, iron and steel and textiles, where around 80%, 50% and 45% respectively of their total demand comes from the region.



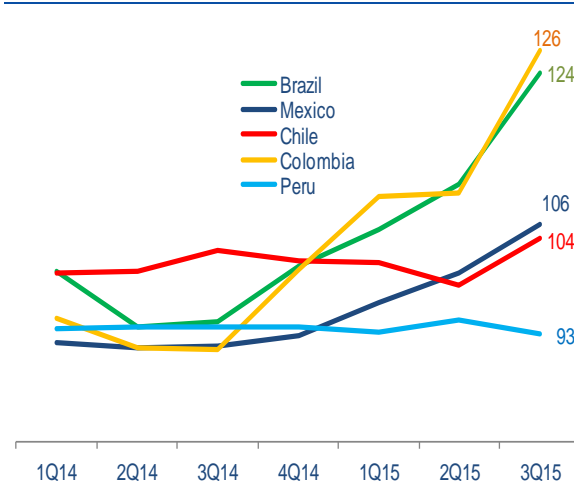
international environment affected businesses, and the number of companies that export USD1mn-10mn fell by 2.3% (these are companies that account for 64% of total non-traditional exports); the first negative result since early 2000.

Figure 3.34  
**Non-Traditional Exports by destinations and sectors**  
(YoY % var., 3Q2015)



Source: BCRP, SUNAT and BBVA Research

Figure 3.35  
**Real multilateral exchange rate**  
(Baseline: 2009=100)



Source: Bloomberg and BBVA Research

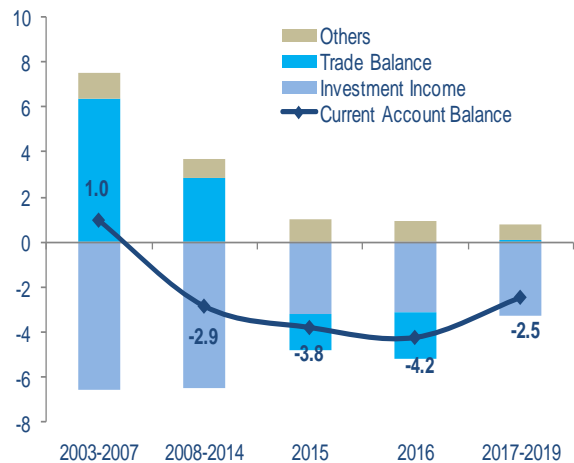
The value of imports fell by 11.2% in Q3, due especially to the effect of lower prices (down 10.5%). Purchases were down for inputs (20.3%) and capital goods (6.9%), while the purchase of consumer goods increased by 2.3%, above all because of higher demand for food (7.0%), cosmetics (7.7%) and furniture and household goods (11.1%). However, the trade deficit increased (both against the previous quarter and year-on-year) to around USD950mn (2.0% of GDP) due to the greater fall in the value of exports.

We expect the deficit on the current account (as a percentage of GDP) to be slightly lower this year than in 2014 (4%), at around 3.8%. This forecast considers that the larger trade deficit that we estimate for this year (in USD, we estimate that it will increase more than two-fold against the previous year) will be offset by a significant fall in profits repatriated by multinationals operating in Peru. It is worth pointing out that, as a large proportion of these profits are reinvested in Peru (an average of 48% over the last five years), the lower deficit from returns on factors of production will also have a negative effect on expected Foreign Direct Investment (FDI) flows, which are a healthy source of funding as they are not a debt obligation for the economy.

For 2016, we predict that the deficit on the current account will exceed 4.0% of GDP, affected by the fall in fish exports because of the El Niño phenomenon (a more detailed analysis of what we expect from this climate anomaly can be found in the next section), as well as the continued fall in prices and lower demand from the countries of the region. All in all, along with relatively constant financial flows (or slightly lower due to lower levels of investment), we expect international reserves to fall. For 2017-19, however, we forecast a slight fall in the deficit on the current account, from 2.9% to 2.0% of GDP (see Figure 3.36), mainly reflecting higher primary tradeable output (mainly mining) and not necessarily a fall in domestic demand. On the other hand, private long-term sources of funding (FDI and long-term loans) are expected to cover most of the falling overseas deficit, which would be a strength in the new international environment as short-term capital funding needs (the most volatile to changes in the international context) would be relatively limited (see Figure 3.37). More specifically, although lower FDI flows are expected during this period because of reduced

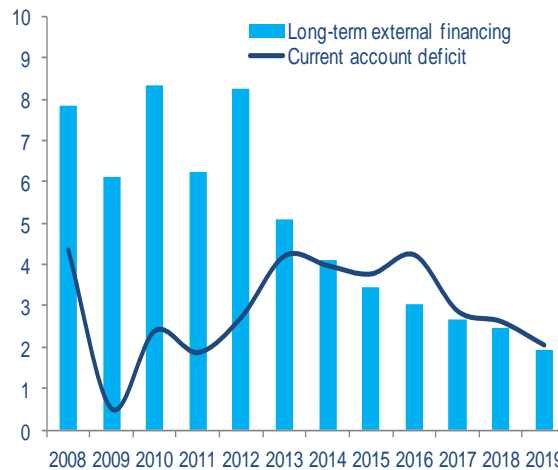
investment in mining associated with the end of the cycle of high prices, investment in infrastructure would offer opportunities for an influx of capital of this kind, driving a diversification of funding sources.

Figure 3.36  
**Balance on the current account**  
(% of GDP)



Source: BCRP and BBVA Research

Figure 3.37  
**Deficit on the current account and long-term private external funding\*** (% of GDP)

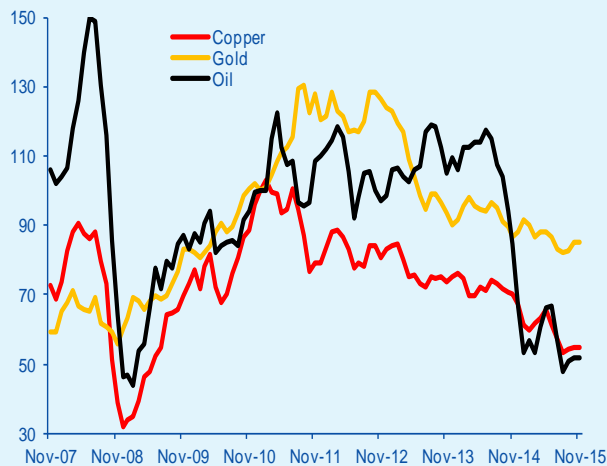


\*Sum of Foreign Direct Investment and long term loans.  
Source: BCRP and BBVA Research

Box 1. Commodity prices: copper, gold and oil

The world economy continues to grow but at a slower rate, especially in the emerging countries. Long-term uncertainty about China as the world's leading customer for raw materials remains in this context. Exchange rates continue to depreciate in most countries, because of a deterioration in the fundamentals (internal and external) and because the Fed is starting to raise interest rates. All of this puts downside pressure on commodity prices (the uncertainty around China has a negative impact on the price of metals and oil, and a stronger USD moves in reverse correlation with the price of commodities). Thus, there have been strong accumulated falls in the average prices of copper, oil and gold in the year to date (Figure R.1.1).

Figure R.1.1  
International price of copper, gold and oil  
(Index January 2011 =100)



Source: Bloomberg and BBVA Research

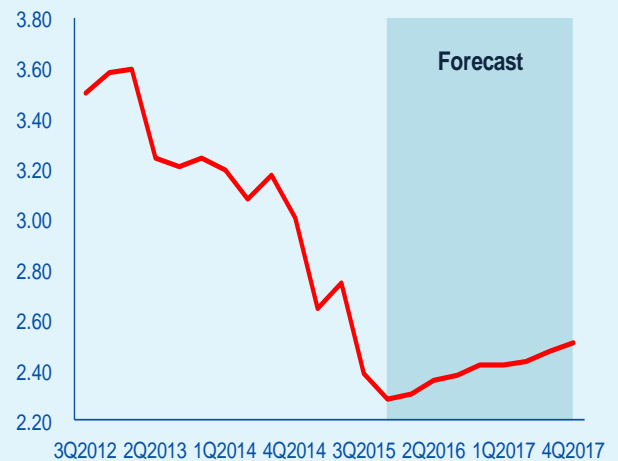
Copper

The price of copper is currently at its lowest since the international financial crisis of 2008-09 (see Figure R.1.1). This fall is based on uncertainty about China (slowdown of manufacturing output, devaluation of the yuan and a falling stock market), and it is driven by the announcement that the United States is about to normalise monetary policy and also by the stronger dollar. Hence, in Q4 to date, the price was around USD2.35/lb, showing a clear downward trend. We believe that this trend will continue through the first half of

2016, in line with the fact that most of the factors described above will also persist.

Further forward, we forecast a gradual recovery in copper prices, supported by reduced supply (especially smaller, more costly deposits), due to cutbacks in production, employment and investment plans. The most important spending cuts are those announced by Glencore (in Africa) and Chile (Abra and Collahuasi mining operations) which, according to COCHILCO, would produce a total of almost 390,000 tonnes by the end of 2016, and these cuts could spread on the back of possible new production cutbacks. On the other hand, the general appreciation of the dollar, lower prospects of growth in China and weak global demand will keep copper prices volatile. Against this backdrop, the price will converge on the long-term price (around USD2.70/lb after 2019 Figure R.1.2).

Figure R.1.2  
International copper prices  
(USD/lb)



Source: Bloomberg and BBVA Research

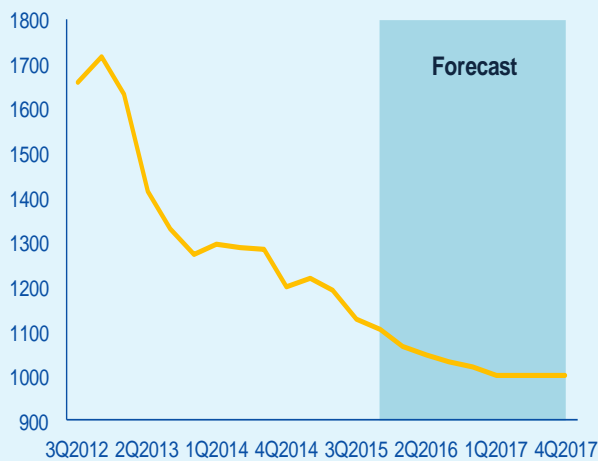
Gold

In the month to date, the price of gold was around USD1,106/oz., having fallen around 8%. This is the result of a clear downward trend in prices (from USD1,249/oz. in January to USD1,106/oz. in November), driven basically by factors including lower demand from China, uncertainty around the Fed's monetary correction and low worldwide

inflation rates. We expect this trend to continue and that the average value of gold in 2015 will be USD1,160/oz..

Although there are some factors that partially offset this situation, such as uncertainty in Europe, everything suggests that the downward trend will continue, in line with the persistence of the factors mentioned above. In a scenario of this kind, we expect the price to converge towards USD1,000/oz. against a backdrop of a stronger dollar and less need for a safe refuge in gold (Figure R.1.3).

Figure R.1.3  
**International price of gold (USD/troy ounce)**



Source: Bloomberg and BBVA Research

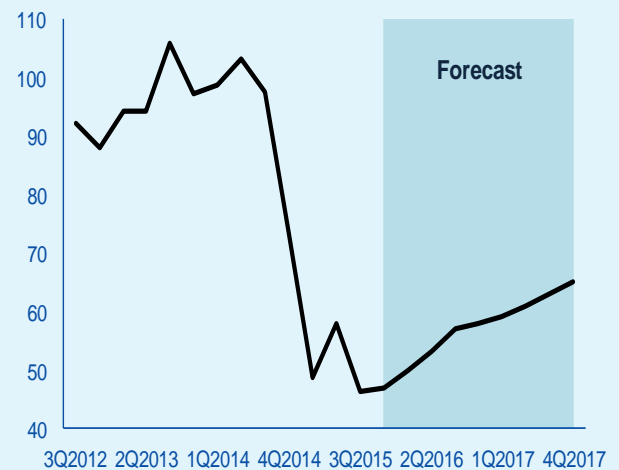
## Oil

Oil is currently around USD45/bbl, showing an accumulated fall of 25%. These lower prices are related to lower world demand, especially from China, against a backdrop of concern about financial volatility and doubts about its growth. On the supply side, factors such as persistent stocks, the resilience shown by shale oil producers in USA, OPEC's policy of maintaining its production quotas and the expectation of increased exports from Iran and Iraq have accentuated the fall in prices. We believe that the current levels will be maintained until the end of the year, giving an average price of USD50/bbl.

