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MONTHLY REPORT • ECONOMIC AND FINANCIAL MARKET OUTLOOK
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ECONOMIC & FINANCIAL ENVIRONMENT

FINANCIAL MARKETS

Emerging capital inflows: increasing against all odds

INTERNATIONAL ECONOMY

US: the baby boomer effect on the cycle and in the long run

EUROPEAN UNION

The sensitivity of inflation to the euro's appreciation

SPANISH ECONOMY

Spanish exports: growth and consolidation

DOSSIER: BUBBLES AND FINANCIAL STABILITY

Financial instability and the business cycle

Bubble economics: an analysis looking into effervescent prices

Economic policy against financial instability

US equity prices: a cause for concern?

MONTHLY REPORT - ECONOMIC AND FINANCIAL MARKET OUTLOOK

November 2017

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Bubbles and monetary policy

How should monetary policy respond to a potential financial bubble? The answer given by economists and central bankers has evolved in recent years but the debate is far from over.

Before the financial crisis that triggered the Great Recession, the standard approach (what might be called the Greenspan doctrine) advocated a very narrow mandate for monetary policy whose essential aim was to stabilise inflation around a particular target.

According to this approach, central banks should only respond to fluctuations in asset prices (such as equity or real estate) insofar as they affect economic activity and inflation. The logic applied by central banks did not distinguish between temporary fluctuations in asset prices and bubbles, understood as excessive, persistent deviations. It was believed that, following the bursting of a bubble, monetary policy would be able to react quickly and forcefully enough to offset any impact on economic activity and inflation.

But the crisis came and the Greenspan doctrine fell apart. We have learned that the costs incurred by some bubbles are difficult to manage after the event. As bubbles grow, resources are misallocated with the consequent negative effects, and when bubbles burst they result in financial instability.

This doctrine has evolved in the light of recent events and the main central banks now recognise the importance of financial stability. Nevertheless, those who believe that monetary policy should try to deflate or prick bubbles are still in the minority. The general opinion is that the interest rate hikes required to affect bubbles would be too large and cause huge damage to the real economy.

More or less explicitly, the responsibility of combating bubble formation have largely been given financial regulation and supervision, for example through macroprudential policy, which may impose capital surcharges on certain activities. Bank regulations have also been tightened, ensuring the sector is better prepared to absorb any losses brought about by a bubble bursting.

This strategy, however, is not without its risks. For instance, whether macroprudential policy is effective enough in practice still remains to be seen as it would require making potentially unpopular decisions (most people own property and they would not want a housing bubble to be pricked). Moreover, a part of the financial system (so-called «shadow banking») would be able to avoid the stricter regulations and supervision.

And finally, we have learned that, albeit indirectly and involuntarily, a central bank can end up encouraging bubbles if it focuses solely on meeting its inflation and economic activity targets. In fact, managing monetary policy can ultimately become a Sisyphean task (inflate the bubble, deflate the bubble, inflate the bubble...).

A more prudent approach makes monetary policy jointly responsible, together with regulation and supervision, for ensuring financial stability. Monetary policy decisions must therefore go beyond the price of goods and services that make up the CPI and also take asset prices into account.

Enric Fernández
Chief Economist
31 October 2017

CHRONOLOGY

OCTOBER 2017

- 22 Shinzō Abe is confirmed as Japan's Prime Minister.
- 24 The 19th National Congress of the Communist Party of China re-elects Xi Jinping as General Secretary for a second five-year mandate.
- 26 The ECB announces its plan to reduce the volume of asset purchases (QE). Specifically, from January to September 2018, the ECB will reduce monthly purchases from EUR 60 to 30 billion.

SEPTEMBER 2017

- 15 Standard & Poor's raises Portugal's sovereign rating by one notch from BB+ to BBB-, up to investment grade.
- 20 The Fed announces it will start to reduce its balance sheet in October. It will start by allowing USD 6 billion in Treasury securities and USD 4 billion in debt and mortgage-backed securities to mature every month, a figure that will gradually increase over the next few quarters.
- 21 Standard & Poor's lowers China's sovereign rating from AA- to A+.
- 25 Angela Merkel wins the general election in Germany.

AUGUST 2017

- 16 Work begins on renegotiating the North American Free Trade Agreement (NAFTA).

JUNE 2017

- 8 The Conservative Party wins the elections in the UK but loses its absolute majority in parliament.
- 14 The US Federal Reserve raises the benchmark interest rate by 25 bp to 1%-1.25%.
- 18 In France, President Macron's party, La République En Marche (LRM), secures an absolute majority in the National Assembly.

MAY 2017

- 7 Emmanuel Macron is elected President of France.
- 24 Moody's downgrades China's sovereign credit rating by one notch, from Aa3 to A1.
- 25 OPEC agrees to extend its oil production cuts until March 2018.

AGENDA

NOVEMBER 2017

- 1 Fed Open Market Committee.
- 3 Registration with Social Security and registered unemployment (October).
- 8 Industrial production index (September).
- 15 GDP of Japan (Q3).
- 17 Loans, deposits and NPL ratio (September).
- 21 International trade (September).
- 28 State budget execution (October).
- 29 Flash CPI (November).
Economic sentiment index of the euro area (November).
- 30 Balance of payments (September).
Quarterly national accounts (Q3).

DECEMBER 2017

- 4 Registration with Social Security and registered unemployment (November).
- 5 Industrial production index (October).
- 7 European Council.
- 12-13 Fed Open Market Committee.
- 14 Governing Council of the European Central Bank.
- 18 Loans, deposits and NPL ratio (Q3 and October).
- 22 International trade (October).
- 27 Balance of payments (Q3).
Net international investment position (Q3).
- 28 State budget execution (November).
- 29 Balance of payments (October).
Flash CPI (December).

The global economy in full swing

World growth remains dynamic. The publication of the economic activity data for Q3 2017 has largely confirmed that global growth is strong, as indeed it was in Q2. This economic momentum is supported by an improvement in both the advanced and emerging economies. In short, the year looks like ending with 3.6% annual growth. With the winds of macroeconomics blowing in their favour, the sails of the financial markets have shifted accordingly. October saw considerable gains in the advanced equity markets and also on many of the emerging stock exchanges. US Treasury bond yields are also tending to consolidate the slow rise that began last summer, albeit with a few ups and downs. Volatility in both equity and bond prices remained low.

The US remains on course. In this globally positive scenario, the world's leading economy is still progressing at a fast cruising speed. When hurricanes Harvey and Irma were expected to dampen growth in Q3, GDP surprised by increasing 0.7% quarter-on-quarter (2.3% year-on-year), just 0.1 pp less than the previous quarter. In this mature phase of the cycle, core inflation, which excludes the volatile components of energy and food, has remained anchored at 1.7% since last May. However, with wage growth at around 2.5% year-on-year, this inflationary slowdown should be temporary. The Fed is of a similar opinion, repeating that another hike in the fed funds rate was likely in December. The Fed's message that it would continue with its plan did not cause any appreciable movements in the markets. These were more interested in the election of Janet Yellen's successor as Chair of the Federal Reserve. Pending Senate confirmation, the candidate supported by the administration, Jerome Powell, is seen as experienced (already a member of the Fed's Board of Governors) and supports continuing the strategy of very gradual monetary normalisation. The US may be firmly on course but the world's other major economy, China, is even more so. On the political front, Xi Jinping's leadership was strengthened at the Communist Party Congress, while in economic terms the 6.8% growth achieved in Q3, a similar figure to the first half of the year, indicates that the country is still growing strongly.

Europe, full speed ahead. Q3 GDP data confirm high growth similar to the rate achieved in the first half of the year. Moreover, early Q4 indicators suggest this dynamism will continue. According to CaixaBank Research forecasts, growth will be 2.2% in 2017, the highest since 2007. Given

this situation, attention is still very much focused on inflation as the normalisation process is very slow. This can be seen by core inflation remaining at a moderate 1.1% in October. The ECB is therefore continuing to strike a balance between the demands of an expanding economy and a very gradual recovery in inflation, a trend that is not expected to alter over the coming months. This balance was reflected in the important meeting held in October which clarified the future path of monetary policy. The ECB announced a slower rate of asset purchases, maintaining the current rate of EUR 60 billion per month until December 2017 then reducing it to EUR 30 billion per month from January until at least September 2018. The ECB also repeated its commitment not to raise interest rates for a long period of time.

The Spanish and Portuguese economies continue to benefit from a favourable external environment.

Spanish GDP grew by 0.8% quarter-on-quarter (3.1% year-on-year) in Q3, a slightly slower rate than Q2 (0.9% quarter-on-quarter). In the absence of a breakdown by component, indicators suggest that this high growth was driven by domestic demand. Export and import flows picked up in Q3 supported by an increasingly favourable external environment. Looking ahead to the next few quarters, we expect the rate of economic growth to slow down as the economy loses the positive influence provided by some factors boosting growth in recent years (such as the expansionary fiscal stance and moderate oil price increases). The external context is also partly responsible for Portugal's good economic performance. GDP growth was a notable 3.0% year-on-year in Q2 2017 thanks to largely the powerful combination of strong exports and dynamic investment. All the evidence suggests that both these forces have continued to drive Portuguese growth in Q3.

FORECASTS

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

International economy

	2015	2016	2017	2018	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
GDP GROWTH										
Global	3.4	3.2	3.6	3.7	3.5	3.6	3.6	3.6	3.8	3.7
Developed countries	2.2	1.7	2.2	2.0	2.1	2.2	2.3	2.1	2.2	2.0
United States	2.9	1.5	2.1	2.2	2.0	2.2	2.3	2.1	2.4	2.3
Euro area	2.0	1.8	2.2	1.9	2.0	2.3	2.5	2.3	2.2	2.0
Germany	1.5	1.9	2.2	1.9	1.9	2.1	2.3	2.4	2.1	1.9
France	1.0	1.1	1.8	1.7	1.1	1.8	2.2	2.1	1.9	1.7
Italy	0.9	1.1	1.4	1.1	1.3	1.5	1.6	1.3	1.1	1.1
Portugal	1.8	1.5	2.7	2.2	2.8	3.0	2.7	2.4	2.2	2.2
Spain	3.4	3.3	3.1	2.4	3.0	3.1	3.1	3.0	2.7	2.4
Japan	1.1	1.0	1.4	1.0	1.4	1.6	1.4	1.1	1.1	0.7
United Kingdom	2.3	1.8	1.6	1.4	1.8	1.5	1.5	1.4	1.4	1.5
Emerging countries	4.3	4.3	4.6	4.8	4.5	4.6	4.6	4.6	4.9	4.8
China	6.9	6.7	6.8	6.3	6.9	6.9	6.8	6.7	6.6	6.3
India	7.5	7.9	6.3	7.3	6.1	5.7	6.5	7.0	7.0	7.2
Indonesia	4.9	5.0	5.1	5.5	5.0	5.0	5.2	5.3	5.5	5.5
Brazil	-3.8	-3.6	0.7	2.1	-0.4	0.3	1.0	2.0	2.2	2.0
Mexico	3.3	2.9	2.1	2.2	3.2	1.9	1.6	1.5	1.9	2.2
Chile	2.3	1.6	1.3	2.6	0.1	0.9	2.1	2.2	2.5	2.6
Russia	-2.8	-0.3	1.6	1.7	0.5	2.5	1.6	1.9	1.6	1.7
Turkey	6.0	2.9	4.4	3.4	5.2	5.1	4.5	3.0	3.2	3.3
Poland	3.9	2.7	4.2	3.2	4.2	4.4	4.7	3.6	3.3	3.0
South Africa	1.3	0.4	0.7	1.3	0.7	0.4	0.6	1.0	1.5	1.2
INFLATION										
Global	2.8	2.8	3.1	3.3	3.2	3.0	3.0	3.2	3.2	3.3
Developed countries	0.3	0.8	1.7	1.8	1.9	1.6	1.7	1.6	1.6	1.9
United States	0.1	1.3	2.1	2.3	2.5	1.9	2.0	1.9	1.8	2.5
Euro area	0.0	0.2	1.6	1.5	1.8	1.5	1.5	1.5	1.4	1.5
Germany	0.1	0.4	1.7	1.6	1.9	1.6	1.7	1.7	1.5	1.6
France	0.1	0.3	1.2	1.4	1.5	1.0	0.9	1.4	1.3	1.4
Italy	0.1	0.0	1.4	1.3	1.4	1.6	1.3	1.5	1.2	1.3
Portugal	0.5	0.6	1.5	1.6	1.4	1.7	1.3	1.7	1.4	1.7
Spain	-0.5	-0.2	1.9	1.4	2.7	2.0	1.7	1.3	0.8	1.4
Japan	0.8	-0.1	0.4	0.9	0.3	0.4	0.6	0.4	1.0	0.8
United Kingdom	0.0	0.7	2.6	2.4	2.1	2.7	2.8	2.8	2.5	2.5
Emerging countries	4.7	4.3	4.1	4.3	4.1	3.9	4.0	4.3	4.3	4.3
China	1.4	2.0	1.7	2.1	1.4	1.4	1.6	2.3	2.4	2.4
India	4.9	4.9	3.2	4.3	3.6	2.2	3.0	3.9	4.0	4.2
Indonesia	6.4	3.5	3.9	4.2	3.6	4.3	3.8	3.8	3.6	4.1
Brazil	9.0	8.8	3.5	4.3	4.9	3.6	2.6	3.1	4.3	4.2
Mexico	2.7	2.8	5.8	3.9	5.0	6.1	6.5	6.0	4.5	3.8
Chile	4.3	3.8	2.2	2.9	2.8	2.3	1.7	2.2	2.6	3.0
Russia	15.5	7.1	4.0	4.1	4.6	4.2	3.4	3.8	4.1	4.1
Turkey	7.7	7.8	10.4	7.9	10.2	11.5	10.6	9.5	8.4	8.2
Poland	-0.7	-0.2	1.6	2.2	1.7	1.5	1.5	1.7	2.0	2.3
South Africa	4.6	6.3	5.4	5.1	6.3	5.3	4.8	5.0	4.4	4.8

Forecasts

Spanish economy

	2015	2016	2017	2018	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
Macroeconomic aggregates										
Household consumption	3.0	2.9	2.5	2.0	2.3	2.6	2.5	2.7	2.5	2.1
General government consumption	2.1	0.8	1.0	1.0	0.6	1.1	0.8	1.6	1.1	0.9
Gross fixed capital formation	6.5	3.3	4.5	3.0	4.7	3.5	4.9	4.8	2.9	3.3
Capital goods	11.6	4.9	5.1	2.8	6.2	3.7	4.9	5.7	2.4	3.3
Construction	3.8	2.4	4.3	3.2	3.9	3.6	5.2	4.5	3.3	3.3
Domestic demand (contr. Δ GDP)	3.9	2.5	2.5	2.0	2.4	2.3	2.6	2.7	2.2	2.0
Exports of goods and services	4.2	4.8	5.8	4.2	6.7	4.4	6.2	5.8	3.4	4.6
Imports of goods and services	5.9	2.7	4.5	3.2	5.1	2.3	5.1	5.4	2.0	3.8
Gross domestic product	3.4	3.3	3.1	2.4	3.0	3.1	3.1	3.0	2.7	2.4
Other variables										
Employment	3.2	3.0	2.7	2.1	2.6	2.9	2.4	3.1	2.5	2.3
Unemployment rate (% labour force)	22.1	19.6	17.2	15.8	18.8	17.2	16.4	16.5	17.0	15.8
Consumer price index	-0.5	-0.2	1.9	1.4	2.7	2.0	1.7	1.3	0.8	1.4
Unit labour costs	1.4	-0.6	-0.1	1.0	-0.1	-0.4	-0.4	0.4	0.5	1.2
Current account balance (cum., % GDP) ¹	1.1	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8
Net lending or borrowing rest of the world (cum., % GDP) ¹	1.8	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0
Fiscal balance (cum., % GDP) ²	-5.2	-4.3	-3.1	-2.5						

