MR03

MONTHLY REPORT • ECONOMIC AND FINANCIAL MARKET OUTLOOK
NUMBER 399 | MARCH 2016

ECONOMIC & FINANCIAL ENVIRONMENT

FINANCIAL MARKETS
Can the ECB easily extend its public sector purchase programme?

INTERNATIONAL ECONOMY
Institutions in Latin America: a watershed

EUROPEAN UNION
Low inflation: oil and nothing else?

SPANISH ECONOMY
Demand for housing is picking up

DOSSIER: OIL: PAST, PRESENT AND FUTURE

The tumultuous life of the price of oil

The outlook for the price of oil

Financial stability and cheap oil: a blessing or a curse?

The Spanish economy and oil: a close relationship

CaixaBank Research

MONTHLY REPORT - ECONOMIC AND FINANCIAL MARKET OUTLOOK
March 2016

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Date this issue was closed:
29 February 2016

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Oil: a cheap but scarce resource?

The price of oil is a key variable for the world economy and that is why it is essential to understand its main determining factors in the medium term as well as its long-term tendential trend. This month we have devoted the *Monthly Report's* Dossier to this very issue. As with other products that also function as a financial asset, economists refuse to even attempt to explain very short-term movements. Such a refusal may be a sign of ignorance but perhaps also of wisdom.

In the medium term the price of crude oil follows what are known as super-cycles; in other words, periods of ups and downs whose overall duration is approximately 10 or 15 years. Essentially these super-cycles are the result of different responses by agents (producers and consumers) over different time spans to an initial change in the price. In the short term the reaction of both is moderate (i.e. supply and demand are relatively inelastic to price) but we do see extensive modifications in production and consumption behaviours over the medium term. Put another way, low prices may continue for some time but this very phenomenon provokes the forces that lead, after a few years, to structural increases in demand and reductions in supply, resulting in significant rises in price. In the last 45 years we have seen two phases of sharp price rises (1973-1980 and 2002-2011), two phases of sharp drops (1980-1986 and 2011-2015) and an unusual phase of low-price stability (1986-2002). This last period is evidence of the oligopolistic nature of the international crude oil market, a factor that also crucially determines its fate. The super-cycle diminishes if, in the phase of potentially limited production, the oil cartel loses cohesion and this, given the pressure of demand, stops producers from responding by restricting the supply.

From the super-cycle perspective, this month's Dossier argues that we are probably coming to the end of the period of falling oil prices, a total slump of approximately 75% since the peak reached in 2011, a similar figure to the one seen in the 1980s. If OPEC is capable of restoring a certain degree of internal discipline under Saudi Arabia's leadership we should see higher prices in the future, returning to 60 dollars over the next three years and exceeding 70 within five.

With regard to the long term, economic analysis suggests we should see a rising trend in price in real terms; i.e. the relative price of oil in the economy. A finite resource should get more expensive as its stocks run out. In practice the real price of oil has fluctuated widely over the last few decades, as we have already mentioned, but curiously it has now returned towards its mean price of approximately 55 dollars (in current purchasing power parity). Four decades are classed as long term but oil reserves have turned out to be larger than expected and this is probably why the upward trend in the price has been almost inexistent in the last half a century.

Such an upward trend is unlikely to emerge in the future either. Not because there are huge reserves still to be discovered or because great technological advances are expected to exploit oil more efficiently. What will probably prevent this long-term increase in price will be the environmental impact of oil consumption: if humanity wishes to meet its goals of controlling CO_2 emissions an important part of the reserves of fossil fuels yet to be exploited will actually be stranded assets. Competition among energy sources will hence emerge. This provides a strong incentive for oil-producing countries to place their reserves on the market in good time, giving up prolonged monopolistic agreements that might only result in short-term gain but long-term pain.

Jordi Gual
Chief Economist
29 February 2016

CHRONOLOGY

FEBRUARY 2016

1 Start of the primaries to elect the candidates for the US presidential elections to be held on 8 November 2016.
24 The European Banking Authority publishes the methodology and macroeconomic scenarios to carry out stress tests on Europe's banking system.

JANUARY 2016

29 The **Bank of Japan** announces it will apply a **negative interest rate** (of 0.1%) to excess reserves held by banks with the institution to stimulate growth in credit and ultimately inflation.

DECEMBER 2015

3 The **ECB makes its monetary policy more accommodative** by extending the asset purchase programme to March 2017, including regional and local debt securities within the programme's eligible assets and cutting the deposit facility rate by 10 bps to –0.30%.
16 The US **Federal Reserve** begins to **normalise its official interest rate**, raising it by 25 bps up to 0.25-0.50% while maintaining its policy of reinvesting principal payments from its debt holdings.
20 The outcome of **Spain's general election** is a more fragmented parliament.

NOVEMBER 2015

23 The European Commission urges the Spanish government to present **an update of its 2016 Budge**t, incorporating measures to reduce the public deficit in line with the agreed path.
30 **The IMF announces the inclusion of the Chinese yuan** in the basket of currencies with special drawing rights (SDR), together with the US dollar, the euro, the Japanese yen and the pound sterling. The approval of the yuan as a reserve currency will come into effect as from October 2016 and marks an important milestone in the internationalisation of the Chinese currency.

OCTOBER 2015

2 **The ratings agency S&P raises Spain's credit rating** to BBB+ from BBB and keeps its outlook stable.
5 **The free trade agreement is signed between the US and several Pacific countries** including Japan, Mexico, Australia and Canada.
29 The Chinese Communist Party announces the **end of its single child policy** and allows two children per couple to combat the country's ageing population.

AGENDA

MARCH 2016

2 Registration with Social Security and registered unemployment (February).
8 Industrial production index (January).
10 Governing Council of the European Central Bank.
15 Fed Open Market Committee.
17 European Council.
18 Quarterly labour cost survey (Q4).
Loans, deposits and NPL ratio (January).
21 International trade (January).
29 State budget execution (December, January and February).
30 Index of economic sentiment euro area (March).
31 Flash CPI (March).
Balance of payments (January).
Net international investment position (Q4).
Household savings rate (Q4).
Fiscal balance (2015).

APRIL 2016

2 Registration with Social Security and registered unemployment (March).
7 Industrial production index (February).
15 Financial accounts (Q4).
18 Loans, deposits and NPL ratio (February).
21 Governing Council of the European Central Bank.
International trade (February).
26 Fed Open Market Committee.
State budget execution (March).
28 Labour force survey (Q1).
Flash CPI (April).
Index of economic sentiment euro area (April).
Flash GDP of the US (Q1).
29 Flash GDP (Q1).
Balance of payments (February).

Financial headwinds in the world economy

Sentiment improves in the financial markets. After a turbulent start to the year in financial markets the mood has calmed down over the last few weeks. The announcement of various monetary measures of an expansionary nature in China and the first attempts by large oil producers to come to an agreement on a possible reduction in supply have helped to improve investor sentiment. However, in spite of this containment of financial deterioration, the intensity and duration of the episode has started to be felt in the real economy, glimpses of which can be seen in the decline in economic sentiment indicators. If we add to these the fact that, in many advanced and emerging economies, the end of 2015 was somewhat weaker than expected, we might expect world growth in 2016 to be rather less expansionary than had been predicted previously.

A moderate adjustment in the outlook. In particular, as a consequence of the downward revision of growth for 2016 in the US , Japan, the euro area and some emerging countries (such as Mexico and Indonesia) and the expected intensification of Brazil's recession, we believe that global growth will be 3.4% in 2016 compared with our previous forecast of 3.5%. This is therefore a moderate adjustment that still implies the world economy will speed up its rate of growth compared with 2015. In this scenario the group of emerging economies will grow by 4.4% in 2016 and the advanced economies by 1.9%. The global expansion will liven up in 2017 thanks to the improved tone in the emerging countries and, to a lesser extent, the advanced. Although global growth will be less than expected, the likelihood of a scenario occurring in which the ever-present high downside risks actually occur (including a hypothetical worsening of financial uncertainty, difficulties in ensuring a soft landing for the Chinese economy or further deterioration in the fragile situation of emerging countries such as Brazil, Russia, South Africa and Turkey) does not change regarding our prediction last month.

Expansion in the US and euro area will take a bit longer. Growth in 2015 Q4 was identical in the US and the euro area (0.3% quarter-on-quarter). Both economies also share a less expansionary start to the year than expected and the pattern of growth expected for the year as a whole is also similar, with their expansion being postponed to the second half. Here the similarities end, however. The US is going through a more mature phase of the economic cycle than the euro area, as endorsed by the duration of the expansion, the strength of its labour market and its higher inflation. Their respective monetary policies are not alike either. Although the Federal Reserve will probably wait longer than expected to continue its monetary normalisation, this is merely a postponement. However, in response to the deterioration in inflation expectations and sensitive to the increase in financial and economic uncertainty, the ECB has opened the door to relaxing its monetary policy even further in March.

Spain continues in the fast lane. Given this situation of a slight decline in the international situation, the Spanish economy is exhibiting a surprisingly positive outlook. While the euro area grew by 0.3% quarter-on-quarter in Q4, Spain recorded a noticeably higher advance of 0.8%; and while the recovery has been delayed in other single currency countries, here its growth forecast for 2016 has remained unchanged. This contrast results from a combination of global factors that especially benefit our country (in particular low oil prices, providing savings in the energy bill equivalent to 1.3% of GDP in 2015) but also to the trend in aspects of a domestic nature. For example the good tone of the labour market and the absence of inflationary pressures continue to support consumption. The recovery in the real estate sector, reflected both in the trend in transactions as well as in prices, is underpinning the trend in construction investment. As has also been the case with capital goods investment, this has benefitted from the clear recovery in the flow of new loans to the economy. Of course many of these factors are the result of the intense processes of adjustment and reforms carried out over the last few years (gains in competitiveness, deleveraging of households and companies, healthier bank balance sheets, etc.). If the Spanish economic environment ends up taking a more sombre path than we currently expect, then it will be even more vital to continue with such ambitious reforms. But even if this episode of lower world growth turns out to be temporary, work must continue on the agenda of economic modernisation and regeneration in order to remain on track to achieve high but sustainable growth.

FORECASTS

Year-on-year (%) change, unless otherwise specified

International economy

	2014	2015	2016	2017	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
GDP GROWTH										
Global	3.4	3.1	3.4	3.7	3.1	2.9	3.3	3.3	3.4	3.5
Developed countries	*1.8*	*1.9*	*1.9*	*2.0*	*1.9*	*1.7*	*1.8*	*1.7*	*1.8*	*2.1*
United States	2.4	2.4	2.1	2.2	2.1	1.9	2.2	1.9	2.0	2.4
Euro area	0.9	1.5	1.6	1.7	1.6	1.5	1.4	1.4	1.6	1.9
Germany	1.6	1.4	1.6	1.7	1.7	1.3	1.4	1.4	1.6	1.9
France	0.2	1.1	1.3	1.4	1.1	1.3	0.9	1.3	1.4	1.6
Italy	–0.4	0.6	1.1	1.2	0.8	1.0	0.9	0.9	1.1	1.3
Spain	1.4	3.2	2.8	2.1	3.4	3.5	3.3	2.9	2.7	2.4
Japan	–0.1	0.5	0.9	0.7	1.6	0.7	0.2	1.0	0.8	1.5
United Kingdom	2.9	2.2	2.1	2.1	2.1	1.9	2.1	2.0	2.2	2.2
Emerging countries	*4.6*	*4.0*	*4.4*	*4.9*	*4.0*	*3.9*	*4.3*	*4.4*	*4.4*	*4.5*
China	7.3	6.9	6.5	6.3	6.9	6.8	7.0	6.6	6.3	6.2
India [1]	7.2	7.4	7.4	7.6	7.7	7.3	7.2	7.4	7.4	7.4
Indonesia	5.0	4.8	5.4	5.8	4.7	5.0	5.2	5.4	5.4	5.4
Brazil	0.1	–3.6	–2.8	1.3	–4.5	–5.1	–4.5	–3.0	–2.4	–1.3
Mexico	2.2	2.5	2.7	3.2	2.8	2.5	2.4	2.5	2.7	3.2
Chile	1.9	2.1	2.6	3.5	2.2	1.8	2.1	2.6	2.6	3.0
Russia	0.6	–3.7	–0.8	1.5	–4.1	–3.8	–2.2	–0.7	–0.4	0.0
Turkey	3.0	3.2	2.9	3.4	4.0	2.7	1.7	2.6	3.5	3.7
Poland	3.3	3.6	3.5	3.5	3.6	3.7	3.5	3.5	3.6	3.5
South Africa	1.6	1.3	0.9	1.8	1.1	0.5	0.7	0.8	0.9	1.1
INFLATION										
Global	3.5	3.2	3.5	3.7	3.2	3.3	3.4	3.5	3.5	3.7
Developed countries	*1.4*	*0.3*	*1.2*	*2.0*	*0.2*	*0.4*	*0.9*	*0.9*	*1.3*	*1.7*
United States	1.6	0.1	1.5	2.1	0.1	0.5	1.3	1.2	1.5	1.8
Euro area	0.4	0.0	0.9	1.8	0.1	0.2	0.3	0.5	1.1	1.7
Germany	0.8	0.1	1.0	2.0	0.0	0.2	0.4	0.6	1.2	1.8
France	0.6	0.1	0.9	1.9	0.1	0.1	0.2	0.5	1.1	1.6
Italy	0.2	0.1	0.8	1.7	0.3	0.2	0.3	0.4	1.0	1.5
Spain	–0.2	–0.5	0.1	2.2	–0.4	–0.3	–0.6	–0.6	0.3	1.3
Japan [3]	2.7	0.8	0.9	2.0	0.2	0.3	0.4	0.3	1.0	1.7
United Kingdom	1.5	0.0	1.2	2.0	0.0	0.1	0.5	0.9	1.5	2.0
Emerging countries	*5.1*	*5.4*	*5.7*	*6.0*	*5.4*	*5.4*	*5.8*	*5.8*	*5.6*	*5.7*
China	2.0	1.4	2.2	2.6	1.7	1.5	1.6	2.4	2.3	2.7
India	6.6	4.9	5.3	5.3	3.9	5.3	6.0	5.8	4.8	4.7
Indonesia	6.4	6.4	5.0	5.2	7.1	4.8	4.7	5.1	4.6	5.4
Brazil	6.3	9.0	7.3	5.6	9.5	10.4	9.0	7.5	6.8	6.0
Mexico	4.0	2.7	3.2	3.2	2.6	2.3	2.8	3.0	3.3	3.5
Chile	4.4	4.3	3.7	3.2	4.8	4.1	4.5	4.0	3.5	2.9
Russia	7.8	15.5	7.7	5.7	15.7	14.5	9.3	8.0	7.0	6.5
Turkey	8.9	7.7	7.5	6.3	7.3	8.2	8.8	7.1	7.0	7.0
Poland	0.2	–0.9	1.7	2.5	–0.8	–0.8	1.4	1.5	1.7	2.3
South Africa	6.1	4.6	4.7	5.0	4.7	4.9	5.6	4.3	4.0	4.9

Note: *1. Annual figures represent the fiscal year.*

Forecasts

Spanish economy

	2014	2015	2016	2017	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
Macroeconomic aggregates										
Household consumption	1.2	3.1	2.9	2.1	3.6	3.5	3.5	3.2	2.6	2.4
General government consumption	0.0	2.7	0.4	–0.7	3.0	3.7	1.3	0.8	–0.2	–0.5
Gross fixed capital formation	3.5	6.4	4.6	3.7	6.7	6.4	5.9	4.4	4.2	4.0
Capital goods	10.7	10.1	6.5	3.6	11.2	10.9	9.8	6.9	5.2	4.2
Construction	–0.1	5.3	3.7	3.8	5.2	4.6	4.2	3.1	3.5	3.8
Domestic demand (contr. Δ GDP)	1.6	3.7	2.6	1.8	4.1	4.1	3.3	2.9	2.1	2.1
Exports of goods and services	5.1	5.4	5.6	4.9	4.5	5.3	5.7	5.7	5.4	5.7
Imports of goods and services	6.4	7.5	5.4	4.4	7.2	7.7	6.4	6.1	4.1	5.0
Gross domestic product	**1.4**	**3.2**	**2.8**	**2.1**	**3.4**	**3.5**	**3.3**	**2.9**	**2.7**	**2.4**
Other variables										
Employment	1.1	3.0	2.5	2.0	3.1	3.0	2.8	2.4	2.3	2.3
Unemployment rate (% labour force)	24.4	22.1	19.9	18.5	21.2	20.9	21.2	20.0	19.2	19.3
Consumer price index	–0.2	–0.5	0.1	2.2	–0.4	–0.3	–0.6	–0.6	0.3	1.3
Unit labour costs	–0.8	0.3	0.6	1.1	–0.2	0.4	–0.7	1.0	0.7	1.4
Current account balance (cum., % GDP)[1]	1.0	1.5	1.7	1.5	1.5	1.5	1.6	1.6	1.6	1.7
Net lending or borrowing rest of the world (cum., % GDP)[1]	1.4	2.1	2.3	2.1	2.0	2.1	2.2	2.2	2.2	2.3
Fiscal balance (cum., % GDP)[1]	–5.8	–5.1	–3.9	–2.1						

Financial markets

	2014	2015	2016	2017	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
INTEREST RATES										
Dollar										
Fed Funds	0.25	0.26	0.58	1.25	0.25	0.29	0.50	0.50	0.58	0.75
3-month Libor	0.23	0.32	0.79	1.54	0.31	0.41	0.62	0.73	0.85	0.96
12-month Libor	0.56	0.79	1.23	1.89	0.83	0.95	1.13	1.20	1.26	1.33
2-year government bonds	0.44	0.67	0.98	1.77	0.67	0.83	0.84	0.87	1.00	1.22
10-year government bonds	2.53	2.13	2.05	2.77	2.21	2.19	1.92	1.93	2.07	2.27
Euro										
ECB Refi	0.16	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
3-month Euribor	0.21	–0.02	–0.12	0.06	–0.03	–0.09	–0.16	–0.15	–0.13	–0.06
12-month Euribor	0.48	0.17	0.05	0.35	0.16	0.09	0.02	0.02	0.05	0.13
2-year government bonds (Germany)	0.05	–0.24	–0.36	0.17	–0.24	–0.32	–0.43	–0.40	–0.37	–0.25
10-year government bonds (Germany)	1.23	0.53	0.49	1.62	0.69	0.57	0.36	0.35	0.44	0.80
EXCHANGE RATES										
$/€	1.33	1.11	1.08	1.09	1.11	1.09	1.10	1.10	1.07	1.06
¥/€	140.42	134.35	131.80	130.48	135.89	132.94	131.71	133.95	131.02	130.50
£/€	0.81	0.73	0.76	0.74	0.72	0.72	0.76	0.76	0.76	0.75
OIL										
Brent ($/barrel)	99.45	53.61	42.64	65.62	51.10	44.70	33.36	39.50	45.50	52.20
Brent (€/barrel)	74.54	48.30	39.50	60.16	46.00	40.82	30.29	35.83	42.67	49.19

Note: *1. Four quarter cumulative.*

Forecasts

FINANCIAL OUTLOOK · **Light at the end of the tunnel?**

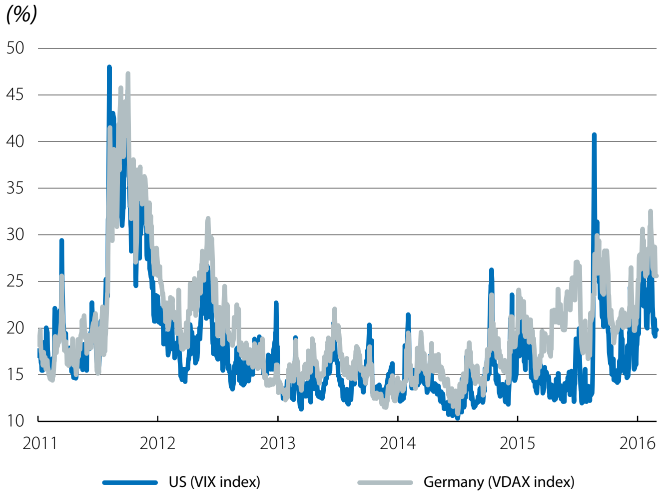
Sentiment improves on international stock markets after the prolonged sell-off at the beginning of the year. Market sentiment deteriorated again early in February with further drops in the price of oil and continued capital outflows from China. As the month progressed investors' attention was grabbed by some signs of economic slowdown in the US and the possible effects of even more accommodative monetary policy on the euro area's banks. However, the markets managed to begin a change in trend after OPEC's agreement to freeze crude oil production and the announcement of several measures by the Chinese monetary authorities. The latest macroeconomic indicators and central banks' minutes also helped to limit excessive stock market losses although markets will continue to be relatively volatile until doubts are resolved on four fronts: China's growth prospects, oil prices, the US economy and Europe's financial sector.

China's slowdown makes less of an impact on the markets. The uncertainty caused by the Asian giant's shift towards an economy where services play a larger role, together with devaluations in the yuan, meant that capital outflows continued in February. However, statements by the governor of the People's Bank of China (PBoC) arguing that pressures on the renminbi were not due to fundamental reasons and that capital outflows would be temporary helped to calm investors. The PBoC also announced further injections of liquidity to stimulate the economy and a reduction in restrictions on foreign investment in domestic bond and equity markets to counteract pressure on the Chinese currency.

Oil picks up from its minimum level and joins other commodities, supporting an upswing in stock markets. The period of persistently low oil prices has had a costly effect on the economies and fiscal balances of producing and exporting countries. Shortly before announcing an OPEC meeting, Saudi Arabia stated that its national accounts were suffering considerably. The agreement to freeze crude oil production led to a 13% upswing in the price of a Brent barrel in the second half of the month. Although recent declarations by the Iranian Minister for Energy have tended to revive pessimism among investors, the possibility of an agreement and adjustment in supply as a consequence of the slowdown in investment in the sector have laid the foundations for more sustained rises in the future. Other important commodities such as copper, iron ore and zinc also contributed to the constructive tone of the stock markets in the second half of the month.