Going forward, however, we estimate that the price of oil will recover gradually and will converge

on the long-term price (lower than forecast in July). The recovery will be driven by an improvement in global demand and lower supply against a backdrop of low prices, triggering a better balance between supply and demand. Furthermore, geo-political tensions in the Middle East will have an effect on crude oil prices. Hence, a progressive recovery will start towards the long-term price of USD65/bbl in 2017 (Figure R.1.4).

Figure R.1.4  
**International oil prices (USD/barrel)**



Source: Bloomberg and BBVA Research

## In this context, we expect growth this year to be around 2.5%. In a complex scenario for 2016, our forecast is conditional mainly on the intensity of the El Niño phenomenon

By Q3 of this year, year-to-date GDP growth was 2.7%. The data available to October in turn (such as electricity), and our forecasts for the mining sector for the final part of the year, suggest that growth will remain between 2.5% and 3% in Q4. Hence, GDP growth in 2015 will be 2.5% or perhaps slightly more. The scenario for 2016 is complex and we are considering the following exogenous factors:

- On the external side, our forecasts factor in:
  - (i) A growth forecast for China of 6.2% (and between 5.8% and 6.0% for 2017-19). In general terms, the moderation in Chinese growth and the rebalancing of its sources of growth on the demand side are expected to be orderly.
  - (ii) Terms of trade (on average) that will fall even further next year, but they will remain relatively stable from 2017. The larger adjustment expected in the terms of trade for 2016, against the forecast of three months ago, will have a negative impact of around 0.3 percentage points on GDP for the year. It must be pointed out that, with the estimated figures for 2016, the terms of trade will show their fifth consecutive fall, contracting by a total of 23.6%<sup>7</sup>.
  - (iii) More gradual adjustment of the Fed rate, against a backdrop in which we have revised down our growth forecasts for the United States. Uncertainty continues to surround the monetary normalisation process in the US, however, suggesting episodes of volatility in local financial markets which, should they persist, could have a real impact.

This international environment would affect all the countries of South America. According to recent IMF forecasts, Latin America will grow on average a mere 0.3% in 2015-16. But they also estimate that Peru will remain one of the fastest-growing economies, expanding on average 2.8%, more than is expected in other countries such as Colombia (2.6%), Mexico (2.6%), Chile (2.4%), Uruguay (2.4%) and Brazil (-2.0%).

- Internally, we assume that:
  - (i) There will be a strong El Niño phenomenon (ENP), which will have economic impacts on sensitive sectors such as fishing and agriculture. This assumption represents a major change against the forecasts we made three months ago, when we assumed that the ENP would be moderate to strong, with a limited economic impact
  - (ii) Business confidence halts its decline and remains at approximately similar levels. After the elections, this indicator will probably improve gradually
  - (iii) The adjustment to stocks will be gradual
  - (iv) Mining production will remain buoyant in 2016 and 2017, particularly for copper
  - (v) Infrastructure works will have a greater impact over the next two years

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7: For a fall of around 10% in terms of trade, GDP is estimated to fall by around one percentage point. For a detailed discussion about the effects of the terms of trade on small, open economies, see Mendoza (1995): "The terms of trade, the real exchange rate and economic fluctuations".

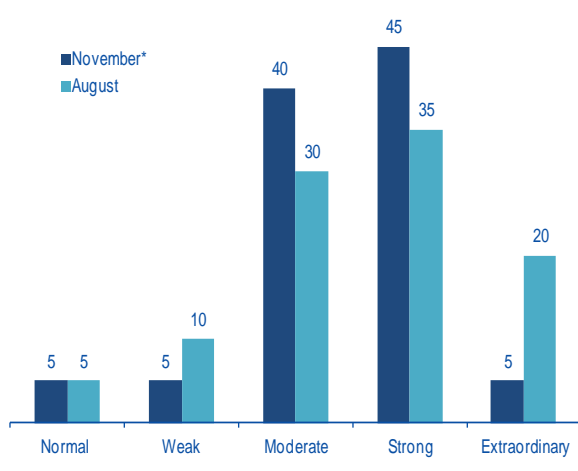
## According to ENFEN, El Niño is most likely to be strong in the summer of 2016

The key element in the set of local variables that defines our baseline scenario is the ENP. As we have already said, our growth forecast for 2016 is based on the assumption of a strong ENP, taking into account the reports of the official local body (the multi-sector committee: ENFEN) that monitors this phenomenon over the Peruvian coast.

At the end of August of this year, ENFEN published its first report on the chances of the ENP occurring and the magnitude that El Niño could have in the summer of 2016. The analysis reached two conclusions: i) it is almost certain that there will be an ENP in the summer, and ii) it is most likely to be a strong one<sup>8</sup>. The next official communiqué, from the first week in November, once again stressed the fact that the most likely scenario (50%) for the summer of 2016 remained an ENP of a similar magnitude to 1982-83 and 1997-98 (Figure 3.38).

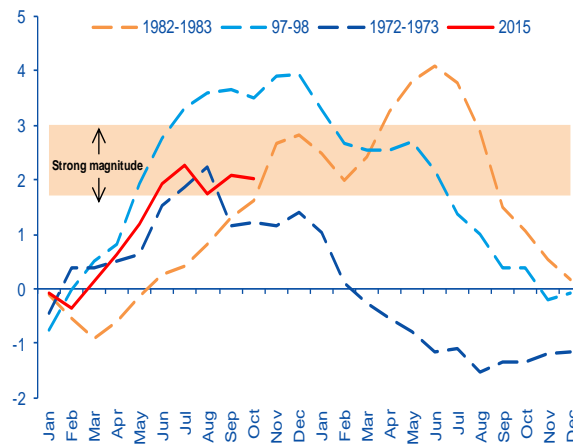
In this context, and based on previous episodes, the most likely scenario is that there will be greater negative impacts on economic activity than we have considered in our forecasts to date (our previous macroeconomic forecasts considered an ENP of a more moderate magnitude in autumn 2015/summer 2016<sup>9</sup>; similar to the El Niño of 1972-73, albeit without such an early weakening as on that occasion (see Figure 3.39). Hence, mainly as a result of El Niño, we estimate that the downside impact on GDP will be around one per cent in 2016 (see Box 2: Effects of the El Niño phenomenon on the Peruvian economy for further details).

Figure 3.38  
**Magnitude of El Niño on the Peruvian coast during the summer of 2016 (Probability)**



\*From the report of 4 November  
Source: ENFEN and BBVA Research

Figure 3.39  
**Anomalies in Peruvian sea temperature (Deviation from historic mean in °C)**



Source: NOAA and BBVA Research

## Consequently, we cut back our GDP growth forecast for 2016 (from 3.8% that we forecast in July) to 2.8%

The main foundations of this forecast remain in place: i) increased copper production, which we estimate will grow by 22% because Toromocho and Constancia will be at full capacity throughout the year and because the Las Bambas project and the Cerro Verde extension will come into production, and ii) progress in the construction of major infrastructure projects, which will not suffer any major setbacks stemming from climate anomalies as they are located in areas of the country that will not be affected by the heavier rains. There will

8: ENFEN, Technical Note N° 02-2015, 28 August 2015. This can be found at the following web address <https://www.dhn.mil.pe/archivos/oceanografia/otros/02-2015.pdf>.

9: See Peru Economic Outlook Third Quarter 2015 (in Spanish) for further details, available at <https://www.bbva.com/public-compuesta/situacion-peru-tercer-trimestre-2015/>.

also be a certain improvement in the global economy. The 2.8% growth forecast for 2016 is conditional on these elements, which offset the negative impacts of the ENP and the exceptional increase in uncertainty during the electoral processes (which affect spending decisions). In 2017, with the recovery of primary activities (Fishing & Agriculture and Livestock), the continuing drive provided by the latter two elements (greater copper production and the construction of major infrastructure projects) and a certain distension of political noise, we expect growth to be slightly above 4.5%.

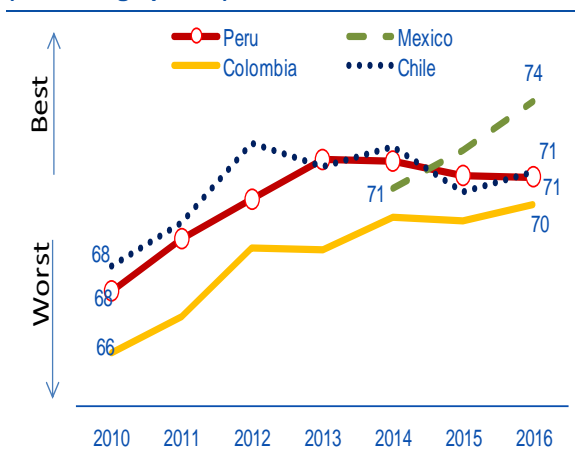
### Greater advances in competitiveness remain pending in order to ensure faster growth in the medium term

In recent editions of this report, we have insisted that measures need to be implemented that will drive productivity and competitiveness in the country, in order to return to a path of faster growth. Higher sustained growth is a necessary condition for permanently reducing poverty.

Unfortunately, despite the efforts made, the Peruvian economy has gradually lost competitiveness in recent years, as shown by some international rankings.

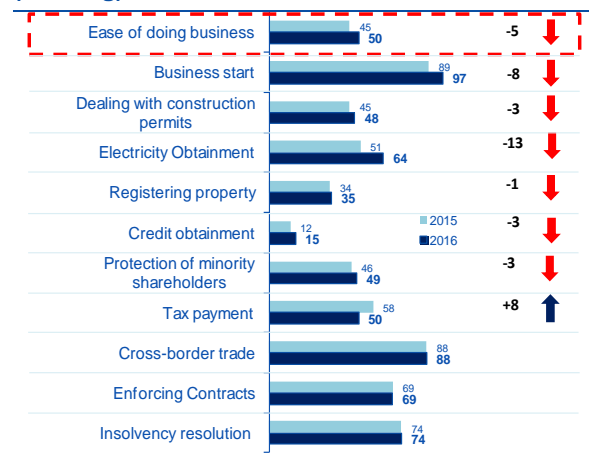
“Doing Business 2015” (indicator of the ease of doing business) reports a five-place fall in Peru’s ranking against the previous year (see Figure 3.40), to below Mexico and Chile. The factors that triggered the fall (see Figure 3.41) included the increased cost of staff for professional consulting on opening a business, higher cost of obtaining a new electricity connection (which is not obtained fast enough) and an increase in the cost of import paperwork. Nonetheless, there have been slight improvements in other indicators, such as the recovery rate for creditors and employees of an insolvent company, and a reduction in the time taken in preparing, filing and paying taxes.

Figure 3.40  
**Ease of doing business: distance to frontier (Percentage points)**



Source: Doing Business and BBVA Research

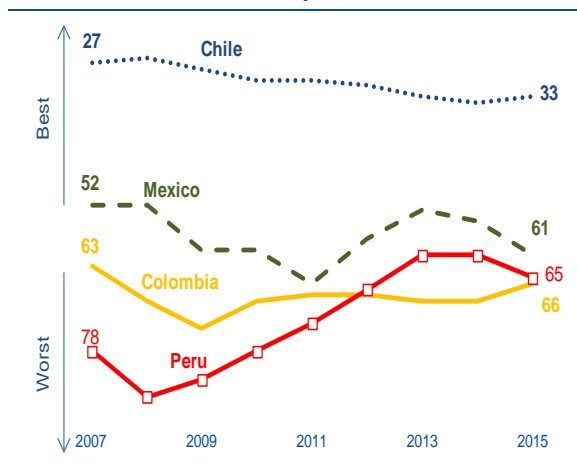
Figure 3.41  
**Ease of doing business and its categories (Ranking)**



Source: Doing Business and BBVA Research

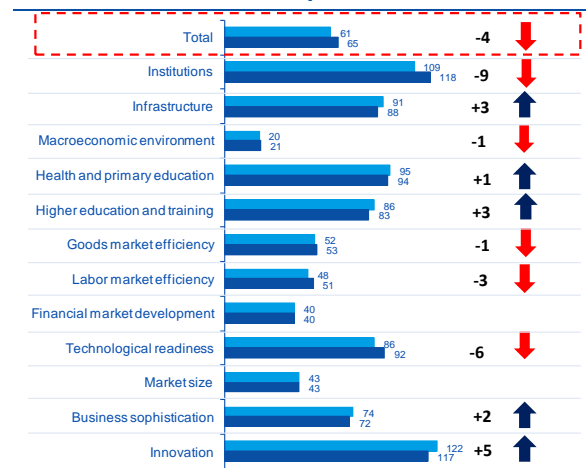
The Global Competitiveness Index measured by the World Economic Forum 2014-15, on the other hand, shows a decline of four places in Peru’s international ranking (see Figure 3.42), putting it in 65th place, below Chile and even Mexico. The factors that have triggered this fall (see Figure 3.43) are Institutions (down nine places), Technological preparation (down six) and Efficiency in the labour market (down three). Other variables included in the ranking that require greater drive in Peru concern Innovation (117th place), Primary and secondary education (94th place) and Infrastructure (88th place). Advances in competitiveness to ensure a faster growth rate obviously remain pending.