Financial markets

INTEREST RATES										
Dollar										
Fed Funds	0.26	0.51	1.11	1.75	0.79	1.05	1.25	1.33	1.50	1.58
3-month Libor	0.32	0.74	1.27	1.95	1.07	1.20	1.32	1.49	1.72	1.20
12-month Libor	0.79	1.37	1.80	2.40	1.75	1.75	1.73	1.97	2.21	1.75
2-year government bonds	0.67	0.84	1.37	2.35	1.23	1.28	1.36	1.62	1.90	1.28
10-year government bonds	2.13	1.84	2.35	3.06	2.44	2.26	2.24	2.46	2.71	2.26
Euro										
ECB Refi	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3-month Euribor	-0.02	-0.26	-0.33	-0.27	-0.33	-0.33	-0.33	-0.33	-0.33	-0.32
12-month Euribor	0.17	-0.03	-0.14	-0.05	-0.10	-0.13	-0.16	-0.18	-0.16	-0.12
2-year government bonds (Germany)	-0.24	-0.58	-0.73	-0.30	-0.78	-0.74	-0.72	-0.67	-0.51	-0.40
10-year government bonds (Germany)	0.53	0.10	0.39	0.85	0.34	0.31	0.42	0.51	0.65	0.71
EXCHANGE RATES										
\$/€	1.11	1.11	1.13	1.18	1.07	1.10	1.17	1.19	1.20	1.19
¥/€	134.33	120.30	126.99	133.13	121.05	122.21	130.38	134.33	134.84	133.69
£/€	0.73	0.82	0.88	0.87	0.86	0.86	0.90	0.89	0.88	0.87
OIL										
Brent (\$/barrel)	53.64	45.04	53.42	59.21	54.68	50.92	52.18	55.88	56.83	58.50
Brent (€/barrel)	48.33	40.73	47.42	49.93	51.35	46.34	44.84	47.14	47.46	49.16

Note: 1. Four quarter cumulative. 2. Cumulative over four quarters. Does not include aid to financial institutions.

Forecasts

FINANCIAL OUTLOOK · Low volatility reigns supreme in the financial markets

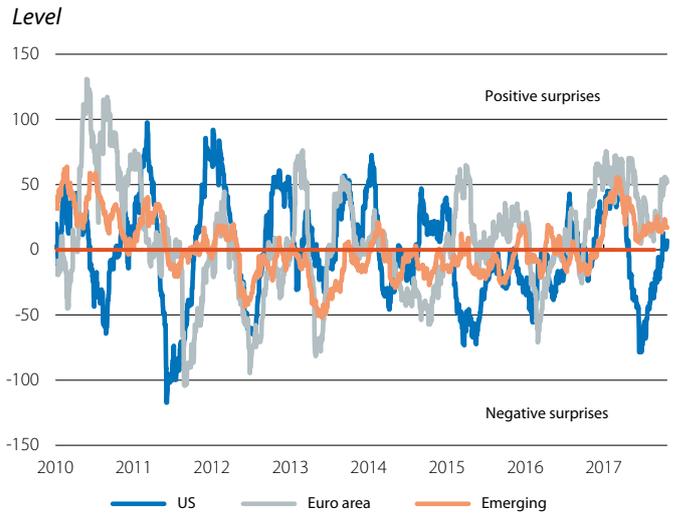
Financial markets grow confident. Global financial markets remained positive in October within a positive world macroeconomic scenario characterised by good growth prospects and a very gradual recovery in inflation. The US stock market continued to post record gains while both the dollar and Treasury bond interest rates made up some of the ground lost over the past few months. This growth is occurring while the Fed has kept its interest rate hike scenario unchanged (one more in 2017 and three in 2018) and the Trump administration has presented its tax reforms to the US Congress. Emerging markets financial conditions also appear to be withstanding the Fed's normalisation with continued gains in emerging stock markets, supported by confidence in their macroeconomic fundamentals. Finally, European stock markets also saw gains and interest rates remained stable with the ECB prolonging its asset purchase programme (APP) into 2018, as the market expected.

The IMF sees a window of opportunity to reinforce financial stability. In its October Global Financial Stability Report, the IMF examines the increasing risk appetite fuelled by a combination of benign global macroeconomic conditions and unusually accommodative financial conditions. Although it believes this greater risk appetite is a desirable consequence at a point in the cycle where some resources are still underutilised, the IMF also notes that this could increase financial instability should such an environment continue for too long. The Fund warns of the following sources of risk in particular: the rebalancing of investment portfolios in response to diverging monetary policies by the main central banks, high financial asset valuations and pressurised risk premia, high indebtedness overall and the transition of China's economy. The IMF suggests that advantage should be taken of this benign environment to strengthen the international financial system, completing the agenda of regulatory and macroprudential policy reforms.

Stock market gains in the developed economies. Supported by the publication of good economic activity indicators, a positive start to the corporate earnings campaign for Q3 2017 and accommodative financial conditions, stock markets ended the month with widespread gains (S&P 500 +2.2%, Eurostoxx50 +2.2%, DAX +3.1% and CAC +3.3%). This was particularly the case in the Japanese stock market. Equity soared after Shinzo Abe's victory in the early elections, reaching levels not seen since the mid-90s (Nikkei +8.1%). The Spanish stock market saw more moderate gains, however, with the Ibex 35 up by 1.4%.

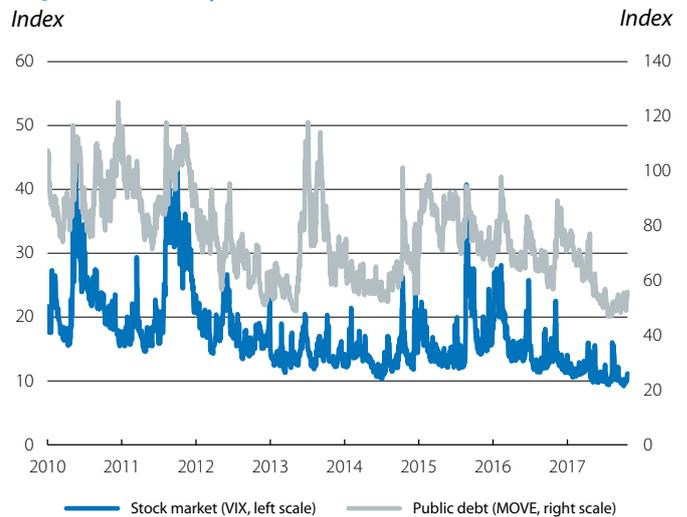
The Fed remains on course for another interest rate hike. The meeting of the Federal Open Market Committee (FOMC)

Index of economic surprises



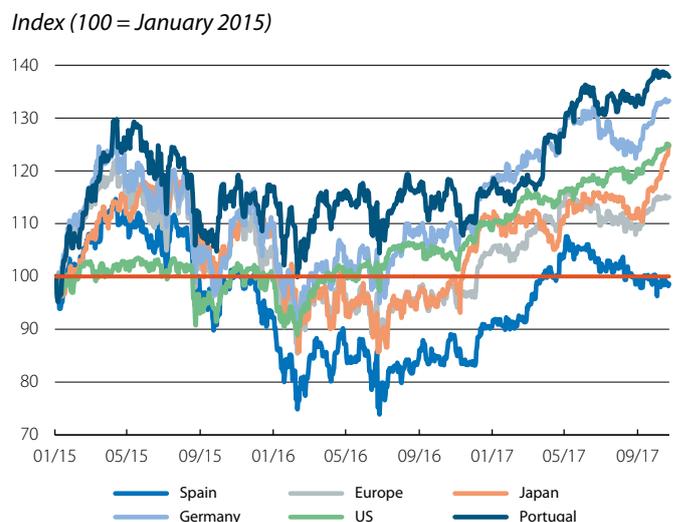
Source: CaixaBank Research, based on data from Citigroup and Bloomberg.

Implied volatility in financial markets



Source: CaixaBank Research, based on data from Bloomberg.

Main advanced stock markets



Source: CaixaBank Research, based on data from Bloomberg.

provided few surprises, leaving interest rates unchanged (fed funds target rate range at 1.00-1.25%) sending emergences of continuity to the existing programme. The Fed noted the positive growth in economic activity and the labour market. However, it repeated that inflation is still below the 2% target and underlined the importance of monitoring developments closely. As a whole, FOMC members repeated their view that, with gradual interest rate hikes, economic activity and the labour market will be dynamic enough to achieve the inflation target in the medium term. Investors believe the likelihood of another fed funds rate hike at the next meeting in December is higher than 90%. The financial markets did not react greatly to these messages of continuation and attention was focused on Jerome Powell being chosen as Janet Yellen's successor as Fed Chairman. Powell is currently on the Fed's Board of Governors and supports the very gradual normalisation of financial conditions. After being proposed by Trump, his appointment is expected bound to be approved by the Senate.

The ECB reduces its stimulus for 2018. At its October meeting, the Governing Council (GC) announced its asset purchase programme (APP) will continue at the current monthly pace of EUR 60 billion until the end of December 2017. Then from January to September 2018 the monthly pace will fall to EUR 30 billion. This decision by the ECB seeks to balance the more solid growth in economic activity and the fact that inflation's recovery is, and will continue to be, very gradual. This lower rate of purchases reflects the improved macroeconomic scenario while the programme's extension up to (at least) September 2018 reinforces the ECB's intention to keep financial conditions accommodative. Moreover, the GC repeated its commitment not to raise interest rates for an extended period of time. It also stated that principal payments from maturing securities purchased under the APP will be reinvested. The ECB therefore took its first step towards normalising monetary policy but without destabilising the markets. In fact, throughout the month sovereign interest rates remained relatively stable, even decreasing the week after the ECB's meeting, with risk premia falling. This was particularly noticeable in Italy, after S&P upgraded its sovereign rating from BBB- to BBB.

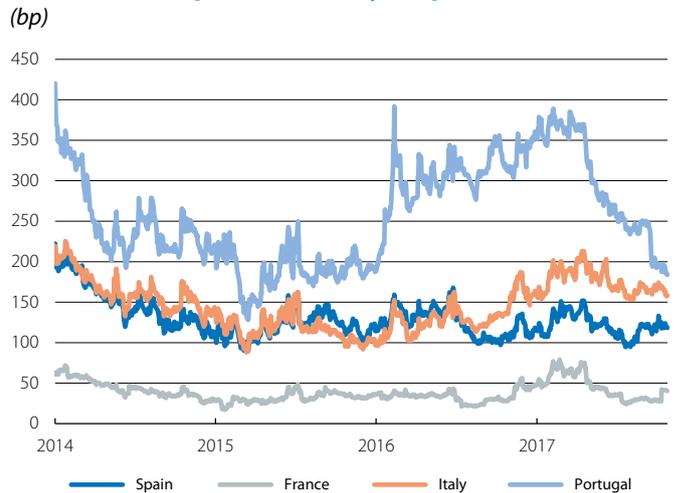
The dollar recovers some of the ground lost. In October the dollar continued the previous month's trend and appreciated against the main currencies. This was largely due to the Fed's commitment to its interest rate plan (four hikes by the end of 2018 according to its own projections), the ECB extending its APP and greater investor optimism due to the Trump administration's tax reforms. Compared with the main advanced economies, the dollar appreciated by 1.5% against the euro, by 0.8% against the pound and by 1.0% against the yen. Among the main emerging currencies, the biggest depreciations against the dollar were posted by the Turkish lira (-6.0%), the Mexican peso (-4.7%), the South African rand (-4.0%) and the Brazilian real (-3.4%).

Yield on 10-year public debt



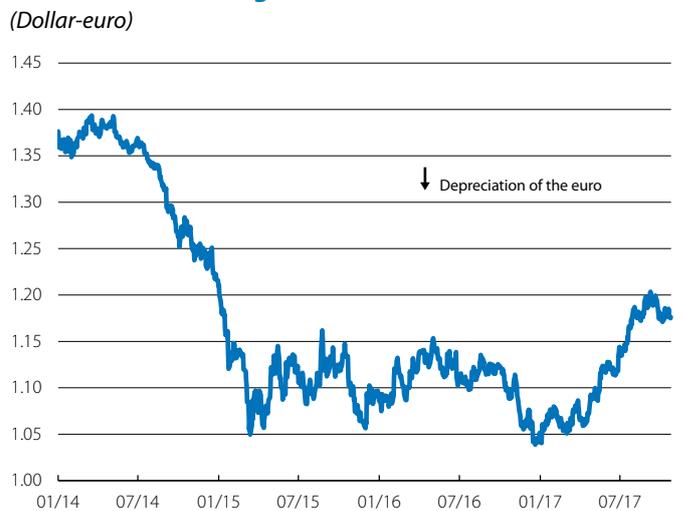
Source: CaixaBank Research, based on data from Bloomberg.

Euro area: risk premia on 10-year public debt



Source: CaixaBank Research, based on data from Bloomberg.

Dollar-euro exchange rate



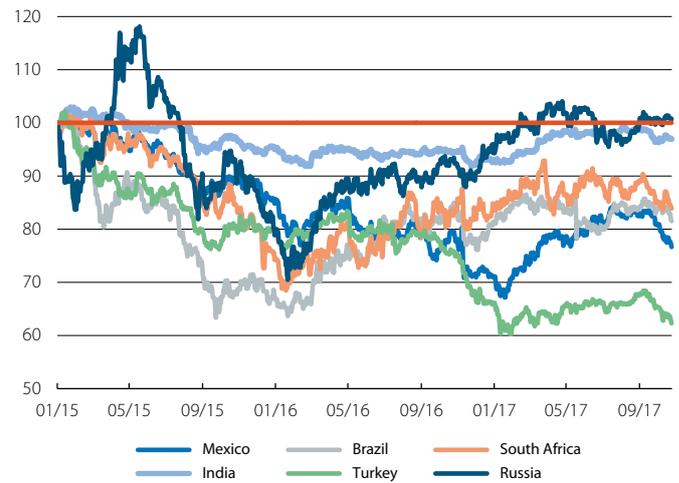
Source: CaixaBank Research, based on data from Bloomberg.

Emerging stock markets are positive, on the whole. The MSCI emerging stock market index reversed its correction at the end of September and increased by 3.5% in October. By region, Asian equity performed particularly well (MSCI Emerging Markets Asia Index +5.3%) with strong growth in the Indian stock market (Sensex +6.2%) and more moderate gains in China (+1.3%). In Latin America, however, the poor performance by stock markets in Mexico (Inmex -3.0%) and Colombia (Colcap -4.2%) affected the MSCI Index for the region. This ended the month down by 3.7% in spite of the stability of Brazil's equity (Bovespa +0.0%) and the gains made by Argentina (Merval +7.1%).

