

# Colombia

# Economic Outlook

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01  
A global outlook of  
anaemic and more  
vulnerable growth

02  
A new fall in oil prices  
is prolonging the  
economic slowdown

03  
Reducing the current  
account deficit and  
supplanting oil tax  
revenue are the major  
challenges facing the  
economy

04  
Increased inflation  
and its associated  
expectations has lead  
the BanRep to raise  
taxes

## Table of Contents

<b>1 Editorial</b>	<b>3</b>
<b>2 A global outlook of anaemic and more fragile growth</b>	<b>4</b>
<b>3 Negative impact on the Colombian economy to intensify and last longer</b>	<b>6</b>
Box 1: What's next for oil prices?	10
Box 2: A less important role for oil in the Colombian economy	18
<b>4 Two sides of the same coin in terms of current account adjustment – deficit levels have been reduced, while they remain high with regard to GDP</b>	<b>20</b>
<b>5 Public finances have been adjusted, in the face of lower oil prices. This correction has by no means concluded, however</b>	<b>22</b>
Box 3: The tax reforms proposed by the commission of experts	24
<b>6 The challenges facing monetary and exchange-rate policy</b>	<b>25</b>
<b>7 Tables with projections</b>	<b>27</b>

**Date of closing: 12 February 2016**

# 1 Editorial

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**The Colombian economy has been severely affected over the past two years by the negative impact on the price of oil.** Colombia currently exports crude oil at nearly a third of its 2013 value. As a result, the exchange rate has depreciated 77% since then, while the current account and fiscal deficits have increased, despite the spending cuts that the Government has introduced.

**Despite this blow, the economy maintained an average growth rate of 4.1% for the 2013-2015 period.** Although this rate is lower than in the recent past (the average for 2002 to 2012 was 4.5%), it is nevertheless a promising figure, given the severity of the impact. We believe that the economy will hold fast against this onslaught, with a gradual and well-ordered slowdown and without serious setbacks, although with a lower growth rate of 2% and 3% in 2016 and 2017, respectively.

**In 2016 growth will be led by an expansion of more than 7% of manufacturing, thanks to the opening of REFICAR.** Construction will also be another source of growth for this year supported by the low and middle income housing programs. In 2017, 4G infrastructure program will make of Civil Works the leading sector of the economy.

**The flexibility of the exchange rate has been a key factor at this juncture.** The depreciation that has been seen since 2013 has been the most pronounced since the floating exchange rate system was introduced, which has served to cushion the blow of the fall in export revenue and helped to reduce the current account deficit. Without this exchange-rate flexibility, the internal and external imbalances would have been greater, meaning a sharper subsequent drop in consumer spending. We expect exchange rates to continue to bolster the economy in 2016, with an average exchange rate of COP 3,306 to the dollar. In 2017, when the price of oil will recover, it will return to an average level of COP 2,873.

**The external balance is showing signs of correction, despite the current account deficit standing at around 6.7% as a percentage of GDP in 2016 and 2017.** In dollars, the 2016 deficit will be USD 17.8 billion, down from USD 19.6 billion in 2015. However, due to the fall in dollar GDP as a result of depreciation, its value as a percentage of GDP does not reflect this improvement.

Inflation will continue to rise over the first half of the year due to the exchange rate and the higher food prices caused by the El Niño phenomenon. These factors, and the indexing of prices to inflation will delay inflation from hitting its target range. **We therefore expect that inflation will end 2016 at 5.4%, while 2017 will see a rate of 3.7%.**

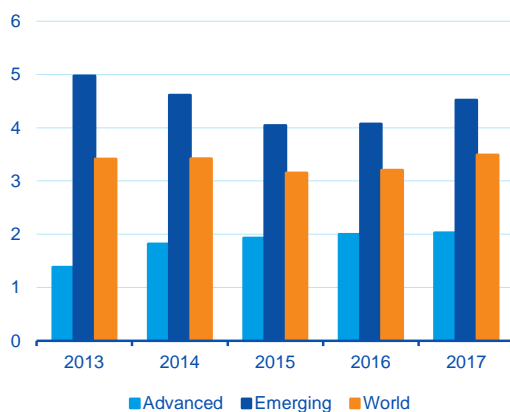
**At a fiscal level, the challenge facing the authorities is to raise their revenues amid challenges from the lower oil price environment.** The government has made certain adjustments to its expenditure in response to this new reality. These efforts are not enough, however. Revenue needs to increase, to which end, the Government needs to announce tax reforms in the second half of the year.

## 2 A global outlook of anaemic and more fragile growth

The intensification during the last quarter of 2015 of some of the risk clusters with a global impact led to a further downward revision of world economic growth forecasts for this year. The transition to a lower growth pattern in China, with economic reforms and changes to key objectives such as the exchange rate, is being accompanied by bouts of intense financial volatility and falling commodity prices. All this leads to a much less favourable global panorama for large commodity-exporting economies, but also for those perceived as more vulnerable financially.

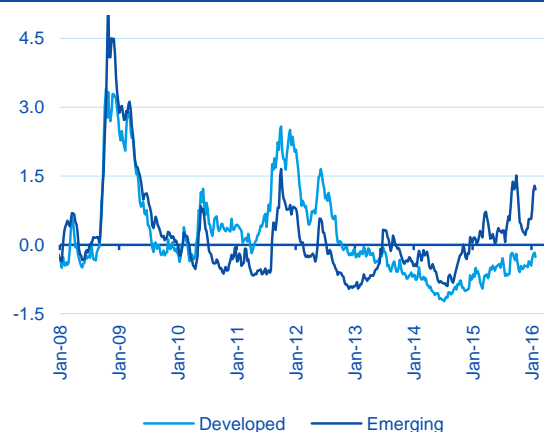
The leading indicators (confidence indices) and the increase in financial stresses point to more moderate growth in early 2016 than was foreseen three months ago, as reflected in our estimates for the first few months of the year. If this trend is confirmed, world GDP will grow by just 3.2% in 2016, repeating the advance of 2015 and postponing the recovery to 2017 when it should reach rates of around 3.5% (Figure 2.1). This lower growth rate, still the lowest since 2009, reflects slackening demand in the emerging economies. Recovery in the developed economies is still fragile, and highly dependent on the eventual impact of the slowdown in world trade and the increase in financial instability on industrial output, corporate capital expenditure decisions and consumer spending. With the US growing at 2.5% and the euro zone by less than 2%, the tenuous improvement in activity in the developed economies as a whole will not be enough to offset emerging markets' expected relatively poor performance.

Figure 2.1  
World GDP, % YoY



Source: BBVA Research and IMF

Figure 2.2  
BBVA index of financial tensions (normalized values)



BBVA Research and Bloomberg

The recent behaviour of the financial markets is largely explained by doubts about the strength of the world economic cycle. Activity indicators continue to show the greatest degrees of deterioration concentrated in manufacturing and trade: Activity in services, which until now had benefited from the recovery of private consumption in the major developed economies, is also starting to show signs of less dynamism. BBVA Research's Financial Stress Index for emerging countries has climbed back up to the levels seen in the summer of 2015 (first wave of the Chinese stock exchange crisis), reaching the stress levels of 2011 (Figure 2.2). Unlike then, volatility remains contained in the developed economies, in a context in which the reallocation of capital to financial assets with a lower risk profile is intensifying the flight-to-safety in sovereign bonds of countries such as Japan, the US and Germany.

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

### USA: moderate growth and depending on consumer spending

In the second half of 2015, US economic growth steadied at around 2.5%, in line with forecasts of three months ago. However, the slowdown in activity in the fourth quarter, together with advance signals given by business confidence indicators, increases the likelihood of growth in 2016 being less. Our base scenario maintains estimated growth of 2.5% for this year and next. Even if private consumption maintains the dynamism showed in the last two years, becoming the main growth driver, weak capital expenditure and stagnating exports will limit the extent to which aggregate demand can improve. On the other hand, Federal Reserve has repeatedly stressed that the path of interest rate increases that started in December 2015 will be gradual and subject to the continuation of the dynamic of domestic demand and inflation. The latest forecasts of the FOMC (Federal Open Market Committee) include four rate hikes for 2016, which would put federal funds at 1.5% at year-end, whereas the market consensus (including BBVA Research) expects at most two interest rate hikes.

### China: the main challenges in the short term are eliminating financial instability and confining the impact of the industrial adjustment on aggregate demand

Doubts about China's ability to successfully manage the transition to a more moderate and balanced economic growth model resurfaced in the last quarter of 2015 following a new bout of financial instability deriving, as last August, from the stock and currency markets.

While maintaining financial stability is crucial in order to avoid any repetition of episodes of risk aversion such as the recent one (a sudden depreciation of the yuan would lead to a sharp correction in other emerging market currencies and a significant increase in sovereign and corporate risk premia from current levels), the growth dynamic shown by China in the short and medium term continues to be of decisive importance for the world economic cycle.

Nevertheless, our base scenario holds GDP growth for 2016 at 6.2% and at 5.8% for 2017, with inflation at 1.7% and 2.5% respectively. Additional monetary stimulus measures during 2016 in the form of key interest rate cuts cannot be discounted (specifically to 3.85% from the 4.35% at year-end 2015), although they will be constrained by the impact they might have on capital flows. Finally, this soft landing scenario, being the more probable, is quite likely to lead to another scenario of greater risk given the doubts about the pace of rebalancing of the economy and the authorities' room for manoeuvre for managing it smoothly

### 3 Negative impact on the Colombian economy to intensify and last longer

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#### Local markets with a higher level of volatility given a further downward adjustment in oil prices

The collapse in oil prices has undergone three phases since mid-2014. The first of these began in June 2014 and continued to the end of the year, where the reference price for Brent oil accumulated a fall of 53%. Between April and August 2015, the price of a barrel of Brent fell a further 28%, although it only represented an 8% below minimal levels at the close of 2014 thanks to an earlier price recovery. The final phase began in October 2015, when the price of oil fell 42% at the close of this report. We forecast that the price will fall further, to an average of USD 30 in 2016.