Figure 3.42  
Points on the Global Competitiveness Index



Source: WEF and BBVA Research

Figure 3.43  
Points on the Global Competitiveness Index



Source: WEF and BBVA Research

### Fiscal leeway has been reduced

In April, the government announced its intention to cut back the structural fiscal deficit going forward (a result that, unlike the fiscal deficit seen, corrects transitory elements in economic activity and raw material prices that affect tax receipts). In our opinion (see Peru Economic Outlook: Third Quarter), the path that was set as a target was inconsistent with the permanent fall in tax revenues generated by cutting income tax rates at the beginning of the year.

In August of this year, the government revised up the target path for structural fiscal deficit in the coming years by one percentage point of GDP as part of the budgetary process for 2016. It is now seeking a greater deficit than announced in April, and on average there will be a structural deficit of 2.5% per year through to 2018. According to our estimates, this scenario will imply that the fiscal deficit will be 2.8% per year, on average, over the same period. As a result, and conditional on the use of assets, the gross public debt to GDP ratio (currently 20%) will rise to around 27% of GDP by 2018.

The new goal announced is more coherent with the medium-term fiscal targets (including reform of the public administration and greater spending on infrastructure). But it also entails a deterioration of public finances. Against this backdrop, due to the magnitude of funding required, the government will have to go mainly to the global markets; in fact, it is already doing so. To date this year, the government has placed around USD3bn in global bonds for refinancing its funding needs for next year<sup>10</sup> (including EUR11bn in bonds denominated in euros<sup>11</sup>). As a consequence, the proportion of the debt denominated in foreign currency will increase, thus increasing the exposure of public finances to exchange rate risk.

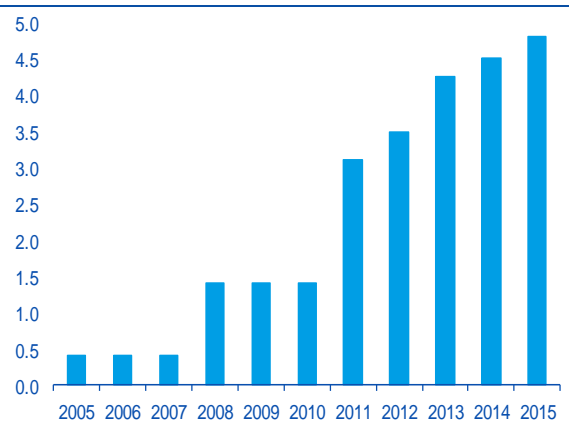
It must be pointed out that one scenario that has been discussed recently is the use of government assets, and especially the Fiscal Stabilisation Fund (FSF) resources that are currently at USD9.2bn<sup>12</sup>. There are two conditions under which FEF funds can be used. The first occurs in extreme situations, such as a “national emergency” or “an international crisis” that could affect the economy. The second is when a fall is expected in annual tax revenues of more than 0.3% of GDP, compared with the average for the last three years<sup>13</sup>. In this case, up to 40% of FEF resources can be used. Considering our tax revenue forecast, the second option would

10 According to a communiqué from the Ministry of Economy, the amount allocated for placing global bonds will help to pay for servicing the public debt next year, which would be fully covered  
 11 The transaction generated a demand of four times the amount offered and the lowest coupon rate on record (2.75%).  
 12 The FSF would not increase, due to the fiscal deficits expected for the coming years. On the contrary, it would fall if some of its resources were used  
 13 From the ordinary source of resources



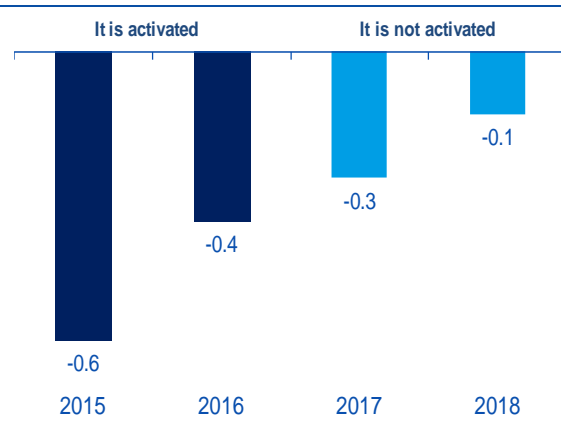
be activated this year and next year, so these resources would help to finance spending needs for 2016 and 2017 (see Figure 3.45).

Figure 3.44  
Fiscal Stabilisation Fund\* (% of GDP)



\*It does not consider the use of assets  
Source: MEF and BBVA Research

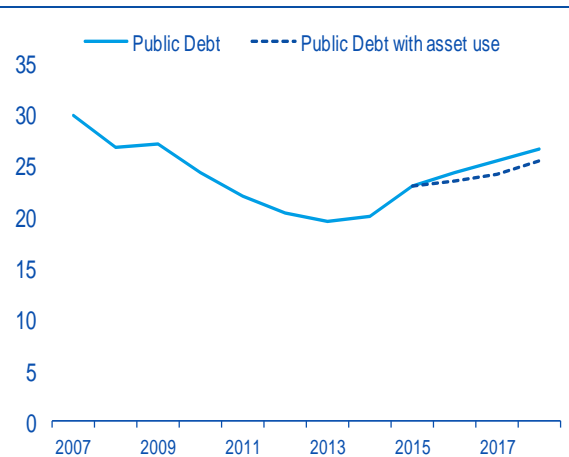
Figure 3.45  
Second condition for using FSF resources\*



\*The difference in the tax revenues from ordinary source of resources as a percentage of GDP and the average of the last three years  
Source: BBVA Research

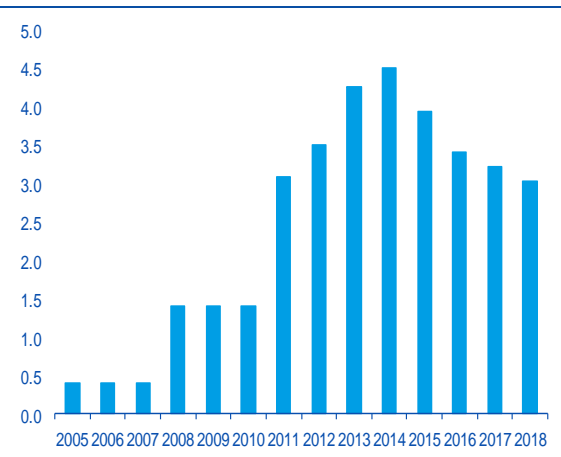
The official forecasts published in the last Multi-year Macroeconomic Framework (MMF) show that the debt to GDP ratio remains constant at 25% towards 2018. This would imply that public assets are expected to be used. Our debt forecasts do not consider the use of assets, putting the debt to GDP ratio around 27% in 2018. Should the use of FSF resources (nearly one percentage point for 2016 and half a point in 2017) be considered, public debt (would approach MMF) would stabilise at 25% by 2018 (see Figure 3.46). In this new scenario, the balance on the FSF would fall by approximately USD3bn, to around 3.0% of GDP by 2018 (see Figure 3.47).

Figure 3.46  
Public debt (% of GDP)



Source: BCRP, MEF and BBVA Research

Figure 3.47  
Fiscal Stabilisation Fund (% of GDP)



Source: MEF and BBVA Research

In summary, the leeway for covering medium-term fiscal targets (including reform of the public administration and greater expenditure on infrastructure) has been reduced without deteriorating public finances. What should be done in this new scenario? If the government were to opt for a fiscal consolidation that avoided a deterioration of public finances, it would have to choose whether to ring-fence areas of public spending such as Remunerations, Investment or Social Programmes. The new administration will probably have to face these issues when it takes office at the beginning of next year.

## Box 2. Effect of the El Niño phenomenon on the Peruvian economy

### Main sectors affected

The productive activities most affected by the climatological anomalies of an ENP that will probably now be stronger are, of course, those located on the northern coast of Peru and those most exposed to changes in temperature and rainfall. These are mainly extractive industries.

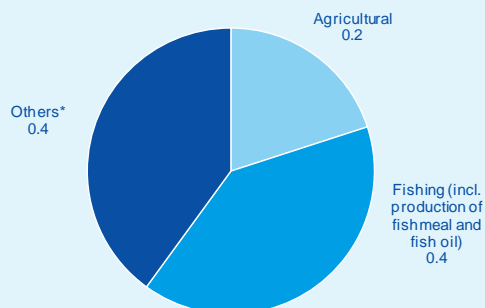
**Fishing.** Warmer seas cause anchovies to migrate south (to colder waters). They go deeper and, therefore, are more difficult to catch, or they come closer inshore, out of reach of the larger fishing vessels. Our revised forecasts now include only one fishing season in 2016, from November to the following January. Hence, we expect some 700,000 tonnes of anchovy to be landed in 2016, well below the previous forecast of almost 4mtn, which was based on a more moderate ENP (when we believed that there would be two fishing seasons). This is the equivalent to a downward adjustment of four-tenths of a percentage point in GDP after considering industrial processing for making fish meal and fish oil (Figure R.2.1). The anchovy catch that we now expect for next year also implies an 80% fall against our 2015 forecast, which would be proportionately similar to the ENP of 1997-98.

**Agriculture and Livestock.** Warmer weather and heavier rain will have a negative effect on some crops along the Peruvian coast (for instance avocado pear, mango, mandarin, lemon, banana, asparagus, quinoa, grapes, sugar cane and cotton), particularly if the sowing season coincides with the most critical part of the ENP. Heavy rains could cause landslides and damage to irrigation infrastructure, compounding the negative impacts on the sector. Other crops, however, could benefit from higher air temperatures and humidity. The abundance of rains could also create more pasture and have a positive impact on the livestock sector. Thus it is difficult to quantify the net impact that a stronger El Niño (strong, rather than somewhat more moderate) would have on the agriculture and livestock sector. As a reference, agriculture and livestock production fell

by around 10% between 1982 and 1983, when the El Niño was extraordinarily intense, but production remained practically stable between 1997 and 1998, when there was an ENP of a similar magnitude. In the latter case, however, it is important to point out that there was a supplementary farming campaign during the year, with the support of MINAGRI (Min. of Agriculture), providing seeds, farm machinery and fertilisers. Taking all the above into account, in our new baseline scenario, which incorporates a less intense ENP than those of 1982-83 and 1997-98, the fall in output from this sector will be limited. The adjustment to agricultural and livestock production involved would be the equivalent of reducing GDP by two percentage points (Figure R.2.1).

**Hydrocarbons.** Oil production could also be affected by a strong ENP. This is more likely in the offshore lots along the north coast of Peru (which account for just over a third of total oil production), as rough waters would make transport more complicated and would thus constrain oil extraction from those wells. There is also a possibility of landslides in the highland jungle regions, along the route of the north Peruvian oil pipeline, which would affect the transport of crude oil. The revision we have made to our forecasts includes adjustments, albeit modest ones, to GDP growth due to possible disruption to transport and, as a result, to oil production.

Figure R.2.1

**GDP in 2016: economic sectors affected by a strong ENP (PP of GDP)**

\*Includes: Trade, Services, Construction, Other Industry, Hydrocarbons and Electricity

Source: BBVA Research

Other sectors, apart from the extraction of natural resources, will also be (Figure R.2.2) affected by a stronger ENP to one degree or another:

**Construction.** Real estate activity, including people building their own houses (for example) would be constrained in the north of the country by heavy rains during the early months of 2016. Progress on major infrastructure projects however, would not suffer major setbacks because they are being built in areas of the country that will not be exposed to the rains to any great extent. Slower progress in the building work might only be seen in the case of the Talara refinery modernisation works, but in annual terms we believe that the impact will be limited because most eventual delays would be offset in the second half of the year. Finally, it is important to mention the fact that in the second half of the year, after the ENP has dissipated, work would start on refurbishing and reconstructing roads, schools, housing and irrigation and domestic water supply infrastructure affected by the ENP. This would partially offset the fall in activity that will be seen in the first half of the year. The positive impact after the ENP has dissipated will depend on two factors: first, adequate co-ordination between national and sub-national governments in order to implement expenditure quickly and, second, that roads are rebuilt rapidly; otherwise it will be impossible to send cement,

machinery and plant to the north to carry out whatever work needs to be done.