Oil rises above USD 60 per barrel. For the first time since July 2015, the price of a Brent barrel of oil went above USD 60. This increase was supported by lower crude oil stocks in the US, which have fallen again after a temporary upswing in September (due to the impact of the hurricanes). It was also boosted by the statements made at the end of the month by OPEC's Secretary General, announcing that Saudi Arabia is in favour of extending the agreement to cut oil production. This agreement, key to the oil price recovering from its slump in mid-2015, was meant to end in March 2018. Now, however, OPEC is likely to discuss its possible prolongation at its ordinary meeting set for the end of November.

Emerging exchange rates against the dollar

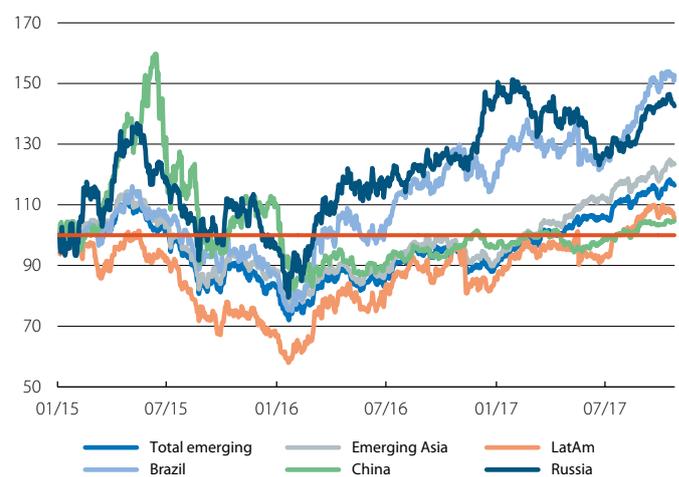
Index (100 = January 2015)



Source: CaixaBank Research, based on data from Bloomberg.

Emerging stock markets by region

Index (100 = January 2015)



Source: CaixaBank Research, based on data from Bloomberg.

Brent oil price

(USD per barrel)



Source: CaixaBank Research, based on data from Bloomberg.

FOCUS · Emerging capital inflows: increasing against all odds

Capital flows towards the emerging countries recovered strongly in 2016 after slumping, in 2015, to their lowest level since the mid-2000s. This trend has continued in 2017 and capital flows are expected to remain strong in 2018.

To some extent, this increase in capital flows towards the emerging countries is due to a greater appetite on the part of international investors for emerging assets. Moreover, the investment made by investors resident in emerging countries beyond their respective borders is also decreasing. Since 2017, both factors have resulted in positive net capital flows towards the emerging economies (see the first chart).

Both pull and push factors are supporting this recovery in capital flows, which began in 2016. The characteristics of the emerging countries themselves are acting as pull factors and affecting investor decisions. Dynamic economic activity in the emerging bloc is one attraction, especially when compared with the economic growth recorded by the advanced economies. Since the end of 2015, rising crude oil prices have also created a favourable environment for capital flows. In fact, the oil price is a fundamental variable for many emerging countries. Its recovery has therefore improved their economic outlook which, in turn, has helped to boost capital inflows.

Push factors, worldwide forces that affect emerging markets from outside their borders, are also boosting emerging capital inflows. A greater appetite for risk, together with highly favourable global financial conditions, are other factors pushing investment towards the emerging economies.

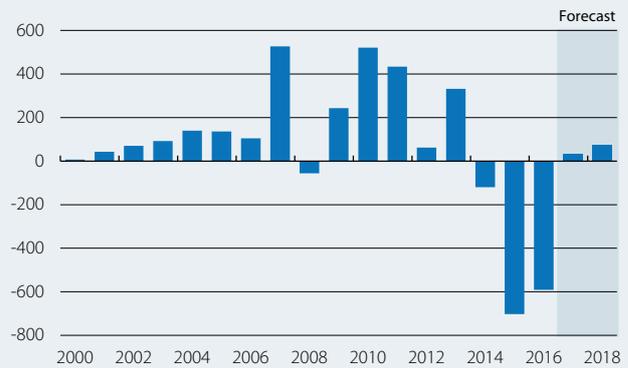
However, these push factors are likely to diminish in the future, with global circumstances becoming less favourable for capital flows. In particular, the monetary normalisation being carried out by the main developed central banks (especially the Fed) should result in tighter global financial conditions. Even so, this process is expected to be very gradual and any abrupt change in conditions is unlikely.

Apart from this less favourable financial environment, geopolitical tensions are another source of risk that could also hinder growth in capital flows towards the emerging economies. The impact on emerging financial markets of the recent tension caused by the North Korean crisis, for instance, reflects just how sensitive financial conditions can be to geopolitical risks.

Nevertheless, although there are many sources of uncertainty, capital flows towards the emerging economies are likely to continue increasing, supported by the favourable growth gap compared with the developed economies (see the second chart) and by interest rates remaining low in spite of incipient monetary normalisation.

Net capital flows in the emerging countries *

(USD billion)

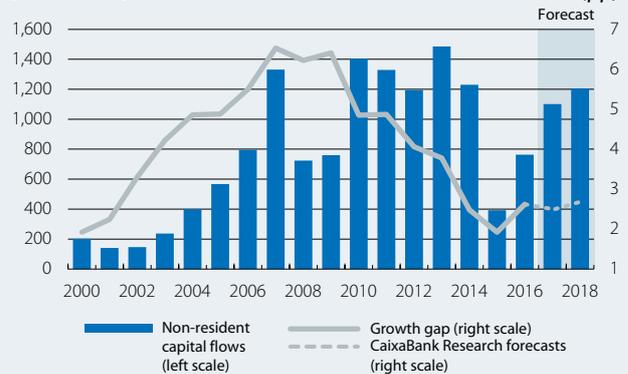


Note: * Total net flows by residents and non-residents.

Source: CaixaBank Research, based on data from the IIF. IIF forecasts.

Growth gap and capital flows towards emerging countries *

(USD billion)



Note: * Growth gap between emerging and advanced economies. Net capital inflows by non-residents.

Source: CaixaBank Research, based on data from the IIF. CaixaBank Research and IIF forecasts.

KEY INDICATORS

Interest rates (%)

	31-Oct	29-Set	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
Euro area					
ECB Refi	0.00	0.00	0	0.0	0.0
3-month Euribor	-0.33	-0.33	0	-1.2	-1.8
1-year Euribor	-0.19	-0.17	-2	-10.8	-12.1
1-year government bonds (Germany)	-0.75	-0.72	-3	5.1	-6.5
2-year government bonds (Germany)	-0.75	-0.69	-6	1.6	-13.2
10-year government bonds (Germany)	0.36	0.46	-10	15.2	19.7
10-year government bonds (Spain)	1.46	1.60	-14	7.6	26.1
10-year spread (bps) ¹	110	114	-4	-7.9	6.2
US					
Fed funds	1.25	1.25	0	50.0	75.0
3-month Libor	1.38	1.33	5	38.2	49.6
12-month Libor	1.85	1.78	7	16.4	27.5
1-year government bonds	1.42	1.29	13	60.9	77.8
2-year government bonds	1.60	1.48	12	41.2	75.9
10-year government bonds	2.38	2.33	5	-6.4	55.5

Spreads corporate bonds (bps)

	31-Oct	29-Set	Monthly change (bp)	Year-to-date (bp)	Year-on-year change (bp)
Itraxx Corporate	50	57	-7	-22.1	-22.7
Itraxx Financials Senior	50	59	-9	-43.4	-47.1
Itraxx Subordinated Financials	113	136	-23	-108.0	-109.2

Exchange rates

	31-Oct	29-Set	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
\$/€	1.165	1.181	-1.4	10.7	6.1
¥/€	132.340	132.920	-0.4	7.6	15.0
£/€	0.877	0.882	-0.6	2.7	-2.2
¥/\$	113.640	112.510	1.0	-2.8	8.4

Commodities

	31-Oct	29-Set	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
CRB Commodity Index	427.6	427.3	0.1	1.1	6.0
Brent (\$/barrel)	61.4	57.5	6.7	8.0	27.1
Gold (\$/ounce)	1,271.1	1,280.2	-0.7	10.3	-0.5

Equity

	31-Oct	29-Set	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
S&P 500 (USA)	2,575.3	2,519.4	2.2	15.0	21.1
Eurostoxx 50 (euro area)	3,674.0	3,594.9	2.2	11.7	20.3
Ibex 35 (Spain)	10,523.5	10,381.5	1.4	12.5	15.1
Nikkei 225 (Japan)	22,011.6	20,356.3	8.1	15.6	26.3
MSCI Emerging	1,119.1	1,081.7	3.5	29.8	23.6
Nasdaq (USA)	6,727.7	6,496.0	3.6	25.0	29.6

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

ECONOMIC OUTLOOK · Global expansion continues in the second half of 2017

World economic activity indicators remain positive at the end of Q3. In September, the composite business sentiment index (PMI), which includes manufacturing and services, stood at 54 points for the global aggregate for the second consecutive month, its best figure since March 2015. This positive economic trend is supported by an overall improvement in both advanced and emerging economies. The trend endorses CaixaBank Research's scenario, which predicts a moderate acceleration in world growth of 3.6% in 2017 and 3.7% in 2018 (3.2% in 2016). This positive scenario is the result of several factors. The continuation of accommodative monetary policies is one. Another is the gradual recovery in oil prices to levels that help exporting countries without hitting importing countries too hard. It is also supported by the effect of consumer and business confidence on consumption and investment.

Nevertheless, there are still some sources of uncertainty. Overall, global risk is still slightly tilted to the downside, due mainly to the uncertainty caused by political elements and protectionist stances. On the political front, the far right has obtained a good score in the legislative Austrian elections, while the tycoon Andrej Babis, a candidate with populist leanings, has won the Czech elections. Regarding trade policy, negotiations to redesign NAFTA have entered more delicate terrain. Sensitive issues are now being discussed, such as the possible introduction of import duties on vehicles and the US proposal to include a «sunset clause», which would make the NAFTA expire every five years unless the three countries involved (US, Canada and Mexico) reach an agreement in this time span. Although we believe negotiations will ultimately take a constructive stance, developments over the coming months will have to be monitored very closely.

The IMF improves its forecasts but remains cautious. In its World Economic Outlook published in October, the Fund revised upward its forecasts for the euro area and, to a lesser extent, for the US. For the emerging economies, the IMF has improved its outlook for Russia and Brazil and slightly for China while downgrading the outlook for India. On the whole, the IMF's view of the macroeconomic situation is similar to that of CaixaBank Research. The IMF has also underlined that this positive point in the global economic cycle provides propitious window of opportunity to ensure growth lasts. The Fund has stressed that it is vital to pursue structural reforms accompanied by growth-oriented fiscal policies to increase the productivity and potential growth of the major economies.

UNITED STATES

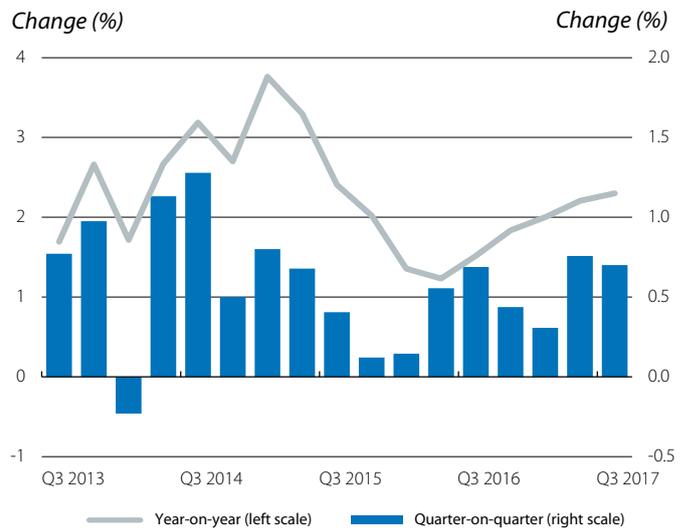
US GDP is surprisingly high in Q3. Hurricanes Harvey and Irma have not affected the US economy. In fact, it

Economic activity indicators: PMI



Source: CaixaBank Research, based on data from Markit.

US: GDP



Source: CaixaBank Research, based on data from the BEA.

US: economic activity indicators



Source: CaixaBank Research, based on data from the ISM.

outperformed analysts' forecasts by posting 0.7% growth quarter-on-quarter (2.3% year-on-year) in Q3 2017. This good figure, just 0.1 pp less than in Q2, was partly due to the considerable contribution made by inventories and by fewer imports. The good performance by these two components has offset the slight slowdown in private consumption and non-residential investment, although these indicators still saw appreciable growth.

Ups and downs in the labour market. Job creation dipped slightly in September with the loss of 33,000 jobs, the first negative figure since September 2010. Nevertheless, this is a temporary setback due to the disruption caused by hurricanes Harvey and Irma, which made it impossible for many Americans to work. The labour market should therefore pick up strongly again over the coming months and get back to the previous monthly job creation rates. Fortunately, there was also some good news: the unemployment rate fell by 0.2 pp to 4.2% and wages rose by 2.9% year-on-year, 0.4 pp more than August's figure. This wage rise is notable after the surprisingly modest increases posted in previous months in an economy so close to full employment. Average wage increases were 2.5% in the previous months while in pre-crisis years the strong labour market produced rises in excess of 3%. We will therefore have to monitor this good figure closely to see just how close the US economy has come to full employment and full utilisation of its labour force (known as «economic slack»).

Inflation: revised upwards. Inflation reached 2.2% year-on-year, 0.3 pp up from the previous month, supported by a post-hurricane increase in the energy component. Due to this figure, we have carried out a technical revision of our inflation forecast for 2017 of 0.2 pp (2.1%) and of 0.1 pp in 2018 (2.3%). Core inflation is still anchored at 1.7%. Nevertheless, this should recover gradually over the next few months as idiosyncratic factors, such as the current decline in wireless telephone services, diminish and wages the expected to rise as the economic slack disappears.

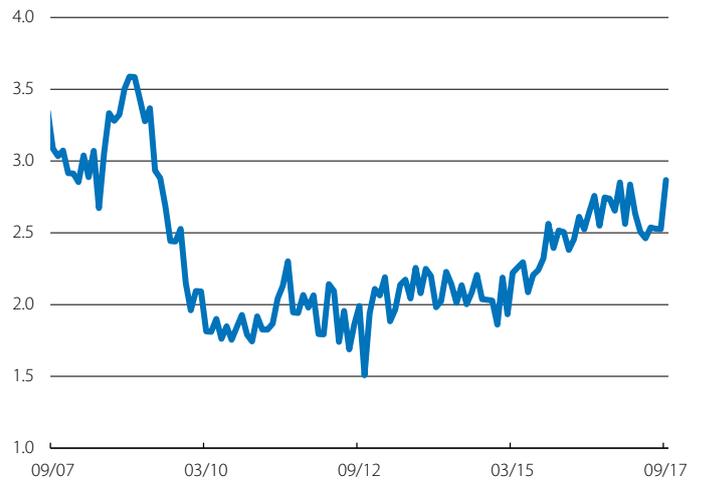
JAPAN

Shinzo Abe wins a big majority in Japan's snap elections. His party, the Democratic Liberal Party (DLP), and his ally, the Buddhist party, Komeito, won over two thirds of the seats in the Lower Chamber against a fragmented opposition, a similar majority which they already held. This undeniable victory will allow Abe to implement his agenda more easily as it is expected to take advantage of this majority to increase on education spending in order to improve the country's poor productivity and to carry out an unpopular hike in consumption tax. His two-thirds majority is also enough to reform the Constitution, which could lead to the Japanese armed forces playing a more active role in the future.