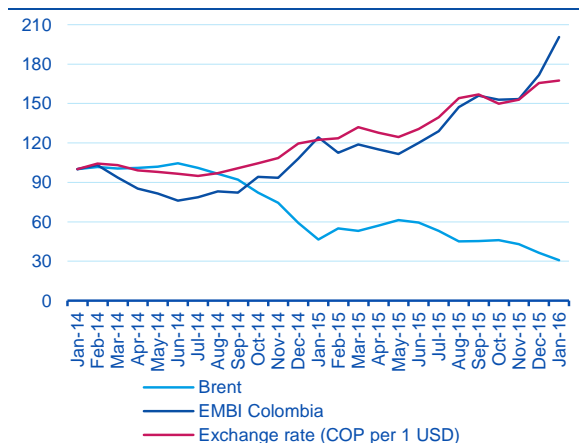
The solid financial position of oil producers, both those within and outside OPEC, given a low oil price scenario, the uncertainty concerning the soft landing of emerging markets and the real impact of technological innovation on the oil sector lead us to believe that the recovery of oil prices will be slow (Table 1). Within this context, BBVA estimates that the price of oil will not return to a long-term price of USD 60 a barrel until late 2018.

Low oil prices, volatility on international financial markets and less appetite for risk have largely determined the performance of local assets. In this context, the main variables suffered a significant setback in 2015. Benchmark 2024 public debt bond (TES) rates rose 98 bp while the 2016 benchmark was up 117 bp. The equity market reached 23.8%. Finally, some measurements of country risk, such as the EMBI and the CDS (at 5 years), were up 125 bp and 102 bp, closing the year on 321 and 243 respectively (Figure 3.1). In January 2016, these indicators remained sluggish, influenced to a large extent by the complex panorama of international financial markets at the start of the year and by further falls in oil prices.

Until now, internal assets have received significant support from inflows of portfolio capital. In 2015, portfolio inflows, recorded on Foreign Exchange Balance, stood at USD 4.418 million. This level was higher than the values seen in 2011 and 2012, similar to 2013 levels and lower than in 2014. It should be remembered that in 2014, capital inflows were at extraordinary levels due changes in the weighting of Colombia in JP Morgan's indexes. Meanwhile, 2015 saw an increase in the participation of foreign capital funds in the internal public debt market: rising from representing 15.4% of TES issued in 2014 to 17.4% in January 2016.

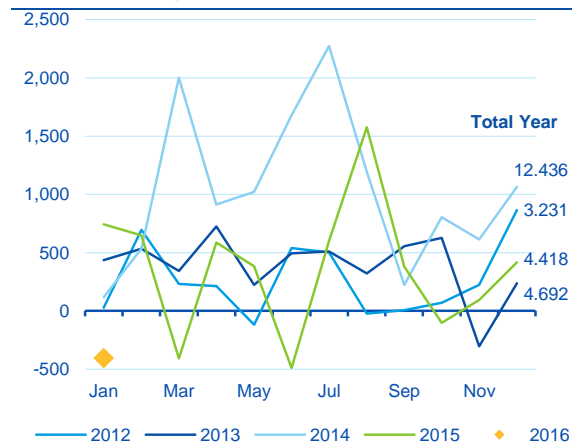
Moving forward, uncertainty is increasing with the inflow of capital. In terms of the outlook for emerging countries, inflows slowed down notably at the start of 2016. In this context, we expect to see a slower inflow of portfolio capital and direct foreign investment this year (Figure 3.2).

Figure 3.1  
**Oil price, EMBI and the Colombian exchange rate (Index, Jan-14 = 100)**



Source: Bloomberg, Banco de la República, JP Morgan and BBVA Research

Figure 3.2  
**Portfolio equity, net inflows (USD millones)**



Source: Banrep's Foreign Exchange Balance y BBVA Research

**There is still a part of the adjustment to come, regarding growth of the economy**

The slowdown of the economy will continue to be gradual. We forecast growth of 2% in 2016. This will mean a further moderation to 2015 growth, which we estimate will be close to 3%. This slowdown is the result of a gradual, controlled adaptation of the economy to the major external shock of recent events – the further fall in the price of oil, the slower growth in China, the Fed embarking on a restrictive cycle and the slower capital inflow.

In this context, the economy this year will record weaker consumer spending and less dynamic public investment. Forecasts for consumer spending are not as positive as consumer confidence is close to zero (on a scale from -100 to 100), below the average of 16 over the past 15 years. The willingness to purchase vehicles and other durable goods is in negative numbers and there is less optimism regarding home purchases. Fiscal restrictions increased with the new panorama of lower oil prices, meaning fewer resources for Central Government and decentralised bodies (See Section 5).

The labour market worsened in 2015. Employment shrank 0.5% between December 2014 and December 2015 (equivalent to 53,000 jobs) with a 0.5% increase in unemployment to 9,8% in the country's thirteen main cities. We feel that this worsening employment scenario will continue in 2016, taking joblessness to 10.6% by year end. On a national level, despite greater job creation, the deterioration of the labour market was evident – in 2014 all the jobs that were created were in formal salaried positions, while in 2015, 57% of the 475,000 jobs were not salaried (the majority being in self-employed or informal employment). This tendency may deepen in 2016, with less job creation, and thus be biased toward more informal employment.

Retail sales began to have a greater impact on consumer spending. While figures from the first half of 2015 only showed a drop-off in the sale of vehicles, recent data highlights a more general slowdown in all product groups. Based on this trend, we take the view that year-on-year variations in household spending will continue to fall, reaching minimum levels mid-way through the year, before beginning a slow process of recovery. The adjustment in end-use consumption can also be explained by lower consumer spending (due to the budget cuts announced by Central Government and those yet to be announced).

Another important reason for the slowdown as far as the Government is concerned stems from reduced spending on public works. This fell from 10% in 2015 to 4% in 2016 (Figure 3.3). In fact, if it wasn't for the launch of fourth-generation infrastructures, scheduled for the second half of the year, assuming work



progresses according to the initial planning, the public works sector would be in freefall. This is due to the Central Government's reduced oil resources and the subsequent cost-cutting, amendments to the mining-energy company investment plan and the cutbacks affecting royalties paid to decentralised regions. Furthermore, mining and energy companies may have higher borrowing costs than corporations in other sectors that have been less impacted by the fall in commodity prices, preventing them from embarking on large-scale investment projects.

There are various factors suggesting growth in 2016, in addition to the 4G infrastructure program. Industry (due especially to the opening of the Cartagena Refinery) will record an annual growth of 7.5% (of which the refinery will contribute 5%). Agriculture will also grow above the average level forecast for the economy on the back of the good first-quarter coffee harvest and a recovery in the price of other produce (rice, flowers, palm oil), especially in the second half of this year. Other sectors with positive results in 2016 will be hotels and restaurants (helped by the devaluation of the peso), financial intermediation and construction (Figure 3.4).

With regard to this sector, residential investment will be leveraged by the building of social housing and residential property for the middle class, encouraged by public subsidies for these segments, as well as by the continuation of the school building programme as outlined in the Productivity Impulse Plan, popularly known as PIPE II. Finally, non-mining exports will see a slight recovery, moving from the negative growth levels in 2015 to figures that are similar to the growth in GDP for 2016.

In 2016, mining will be the biggest millstone for the economy, shrinking 7.3%. We forecast that average oil production will stand at 919 mbd, 8.6% below the 2015 average figure. We also estimate falls in the production of carbon of almost 6%, with nickel production down 9%. In this sector, the only recovery has been in the production of non-metallic minerals on the back of work commencing on 4G. Nevertheless, given the low contribution from the mining segment, this will not be enough to compensate for the drop-off in other sub-sectors

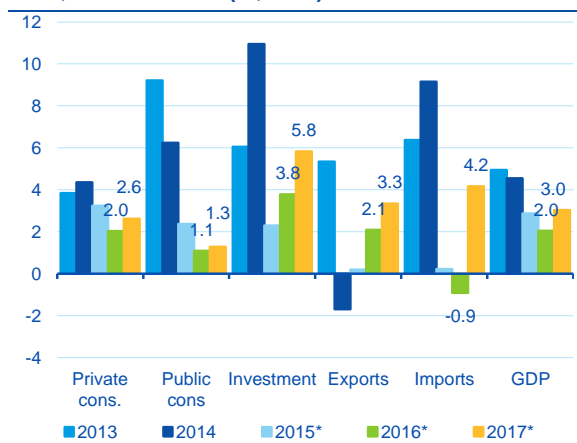
In 2017, GDP growth will recover to 3%. The main focus for this growth will be the work on 4G, as this year will see a consolidation of the progress made on structured work with the first phase of concessions. A greater quantity of school classrooms will be built, as tenders for a large number of projects have already been granted. On the back of this, there will be a less significant, yet nonetheless important, recovery in consumer spending and exports. The former will be a consequence of improved internal confidence, although household spending will be limited by the effects of a possible increase in VAT in 2017. In the case of the latter, it will be a result of a more optimistic global outlook, especially in developed countries. This will also imply improved performance of the industry which differs from refining and agriculture, accompanied by a process of substituting imports which began with the devaluation of the exchange rate.

In total, the adjustment for the two-year period 2016-2017 compared to earlier trends will have a number of positive effects: (i) the growth profile will change, with a greater importance afforded to the non-mining tradable goods sector; (ii) export products will have greater aggregate value; (iii) there will be a change in the profile of the consumer sector, with a lower incidence of imported goods; (iv) the tourism sector will enjoy greater growth due to the positive effect of the exchange rates; (v) the construction sector will concentrate growth on revenue streams that have greater potential demand (to judge by the housing shortage): low- and medium-income properties.

However, there will also be challenges that the Colombian economy will need to face. The economy's terms of trade will remain at lower levels than those seen the years prior to the oil price crash. The generation of foreign exchange (and its subsequent impact on national income) will be lower. The development of specialist commercial establishments (shopping centres, for example) will give rise to a slower rate of growth than in the past.