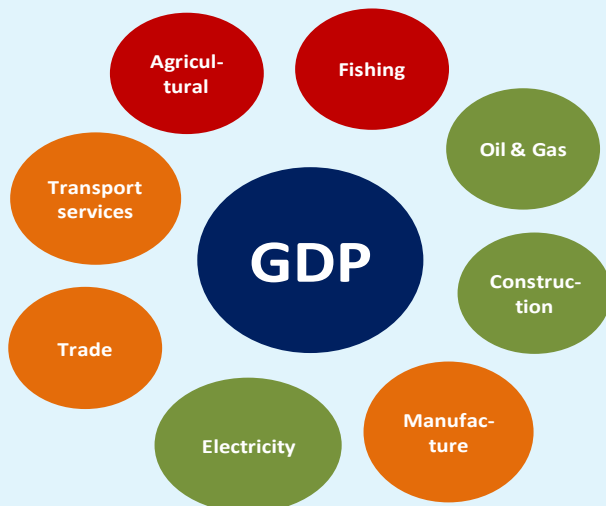
**Industry.** Apart from the anchovy-processing industry to make fish meal and fish oil, the revised forecasts take into consideration that there will be several manufacturing branches that will suffer from a strong ENP. First of all, the industries devoted to refining sugar and oil. Abundant rains will probably affect sugar cane crops and the operations of the Talara refinery. Apart from the latter, there is also a more restricted supply of crude oil from the lots located on the continental shelf and in the jungle via the oil pipeline for refining. Secondly, the textile industry, due to higher air temperatures on the coast and possibly a continuation of the heat wave beyond the summer. Third, the manufacturing branches that cover demand for intermediate and capital goods from sectors such as Fishing, Agriculture and Livestock and Construction, all affected by a more intense El Niño. And finally, in more general terms, industries that take their raw material supplies from areas of the country that will be affected and those that distribute their final products in these same areas, would also suffer damage. On the upside, there would be increased demand for the sparkling drinks industry, for example, and for construction materials when the process of re-building the damaged infrastructure starts.

**Transport services.** Interrupted road transport due to rivers breaking their banks or landslides, for example, will make it more difficult to transport raw materials, finished goods and people.

**Trade.** With a negative impact on the Fishing, Agriculture and Livestock, Industry and Transport sectors, trade in goods will suffer.

**Electricity.** Landslides and floods could possibly damage the transport infrastructure and thus, temporarily paralyse electricity production.

Figure R.2.2  
**GDP 2016: economic sectors affected by a strong ENP**



Source: BBVA Research

**On the demand side...**

Exports would be affected due to reduced shipments of fish meal and oil, agricultural and livestock produce and, potentially, oil. There will also be a negative impact on both private and public investment. This negative impact would be linked to the weakness of the construction sector and sub-national capital spending during the early months of the year, which will probably not be fully offset by the turn-around (with refurbishment and reconstruction work) once the ENP has dissipated. Finally, household consumer spending will also fall off, not only because of the context of less business progress (and with it, employment), but also because inflation (food and transport above all) will be higher, which will cut back purchasing power. We estimate that prices will rise at a year-on-year rate of around 5.5% in the summer of 2016, from the current 4%, before falling back again in the second half of the year as the weather anomalies also recede. Hence, inflation will accelerate only temporarily. Perhaps the only component of demand that shows greater dynamism in 2016 in this scenario of a strong ENP (against the previous scenario of a moderate to strong El Niño) is public consumption, as the areas of the country affected, both during and after El Niño has dissipated, will require greater expenditure on goods and services.

Taking only the aforementioned elements into consideration, we estimate that the intensification of El Niño from moderate/strong to strong will have an impact on economic activity equivalent to one percentage point of GDP in 2016. Around 60% of this will be concentrated in the primary sectors; Fishing and Agriculture and Livestock (and in industry directly linked to these).

Figure R.2.3  
**GDP 2016: kind of spending affected by a strong ENP**

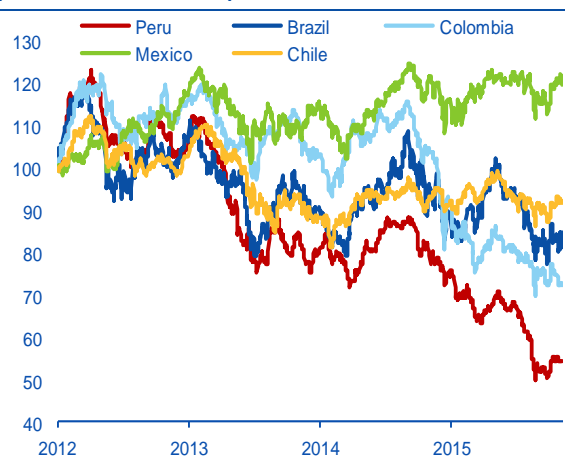


Source: BBVA Research

## 4 Local financial markets remain bearish. We continue to see further future depreciation of the Peruvian currency

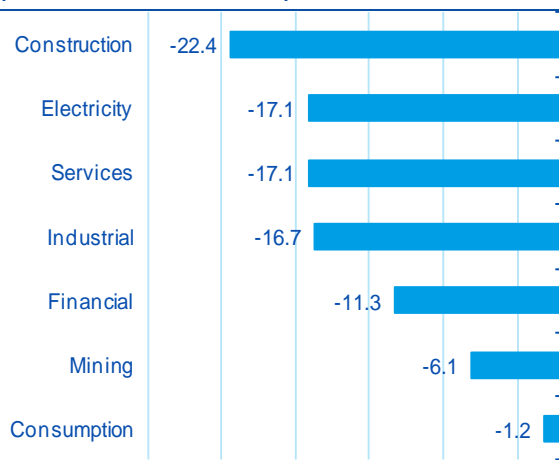
In the last three months, from the end of July to October, the Lima Stock Market General Index (S&P/BVL Peru general) fell 12.0% (see Figure 4.1). The sectors most affected were construction, services and industry (see Figure 4.2), in line with the slower growth that has been seen. The fall in the S&P/BVL Peru general, far greater than the fall seen in other countries of the region, led stock market index company Morgan Stanley Capital International (MSCI) to consider changing Peru's rating in September from an emerging country to a frontier country. Although the change was not implemented, there is to be another review in June 2016. Should this change materialise, it would rate Peru as a more risky country, which could trigger a flight of capital.

Figure 4.1  
Lima Stock Market General Index  
(Index Jan 2012=100)



Source: Bloomberg and BBVA Research

Figure 4.2  
Sector indices: last three months  
(% var. last three months)

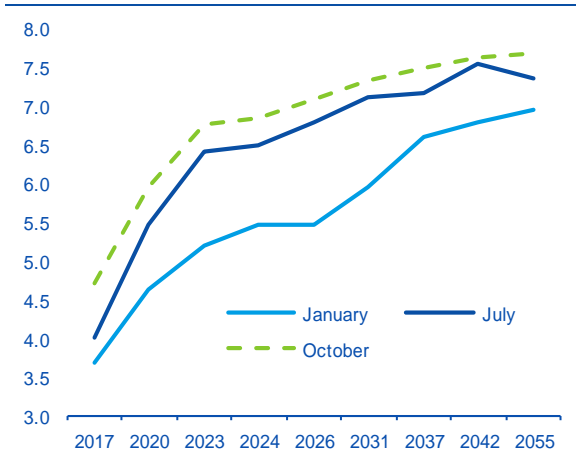


\*Variations in the indices of 30 October vs. 30 July. Source: BVL and BBVA Research

Sovereign bond yields, on the other hand, remained higher than three months ago and at the beginning of the year, mainly in the short and medium term (see Figure 4.3). Thus the yield on sovereign bonds for 2023 and 2026 rose by more than 130 basis points between January and October. This reflects the global readjustments to both portfolios and the exchange rate, which reduces the yield expressed in foreign currency. The risk perception of Peruvian securities has also increased over the last three months: the EMBI increased 12.2% from August to October. The share of sovereign bonds held by non-residents softened the fall against this backdrop (see Figure 4.4), from a fall of 11 basis points in 2014 (from 49.8% to 38.3%) to almost 0.5 in 2015 (from 37.4% to 36.9%).

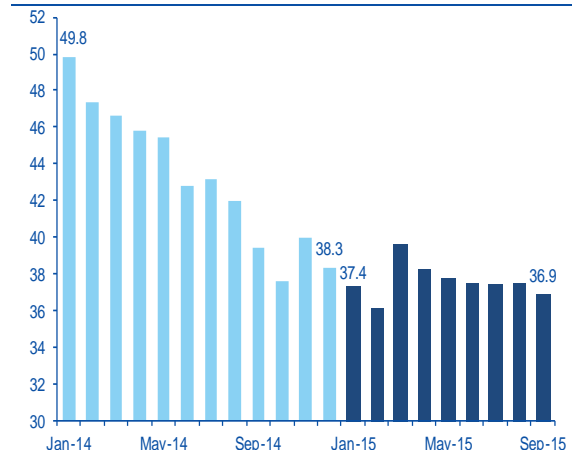
The Peruvian government does not place global bonds very frequently. There have been three transactions made this year on the international market. The last transaction was at the end of October, when a EUR1.1bn bond was placed on the European market, maturing in 2026, with a view to extending and diversifying the investor base. Demand was approximately four times this amount, allowing a yield of 2.75%.

Figure 4.3  
**Peruvian sovereign bond yields (%)**



Source: Bloomberg and BBVA Research

Figure 4.4  
**Holdings of sovereign bonds by non-residents (% of total)**

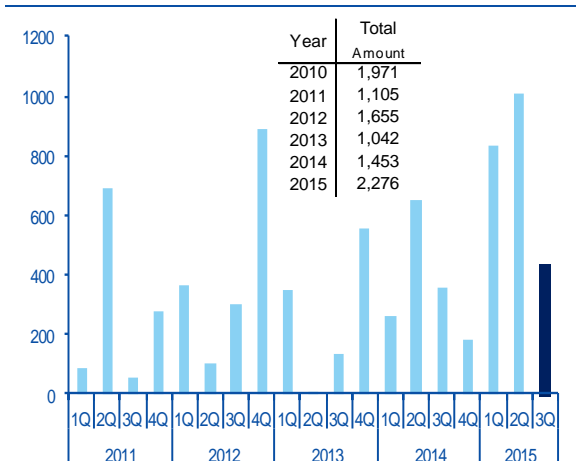


Source: Bloomberg and BBVA Research

Non-financial company financing through the emission of securities in the local market reached PEN2.276bn to September, higher than the last five years. Although it has slowed in 3Q2015 against the previous quarter, to PEN435m, it remains higher than in 3Q2014 (see Figure 4.5). It is important to point out that exchange market volatility has led companies to issue debt in local currency.

Bonds issues on the international market, on the other hand, amounted to USD4.51bn to September 2015 (see Figure 4.6), where mining company Southern Copper Corporation made the largest issue, USD1.5bn in April, followed by the issue of USD1.15bn made by the Nuevo Metro de Lima Consortium in June to finance the construction of Line 2 of the Lima Metro, one of the largest transport infrastructure projects in Lima.

Figure 4.5  
**Bond issues by non-financial companies (In millions of PEN)**



Source: BCRP and BBVA Research

Figure 4.6  
**Bond issues on the international market**

	Date of issue	US\$ Mills	Term (years)	Rate
<b>2014</b>				
<b>Non-financial sector</b>		<b>3,306</b>		
<b>Financial sector</b>		<b>2,204</b>		
	Private sector	1,025		
	Public sector	1,179	10	4.75
<b>Total 2014</b>		<b>5,510</b>		
<b>2015</b>				
<b>Non-financial sector</b>		<b>3,361</b>		
	GyM Ferrovias	206	25	4.75
	Southern Copper Corporation	500	10	3.88
	Southern Copper Corporation	1,500	30	5.88
	Consorcio Nuevo Metro de Lima	1,155	19	5.88
<b>Financial sector</b>		<b>1,149</b>		
<b>Private sector</b>		<b>349</b>		
	Intercorp	250	10	5.88
	Interbank**	99	15	7.66
<b>Public sector</b>		<b>800</b>		
	COFIDE	200	4	3.25
	COFIDE	600	10	4.75
<b>Total 2015</b>		<b>4,510</b>		

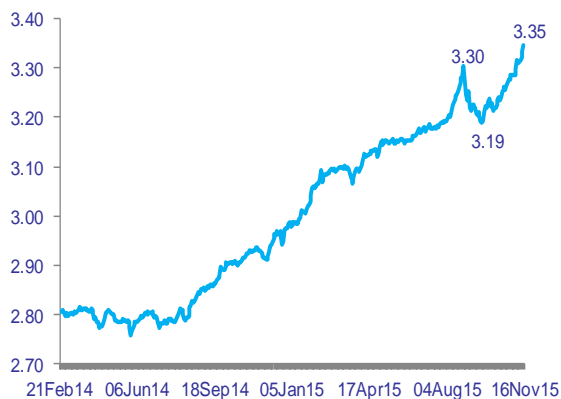
Source: BCRP and BBVA Research

Exchange rate pressures will continue over the coming months because of weakening fundamentals, with episodes of strong volatility stemming from uncertainty around external factors

Upside pressure on exchange rates resumed after the relative calm that followed the Fed announcement in September that it would not raise the interest rate at that time. This was influenced by the more hawkish tone of the October meeting, plus the fact that the central bank allowed the local currency to slip further (the entity has played a less active role in the exchange market for example, and sales of dollars are USD340mn, lower than the August figure of USD1.5bn). This triggered a 1.6% depreciation in the exchange rate over one month in October (the largest in three months), and it is currently around USD/PEN 3.35 (see Figure 4.7). It must be pointed out that this greater slip in the currency allowed by the central bank is a natural process insofar as it allows a correction of the exchange rate lag in terms of competitiveness with our regional peers. Moreover, it is coherent with the greater leeway offered by a lower dollarisation of loans (31% in October against 38% at the beginning of the year) and with the new de-dollarisation programme, which expects to keep the balance below 80% of the September 2013 balance by December 2016, excluding credit for overseas trade<sup>14</sup>. This way, the monetary authorities are expected to continue acting in this direction, administering an orderly process of adjusting the exchange rate (see Box 3: An assessment of the central bank’s capacity to implement an orderly currency depreciation process, for further details).