The country continues to post positive economic figures. Japan's business sentiment indicators are still rising. In

US: wages

Year-on-year change (%)



Source: CaixaBank Research, based on data from the Bureau of Labor Statistics.

US: CPI

Year-on-year change (%)



Source: CaixaBank Research, based on data from the Bureau of Labor Statistics.

Japan: business sentiment index (Tankan *)

Level



Note: * Index for large companies.

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

particular, the Tankan index for large manufacturers rose to its highest level since 2007 in Q3. We can therefore be reasonably optimistic about the GDP figure in Q3, whose first estimate will be published mid-November.

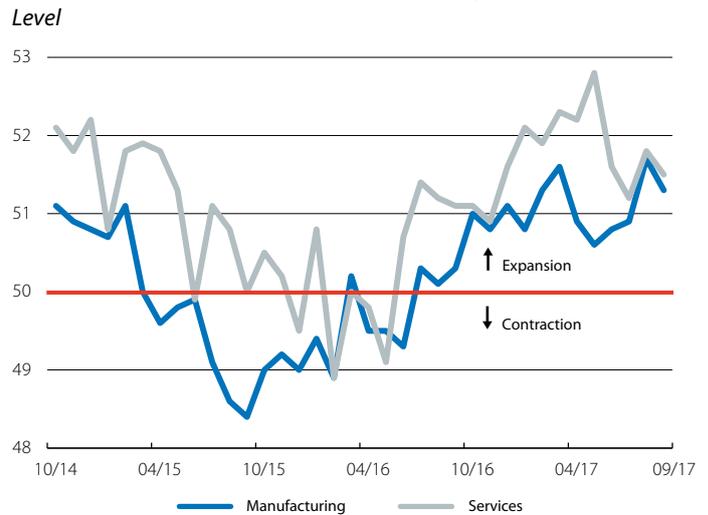
EMERGING ECONOMIES

The emerging bloc remains constructive. On the whole, the emerging economies continue to post significant growth in economic activity. This can be seen both in the latest macroeconomic figures and also in the (PMI) business sentiment indices, which are still comfortably in the expansionary zone in spite of a slight dip in September. Given this situation, the emerging economies continue to enjoy considerable inflows of foreign capital. Nevertheless, the IMF has warned that tougher global financial conditions could pressurise some emerging economies, especially those with high levels of debt.

China: an intense month, both in economic and political terms. Regarding the economy, China’s GDP grew by a notable 6.8% year-on-year in Q3, 0.1 pp lower than the figure for the first two quarters. This growth was supported by economic stimulus policies, including an increase in public infrastructure investment. Nevertheless, September’s economic activity data, published together with GDP, were positive, in line with the good growth figures. In the political arena, the National Congress of the Communist Party of China reinforced Xi Jinping’s leadership, who will embark on his second (and theoretically last) five-year mandate as China’s leader with the Party’s extensive backing. All the evidence suggests that China’s government will not alter its economic policy to any great extent, at least in the near future. The country’s economic the balancing is therefore expected to continue its gradual transition. The main doubt is whether the Chinese President, now with greater room to manoeuvre, will decide to implement more reforms to reduce the country’s high debt.

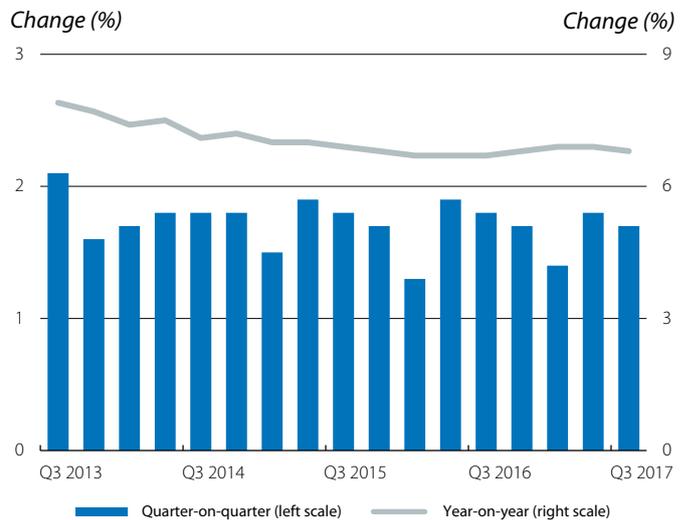
The Mexican economy falters in Q3. GDP fell by 0.2% quarter-on-quarter (+1.6% year-on-year), slightly lower figures than those posed in Q2 (0.6% and 1.9%, respectively). This is probably a temporary dip, however, resulting mostly from the negative effect of the oil production stoppage caused by hurricane Harvey (September’s production was the lowest since 1980) and, to a lesser degree, the impact of two earthquakes in September. Reconstruction work is likely to boost growth in Q4.

Emerging economies: economic activity indicators (PMI)



Source: CaixaBank Research, based on data from Markit.

China: GDP



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

China: economic activity indicators



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

FOCUS · US: the baby boomer effect on the cycle and in the long run

After almost eight years of GDP growth, the US is now entering a mature phase of its business cycle. The figures posted during the last eight years have been remarkable. In the current expansionary cycle, US GDP has seen a cumulative growth of 20%. In other words, an annual growth rate of around 2.1% on average. These are not extraordinarily positive figures, particularly compared with the US economy's most recent boom periods. But they are certainly impressive when compared with the trend in other developed countries. The euro area, for instance, has only seen four years of expansion, posting a modest 8% and 1.6% for cumulative and annual growth, respectively.

Many indicators suggest that the US economic cycle is now in a mature phase but the labour market surely provides the most illustrative. One of the key indicators, the unemployment rate, fell to 4.1% in October. Such levels have not been seen since the 2000s when it reached 3.8%, and we have to go back to the 1980s to find a lower figure.

Similar conclusions are provided by the trend in the U-6 rate, the unemployment rate that includes discouraged workers who would like to work but are not actively looking for a job, as well as underemployed workers. This rate is currently 8.3%, not very far from the all-time low of 6.8% reached in 2000 (see the first chart).

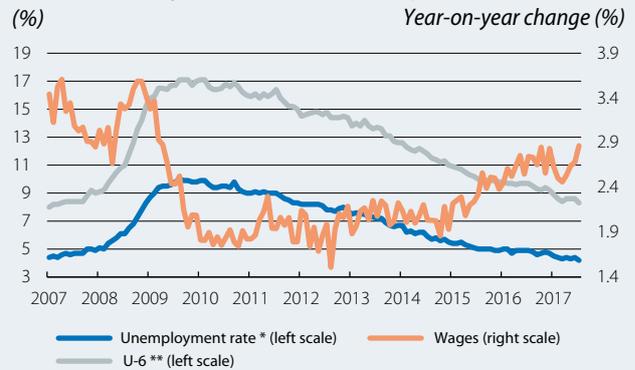
The participation and employment rates are also significant in the US labour market. At first sight, both may appear to be relatively low. However, this is largely due to a demographic factor. As baby boomers¹ approach retirement age and stop working, both indicators naturally fall. However, the underlying trend is revealed when both indicators are adjusted so that they are not affected by changes in the population's structure.² As the second chart shows, once adjusted for the population factor, both the participation and employment rate are now close to their pre-crisis levels.

Continuing with labour market indicators, the gradual but persistent upward trend in wage growth also suggests that the US economy is close to full employment (see the first chart).

A more sophisticated way of determining the US economy's point in the cycle is by using the output gap. Although widely used, this indicator must be used with caution, however, as it is notably difficult to estimate.³ According to the latest IMF estimates, the US closed its

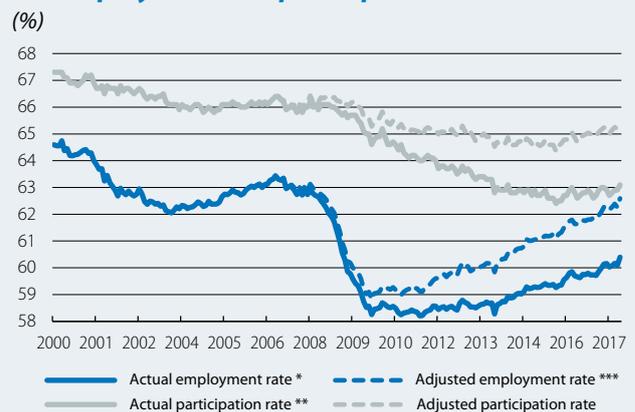
1. People born between 1946 and 1964.
2. See the note in the second chart.

US: unemployment rate and wages



Notes: * Unemployment rate: unemployed / labour force.
** The U-6 rate includes underemployment (unemployed people who are not looking for a job but have done so in the past 12 months, and employees working part-time involuntarily, for economic reasons).
Source: CaixaBank Research, based on data from Thomson Reuters Datastream.

US: employment and participation rate



Notes: * Employment rate: employed population / population aged 16+.
** Participation rate: employed and unemployed population (labour force) / population aged 16+.
*** In adjusting the composition, the share of the population of different age segments has been kept constant, at January 2007.
Source: CaixaBank Research, based on data from Thomson Reuters Datastream.

output gap in 2015 after years of a negative gap (see the third chart). Once again, the figures are markedly different for the euro area, which still has a negative output gap and is not expected to close this until 2019.

In summary, it looks as if cyclical factors will have a diminishing effect on growth over the coming years. Growth in economic activity will no longer be boosted by people who lost their jobs in the crisis rejoining the labour market, or by the reutilisation of idle capacity. As a result, the trend in the US economy will increasingly

3. The output gap is defined as the difference between actual GDP and GDP compatible with stable inflation close to 2%. For more information on this concept, see the Dossier «Potential GDP, a key but diffuse concept» in MR05/2013.

depend on factors determining its long-term growth. Ostensibly, most analysts believe that, although growth rates similar to those achieved in previous expansionary phases will not be reached, neither will they fall much below those observed over the past few years. But are they right?⁴

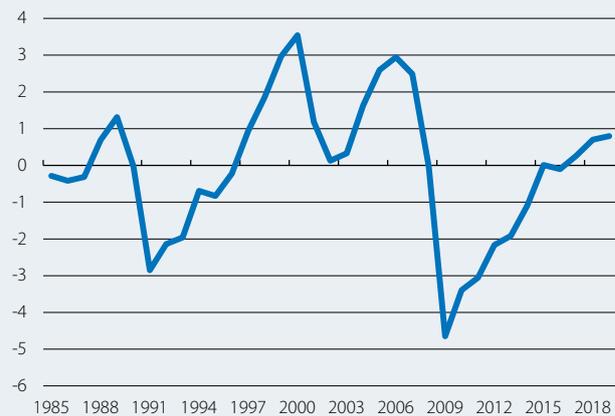
To examine the US economy's long-term growth capacity more thoroughly, we must analyse the situation and outlook for the different underlying factors that determine growth. These can be divided broadly into three: an increase in productivity, in capital and in labour. Upcoming editions of the *Monthly Report* will review the situation of each of these factors in depth. But the aim of this article is to provide an overview of the role played by demographics, and particularly the impact of the ageing US population on the labour factor.

As already mentioned, the effect of the ageing population on the labour market has been noticeable for some years now. The first signs appeared early in the 2000s, when US baby boomers reached an age at which, in general, the labour force participation rate tends to fall. By way of example, in 2005 baby boomers were around 55 years old. The participation rate for individuals aged 25 to 54 is about 82% while for individuals aged between 55 and 64 it falls to 64%.

The decline in the supply of jobs is already having a negative effect on US growth capacity. The long-term trend in the growth rate of the number of hours worked is a clear indicator. Growth in the hours worked has gone from 1.8% on average between 1974 and 1999 to an average of 0.3% since 2000 (see the fifth chart). This trend's impact on GDP cannot be ignored: growth in employment has gone from contributing 1.1 pp to annual GDP growth to just 0.2 pp. This changing growth rate for the number of hours worked could be due to several factors, such as variations in migratory flows or different characteristics of each period's business cycles. Nevertheless, it is estimated that around two thirds is due to the ageing population.

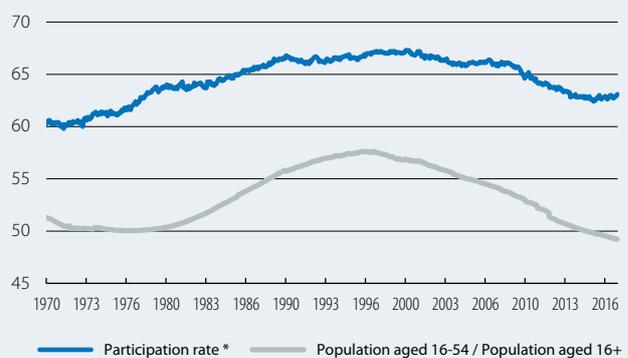
4. In its report of June 2017, the Congressional Budget Office estimates US potential growth at 1.9%, compared with its 2.6% estimate 10 years previously.

US: output gap (% of potential GDP)



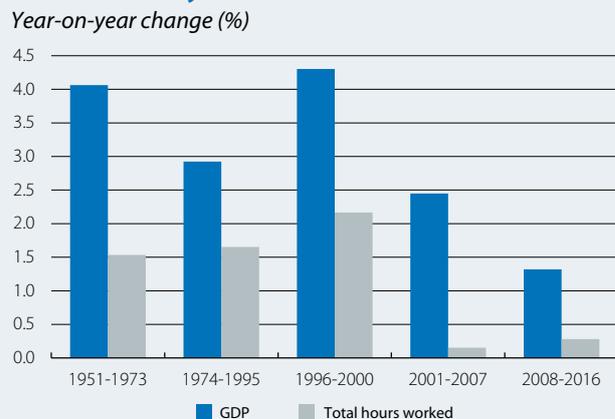
Source: CaixaBank Research, based on data from the IMF (WEO, October 2017).

US: participation rate and population aged 16-54 (%)



Note: * Participation rate: employed and unemployed population (labour force) / population aged 16+.
Source: CaixaBank Research, based on data from Thomson Reuters Datastream.

US: GDP and total hours worked in the economy



Source: CaixaBank Research, based on data from Thomson Reuters Datastream.

FOCUS · Mexico: a resilience test

Mexico's economic outlook depends on three events whose future development is uncertain. The first is the Fed's monetary normalisation. The second is what the new North American Free Trade Agreement (NAFTA) will look like. And the third source of uncertainty comes from the presidential and parliamentary elections to be held on 1 July 2018, which could result in a political shift from the current President's reformist focus.

However, according to CaixaBank Research's main scenario the impact of these three factors is relatively limited. The tightening up of US monetary conditions is expected to be gradual while the Fed is taking great care with its forward guidance. In anticipation, Banxico has already raised Mexico's benchmark interest rates and we expect any additional hikes in 2018 to be relatively minor. As a result, Mexican financial conditions will be less accommodative than in the past but should not stifle finance to any great extent.

Regarding NAFTA, although the start of negotiations for the most complicated points has led to uncertainty and penalised the peso, CaixaBank Research agrees with numerous analysts that the agreement will ultimately be constructive, adapting to the changes brought by the rise in digital trade and opting for a partial but not radical rebalancing of US relations with Mexico (and Canada).