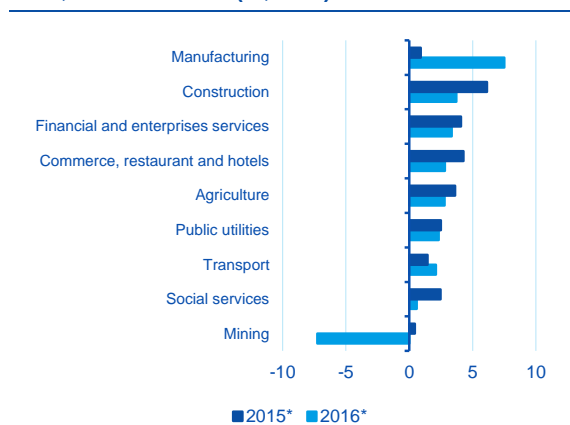


Figure 3.3  
**GDP, demand side (% YoY)**



Source: DANE. \* BBVA Research forecasts

Figure 3.4  
**GDP, sectorial side (% YoY)**



Source: DANE. \* BBVA Research forecasts

### Faster economic growth in the medium term will depend on the infrastructure plan and increased productivity

Colombia faces a big challenge in terms of finding new sources of growth, after the structural collapse of oil prices and lower levels of medium-term international liquidity. The leading candidate among these potential new sources is the building of infrastructure: it will not only mean greater activity during the years of construction work but also increased productivity associated with activities related to tradable goods, which have benefitted from the devaluation of the exchange rate.

Similarly, the change in the Bogota government's priorities, with a greater emphasis on infrastructural work and housing within the total budget, might well increase the capital's share of national construction output. These factors are not completely accounted for in our forecasts for 2017 and 2018, and may represent an upward bias in terms of our outlook of total GDP.

## Box 1: What's next for oil prices?

### The End of an Era

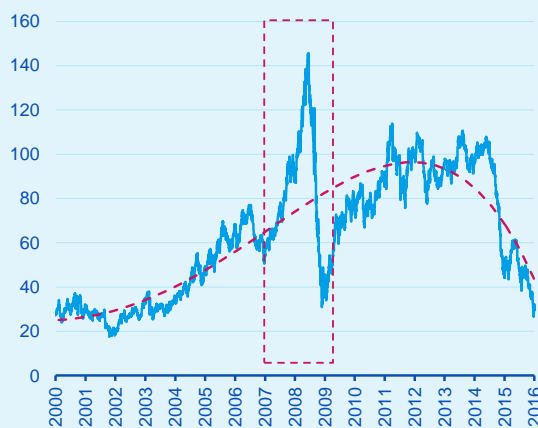
Between the early 2000's and the second half of 2014, oil prices exhibited a period of sustained gains interrupted momentarily by the Great Recession. In this commodity super-cycle, oil market conditions were characterized by robust growth in both non-OECD demand and non-OPEC supply of crude oil, supported by loose monetary policy, unprecedented technological advancements and search-for-yield investment strategies. As a result, a massive amount of resources were allocated throughout the oil and gas (O&G) value-chain.

Global demand was largely driven by the formidable economic expansion of emerging markets. Between 2000 and 2015, emerging markets contributed with 70 cents per each additional dollar –PPP adjusted- of world's GDP. In the same period, the increase of global demand for petroleum products was entirely driven by emerging markets. Moreover, China's staggering 9.5% average GDP growth in this period and its large spillover effects on other emerging markets, explain 62% of the net increase in petroleum products demand in the last 15 years.

Non-OPEC supply's surge was driven by the U.S., where a combination of high oil prices, hydraulic fracturing, horizontal drilling, deep-water technologies and historically low interest rates encouraged a significant amount of investments in the O&G industry. In fact, the ratio of total capital expenditures in O&G to GDP increased from 0.4% in 2000 to 2.1% in 2014, accumulating \$2.8tn in 15 years. As a result, U.S. crude oil production increased from 5.7 million b/d in 2011 to 9.7 million b/d in April 2015. In this period, the U.S. accounted for 83% of the cumulative net increase in global crude oil supply.

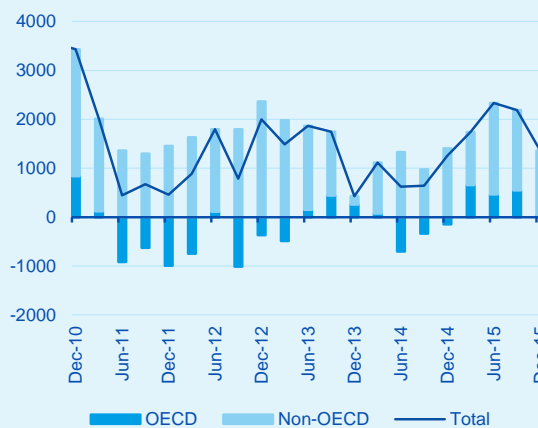
Throughout much of this period, crude oil prices increased consistently suggesting that demand-side factor dominated market expectations. However, beginning in 2011, when U.S. supply began to surge, oil prices stabilized as expectations discounted a more balanced market.

Figure R.1.1  
WTI Spot Price (\$ per barrel)



Source: BBVA Research & Haver

Figure R.1.2  
Oil Product Demand (yoy change, thous b/d)

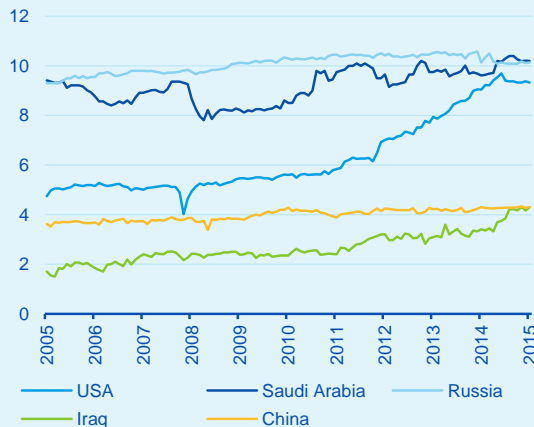


Source: BBVA Research & Haver

However, by 2014, demand was unable to absorb supply, leading to a decline in prices that continues until today.

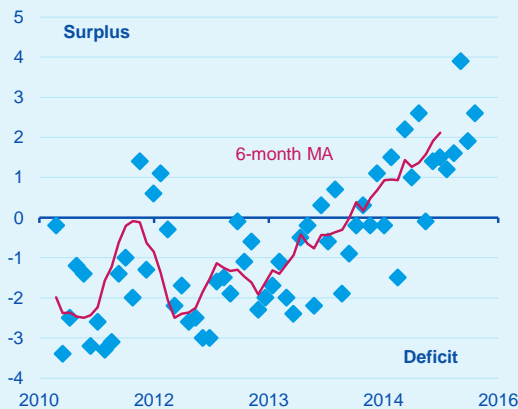
In previous episodes of price downturns, OPEC would have reacted by cutting production as it did during 2001 and 2008; however, in November 2014, the cartel surprised markets by deciding to keep its production quota unchanged which was interpreted as an attempt to protect market share. The reluctance to cut production and even revamp it in 2015, when prices continued declining, was seen by some experts as an attempt to force higher-cost producers to exit the market.

Figure R.1.3  
**Crude Oil Production (million barrels per day)**



Source: BBVA Research & Haver

Figure R.1.4  
**Global Oil Supply and Demand Balance (million barrels per day)**

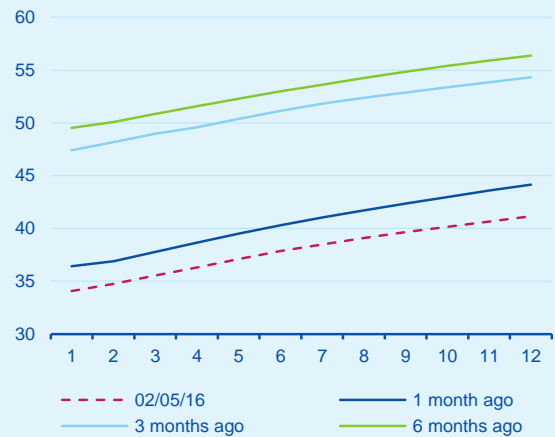


Source: BBVA Research & Haver

At the same time, in mid-2014, China's economic deceleration became more evident. This trend has persisted ever since. For example, the manufacturing PMI has decelerated consistently since July 2014, after it reached a peak of 51.7. The spillover effects into emerging markets have been significant. For instance, growth of industrial production in emerging markets and the volume of foreign trade from and to this region have slowed to their lowest levels in six years.

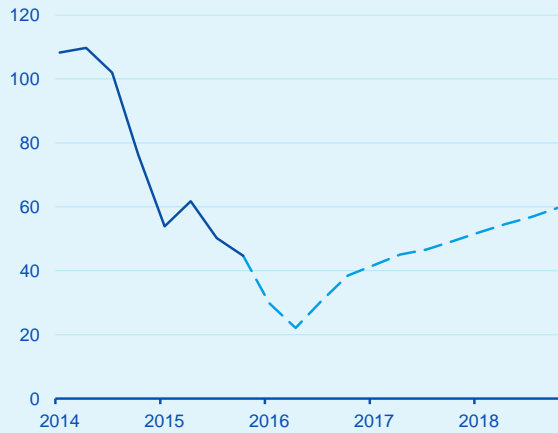
Our econometric analysis confirms that the drop in oil prices has been primarily driven by fundamentals: supply and demand, including expectations about both factors. In particular, resilience—and expectations about—the non-OPEC oil supply and the weakness—and expectations about—the nonOECD aggregate demand have had a relevant role in the oil prices level and volatility. In addition, the reassessment of global growth expectations in favor of developed economies relative to emerging markets along with monetary policy divergence in developed economies—both of which strengthened the relative value of the U.S. dollar—, have generated further downward price pressures. Price volatility has also reflected geopolitical developments such as the lifting of sanctions on Iran and military conflicts in the Middle East. Our baseline scenario projects a downward adjustment in 1H16 followed by a mild recovery thereafter. By the end of 2018, prices are expected to stabilize around \$60/bbl, level around we estimate the long-term equilibrium level.