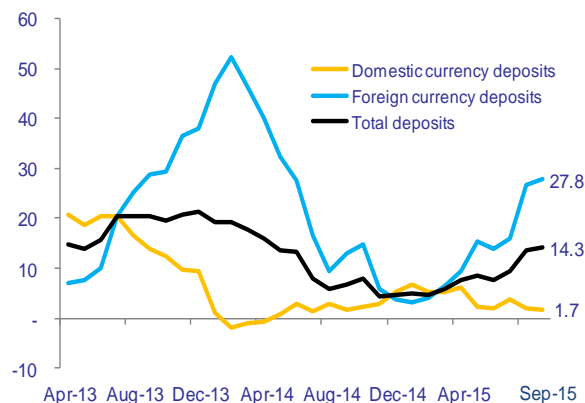
Against a backdrop of an increased deterioration of the currency and expectations of a future increase in international interest rates, there has been a sharp increase in the dollarisation of bank deposits in foreign currency, which increased 28% in September, similar to the August figure (27%), and the highest growth rate since mid-2014 (see Figure 4.8).

Figure 4.7  
Nominal exchange rate  
(PEN per dollar)



Source: BCRP and BBVA Research.

Figure 4.8  
Bank deposits by kind  
(YoY % var.)



Source: ASBANC and BBVA Research.

Moving forward, we see a greater correction of the Peruvian currency, which according to our estimates (using a model to determine the equilibrium exchange rate and an estimate of the depreciation required to converge on a deficit on the current account that maintains the medium term external liabilities to GDP ratio constant as a percentage) is still over-valued by between 2.5% and 6.5%. This over-valuation can also be verified by comparing the historic average real bilateral exchange rate (a proxy for the equilibrium level) with the observed level which, taking into account the inflationary spread between Peru and USA, involves a nominal exchange rate adjustment of around 5%. Finally, it should be added that the Peruvian currency has

14: Mortgages and car loans are expected to reach 70% of the February 2013 balance and then fall by 10 percentage points a year until they reach 5% effective equity.

suffered less adjustment than other currencies of the region since the end of May 2013 (when tapering was announced). There is a lag that could translate into a loss of external competitiveness.

The deterioration that we expect the Peruvian sol to show over the coming months is consistent with a deterioration of the fundamentals of the economy: i) a deficit on the current account that will remain relatively high and which will not be able to be wholly financed by long-term private capital inflows in 2016; ii) lower export prices; iii) a weaker fiscal position, and iv) reduced productivity gains. With respect to these trend components, the exchange rate could continue to be affected by the same external factors observed in recent months (Fed adjustment and China). Furthermore, exchange rate volatility could be accentuated further in the first quarter by the general elections, which will be on the home straight.

With this scenario, we forecast a year-end exchange rate of around PEN3.38 per USD, and it could reach a maximum of PEN3.50 in the first six months of next year. According to the central bank's October forecast, the exchange rate will close 2016 at an average of PEN3.47.



### Box 3. An assessment of the Central Reserve Bank of Peru’s capacity for implementing an orderly process of currency devaluation

The rapid and significant fall that the Central Reserve Bank of Peru’s (BCRP) exchange position has seen over the last 24 months has generated a certain amount of concern about the bank’s capacity to defend the local currency (PEN) against possible speculative attacks. The possibility of a sudden, abrupt depreciation of the currency is a particularly sensitive issue in Peru, because of the levels of dollarisation of the financial system and possible currency mismatches there may be. This vulnerability explains why historically the BCRP has intervened very actively in the currency market.

#### BCRP international liquidity availability: net international reserves (NIR) and the exchange rate position

A first idea of the central bank’s international liquidity can be obtained from the balance of its NIR, defined as the total reserve assets in foreign currency (first class, highly liquid international assets, such as US treasury bonds, gold, etc.) minus short-term liabilities, also in foreign currency (usually obligations with the IMF, which are insignificant in the case of Peru).

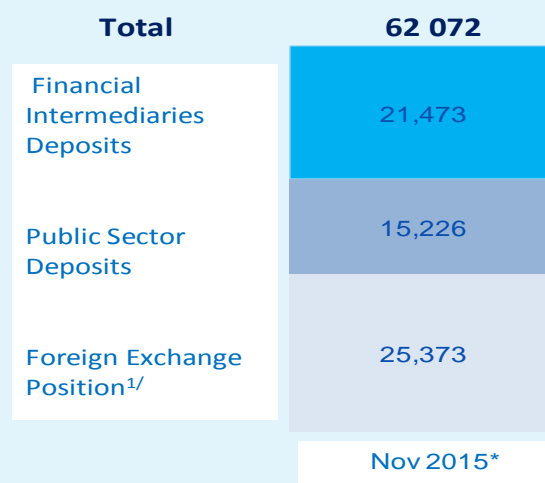
The central bank has three main sources that allow it to accumulate foreign reserves (see Figure R.3.1):

1. The exchange rate position. This is the acquisition of foreign currency financed through monetary issue. These are said to be the central bank’s “own dollars”. From the point of view of the bank’s balance sheet, the purchase of dollars on the currency market implies more NIR on the asset side and more monetary issue on the liability side.
2. Deposits in dollars made by financial institutions in the central bank. These deposits come from dollar reserve requirements, usually fairly high (the marginal reserve is currently 70%). This also considers overnight deposits and dollars deposited in accounts as guarantees for loans in local currency

(different forms of repos: regular, expansion and substitution repos).

3. Public sector deposits in dollars in the central bank. These are comprised of the Fiscal Stability Fund (an intangible fund that can only be used to deal with the contingencies established in the legislation on Fiscal Responsibility and Transparency (currently amounting to USD9.161bn) and other Treasury deposits (usually expendable funds that are, in part, loans received from abroad).

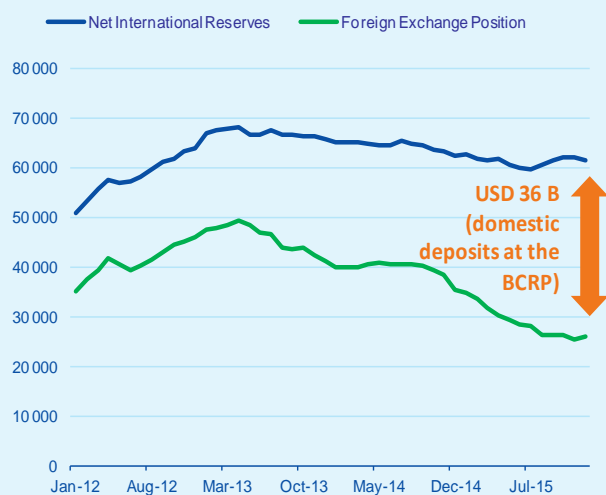
Figure R.3.1  
2015 components of NIR\*  
(USD mn)



\*At 07 November. 1/ It does not consider the Peruvian government’s global bonds held by the BCRP.  
Source: BCRP and BBVA Research

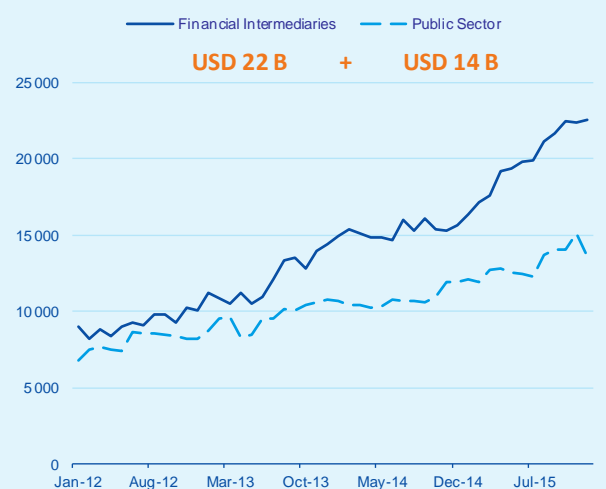
N.B. the central bank’s exchange position differs from the NIR by the obligations in dollars that the bank has with the public sector: financial institutions and public sector. From April 2013 to date, the exchange position has fallen by USD23.176bn (see Figure R.3.2). But NIRs have remained largely stable because the fall in the exchange rate position has been offset by larger public sector and financial intermediary deposits (see Figure R.3.3).

Figure R.3.2  
**NIR and exchange rate position**  
(USD mn)



Source: BCRP and BBVA Research

Figure R.3.3  
**Deposits in the BCRP**  
(USD mn)



Source: BCRP and BBVA Research

The international liquidity indicator that best measures the central bank’s “fire power” to defend its currency against speculation

A first indicator, of course, would be the NIRs. In principle, the central bank could use all its international assets to defend its currency. But the real acid test would be to consider solely the exchange rate position (The BCRP’s “own dollars” financed with seigniorage), as the part of the reserves that was financed with deposits made by

financial intermediaries should be used to cover illiquidity situations of these entities<sup>15</sup>, and the part that was financed with public sector deposits should be used to cover the foreign currency requirements of the Treasury. In the latter case however, in the face of exchange rate pressures, the most likely scenario would be one of coordination between the central bank and the Ministry of Economy and Finances to ensure that the latter does not withdraw its dollar deposits, except for servicing its overseas debt over the next 12 months.

Hence, bearing these considerations in mind, the harshest indicator of international liquidity availability would be as follows (see Table R.3.1):

Table R.3.1  
**International Liquidity Indicator against speculation\***

Indicator	Millions of USD
1. Foreign Exchange Position <sup>1/</sup>	25,919
2. Public Sector Deposits	15,226
3. External debt service Public Sector <sup>2/</sup>	2,134
<b>Total (1 + 2 - 3)</b>	<b>39,011</b>

\*At 07 November.  
1/ Considering the Peruvian government’s global bonds held by the BCRP.  
2/ According to Multi-year Macroeconomic Framework 2016-201 Revised.  
Source: BCRP and BBVA Research

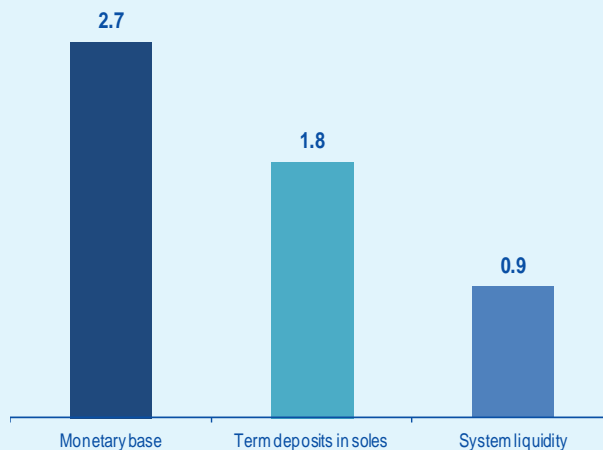
With information available to 7 November, this indicator would be USD39.011bn. One way of measuring the power of this indicator would be to compare it against monetary aggregates in sols as it is the amount of local currency that determines the magnitude of the attack. The idea is to verify whether this indicator can “buy” all the mass of sols. If it can, it could possibly set the exchange rate, or make it clear that it could do so, to dissuade attackers from taking speculative positions against the local currency<sup>16</sup>. Figure R.3.4 shows that, according to this indicator, the

15: During the Lehman Brothers crisis, for instance, the BCRP released (reduced) reserves in dollars, when overseas banks closed lines of credit to local banks.  
16: Economic theory suggests that speculation against a currency occurs before the central bank’s international liquidity availability is exhausted. But, the BCRP can be seen to be in a relatively comfortable position to attenuate exchange rate pressures.

central bank could buy the entire monetary base 2.7 times over. It also compares well with respect to other, more extensive, monetary aggregates in sols.