Finally, concerning the upcoming elections, opinion polls point to victory for the Movimiento de Regeneración Nacional (better known as MORENA), led by Andrés Manuel López Obrador. The alternatives proposed by the incumbent party (PRI) or by a probable coalition between the PAN and PRD, currently in opposition, are less likely to win. There have certainly been concerns regarding MORENA's excessively populist stance. Nevertheless, the crucial (and widely supported) structural reforms of the previous legislature are unlikely to be reversed to any great extent. Electoral rhetoric aside, over the next six years the need for progress in two areas should once again be the focus of attention: greater investment in infrastructures and further fiscal reform focusing largely on indirect taxes.

The possible impact of these three sources of uncertainty can therefore be interpreted quite constructively. Nevertheless, investors are still delaying some of their decisions until the scenario becomes a little more predictable. Between 2017 and 2018 growth will therefore be in the order of 2%, slightly below the rate for the immediately preceding years. However, once this uncertainty has eased, Mexico should return to growth of around 2.5% without too much difficulty.

This being the baseline scenario, we should look at what would happen if the likely impact of monetary normalisation, NAFTA negotiations and political confrontation between election candidates turned out to be more damaging than expected. First of all, the impact of these three elements differs greatly: while a breakdown in NAFTA negotiations or a new agreement that clearly penalises Mexico would strongly disrupt the economy, affecting the country's growth potential, monetary normalisation and the elections should potentially have a much smaller and shorter negative effect.

In any case, Mexico is facing these hypothetical hurdles with relatively strong public finances. In 2017 the country should achieve the ambitious target announced by the government of posting a primary surplus, the first time in the last nine years. The public deficit in 2018 and 2019 is also likely to be somewhat lower than in the past few years, which should help to bring down public debt. This would allow Mexico to implement some countercyclical policies to offset adverse shocks, if necessary.

Regarding Mexico's external vulnerabilities, the situation can be classed as a moderate risk. Its current deficit will probably remain at around 3% of GDP in 2017 (notably lower than in previous years) while its external debt will be 38.5% of GDP, a figure that, although not low, is clearly better than in previous years. Perhaps the one factor tipping the balance towards relative calm in this area is the fact that Mexico's international reserves more than double its short-term external debt.

Mexico: key macroeconomic indicators

	2007-2013	2014	2015	2016	2017 (f)	2018 (f)
Growth in real GDP (%)	1.9	2.8	3.3	2.9	2.1	2.2
CPI inflation rate (%)	4.2	4.0	2.7	2.8	5.8	3.9
Current account balance (% of GDP)	-1.3	-2.0	-2.9	-2.7	-2.5	-2.7
Fiscal balance (% of GDP)	-4.0	-4.6	-4.1	-2.9	-1.4	-2.5
Public debt (% of GDP)	39.4	46.9	51.4	55.7	52.3	52.0

Note: (f) Forecasts.

Source: CaixaBank Research, based on data from Thomson Reuters Datastream.

KEY INDICATORS

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

UNITED STATES

	2015	2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	07/17	08/17	09/17
Activity									
Real GDP	2.9	1.5	1.5	1.8	2.0	2.2	–	2.3	–
Retail sales (excluding cars and petrol)	4.3	3.8	3.4	3.4	4.0	2.9	3.8	3.7	3.8
Consumer confidence (value)	98.0	99.8	100.7	107.8	117.5	118.1	120.0	120.4	119.8
Industrial production	–0.7	–1.2	–1.2	–0.1	0.6	2.1	1.8	1.2	1.6
Manufacturing activity index (ISM) (value)	51.4	51.5	51.1	53.3	57.0	55.8	56.3	58.8	60.8
Housing starts (thousands)	1,107	1,177	1,150	1,248	1,238	1,167	1,185	1,183	1,127
Case-Shiller home price index (value)	179	189	189	192	197	199	199	...	...
Unemployment rate (% lab. force)	5.3	4.9	4.9	4.7	4.7	4.4	4.3	4.4	4.2
Employment-population ratio (% pop. > 16 years)	59.4	59.7	59.8	59.7	60.0	60.1	60.2	60.1	60.4
Trade balance ¹ (% GDP)	–2.8	–2.7	–2.7	–2.7	–2.8	–2.8	–2.8	–2.8	...
Prices									
Consumer prices	0.1	1.3	1.1	1.8	2.5	1.9	1.7	1.9	2.2
Core consumer prices	1.8	2.2	2.2	2.2	2.2	1.8	1.7	1.7	1.7

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

	2015	2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	07/17	08/17	09/17
Activity									
Real GDP	1.1	1.0	1.0	1.7	1.4	1.6	–	...	–
Consumer confidence (value)	41.3	41.7	42.1	42.2	43.4	43.4	43.8	43.3	43.9
Industrial production	–1.2	–0.2	1.0	2.8	4.9	5.8	4.6	5.3	3.9
Business activity index (Tankan) (value)	12.8	7.0	6.0	10.0	12.0	17.0	–	22.0	–
Unemployment rate (% lab. force)	3.4	3.1	3.0	3.1	2.9	2.9	2.8	2.8	2.8
Trade balance ¹ (% GDP)	–0.5	0.7	0.5	0.7	0.7	0.6	0.8	0.8	0.8
Prices									
Consumer prices	0.8	–0.1	–0.5	0.3	0.3	0.4	0.5	0.6	0.7
Core consumer prices	1.4	0.6	0.4	0.2	0.1	0.0	0.1	0.2	0.2

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

	2015	2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	07/17	08/17	09/17
Activity									
Real GDP	6.9	6.7	6.7	6.8	6.9	6.9	–	6.8	–
Retail sales	10.7	10.4	10.5	10.6	10.0	10.8	10.4	10.1	10.3
Industrial production	6.1	6.0	6.1	6.1	6.8	6.9	6.4	6.0	6.6
PMI manufacturing (value)	49.9	50.3	50.2	51.4	51.6	51.4	51.4	51.7	52.4
Foreign sector									
Trade balance ¹ (value)	608	512	554	512	466	458	456	447	435
Exports	–2.3	–8.4	–7.0	–5.3	7.8	9.0	7.2	5.5	8.1
Imports	–14.2	–5.7	–4.7	2.1	23.9	14.3	11.3	13.4	19.1
Prices									
Consumer prices	1.4	2.0	1.7	2.2	1.4	1.4	1.4	1.8	1.6
Official interest rate ² (value)	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
Renminbi per dollar (value)	6.3	6.6	6.7	6.8	6.9	6.9	6.8	6.7	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 · Economic growth reaches cruising speed in the euro area

The euro area economy maintains its momentum in H2 2017. Q3 real GDP increased by 0.6% quarter-on-quarter, a similar pace to that of the first half of the year, as economic indicators were suggesting. Across countries, the figures for Spain (0.8% quarter-on-quarter) and France (0.5%) have also been published. Given the strong growth in economic activity, the IMF has raised its GDP growth forecasts for the euro area to 2.1% in 2017 and 1.9% in 2018 (+0.2 pp in both cases), slightly below CaixaBank Research forecasts (2.2% and 2.0%, respectively). According to the institution, this above-potential growth is being supported by strong domestic demand and an acceleration in exports. However, the IMF warned that, without structural reforms, growth in the euro area will gradually decline over the medium term. Specifically, the IMF pointed that potential growth remains moderate due to weak productivity, demographic factors and high public and private debt. In the United Kingdom, Q3 GDP figure was also released. The economy grew by 0.4% quarter-on-quarter (0.3% in the previous quarter), relatively in line with analysts' expectations. In the political arena, the Austrian conservative party (ÖVP) won the country's general election held on 15th October, and the far right party (FPÖ) gained more support. In fact, these two parties will probably form a coalition government. The resulting coalition is expected to implement an agenda that will help to boost the country's growth and not interfere with Europe's reformist agenda. However, tensions may arise within the EU in relation to migratory policy. In Germany, after the general election of 24th September, Angela Merkel's centre-right party (CDU) has embarked on negotiations to form a coalition government with the liberals (FDP) and green party. Nevertheless, discussions are likely to be complicated given the marked differences in some policies. Lastly, Italy finally passed its new electoral law, known as Rosalatum, which combines direct representation (36% of the seats) with proportional representation (the remaining 64%). This reform paves the way for elections to take place in early 2018 and is expected to favour the traditional parties over populist movements since the former are more willing to form coalitions.

Economic activity indicators point to a similar growth rate in the last quarter of the year. The first indicators available for Q4 2017 suggest that the euro area will continue to grow at a strong pace. The composite business sentiment index (PMI) for the euro area as a whole stood at 55.9 points in October, a similar figure to that of Q3 (56.0) and clearly in the expansionary zone (above 50 points). Also, the Economic Sentiment Index (ESI) reached 114 points in October, its

IMF GDP forecasts

Annual rate of change (%)

	GDP forecast			Change compared with July 2017*	
	2016	2017	2018	2017	2018
Euro area	1.8	2.1	1.9	▲ 0.2	▲ 0.2
Germany	1.9	2.0	1.8	▲ 0.2	▲ 0.2
France	1.2	1.6	1.8	▲ 0.1	▲ 0.1
Italy	0.9	1.5	1.1	▲ 0.2	▲ 0.1
Spain	3.2	3.1	2.5	= 0.0	▲ 0.1
Portugal	1.4	2.5	2.0	= 0.0	= 0.0
UK	1.8	1.7	1.5	= 0.0	= 0.0

Note: * The previous forecast for Portugal corresponds to the publication of the Staff Concluding Statement of the 2017 Article IV Mission (June 2017).

Source: CaixaBank Research, based on data from the IMF (WEO, October 2017).

Euro area: composite PMI economic activity indicator



Source: CaixaBank Research, based on data from Markit.

Euro area: consumption indicators



Source: CaixaBank Research, based on data from Eurostat and the European Commission.

highest level since 2001. Across countries, France performed particularly well with a composite PMI that reached 57.5 points in October, the highest level since May 2011. In Germany, while the index fell below the Q3 average (56.0) the IFO business sentiment indicator once again reached an historical high.

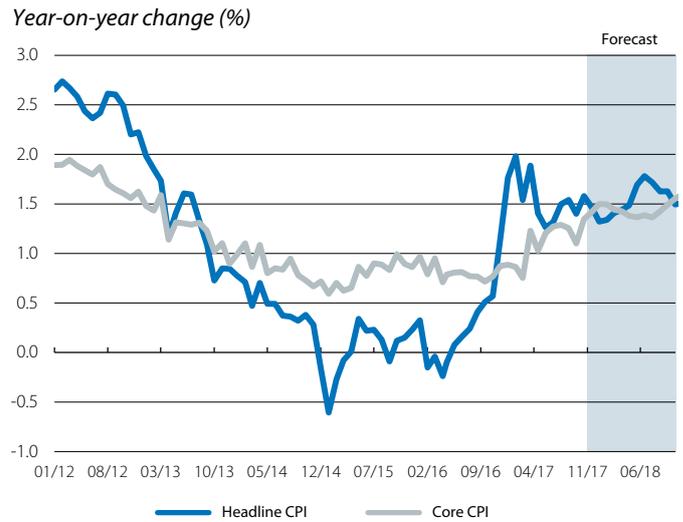
Household consumption continues to drive economic growth. This can be seen in the euro area's retail sales figures, which were up by 1.9% year-on-year in August, below the previous month but still above the 1.4% average for 2016. The consumer confidence index also rose to -1.0 points, its highest level since May 2007. Private consumption is likely to remain firm over the coming months, supported by the improvements in the labour market and low interest rates.

Euro area inflation is gradually getting back to normal as economic activity grows. Euro area headline inflation, as measured by the harmonised index of consumer prices (HICP), stood at 1.4% in October (0.1 pp lower than the previous month) due to the decline in the energy component. Core inflation, which excludes data for the volatile components (energy and unprocessed food), fell to 1.1%, 0.2 pp below the previous month's figure. We expect core inflation, indicative of medium-term inflationary trends, to continue to recover gradually over the coming months as a result of the robust economic activity and improvements in the labour market.

Financial conditions remain accommodative and support growth in domestic demand. The ECB's bank lending survey for Q3 2017 shows that loan demand increased across all categories, supported by the low interest rate environment, among other factors. According to this survey, credit standards on loans to households eased further, both for consumer credit and house purchase. Companies also continued to benefit from easier loan approval standards than in previous quarters. For the fourth quarter, financial institutions expect demand for loans to continue to rise while credit standards for loans to households to ease further. All this suggests that financial conditions will go on supporting growth in domestic demand.

Euro area public debt continues to fall gradually. While the euro area's average public deficit stood at 1.2% of GDP in Q2 2017, 0.3 pp below the figure for the same period in 2016, public debt remained closed to 90% of GDP. In Q2 2017, public debt stood at 89.1% of GDP, almost 0.2 pp below the Q2 2016 level (90.8%). However, this gradual reduction in public debt hides some very different situations at a national level. Public debt has fallen considerably (by 0.3 pp of GDP or more) in Greece, the Netherlands, Germany, Austria and Belgium whereas it has remained stable or even increased in other countries, such as Italy, Portugal and France. As public debt is high in this second group, it is important for them to bring it down to a more sustainable level, especially while the wind is in their favour.

Euro area: Harmonised CPI



Source: CaixaBank Research, based on data from Eurostat.

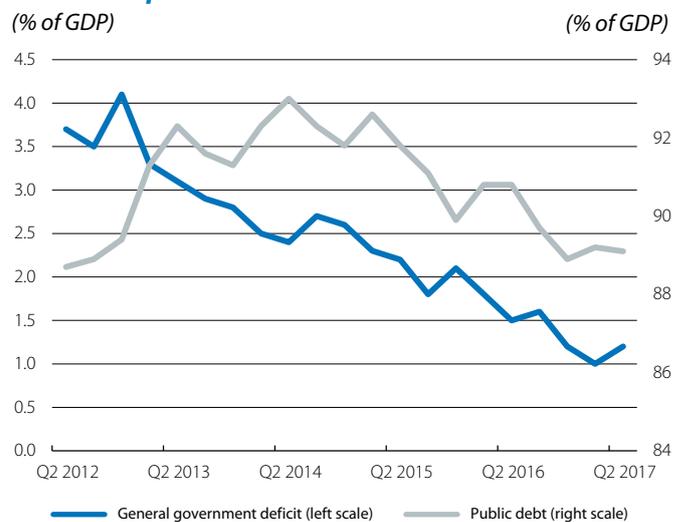
Euro area: bank lending survey

Banks tightening (+) or easing (-) standards for the approval of loans or credit lines (net %)



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

Euro area: public deficit and debt



Source: CaixaBank Research, based on data from Eurostat.