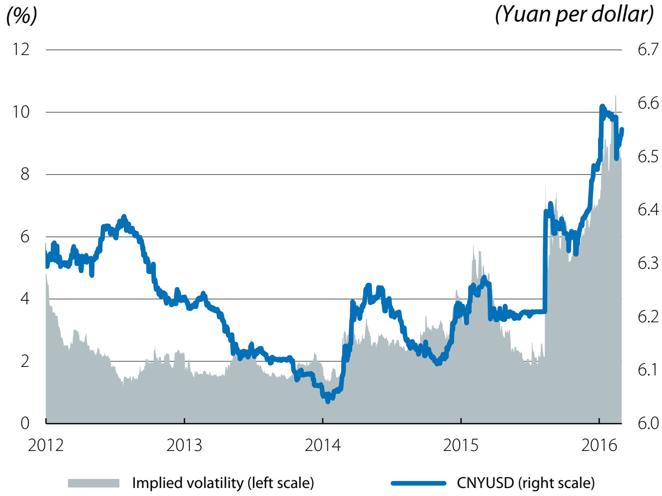
The perceived risk of a slowdown in the US has increased, with the economy losing steam as corporate earnings are falling. The last earnings season was disturbing for some after

Implied volatility of the US and German stock markets



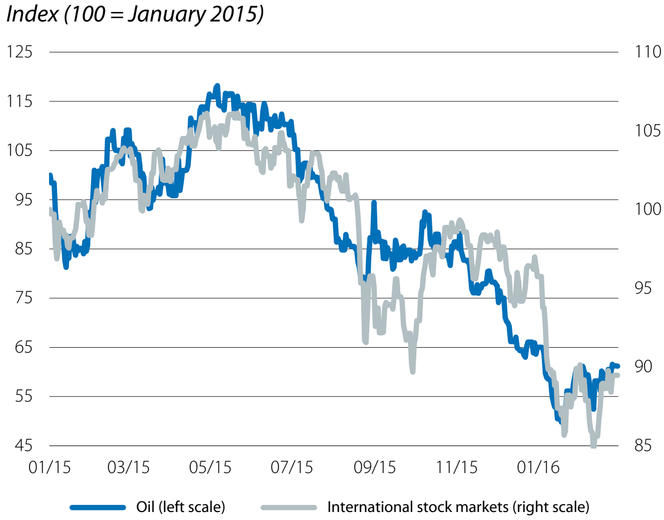
Source: *CaixaBank Research, based on Bloomberg data.*

Value of the yuan against the dollar and implied volatility



Source: *CaixaBank Research, based on Bloomberg data.*

Global stock market and Brent oil price



Source: *CaixaBank Research, based on Bloomberg data.*

earnings per share (EPS) fell by 7%. Once again the energy sector was the main culprit of this trend which has consolidated after several quarters of similar results. But there was no growth in EPS in the other sectors either and sales fell by 4%. In any case the major analysts have revised downwards their earnings forecasts for 2016. This trend is in addition to several indicators which have also harmed investor sentiment: industrial production has declined in 10 of the last 12 months, corporate risk premia are rising, the conditions for wholesale loans are slightly stricter and the interest rate curve is the flattest it has been since 2007 but with rates close to zero. On the whole the probability of a recession has increased although the likelihood is still low and the foundations of the US economy (particularly the labour market and housing) seem to be withstanding external shocks quite successfully.

European banks are being overly punished. The Eurostoxx Banks and Stoxx 600 Banks indices have lost 22% in the year to date, twice the amount of the Eurostoxx 50 and Stoxx 600 indices. The earnings of two thirds of the banks in the euro area were surprisingly low, once again bringing the sector's returns to the attention of investors within a context of rock-bottom interest rates and unusually flat curves. In February attention was also focused on CoCos (contingent convertibles) due to the risk of banks not being able to make coupon payments on these bonds in the case of limited solvency or losses caused by a scenario in which capital would be converted. Such doubts contrast with the euro area's macroeconomic indicators which are reasonably solid. In fact, corporate earnings posted growth of 3% in terms of EPS and 4% in income (both excluding the energy sector).

The Federal Reserve (Fed) retreats again given the uncertain global environment. The minutes of the Fed's January meeting, in line with recent comments by council members, underlined the continued improvement in the labour market and the generally positive tone of the economy as a whole. A vigilant tone was adopted, however, on mentioning the downside risks resulting from somewhat more restrictive financial indicators (due to larger spreads for corporate bonds and higher interest rates on wholesale loans) and weaker global growth prospects. For the time being the Fed does not believe these risks are serious enough to modify its growth forecast for the United States in the medium term. However, for the market they are reason enough to expect, at most, one hike in the federal funds rate this year.

The ECB fuels expectations of further measures in March. The same global risks that threaten monetary normalisation in the US (uncertainty regarding world growth, downward pressure on inflation due to the trend in oil prices and the fragile financial environment) have also led the ECB to suggest it might increase its accommodative stance in March. The Governing Council of the ECB wished to convey the fact that it is prepared to continue using all its resources but the markets remain sceptical regarding the effectiveness of monetary

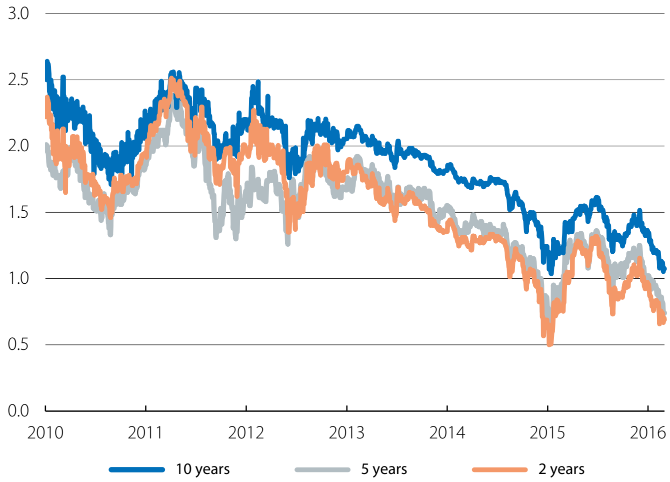
*US: inflation expectations at 10 years **

(%)

Note: ** Implied in the price of US inflation-indexed Treasury bonds.*
Source: *CaixaBank Research, based on Bloomberg data.*

Euro area: inflation expectations

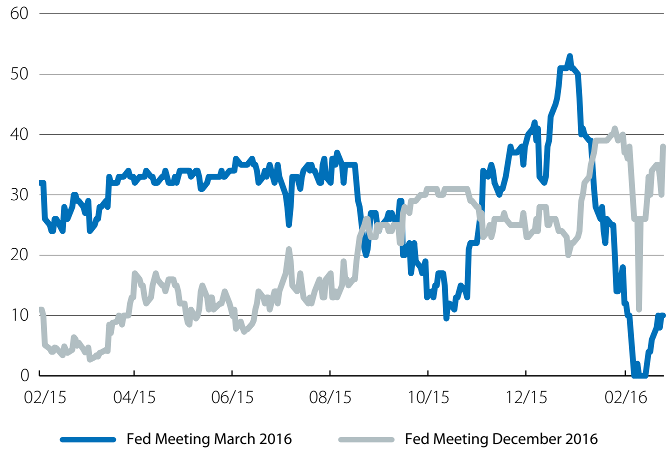
(%)



Source: *CaixaBank Research, based on Bloomberg data.*

US: probability associated with a second hike in the federal funds rate

(%)



Source: *CaixaBank Research, based on Bloomberg data.*

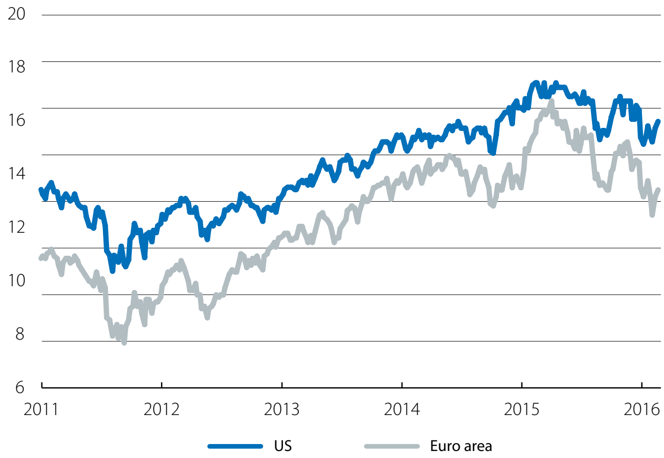
policy. Investors are weighing up the risk that central banks no longer have much leeway if adverse shocks materialise and that the supply of eligible assets to implement measures is running out (see the Focus «Can the ECB easily extend its public sector purchase programme?» in this *Monthly Report*). The market currently expects an additional cut of 10 bps in the deposit facility in March, as well as an enlargement of the asset purchase programme.

Emerging stock markets withstand the onslaught while a search for safe assets predominates. The MSCI Emerging Markets index has lost 6% since the beginning of year with a similar performance for the S&P 500. The dollar's depreciation against a set of emerging currencies has helped them to weather the storm but there is still risk due to growing corporate debt, accentuated by the recent tightening up of credit conditions and the increase in loan defaults. Given this situation of uncertainty and volatility, gold has once again become a safe haven, gaining more than 16% in 2016. US and German government bonds have also become more popular, their 10-year yield falling in February by another 20 bps and 23 bps to 1.74% and 0.12%, respectively. US and European equity have seen some outflows, especially by retail investors but a lot of strategic investment funds have positioned themselves for an upswing by increasing their exposure to equity.

The downside risks for the markets are still moderate. Although the oil-China tandem will continue to be the main driving force for the markets in the short term, a close eye will still be kept on the possibility of a slowdown in the US, as well as the effectiveness of monetary policy and the UK referendum on its possible exit from the European Union (Brexit). The sectors associated with crude oil have continued to damage the stock markets and credit risk in the energy sector has increased notably due to the onset of the first bankruptcies of small firms in the US. However, at present this risk is unlikely to become systemic. Goldman Sachs estimates the exposure of banks to loans related to the energy sector at 2.5% of their assets while exposure to mortgages in 2007 was 33% (see the article «Financial stability and cheap oil: a blessing or a curse?» in this *Monthly Report*). In the area of currencies, the current Brexit debate depreciated the pound sterling by around 6% against the dollar and euro.

International stock markets: price-to-earnings ratios (P/E ratios) *

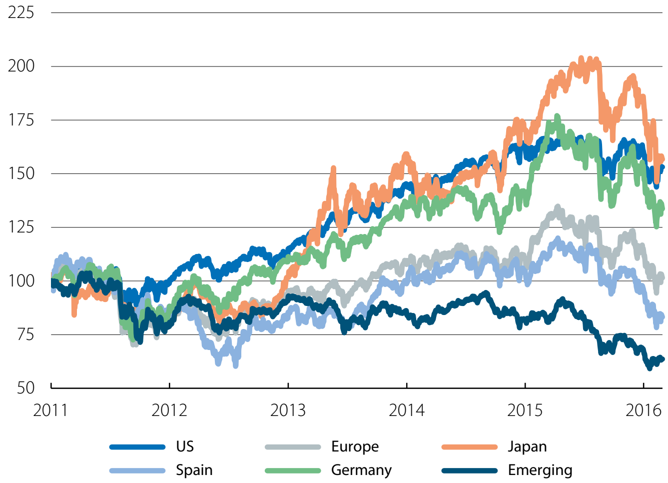
(Ratio)



Note: ** P/E ratios calculated based on expected earnings by the consensus of analysts at 12 months.*
Source: *CaixaBank Research, based on Bloomberg data.*

Main international stock markets

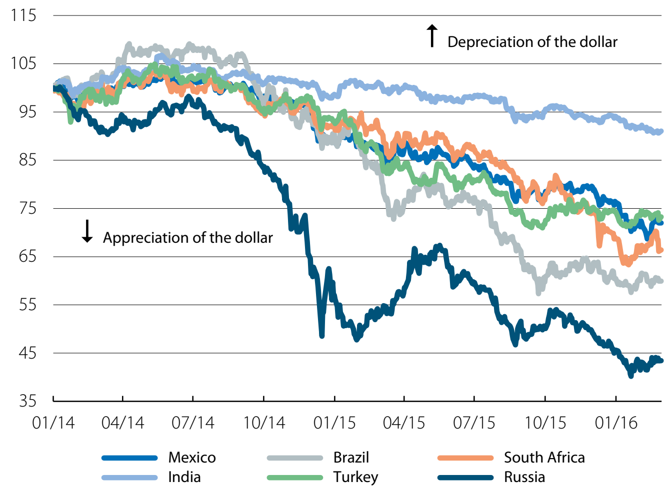
Index (100 = January 2011)



Source: *CaixaBank Research, based on Bloomberg data.*

Emerging currencies against the dollar

Index (100 = January 2014)



Source: *CaixaBank Research, based on Bloomberg data.*

FOCUS · Can the ECB easily extend its public sector purchase programme?

On 21 January, almost a year after announcing the start of its public sector purchase programme (QE), the ECB hinted at the possibility of implementing more stimuli to meet its inflation target. However, the prospect of more extensive QE rouses doubts as to the institution's capacity to acquire a larger volume of debt than currently planned.

Initially the programme included the purchased public debt of countries and supranational entities (such as the European Investment Bank) up to a total of EUR 50 billion a month between March 2015 and at least September 2016 (of these 50 billion, EUR 44 billion correspond to sovereign debt). This public sector purchase programme was to complement the asset-backed securities and covered bond purchase programmes in place since September 2014 (totalling around EUR 10 billion per month). An announcement was made last December that purchases would be prolonged until at least March 2017 and that they would be complemented with the reinvestment of the bonds as they mature. As the debt acquired by the ECB has a minimum maturity of two years, these reinvestment operations will not start until March 2017 (when the first debt matures).

During 2015, in response to growing concern regarding a possible shortage of QE eligible bonds, the ECB made several adjustments. In July it extended the list of national agencies whose bonds are eligible. In September it increased the limit of bonds that can be acquired from a single source from 25% to 33% (provided its position could not interfere with any debt restructuring). And, in December, it included regional and local debt in the programme. Moreover the decision to cut the deposit facility interest rate from –0.20% to –0.30% also effectively enlarged the volume of eligible debt as it added bonds whose yields are within this band (although this effect was limited due to the drop in yield caused by the interest rate cut).

With these changes, the ECB will be able to implement QE under its current terms up to approximately March 2017, the time when some of the programme's restrictions will come into play. Specifically, it is estimated that, at that time, there will not be enough eligible German debt to cover the planned purchases. However, such limitations will come into play before the end of this year should the ECB decide to increase the volume of QE purchases by, for example, EUR 20 billion as from March 2016.[1]

Beyond the question of the number of eligible bonds in circulation, current market conditions and the reticence of some investors to sell this kind of asset could also make it difficult to enlarge QE significantly. For example, the volume of purchases of German, French or Spanish debt included under QE already exceeds the net debt issuances planned for the coming quarters (see the table). This means that other investors will have to reduce their positions in these assets to sell them to the ECB. However, some institutions, such as insurance companies, have little incentive to do so, mainly for regulatory or liquidity reasons. Moreover other investors might also be reticent when it comes to getting rid of their public debt if the current context of risk aversion lasts much longer. On the other hand the market of asset-backed securities and covered bonds does not seem deep enough to significantly enlarge the rate of purchases.

In summary, under the current QE conditions the ECB does not appear to have much room to manoeuvre. Enlargement would therefore require adjusting some of the programme's rules to include, for example, corporate or bank debt or to be able to acquire debt in line with the stock in each country (and not, as is currently the case, in proportion to the ECB's capital key of each member state). These would be politically sensitive measures and would therefore not be easy to implement. Even more so when there is no great unanimity regarding the need to extend QE given the decreasing returns from quantitative policies and their possible adverse effects.

Issuances of eligible debt and purchases planned by the ECB in 2016

(Billion euros)

	Gross debt issuances	Net debt issuances	Purchases planned by the ECB
Germany	159	–9	109
France	187	43	92
Italy	270	106	88
Spain	140	50	62
Netherlands	48	3	25
Belgium	33	2	18
Austria	17	1	14
Portugal	13	7	13
Finland	12	7	9
Ireland	14	9	8

Source: *CaixaBank Research, based on Bloomberg data.*

1. See Claeys G. and Leandro, A. (2015), «The European Central Bank's quantitative easing programme: limits and risks», Policy Contribution 2016/02.

FOCUS · The real value of value investing

May 1984, Columbia Business School, New York. Huge crowds have come to hear a talk by Warren Buffett defending an investment approach known as «value investing». He explains the experience of a group of portfolio managers who, following this strategy, have achieved much higher long-term returns than the market average. But does this investment style really work? And, if so, why is it not applied by the majority of investors?

Although Buffett is considered to be the greatest exponent of value investing, the origins of this school date back to the theory presented by Ben Graham and Dave Dodd in their influential book *Security Analysis* in the 1930s. The core idea of value investing is simple: buying assets whose prices are far below their intrinsic value. This gap in the share price provides the so-called «margin of safety» which means the share price has a lot of room to move upwards, at the same time as limiting potential losses should the price fall. This concept contrasts with the usual relationship between risk and return which postulates that a higher expected return must necessarily be associated with greater risk.

The key to this strategy is knowing how to arrive at a relatively accurate estimate of a share's intrinsic value. In principle this would involve precise estimates of the future flow of a company's profits and calculating its present value. However, empirical evidence points to a series of criteria that help to identify «value» firms: for example, their shares are quoted at relatively low price-to-book or price-to-earnings ratios, they have little debt (for example, below 50% of their total assets) and they have a good business model (not excessively complex) and good quality management. Such data can also be complemented by an analysis of the sector to spot factors (regulations, new rivals, future prospects for demand, etc.) that might affect the trend in the shares and explain values that, at first sight, could seem to be unjustifiably low. Without forgetting there may also be shares in the so-called «value trap» whose supposed gains in price never materialise.

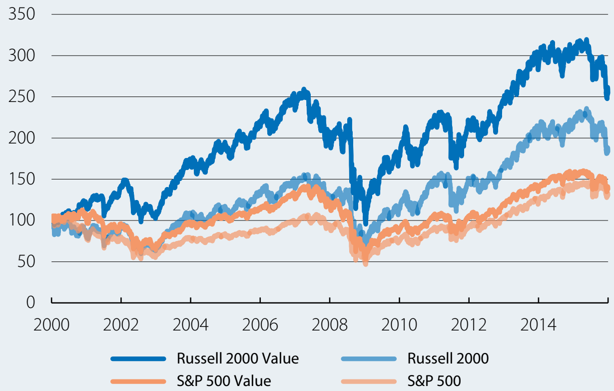
In addition to accurate analysis, this investment strategy also requires another ingredient: patience. The underlying bet is that the assets acquired will eventually achieve their potential gains with their share price approaching the intrinsic value. Experience indicates, however, that in many cases the minimum amount of time required for value investing to start generating higher returns than the market or other investment methods is 10-15 years. A considerable period of time in a world where managers' results are evaluated over a much shorter timescale, forcing them to follow strategies that are not too far away from the market's performance.

The superiority of value investing in the long term contradicts the so-called «efficient markets hypothesis». According to this hypothesis, in a sufficiently liquid market a share's price reflects the best possible estimate of its intrinsic value at all times. So an asset can only offer a higher expected return if there is also a greater risk (greater volatility associated with this return). In practice, however, companies identified as value in accordance with a series of relatively simple criteria from the Russell 2000 (a benchmark for small and medium-sized enterprises) have provided notably better risk-adjusted returns than those of the index as a whole, and also the S&P 500. The most plausible explanation for this market inefficiency is that there is less information on this kind of company so that more work is required to gather and analyse data. As these companies are therefore less scrutinised by analysts, their share prices are more likely to be inaccurate, producing a large margin for gain.

As Buffet said himself, «When the price of a stock can be influenced by a "herd" on Wall Street with prices set at the margin by the most emotional person, or the greediest person, or the most depressed person, it is hard to argue that the market always prices rationally. In fact, market prices are frequently nonsensical». It is more than likely that the panic affecting the world's stock markets over the last few weeks can provide many examples supporting this view.

Value investing returns compared with the market

Index (100 = March 2000)



Source: *CaixaBank Research, based on Bloomberg data.*

KEY INDICATORS

Interest rates (%)

	29-Jan	31-Dec	Monthly change (bps)	Year-to-date (bps)	Year-on-year change (bps)
Euro area					
ECB Refi	0.05	0.05	0	0.0	0.0
3-month Euribor	–0.21	–0.16	–4	–7.4	–24.5
1-year Euribor	–0.02	0.02	–4	–8.0	–25.3
1-year government bonds (Germany)	–0.48	–0.45	–3	–10.2	–29.5
2-year government bonds (Germany)	–0.57	–0.49	–8	–22.5	–34.3
10-year government bonds (Germany)	0.11	0.33	–22	–51.9	–21.8
10-year government bonds (Spain)	1.53	1.51	2	–24.1	27.0
10-year spread (bps) [1]	142	119	24	28.1	49.1
US					
Fed funds	0.50	0.50	0	0.0	25.0
3-month Libor	0.64	0.61	3	2.7	37.8
12-month Libor	1.16	1.14	2	–1.8	48.0
1-year government bonds	0.60	0.45	15	0.3	41.2
2-year government bonds	0.77	0.77	0	–27.8	15.2
10-year government bonds	1.73	1.92	–19	–53.9	–26.3

Spreads corporate bonds (bps)

	29-Feb	29-Jan	Monthly change (bps)	Year-to-date (bps)	Year-on-year change (bps)
Itraxx Corporate	100	93	8	23.2	50.9
Itraxx Financials Senior	109	92	17	32.1	54.6
Itraxx Subordinated Financials	238	208	30	82.3	116.2

Exchange rates

	29-Feb	29-Jan	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
$/euro	1.087	1.083	0.4	0.1	–2.9
¥/euro	122.530	131.210	–6.6	–6.2	–8.5
£/euro	0.781	0.761	2.7	6.0	7.7
¥/$	112.690	121.140	–7.0	–6.3	–5.8

Commodities

	29-Feb	29-Jan	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
CRB Commodity Index	383.6	383.3	0.1	2.4	–8.9
Brent ($/barrel)	35.9	33.2	8.3	0.5	–41.9
Gold ($/ounce)	1,238.7	1,118.2	10.8	16.7	2.1

Equity

	29-Feb	29-Jan	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
S&P 500 (USA	1,932.2	1,940.2	–0.4	–5.5	–8.2
Eurostoxx 50 (euro area)	2,945.8	3,045.1	–3.3	–9.8	–18.2
Ibex 35 (Spain)	8,461.4	8,815.8	–4.0	–11.3	–24.3
Nikkei 225 (Japan)	16,026.8	17,518.3	–8.5	–1.6	–14.7
MSCI Emerging	740.3	742.4	–0.3	–6.8	–25.2
Nasdaq (USA	4,558.0	4,614.0	–1.2	–9.0	–8.2

Note: *1. Spread between the yields on Spanish and German 10-year bonds.*

ECONOMIC OUTLOOK · The world economy: financial uncertainty is damaging economic sentiment

The world economy is taking its foot off the accelerator (but not slowing down too much). A slightly weaker end to 2015 than expected in many advanced and emerging economies and financial uncertainty being passed on to the real economy to some extent (reflected, for the time being, in sentiment indicators) have led to expectations of less expansionary growth in the world in 2016 than initially forecast. In particular, as a result of the downward revision in growth for this year in the US, Japan, the euro area and some emerging countries (such as Mexico and Indonesia) and of the intensification in the recession expected in Brazil, we predict that world growth will reach 3.4% in 2016 compared with the original forecast of 3.5%. In this scenario, the emerging economies as a whole will grow by 4.4% in 2016 while the advanced economies will grow by 1.9%. Global expansion will accelerate in 2017 thanks to the improved tone of the emerging countries and, to a lesser extent, the advanced group.

This downward revision of the main scenario has not reduced the likelihood of more adverse scenarios occurring. Although global growth will be lower than expected, the probability of a scenario occurring in which the high downside risks that still exist actually come about (including a hypothetical worsening of financial uncertainty, difficulties in ensuring a soft landing for the Chinese economy and further deterioration in the situation of fragile emerging economies such as Brazil, Russia, South Africa and Turkey) has not changed compared with our forecasts last month.