Figure R.3.4

**Indicator of international liquidity against the monetary base, term deposits in sols and liquidity of the system (Number of times)**



Source: BCRP and BBVA Research

An additional comparison is to measure how long the central bank can continue to intervene in the exchange market. One way of doing this is to consider that the monthly rate of sales in the spot market observed in the year to date is maintained. At 7 November, the BCRP had sold a total of USD7.121bn worth of dollars in the exchange markets. This is the equivalent of a monthly average of USD712mn, so, according to the BCRP's international liquidity indicator, it can continue to sell dollars at the same rate for about 55 months (USD39.011bn/USD712mn).

It is important to bear in mind that the BCRP has two further instruments that it could use to deal with the demand for assets in dollars or foreign currency (the possibility of using them of course, will depend on whether they are accepted against physical dollars). These include Variable Exchange Rate Certificates of Deposit (CDRBCRP) and exchange swaps that involve an exchange of interest rate flows (the central bank pays a fixed rate in dollars and the banks pay a variable rate accumulated in sols)<sup>17</sup>. The

17: The use of exchange rate swaps (and other monetary instruments such as currency repo operations that provide liquidity in sols with

important point here is that both instruments that hedge against exchange rate risk are settled in sols, giving the BCRP more room to defend its currency.

Finally, in the face of a speculative attack, the BCRP is very likely to request contingent lines such as those offered by multilateral agencies like the IMF and FLAR (Latin American Reserve Fund) which would enhance its fire power.

## Conclusions

One general conclusion is that the BCRP has a certain degree of leeway to continue defending the Peruvian sol, thus limiting the chances of a speculative attack against its currency. Intense and prolonged episodes of exchange rate pressures cannot be ruled out, however, either in the form of turmoil from global financial markets or because of a further deterioration of the fundamentals of the economy (sharp fall in export prices and a weakening fiscal position). Against this backdrop, the central bank could soften the transition towards a higher exchange rate (consistent with weaker fundamentals), but it could not prevent a depreciation of its currency. Another factor to bear in mind is that if the BCRP should decide on a massive defence of the sol by selling off dollars, the consequence would be a drain on the sol reserves, which would eventually trigger a sharp hike in interest rates in local currency, as well as having counterproductive and destabilising effects on economic activity and the bottom lines of companies, families and banks. In a context of sharply rising interest rates, the problem of asymmetric information would be exacerbated, and this would affect lending. So a risk analysis should not only focus on the exchange rate side and the fire power that the BCRP has to defend its currency; it should also consider the interest rate risk for private sector balance sheets. So, in the face of speculation, the central bank would face the choice between defending the exchange rate (and hence draining

guarantee in dollars) does not affect the BCRP's international liquidity availability. Exchange rate swaps are settled in local currency, so they do not compromise the BCRP's exchange rate position or NIRs. In currency repo operations, there is no transfer of ownership of the foreign currency, so they do not modify or compromise the central bank's international liquidity availability.

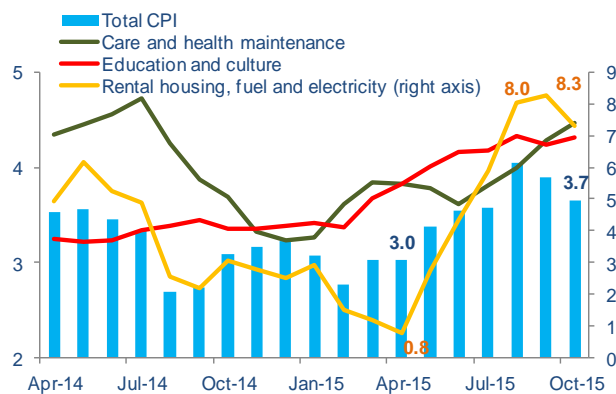
sols from the economy) and accepting higher interest rates in local currency. The most likely scenario is that the BCRP would seek an intermediate position. To do this, it must be prepared to put back into the system the sols that it withdraws in its interventions in the exchange market (to ensure that there are mechanisms to inject liquidity, which could require adequate collateral if the central bank decides to supply sols with secured loans).

## 5 The El Niño phenomenon could push inflation above 5.0% in the first quarter of 2016

Year-on year inflation was 3.7% at the end of October, exceeding the ceiling of the target range for the sixth consecutive month (year-on-year inflation has been consistently above 3.0% since April). The monthly result was affected by services (Teaching and Culture and Health Care and Conservation, for example) that have been growing at over 4% because of the existing supply restrictions. But the most important factor that has triggered higher inflationary pressure, despite the lack of demand pressure, is perhaps the exchange rate. It is mainly housing rental, fuel and electricity (accounting for almost 10% of the price of the consumer basket and significantly affected by the depreciation of the local currency) that have really contributed to the increase in total inflation since May (see Figure 5.1). The increase in inflation from the exchange rate can be explained by the possible effect of a certain depreciation of the exchange rate being passed through to domestic prices or by the greater depreciation per se. But our estimates suggest that there is little evidence of a change in the value of the pass-through coefficient over the last year<sup>18</sup>, causing the current inflationary dynamic to be determined mainly by the greater depreciation in the exchange rate itself.

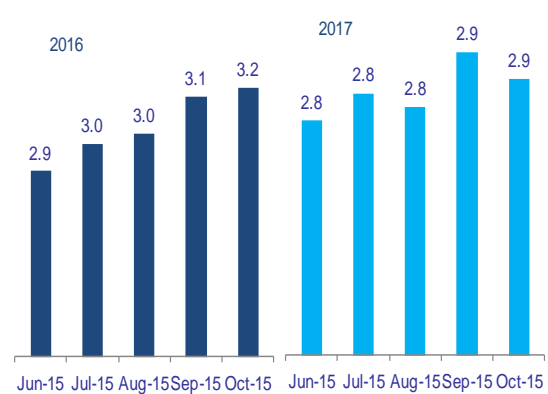
In the scenario of growing inflationary pressures and the central bank’s difficulties to keep year-on-year inflation within the target range (inflation has been within this range four times in the last 24 months, but never for more than two consecutive months), inflation expectations have been constantly on the rise and they are now at 3.1% for 2016 on average and 2.9% for 2017 (see Figure 5.2). This suggests an uncoupling of inflation expectations from the central bank’s target, that could generate inertia for the process of price formation going forwards.

Figure 5.1  
**Inflation**  
(YoY % var.)



Source: INEI and BBVA Research

Figure 5.2  
**Inflation expectations\***  
(YoY % var.)



\*Average expectations  
Source: BCRP and BBVA Research

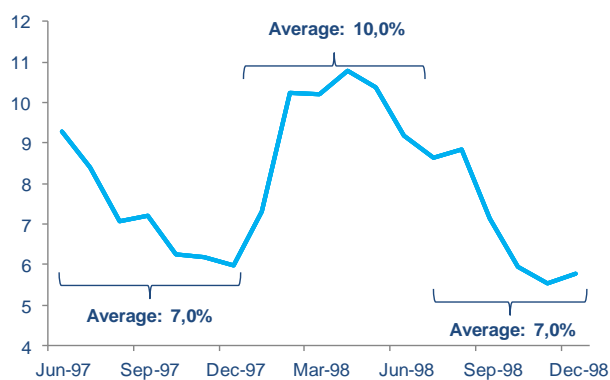
For the next few months, we believe that inflation will remain above the ceiling of the target range. Specifically, our central scenario considers that the inflation rate in year-on-year terms will start to pick up from November because of: i) the baseline for comparison is relatively low (price rises were fairly limited in November/December of last year); ii) upside pressure on the exchange rate has resumed, and iii) the prices of some goods (particularly food) and services will gradually start to reflect the effects of the weather

18: But it will probably show increases against the value of a couple of years ago.

anomalies (a strong El Niño phenomenon). Thus we estimate that inflation will be closer to 4% by 2015's year-end and that it will exceed 5% in the first quarter.

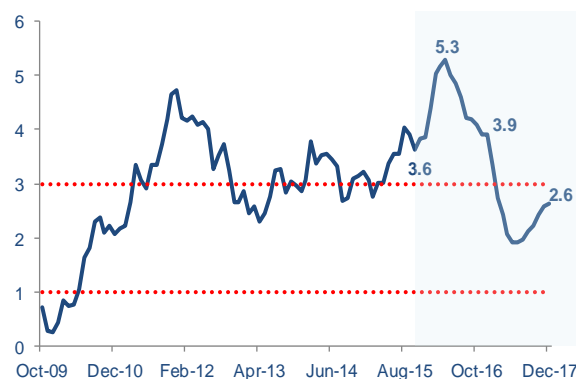
A lower growth rate of the CPI would not be seen until 2Q2016, as some food prices reverse their trend after El Niño, as they did in 1998 (see Figure 5.3). But this slow-down in prices would be very gradual and hence inflation would remain outside the target range in 2016. Further forward, against a backdrop of exchange rates stabilising around the equilibrium point, the output gap remaining in negative territory and no significant supply conflicts (the price of oil for example), inflation would systematically converge on the target range after four years (see Figure 5.4).

Figure 5.3  
**Inflation food and beverages 1997-98**  
(YoY % var.)



Source: INEI and BBVA Research

Figure 5.4  
**Inflation**  
(YoY % var.)



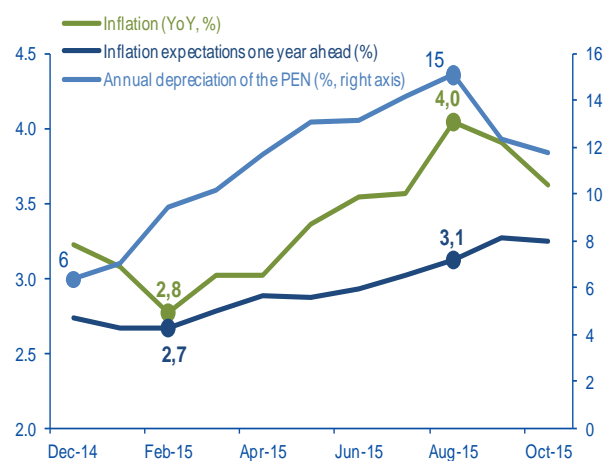
Source: INEI and BBVA Research

## 6 Monetary policy: we do not rule out another adjustment to the central bank reference rate in the immediate future

The central bank surprised the market in September with an increase in the target rate. Prices have deteriorated, but economic indicators are weak

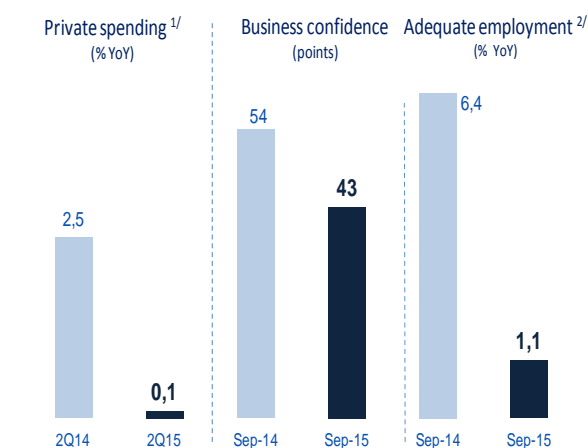
In September, the central bank decided to increase the reference interest rate by 25 basis points, to 3.50%. It was the first adjustment since January 2015. In a context in which all inflation measures have shown a rising trend, inflation expectations have also been rising over the year (see Figure 6.1) and they were about to exceed the ceiling of the target range (two-year horizon) or they already had (one-year horizon). This would suggest an adjustment to the target rate.

Figure 6.1  
Inflation, inflation expectations and depreciation of the PEN (YoY % var.)