PORTUGAL

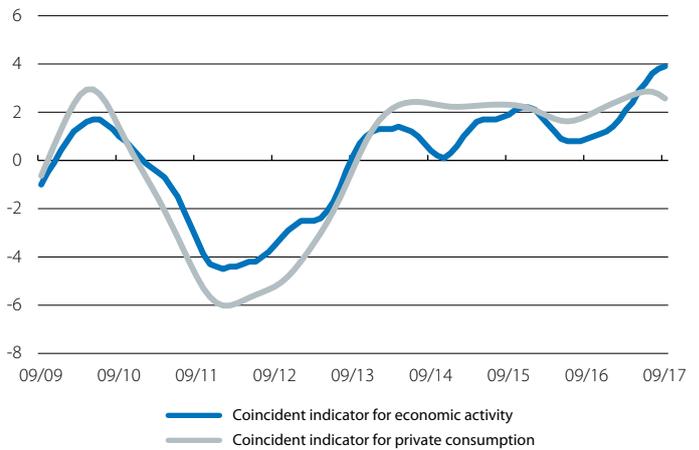
The Portuguese economy remains dynamic. After growing 3.0% year-on-year in Q2 2017, indicators available to date point to economic activity maintaining its momentum in the second half of the year. The Bank of Portugal's coincident indicator for economic activity, which summarises the trend of Portugal's high frequency indicators, rose again in September (+3.9% year-on-year), thereby continuing the upward trend that started in 2016. October's Economic Sentiment Index (ESI) reached 114.4 points, a level above the average for the first half of the year (111.5 points). The Bank of Portugal's coincident indicator for private consumption rose by 2.6% year-on-year in September, a similar rate to that of the first half of the year, while consumer confidence remains at historically high levels. Overall, indicators point to a favourable economic outlook. Given this, the Bank of Portugal, in its October's Economic Bulletin, kept its GDP growth forecasts for 2017 (2.5%) and 2018 (2.0%) unchanged.

Portugal's current account remains positive. The current account surplus (cumulative over 12 months) totalled EUR 980 million in August, a higher figure than the EUR 787 million posted in August 2016 and equivalent to 0.5% of GDP. Regarding its composition, this improvement was due to a larger services surplus and smaller income deficit, both of which offset a larger deficit in goods. This decline can be explained by the increase in energy imports (resulting from higher oil prices) and in intermediate and capital goods (as investment picks up).

The favourable economic situation can also be seen in the trend for loans. In August, new loans granted to households for house purchases continued the upward trend that started in 2015, and grew by 39.2% year-on-year YTD, reflecting the recovery in real estate demand. New loans for consumer purchases also continued to grow strongly in spite of a slowdown in the rate (7.6% year-on-year). New loans granted to both small and large firms were still affected by the deleveraging carried out by the private sector. The debt of Portuguese non-financial firms has fallen considerably since the peak reached in 2013, although it remains high (111.4% of GDP in Q1 2017) and above the euro area average (104.2%).

Portugal: coincident indicators for economic activity and private consumption

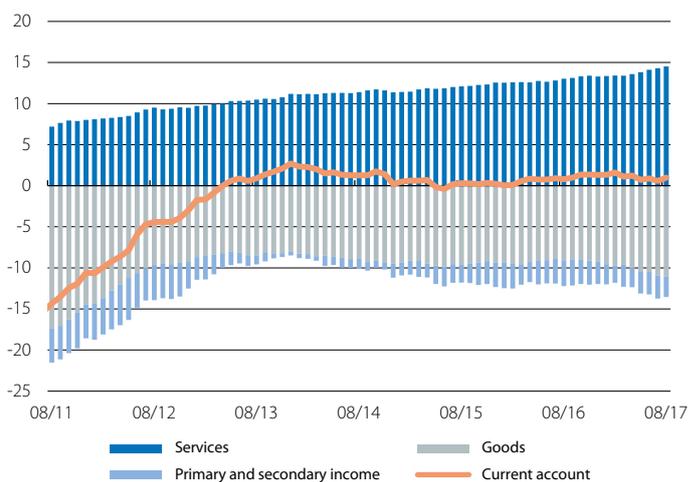
Year-on-year change (%)



Source: CaixaBank Research, based on data from the Banco de Portugal.

Portugal: current account

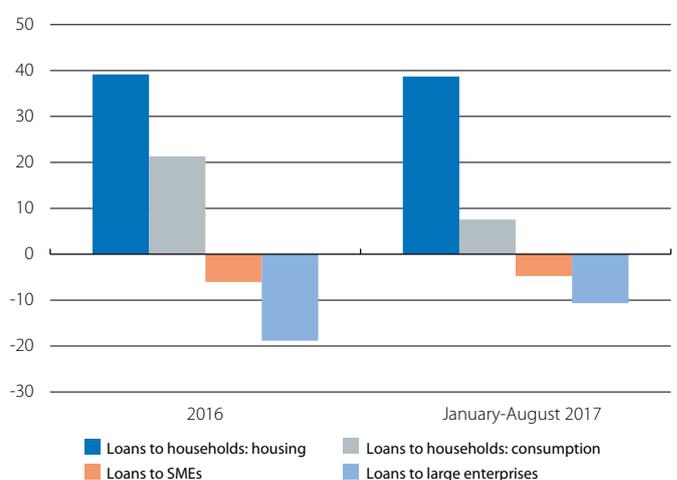
Cumulative over 12 months (EUR billion)



Source: CaixaBank Research, based on data from the Banco de Portugal.

New loans granted

Year-on-year change (%)



Source: CaixaBank Research, based on data from the Banco de Portugal.

FOCUS · Europe's social policies at a crossroads

Globalisation, technological changes and migration are rapidly transforming the production processes and labour markets of Europe's economies. Although benefitting society as a whole, they are also increasing inequality and the number of people at risk of social exclusion.¹ Certain groups of individuals are particularly affected, precisely the ones hardest hit by the economic crisis of the past few years. Social assistance programmes therefore require enough resources and those resources should be used with the utmost efficiency.

Social policies in Europe date back to the end of the 19th century when, in Germany, Otto von Bismarck introduced insurance systems for health, occupational accident and retirement. Since then, and particularly after the Second World War, the cover provided by pension and public health systems has been widened, as well as developing assistance programmes for families, the unemployed and the disabled, among others. In 2016, public social spending in the EU is worth 23.6% of GDP. How this spending is distributed among the different programmes varies widely. However, in general most of the resources are allocated to the public pension and health system (see the second chart).

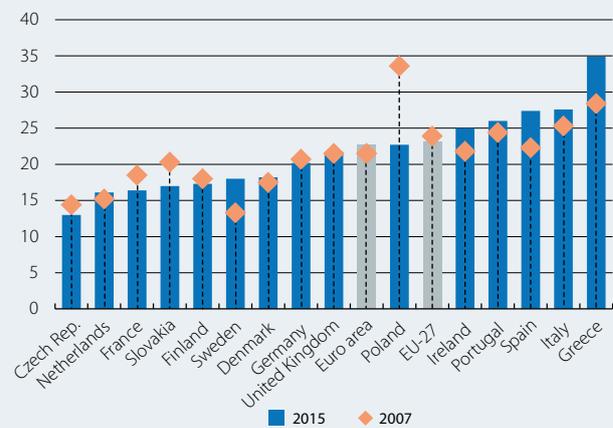
Social programmes reduce income inequality and poverty and are a means of stabilising the economy at times of crisis. In 2014, for instance, tax collection and income transfers reduced income inequality in the EU by 38% on average, according to OECD figures.² However, at a time when public finances are under intense pressure, such programmes not only need to be effective but also efficient, achieving the desired goal in the best way possible. The design and implementation of these programmes is therefore crucial, be they public or private, as well as ensuring they are systematically evaluated.

Nevertheless, the changes occurring in today's society are raising doubts as to whether the mechanisms created over the past few decades to encourage equal opportunity are still valid. In addition to systems used traditionally to protect against illness, disability, old age or unemployment, increasingly greater emphasis is being placed on the educational system. It is crucial to act in this area, from nursery right through the whole educational process, including university and vocational training and life-long learning. Such actions help to promote equal opportunity at a time when technological changes are altering the labour market's

requirements.³ A good example of this is the European Pillar of Social Rights, approved in November 2017 by the European Commission. This focuses especially on reformulating how Europe's labour market and welfare system work. The Pillar's principles range from equal access to education to fostering mechanisms that improve job stability. Also important is the proposal to introduce a minimum wage for anyone with insufficient resources, as well as incentives for people who are able to work to join the labour market. However, creating such a safety net in a changing society is a complicated task that requires an even greater effort.

Population at risk of social exclusion

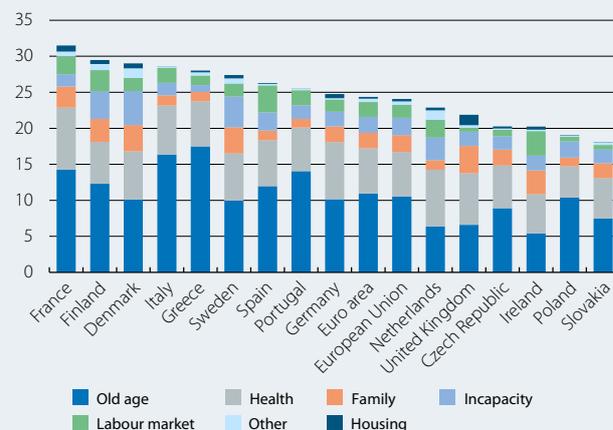
(% of total population aged 18+)



Source: CaixaBank Research, based on data from Eurostat.

Social expenditure by area

(% of GDP)



Source: CaixaBank Research, based on data from the OECD (2016 Social Expenditure (SOCX) database).

1. See the Dossier «New technologies and the labour market» in MR02/2016.
 2. Reduction in the Gini coefficient as a result of transfers and taxes in 2014 (OECD, 2016, «Income Inequality Update»).

3. See the Dossier «Education: more crucial than ever» in MR05/2017.

FOCUS · The sensitivity of inflation to the euro's appreciation

In his latest appearance before the European Parliament, Mario Draghi commented that the current recovery is based on a increased activity which should push up inflation over the coming quarters. However, he noted that the recent appreciation of the euro, up by 11.5% in 2017 against the dollar and by 6.4% against the euro area's main trading partners (see the first chart), could make it difficult to reach the inflation target. As we will see, this appreciation will affect inflation expectations for 2018, pushing them down slightly.

The main channel through which exchange rate fluctuations affect inflation is by changes in import prices. When the domestic currency appreciates, the prices of foreign products denominated in foreign currencies fall. Cheaper imports push down the price of both final and intermediate goods, and thereby inflation. This mechanism, known as the pass-through, has been examined and monitored by national economic authorities given its importance in forecasting domestic inflation. Several studies suggest that the pass-through is never one hundred percent. In other words, a 1% appreciation results in a less than 1% reduction in inflation.¹ Moreover, the effect on inflation is not immediate. In fact, the peak does not occur until four to five quarters after appreciation.

Different studies show that exchange rate pass-through is decreasing in the euro area for various reasons, including the growth of euro denominated import invoices. In 2004, euro area imports from countries outside the monetary union but denominated in euros accounted for 48.8% of the total compared with 51.7% in 2013. In turn, the percentage of euro-denominated imports of services grew from 53.8% to 61.5% over the same period.² Another explanation for a smaller pass-through in the euro area is the increase in exchange rate hedges using financial instruments that temporarily insulate importers from exchange rate fluctuations.³ Both factors mean that firms insure their margins against movements in the euro's value without having to adjust their prices, thereby reducing the pass-through in the euro area as a whole.

The evidence available to date suggests that exchange rate pass through varies depending on the reason behind the exchange rate fluctuation.⁴ According to ECB

estimates, the euro's appreciation in 2017 is mainly due to a larger increase in domestic demand and to the change in expected monetary policies. Taking these factors into account, and based on the historical relationship between the exchange rate and inflation, we can conclude that, in 2018, inflation will be approximately 0.15 pp lower than the expected rate before the euro appreciated. This difference should therefore not alarm the authorities nor conjure up the spectre of deflation, but it does take the euro area further away from its inflation target.

Euro area: nominal effective exchange rate of the euro *

Index (January 2017 = 100)



Note: * Calculated as the average of euro values against the currencies of its main trading partners, weighted by the export trade with these countries.
Source: CaixaBank Research, based on data from the ECB.

Euro area: impact of the euro's appreciation on the inflation forecast

(%)



Note: The impact of the euro's appreciation on inflation has been calculated using the estimates of Comunale and Kunovac (2017)⁵ and the ECB's calculations.
Source: CaixaBank Research, based on data from the ECB.

1. Among other articles, see Krugman, P. (1986), «Pricing to market when the exchange rate changes», NBER Working Paper Series.
2. See BCE (2014), «The international role of the euro».
3. See BCE (2016), «Exchange rate pass-through into euro area inflation».
4. See Forbes, K. et al. (2016), «The Shocks Matter: Improving our Estimates of Exchange Rate Pass-Through», External MPC Unit Discussion, Paper No. 43.

5. See Comunale, M. and Kunovac, D. (2017), «Exchange rate pass-through in the euro area», ECB Working Paper.

KEY INDICATORS

Activity and employment indicators

Values, unless otherwise specified

	2015	2016	Q4 2016	Q1 2017	Q2 2017	07/17	08/17	09/17	10/17
Retail sales (year-on-year change)	2.7	1.5	2.4	2.2	3.0	2.3	1.2	...	...
Industrial production (year-on-year change)	2.1	1.5	2.3	1.3	2.7	3.6	3.8	...	...
Consumer confidence	-6.1	-7.7	-6.5	-5.5	-2.7	-1.7	-1.5	-1.2	-1.0
Economic sentiment	104.2	104.8	106.9	108.0	110.0	111.3	111.9	113.1	114.0
Manufacturing PMI	52.2	52.5	54.0	55.6	57.0	56.6	57.4	58.2	58.6
Services PMI	54.0	53.1	53.4	55.1	56.0	55.4	54.7	55.6	54.9
Labour market									
Employment (people) (year-on-year change)	1.0	1.4	1.4	1.6	1.6	-	...	-	-
Unemployment rate: euro area (% labour force)	10.9	10.0	9.7	9.5	9.2	9.0	9.0	8.9	...
Germany (% labour force)	4.6	4.2	3.9	3.9	3.8	3.7	3.6	3.6	...
France (% labour force)	10.4	10.0	10.0	9.6	9.5	9.7	9.7	9.7	...
Italy (% labour force)	11.9	11.7	11.8	11.6	11.2	11.3	11.1	11.1	...
Spain (% labour force)	22.1	19.6	18.7	18.2	17.3	16.9	16.8	16.7	...

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

	2015	2016	Q4 2016	Q1 2017	Q2 2017	07/17	08/17	09/17
Current balance: euro area	3.4	3.6	3.6	3.5	3.2	3.3	3.3	...
Germany	8.5	8.3	8.3	8.3	7.8	7.8	7.8	...
France	-0.4	-0.9	-0.9	-1.1	-1.2	-1.3	-1.1	...
Italy	1.5	2.7	2.7	2.9	2.8	2.7	2.7	...
Spain	1.1	1.9	1.9	1.9	1.8	1.8	1.8	...
Nominal effective exchange rate¹ (value)	91.7	94.3	94.5	93.7	95.2	97.6	99.0	99.0

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

	2015	2016	Q4 2016	Q1 2017	Q2 2017	07/17	08/17	09/17
Private sector financing								
Credit to non-financial firms ¹	-0.3	1.8	2.2	2.2	2.3	2.4	2.4	2.5
Credit to households ^{1,2}	0.7	1.7	1.9	2.3	2.6	2.6	2.7	2.7
Interest rate on loans to non-financial firms ³ (%)	1.6	1.4	1.3	1.3	1.3	1.3	1.3	...
Interest rate on loans to households for house purchases ⁴ (%)	2.1	1.8	1.8	1.8	1.7	1.8	1.8	...
Deposits								
On demand deposits	11.1	10.0	9.3	9.4	10.3	10.0	10.6	10.8
Other short-term deposits	-3.8	-1.9	-2.0	-2.3	-2.9	-3.2	-2.7	-3.3
Marketable instruments	2.6	2.7	4.2	5.7	0.7	-2.1	-0.4	1.2
Interest rate on deposits up to 1 year from households (%)	0.8	0.5	0.4	0.4	0.4	0.4	0.4	...