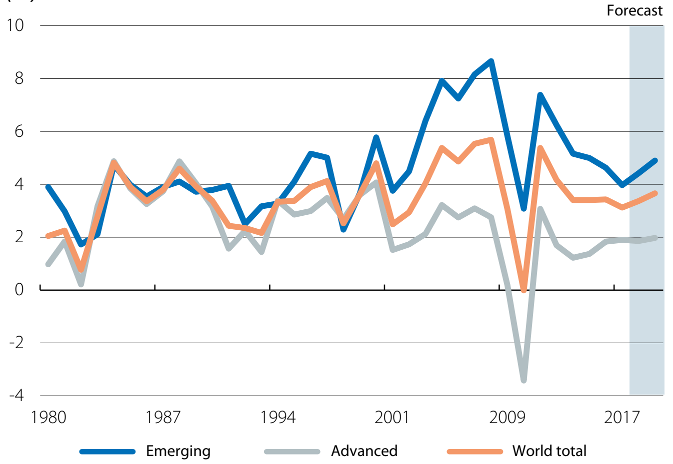
UNITED STATES

The US ends the year below par. According to the latest revised GDP figures from the Bureau of Economic Analysis, the US economy grew by 0.3% quarter-on-quarter in 2015 Q4, a disappointing figure both because it is lower than the growth in Q3 (0.5% quarter-on-quarter) and also because of its composition with repeated weakness in non-residential investment and exports. In spite of this downward end to 2015, however, growth for the whole of the year stood at 2.4%, the same figure as the one recorded in 2014.

The data from the beginning of 2016 do not suggest any immediate upswing in the economy. January's business indicators point to the economic pulse in Q1 being only slightly better than in 2015 Q4, even in the best of cases. The ISM indicator for manufacturing, although managing to stabilise its December level, remained at levels indicative of contraction in industrial production while the ISM indicator for services saw its third consecutive month of falls in January. Although this indicator was still above 50 points, suggesting expansion in the tertiary sector, other similar indicators such

Global GDP growth: forecasts by CaixaBank Research

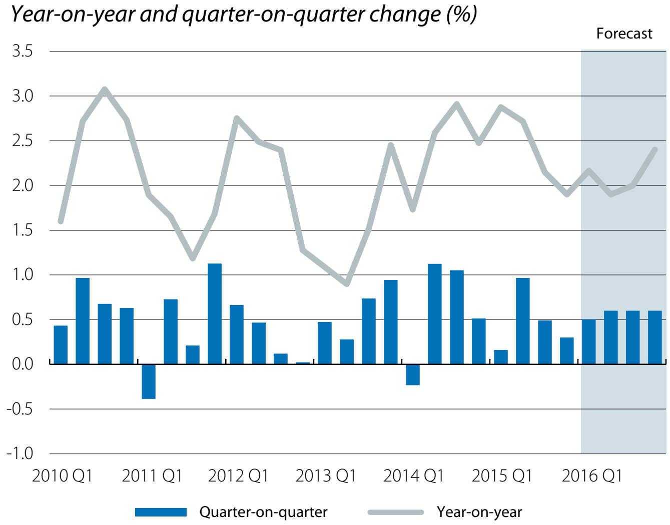
(%)



Source: *CaixaBank Research.*

US: GDP

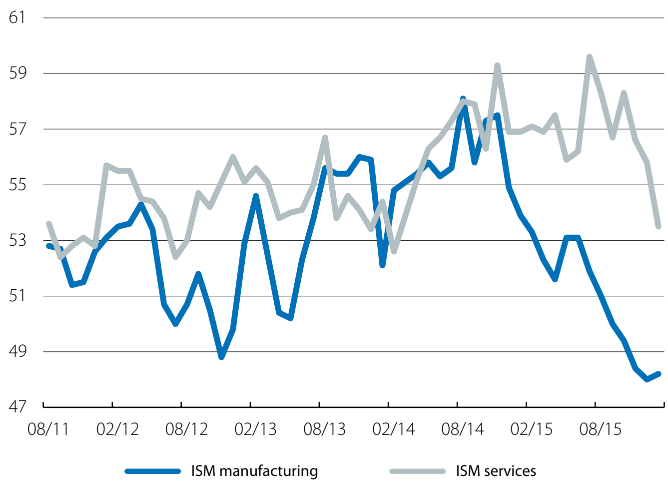
Year-on-year and quarter-on-quarter change (%)



Source: *CaixaBank Research, based on data from the Bureau of Economic Analysis.*

US: business sentiment indicators

Year-on-year change (%)



Source: *CaixaBank Research, based on ISM data.*

as the flash PMI for services produced by Markit placed this below the 50-point threshold. Changes in business sentiment are reflected particularly quickly by sentiment indicators for the construction industry and it is therefore logical for them to be capturing the financial uncertainty prevalent at present. A more nuanced interpretation is given by the US economic outlook obtained from demand indicators and particularly consumption, where an improvement has been observed in retail and consumer goods.

A scenario of a moderate slowdown is the most likely outlook for 2016. A disappointing end to 2015 and an only slightly better start to 2016 have partly affected our growth forecasts. Although the US economy will pick up speed as the year progresses, average growth, at 2.1%, will be below the figure posted the two previous years (2.4%). This slowdown is limited in its intensity as private consumption is holding firm, public consumption is speeding up and residential investment has maintained its rate of growth. However, the outlook for non-residential investment is more contained as it will no longer be supported by healthy corporate earnings. Given this situation, we believe the Federal Reserve will spread out its normalisation of the benchmark interest rate: whereas we had previously expected another hike from 0.50% to 0.75% in June, we now believe it will happen in September. This is merely a pause, however, since the conditions of inflation, which will continue to recover over the coming months, and the labour market (in January unemployment stood at 4.9%, the lowest since February 2008) justify monetary normalisation.

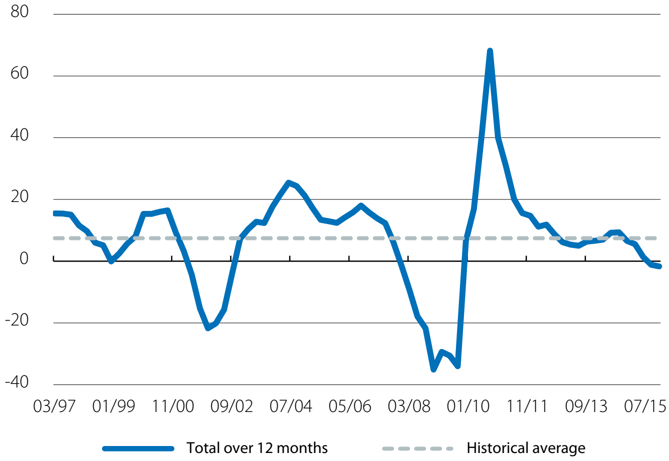
JAPAN

A stumble in Q4. Just when low but positive growth was expected, Japan's GDP fell by 0.4 pps in Q4, taking the average for 2015 to 0.5%. This economic decline was essentially due to the bad performance by private consumption and, to a lesser degree, exports. On the other hand investment looked dynamic and is, by far, the most positive aspect of GDP's composition. For its part inflation continued to reflect the feeble tone in domestic demand. In January the CPI without food but with energy (the Bank of Japan's benchmark) stood at 0.0% year-on-year, very far from its target of 2%.

Relative improvement in 2016. Based on these trends, we expect the economy to speed up this year but only at a moderate rate (0.9%, 0.1 pp less than we thought before knowing the GDP figure for Q4). Japan's recovery is facing three obstacles: perennially weak private consumption, lethargic exports (affected by a drop in purchases by US and China) and inventory adjustments. Given this situation, speculation is that economic policy will continue to support growth: in Q1 a new fiscal package will be implemented equivalent to 0.3% of GDP which is quite likely to be enlarged even further this same year, and the Bank of Japan will also probably adopt further measures of monetary expansion. However, the effectiveness of the monetary policy may be limited given the little effect recorded by previous similar measures.

*US: corporate earnings **

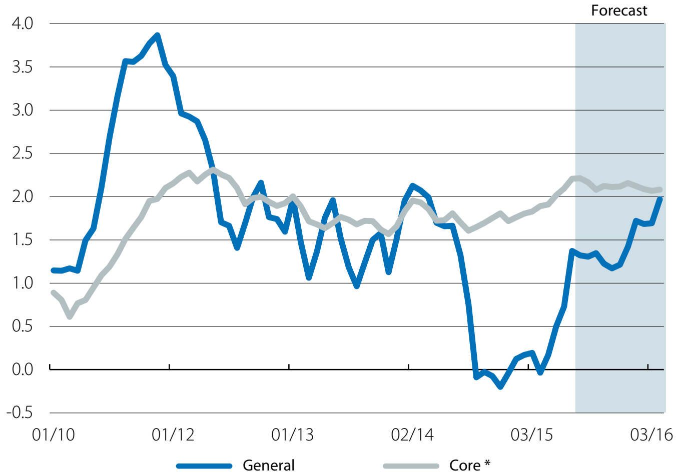
Year-on-year change (%)



Note: ** Earnings per share of the S&P 500.*
Source: *CaixaBank Research, based on data from Thomson Reuters Datastream.*

US: CPI

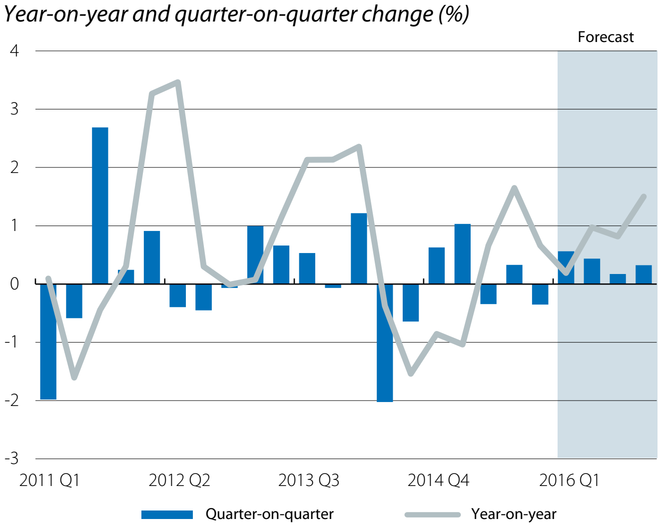
Year-on-year change (%)



Note: ** Core: general index without energy or food.*
Source: *CaixaBank Research, based on data from the Bureau of Labor Statistics.*

Japan: GDP

Year-on-year and quarter-on-quarter change (%)



Source: *CaixaBank Research, based on data from the Ministry of the Interior and Communication.*

EMERGING ECONOMIES

China: no news from the front. The publication of macroeconomic data slows down during the festivities for the Chinese New Year and the few data published do not provide a very clear picture of the country's immediate outlook. The (official) PMI indicator for activity in January fell below the threshold of 50 points both for manufacturing and services while the Markit-Caixin PMI indicator points to a minimally expansionary tone in the tertiary sector. On the other hand exports and imports declined more in January than expected. Compared with these indicators for the real economy, the financial trend seems to be steadier than in the first few weeks of the year. After closing to celebrate the New Lunar Year, Shanghai stock market opened with gains at the same time as the yuan recovered part of the ground lost since the beginning of 2016. Given this uncertain situation, we have maintained our scenario of a gradual slowdown in GDP in 2016 and 2017, albeit with downside risks.

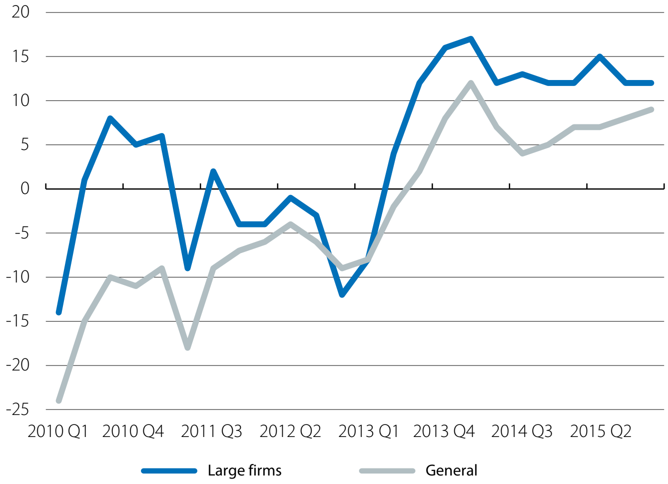
India, the exception of emerging Asia. As the soft landing for the Chinese economy gradually materialises and the acceleration in the advanced economies slows down, the rest of emerging Asia is reflecting such changes in the external environment by moderating its rate of growth. Prospects are especially more contained for Hong Kong, Singapore, Malaysia and Indonesia, justifying a certain downward revision of the GDP growth forecast for these economies in 2016. Given this situation, India's growth stands out favourably, both because of its rate (7.3% year-on-year growth in 2015 Q4) and its composition (in particular thanks to surprisingly vigorous manufacturing, traditionally one of the country's shortcomings).

Mexico and Brazil, two different ways of weathering the storm. Year-end data indicate that the recession in Brazil is becoming deeper which, added to a lack of improvement in the political arena and the intensification of imbalances such as inflation, represents a further deterioration it its prospects. Mexico, however, grew by 2.5% year-on-year in Q4 and its annual figure was the same. The data confirm a certain slowdown compared with the previous quarter which will continue in the coming quarters according to available indicators, the fiscal adjustment announced (0.7% of GDP) and the hike in the benchmark interest rate (from 3.00% to 3.75% between December and February). Nonetheless we believe that this country is applying the right economic policy, distancing it from Brazil's situation.

Oil: few changes, high volatility. The price of oil fluctuated appreciably in February, finally ending the month around 35 dollars per barrel of Brent crude, almost unchanged from its price at the beginning of the period. The underlying trends point to a moderate recovery in the price in 2016. However, taking a short-term view, what has dominated the trend in the oil price is the credibility of a possible agreement between the large producers to stabilise production, pushing up prices when this pact appeared solid and pushing them down when commitment seemed weak.

Japan: business sentiment index (Tankan)

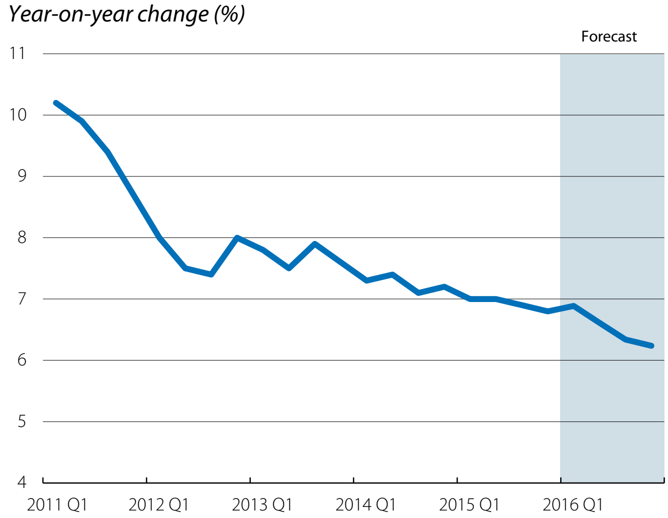
Level



Source: *CaixaBank Research, based on data from the Bank of Japan.*

China: GDP

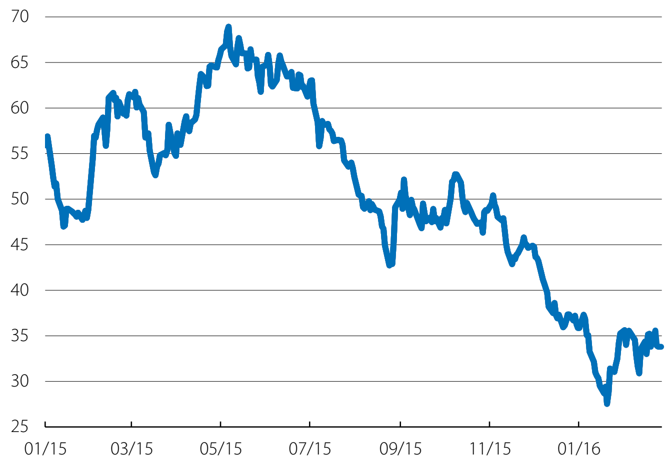
Year-on-year change (%)



Source: *CaixaBank Research, based on data from the National Statistics Office.*

Commodities: oil price *

($/barrel)



Note: ** Brent, one-month forward contracts.*
Source: *CaixaBank Research, based on data from Thomson Reuters Datastream.*

FOCUS · Hong Kong: to break or not to break with the US dollar

The convergence of three factors has led to fears of a possible rupture of the peg between the Hong Kong dollar (HKD) and the US dollar (USD): namely the start of interest rates hikes by the Federal Reserve of the United States (Fed), China's economic slowdown and increased risk aversion among international investors. However, although some long-term trends suggest that this USD peg should be broken, it is likely to continue in the short and medium term.

The HKD has been pegged to the dollar since 1983 via a Currency Board. This guarantees that HKD will be exchanged for USD at a rate of 7.8 HKD per USD (±0.05) thanks to one of the largest stocks of foreign reserves (USD 359 billion). In addition to this ample buffer of reserves, a healthy financial sector and solid public accounts and a surplus current account are elements that help peg maintainance in the short term. However, during the first few weeks of 2016, with the worsening of financial turbulence in the Chinese markets and the depreciation of the renminbi (RMB), capital outflows from Hong Kong brought the value of the HKD to the weakest limit of its band (see the graph).

For more than three decades this fixed exchange rate has been very useful for Hong Kong's economy, helping to implement its economy's singular, successful model of development focused on the financial sector and trade services. It has also helped China's modernisation as Hong Kong has become the main entry point for the Asian giant's relations with the rest of the world (a large proportion of trade and capital flows to and from mainland China pass through this small region). In short, the anchoring of the HKD with the USD has helped Hong Kong to become a world-leading hub for finance and trade and the toll paid of losing monetary policy and being subject to the Fed has therefore been acceptable.

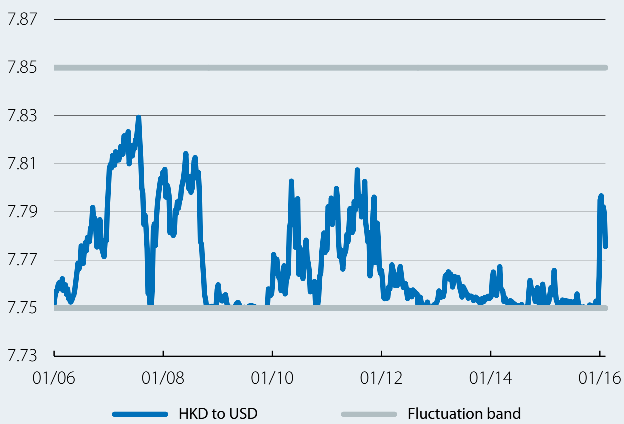
However, growing relations with mainland China are changing Hong Kong's economic and financial situation. In particular, the increasing importance of the RMB is starting to challenge the supremacy of the USD in Hong Kong's economy, finance and trade. By way of example, while in 2009 commercial transactions in the Chinese currency were insignificant, it is estimated that these exceeded 6 billion RMB in 2015 (close to 900 million USD). Of the 1,752 companies listed on the Hong Kong Stock Exchange at the end of 2014, 876 came from mainland China, accounting for almost 60% of the market capitalisation. In November 2014 a connection was established between the Hong Kong and Shanghai stock markets (Shanghai-Hong Kong Stock Connect) which allows capital to flow between both (within quotas set by the Asian giant).[1]

This trend towards Hong Kong becoming more synchronised with mainland China in detriment to the US has had repercussions at an economic level. Between 2011 and 2014, while China looked solid economically and the Fed was applying its ultra-accommodative monetary policy (translated into a federal funds rate close to zero in Hong Kong), high rates of inflation were observed (4.5% annually on average compared with rates of 2% a few years earlier) as well as a sharp rise in real estate prices (more than 100% since 2010). Thus, Hong Kong's exchange rate regime is and will continue to be a cause of debate, especially so in the long term. A change that brings the HKD closer to the RMB will be beneficial giving the increasing integration of both economies. However, first China will have to complete and consolidate its integration within the international financial system, reducing its still high restrictions to capital flows, modernising its financial system and increasing the flexibility of its exchange rate and the convertibility of its currency.

In the short term the most advantageous option is for the peg to remain in place, fundamentally for two reasons. Firstly the USD is still the main currency for trade and financial transactions in Hong Kong so breaking this link now would considerably destabilise its economy. Moreover the liberalisation being carried out by China could cause significant volatility so it is useful to have a financial and commercial hub which the world believes is stable.

Hong Kong dollar exchange rate

Hong Kong dollars to US dollars



Source: *CaixaBank Research, based on Bloomberg data.*

1. See «Shanghai-Hong Kong Stock Connect: connecting with the Chinese stock market», in MR01/2015.

FOCUS · Institutions in Latin America: a watershed

Latin America has been through a genuine institutional revolution in the last few decades that has completely altered the way economic policy is decided. Although formal changes are very often highlighted, such as the evolution towards democratic regimes taking place in the region since the 1980s, from a strictly economic point of view it is more important to look at improvements in different areas of governance which have been shown to affect economic efficiency. The governance indicators developed by the World Bank are particularly useful, providing details on the situation in six key areas: voice and accountability (including, among others aspects, democratic choice of government, freedom of the press and of association), political stability and absence of violence, government effectiveness (including measurements of the quality of public services, public policy, etc.), regulatory quality, rule of law and, lastly, control of corruption.

Although the conventional view is that governance has improved over the last 20 years, it is certainly true that this trend has not been uniform over time. While, between 1996 (first year with data) and 2005, the trend in the average figure for these six indicators is negative, it becomes positive in the following 10 years. Paradoxically, the situation of 2014, the last year available, is almost identical to the one in 1996. However, this institutional stagnation is almost exclusively due to the regression recorded in two countries, Argentina and Venezuela. Eliminating these two atypical cases we can see that, between 1996 and 2014, the region improved in institutional terms, achieving particularly good institutional quality in Chile, Uruguay and Costa Rica. Nonetheless, as a benchmark for the institutional progress achieved, we should note that the levels achieved in the regional average (excluding Argentina and Venezuela) are somewhat better than those of emerging Asia but clearly below the achievements of emerging Europe.

Given that Latin America is now entering a phase of worsening economic prospects due to a twofold economic shock (tougher international financing conditions and lower gains in commodities than those seen in the boom of the first decade of the new millennium) and that its leading economy, Brazil, is suffering from a deep recession, can the region weather the storm better than in the past thanks to the institutional changes occurring in the last few decades?

To answer this question, we need to clarify two issues. The most general issue is whether the region's current institutional framework now makes it more likely to adopt the right economic policy. A second, more specific aspect is related to whether the improved institutional system will assuage the increased likelihood of default since debt has become less sustainable due to a combination of lower growth and tougher financial conditions.[1]

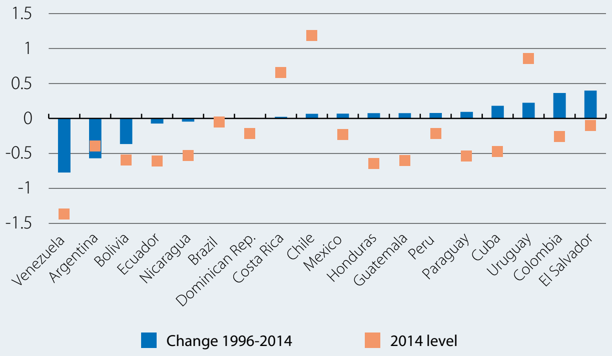
With regard to the first of these issues, the literature points to strong causal ties between (greater) institutional quality and a (greater) capacity to implement anti-cyclical economic policy. The empirical evidence available that is relevant for Latin America is mixed, however. While the BIS (2012) detects that several emerging economies, including some Latin American ones, have been able to implement counter-cyclical economic policies since 2000, the IMF (2014) is more cautious, noting a slight reduction in the pro-cyclical nature of economic policy.[2] The BIS also recognises that progress has been made particularly in monetary policy but not so much in the fiscal area (only Chile stands out in this area).