Figure R.1.5  
**Brent Crude Futures (\$ per barrel)**



Source: BBVA Research & Haver

Figure R.1.6  
**Crude Oil Price Forecast – Baseline (Brent, \$ per barrel)**

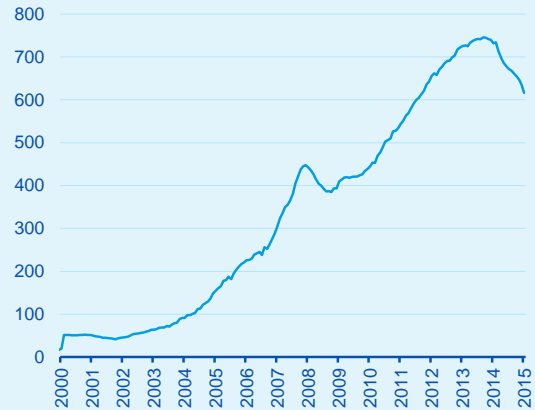


Source: BBVA Research & Haver

### Further prices correction is possible in the next few months

Since prices began to fall, futures contracts have persistently reassessed expectations to the downside, suggesting that it is still uncertain when prices could reach a bottom. Concerns on oversupply persist. OPEC has not shown any convincing signs of a potential cut in production. This could be explained by two factors. On the one hand, the marginal cost per barrel for Saudi Arabia and other OPEC members remains well below \$20bbl. On the other hand, Saudi Arabia –the biggest producer and holder of the second largest proven reserves- has been able to absorb the impact of low prices on its economy through a combination of austerity measures and selling foreign reserves. Considering the foreign reserves level (\$616bn, 100% of GDP) and that public debt is low (6.7% of GDP), the country has ample room to withstand a longer period of low oil prices.

Figure R.1.7  
**Saudi Arabia: foreign reserves (total minus gold, EOP, billion US\$)**



Source: BBVA Research & Haver

Figure R.1.8  
**Iran: crude Oil Production (million barrels per day)**



Source: BBVA Research & Haver

Divisions within OPEC obscure the possibility of agreement among members. The cartel is split in two groups. The first includes countries like Venezuela, Nigeria, Iran, Iraq and Libya whose troubled economies desperately need higher prices and would like to see production cuts coming from members with stronger economic conditions. The second group is comprised by Saudi Arabia and other Gulf states who believe that any cut in production should be shared not only by all OPEC

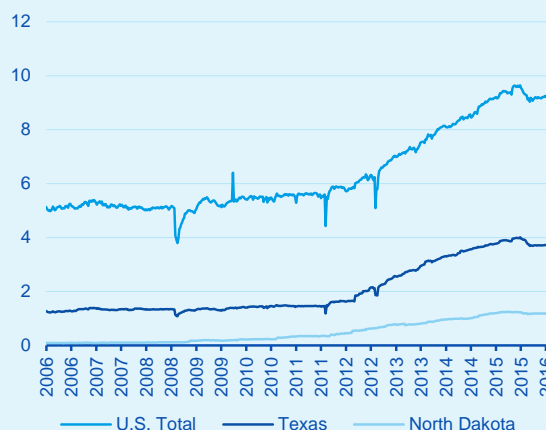
members but by non-OPEC producers as well; a necessary condition to maintain market shares unchanged. However, non-OPEC countries like Russia –the second world’s largest producer- and Brazil may find it difficult to cut production voluntarily as their economies are contracting and oil revenues are critical to support countercyclical fiscal policy. Not surprisingly, recent efforts to persuade Russia to join OPEC in cutting production have been unsuccessful.

Another source of downward price pressures has to do with Iran’s ability to export crude after the lifting of sanctions resulting from the nuclear deal with the P5+1. The Iranian government aims to increase production by 1 million b/d in 2016, which would mean returning to full production capacity, estimated at nearly 4 million b/d. However, a more reasonable estimation suggests that the amount of additional oil that the country can inject into the global market in the short-term is between 300K b/d and 500K b/d. A larger expansion in production will take time as significant amounts of investments are needed to modernize a deteriorated infrastructure. These investments will not flow swiftly given tighter credit conditions and diminished risk appetite.

Given OPEC and Russia’s impasse together with Iran’s reintegration to the global market, the attention has turned to the U.S. where production has shown a significant degree of resiliency. Since its last peak of 9.7 million b/d in April 2015, U.S. crude oil field production went down gradually to 9.3 million in November 2015. Until now absence of an abrupt decline in U.S. production can be explained by a series of factors. First, highly- leveraged operators need to continue producing and selling crude in order to service debt. Second, variable costs have adjusted faster than expected providing a temporary relief to partially absorb the impact of declining prices. The third factor is the heterogeneity of the industry and its assets. For instance, break-evens vary across shale plays and so do operators’ responses to declining prices. Some companies are more diversified than others or have assets of better quality. Adjustments in production have been heterogeneous across shale plays; for example, as of December 2015, production continued to expand

in the Permian and Utica, but contracted in the Bakken and the Eagle Ford. However, those factors are not permanent. In the extent that the scenario of low prices remains, the decline of U.S. oil production would be more intense.

Figure R.1.9  
U.S. Crude Oil Production (millions barrels per day)



Source: BBVA Research & Haver

Table R.1.1  
Real GDP Growth (YoY % change)

	Estimates		Projections
	2015	2016	2017
Russia	-3.7	-1.0	1.0
China	6.9	6.2	5.8
India	7.3	7.5	7.5
Brazil	-3.8	-3.0	1.3
South Africa	1.3	0.7	1.8

Source: BBVA Research, IMF and Haver

From the demand side, prospects for global growth have diminished due to weakness in emerging markets and modest growth in developed economies. In particular, China’s economic growth is expected to go from 6.9% in 2015 to 6.2% in 2016 and 5.8% in 2017. Our baseline scenario assumes a “soft landing”; however, uncertainty about the magnitude of the slowdown and the government’s

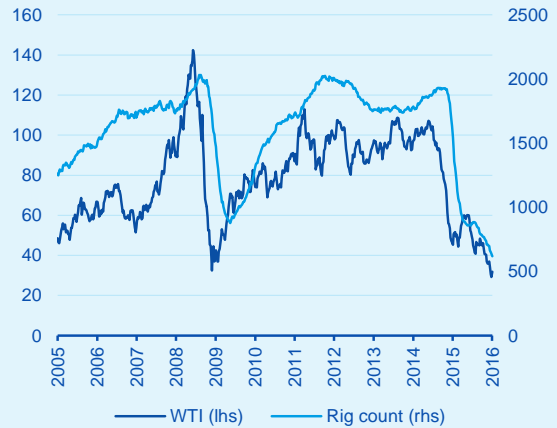
ability to manage the cycle through fiscal and monetary policy is likely to exert downward pressures on crude prices in the short-run. Slower growth in China will have spillover effects on other emerging markets with negative implications for the demand of crude. Another factor preventing prices to go up anytime soon are persistently high levels of inventories, mainly in the U.S. where crude stocks excluding strategic reserves are the highest in eighty years, and where despite their exponential growth, pressures on working storage capacity are still contained.

### Modest improvement in 2H16 and 2017

Although prices could decline further in 1H16, a stronger adjustment in U.S. production could bring them up in 2H16 and 2017, particularly if the drop in US production is larger than the potential increase in supply from other producers (e.g. Iran). The rapid reduction of active rigs suggests that U.S. crude oil production could decline by around \$1 million b/d over the next twelve months. This would trim a substantial portion of excess supply in the market, currently estimated to be between 1.5 and 1.8 million b/d. In 2015, U.S. real private fixed investment in mining exploration, shafts and wells contracted 35%, \$47.3 billion less than in 2014. This trend is likely to continue in 2016 as O&G make further CAPEX reductions in response to pressures on profitability. As a share of GDP, CAPEX in the U.S. O&G industry declined to 1.5%, the lowest since 2008. U.S. production will also be affected by an increasing number of bankruptcies and a more risk-averse environment reflected by tighter credit standards for O&G financing<sup>1</sup>.

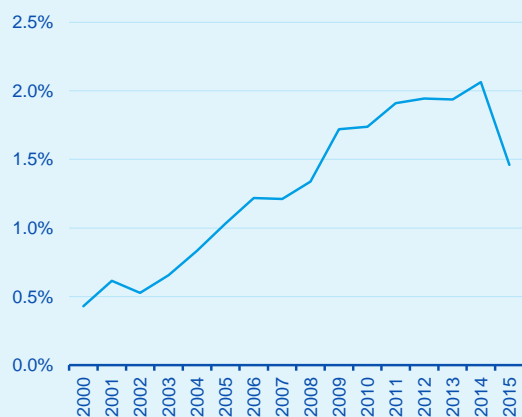
<sup>1</sup> According to the Shared National Credit Program, approximately \$34.2bn of outstanding syndicated debt in O&G may be at risk of default, that is one in seven loans of more than \$20 million. In 2015, around 40 firms declared bankruptcy with an estimated total debt of \$16.7bn.

Figure R.1.10  
**U.S. Active Rig Count and WTI (units and \$/barrel)**



Source: BBVA Research & Haver

Figure R.1.11  
**U.S. Capital Expenditures in O&G (share of GDP, %)**



Source: BBVA Research & Haver

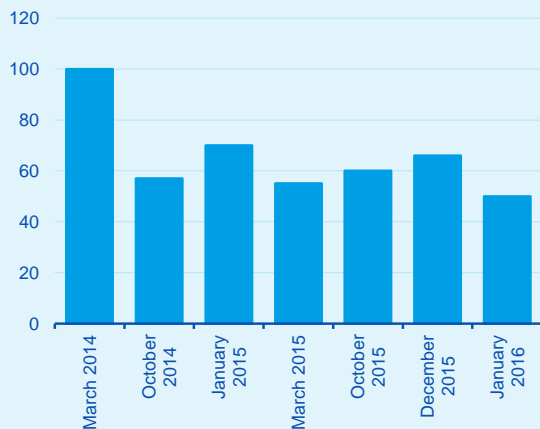
Global production could also decline if OPEC manages to convince Russia to reduce production; however, as we prepare this document, there is no solid evidence that this could happen soon.