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.

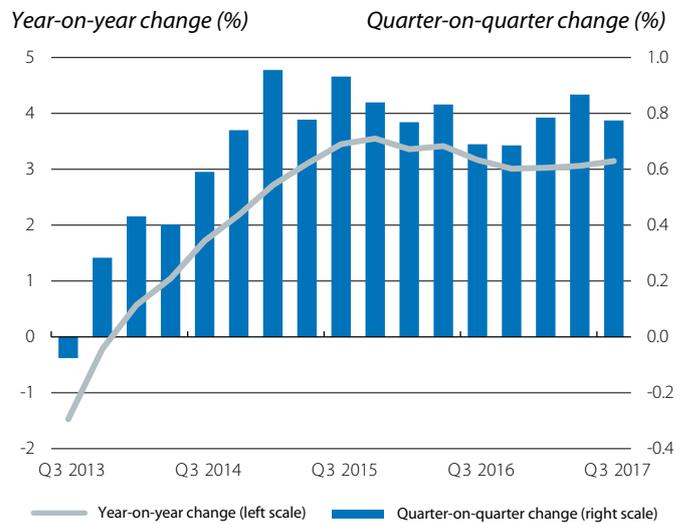
ECONOMIC OUTLOOK · Sailing in a favourable external environment

GDP growth remained high in Q3. GDP grew by 0.8% quarter-on-quarter (3.1% year-on-year), in line with the CaixaBank Research forecast and slightly slower than Q2 (0.9% quarter-on-quarter). Although the breakdown by components has yet to be published, early indicators point to this fast growth being driven by domestic demand, specifically private consumption and investment, especially construction. Exports and imports picked up in Q3 thanks to an increasingly favourable external environment with the global economy speeding up. However, the economic activity growth rate is likely to ease over the coming quarters. This is because of diminishing support from certain factors over the past few years, such as expansionary fiscal policies, spending on consumer durables after postponing such purchases during the crisis, and a moderate rise in oil prices. The government has also revised downwards its GDP growth forecast due to the uncertainty caused by Spain's political situation. The new macroeconomic scenario contained in the Draft Budgetary Plan for 2018 now predicts 2.3% GDP growth in 2018, 0.3 pp lower than the previous forecast (see the Focus «Ten years of public deficit and counting» in this *Monthly Report*).

Economic activity indicators already pointed to strong growth in Q3. From the supply side, the indicators for manufacturing were particularly positive. The business index for industry rose by 7.6% year-on-year in August while its PMI index reached 54.3 points in September, a level in line with the average for the first half of the year (54.8). A sharp rise in new industrial orders in August (up 8.2% year-on-year) also suggests the sector's positive trend will continue in the last part of 2017. This uptick was mainly due to the good performance of industrial orders from the euro area (up 6.6% year-on-year), showing the positive impact on the Spanish economy of the stronger growth enjoyed by our main trading partners. The trend in the services sector, which represents almost two-thirds of GDP, was also positive. Economic activity for this sector accelerated its growth rate in August to 6.2% year-on-year, while the sector's PMI business sentiment index remained high in September (56.7 points). Regarding demand, the consumer confidence index stood at 0.2 points on average in Q3, slightly below the Q2 average (1.5) but far better than the historical average (-13.6) and the average for 2016 (-3.8). Average growth in retail sales also increased by 1.7% year-on-year in Q3 (a similar rate to the first six months). Private consumption is therefore expected to continue to drive growth.

The sharp rise in consumption keeps the savings rate below its historical average. The strong growth in private consumption in Q2 2017 (4.0% year-on-year, in nominal terms), higher than the growth in gross disposable income (1.8% year-on-year), pushed down the household savings rate

GDP



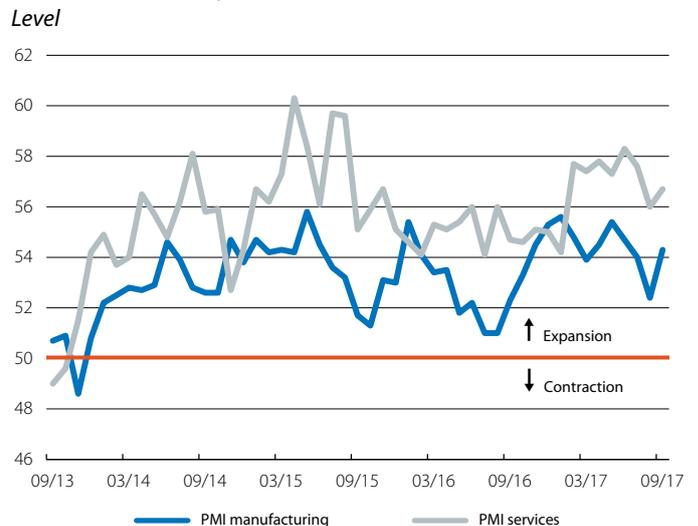
Source: CaixaBank Research, based on data from the INE.

Government's macroeconomic scenario

	New scenario		
	2016	2017	2018
GDP (% ▲)	3.3	3.1	2.3
Employment (% ▲)	3.0	2.9	2.4
Unemployment rate	19.6	17.2	15.5
Current account balance (% GDP)	1.9	1.7	1.6
Public deficit (% GDP)	4.5	3.1	2.3
Public debt (% GDP)	99.0	98.1	96.8

Source: Draft Budgetary Plan 2018.

Economic activity indicators



Source: CaixaBank Research, based on data from Markit.

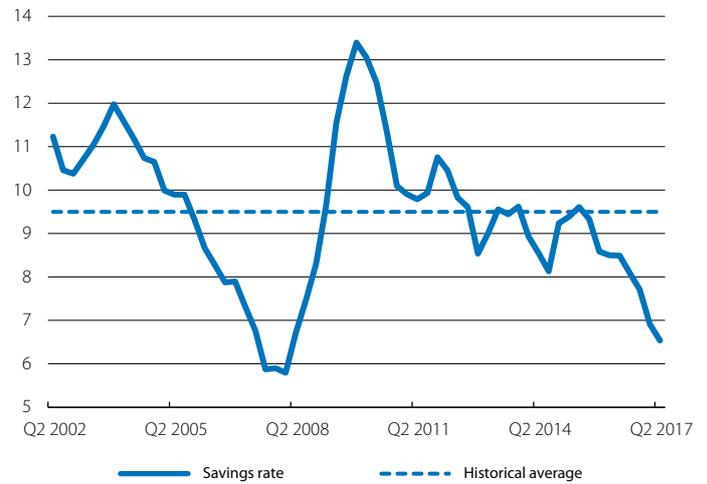
to 6.5%, 2 pp lower than the previous year. As already noted, early indicators for private consumption suggest this strong growth will continue. The savings rate is therefore likely to remain historically low for several quarters.

Very positive employment trend in Q3 2017. The boost provided by economic activity can be seen in the labour market with 521,700 more people employed than a year ago. There was also a considerable drop in the number of unemployed (-589,100 in the past four quarters), reducing the unemployment rate to 16.4% (-2.5 pp in the past year). The labour market improved beyond what was already expected considering that this quarter coincides with the peak of the tourism season. Indeed, in seasonally adjusted terms, employment rose by 0.75% quarter-on-quarter in Q3 (0.84% in Q2 2017). This growth in employment was widespread across all sectors, although especially in the private one. In particular, private sector employment has risen by 463,500 people over the past 12 months, accounting for 89% of the jobs created over this period and in excess of the private sector's 84% share of all employed people. Nevertheless, the IMF's annual report on the Spanish economy warns that job creation is still concentrated in sectors with below-average productivity (25% tourism-related, 25% administrative support and 14% public services). The institution also warned of the high temporality of Spanish jobs and of extensive over-qualification in some sectors. Both aspects hinder productivity gains and reduce the economy's growth potential. The Fund recommends focusing active employment policies on certain groups of people, such as the unemployed and unskilled workers.

Growing world trade boosts Spain's exports and imports. As global trade gains traction, foreign trade in Spanish goods is also performing well. Goods exports increased by 6.9% year-on-year in August (cumulative over 12 months), the highest rate since July 2012. Imports also grew strongly (8.2% year-on-year), although mostly due to higher oil prices which substantially increased energy imports. The goods trade deficit therefore stood at 2.1% of GDP (cumulative over 12 months) in August, larger than the 1.7% deficit for the same period in 2016.

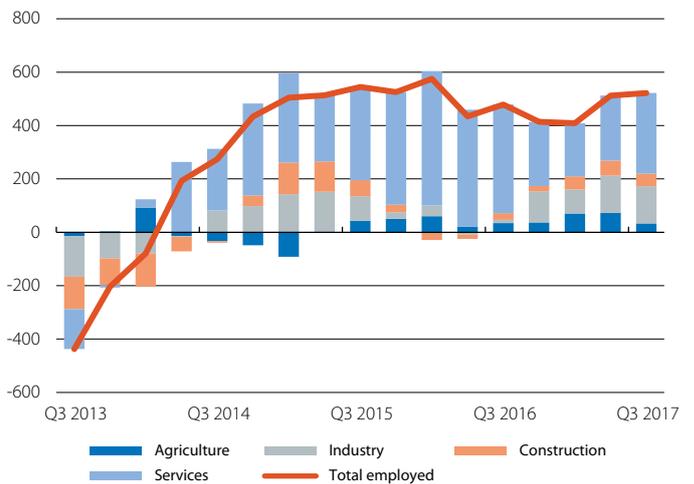
Inflation moderates but is on track for a medium-term recovery. In October, headline CPI slowed down its rate of growth to 1.6%. Details by component have yet to be published but this slowdown can be explained by a smaller increase in fuels compared with the rise in October 2016. Inflation stood at 1.8% in September, the latest figure available with a breakdown by component. Food and non-alcoholic beverages contributed positively to growth due to a smaller drop in fruit prices (in year-on-year terms). Leisure and culture also made a positive (albeit smaller) contribution, while housing-related prices (gas and electricity) slowed down. Nevertheless, prices continue to rise very slowly, as shown by core inflation which remained at 1.2% in September. Over the next few months, inflation will continue to slowdown

Savings rate
(% of gross disposable income)



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

Employment by sector
Year-on-year change (thousands)



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

Exports and imports of goods *
Year-on-year change (%)



Note: * Cumulative over 12 months.
Source: CaixaBank Research, based on data from the Customs Department.

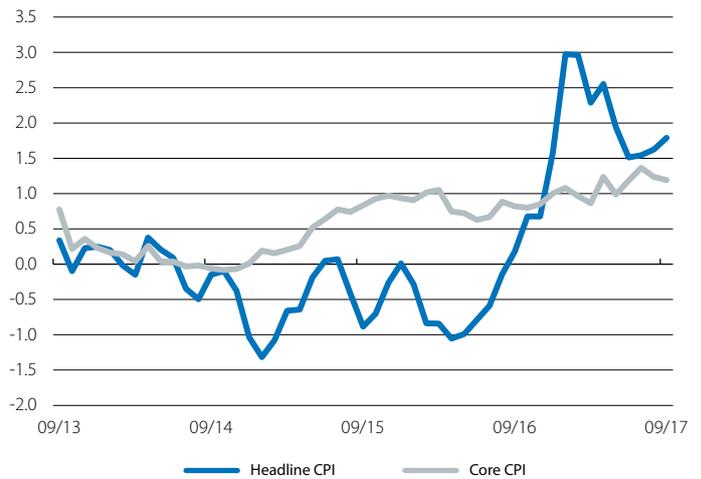
compared with the current figure. This is particularly due to the base effects of electricity prices and, to a lesser extent, the direct and indirect effects of an appreciating euro. In the medium term, however, inflation is likely to see sustained growth, a trend that should occur throughout the euro area. In fact, the ECB announced it would reduce its monthly asset purchase rate in January, from EUR 60 billion to EUR 30 billion. This suggests it now has more confidence in euro area inflation recovering in the medium term. Nevertheless, financial conditions will remain highly favourable in spite of this gradual withdrawal of monetary stimuli.

Accommodative financial conditions boost bank credit.

The bank lending survey for Q3 2017 shows that credit standards eased on loans to households for house purchases, crucial for the real estate sector’s recovery. Mortgages for house purchases rose by 29% year-on-year in August, a fundamental support for demand. However, the outstanding mortgage balance is still declining (–2.8% year-on-year in Q2 2017), in line with household deleveraging. Nonetheless, outstanding consumer credit is still growing at a good rate (15.2% year-on-year). Outstanding credit for non-financial enterprises (excluding developers), which are also still deleveraging on the whole, continued to fall in Q2 2017 (–3.1% year-on-year). Developer credit is falling at a very fast rate (–6.7% year-on-year) due to the sale of doubtful assets. However, the NPL ratio is still high in the developer segment, namely 21.5%, far higher than in the other segments (8.5% in August). The European Commission and the ECB, in their eighth report on Spain’s banking sector after the end of the financial aid programme for this sector, highlighted the good performance of the financial system, bank capitalisation and the adjustments made to business models as well as cost structures in order to boost margins. The report points out, however, that a key challenge faced by Europe’s banks in general is to sustain sufficient profitability over the medium term.

CPI

Year-on-year change (%)



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

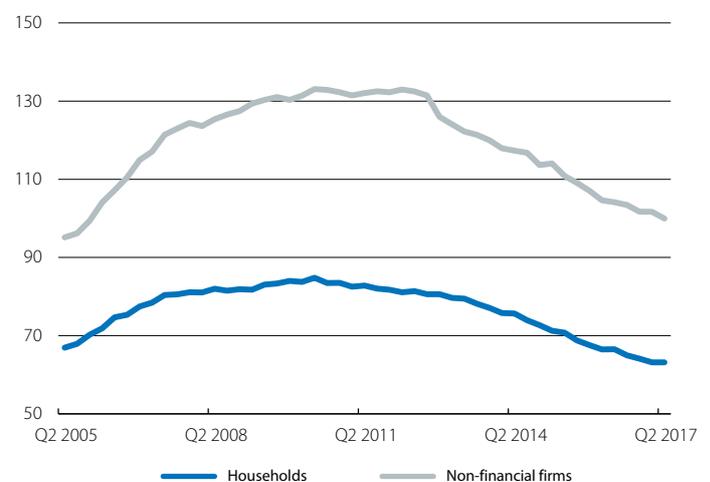
Gross credit and NPL ratio in Q2 2017

	Balance (EUR billion)	Year-on-year change (%)	NPL ratio (%)
Loans to households	706	-1.4	-
House purchases	529	-2.8	4.7
Other purposes	75	2.9	8.3
Consumption	75	15.2	-
Loans to enterprises	483	-4.0	-
Non-developers	366	-3.1	10.8
Developers	116	-6.7	21.5
Loans to private sector *	1,189	-2.5	8.4

Note: * The total balance does not include loans to financial services.
Source: CaixaBank Research, based on data from the Bank of Spain (chapter 8).