Regarding the second of the issues mentioned, the literature claims there are causal relationships between (greater) institutional quality and a (lower) probability of default. That is why we expect the latter to be less frequent than in the past.

In summary, Latin America is facing turbulent conditions with a better institutional framework than in the past. However, not all Latin America is Chile or, in other words, this does not mean it will all be plain sailing from now on. Neither is it clear whether the institutional improvement in the rest of the countries is enough, given the approaching storm.

Latin America: institutional quality

Level



Note: *Simple average of six governance indicators: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. The values are standardised from -2.5 to +2.5, the higher values corresponding to better governance.*
Source: *CaixaBank Research, based on data from the World Bank (Worldwide Governance Indicators).*

1. On this issue, see the Focus «Towards a crisis of external debt?» in MR02/2016.
2. Takáts, E. (2012), «Countercyclical policies in emerging markets», BIS Quarterly Review, June, and International Monetary Fund (2014), «Regional economic outlook. Western Hemisphere».

KEY INDICATORS

Year-on-year change (%), unless otherwise specified

UNITED STATES

	2013	2014	2015 Q1	2015 Q2	2015 Q3	2015 Q4	01/16	02/16
Activity								
Real GDP	1.5	2.4	2.9	2.7	2.1	1.9	–	...
Retail sales (excluding cars and petrol)	3.4	3.9	4.8	3.7	4.0	3.4	3.8	...
Consumer confidence *(value)*	73.2	86.9	101.3	96.2	98.3	96.0	97.8	92.2
Industrial production	1.9	3.7	3.5	1.5	1.1	–0.8	–0.7	...
Manufacturing activity index (ISM) *(value)*	53.8	55.6	53.2	52.6	51.0	48.6	48.2	...
Housing starts *(thousands)*	928	1,001	978	1,158	1,158	1,130	1,099	...
Case-Shiller home price index *(value)*	158	171	177	179	179	183	...	...
Unemployment rate *(% lab. force)*	7.4	6.2	5.6	5.4	5.2	5.0	4.9	...
Employment-population ratio *(% pop. > 16 years)*	58.6	59.0	59.3	59.3	59.3	59.4	59.6	...
Trade balance [1] *(% GDP)*	–2.9	–2.9	–3.0	–3.0	–3.0	–3.0	...	...
Prices								
Consumer prices	1.5	1.6	–0.1	0.0	0.1	0.5	1.4	...
Core consumer prices	1.8	1.7	1.7	1.8	1.8	2.0	2.2	...

Note: *1. Cumulative figure over last 12 months.*
Source: *CaixaBank Research, based on data from the Department of Economic Analysis, Department of Labor, Federal Reserve, Standard & Poor's, ISM and Thomson Reuters Datastream.*

JAPAN

	2013	2014	2015 Q1	2015 Q2	2015 Q3	2015 Q4	01/16
Activity							
Real GDP	1.4	–0.1	–1.0	0.7	1.6	0.7	–
Consumer confidence *(value)*	43.6	39.3	40.7	41.5	40.9	42.3	42.5
Industrial production	–0.6	2.1	–2.2	–0.5	–0.4	–0.5	–2.3
Business activity index (Tankan) *(value)*	6.0	13.5	12.0	15.0	12.0	12.0	–
Unemployment rate *(% lab. force)*	4.0	3.6	3.5	3.3	3.4	3.2	...
Trade balance [1] *(% GDP)*	–2.4	–2.6	–1.8	–1.4	–1.0	–0.6	–0.5
Prices							
Consumer prices	0.4	2.7	2.3	0.5	0.2	0.3	–0.1
Core consumer prices	–0.2	1.8	2.1	0.4	0.8	0.8	0.7

Note: *1. Cumulative figure over last 12 months.*
Source: *CaixaBank Research, based on data from the Communications Department, Bank of Japan and Thomson Reuters Datastream.*

CHINA

	2013	2014	2015 Q1	2015 Q2	2015 Q3	2015 Q4	01/16
Activity							
Real GDP	7.7	7.3	7.0	7.0	6.9	6.8	–
Retail sales	15.5	12.0	10.5	10.2	10.7	11.1	...
Industrial production	9.7	8.3	6.4	6.3	5.9	5.9	...
PMI manufacturing *(value)*	50.8	50.7	49.9	50.2	49.8	49.7	49.4
Foreign sector							
Trade balance [1] *(value)*	258	383	489	542	577	602	605
Exports	7.8	6.0	4.6	–2.2	–5.8	–5.1	–11.4
Imports	7.3	0.4	–17.6	–13.5	–14.3	–11.6	–18.6
Prices							
Consumer prices	2.6	2.0	1.2	1.4	1.7	1.5	1.8
Official interest rate [2] *(value)*	6.00	5.60	5.35	4.85	4.60	4.35	4.35
Renminbi per dollar *(value)*	6.1	6.2	6.2	6.2	6.3	6.4	6.6

Notes: *1. Cumulative figure over last 12 months. Billion dollars. 2. End of period.*
Source: *CaixaBank Research, based on data from the National Bureau of Statistics of China and Thomson Reuters Datastream.*

ECONOMIC OUTLOOK · **Moderate growth that is taking its time to build up steam**

The euro area's economic expansion is continuing this year. The European Commission predicts that GDP growth in the euro area will be 1.7% in 2016, 0.1 pps less than the forecast given last autumn due to some headwinds (the slowdown in the emerging economies and recent financial turbulence) that are blowing somewhat more strongly than three months ago. The pace of growth for most of the region's economies is accelerating gradually and our scenario of forecasts predicts a moderate recovery that will build up speed throughout the year, albeit a little more slowly than we had initially expected. Growth is being sustained by solid domestic demand, especially private consumption and to a lesser extent public consumption and investment. The contribution made by foreign demand will be limited in scope due to the slowdown in world trade. The intensity of the tailwinds that supported growth in 2015 will change: low oil prices will continue to be a boost for a few months (although they will then gradually rise) and the ECB's accommodative monetary policy will intensify, keeping interest rates low and the euro's real exchange rate weaker (than without the accommodative monetary policy). However, our scenario could be affected by some headwinds that are blowing more strongly than expected: a greater slowdown in the emerging economies, the continuation of financial volatility, the UK's exit from the EU and geopolitical risks.

The euro area's GDP grew by 0.3% quarter-on-quarter in 2015 Q4 (1.5% year-on-year), the same rate as in Q3. This figure places total growth for the year at 1.5%, representing an increase on 2014 (0.9%). Nonetheless the recovery is taking place at different speeds depending on the country and is somewhat slower than expected. Spain is still in the lead with 0.8% growth quarter-on-quarter in Q4 while Germany maintained a moderate but solid rate of 0.3% in Q3. On the other hand France and Italy reduced their growth rates by 0.1 pps, to 0.2% and 0.1% quarter-on-quarter respectively. Although the breakdown of GDP by demand component has yet to be published, the data available point to domestic demand being the main support for growth in the euro area. The economy has benefitted from some temporary factors that have offset, for the time being, the slowdown in the emerging economies and the increase in financial turbulence.

Emerging Europe accelerates its recovery. In Q4 the activity rate speeded up throughout the region. Of note was the high GDP growth recorded by Poland, Romania, Slovakia and Hungary, whose percentage change quarter-on-quarter reached and in some cases even exceeded 1% (the year-on-year change was 3.5%-4%). Lacking details by component,

GDP growth: forecasts by the European Commission

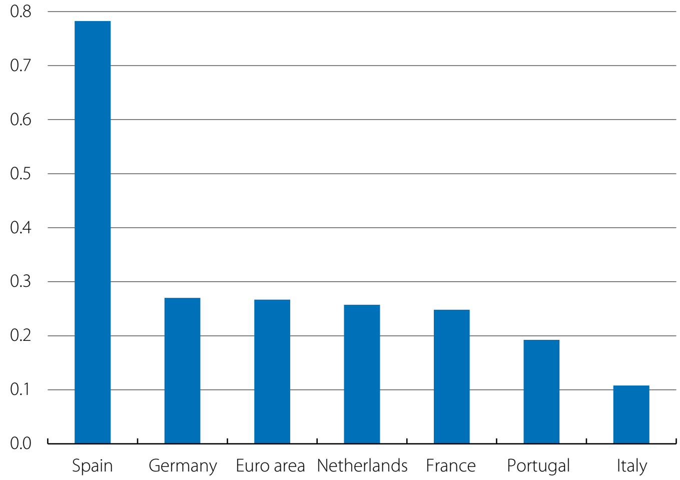
Annual change (%)

		Forecast		Change compared with the autumn 2015 forecast	
	2015	2016	2017	2016	2017
Euro area	1.5	1.7	1.9	▼ 0.1	=
Germany	1.4	1.8	1.8	▼ 0.1	▼ 0.1
France	1.1	1.3	1.7	▼ 0.1	=
Italy	0.6	1.4	1.3	▼ 0.1	▼ 0.1
Spain	3.2	2.8	2.5	▲ 0.1	▲ 0.1
Portugal	1.4	1.6	1.8	▼ 0.1	=
Greece	–0.7	–0.7	2.7	▲ 0.6	=

Source: *CaixaBank Research, based on data from Eurostat (2015) and the European Commission.*

GDP in 2015 Q4

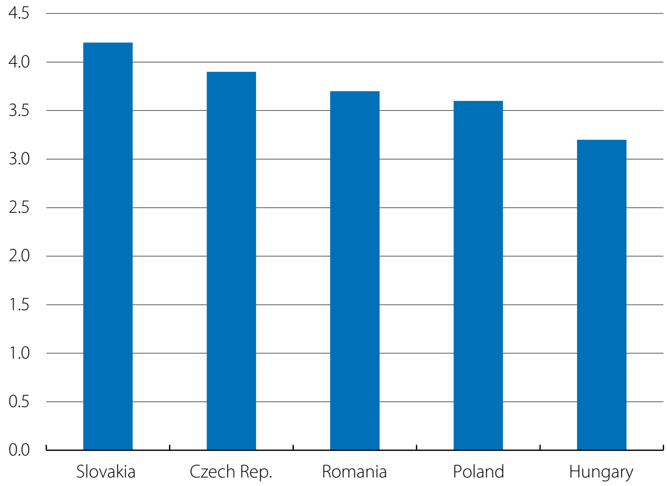
Quarter-on-quarter change (%)



Source: *CaixaBank Research, based on Eurostat data.*

Emerging Europe: GDP in 2015 Q4

Year-on-year change (%)



Source: *CaixaBank Research, based on data from Eurostat and national statistics offices.*

available indicators suggest that most of these economies are being helped simultaneously by the positive contribution of foreign demand (reflecting the good tone of their main market, the euro area) and more vigorous domestic demand. The immediate outlook is for these countries to record a notable rate of expansion in 2016, albeit gently slowing down compared with 2015.

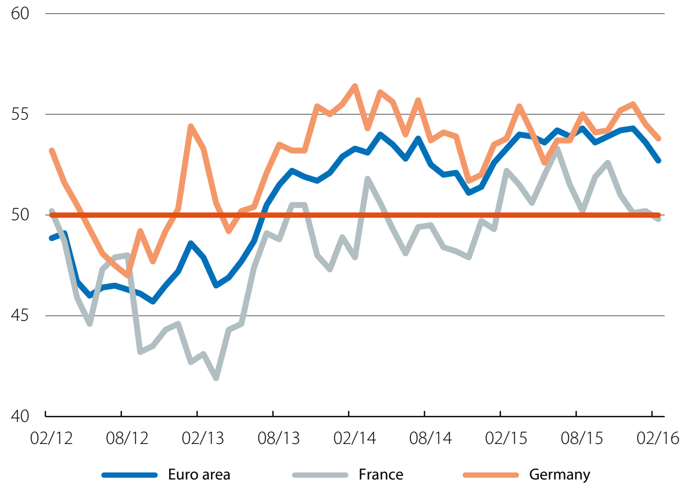
The pace of activity growth does not seem to have increased in 2016 Q1. Business indicators available for the month of February point to growth in the euro area not speeding up. The economic sentiment index fell to 103.8 points, above its historical average (100). The composite PMI fell to 52.7 points, its lowest figure since January 2015 although it is still clearly within the expansionary zone (above 50 points). By country, the composite PMI fell in Germany to 53.8 points but also still remained comfortably in the zone of expansion. On the other hand, in France the index fell to 49.8, a marginally recessionary level. These drops show how the turbulence observed in financial markets is affecting economic and business sentiment and, although we do not expect this to lead to a slowdown in activity in the euro area, growth may take longer to gain traction.

Consumption grows but does not accelerate. Demand indicators show a certain slowdown between the end of 2015 and the start of 2016. Retail sales rose by 1.4% year-on-year in December, a rate higher than their historical average but slightly below the strong growth recorded in the rest of 2015. On the other hand consumer confidence in the euro area fell in February to –8.8 points (–6.3 in January), below the figures observed since December 2014. This reduction in confidence reflects increased uncertainty as a consequence of the strong financial volatility recently but we expect this downward trend to be temporary. In fact, the euro area's labour market continues to recover well. Unemployment fell to 10.4% in December 2015 and we expect it to continue improving this year and support the improvement in private consumption.

The current account surplus continues to improve. In spite of the gradual increase in domestic demand, the low oil prices, which have reduced the euro area's energy deficit, and improved price competitiveness both helped to boost the current account surplus in 2015. This reached a peak of 3.2% of GDP in December (cumulative over 12 months), supported by the large correction in the deficits of numerous peripheral countries (Spain is a clear example) and by the continued substantial surplus in Germany (8.9% of GDP in December). From the point of view of investment and savings, a large rise in the surplus indicates that increased savings have not been invested in the euro area and, if the situation continues for some time, this imbalance might have an effect on the euro area's growth potential.

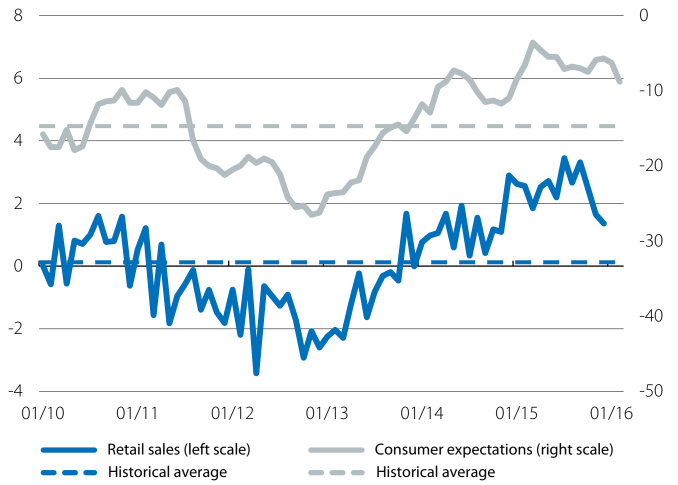
The United Kingdom's potential exit from the EU adds uncertainty to the economic environment. The UK has

Composite PMI activity indicator
Level



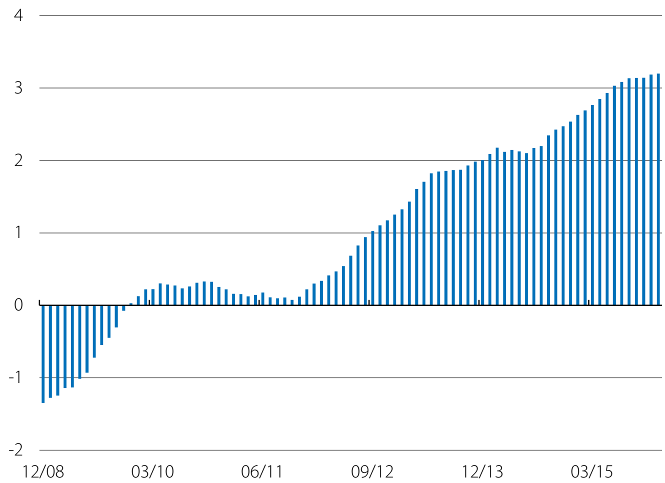
Source: *CaixaBank Research, based on data from Markit.*

Euro area: consumption indicators
Year-on-year change (%) *Level*



Source: *CaixaBank Research, based on Eurostat data.*

Euro area: current account balance
Cumulative over 12 months (% of GDP)



Source: *CaixaBank Research, based on data from the ECB.*

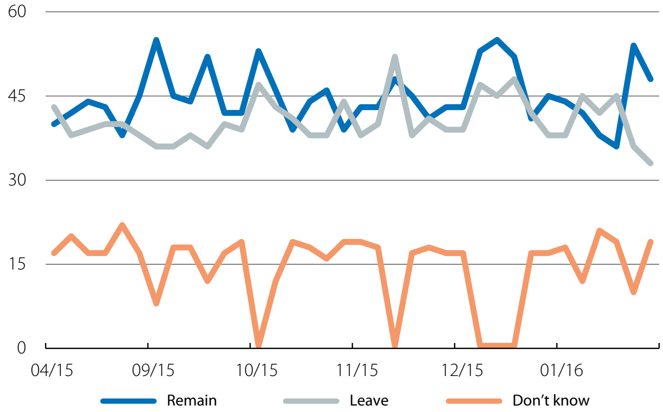
reached an agreement with the European Council regarding the terms of its EU membership, which will be put to a referendum on 23 June. The agreement covers four major areas: sovereignty, competitiveness, economic governance and immigration. The latter has been the most controversial, as it includes an «emergency brake» to social benefits related to employment for immigrants from the EU, treating them differently to national workers. Beyond the small print, should it be approved the United Kingdom will no longer be committed to greater integration within the EU, setting a precedent with negative consequences for political and economic integration should other countries also claim exceptional circumstances. However, the clarification of its role may also give free rein to those countries hoping to achieve greater political and economic integration within the euro area. So far the polls have not provided a clear outcome for the referendum as many people are undecided. Whatever the result, the possibility of Brexit has increased uncertainty, leading to the pound depreciating sharply in the last few weeks. This depreciation is also due to the possible delay, until the beginning of 2017, of interest rate hikes by the Bank of England given the context of greater uncertainty and low inflation.

The refugee crisis is an important challenge for the EU, beyond its humanitarian aspect. The inability to reach an agreement on how to handle the crisis is leading each country to take unilateral decisions to the detriment of their neighbours. Six countries have temporarily imposed border controls within the Schengen area, a measure that could hinder the EU's economic growth if it continues for some time. According to France Stratégie, a permanent return to border controls would be the equivalent of introducing a commercial duty on trade which would reduce commercial relations between Schengen countries. Within such a climate of mutual mistrust, it will not only be difficult to resolve the management of the refugee crisis but also to advance in constructing Europe in general. Moreover, other risks might appear, both geopolitical and those particular to each country, which could end up having a negative impact on growth by limiting the EU's ability to respond as a single entity.

The sources of risk increase in Portugal. Portugal's growth prospects have weakened recently: the consensus of analysts' GDP forecast for 2016 has gone from 1.8% to 1.5% in less than four months. This deterioration is the consequence of worse activity figures recorded in the second half of 2015 with domestic demand losing its vigour, and also of doubts regarding the government's parliamentary solidity and its capacity to adopt the right economic policy, which have already had an effect. Particularly of concern is the uncertain trend in the budget resulting from a lack of credibility in the scenario forecast, leading to the European Commission demanding additional adjustments.

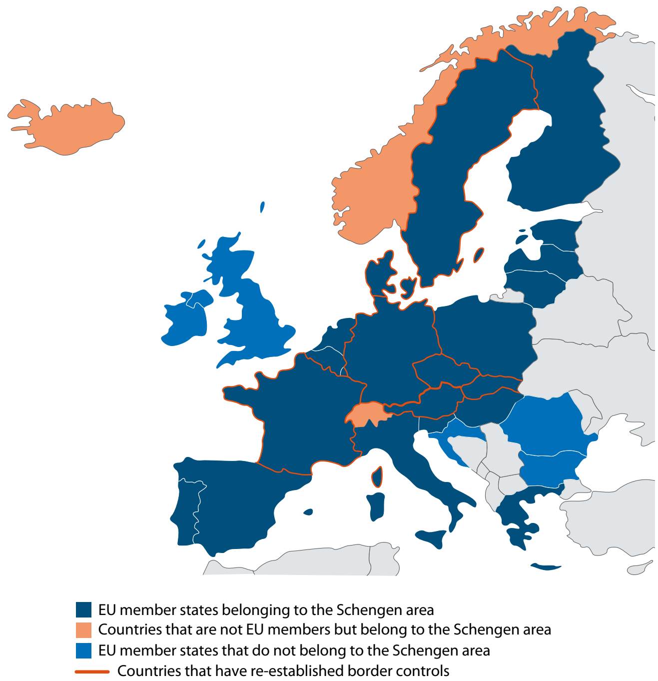
United Kingdom: intended vote in the referendum

(%)



Source: *CaixaBank Research, based on data from the Financial Times.*

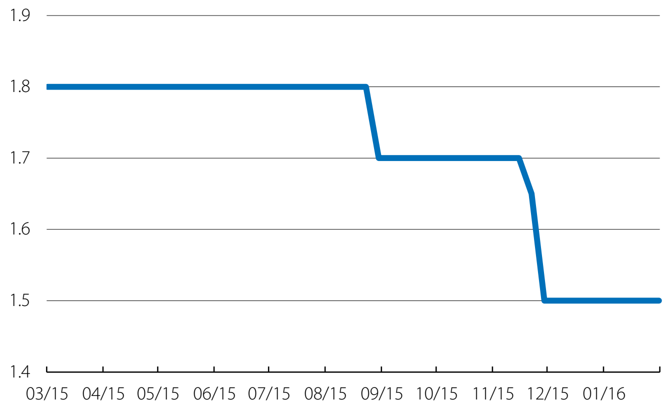
Border controls within the Schengen area



Source: *France Stratégie.*

Portugal: Forecasts of GDP in 2016 by the consensus

Annual change (%)



Source: *CaixaBank Research, based on Bloomberg data.*

FOCUS · Low inflation: oil and nothing else?

Although the euro area's growth has been in positive figures for more than two years now, inflation is still at an all-time low. It is often argued that this reflects the weakness of such growth or is used to question the effectiveness of monetary policy. Is it appropriate to use inflation as an indicator of the economy's underlying condition at present?

There can be no doubt that the low inflation rate is partly due to the sharp fall in oil prices and its direct effect on the prices of energy products. Nonetheless some analysts suggest there are additional factors to be taken into account since core inflation, which excludes the energy component, is also far from the ECB's target.

However, such concerns about low inflation can be partly offset by considering the channels via which oil prices affect core inflation. The first channel of impact is the indirect effect the new oil price can have on companies by reducing their production or transport costs. In fact core inflation contains components with a historically high correlation to the price of oil[1] which have also reacted sharply to the recent slump. For example, non-durable domestic goods, which do not include energy products of any sort, have followed a very similar trend to the oil price. This is because the price of oil is crucial in the production and transport costs of companies selling non-durable domestic goods, with movements in the price of crude oil consequently being reflected in the final price offered to consumers.