Although a deeper adjustment of U.S. production or an OPEC agreement with Russia could bring prices up again, the upside will be limited by the following factors: first, if Saudi Arabia and its partners want to maintain or gain market share, they need prices to be just below the breakeven



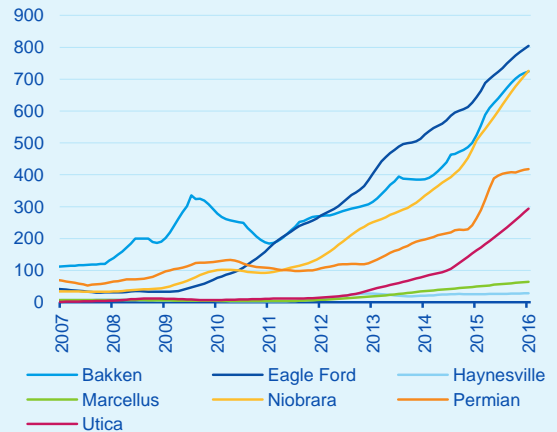
prices of high-cost producers. This means that they cannot cut production to a point that high-cost producers become competitive again. Second, the flexibility and efficiency of the U.S. shale industry suggest that firms may revamp production relatively quickly once they perceive prices are increasing again. The short time between investment decisions and production will prevent the U.S. shale industry to be the key factor in sustaining a price upturn. Third, prospects for slower economic growth could counterbalance any upside coming from a supply adjustment. In other words, for Saudi strategy to work, the period of low oil prices needs to be somewhat prolonged in order to avoid a quick return of shale oil producers.

Figure R.1.12  
**North America Average Break-Even Prices (Tight oil, \$ per barrel)**



North America Average Break-Even Prices (Tight oil, \$ per barrel)

Figure R.1.13  
**Rig Count Productivity (B/d per rig)**



Source: BBVA Research & EIA

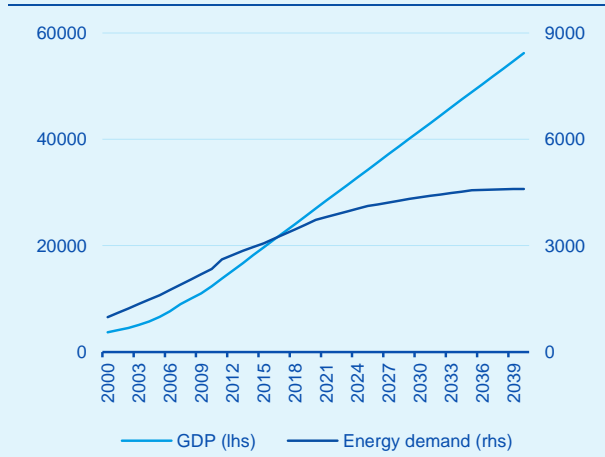
### Are oil prices heading to lower long term equilibrium? Yes, they probably are, but uncertainty is huge

Structural changes in the energy market will have a significant impact in the long-run. From the supply side, increasing competition from non-OPEC producers will continue to weaken the role of OPEC as a price stabilizer. More competition will foster innovation that could bring break-even prices down, making currently high-cost producers more competitive in the future. The U.S. shale revolution proved that a more competitive environment encourages innovation that boost productivity and grants access to once unavailable resources. Technological advancements have rendered the notion of “peak oil” –that is the hypothetical point in time when production reaches its maximum and declines thereafter to depletion– less relevant in a world where reserves continue to be discovered and extraction is increasingly feasible. One example of productivity enhancers is plasma-pulse, a technology that maximizes oil recovery by using a high-energy plasma arc rather than by injecting fluids at high pressure to stimulate the reservoir. Plasma-pulse is a more efficient and more



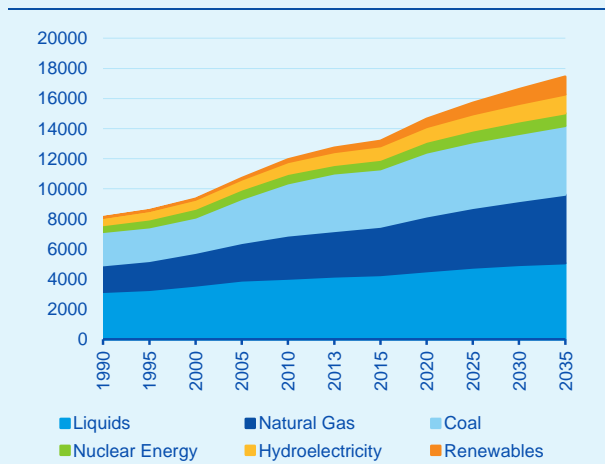
environmentally friendly option than traditional techniques.

Figure R.1.14  
**China: GDP and Energy Demand**  
(\$tn PPP, and million tonnes of oil equivalent)



Source: BBVA Research & EIA

Figure R.1.15  
**World Energy Consumption by Fuel**  
(million tons of oil equivalent)



Source: BBVA Research & EIA

From the demand side, emerging markets will continue to drive growth while demand in developed countries will continue to lose relative importance; however, the rebalancing of the Chinese economy could have far reaching implications for oil. While China's GDP may well remain above 6%, a recomposition of growth sources could imply a much sharper adjustment in

crude oil demand than if growth remains supported mainly by the industrial sector.

As China transits from an investment-driven to a consumption-driven economy, energy use per GDP is likely to change as it has been the case for developed countries. In this regard, the International Energy Agency projects Chinese energy demand to start decoupling from GDP by the end of this decade and stabilize near 4000 million tons of oil equivalent by 2040. This divergence will bring the energy to GDP ratio downward implying higher energy efficiency in transportation, commercial and industrial activity.

Finally, commitments to reduce CO2 emissions to the atmosphere –epitomized by the unprecedented success of the 2015 UN Climate Change Conference– are expected to encourage significant amounts of investments in order to increase the share of renewables in the global energy mix. These investments together with fiscal incentives across the globe promise to increase the cost-competitiveness of clean energy relative to fossil fuels. As technology adopters, emerging markets could make a relatively quick transition to energy efficiency and renewable sources even if oil prices remain low for a prolonged period of time.

These trends would imply a new and certainly lower than previously expected equilibrium price for crude oil, although the uncertainty is huge about the intensity or even about the effective manifestation of those long term factors in the forecast horizon.

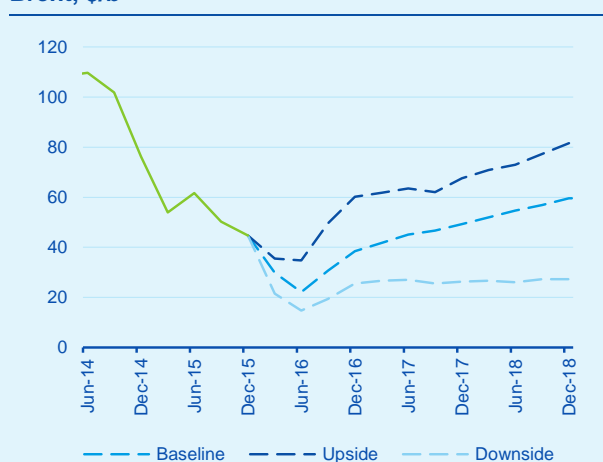
From a long term perspective, oil markets may be moving to a new paradigm. One in which hydrocarbons are abundant and accessible, but energy demand is shifting towards multiple sources. The world's energy needs are massive, but also complex. On the one hand, vast amounts of cheap energy are needed to support economic growth in developing countries where population is expected to grow the most. However, as the impact of climate change becomes more acute

and governments and private agents around the world take it more seriously, the need for “clean and cheap” energy is no longer an option but an imperative. Hydrocarbons fit only in the “cheap” part of the equation. Renewables, on the other hand, are clean, but it will take some time before they become a cost-effective alternative for economic development, more so if prices remain low. In this new paradigm, oil will still be needed, but in less quantities, and companies will produce “energy” in the most holistic sense of the term.

### Huge uncertainty around our baseline scenario, also in the short- and mid-run

The uncertainty doesn’t vanish in the short and mid-term than in the long term. Prices could stop falling and resurge rapidly if 1) OPEC decides to cut production, 2) U.S. production shows a faster than expected adjustment with long-lasting impact on the industry, and/or 3) the deceleration of the global economy turns out to be milder than expected. Opposite events could outcome the opposite scenario of prices, i.e.: 1) a “hard-landing” of the Chinese economy materializes; 2) OPEC maintains its current production quotas and engages in a price war against other producers, and 3) U.S. production remains resilient while break-even prices decline due to innovation. The financial resilience of oil producers – OPEC and non-OPEC- to low oil prices scenario, the uncertainty about the soft landing of EM and the real impact of incoming innovation in oil industry will shape the final outcome of oil prices.

Figure R.1.16  
**Crude Oil Price Forecasts  
Brent, \$/b**



Source: BBVA Research

Table R.1.1  
**Crude Oil Price Forecasts  
Brent, \$/b**

	Baseline	Upside	Downside
2015	52.6	52.6	52.6
2016	30.3	45	20.3
2017	45.7	63.7	26.4
2018	55.7	75.7	26.8

Source: BBVA Research

**Box 2: A less important role for oil in the Colombian economy**

Although the initial blow to the energy market – when prices fell from USD 120 to USD 60 a barrel – and the final collapse – when prices plummeted from USD 60 to USD 30 a barrel – were both equivalent to a stripping of 50% off the price, its effects on the Colombian economy were less in the second case. Economists call this phenomenon “non-linearity” in the relationship between two variables: the marginal effect is reduced when the impact is repeated to a similar extent.