Source: BCRP and BBVA Research

Figure 6.2  
Economic indicators (YoY % var. and points)



1/ Excludes the var. in stocks; 2/ EAP adequately employed.  
Source: BCRP, INEI, and BBVA Research

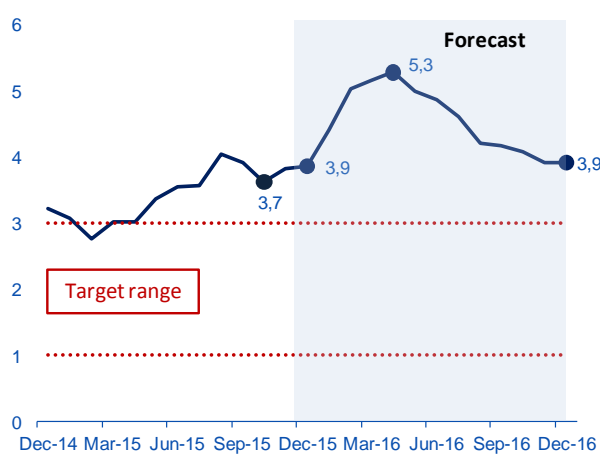
But there were three components that would suggest acting with caution. First, economic growth (see Figure 6.2). Private expenditure was stagnant, business expectations had fallen to the pessimistic band and job creation was very weak and continued to deteriorate. Against this backdrop, there was very little drive from the public spending side. As a result, stocks were accumulating fast (the improvement in GDP growth rates did not reflect what was happening on the demand side), which would hinder growth in the coming quarters to some extent as they normalised. Second, there are the risks faced by economic activity in the short term, such as the slow-down in China, for example, and its impact on raw material prices, the adjustment to the Fed rate and the markets really accepting this, the El Niño phenomenon and the deterioration in business confidence. And third, the transitory nature of the factors had driven inflation and, thus, inflationary expectations. The adjustment of the exchange rate towards its new equilibrium rate reflects the deterioration of the macroeconomic fundamentals (terms of trade, fiscal position) and supply conflicts. Eventually, these pressures would dissipate and inflation would fall, and with it, expectations of inflation.

On balance, we would be inclined to keep the reference interest rate at 3.25% but, to do so, the central bank would have to be energetic and convincing in reporting that the rise in inflation was only temporary (the credibility of the monetary authority would be very important in this context), hence seeking to contain

inflationary expectations while pressure on the currency and supply continued in the short term. Later on, as economic recovery started to gain more traction in 2016 (after the El Niño phenomenon had dissipated and the general elections were over), there would be more leeway to start to gradually tighten the monetary position to help reduce inflation. But this was not the case. The central bank opted for an early adjustment. We understand that its concern over the price situation was greater and it took a more optimistic view of business activity (it expects an expansion of over 4% next year). Moreover, the central bank argued that the position of monetary policy was already lax enough (and remained lax after the adjustment) to support a recovery of expenditure.

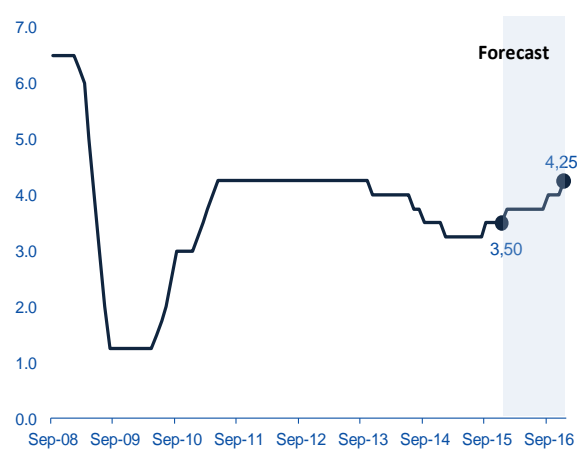
Over the next two months, inflationary expectations continued to increase (inflationary expectations on a two-year horizon finally deviated from the target range). Furthermore, it became clear that the most likely scenario was for a strong El Niño phenomenon in summer, rather than just moderate, with the consequently greater negative impact on food supply and thus on inflation. The rise in inflation in the summer, which we estimate could exceed 5% (see Figure 6.3), would drag inflationary expectations in the same direction. The price scenario moving forward was thus more complex. Bearing in mind the rationality of the adjustment in September, it was difficult to rule out the central bank making another adjustment to its target rate. To date, however, this has not occurred. Perhaps it sensed that the transitory dip in inflation in September and October (from 4.0% in August to 3.7% in October) provided some leeway for not changing it, and thus for supporting private sector spending.

Figure 6.3  
**Inflation**  
(YoY % var.)



Source: BCRP and BBVA Research

Figure 6.4  
**Reference interest rate**  
(%)



Source: BCRP and BBVA Research

### A new adjustment to the rate cannot be ruled out in the short term, perhaps in early December but more likely to be in the summer

We believe that this situation will change soon. The target interest rate will not remain at its current level of 3.50% for very long. The summer is about to start and, with it, the impact of the El Niño phenomenon on prices will be greater. Moreover, the year-on-year rate of depreciation of the local currency picked up again in November and we expect that it will accelerate next month as the Fed will probably start to hike its interest rate in December in an environment in which one third of the market still has not accepted this fact. These greater pressures on the currency will be passed on to inflation. Against this backdrop of greater inflationary pressures, inflationary expectations, which are already above the target range even on the two-year horizon, are likely to continue to rise. Bearing in mind this deterioration of the price scenario, along with what the central bank did in September (when it increased the reference rate by 25bp) and the reasons underpinning



this decision, it is difficult to rule out an early adjustment to the target rate, perhaps at the beginning of December, although more probably in the summer, when we expect additional inflationary pressures to be clearer. This adjustment would take place despite the fact that the deterioration in prices will be transitory (considering the nature of the elements that cause it) and that private sector spending will remain weak.

### The monetary position will be tightened further in the second half of next year, to consolidate the process of converging inflation with the target range

In the second half of 2016, when the El Niño phenomenon has dissipated and the general elections are over (the electoral noise will have diminished), economic activity will gain more traction. There will be more room for raising the reference rate and this would help inflation to accelerate its convergence with the target range. In this context, we believe there will be two 25bp increases in the second half of next year, taking it to 4.25% by the end of 2016 (see Figure 6.4). The adjustment to the target rate in Peru will thus be similar to the rate we expect for the Fed, which will limit the exchange rate impact (and thus inflation) of the process of monetary normalisation in USA next year.

## 7 China is the main source of downside risk

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Deviations from our baseline scenario for several key external and local variables could create a more challenging environment for the Peruvian economy in the coming months. But it is important to point out that Peru has strengths to limit the potential impacts of more adverse scenarios.

### On the external side, a more intense and prolonged slowdown in China would affect Peruvian economic growth

Our baseline scenario considers that the process of moderating growth in China to sustainable levels and re-balancing its drivers of growth on the demand side (less investment versus more consumption) will be gradual and orderly. But the financial vulnerabilities that are appearing in China have generated doubts about the strength of its growth and about its capacity to sustain growth rates of nearly 6%. More specifically, in August and September the risk of a greater slowdown in growth in China was associated with the strong stock market correction and its effects on the real sector of the economy: i) deteriorating financing conditions for business due to the suspension of the issue of shares and loss of value of collateral (fall in share prices), and ii) a negative wealth effect that might affect consumption. Lower growth in China would have a negative impact on the Peruvian economy because it would imply weaker external demand, lower prices for the metals that Peru exports (which would affect the profits of mining companies and their reinvestments, along with tax revenues) and greater global aversion to risk that would weaken the appetite for investing in emerging economies such as Peru. Given the importance of developments in the Chinese economy on Peru, this section includes a box that assesses the impacts that a more intense and prolonged slowdown of the largest economy in Asia would have.

### Another external factor; the up-coming adjustment of the Fed continues to generate uncertainty

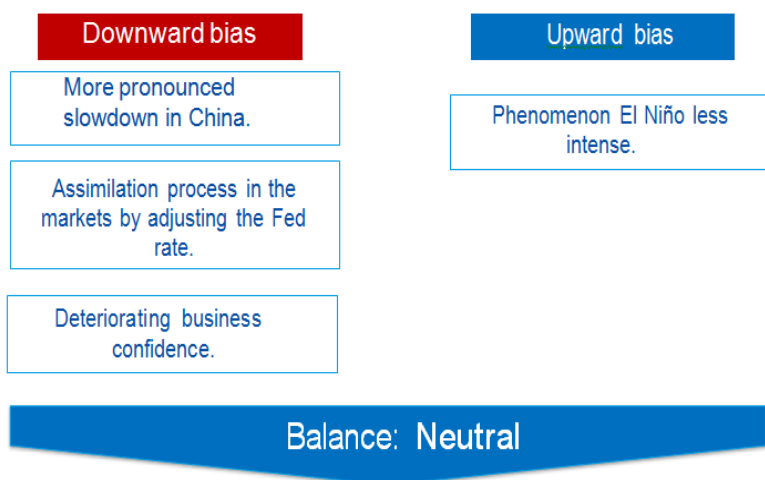
The uncertainty around the process of normalising the Fed rate, and the speed at which the adjustment will be made, has triggered episodes of volatility in emerging financial markets. Surprising economic activity data in the USA, or a change in the perception of the Fed's intention, have generated adjustments in investors' portfolios that have been reflected in changes in the prices of assets and currencies of the economies of Asia and Latin America. Markets (according to information on Fed future rates listings) expect the Fed to raise its monetary policy rate more gradually than it announced in September (in line with the average of Fed rate forecasts made by the members of the Open Markets Committee). A faster increase in the rate on federal funds, which cannot be ruled out, would trigger a new adjustment to portfolios worldwide, which would favour holding assets in dollars. Greater upside pressure on the exchange rate would be expected in this scenario, and an increase in risk premiums, and therefore financing costs. In this scenario, an even stronger dollar could not be ruled out either, generating additional downside pressure in the short term on raw material prices. In the event that these pressures on local financial markets and the Peruvian currency were persistent (and they were to translate into tougher financial conditions, balance sheet effects, etc.), the real impacts would be greater and growth consequently lower.

**Locally, further deterioration of business confidence could curb growth even more. On the other hand, the risk of an extraordinary El Niño phenomenon is diluted**

Business confidence has remained low, within the pessimism area. Weak business confidence in recent months has been associated with disappointing business activity data and greater political noise. Our baseline scenario assumes that business confidence will remain at a similar level for the rest of the year and for much of 2016. But an exacerbation of the political scene, electoral promises made with one eye on the general elections in April 2016 at the expense of the markets, or enhanced uncertainty from abroad could hit business confidence even harder, which would affect private sector investment spending and, thus, job creation and household consumption. As a result, the cyclical recovery of the Peruvian economy would be slower.

With respect to the El Niño phenomenon (ENP), our baseline scenario considers that it will be a strong one. This assumption is based on the reports by the local agency responsible for monitoring its development (ENFEN). According to the agency’s latest report, the most likely scenario is a strong ENP in the summer (45% probability), higher than the 35% forecast in the September report. The chances of it being a moderate ENP has also increased (from 30% in September to 40%), while the chances of an extraordinary ENP have fallen (from 20% to 5%). Given this probability distribution, we consider the risk of a deviation from our baseline scenario (a strong ENP) would entail a moderate ENP, which, should it materialise, would put an upside bias on our growth forecasts.

Figure 7.1  
**Forecast 2016**



Source: BBVA Research

Box 4. The impact on Peru of a sharper slowdown in China

A risk scenario: persistent slowdown

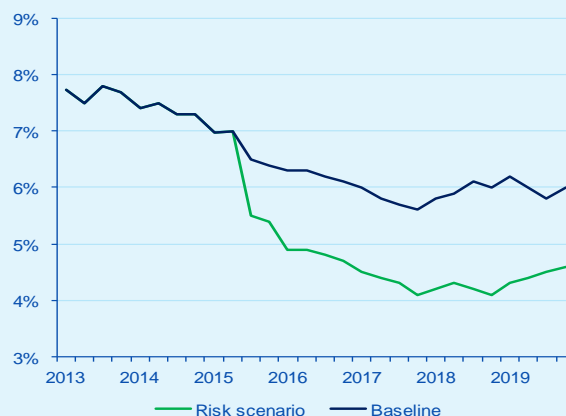
Doubts around the strength of the economic cycle and China’s financial stability drove a significant increase in financial tensions and new corrections to the prices of raw materials in August and September of this year.

Although our central scenario assumes that the authorities will continue to support growth of at least 6% per year, it is important to explore the effect of a sudden and persistent slowdown in China, leading to significantly lower growth.

The trigger for a low growth scenario could be a lack of progress in structural reforms, to re-balance consumption and investment. In this situation, with doubts around the quality of the large real estate investments and productive capacity, growth in China would slow down significantly in the coming years. Although it is true that the authorities would continue to increase their efforts to stimulate domestic demand (probably through greater public-sector investment), this would not offset the reduced investment by the private sector. Hence, despite the drive of economic policies (fiscal and monetary policies), the economy would operate below its potential. At the same time, stimulation measures would generate pressure to depreciate the exchange rate of the renmimbi and fuel inflation. This would be a scenario of lower GDP growth, at rates of around 4%, instead of the 6% of the central scenario (see Figure R.4.1). Investment would also grow at under 7% a year (see Figure R.4.2) and industrial output at under 4% (see Figure R.4.3), lower rates than those considered in the baseline scenario (11% and 7% respectively).