The second channel is the second-round effect produced when agents alter their inflation expectations due to the slump in oil prices and, in turn, these expectations affect the trend in current prices. For example, this would be the case if a change in expectations influenced wage negotiations between companies and their workers.

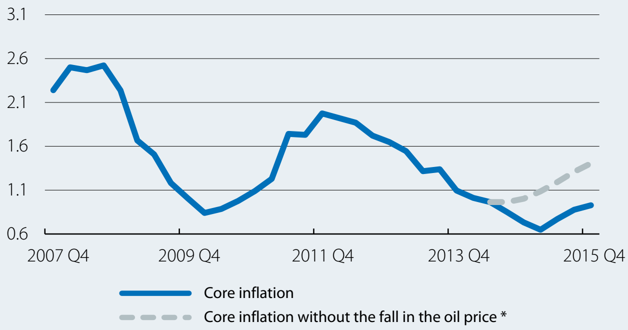
To discover the extent of such indirect and second-round effects, we have analysed the historical relationship between core inflation and the oil price and have estimated what the level of core inflation would be if the price of oil had not fallen.[2] For those with a knowledge of ecometric techniques, what we have done is estimate a model that captures how variations in the price of crude oil have affected core inflation historically and, as from July 2014, we have assumed that the energy component has advanced at the same rate as core inflation to obtain the counter-factual value; i.e. the level of core inflation without any indirect or second-round effects.

As can be seen in the graph, this impact is not small: in the last quarter of 2015, core inflation in the euro area would have been 1.41% instead of the 0.93% observed; a level only slightly below the historical average, as corresponds to an economy growing at a good rate but not yet performing at 100%, and not very far from the ECB's target.

In fact, if the oil price picks up gradually over the coming quarters, as we think it will, both core inflation and especially general inflation will accelerate considerably. Specifically, we expect general inflation to go from its current rate of 0.4% to 2.0% by December this year. Nevertheless, just as today's low inflation rate must not be interpreted as a sign of weakness in growth, its increase will not be due to any fundamental change in economic activity either.

Core inflation: indirect and second-round effects of the oil price

Year-on-year change (%)



Note: ** It is assumed that core inflation advances at the same rate as the energy component as from July 2014. In the estimated model we use data for the euro area (EU 15) from 2002 Q1 to 2015 Q4.*
Source: *CaixaBank Research, based on Eurostat data.*

1. ECB «Monthly Bulletin» of December 2014 (Box 3).
2. We use an extension of the model presented by the article «Has ECB QE lifted inflation?» published by Bruegel.
$\pi_t^{core} = a + \sum_{i=1}^{4} \beta_i \pi_{t-i}^{core} + \sum_{j=1}^{4} \gamma_j y_{t-j} + \sum_{k=1}^{4} \delta_k (\pi_{t-k}^{energy} - \pi_{t-k}^{core}) + \varepsilon_t$, where π_t^{core} is core inflation; π_{t-i}^{core} core is core inflation in the period *t-i*; y_{t-j} is real GDP growth year-on-year in the period *t-j*; π_{t-k}^{energy} is the inflation of the energy component in the period *t-k*; and ε_t is the error term in the regression equation.

FOCUS · The ECB and the slump in oil prices

Europe's economic recovery is still on track although uncertainty in the global environment has led Mario Draghi to consider revising the ECB's monetary policy at its March meeting. The movement in the price of oil is one of the main sources of uncertainty because, falling by 72% in the last year and a half, it has kept inflation far from the central bank's target. Below we analyse how far monetary policy should react to these fluctuations in oil.

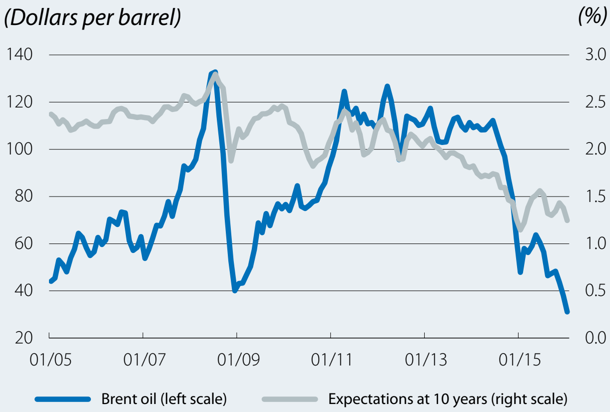
If the low price of crude oil were temporary, there would be no doubt as to the ECB's capacity to guarantee price stability so it seems evident there should be no active response via monetary policy. However, the bulk of the evidence available suggests that a significant proportion of the correction in the price of crude oil will be permanent. For example, the International Energy Agency, one of the most authoritative voices in this field, predicts a price of 79 dollars per Brent barrel in 2020, a considerably different figure to the 113 dollars per barrel reached in 2012.

The clearest consequence of a permanently lower price for crude oil is the greater production capacity of the European economy, a large importer of the hydrocarbon, as the price of energy is one of the most important costs for many companies. If the economy quickly achieves its new potential, no intervention by economic policy will be necessary. However, if demand does not keep up with the growth in production capacity, the downward pressure on prices would increase, compromising the ECB's mandate which aims to keep inflation below but close to 2%. To date, there has been a steady advance in activity in the euro area, gradually approaching its new potential. However, as suggested by the ECB, the recent intensification of risks regarding the future course of the global economy could slow down this recovery. For example, households and companies might postpone decisions to consume and invest given the greater uncertainty. Deceleration in the emerging economies could also damage exports from the euro area and slow down the economy's growth. Because of this, given the increase in such risks, monetary policy could respond with expansionary measures that would boost the economy if it showed any clear signs of a slowdown.

The second factor that might cause the ECB to act is if the fall in oil prices pushed down inflation expectations, which are fundamental for the implementation of the ECB's policy.[1] If workers and consumers had significantly reduced their inflation expectations we would have seen the fall in oil prices passed on to prices in the rest of goods and services as well as wages. Our analysis, presented in the Focus «Low inflation: oil and nothing else?» in this *Monthly Report*, indicates that lower oil prices have temporarily reduced inflation for other goods and services but it also points out that this does not seem to have affected the recovery in core inflation during 2015. According to our analysis, the lower price of crude oil does not seem to have led to any permanent reduction in the inflation expectations of consumers or workers. In any case, as can be seen in the graph, in the last few years the market's inflation expectations[2] have decreased and are now below the ECB's target. What is more, there is now a stronger correlation between the price of oil and expectations. On the other hand, expectations based on economist surveys, which are less volatile than market expectations, point to a much more moderate reduction. Consequently, on the whole the evidence points to the ECB continuing to keep the situation under control although it might be compromised should the price of oil fall much further.

In summary, to date the economic recovery has followed a solid path and the slump in oil prices has not led to indirect effects that compromise long-term inflation expectations. If this scenario continues, the ECB should not respond to the fall in oil prices. However, the central bank must remain alert as an increase in uncertainty or further drops in the oil price could warrant its intervention.

Oil and market inflation expectations



Note: *Expectations according to inflation swaps.*
Source: *CaixaBank Research, based on data from Thomson Reuters.*

1. The central bank establishes a nominal interest rate but agents base their decisions on the real rate: the spread is determined by inflation expectations.

2. For more details on how market expectations are constructed, see the article «Measuring inflation expectations: the devil is in the detail», in MR02/2015.

KEY INDICATORS

Activity and employment indicators

Values, unless otherwise specified

	2013	2014	2015 Q1	2015 Q2	2015 Q3	2015 Q4	01/16	02/16
Retail sales *(year-on-year change)*	–0.8	1.2	2.3	2.5	3.1	1.8	...	...
Industrial production *(year-on-year change)*	–0.7	0.8	1.6	1.3	1.8	0.7	...	...
Consumer confidence	–18.8	–10.2	–6.2	–5.2	–7.0	–6.4	–6.3	–8.8
Economic sentiment	93.5	101.5	102.6	103.7	104.5	106.3	105.1	103.8
Manufacturing PMI	49.6	51.8	51.4	52.2	52.2	52.8	52.3	51.0
Services PMI	49.3	52.5	53.5	54.1	54.0	54.2	53.6	53.0
Labour market								
Employment (people) *(year-on-year change)*	–0.7	0.6	0.9	1.0	1.1	...	–	...
Unemployment rate: euro area *(% labour force)*	12.0	11.6	11.2	11.0	10.7	10.5	...	...
Germany *(% labour force)*	5.2	5.0	4.8	4.7	4.6	4.5	...	...
France *(% labour force)*	10.3	10.3	10.4	10.4	10.5	10.2	...	...
Italy *(% labour force)*	12.1	12.7	12.3	12.2	11.7	11.4	...	...
Spain *(% labour force)*	26.1	24.5	23.1	22.5	21.7	21.0	...	...

Source: *CaixaBank Research, based on data from the Eurostat, European Central Bank, European Commission and Markit.*

Foreign sector

Cumulative balance over the last 12 months as % of GDP of the last 4 quarters, unless otherwise specified

	2013	2014	2015 Q1	2015 Q2	2015 Q3	12/15	01/16
Current balance: euro area	**2.0**	**2.5**	**2.7**	**3.0**	**3.1**	**3.2**	**...**
Germany	6.5	7.3	7.5	7.8	8.0	8.2	...
France	–0.8	–0.9	–0.5	0.1	0.2	–0.1	...
Italy	0.9	1.9	2.0	2.0	2.1	...	...
Spain	1.5	1.0	1.2	1.4	1.5	1.5	...
Nominal effective exchange rate [1] *(value)*	**101.2**	**101.8**	**93.0**	**91.1**	**92.7**	**92.5**	**93.5**

Note: *1. Weighted by flow of foreign trade. Higher figures indicate the currency has appreciated.*
Source: *CaixaBank Research, based on data from the Eurostat, European Commission and national statistics institutes.*

Financing and deposits of non-financial sectors

Year-on-year change (%), unless otherwise specified

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	12/15	01/16
Private sector financing								
Credit to non-financial firms [1]	–2.6	–0.2	–0.8	–0.4	0.1	0.4	0.1	0.6
Credit to households [1,2]	–0.1	0.8	0.2	0.5	1.0	1.3	1.4	1.4
Interest rate on loans to non-financial firms [3] *(%)*	2.0	1.6	1.7	1.6	1.5	1.5	1.5	...
Interest rate on loans to households for house purchases [4] *(%)*	2.6	2.1	2.2	2.0	2.1	2.0	2.0	...
Deposits								
On demand deposits	6.0	11.5	9.7	11.8	12.4	11.9	11.6	11.3
Other short-term deposits	–2.0	–3.9	–3.1	–4.0	–4.7	–3.9	–3.5	–2.7
Marketable instruments	–7.2	3.1	3.9	5.7	2.0	0.7	–3.8	–1.3
Interest rate on deposits up to 1 year from households *(%)*	1.3	0.8	1.0	0.9	0.7	0.7	0.7	...

Notes: *1. Data adjusted for sales and securitization. 2. Including NPISH. 3. Loans of more than one million euros with a floating rate and an initial rate fixation period of up to one year. 4. Loans with a floating rate and an initial rate fixation period of up to one year.*
Source: *CaixaBank Research, based on data from the European Central Bank.*

ECONOMIC OUTLOOK · The pace of growth is still robust

Domestic demand is boosting growth. The data from the National Accounts system confirm that the Spanish economy grew by 0.8% quarter-on-quarter in Q4 thanks to the notable contribution made by domestic demand (0.6 pps). Of note is dynamic private consumption (0.8% quarter-on-quarter) which has benefitted from households' increased purchasing power for several months now, a result of the rate of job creation, the fall in energy prices and improved financial conditions. Domestic demand was also supported by capital goods investment which grew by 1.9% quarter-on-quarter. After several quarters contributing negatively to growth, foreign demand made a positive contribution in the last quarter of 2015 of 0.2 pps thanks to the good trend in exports and the moderate advance made by imports. Nevertheless, for the whole of 2015 foreign demand deducted 0.5 pps from the annual growth in GDP which was 3.2%, while domestic demand contributed 3.7 pps. In 2016 our main scenario predicts that domestic demand will continue to expand although at a more moderate rate, and that foreign demand will make a slightly positive contribution to GDP growth, which we expect to be 2.8%. For the time being the uncertainty related to the political impasse and financial turbulence at a global level are not affecting business indicators. However neither internal nor external risks to economic developments have eased and are still downside. Consequently, for the economic recovery to continue at a good rate, it will be crucial for these sources of uncertainty to gradually diminish over the coming months.

Investment is still robust. After a year with a notable contribution from capital goods investment, the business sentiment index (PMI) in January pointed to a good start to the year. Specifically, the manufacturing index rose to 55.4 points, above the average figure for Q4 (52.5). However, the services index fell slightly and stood at 54.6 points, below its average for Q4 (55.9) but still in a comfortable zone of expansion. The economic sentiment indicator (ESI) published by the European Commission also remained at levels above its historical average in spite of a moderation in optimism in the first few months of the year. In particular, the confidence indicator for the industrial sector has corrected significantly both in January and February, explained mainly by the deterioration in expectations regarding industry's portfolio of orders. It is worth noting, however, that the outlook for future production has improved. The good levels maintained by these indicators in the months of January and February, together with the positive trend in corporate earnings (see the Focus «The points of support for corporate profitability») suggest that the contribution made by investment to GDP growth will remain at a high level in Q1.

Breakdown of GDP and forecasts

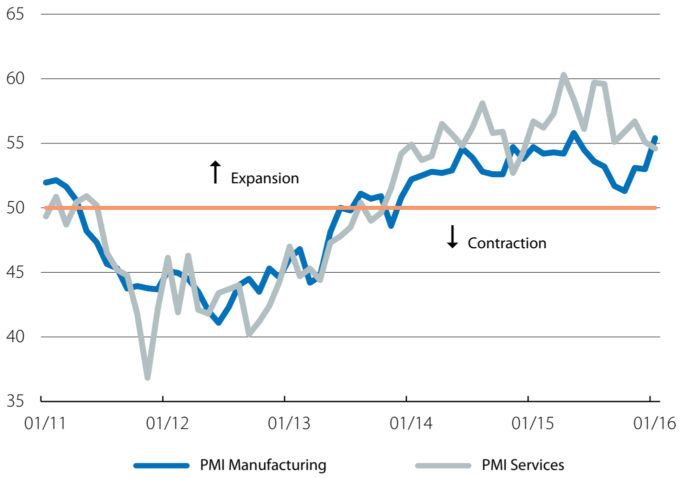
Quarter-on-quarter change (%)

	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1 (Forecast)	2016 Q2 (Forecast)
Private consumption	0.8	0.8	1.1	0.8	0.8	0.6
Public consumption	1.9	0.7	0.5	0.4	–0.4	0.3
Investment	1.6	2.3	1.3	1.1	1.0	0.9
Capital goods investment	2.3	3.7	2.6	1.9	1.3	1.0
Investment in construction	1.3	1.9	0.7	0.6	0.9	0.9
Exports	1.0	1.4	1.8	0.9	1.4	1.4
Imports	2.6	1.5	3.1	0.3	1.3	1.3
GDP	0.9	1.0	0.8	0.8	0.7	0.6

Source: *CaixaBank Research, based on INE data.*

Activity indicators

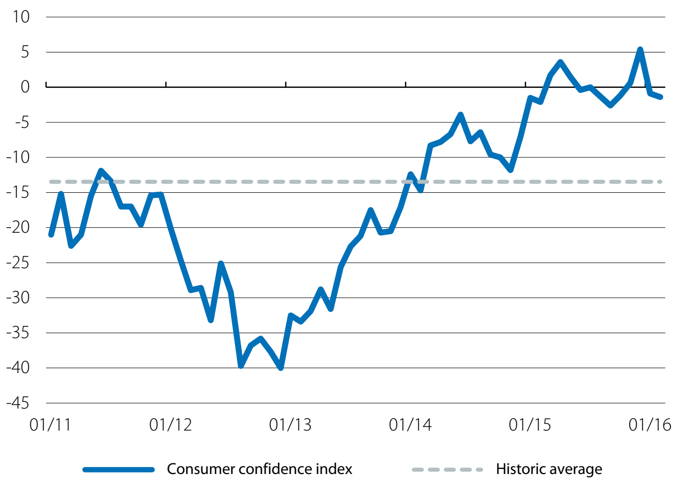
Level



Source: *CaixaBank Research, based on data from Markit.*

Consumer confidence

Level



Source: *CaixaBank Research, based on European Commission data.*

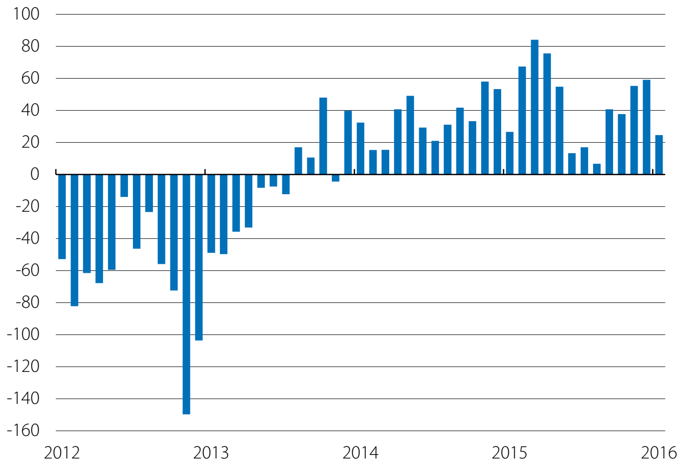
Private consumption remains strong. Consumer confidence is still above its historical average in spite of falling slightly in the first two months of the year, reaching –1.4 points after recording large advances in 2015. The good figures for the consumer confidence index in this start to the year point to private consumption continuing to boost growth in 2016.

Job creation is still dynamic. According to data from the National Accounts system, the growth in full-time equivalent employment was 0.6% quarter-on-quarter in Q4. For the year as a whole the percentage change stood at 3.0%, the equivalent of 495,000 net jobs being created. The number of registered workers affiliated to Social Security in January confirmed the favourable trend in employment in 2016. Specifically, contributors grew by 3.2% year-on-year which represents an increase of 24,602 workers affiliated, seasonally adjusted. For its part registered unemployment fell by 8.3% posting a particularly large drop in industry and construction. In spite of these good employment figures, wage increases are still moderate within a context in which there is still extensive underutilisation of the resources in the labour market. Wages rose by 0.7% in Q4, taking the annual increase to a contained 0.9%. Wages agreed in January, however, seem to indicate slightly higher increases of 1.1%.

Inflation surprised again in February by falling to –0.8%, mainly due to the drop in fuel prices and food. This fall, much higher than our forecast, is surprising in a context where the average price of oil in February was higher than in January. However, we expect core inflation, which excludes energy and unprocessed food, to have remained stable at 0.9%, a level very similar to the one observed in the last few months. This drop in inflation, larger than predicted in our main scenario, has led us to revise downward our forecasts. Specifically, we now place inflation at 0.1% for the whole of 2016 (compared with 0.5% previously). According to our estimates, low oil prices will keep inflation in negative terrain until the summer and it will then pick up once the base effect of the slump in oil has disappeared. We therefore expect inflation to recover and come close to 1.6% by the end of year.

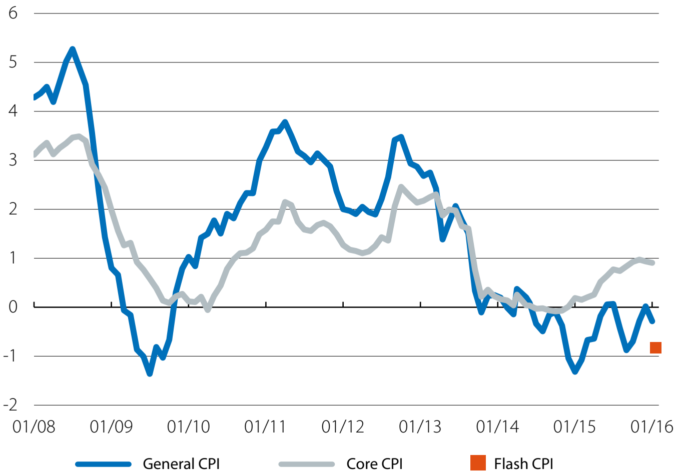
The fall in oil prices contributed positively to the foreign sector in 2015 with savings in the energy bill totalling EUR 12 billion. However, in spite of this reduction in the energy deficit and the good performance by non-energy exports which increased by 6.1% year-on-year, the balance of trade only improved by EUR 300 million due to the rise in imports (11.6% year-on-year). The balance of payments ended 2015 with a comfortable surplus of EUR 16.7 billion, equivalent to 1.5% of GDP, an improvement of 0.5 pps compared with 2014 which can mostly be put down to the increase in the balance of primary and secondary incomes and, to a lesser extent, the aforementioned reduction in the trade deficit. In 2016 low oil prices will continue to favour the balance of goods but it is important to continue adopting measures that

*Registered workers affiliated to Social Security **
Monthly change (thousands of people)



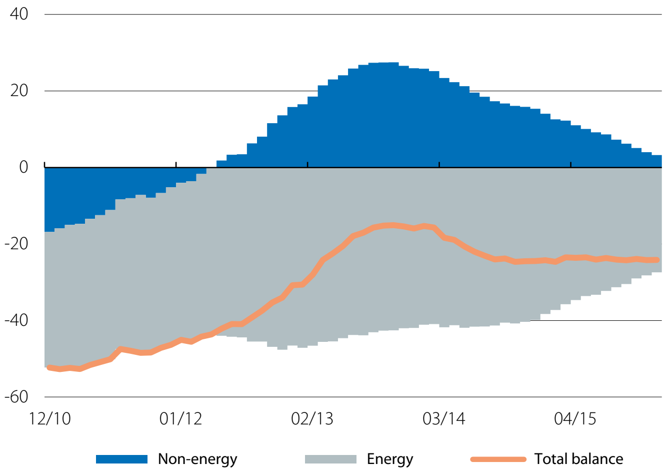
Note: ** Series seasonally adjusted.*
Source: *CaixaBank Research, based on data from the Ministry of Employment and Social Security.*

CPI
Year-on-year change (%)



Source: *CaixaBank Research, based on INE data.*

*Balance of goods **
Cumulative figures over 12 months (billion euros)



Note: ** Nominal data.*
Source: *CaixaBank Research, based on data from the Bank of Spain.*

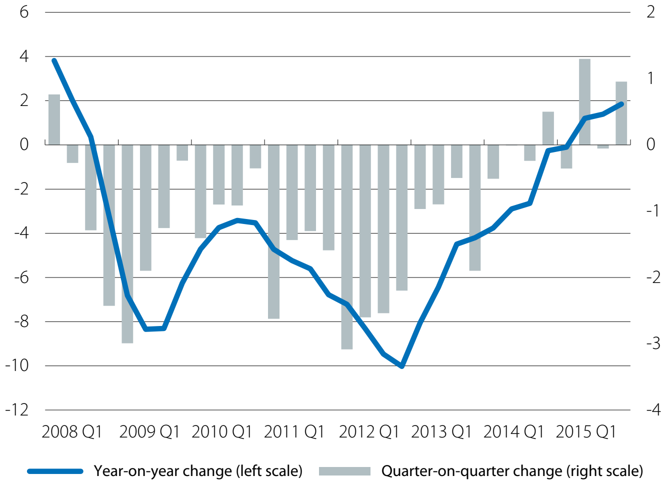
improve the balance of trade in structural terms, something that will become more evident once oil prices start to recover (see the article «The Spanish economy and oil: a close relationship», in the Dossier of this *Monthly Report*).