Why is the effect on the economy less in the second case? This non-linearity has various explanations. It stems from the idea that the economy absorbed the impact from the initial and adjusted to a large extent to the new reality of oil prices.

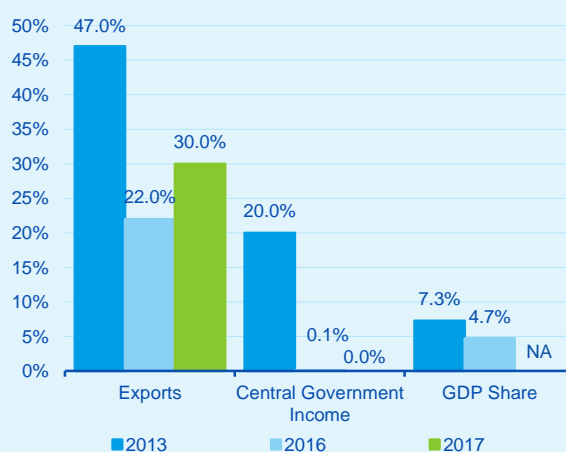
Revenue from energy commodities, which represented 20% of Colombia's income (3.3% of GDP) in 2013 will fall to almost 0% of revenue in 2017 (Figure R.2.1). This adjustment was achieved by cutting government spending and increasing the fiscal deficit (See Section 5).

The value of crude oil exports fell from 47% of the total value of exports in 2013 to 36% in 2015. We expect this percentage to fall further, to 22% in 2016, rising slightly to 30% in 2017, if the price of oil recovers to the extent forecast by BBVA Research (Figure R.2.1). The role of oil exports will lessen further due, among other factors, to the early recovery in non-mining exports, which have benefitted from the devaluation of the exchange rate and the increased growth in developed countries.

The oil sector was also important in attracting direct foreign investment, which has shrunk, paving the way for other sectors to attract more foreign capital. Investment in the oil sector fell 25% from their 2013 levels in 2015, while joint investment in construction, trade, financial, business and property activities rose 26% in the same period, albeit from lower levels, with an impossibility to compensate for the value of the lost investment in the oil sector.

The contribution from the extraction of crude oil (including natural gas, uranium and thorium) to real GDP fell from 7.3% in 2013 to 5.2% in 2015 (to September). This proportion is expected to continue to fall in line with the lower oil production levels that we forecast for 2016 and 2017. In comparison to 2015, average daily oil production will be 10% less in 2017.

Figure R.2.1  
**Importance of Oil in exports, Government revenue and GDP**



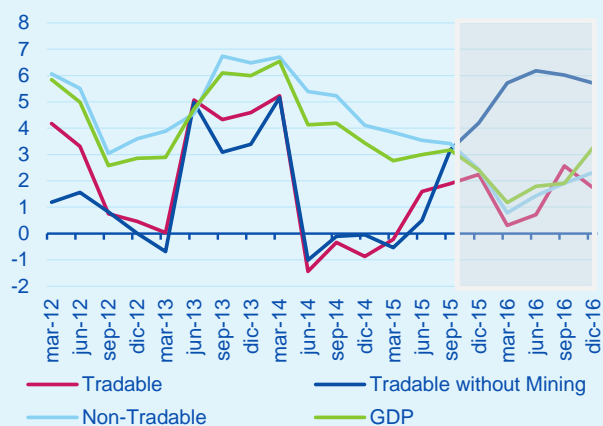
Source: DANE, Ministry of Finance and BBVA Research

Furthermore, in Colombia's national accounts, oil has an indirect effect on GDP in terms of investment in public works in the mining sector, discouraged by the lower price of oil. Mining work as a percentage of all public works fell from 51% of the total in 2011 (the highest proportion) to 34% in 2015. The execution of public building work by regional and local governments, funded by royalties from the oil and mining industries, will continue sliding between 2015 and 2016. According to the government's calculations, royalties fell from COP 19.3 trillion in the two-year period 2013-2014 to COP 12 trillion for the two-year period 2015-2016, with further falls possible for 2017-2018.

Finally, the other economic sectors, which were negatively affected by high oil prices and the subsequent currency appreciation, have gradually

recovered their dynamism. This was not immediately possible during the first phase of the oil price collapse, as an additional adaptation period was needed, which they had during the following period (Figure R.2.2).

Figure R.2.2  
GDP growth by group of sectors (YoY, % variation)



Source: DANE and BBVA Research

Simultaneously, although at a slower rate than the fall-off in exports, the slowdown in imports led to a change in Colombia's production-consumption profile. We actually forecast a greater role for domestic goods, to compensate for the lower levels of foreign purchasing. The additional fall in oil prices and the subsequent devaluation of the peso will have less impact on the household purchasing structure, where the proportion of imported goods has fallen. Once again, therefore, we see the principle of non-linearity.

To conclude, Colombia has significantly reduced its exposure to oil resources. This has been the case with fiscal accounts, external accounts, domestic GDP accounts and in the sectoral balance with respect to growth. Additional falls in the price of oil had (and will have) fewer repercussions in terms of the performance of the Colombian economy than those seen during the initial phase of the price collapse.

## 4 Two sides of the same coin in terms of current account adjustment – deficit levels have been reduced, while they remain high with regard to GDP

One of the major challenges facing the Colombian economy is to ensure an ordered current account adjustment. The 2015 foreign deficit ended up at around 6.7% of GDP. For 2016 a similar percentage is forecast, also in proportion to GDP (Figure 4.1). Its dollar value will slip between 2015 and 2016 however, falling below the 2014 level, when deficit stood at 5.2% GDP. The current account deficit in dollars rose from USD 19.5 billion in 2014 to USD 19.6 billion in 2015 (estimated), despite such a strong fall in the price of oil, where total sales represented 40% of exports. In 2016, there will be a further adjustment of the deficit in terms of its dollar value, to USD 17.8 billion. Finally, the recovery of the economy in 2018 will again increase the deficit to USD 18.6 billion, stabilising at around USD 18 billion in the medium term.

This shows that, although very gradually, the external balance has been corrected, a necessary step forward in order to compensate for the collapse in oil export revenue and the subsequent fall in domestic savings. It also highlights the fact that the deficit increase can, to a large extent, be explained by the devaluation of the peso and the consequent fall in GDP in dollar terms. In 2016 in fact, the external deficit would shrink to 4.7% of GDP from 6.8% if there were no devaluation of the peso in 2016.

The most important adjustments can be seen in imports and in the payments made to foreign investors. In 2015, imports fell 15% (to USD 52.3 billion) while in 2016 they will fall a further 9% (to USD 47.5 billion). This is in line with the additional slowdown that we forecast in consumer spending. In 2017 this figure will recover 8.7% (to 52.7 billion), although it will not return to 2014 levels (USD 61.6 billion) before the end of this decade. Dividend payments will fall from almost USD 15.6 billion in 2012 to nearly a third of this level in 2016, with a slight recovery forecast from 2017 onward. This will not be sufficient to ensure that payments return to their maximum levels in the next five years.

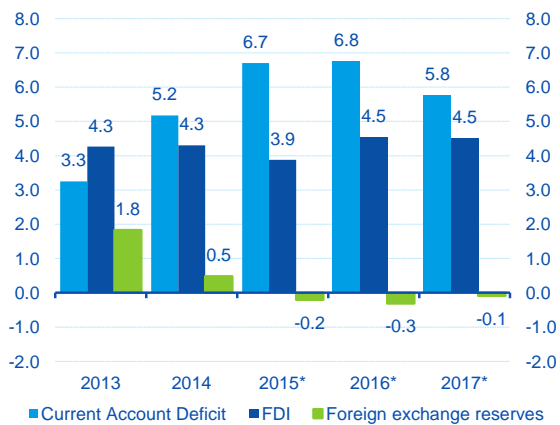
The recovery of external revenue, also required for the adjustment to the current account, will not be consolidated until 2017, as there will be further shrinkage in 2016 (-7.1% year-on-year) to USD 35.1 billion. The good news as far as this drop is concerned is that it wholly the result of the fall in oil (-39% year-on-year) and coffee (-19% year-on-year) revenues, as other areas will show improvements on 2015 levels. Between 2015 and 2017, we expect to see an accumulated increase of 13% in traditional exports (coffee, oil, ferronickel and coal) and 14% in other goods. Exports in 2017 will total around USD 42.7 billion. Finally, employee remittances will stand at very close to USD 4.8 billion in 2016 and 2017, compared to the USD 4.1 billion reported in 2014 (Figure 4.2).

The financing of the current account (in other words, the balance of the financial or capital accounts) will not be as easy as in previous years and may need a decumulation of foreign reserves no greater than USD 1 billion in 2016, before relative stability can be ensured in 2017 (Figure 4.1). Foreign Direct Investment (FDI) will remain stable in 2016 in comparison to 2015, at almost USD 12 billion. Nonetheless, the 2016 level would be lower were it not for ISAGEN sales resources, which we estimate at around USD 3.4 billion. In 2017, FDI may increase to USD 13 billion. We expect that the construction (above all, infrastructure programmes), industry, banking and commerce sectors to be the most dynamic in the raising of capital, partly compensated by the lower level of investment in mining- and oil-related activities.