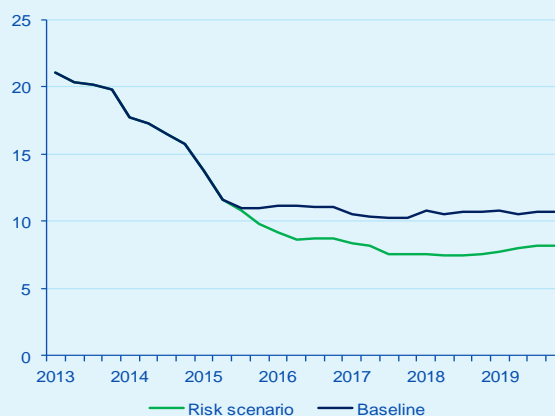
It is important to highlight that there is little significant chance of this happening, especially bearing in mind that the central scenario already factors in a slowdown in growth. All in all, this scenario would have a substantial impact on economies with close ties to China, such as Peru.

Figure R.4.1  
China: GDP growth in the baseline and risk scenario (% YoY)



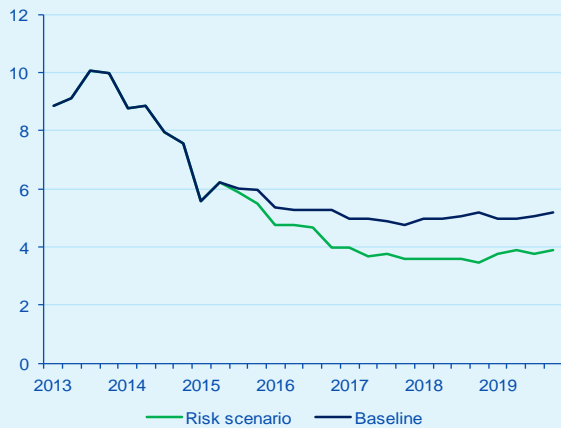
Source: BBVA Research

Figure R.4.2  
China: variation in investment in fixed assets (% YoY)



Source: BBVA Research

Figure R.4.3  
China: variation in industrial output (% YoY)



Source: BBVA

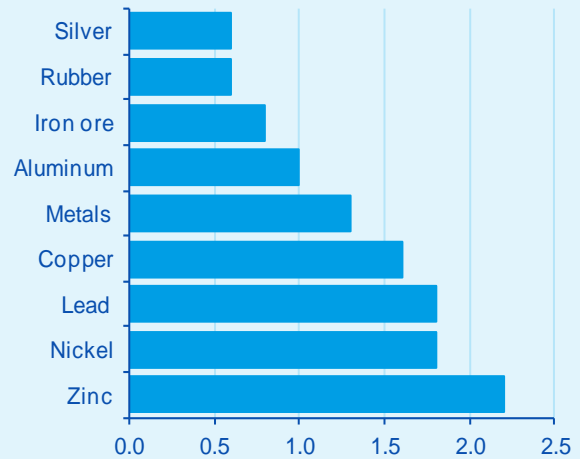
### A negative shock to growth in China: transmission channels

There are two main channels through which the risk scenario described above would affect Peru: i) deteriorating trade due to reduced external demand and lower prices of the main export raw materials, and ii) an increase in the global aversion to risk, with negative effects especially on the assets of the emerging economies.

With respect to the former, it must be remembered that China is one of Peru's leading trading partners. But dependence on China is not only determined by direct sales to the country, but also the influence that China has on the price of the main raw materials that Peru exports.

The impact on these prices would depend substantially on the intensity of investment (the hardest-hit component of GDP in this risk scenario) demand in China for each kind of raw material. Figure R.4.5 shows the elasticity of the prices of the main industrial raw materials to a fall in investment.

Figure R.4.5  
Elasticity of raw material prices to investment in China

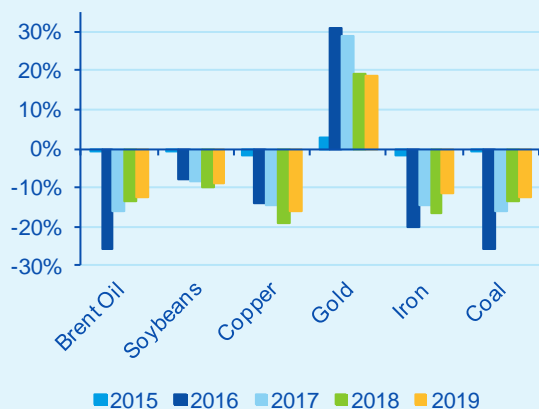


\* Percentage impact on the price of raw materials one year after a 1pp reduction in the growth of investment in fixed assets in China. Source: IMF and BBVA Research

Taking these elasticity figures into consideration, the paths estimated for consumption and investment in China in the risk scenario, expected increase in global aversion to risk (see details below) and an excess of current supply of some raw materials in some markets (especially oil), Figure R.4.6 shows the estimated impact on the prices of the main raw materials exported from the region, against the baseline forecast scenario.

What is particularly important for Peru is the strong negative effect that this risk scenario would have on the price of the main industrial metals (copper, iron), explained by the reduction in demand from industry and real estate investment. Energy raw material prices would also be affected significantly, especially oil, initially, even more than metals as the shock of lower demand would coincide with doubts around absorbing current over supply. Food prices, in turn, would not face such a substantial fall, as they are more closely linked to consumer behaviour, which is less affected by this shock.

Figure R.4.6  
Effect on the price of the main raw materials in the risk in China scenario (% difference in price against the baseline scenario)



\* Percentage impact on the price of raw materials one year after a 1pp fall in the growth of investment in fixed assets in China.  
Source: BBVA Research

**The second channel for the impact would be an increase in global aversion to risk**

A severe slowdown in China would probably be accompanied by an increase in global risk aversion, as the doubts about the capacity to sustain global growth, the possibility of financial instability in China and the quality of assets in China and in other emerging economies closely tied to China would be accentuated. In the case of China, we could see an increase in risk premiums even greater than those seen immediately after the collapse of Lehman Brothers, and the impact on Peru would be substantial, with risk premiums close to those seen in 2009. The enhanced aversion to risk would trigger a flight to the refuge of the assets of the developed economies and pressure would come to bear on the price of assets and on the exchange rate. And this flight to more secure assets would drive gold prices higher than expected in the baseline scenario (see Figure R.3.6).

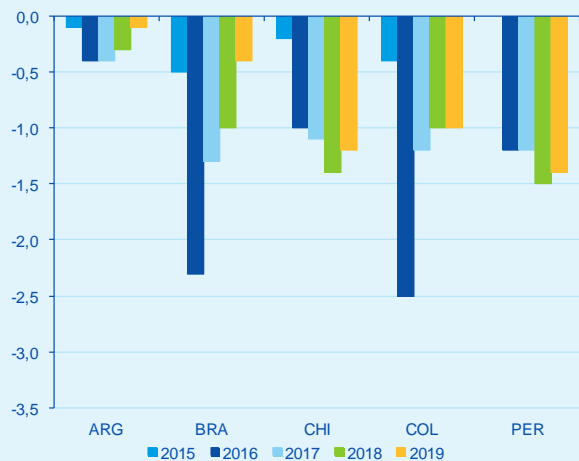
These two channels would be amplified by the negative impact on confidence, as happened after the collapse of Lehman Brothers in 2008 (when the sharp fall in confidence led to a sharp fall in domestic demand)

Given the importance of China for Peru, a repetition of the strong deterioration in confidence is highly likely, but aggravated by the fact that confidence is already depressed. Specifically, we assume that the negative effect on household and business confidence would be similar to the situation after the collapse of Lehman Brothers, lasting between four and six months.

Furthermore, unlike in 2009, this time there is far less room for counter-cyclical economic policies to absorb the impact of the shock. On the monetary side, rising inflation and the risk of decoupling expectations makes a relaxation of monetary policy unlikely. On the other hand, the impact of falling prices of the main raw materials on public finances has left far less room. But Peru does have a certain amount of room for manoeuvre, albeit not much, to prevent it from compromising its sovereign rating.

Faced with a scenario of slowdown in China such as the one described above, domestic demand would be affected significantly, by both falling consumption and falling investment in the face of falling household and business confidence. Furthermore, in the case of investment, lower raw material prices would depress the development of projects in the mining sector even further. This situation has been verified in countries such as Chile and Peru. It is also worth mentioning that the risk scenario has been replicated for other economies of the region, allowing a comparison of which of them would be most compromised. Figure R.4.7 shows that Brazil and Colombia would be the most affected, as they are highly exposed to China and, in the latter case, suffer the sharp impact of falling oil prices (greater than other raw materials). Furthermore, in the case of Brazil, it would also need to continue the fiscal adjustment as it would face this shock with greatly weakened fundamentals.

Figure R.4.7  
**Impact of the risk scenario in China on growth (difference in pp against the baseline scenario)**



Source: BBVA Research

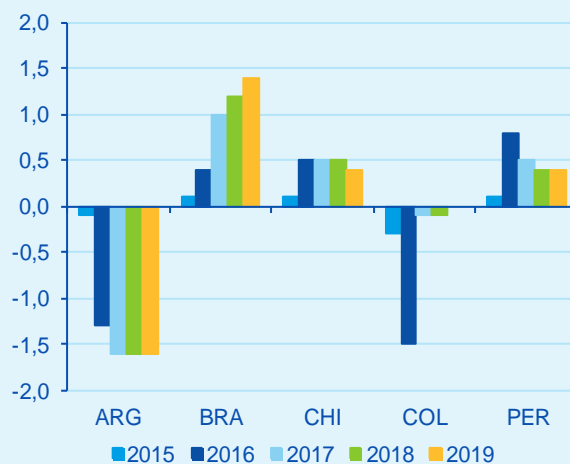
Peru and Chile, in turn, are highly exposed to a shock from China, but they do have a certain amount of room for implementing counter-cyclical fiscal policies (at least initially) that would moderate the initial impact. In the case of Argentina, the impact would not be as harsh because the shock to food prices (its main export product) is much less than it is to metals, and the falling price of imported oil would actually offset part of the negative effect on the overseas accounts.

Hence, in the risk scenario, Brazil would face a deep recession in 2016 (deeper than the one already included in our baseline scenario). Growth in Peru would fall by around 1.2 percentage points in 2016 against the baseline scenario (so GDP growth would be around 1.6%, rather than the 2.8% forecast for the baseline scenario). It is interesting to highlight that the sharp fall in domestic demand would more than offset the falling external demand and terms of trade, in a similar fashion to 2008, which would in fact improve the overseas deficit in the case of Peru, Chile and Brazil against the baseline scenario (Figure R.4.8).

Thus, the results of this simulation exercise show that some countries of the region, such as Mexico, Peru and Chile, can absorb a shock from China relatively better, although the weak

macroeconomic starting point makes the effects quite pronounced in most countries, except Mexico. At the same time, the exercise highlights the importance of having room for counter-cyclical policies, which has not been created again after having been successfully used to soften the global crisis of 2008-09.

Figure R.4.8  
**Impact of the risk in China scenario on the current account (% GDP) (difference in pp against the baseline scenario)**



Source: BBVA Research

## 8 Tables

Table 10.1

**Macroeconomic forecasts**

	2013	2014	2015	2016
GDP (% YoY)	5.8	2.4	2.5	2.8
Inflation (% YoY, eop)	2.9	3.2	3.9	3.9
Exchange rate (vs. USD, eop)	2.79	2.96	3.38	3.50
Policy interest rate (% eop)	4.00	3.50	3.50	4.25
Private Consumption (% YoY)	5.3	4.1	3.3	3.0
Public Consumption (% YoY)	6.7	10.1	6.8	4.0
Investment (% YoY)	7.4	-1.8	-6.1	0.1
Fiscal Balance (% of GDP)	0.9	-0.3	-2.5	-3.0
Current Account (% of GDP)	-4.2	-4.0	-3.8	-4.2

Source: Central Bank and BBVA Research

Table 10.2

**Macroeconomic forecasts**

	GDP (% YoY)	Inflation (% YoY, eop)	Exchange Rate (vs. USD, eop)	Policy Interest Rate (% eop)
Q1 13	4.4	2.6	2.59	4.25
Q2 13	6.2	2.8	2.75	4.25
Q3 13	5.2	2.8	2.78	4.25
Q4 13	7.2	2.9	2.79	4.00
Q1 14	5.0	3.4	2.81	4.00
Q2 14	1.8	3.4	2.80	4.00
Q3 14	1.8	2.7	2.87	3.50
Q4 14	1.0	3.2	2.96	3.50
Q1 15	1.8	3.0	3.09	3.25
Q2 15	3.0	3.5	3.16	3.25
Q3 15	3.1	3.9	3.22	3.50
Q4 15	1.9	3.9	3.38	3.50
Q1 16	2.8	5.2	3.48	3.75
Q2 16	1.0	4.9	3.48	3.75
Q3 16	3.1	4.2	3.46	4.00
Q4 16	4.1	3.9	3.50	4.25

Source: Central Bank and BBVA Research



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