The real estate market consolidates its recovery in 2015. For the year as a whole, house sales rose by 11.1% compared with 2014 while mortgages grew by 19.8% year-on-year, also for the whole of 2015. These figures reflect the greater dynamism in demand which has been boosted by the good performance of the economy, improved financial conditions and high returns from housing compared with other investments (see the Focus «Demand for housing is picking up»). This vigorous demand has affected house prices which rose by 1% quarter-on-quarter in Q4 according to the Ministry of Public Works, while in year-on-year terms prices grew by 1.8%. On the supply side, the National Accounts reflect how investment in building residential properties gradually built up steam in 2015 compared with non-residential construction. Consequently, new building permits grew by 29% in November in comparison with November 2014, according to the cumulative figures over 12 months. The outlook is favourable over the coming months and the upward trend in prices and activity looks like continuing thanks to improved financing conditions and labour market and the shortage of stock in some prime zones. Consequently, the sector will continue to expand although with a highly heterogeneous trend in different provinces.

The increase in bank credit supports growth. The positive trend in new loans to households during 2015, which grew by 20% for the year's cumulative figure, has strengthened domestic demand. New loans to non-financial firms for SMEs rose by 12.9% in the cumulative annual figure and growth in new loans for large firms was 7.7%. Mortgage loans were up by a considerable 33.4%, boosted by the stabilisation of house prices and the increase in real estate transactions. On the other hand, the low non-performing loan rate highlights the healthier state of Spain's banking system. In the last two years non-performing loans have fallen by 3.5 pps from the peak reached in December 2013.

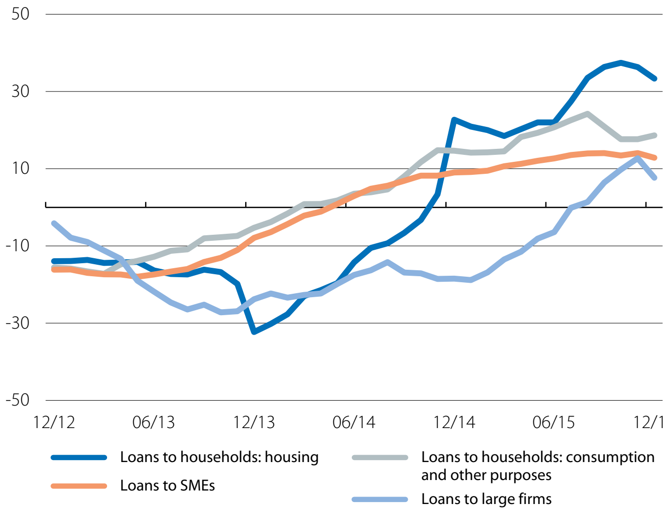
Public debt shows signs of stabilising. Public debt ended the year at 99.0% of GDP. This high level, although somewhat lower than expected, highlights the importance of continuing with fiscal consolidation. In this respect, the European Commission warned that the high amount of debt makes the Spanish economy vulnerable to shocks in international financing conditions. Given this situation, there is very little margin to adopt expansionary fiscal policy.

Housing prices



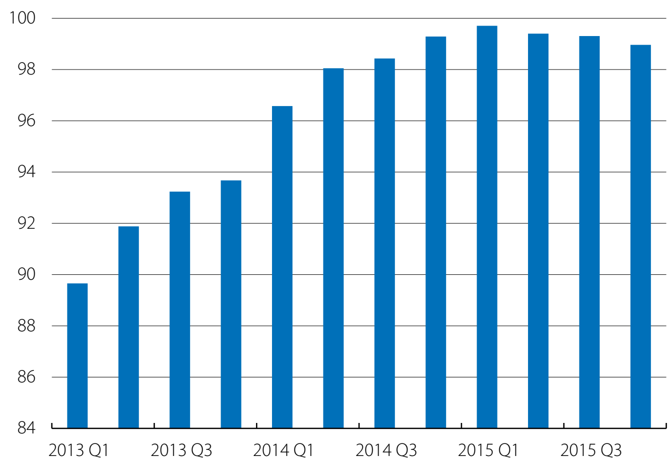
Source: *CaixaBank Research, based on data from the Ministry of Public Works and Transport.*

New loans granted



Source: *CaixaBank Research, based on data from the Bank of Spain.*

Public debt



Source: *CaixaBank Research, based on data from the Bank of Spain*

FOCUS · How does the type of employment contract affect productivity?

The proportion of employees with temporary contracts in Spain, standing at 26.2% in 2015 Q3, almost doubles the average rate for the European Union of 14.8% and is one of the particular features of the Spanish labour market that has a negative effect on its productivity.[1] The type of employment contract affects productivity in two ways: investment in training by employers and the incentive to work by employees. Productivity increases as human capital is accumulated and workers make more effort.

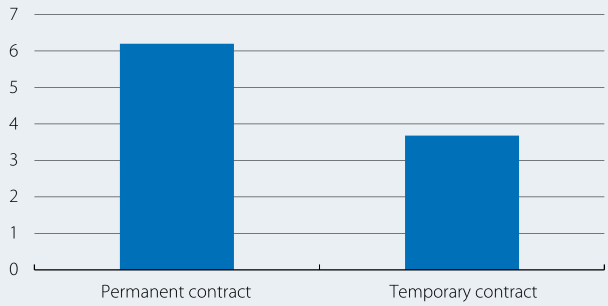
Let us start with the first channel, namely investment in human capital depending on the type of employment contract. An analysis of the Spanish case based on the country's Labour Force Survey shows that workers on temporary contracts receive less informal training from the company than those on a permanent contract, reducing their professional development and ultimately their productivity (see the first graph). Specifically, in 2014 3.7% of salaried workers with temporary contracts had carried out informal training during the previous four weeks compared with 6.2% of salaried workers with permanent contracts.[2] It should be noted that the main aim of the training received by most employees was related to the job they were doing.

Another sign that employees with temporary contracts accumulate less human capital is provided by the findings of the OECD's survey of adult skills: workers on temporary contracts in Spain use fewer skills[3] in their jobs than those on permanent contracts, even after taking differences into account regarding educational level and job (see the second graph).[4] Moreover, this differential in the use of skills between different types of contract is greater in Spain than in the OECD as a whole, suggesting important consequences of the dual nature of the labour market, which is greater in Spain's case.

The second channel, namely the relationship between effort and productivity according to the type of contract, is less evident. For example, not all temporary contracts have the same effect on effort. When a contract is temporary for recruitment purposes (i.e. during a trial period before becoming permanent), workers would be more motivated to make an effort because they would perceive a greater chance of getting a permanent contract. However, empirical evidence shows that this is not the pattern in Spain. Only 21% of salaried workers on temporary contracts manage to get a permanent contract after one year, 56% continue on a temporary contract while the rest become unemployed.[5] Consequently most temporary contracts are not for recruitment but only for a specific period of time, a type that leads to less effort as workers assume they will probably lose their job irrespective of their level of dedication. Permanent contracts have differing effects on this variable as well: employees with permanent contracts involving high dismissal costs may have less incentive to make an effort because the probability of them losing their job is not related to their productivity while workers whose permanent contracts involve more moderate dismissal costs probably make more of an effort. In summary, there is still plenty of margin to find contractual formulas that manage to increase investment in training and employee effort, two fundamental ways of improving productivity.

Training with the company's participation by type of contract

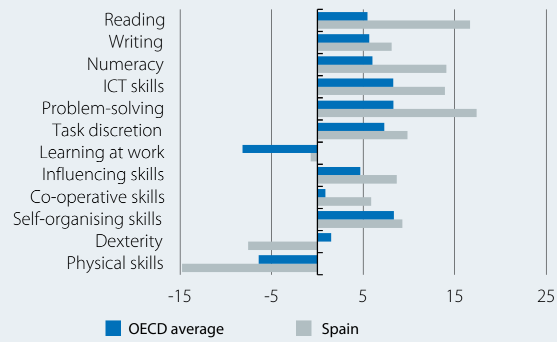
(% of workers receiving training outside formal study plans in the previous four weeks)



Source: *CaixaBank Research, based on INE data (LFS, Sub-sample variables, 2014).*

Use of skills at work by contract type

*Difference between permanent and temporary contracts * (%)*



Note: ** The estimate takes into account differences in the level of education and in jobs.*
Source: *CaixaBank Research, based on data from the OECD (Survey of Adult Skills, PIAAC).*

1. One part of this difference can be explained by the larger share in Spain's economy of highly seasonal sectors, such as tourism.
2. The differential in the incidence of training between workers on temporary and on permanent contracts remains once socio-economic factors have been taken into account, such as age and level of education.
3. By way of example, numeracy skills in the job entail the use of numbers, quantities, statistics or mathematics: calculating prices, costs or budgets; use of fractions, decimals or percentages; preparing graphs, tables or diagrams; analysing regression, etc.
4. See «OECD Skills Outlook 2013: First Results from the Survey of Adult Skills».
5. See Serra, S. (2015), «Temporary Contracts' Transitions: the Role of Training and Institutions», Bank of Portugal.

FOCUS · The points of support for corporate profitability

Companies are the driving force of the economy. Job creation, so vital to boost the labour market, depends on companies, as well as investment, which is needed to increase the economy's long-term growth potential. For companies to fulfil these functions that are so crucial for the economic recovery they must have a sufficiently healthy balance sheet and be able to generate earnings that offset the risks assumed by business owners. In this article we look at the state of health of the corporate sector based on data from Spain's National Accounts system, analysing the trend in non-financial private firms as a whole.

As can be seen in the graph, corporate earnings have started to rise. In 2015 Q3 the gross operating surplus (GOS)[1] generated by non-financial firms grew by 3.1% year-on-year,[2] a considerable increase compared with the 0.1% reduction in 2014. In fact, the GOS remained almost at a standstill between 2008 and 2014 due to the drop in sales and the closure of many firms, interrupting a long upward trend. Nevertheless, the GOS was prevented from falling due to an increase in gross corporate profit margins resulting from the efforts made by many companies to contain their costs and increase productivity in order to compensate the slump in sales. In fact, the evolution of the ratio between the GOS and the gross value added (GVA)[3] of non-financial firms, an approximation of gross corporate profit margins at an aggregate level, shows counter-cyclical behaviour during the last phase of the recession.[4] However, since 2014 Q1 a change in trend has been observed in this ratio which would indicate that gross profit margins are adjusting progressively thanks to greater economic activity and higher turnover.

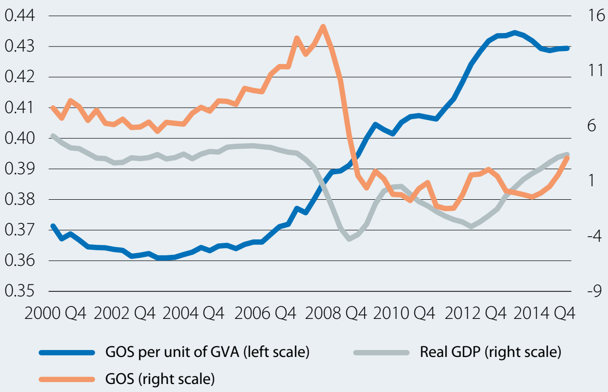
Certainly the main point of support for corporate earnings in the current recovery stage is the increase in sales. Companies have benefitted from dynamic private consumption which, in turn, has been encouraged by job creation and improved confidence. The GVA started to grow in 2014 Q2 and accelerated its rate of growth to 3.7% year-on-year in 2015 Q3; but unlike the situation with the GOS, the GVA is still 6% below its pre-crisis level.

Companies are also receiving support from two additional elements. Firstly, wage containment. Although payments to salaried workers posted growth of 4.1% year-on-year in 2015 Q3 this increase can be explained entirely by the rise in the number of employees (3.1% year-on-year) as wages per employee have remained almost the same (0.9% year-on-year). Secondly, financial costs have fallen thanks especially to lower interest rates paid by companies on their debt and also, albeit to a lesser extent, to the reduction in the level of debt itself. Specifically, between 2012 Q2 and the 2015 Q3 financial costs fell by EUR 25.44 billion. 87% of this reduction can be explained by the drop in the average cost of debt from 3.0% to 1.4% and the rest by a reduction in debt during this period (equivalent to 24 pps of GDP).

In summary, 2015 was a good year for the business sector and a review of the factors supporting its recovery suggest this positive trend will continue in 2016.

Corporate profit margin, GOS and economic growth

(Ratio) *Year-on-year change (%)*



Note: *GOS (gross operating surplus).*
Source: *CaixaBank Research, based on INE data.*

1. GOS equals gross value added (GVA) less the wages paid to employees and taxes on production and imports. It should be noted that the GOS cannot be interpreted directly as corporate earnings since it includes, among other factors, capital payments and amortisation.
2. All the data in this article are cumulative over four quarters.
3. The GVA is equivalent to the production of goods and services less intermediate consumption.
4. This ratio should be seen as an overall estimate of corporate profit margins but involves some problems of interpretation and measurement. See «La evolución reciente de los márgenes de las sociedades no financieras», Boletín Económico, December 2013, Bank of Spain.

FOCUS · Demand for housing is picking up

The recovery in the real estate market is getting stronger month by month. One sign of this is that, in 2015, house sales increased by 11.1% compared with 2014. Moreover, all the evidence suggests that the different factors supporting the sector's recovery will consolidate over the next few quarters.

Broadly speaking the factors boosting house sales can be divided into two groups: demographic factors, which affect the formation of new households, and factors of an economic nature such as house purchases as a form of investment, to change the usual residence or to buy a second home. Economic factors are currently the main support for this recovery in housing demand. The good performance of the economy, reflected in an increase of disposable income and wealth in households as a whole, in lower unemployment and greater consumer confidence, is providing the main boost for domestic demand. Improved financial conditions are also contributing to the recovery: the number of new mortgages granted grew by 33.4% in 2015 and interest rates to acquire housing fell to 1.98%. On the other hand, in a highly liquid environment, the return on investment in housing,[1] which was close to 4.6% in 2015 Q3, much higher than other investments such as sovereign bonds, is boosting investor appetite in the sector. Foreign demand is looking particularly strong: sales made to foreigners accounted for 19.4% of the total in 2015 Q3 (8.7% in 2008 Q3)[2] and inflows of foreign capital for real estate activities are increasingly significant. Specifically, in 2015 Q3 EUR 2.67 billion entered in net terms, a figure clearly above the EUR 1.45 billion posted in 2013.[3]

The formation of new households, however, is still sluggish. In the last two years the migratory balance has been negative, leading to a net reduction in the population. This, together with the impact of the economic recession, means that household creation rates are still at a very low level. For example, in the last two years 75,000 households a year were created on average, only 19% of the net formation of households achieved in 2008.

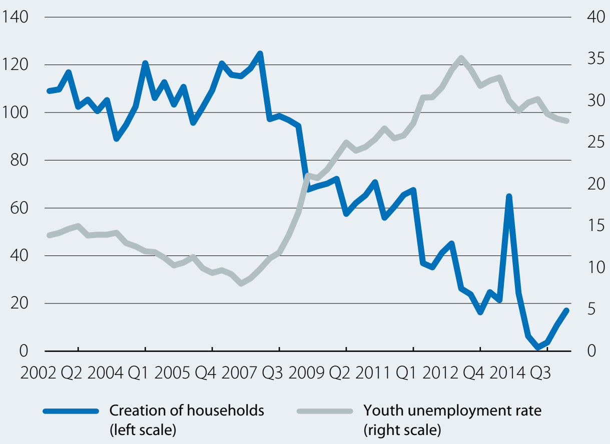
In the short term the creation of households will gain traction as economic growth is passed on to the population at the age of leaving the parental home via improvements in youth employment and disposable income. In addition to this will be the latent demand for housing composed of all those households that would normally have been formed since the start of the crisis but were not as a consequence of worsening economic conditions (see the first graph).

However, beyond the impact that economic factors may have on the creation of households, over the medium to long term all the evidence suggests that demographic factors will keep this rate at a lower level compared with the last expansionary cycle. For example, according to estimates by the Bank of Spain, in the medium term the annual net creation of households would be 238,000 in the most favourable scenario.[4]

In summary, the improvement in the economic cycle is stimulating demand for housing and reviving the real estate sector. Now that the upward cycle has started to consolidate, we need to monitor the situation closely to ensure the errors of the past are not repeated.

Net creation of households and youth unemployment

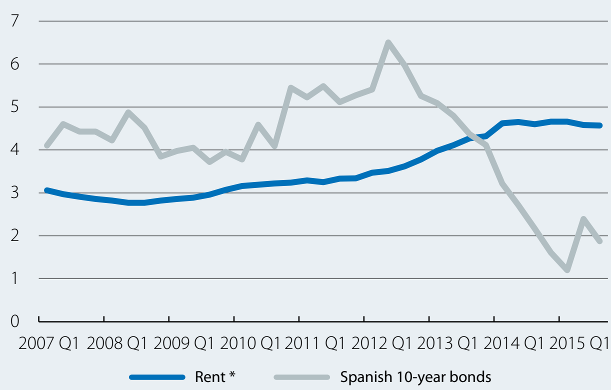
(Thousands of households) *(% of the labour force aged between 25 and 29)*



Source: *Caixabank Research, based on INE data.*

Return on rent and on 10-year bonds

(%)



Note: ** Calculated as the average annual rent per m² divided by the average price per m² in the previous 12 months.*
Source: *CaixaBank Research, based on data from the Bank of Spain.*

1. Return on rent is calculated as the average annual rent per m² divided by the average price per m² in the previous 12 months.
2. Cumulative figures over four quarters.
3. Cumulative figures over four quarters, based on «Datos de inversión extranjera en España», Datainvex, Ministry of Economy and Competitiveness.
4. See «Creación de hogares y necesidades de vivienda nueva principal a medio plazo», Boletín Económico, October 2015.

KEY INDICATORS

Year-on-year (%) change, unless otherwise specified

Activity indicators

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	01/16	02/16
Industry								
Electricity consumption	–0.1	1.5	1.2	–0.1	2.5	2.5	–3.2	...
Industrial production index	1.3	3.2	1.5	3.5	4.0	4.0	...	...
Indicator of confidence in industry *(value)*	–7.1	–0.3	–3.2	0.9	0.7	0.3	–1.3	–2.7
Manufacturing PMI *(value)*	53.2	53.6	54.4	54.8	52.8	52.5	55.4	...
Construction								
Building permits *(cumulative over 12 months)*	–7.7	20.0	12.1	17.0	19.7	31.1	...	...
House sales *(cumulative over 12 months)*	–5.6	10.7	8.9	10.2	12.2	11.5	...	...
Services								
Foreign tourists *(cumulative over 12 months)*	7.2	5.6	6.6	5.9	5.0	4.8	5.4	...
Services PMI *(value)*	55.2	57.3	56.7	58.3	58.1	55.9	54.6	...
Consumption								
Retail sales	1.0	3.0	2.5	2.9	3.3	3.4	...	...
Car registrations	18.4	21.3	31.4	13.6	23.1	17.1	12.2	...
Consumer confidence index *(value)*	–8.9	0.3	–0.6	1.6	–1.3	1.6	–0.9	–1.4

Source: *CaixaBank Research, based on data from the Ministry of Finance, Ministry of Public Works, INE, Markit and European Commission.*

Employment indicators

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	12/15	01/16
Registered as employed with Social Security [1]								
Employment by industry sector								
Manufacturing	0.1	2.2	1.5	2.2	2.4	2.7	2.8	3.0
Construction	–1.6	4.7	4.6	5.6	4.6	4.1	3.7	3.3
Services	2.2	3.5	3.5	3.7	3.5	3.4	3.3	3.2
Employment by professional status								
Employees	1.4	3.5	3.0	3.8	3.6	3.6	3.6	3.7
Self-employed and others	2.2	1.9	2.4	2.2	1.7	1.4	1.3	1.1
TOTAL	**1.6**	**3.2**	**2.9**	**3.5**	**3.3**	**3.2**	**3.2**	**3.2**
Employment [2]	**1.2**	**3.0**	**3.0**	**3.0**	**3.1**	**3.0**	**–**	**–**
Hiring contracts registered [3]								
Permanent	18.8	12.3	24.1	7.7	9.7	7.6	8.0	4.5
Temporary	13.1	11.2	12.2	11.2	9.7	11.8	15.8	1.9
TOTAL	**13.4**	**11.3**	**13.2**	**10.9**	**9.7**	**11.5**	**15.2**	**2.1**
Unemployment claimant count [3]								
Under 25	–8.2	–11.0	–9.8	–9.3	–13.4	–11.7	–11.8	–12.1
All aged 25 and over	–5.3	–7.2	–6.1	–7.4	–7.7	–7.5	–7.6	–7.9
TOTAL	**–5.6**	**–7.5**	**–6.5**	**–7.6**	**–8.2**	**–7.9**	**–8.0**	**–8.3**

Notes: *1. Mean monthly figures. 2. LFS estimate. 3. Public Employment Offices.*
Source: *CaixaBank Research, based on data from the Ministry of Employment and Social Security, INE and Public Employment Offices.*

Prices

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	01/16	02/16
General	**–0.1**	**–0.5**	**–1.0**	**–0.3**	**–0.4**	**–0.3**	**–0.3**	**–0.8**
Core	0.0	0.6	0.2	0.5	0.8	0.9	0.9	...
Unprocessed foods	–1.2	1.8	0.3	1.9	2.3	2.5	3.3	...
Energy products	–0.8	–9.0	–9.7	–6.4	–9.7	–10.2	–10.3	...