There is still, however, deep uncertainty regarding Colombia's capacity to attract these capital flows, even at the low levels that we forecast. This is partly due to the heightened aversion to risk in the emerging economies at the start of the year and the rises in the underlying EMBI and CDS. In such a context, the flow

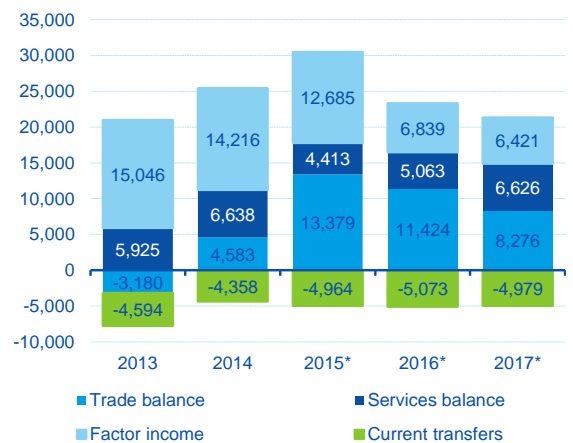
of capital toward under-developed countries came to a swift halt. If inputs are lower, international reserves could shrink further without affecting the sustainability of the Colombian economy, given that imports and GDP in dollars will fall at a faster rate.

Figure 4.1  
**Current Account Deficit and Sources of External Financing (% of GDP)**



Source: Banco de la República. \* BBVA Research forecasts

Figure 4.2  
**Current account deficit by componente (USD Millones)**



Source: Banco de la República. \* BBVA Research forecasts. A negative number represents a surplus



## 5 Public finances have been adjusted, in the face of lower oil prices. This correction has by no means concluded, however

The adjustment to public finances as a consequence of the collapse in the oil price will continue in 2016 and 2017, reaching maximum levels in 2017. Central government revenue from the sector fell from 3.3% of GDP in 2013 to 1.2% in 2015 and to 0.2% in 2016. It is expected to almost reach zero in 2017. Revenue from royalties will shrink by COP 19.3 trillion over the 2013-2014 two-year period to COP 12 trillion for 2015-2016.

The effects of this drop in revenue will mean that the central government deficit will reach maximum levels of 3.9% and 3.6% in 2016 and 2017 respectively. After closing 2015 with a deficit that stood at around 3% of GDP compared to 2.3% in 2013 and 2.4% in 2014), the figure will further increase to 3.9% in 2016 before falling back to 3.6% in 2017. This forecast from BBVA Research includes an adjustment to expenditure as a percentage of GDP, which will slip from 19.1% in 2014-2015 to 18.8% in 2016 and to 18.7% in 2017. This suggests a real increase in total expenditure which is much flatter (1.5% year-on-year average between 2013 and 2016) if compared to growth between 2000 and 2013 (6.6% year-on-year average). We should mention that the adjustment to investment expenditure, which has fallen from 3.1% of GDP in 2013 to 1.9% in 2016, a year-on-year average drop of 14% in real terms (an accumulated 36% over this period).

On the revenue side, our forecast for 2017 includes 0.6% GDP as additional income as a result of the tax reforms that the government will put before the National Congress in the second half of the year (See Box R.3 regarding preliminary proposals). The estimate also includes tax revenues at 0.3% of GDP for 2016 and 2017 due to efficient fiscal administration. These efforts are in addition to those that the government has already made in this area. According to government figures, between 2013 and 2015 annual revenue of 0.6% of GDP could be attributed to the Colombian Revenue & Customs office, DIAN<sup>2</sup>. In our scenario, with additional revenue from management of 0.3% percentage points in 2016 and 2017, this income should represent 0.9% of GDP (including the 0.6% already achieved and the extra 0.3%).

Our projection for a deficit of 3.9% of GDP for 2016 is consistent with the 2.1% structural deficit required by fiscal regulations. Despite the fact that the slower growth of GDP and the lower oil prices will allow the government to record an effective deficit in excess of 4% of GDP, it would seem to be committed to trying to maintain its level as low as possible. Our deficit forecast for 2016 is therefore similarly demanding.

As far as 2017 is concerned and applying our forecast price path, the estimated long-term price of oil will be USD 69.20 a barrel, which, compared to the average price for 2016, is an increase of USD 39 a barrel. With this differential, the energy cycle will be at close to 2% of GDP. In 2017 therefore, due to oil-price and macroeconomic cycles, the deficit allowed by fiscal regulations could be in excess of 4% of GDP.

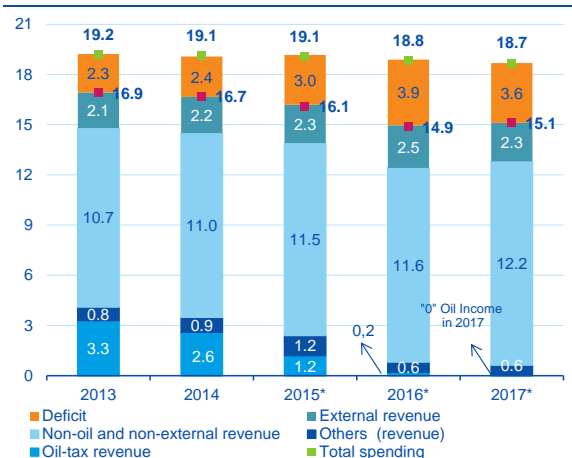
In terms of public debt, the efforts that Colombia has made to reduce the external component of the debt, increasing its average life and reducing the cost, have given the government greater manoeuvrability. Central government's total debt fell from representing 46.2% of GDP in 2002 to 37.1% in 2013. Perhaps more important than this reduction was the change to its make-up, with external debt, which represented 46% of the total gross debt in 2002 accounting for just 26% in 2013. In spite of the 63% devaluation at the close of 2013 and 2015, it is estimated that in the latter year, external debt represented around 37% of central government's total debt. For 2015 and 2016 we estimate that central government debt will stand at

2: According to the DIAN, in 2013 and 2014, revenue from effective fiscal management amounted to COP 4.4 trillion each year. The presentation of the updated 2016 Financial Plan made mention of revenue from management totalling COP 5 trillion in 2015 (COP 3.5 trillion from management and COP 1.5 trillion from special payment conditions). These revenues have already been included within central government's total revenue for the year.



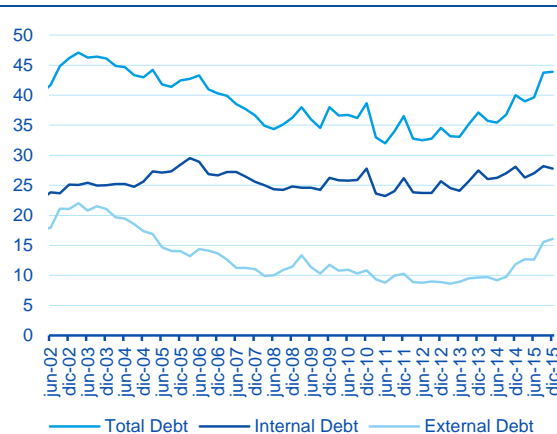
43.9% of GDP, a level that exceeds that of 2014 (40% of GDP), which can be mainly explained by the previously mentioned increase in external debt. From 2017 onward, debt as a proportion of GDP will begin to decrease, as forecast in fiscal regulations, once the cyclical effects of oil prices and activity wane.

Figure 5.1  
Central National Government fiscal balance (% del PIB)



Source: Ministry of Finance. \* BBVA Research forecasts

Figure 5.2  
Total debt, external and internal (% del PIB)



Source: Ministry of Finance

### Box 3: The Tax Reforms Proposed by the Commission of Experts

The discussion concerning the scope of the tax reform that the Government will present to Congress in the second part of the year is yet to be known, although important advance news can be found in the final document published by the Tax Reform Commission of Experts (TRCE) that was presented some weeks ago to the Colombian government<sup>3</sup>. This document puts the difficulties faced by the current tax system into context and makes very interesting improvement recommendations. Among their proposals is the suggestion that in the area of indirect taxes there is space to increase the amount collected. The Commission proposes increasing the general VAT rate from 16% to 19%; it also suggests a limitation to the goods excluded to those that have a public interest or where consumption has positive externalities; additionally it proposes leaving the minimum rate of 0% in place for exports and donation and increasing the excise tax rate from 7% to 11%, allowing the full discount on VAT in the purchase of capital goods. The elimination of these exceptional cases would seem to be important as, under current conditions, the TRCE regards the tax as inefficient.

As far as direct taxes are concerned, the TRCE proposes the elimination of equity tax both for individuals and entities and increasing the rate for presumptive revenue. The Commission also proposes extending the base rate for personal income tax, lowering the threshold after which this tax is payable. They also suggest the inclusion of revenue from pensions and dividends as taxable income. Pensions are to be taxed in a similar way to salary income, although pensioners will be able to discount compulsory health contributions. As far as dividends are concerned, there will be a discount of 20%, bearing in mind that part of this revenue is taxable at a business level. In the case of entities, the TRCE proposes the establishment of a single tax, the Business Profits Tax, or IUE to use its Spanish abbreviation, eliminating the income and supplementary earnings tax, the

equity tax or CREE and its additional charges. The taxable base for this new tax will be the accounting profit recorded by companies (with very limited adjustments) with a base rate between 30% and 35%. Almost all companies, with just a very few exceptions, will be subject to the tax, thus extending the tax base.

As far as taxes related to the labour market are concerned, the Commission is proposing the elimination of remaining parafiscal charges and contributions to family compensation funds. Mention should also be made of the Commission's recommendations concerning how best to reduce tax evasion through regulatory loopholes and improve control over non-profit-making bodies.

Any tax reform proposal should be based on the need for access to greater resources. Given the space that exists within the VAT system, we feel that increasing the general rate may well be a recommendable step. There should also be an attempt to eliminate certain taxes on which there is certain consensus regarding their distortionary nature such as the Tax on Financial Transactions, the Wealth tax and the lack of full rebate on VAT on capital goods. The reform should also seek to lighten the tax burden on companies and extend the tax base for individuals. The TRCE proposal to lower the threshold at which individuals begin to be taxed, as well as to tax income from pensions and dividends would appear to be an appropriate measure, not only in terms of revenue but also in terms of equity. This is consistent with the perception that the Colombian tax system is not a progressive one, as the exemptions, deductions and rebates, among other "exceptions", often are to the detriment of the principle of progressivity, horizontal equity, simplicity and the system's capacity to collect tax revenue.