Source: *CaixaBank Research, based on data from the INE.*

Foreign sector

Cumulative balance over the last 12 months in billions of euros, unless otherwise specified

	2014	2015	2015 Q1	2015 Q2	2015 Q3	10/15	11/15	12/15
Trade of goods								
Exports *(year-on-year change)*	2.5	4.3	4.4	5.4	3.4	–0.8	8.6	4.1
Imports *(year-on-year change)*	5.7	3.7	2.5	5.8	3.3	–2.2	9.3	3.7
Current balance	**10.2**	**16.7**	**12.1**	**14.9**	**15.8**	**17.0**	**16.4**	**16.7**
Goods and services	26.0	27.4	27.4	27.5	27.2	27.6	27.6	27.4
Primary and secondary income	–15.7	–10.7	–15.3	–12.6	–11.4	–10.7	–11.2	–10.7
Net lending (+) / borrowing (–) capacity	**14.7**	**22.7**	**15.6**	**19.0**	**21.5**	**22.5**	**21.9**	**22.7**

Source: *CaixaBank Research. based on data from the Department of Customs and Special Taxes and Bank of Spain.*

Public sector

Percentage GDP, cumulative in the year, unless otherwise specified

	2013	2014	2015 Q1	2015 Q2	2015 Q3	10/15	11/15
Net lending (+) / borrowing (–) capacity	**–6.9**	**–5.9**	**–0.7**	**–3.0**	**–3.1**	**–**	**...**
Central government [1]	–4.9	–3.9	–1.0	–2.1	–2.4	–2.2	–2.6
Autonomous regions	–1.6	–1.7	–0.2	–0.9	–1.0	–1.2	–1.3
Local government	0.6	0.6	0.1	0.2	0.3	–	...
Social Security	–1.1	–1.0	0.3	–0.4	–0.3	–0.3	–0.3
Public debt *(% GDP)*	**93.7**	**99.3**	**99.7**	**99.3**	**99.3**	**–**	**...**

Note: *1. Includes measures related to bank restructuring but does not include other central government bodies.*
Source: *CaixaBank Research, based on data from the IGAE, Ministry of Taxation and Bank of Spain.*

Financing and deposits of non-financial sectors

Year-on-year change (%), unless otherwise specified

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	12/15	Balance 12/15 [1]
Financing of non-financial sectors [2]								
Private sector	–6.2	–4.1	–4.8	–4.1	–4.2	–3.2	–2.8	1,643.6
Non-financial firms	–7.0	–4.4	–5.4	–4.3	–4.7	–3.1	–2.4	920.1
Households [3]	–5.1	–3.7	–4.2	–3.7	–3.6	–3.3	–3.3	723.5
General government [4]	6.9	4.2	5.0	4.0	3.8	3.9	3.5	1,069.9
TOTAL	**–1.8**	**–1.1**	**–1.3**	**–1.1**	**–1.3**	**–0.5**	**–0.4**	**2,713.5**
Liabilities of financial institutions due to firms and households								
Total deposits	–0.9	–1.0	–1.3	–1.2	–1.1	–0.5	–0.1	1.159.2
On demand deposits	10.8	18.5	17.9	19.5	18.8	17.7	16.9	384.4
Savings deposits	5.8	12.9	10.5	12.3	13.7	15.2	14.6	254.2
Term deposits	–7.6	–15.3	–13.5	–15.5	–16.3	–15.8	–15.1	499.1
Deposits in foreign currency	1.1	5.6	8.9	10.5	5.1	–2.3	–0.8	21.4
Rest of liabilities [5]	–8.2	–13.0	–11.4	–11.5	–14.0	–15.1	–20.7	102,5
TOTAL	**–1.7**	**–2.2**	**–2.3**	**–2.2**	**–2.3**	**–1.9**	**–2.1**	**1,261.7**
NPL ratio *(%)* [6]	**12.5**	**10.1**	**12.1**	**11.0**	**10.7**	**10.1**	**10.1**	–
Coverage ratio *(%)* [6]	**58.1**	**59.2**	**58.5**	**60.0**	**60.6**	**59.2**	**59.2**	–

Notes: *1. Billion euros. 2. Resident in Spain. 3. Including NPISH. 4. Total liabilities (consolidated). Liabilities between different levels of government are deduced. 5. Aggregate balance according to supervision statements. Includes asset transfers, securitized financial liabilities, repos and subordinated deposits. 6. Data end of period.*
Source: *CaixaBank Research, based on data from the Bank of Spain.*

OIL: PAST, PRESENT AND FUTURE

The tumultuous life of the price of oil

The spectacular drop in oil prices over the last few years has revived an interest in studying the factors that determine this important variable for the global economy. The insight provided by past experiences helps us to understand the forces in play.

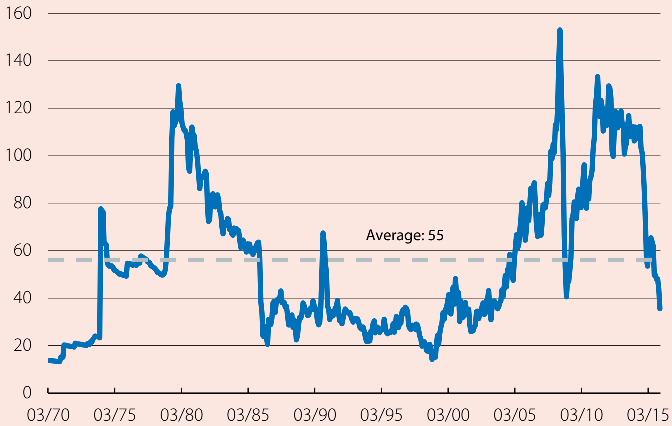
The conceptual framework for determining the price of oil is none other than the law of supply and demand, although there are also some additional elements particular to this market. On the supply side it is useful to highlight six elements. The first is the fact that crude oil is essentially a finite resource although new, very large reserves have continuously been discovered. Second, the cost of extracting oil varies greatly between regions (due to geological factors) and over time (due to technological innovations). Third, a lot of oil reserves are located in geopolitically conflictive countries. Fourth, some of the major producers have set up a cartel (OPEC) and one of them (Saudi Arabia) enjoys a dominant situation thanks to its huge reserves and low extraction costs. Fifth, price elasticity of supply is quite low in the short term as a lot of investment and time are required to increase production capacity and because variable costs are small compared with fixed costs; however, medium-term elasticity is notably larger. Sixth, the number of barrels extracted per day falls quickly after the initial start-up (a decline due to geological and engineering reasons).

There are four main distinctive features regarding demand. First, the fact that short-term price elasticity of demand is low because oil is mostly used in transport, an almost essential service for which, at present, there is no large-scale replacement source of energy; however, price elasticity is slightly higher over the medium to long term (as a result of changes in consumer habits and also technological innovations in energy efficiency and in replacement sources of energy, etc.). Second, income elasticity is low for the lowest and highest income brackets but high for intermediate income brackets (households whose income is below a certain threshold cannot afford a vehicle while fuel consumption is not very sensitive to variations in income among high-income households). Third, both crude oil, petrol and other refined products can be stored long-term on land so that demand for stocks due to precautionary or speculative reasons can be met (organised futures markets also facilitate financialisation). Fourth, oil consumption causes significant negative externalities (contamination and climate change), making it a target for public policies (taxation, etc.) and social activism.

The combined influence of these elements and their interaction with macroeconomic variables (such as the intensity and composition of international growth, exchange rates, etc.) have shaped demand, supply and consequently the price of crude oil over time. The first graph shows the trend since 1973 in the price of a barrel of Brent oil in real terms; i.e. expressed in dollars but always with the same purchasing power as in 2015 (in this case in line with the CPI in the US). There are three notable stylized facts.

Oil price in real terms *

$/barrel



Note: ** In 2015 dollars, normalised with the CPI of the US, seasonally adjusted.*
Source: *CaixaBank Research, based on data from Thomson Reuters Datastream.*

Firstly, there is hardly any noticeable long-term upward trend in the real price, which would have been expected given that oil is a finite resource. Although this is not shown in the first graph, it is worth noting that, since the end of the 19th century (when the use of oil became significant) and up to 1973 (the date of OPEC's embargo in response to the Yom Kippur war), the real price has remained quite stable within a relatively narrow band of 12 to 35 dollars at 2015 value. This performance is in line with the market's features during that long period (which some call the «golden age» of oil): a sensation of abundant, easy extraction (think of the oil fields in Texas and Arab countries), strict regulations aimed at controlling the price and a predominance of long-term contracts between the parties. The shock in 1973 marked an abrupt shift towards a new regime characterised by the perception of oil being a critical natural resource for the world economy to function, with high risks regarding its continued supply, facing growing extraction costs and, especially worrying, the more or less distant but unavoidable exhaustion of reserves (peak oil). However, in actual fact new sites have constantly been discovered, to the extent that, contrary to expectations, the number of reserves proved viable has grown over the last four decades. Firstly due to the discovery of conventional fields in new locations (Russia, Venezuela, Nigeria, etc.) but also thanks to achievements in extracting oil from non-conventional reserves (deepwater, oil sands, shale oil, etc.). Moreover, although it is much more complex to exploit non-conventional sources, improved technology and processes have managed to keep costs appreciably lower than expected. These factors explain the absence of an upward trend in the real price over the last four decades. A more recent addition to these factors is the issue of climate change which ultimately creates a growing perception (among producers and consumers) that it is unlikely to be viable to burn all known reserves of fossil fuels, which means a large proportion of them might remain underground (stranded oil).

If there is one thing that distinguishes the performance of the real price of crude oil since 1973 compared with its «golden age» it is the huge increase in instability. In fact the second notable stylized fact is the presence of two large movements in the medium term (which we could classify as super-cycles) and the third is the appearance of a large number of different short-term fluctuations.

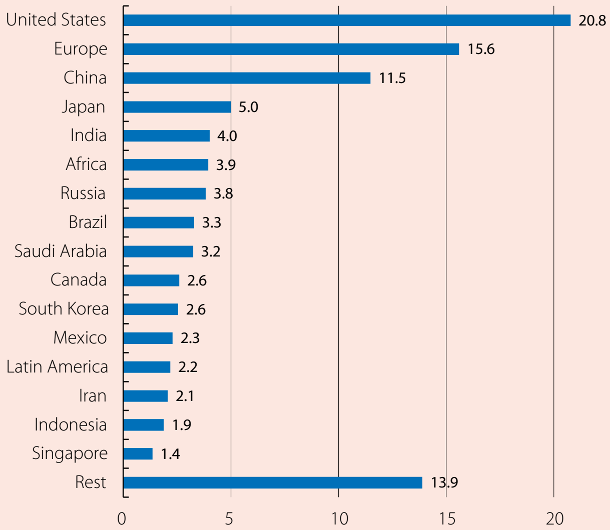
The emergence of these two super-cycles can be reasonably explained by the interaction of three factors: in the background, the prolonged spread of abnormally intense demand by transport; in addition, changes in OPEC's power in the market and, as a catalyst, the interaction between short and medium-term elasticities. The first super-cycle is famous because its upward phase started suddenly with the aforementioned embargo in 1973, an event ushering in a period during which OPEC determined and managed to regulate supply (helped by Iran's revolution in 1978). But the contribution made to this super-cycle by demand was also very important: in the second half of the 1960s and 1970s there was a huge boom in the number of automobiles in the US and Europe, fuelled by the development of the middle classes and by Babyboomers reaching working age. In fact this context of strong structural demand helped the cartel to maintain strong internal discipline. Moreover, given that short-term elasticities were very low, for some time the price of oil shot up above its long-term equilibrium level (with an extra boost from the Iran-Iraq war in 1980). But this situation also sowed the seed for its decline insofar as it created incentives to moderate fuel consumption, improve engine efficiency, find alternative sources and look for new sites. When this happened and the price started to fall (with the added factor of the 1981 Volcker Recession in the US), discipline within OPEC started to diminish, accentuating the fall in the price. For a time Saudi Arabia tried to sustain the price by sacrificing its production but, once it realised that these changes in supply and demand were here to stay, in 1986 it gave up this task and caused the price to plummet (returning to its pre-1973 level in real terms).

This gave way to a period full of short-term fluctuations but without any great medium-term variations until 2001, the date when we can see the start of the second super-cycle. Here there are notable parallels with the first super-cycle: most of the extra, unexpected demand for transport fuel was attributable to China (see the second and third graph), OPEC regained some discipline and low short-term elasticities played their part (with an added boost from the speculative financialisation of commodities as part of the financial bubble of 2007). But after a period of time (and the shock of the Great Recession), incentives reappeared for an increase in supply in the medium term, especially in the exploration and start-up of new sites thanks to the revolution in fracking and shale oil. This phenomenon was already quite evident towards 2011-2012 and the real price started to fall slightly. In 2014 the prospect of China's economic transformation and slowdown increased downward pressure and, from then on, the pattern from the early 1980s was repeated: OPEC once again lost cohesion and, to date, has not made any serious attempt to moderate supply. In fact a fierce rivalry can be seen between its members in order to defend their own market share (particularly now that Iran is extracting oil again). One important element has been Saudi Arabia's strategy as, to the surprise of many, it decided in 2014-2015 to increase its production, possibly given the perception that shale oil and stranded oil are not temporary phenomena but structural changes in the oil market.

Short-term fluctuations have shown a variety of profiles in terms of their intensity, duration and frequency but, in general, they have resulted from one of two types of cause. Firstly, geopolitical conflicts such as the Iran-Iraq War (1980-1988) mentioned earlier, the Kuwait invasion in 1991 and the Second Gulf War in 2003. This kind of event has caused sudden but relatively brief rises as no prolonged cuts have resulted in the chains of extraction and transport. In fact, the main way they have affected the oil price is by increasing demand for precautionary reasons. Secondly, unexpected variations in fuel consumption related to the

Oil consumption in 2013

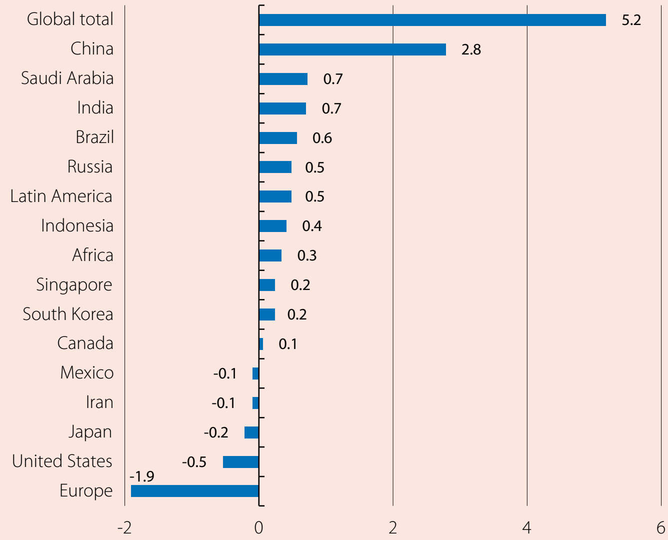
(% global total)



Source: *CaixaBank Research, based on data from the IEA.*

Growth in oil consumption between 2008 and 2013

(Millions of barrels a day)



Source: *CaixaBank Research, based on data from the IEA.*

macroeconomic cycle, such as the recession in western countries in 1991-1992, the Asian crisis in 1997, the Great Recession in 2009, and the crisis of the emerging countries in 2014-2015. This kind of fluctuation tends to be longer than the geopolitical type and follows a common pattern: the initial fall in the price discourages investment in exploration for new wells and after a few months the effective production capacity decreases due to the decline so that, once fuel demand recovers, there is a scarcity which leads to sharp increases in the price of crude oil.

In summary, over the last few years both short-term, medium-term and even long-term factors, on both the supply and on the demand side, have come together to create a perfect storm for the price of crude oil. After its rapid slump it is now at a level, in real terms, similar to the period of 1986-2001 and only a little above the price prevailing during its «golden age». This episode has undoubtedly been one of the most remarkable within an already highly agitated life. The next article in this Dossier presents some key aspects concerning what we might expect in the future.

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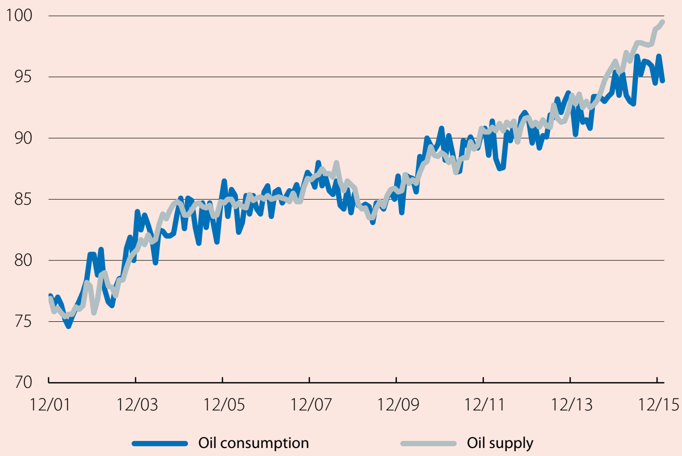
The outlook for the price of oil

No-one claims to have predicted, not even remotely, the spectacular 75% slump in oil prices between June 2014 and December 2015. Such an omission can be excused due to the totally exceptional nature of the convergence of different forces occurring over such a short period of time but this variable has almost always had the rebellious habit of frustrating the predictions of experts. Given such a precedent we need to proceed carefully with any forecasts and merely provide a few pointers. With the storm still raging, our assessment indicates, and quite confidently, a medium-term situation (around five years) of the price being clearly above its present level. The path until then is far from certain but we are more than likely to see the first few signs of this recovery before the end of 2016. With regard to the long term, there seems to be no reason to think that the average price in real terms would be very different from the one seen over the last four decades.

The scenario of a significant rise in the price of crude in the medium term is supported by both supply and demand factors, whose interaction should follow a similar pattern to the one given by past experience described in the previous article in this Dossier. On the side of demand, the economic development of the emerging countries, with China at their head, will be a key determining factor. Here both cyclical and structural dimensions come into play. Regarding the former, we believe that most emerging economies will regain their dynamism after several years of adversity, albeit not without a few stumbles. Problems have appeared due to a combination of certain internal imbalances (current account deficit, inflation, etc.), disturbances resulting from the ups and downs of flows of international capital (in turn caused by the monetary policy adopted by the Federal Reserve and other central banks of developed countries) and the transformation and slowdown of the Chinese economy (which is moderating its consumption of commodities). The first part of 2016 might represent the valley in this cycle and, in spite of the pessimism predominant at present, the recovery should not take too long to materialise. One essential requirement is the stabilisation of the Chinese economy in the sense of achieving its desired and healthy change in model without a hard landing. If, as we expect, this will be the case, then conditions will be right for structural forces to take off, in China itself and also in other important emerging countries, leading to a notable rise in the demand for crude oil.

Global oil consumption and supply

Millions of barrels a day



Source: *CaixaBank Research, based on data from the Energy Intelligence Group.*

In fact, beyond the inevitable cycles, it is evident that, since the Asian crisis ended in the second half of the 1990s, both industrial development and social progress (expansion of the middle classes) have consolidated in the emerging countries so that many are now close to or have already passed the thresholds where demand for transport starts to accelerate. Years ago oil certainly deserved its moniker of «black gold» as its price was truly prohibitive for some. But undeveloped countries now have an increasingly larger share of the world's GDP, both measured in purchasing power parity and also in current dollars. Such progress involves a very significant increase in fleets of industrial vehicles and especially many households reaching a level of income that allows them to buy an automobile. For example, in 2015 sales of private vehicles in China reached 15 million (close to the 17 million in the United States). Given that only 25% of Chinese households currently own a vehicle (compared with 95% in the US), there is still a long way to go in this country. And in the near future China will be followed by other countries such as India, Indonesia, Pakistan, Bangladesh, Brazil and Turkey, adding a further 2 billion inhabitants.

In developed economies the main reason for expecting a certain rise in the demand for crude oil in the medium term is different in nature: the current situation of cheap oil tends to encourage and consolidate consumption habits biased towards petrol, as well as discouraging investment (private and public) in energy efficiency and in developing alternative sources (for example in the area of electric cars). This factor may not be very important in terms of size, however, as the price of petrol has dropped much less than that of crude oil due to the fixed taxes levied on fuel. Where the currently low crude oil prices can be seen to have a clear influence in the medium term is on the side of supply. And the effect is downwards. 2015's figures show that there is already a sharp decline in upstream investment (exploration and production) by international oil companies. And we can also expect a drop in the financial and technical resources devoted to research and development programmes, the ultimate source of improved productivity for oil extraction. This situation will reduce extraction capacity in the coming years. In fact, there are reasons to think this phenomenon will be more intense than in the past. One reason is that the decline (for geological reasons, in the daily number of barrels extracted from a well unless additional investment is made to deepen the well or pump more strongly) is currently of a rate (or speed) that is higher than in the past. This is the case for conventional fields (because they have already lost a lot of pressure) but especially for shale oil deposits (many of which actually tend to lose half their daily production every year). A second reason also has a particularly serious effect on the shale oil segment: the drop in the price of crude has been so sharp and unexpected that many companies are now in serious financial difficulty. For them, cutting investment does not seem to be such a bad move if it ensures their survival. But many, drowning in debt, are going under, with the consequent effect on physical, human and technological capital in the sector as a whole. These problems can also be seen in some oil-producing countries suffering from serious macroeconomic imbalances (in public deficit and current account), with pressing social needs and growing risks of political instability. Among the most worrying cases are those of Russia, Venezuela, Nigeria and Angola. Subjected to a similar situation, their respective governments are tempted to cut back on investment in oil extraction capacity and even in maintaining facilities, which will limit supply within a short period of time. In fact, with the aggravating factor of the short-sightedness typical of these countries, they are exhausting their production potential very quickly, which is helping to push the price down even further. At the same time they are also trying to achieve some respite by pressurising Saudi Arabia and Iran to sacrifice some of their production. This leads us to the third significant determining factor in the medium term: the competition between producers.

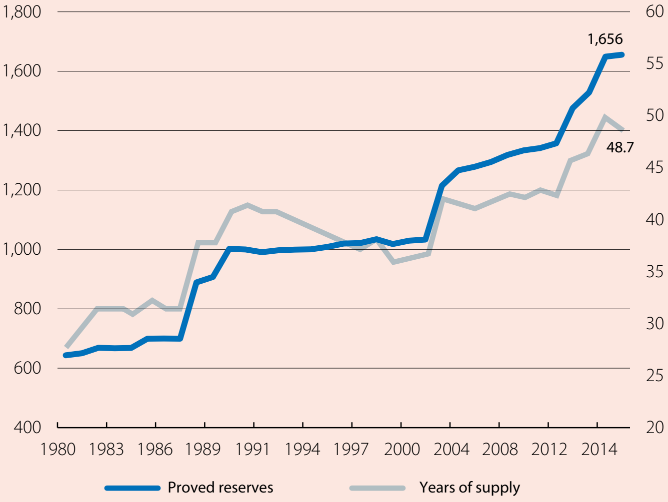
The drop in crude prices, which had started in 2011 and had been happening very gradually, speeded up in the summer of 2014 and the key factor behind this acceleration was the change in Saudi Arabia's attitude. Thanks to its huge reserves and incredibly low extraction costs, the country is a swing producer and can therefore absorb any temporary shocks occurring in the crude oil market better than anyone else. This is what it did in 2012-2013 when significant amounts of shale oil started to flood the market, and also during the first setback for the emerging economies (after the Federal Reserve announced the end of QE). In the summer of 2014 the Saudi Arabians changed their tactic of keeping the price around 100 dollars to one of defending their own share of global production. It is very likely that this decision was taken after reaching the conclusion that the shale revolution is not temporary or marginal and that China's slowdown and the adjustment phase in other emerging countries are going to last longer than just a few months. With this change, Saudi Arabia achieves two goals. Firstly, it slows down a competitor such as US shale whose extraction costs are high and now exceed the price of its oil. Secondly, it complicates Iran's plans to increase its production given the recently confirmed expectation that international sanctions would be lifted, which had been preventing the country from selling freely in the market. Iran has the potential (also due to its privileged volumes of reserves and production costs) to challenge Saudi Arabia to the leadership of OPEC. And, in addition to economic considerations, we should also remember that Sunni Saudi Arabia has a growing political and religious rivalry with Shiite Iran. Saudi Arabia looks on track to achieving its goals but this is still not certain, so its aggressive strategy could continue for some time yet (it has a good buffer of foreign reserves and low public debt). However, logic suggests that, as high-cost producers such as shale are increasingly pushed out of the market, and also as the recovery materialises in the emerging countries, Saudi Arabia will probably make a move to facilitate and take advantage of a context of higher prices than at present.

In summary, growth in demand from emerging countries, the current decline in investment in capacity and a moderation in the rivalry between producers are the three reasons why we expect the price of crude oil to rise in the medium term. Our forecast is 70-75 dollars by 2020, a considerable increase which would entail a return clearly above the historical average in real terms. This kind of over-reaction has already occurred in the past in similar situations to the present; in fact reaching prices above 100 dollars which, on this occasion, does not seem likely (huge surprises would be required in the aforementioned factors, in particular in the expansion of the number of vehicles in the emerging countries).