<sup>3</sup> Equity and Tax Competitiveness Commission of Experts. December 2015 Report presented to the Minister of Finance and Public Credit.

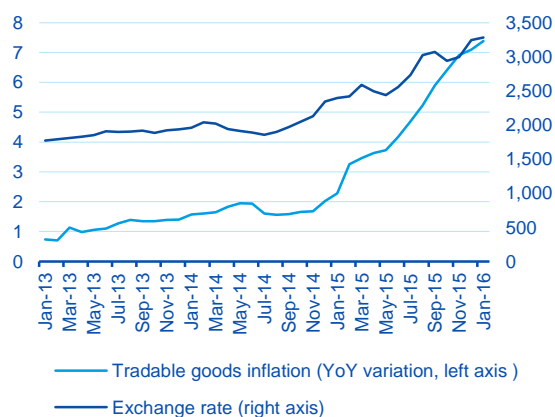
## 6 The challenges facing monetary and exchange-rate policy

### The subtle balance between control over inflation and macroeconomic adjustment

2015 closed with inflation at a high level (6.8%), passing the target 4% ceiling. The depreciation of the exchange rate explains this high rate, as it led to increases in inflation affecting tradable goods (including the price of certain imported goods), higher gas tariffs (19% by the close of 2015) and more expensive raw materials, indirectly raising the price of some products (Figure 6.1). A further determining factor was the drought caused by the El Niño phenomenon which hit the supply of agricultural produce and the level of reservoirs, sending the price of foodstuffs higher (10.8% YoY in 2015) and electricity tariffs (9% YoY in 2015) higher. As a result, inflation increased in 2015, both in total and basic terms (Figure 6.2).

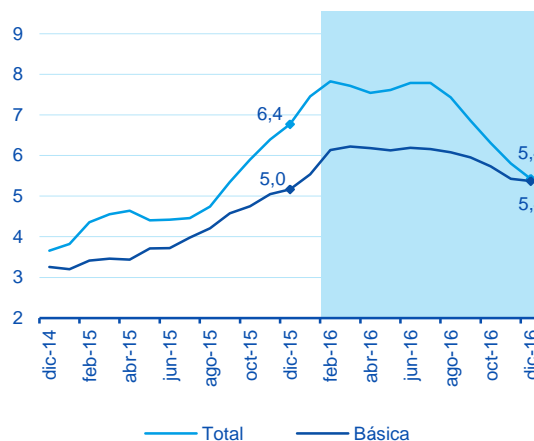
In January, inflation continued to accelerate, as a consequence of a prolonged El Niño phenomenon and the 8% MoM depreciation of the exchange rate in December. The persistence of these climatic shocks and changes will affect prices over the first half of the year, meaning that the convergence of the rate of inflation with the target figure will be more gradual. This dynamic will be further accentuated with the activation of economic indexing mechanisms that mean that the target rate will not be met before 2017. In fact, our projections forecast that inflation will remain above the target rate for the whole of 2016, with levels close to 7.7% for the first six months of the year. In the second half of the year, the rate should drop slowly, with a close-of-year projected figure of 5.4% as a consequence of the partial reversal of the impact on food prices, less demand-side pressure and a correction in exchange rates.

Figure 6.1  
Exchange Rate and Tradable Goods Inflation



Source: DANE, BanRep and BBVA Research

Figure 6.2  
Headline and Core inflation forecasts



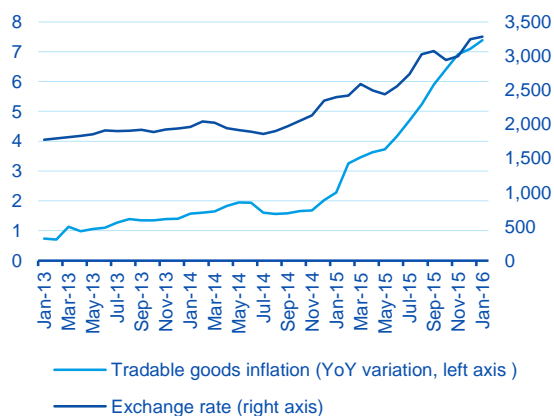
Source: DANE and BBVA Research

Although the devaluation of the peso has undoubtedly led to inflationary pressure, exchange-rate flexibility will continue to be an appropriate policy which will partially soften the external shock. Without this exchange-rate flexibility, the internal and external imbalances would have been more pronounced and persistent, meaning a sharper subsequent drop in consumer spending. Within this context, we expect to see the exchange rate continuing to act as a buffer to the external shocks experienced by the economy, which, given the international situation, suggests that the exchange rate will continue to fall throughout 2016. We forecast

an average depreciation approaching 21% in 2016 with an upturn in December of 1.7%. We forecast a normalisation of the exchange rate in 2017, in line with a gradual adjustment of oil prices, although on average it will be above COP 2,900 (Figure 6.3).

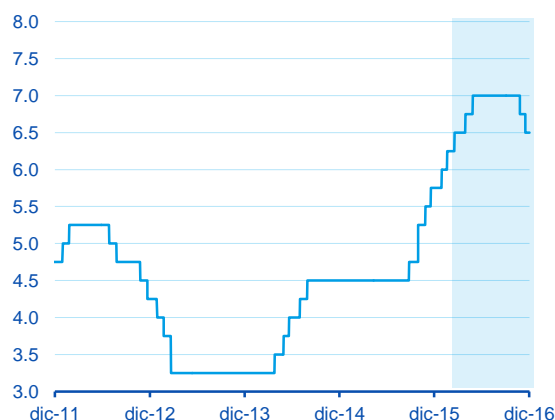
Within this complex situation, the Bank of the Republic will be facing a number of challenges during the year. As far as the exchange rate is concerned, while the current flexibility is favourable, the high levels of volatility might be damaging, increasing uncertainty in the real sector and limiting the capacity of the tradable goods sector to react to the signals given by an exchange rate that has been further depreciated. It is therefore probable that the options auction programme will be maintained (although it is yet to be activated) or that its conditions will be eased at some point during the year.

Figure 6.3  
**Exchange Rate and Tradable Goods Inflation**



Source: DANE, BanRep and BBVA Research

Figure 6.4  
**BanRep's Benchmark Rate Forecast**



Source: DANE and BBVA Research

With respect to inflation, the challenge facing the Central Bank centres on ensuring a subtle balance between the return of high inflation and the expectations of bringing it in line with target levels, without having an excessive impact on the economy. Achieving that balance is no easy task. Given current risk that expectations will not be met, we forecast further movements of the repo rate to 7% in Q1. Nevertheless, fears of an over-adjustment to the Colombian economy mean that the Central Bank will act very cautiously on the figures available to ensure there is no over-reaction to the drop in domestic demand, continuing with the gradual increases in the repo rate. Furthermore, given the reduced pressure on the demand side and a normalisation of inflation forecasts to year end, our outlook foresees 25% reductions at both the November and December 2016 meetings, closing the year on 6.5% (Figure 6.4).

Among the indicators that will be central to discussions at meetings of the BanRep's Board of Directors, in order to guarantee the convergence of inflation as an appropriate macroeconomic adjustment, there will be special interest in the adjustment to the current account, the relative speed with which domestic demand – and particularly private consumption – will slow down compared to GDP and the dynamics of the portfolio. As far as this final variable is concerned, it is important to highlight the fact that during the current period of economic slowdown, the portfolio has performed favourably. Nevertheless, and as a consequence both of reduced levels of economic activity and interest rate hikes, there should be a gradual slowdown of this indicator through the year.

## 7 Tables with projections

Table 7.1  
**Annual macroeconomic forecasts**

	2014	2015	2016	2017
GDP (% YoY)	4,6	2,9	2,0	3,0
Private consumption (% YoY)	4,4	3,2	2,0	2,6
Public consumption (% YoY)	6,2	2,4	1,1	1,3
Fixed investment (% YoY)	10,9	2,3	3,8	5,8
Inflation (% YoY, eop)	3,7	6,8	5,4	3,7
Inflation (% average YoY)	2,9	5,0	7,1	4,0
Exchange rate (vs. USD, eop)	3.392	3.149	3.189	2.790
Depreciation (vs. USD, eop)	24,2%	31,6%	1,3%	-12,5%
Exchange rate (vs. USD, avg.)	2.001	2.742	3.306	2.873
Depreciation (vs. USD, avg.)	7,1%	37,0%	20,6%	-13,1%
Central bank interest rate (% eop)	4,50	5,75	6,50	5,25
FTD interest rate (% eop)	4,34	5,24	6,79	5,42
Unemployment rate (% eop)	9,3	9,8	10,6	11,0
Fiscal balance (% GDP)	-2,4	-3,0	-3,9	-3,6
Current account (% GDP)	-5,2	-6,7	-6,8	-5,8

Source: DANE, Banco de la República, Ministerio de Hacienda and BBVA Research Colombia.

Table 7.2  
**Quarterly macroeconomic forecasts**

	GDP (YoY)	Inflation (% YoY, eop)	Exchange rate (vs. USD eop)	Central bank interest rate (%, eop)
T1 14	6,5	2,5	1.965	3,25
T2 14	4,1	2,8	1.881	4,00
T3 14	4,2	2,9	2.028	4,50
T4 14	3,5	3,7	2.392	4,50
T1 15	2,8	4,5	2.576	4,50
T2 15	3,0	4,4	2.585	4,50
T3 15	3,2	5,4	3.122	4,75
T4 15	2,4	6,8	3.149	5,75
T1 16	1,2	7,7	3.325	6,50
T2 16	1,8	7,8	3.460	7,00
T3 16	1,9	6,9	3.233	7,00
T4 16	3,2	5,4	3.186	6,50
T1 17	4,0	4,2	2.951	5,75
T2 17	3,4	3,9	2.817	5,25
T3 17	2,5	3,8	2.793	5,25
T4 17	2,2	3,7	2.790	5,25

Source: DANE, Banco de la República and BBVA Research

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