However, the path that might be followed by the price of oil up to this benchmark is difficult to predict. It is most likely that this will be a gradual rise as from the second half of the year; firstly due to the revival in the world economy, which is currently in a phase of deceleration that also affects developed countries. We will start to feel the effects of under-investment and the expulsion of shale in 2017 and these will become powerful as from 2018, acting as a further boost to the price. But the Saudi Arabia-Iran rivalry and, around it, the decisions made by OPEC and other major producers such as Russia, represent the huge doubt that looks like generating a great deal of volatility, and at any time, before oil prices finally get back on track.

*Trend in proved reserves and in years of supply **

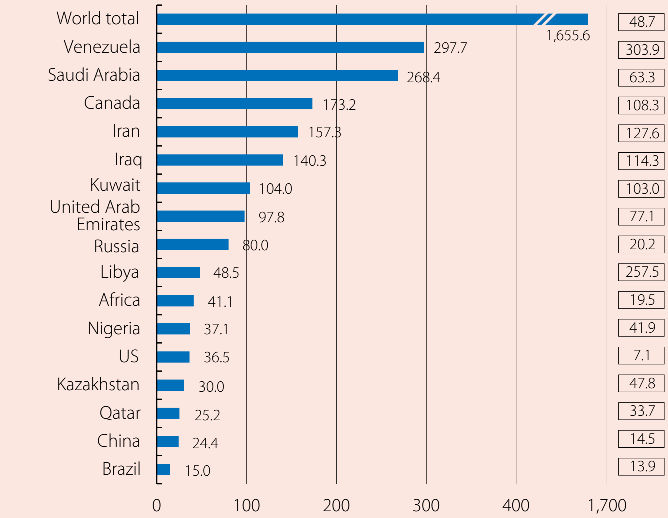
(Billions of barrels) *(Years of supply)*



Note: ** The number of years of supply is calculated based on the most recent production figures.*
Source: *CaixaBank Research, based on data from the IEA.*

*Proved reserves by country and by years of supply **

(Billions of barrels) *(Years of supply)*



Note: ** The number of years of supply is calculated based on the most recent production figures.*
Source: *CaixaBank Research, based on data from the IEA.*

In fact, the Saudi strategy (and that of other countries within its orbit, such as Kuwait and Qatar) could also be influenced by a long-term factor whose relevance is nevertheless increasing: namely the implications of the risk of climate change for the international energy industry. As has been discussed in the previous article in this Dossier, we cannot rule out the possibility of a large part of the proved reserves of fossil fuels (oil, natural gas and coal) remaining forever underground if, as expected, governments and private agents join the objective of putting an absolute limit to CO_2 emissions released into the atmosphere. The establishment of taxes and restrictions on carbon, as well as encouraging public and private research programmes into alternative sources and energy efficiency, could bring this about. Certainly a challenge of this size would require a long time but Saudi Arabia is aware that its crude reserves can last for over 60 years at its current production volume and that, at a global level, this figure is almost 50 years (see graphs two and three). According to the map of scenarios (economic, political, technological, etc.) considered, there is the possibility that, in order to maximise the present value of all its future sales, Saudi Arabia might decide not to sacrifice its market share and tolerate, or even encourage, a price that eliminates or weakens its rivals. In fact, from a very long-term view, competition also includes the rest of the energy sources such as coal (which releases a lot more CO_2 but is much cheaper), natural gas (which emits less), nuclear, hydroelectric and renewable energy sources. Technological innovations will play a crucial role in this competition. In our opinion today's situation points to the long-term trend in oil prices being similar to that observed over the last four decades: fluctuations, probably as strong or stronger than in the past, around a stable price in real terms equivalent to about 55 current dollars. Should this be the case, it would prolong its behaviour as a finite resource that refuses to run out, thereby endorsing the famous quote by Sheikh Zaki Yamani, Saudi Arabia's Minister for Oil during the tumultuous 1970s and 1980s: «the Stone Age did not end for a lack of stone».

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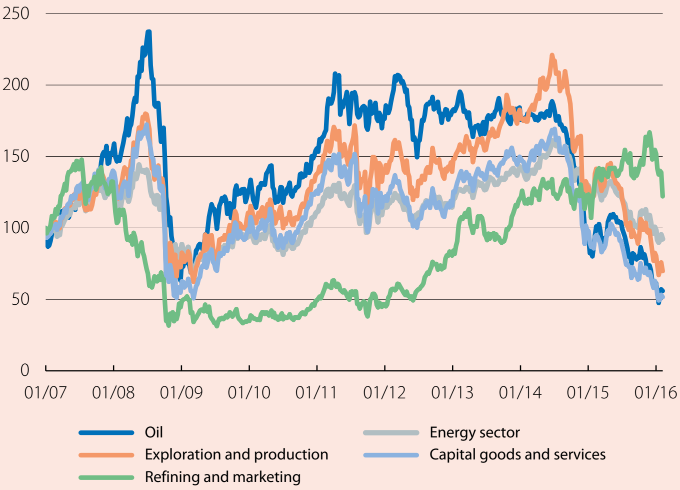
Financial stability and cheap oil: a blessing or a curse?

In just over a year and a half the price of a barrel of oil has gone from 115 dollars to around 30 and this rapid and sharp slump has acted as a significant source of tension in international financial markets. Investors and regulators fear the potential consequences for global financial stability of a scenario of persistently low oil prices. Certainly there are more reasons for caution than for complacence.

The bad performance by risky assets in the last few months can actually be put down largely to three factors: one common factor that affects the energy industry but also all the other sectors (related to global growth prospects), a second factor that has a specific impact on the energy industry (oil prices) and, lastly, a factor related to possible contagion from this sector towards the rest. The high correlation between the trend in crude oil prices and stock markets is mostly due to the aforementioned common factor: the fear of a sharp slowdown in world economic growth which, in view of the activity indicators as a whole, seems exaggerated. To a large extent this fear arises from evidence of a slowdown in China's economy, the recession in important emerging economies such as Brazil and Russia and, more recently, the weaker tone shown by the US economy. All this has helped to intensify the downward pressure on oil prices, whose origin can be found in supply factors (in particular related to the emergence of shale oil, to Iran rejoining the international market and the strategy adopted by Saudi Arabia).

US: oil and stock market indices for the energy sector

Index (100 = January 2007)



Source: *CaixaBank Research, based on Bloomberg data.*

A considerable proportion of this drop in share prices is due to the severe correction in assets with a higher exposure to the energy industry. In stock exchange terms, energy sectors have been at the epicentre of the poor performance by stock markets over the last few quarters. Since the price of crude oil started to plummet in June 2014, the MSCI global index for energy has fallen by 45% while, in the US, the sector's stock market decline has reached 40% and, in Europe, the correction has been 30%. In the US the oil exploration and production sector (known as its upstream business) has been particularly hard hit, reflected in a cumulative drop of more than 70%. The equipment and engineering services industry for gas and oil has also recorded strong stock market losses due to the close relationship between the cycle of investment in the industry and the price of crude oil and especially because of investment cuts in shale oil in the US. On a more positive note, the oil refining and marketing industry (downstream business) has performed relatively well compared with the rest of the sub-sectors during the oil sell-off. It therefore comes as no surprise that the more diversified oil companies are the ones that have best weathered the storm. Ultimately, in cases such as the US, euro area and Japan, the positive effects of cheaper energy costs, which benefit the majority of the companies whose shares are quoted on their respective stock markets, should probably outweigh the negative effects. However, the accuracy of this last point depends very much on the detail, as we will explain below.

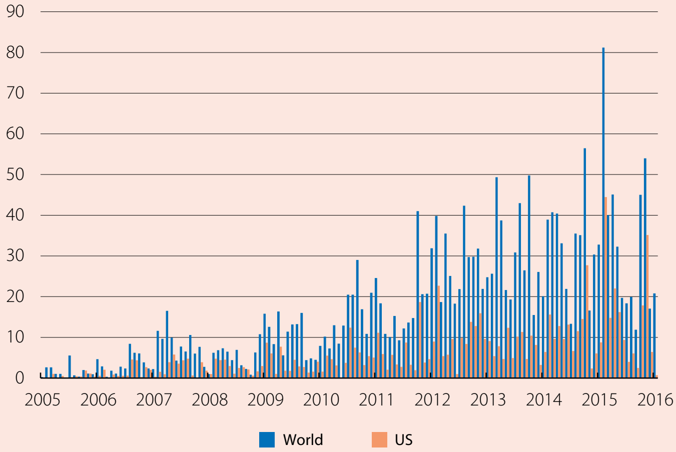
Equity is not the only source of turbulence. The corporate bond market was among the first to show signs of weakness just a few months after oil prices started to plummet. The risk premia for energy sector corporate bonds exemplify the difficult situation faced by the industry, especially in the US. In this country the yield on energy bonds in the high-yield segment rose sharply last year and reached 19%, in comparison with the 10% yield for the high-yield bond market as a whole, a spread that is at an all-time high. This trend can be explained by the worse outlook for earnings, the decline in variables related to corporate balance sheets and particularly by the size of debt held by energy companies, a phenomenon that had not been present, at least not on the scale seen today, in previous oil crises. According to data from the BIS, the outstanding debt for oil and gas companies grew at an annual rate of 15% between 2008 and 2014, more than for the rest of the sectors, reaching 1.4 trillion dollars in 2014 compared with 455 billion in 2008.[1] Although the most worrying scenario is related to low quality debt, problems have begun to spread towards the investment-grade segment, in principle considered to be very safe. In the first two months of the year, the ratings agency Standard & Poor's downgraded its rating of 13 energy companies in this segment, a considerable figure when compared with the 18 downgrades throughout the whole of 2015 or the 10 carried out in 2014. In the US alone, a wave of downgrades in credit ratings has led to five energy firms losing their investment grade status, a trend that could deepen over the coming months.

The leveraging of the energy sector, which has gradually come about thanks to extraordinarily accommodative global monetary conditions, represents a risk whose effects could be transferred from the energy sector to other markets and the whole of the real economy. One particularly sensitive aspect relates to the harmful effects of excess debt on capital investment (capex), not only in the energy sector but also in other interconnected business segments.[2] On the other hand, concentration in geographical and sector terms is an additional aspect that needs to be monitored. The fact that a large number of emerging countries depend on crude oil exports introduces a considerable element of fragility. Russia and Venezuela are cases in point. The slump in oil prices has particularly harmed tax revenue and thereby the sustainability of sovereign debt in these and other countries. Given the current situation of oil neither can we rule out episodes of contagion in the corporate bond or sovereign debt markets.

Lastly, banks' exposure to the energy sector could also represent an additional source of risk. According to data from Bloomberg, internationally this accounts for between 1% and 5% of all total loans for most banks, a size that nevertheless appears to be sufficiently modest so as not to cause any great upset. For instance, it is far from the figure of 44% reached by mortgage loans in the US in 2007. However, the global financial crisis that followed the implosion of subprime mortgages highlighted just how harmful the materialisation of such tail risks can be when not calculated accurately. Although it is true that hindsight is always 20/20, we can still learn valuable lessons from that period.

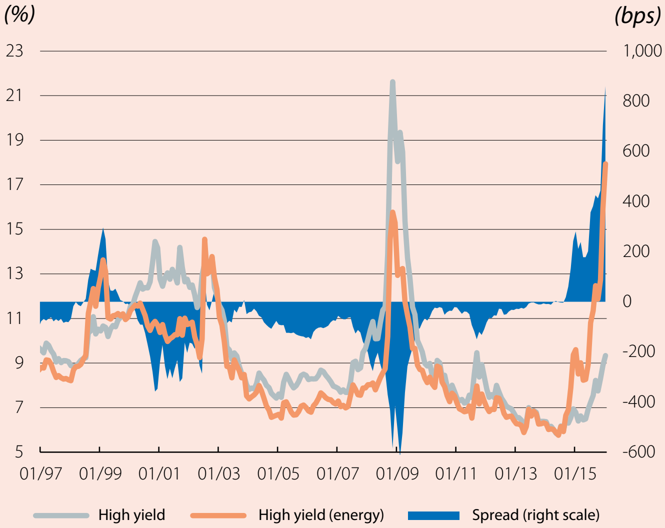
Energy sector: bond issuances

(In billions of dollars)



Source: *CaixaBank Research, based on data from Bloomberg.*

Energy sector: yields in the US high yield market



Source: *CaixaBank Research, based on data from Bloomberg and Bank of America Merrill Lynch.*

1. For an interesting presentation of the dynamics in oil prices and debt, see Domanski, D., Kearns, J. et al. (2015). «Oil and Debt», BIS Quarterly Review, March 2015.
2. According to the arguments presented in Banerjee, R., Kearns, J. and Lombardi, M. (2015), «(Why) Is investment growth weak?» BIS Quarterly Review, March 2015.

From all of this we can see that plunging oil prices on the one hand and leveraging on the other have created vulnerabilities that could mutually reinforce and feed each other. Nevertheless it seems unlikely that systemic contagion in bond and equity markets would end up having a considerable impact on the real economy. However, the premise that oil's collapse is a zero sum game between some countries and others is highly questionable. At least in the short term.

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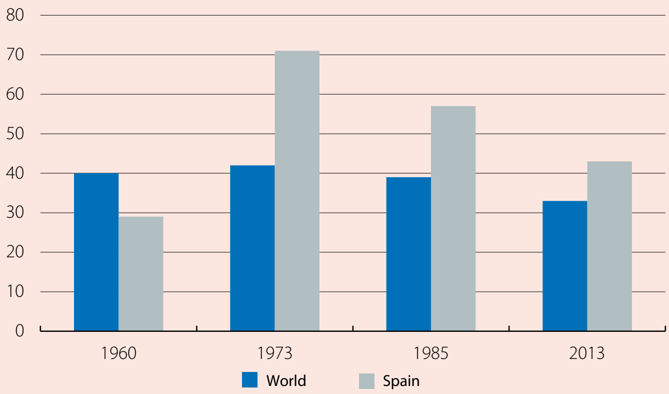
The Spanish economy and oil: a close relationship

The slump in oil prices is turning out to be a real boon in consolidating Spain's economic recovery. As the country has hardly any oil reserves of its own, it has to import almost all it consumes and this is a very large amount since the country's energy model depends largely on crude oil, representing 41% of all its primary energy.[1] Cheap oil is therefore clearly a positive factor for the Spanish economy as a whole. This article analyses the impact such a reduction in the country's oil bill is having on some of its key macroeconomic variables (current balance, GDP and inflation) and the expected trend based on our forecast of a moderate rise in oil prices over the coming quarters. As we will see, the Spanish economy is more sensitive to the trend in crude oil than most other developed countries, a situation which can largely be explained by energy policies that have not managed to replace oil with alternative sources over the years. Let us start, then, with a brief look at the past.

Spain and the world: use of oil

(% of total primary energy)



Note: *A primary energy source is one that is available in nature before being transformed into final energy.*
Source: *CaixaBank Research, based on Economy Industrial no. 394, Ministry of Industry, Energy and Tourism (2014).*

In 1960, within a context of incipient industrialisation and an economy that was relatively closed to other countries, oil accounted for just 29% of Spain's primary energy compared with 40% at a global level. However, between 1960 and 1973 there was a sharp rise in oil consumption as a result of unprecedented economic development, the gradual opening up of the economy internationally, low oil prices and government policy. The cumulative annual rate reached 15%, much higher than the 8% growth recorded in the demand for primary energy. Consequently, by 1973 oil actually represented 71% of the total energy consumed, far higher than the global average which had remained stable at around 40%. During this time the government believed the energy sector was strategic and energy policy focused almost exclusively on guaranteeing an external supply of crude oil.

This upward trend in the share of oil consumption was cut short after the huge shock to the international oil market in 1973. The first National Energy Plan in 1975 promoted the development of coal and nuclear energy as substitutes for oil, thereby gradually reducing the latter's relative share to 57% by 1985. In the following five years, between 1986 and 2001, oil prices remained low and stable but oil continued to lose share in Spain's energy mix due to the spread of the gas network, allowing greater diversification in energy sources in favour of natural gas. The boom in renewable energy plants (especially wind and solar power) came with the change in millennium thanks to growing environmental concern and, most notably, a compensation policy that guaranteed a return on investment under very favourable terms. The production of renewable energy therefore grew by 94% between 2004 and 2014 and currently contributes 15% to the total primary energy. In the meantime oil has continued to lose share, falling to today's figure of 41% although this is still noticeably higher than the world average of 33%. Gas (21%), coal (10%) and nuclear energy (13%) complete Spain's sources of primary energy.

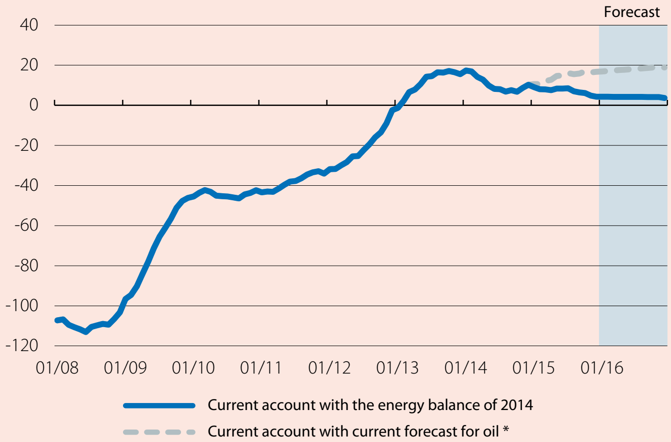
In spite of the path taken to diversify energy sources, the country is still very dependent on imported oil.[2] Consequently a fall in its price results in significant savings in the energy bill paid every year to other countries. To quantify these savings, we need to look at the trend in Spain's energy balance.[3]

1. A primary energy source is an energy form found in nature that has not been subjected to any conversion or transformation process (e.g. electricity is a secondary energy source but not primary).
2. According to the OECD energy balance, the self-sufficiency index (ratio between the production of primary energy sources and consumption) in Spain is 0.30 while the OECD average is 0.78. The gap in the self-sufficiency index for oil is even wider: 0.01 in Spain and 0.57 for the OECD.
3. We have analysed the total energy balance and not oil imports for two reasons. Firstly, oil and its derivatives account for 75% of energy imports and gas 20%. Given that the oil price and the gas price are very closely related (gas contracts are generally indexed to the price of crude), it is useful to analyse all energy sources together. Secondly, Spain carries out a significant amount of oil refinement so that, although it does not have any important reserves, it does export refined oil products whose value has also fallen (–28% in 2015).

The country's energy deficit totalled almost EUR 27.42 billion in 2015 (2.5% of GDP) compared with EUR 39.84 billion in 2014 (3.8% of GDP); i.e. the 35% reduction in the price of a barrel of oil in euros (from EUR 74.5 on average in 2014 to EUR 48.3 in 2015) has led to savings of more than one percentage point of GDP. This is a considerable figure which nevertheless has only helped to improve the current account surplus to 1.5% of GDP in 2015 from 1.0% in 2014, due to a simultaneous and notable deterioration in the non-energy balance which has been obscured to some extent. In other words, if the energy deficit had remained at its 2014 level, the current account surplus would have deteriorated to 0.4% of GDP in 2015. With a view to 2016, cheap oil will continue to support the improvement in the current account. Our forecasts assume a price of EUR 39.5 per barrel, 18% lower than the 2015 average, which would lead to additional savings equivalent to 0.3% of GDP. The improvement in the energy balance will therefore be modest, highlighting the fact that, in order for the Spanish economy to achieve a sustainable external balance, it must continue to make gains in competitiveness to improve its non-energy balance.

Current account balance

Cumulative over 12 months (billion euros)



Note: ** Oil price forecast of EUR 39.5 per barrel in 2016.*
Source: *CaixaBank Research, based on data from the Bank of Spain.*

The fall in oil prices on the world market since 2014 is largely due to supply factors (shale oil, Saudi Arabia's strategy, etc.) so we can expect a positive and considerable effect on economic activity.[4] Savings in the energy bill release resources of households and companies which can be used to consume and invest in other goods and services and thereby stimulate economic growth. An approximate calculation, based on the values historically observed in the marginal propensities to consume and invest, as well as on import content, suggests that the reduction in oil prices may have contributed between 0.4 and 0.8 pps to Spain's GDP growth in 2015, which was 3.2%.[5] More sophisticated econometric techniques such as SVAR models with sign restrictions, which isolate the effect of the fall in oil prices on GDP growth, point to an even greater effect in the long term. For example, a study by Peersman and Van Robays[6] estimates that, after 20 quarters, the impact of a 10% fall in oil prices on Spain's GDP is 0.5 pps,[7] a noticeably larger effect than the average for the euro area (0.3 pps) and only exceeded by Ireland, Finland and Portugal. Consequently, given the time lapse required for the fall in oil prices to affect the economy, the impact on GDP in 2016 could even be more than in 2015.

Lastly, a third macroeconomic variable whose trend has been greatly affected by oil and its volatility is inflation. In fact downward revisions of inflation throughout 2015 have been continuous and substantial as the slump in oil prices exceeded all expectations. For example, one year ago we forecast 0.3% general inflation for Spain in 2015, which ended up being –0.5%, and 1.6% for 2016 when our forecast is now 0.1%. Something similar has happened in the euro area as a whole and with important implications for monetary policy. In principle a downward deviation in inflation (no longer compared with analysts' forecasts but the central bank's target) should not be a cause for concern if this is due to oil prices as it would not suggest the economy is operating below its potential. However, a prolonged period of abnormally low inflation could end up influencing inflation expectations and thereby prolong and accentuate the deviation. Unfortunately these expectations have shifted downwards, a circumstance that largely explains the more accommodative tone shown by the ECB in the last few months.

4. A drop in oil prices associated with a shock in global demand, however, would have a negative effect on the Spanish economy's growth as the impact of the decline in aggregate demand in international markets would exceed the boost associated with lower crude prices.
5. The effect observed might be located in the upper region of this band as the nature of the shock is perceived as permanent and not temporary.
6. See Peersman and Van Robays (2009) «Oil and the Euro Area Economy», Economic Policy.
7. An analysis by demand component of GDP shows that investment is the component that has grown the most (1.60 pps) while the impact on consumption is lower (0.34 pps).

Beyond the macroeconomic impact in the short and medium term (with a more positive than negative effect on the balance), we should not forget that cheap oil also entails certain risks of a different nature, particularly those related to less incentive to improve energy efficiency and to replace crude oil with other, more environmentally friendly sources. Similarly another danger mentioned little in public debate is the complacency observed in adopting measures to improve external competitiveness in structural terms as this deficiency in Spain's economy is being obscured by the exogenous improvement in its energy balance. We should take advantage of the current tailwind offered by cheap oil to carry out reforms that will help to tackle any headwinds in the future.

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As of December 31, 2015

	MILLION €
Customer funds	296,599
Receivable from customers	206,437
Profit atributable to Group	814
Market capitalisation	18,702
Customers (million)	13.8
Staff	32,242
Branches in Spain	5,211
Self-service terminals	9,631

"la Caixa" BANKING FOUNDATION COMMUNITY PROJECTS: BUDGET 2016

	MILLION €
Social	308.8
Research and education	61.3
Spreading culture and knowledge	129.9
TOTAL BUDGET	**500**

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Design and production: www.cegeglobal.es
Legal Deposit: B. 21063-1988 ISSN: 1134-1920

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