Private sector debt

(% of GDP)



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

FOCUS · Looking for work? Inactivity and unemployment in Spain

Spain's unemployment rate has fallen sharply over the past five years, by 9.7 pp from its peak of 26.9% in Q1 2013. However, this rate is still a high 17.2%, practically doubling the euro area's figure (9.0%).¹ Over the same period, and in spite of the improvement in the labour market, the inactivity rate² has remained almost the same, at around 26.0%. This is slightly lower than the euro area as a whole (27.0%) and significantly lower than other European countries such as Italy (34.6%) and France (28.4%).

There is a large number of inactive people aged between 15 and 64, totalling 7.5 million, almost twice the number of unemployed people (3.9 billion).³ The reasons for this inactivity vary greatly between gender. For men, the main reason is the suffering from an illness or disability (see the second chart). The second most frequent reason is participation in education or training. For women, however, personal or family reasons are the main causes of inactivity. This reflects the still very wide gender gap regarding family responsibilities and the role of carer.

It is notable that the percentage of inactive people not seeking employment because they believe they will not find a job is small, both for men and women. They are normally classified as «discouraged workers» and account for just 5.4% of all inactive people aged between 15 and 64.⁴ The share of discouraged workers in Spain seems relatively low when compared with the large number of unemployed (many of them long-term) and also compared with the euro area, where the percentage of discouraged workers is very similar (5.6%) but, on the other hand, the unemployment rate is approximately half that of Spain, as already noted.

Spain's low inactivity rate (and high unemployment rate) can be easily demonstrated through its comparison with the euro area. In Spain, out of every 100 people of working age, 61 are employed and the rest are divided among 13% unemployed and 26% inactive. The euro area has a higher percentage of people in work (66%) but the mix of unemployed and inactive people is very different

(7% unemployed and 27% inactive; i.e. four inactive people for every unemployed person). If this mix were applied to the Spanish case (keeping the employment percentage at 61%), the unemployment rate would be 11.2%; i.e. 6 pp lower than its actual level. The aim of this simple exercise is to highlight the limitations of concentrating solely on the unemployment rate when assessing the situation of the labour market. Other institutional and regulatory features of the labour market and also welfare state policies have a great effect on individuals' behaviour and their decision to participate, or not, in the labour market.

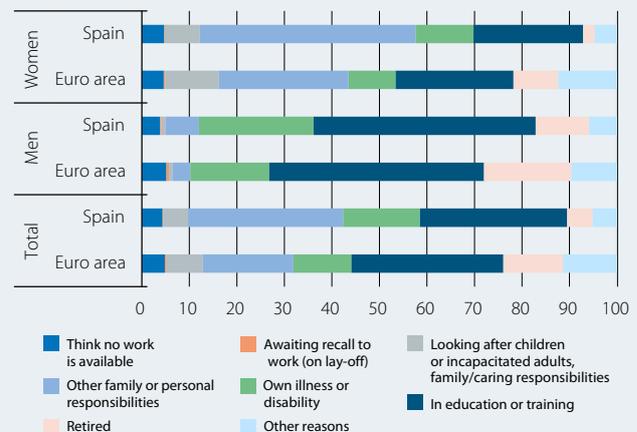
Inactivity and unemployment rate (15-64 years)



Note: * Percentage of inactive people out of the total population aged 15 to 64.
Source: CaixaBank Research, based on data from Eurostat.

Inactive persons: reason for not looking for employment (2016)

(% of all inactive persons aged 15-64)



Source: CaixaBank Research, based on data from Eurostat.

1. The figures in this article refer to Q2 2017, unless otherwise specified.
2. The inactivity rate refers to the percentage of inactive people out of the total population aged between 15 and 64.
3. Although neither unemployed nor inactive people work, the distinction between these two groups is very important in statistical terms. While the former are counted within the labour force, inactive people are not. Specifically, following the criteria of the International Labour Organization, unemployed people are those who, at the time they are surveyed, are without work, state that they wish to work, are available to do so within two weeks and have taken active steps to look for work in the last four weeks. People who do not meet all these conditions are classified as inactive.
4. Eurostat data, 2016.

FOCUS · Ten years of budget deficit and counting

Spain's public sector accounts are still in the red. The budget deficit will probably reach 3.1% of GDP in 2017, with general government spending exceeding revenue, for the tenth year in a row. A glass half-full approach, however, notes that the economic recovery and measures to control and cut the expenditure of public administrations over the past few years have led to a downward trend in the budget deficit. As a result, Spain looks like achieving the fiscal balance target for 2017 agreed with the European Commission.

With this year about to end, however, it is useful to examine the accounts for the coming year. The Spanish government sent its 2018 Draft Budgetary Plan to the European Commission in October. The support of a parliamentary majority for the Budget is still in the air. Nevertheless, this Plan is based on a scenario that essentially prolongs 2017's policies and relies on economic growth to reduce the budget deficit.

According to the Plan, GDP growth, forecast at 2.3%, will reduce the fiscal balance to -2.3% of GDP in 2018. Although an improvement of 0.8 pp, this will not be enough to achieve the target of -2.2% of GDP contained in the Stability Programme and agreed with the European Commission.

Expenditure measures are also expected to improve the public accounts. Public sector wages are frozen and unemployment is likely to fall by 1.7 pp, reducing the payment of unemployment benefits by 2.9%. The central government also estimates that interest payments will rise

in line with nominal GDP growth (4.0%). This projection seems very conservative, given that the average maturity of public debt is longer than seven years and interest rates are considerably lower than in previous years (and are expected to remain very low in 2018). In fact, interest payments had fallen by 6.1% up to July 2017 compared with the same period in 2016.¹

Regarding revenue, the central government estimates that the positive trend in employment (2.4% in 2018) will boost Social Security contributions, growing by 4% in 2018. The Draft Budgetary Plan also projects that revenue from taxes on production and imports (mainly VAT) will rise by 4%. This forecast is also in line with the macroeconomic situation of household consumption continuing as one of the major supports for the recovery. Nevertheless, the 6% increase forecast in revenue from taxes on income and wealth seems rather optimistic.²

In short, the estimates contained in the Draft Budgetary Plan seem plausible. These predict that economic growth will push the budget deficit below 3% of GDP and therefore help Spain to exit its excessive deficit procedure. Nevertheless, all the evidence points to Spain's public accounts remaining in the red until after 2020. Moreover, measures to reduce the fiscal deficit will still be required to ensure that public debt, which is close to 100% of GDP, also starts to fall. The wisest move would be to take advantage of the years of economic growth to improve the accounts and thereby have more margin to act when low growth comes as a surprise.

Forecasts for revenue and expenditure items in the 2018 Draft Budgetary Plan

	(% of GDP)			(Annual rate of change)		
	2016	2017	2018	2017	2018	Data up to July 2017 *
Total revenue	37.7	38.1	38.3	5.4%	4.5%	4.8%
<i>Of which:</i>						
Taxes on production and imports (e.g. VAT)	11.6	11.7	11.7	5.6%	4.0%	5.1%
Current taxes on income and wealth (e.g. Income Tax)	9.9	10.3	10.5	8.5%	6.0%	10.3%
Social Security contributions	12.2	12.2	12.2	4.5%	4.0%	4.9%
Total expenditure	42.2	41.2	40.6	1.8%	2.5%	0.1%
<i>Of which:</i>						
Payroll	10.8	10.6	10.2	1.9%	0.1%	0.5%
Unemployment benefits	18.1	17.8	17.5	2.4%	2.2%	0.0%
Interest payments	2.8	2.6	2.6	-3.4%	4.0%	-6.1%

Note: * Data for all public administrations, excluding local government corporations.

Source: CaixaBank Research, based on data from the 2018 Draft Budgetary Plan.

1. Expenditure by all public administrations, excluding local government corporations.

2. A forecast based on the historical elasticity (1998-2016) between these taxes and nominal GDP would be around 4.5%.

FOCUS · Spanish exports: growth and consolidation

During the Great Recession, weak domestic demand led to a large number of companies looking for business abroad as from 2010. As a result, exports of goods and services went from representing 25.5% of GDP in 2010 to 34.2% in Q2 2017 (and goods exports from 17.2% to 23.6%). Behind this growth in exports lies an increasingly internationalised set of companies. The question that now needs to be asked is whether this greater willingness of Spanish firms to export is likely to consolidate in the future.

To answer this question, first we need to distinguish between two very different periods in the growth of goods exports since the end of 2010. An initial phase of expansion, in the three-year period of 2011-2013, and another phase of consolidation as from 2014. In the expansionary phase, the total number of exporters increased, in net terms, by 41,797, up by 38.2% compared with the total in 2010. The fact that this net increase resulted from 215,136 companies starting to export and 173,339 companies stopping exports illustrates the high rotation among exporting firms (and the high company start-up and closure rate). The number of new exporters tended to rise during this period. On the other hand, the number of regular exporters, defined as those exporting for at least four years continuously and which tend to have less rotation, only increased by 2,405 in net terms, up by 6.2% compared with 2010.

By sector,¹ companies selling industrial products dominated this phase, accounting for almost all new exporters with an increase of 54.1% compared with the number of firms from this sector in 2010. As a result of this larger number of new exporters in the industrial sector, during the period 2011-2013 the average size of exports per company (the average export flow in euros) fell by 17.6% in this sector. This figure reflects the fact that new companies tend to export less in terms of value. In the rest of the sectors (agrifood, beverages and consumer goods), the net increase in the number of exporters was lower, around 20%. Since fewer new companies entered these sectors, their average export value increased slightly. Nevertheless, as a whole, industry's larger share (70%) meant that exporters' average export value fell by 8.7% overall. This initial expansionary phase was therefore characterised by a large number of newly created exporting firms while the increase in the number of regular exporters was much more moderate. Specifically, this rise was 11.2% for

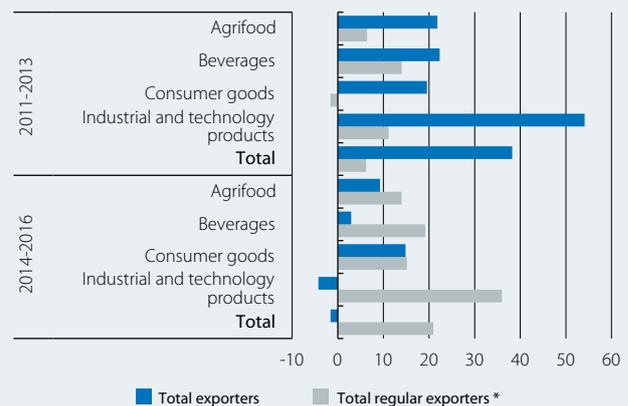
industry, 6.4% for food, 14.0% for beverages and a drop of 1.6% for consumer goods.

The second phase, as from 2014 and with data available up to 2016, is one of consolidation. Over the past three years the number of exporters has fallen in net terms by 2,366 companies, down 1.6% on the end of 2013. However, the number of regular exporters has increased by 20.8% and the average export value by 9.7%. Analysed by sector, this consolidation is stronger among industrial products, with an increase of regular exporters of 36.0% (9,549 companies) and of the average export value (8.2%) in 2014-2016. Consequently, this period's growth in exports cannot be explained by new exporters but by the consolidation and growth of existing firms.²

The food and consumer goods sectors have also consolidated, with a significant increase in regular exporters of 14.0% and 15.6%, respectively. However, unlike industrial products, the number of new exporters continues to rise (4.7% and 14.7%, respectively). This suggests these sectors still have a lot of potential. The food sector, traditionally with the largest exporters in terms of export flows in euros, grew in average size by 12.0% and, in terms of euros, has seen cumulative growth of 54.2% since the end of 2010, compared with 36.3% for total exports.

Total and regular exporters

Cumulative change in each period (%)



Note: * Regular exporters are those exporting over the past four years.

Source: CaixaBank Research, based on data from the Ministry of Trade.

1. Datacomex data are broken down into four sectors: industrial and technology products (70.0% share), which we call industrial products in this Focus; agrifood (15.5%); beverages (1.8%) and consumer goods (12.8%).

2. It should be noted that this analysis is general given the size and diversity of the industry and technology sector.

KEY INDICATORS

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

Activity indicatorsw

	2015	2016	4Q 2016	1Q 2017	2Q 2017	07/17	08/17	09/17	10/17
Industry									
Electricity consumption	1.7	0.1	-0.1	1.6	1.2	0.8	1.6	-1.5	...
Industrial production index	3.3	1.9	1.9	1.9	2.1	1.7	2.2	...	...
Indicator of confidence in industry (value)	-0.3	-2.3	-0.6	0.3	-0.5	-1.8	-0.6	2.1	2.5
Manufacturing PMI (value)	53.6	53.2	54.4	54.8	54.9	54.0	52.4	54.3	...
Construction									
Building permits (cumulative over 12 months)	20.0	43.7	36.9	24.5	18.4	21.9	23.2	...	...
House sales (cumulative over 12 months)	10.9	13.1	13.9	15.2	12.2	13.6	13.3	...	...
House prices	1.1	1.9	1.5	2.2	1.6	-	...	-	-
Services									
Foreign tourists (cumulative over 12 months)	5.6	8.2	10.1	10.0	10.2	10.4	10.1	10.3	...
Services PMI (value)	57.3	55.0	54.9	56.4	57.8	57.6	56.0	56.7	...
Consumption									
Retail sales	3.0	3.6	3.0	0.5	2.5	0.7	1.9	2.6	...
Car registrations	21.3	11.4	8.9	7.8	6.3	2.5	13.0	4.6	...
Consumer confidence index (value)	0.3	-3.8	-3.2	-2.8	1.5	2.0	-0.2	-1.1	-1.4

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

Employment indicators

	2015	2016	4Q 2016	1Q 2017	2Q 2017	07/17	08/17	09/17
Registered as employed with Social Security¹								
Employment by industry sector								
Manufacturing	2.2	2.8	2.8	3.0	3.1	3.1	3.1	3.2
Construction	4.7	2.6	3.3	5.3	6.1	6.3	5.8	6.3
Services	3.5	3.2	3.5	3.4	3.8	3.7	3.5	3.6
Employment by professional status		3.5						
Employees	3.5	3.5	3.8	4.0	4.4	4.2	4.1	4.1
Self-employed and others	1.9	1.0	0.9	0.9	0.9	0.8	0.7	0.8
TOTAL	3.2	3.0	3.3	3.4	3.8	3.6	3.4	3.5
Employment²	3.0	2.7	2.3	2.3	2.8	-	2.8	-
Hiring contracts registered³								
Permanent	12.3	14.2	13.3	15.4	10.2	10.6	9.8	12.7
Temporary	11.2	7.2	6.6	12.1	9.6	5.8	5.5	3.7
TOTAL	11.3	7.8	7.1	12.4	9.6	6.2	5.8	4.5
Unemployment claimant count³								
Under 25	-11.0	-12.6	-13.2	-13.3	-17.3	-11.9	-9.5	-6.7
All aged 25 and over	-7.2	-8.2	-9.0	-9.2	-10.3	-9.2	-8.4	-8.5
TOTAL	-7.5	-8.6	-9.4	-9.6	-10.9	-9.4	-8.5	-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

	2015	2016	4Q 2016	1Q 2017	2Q 2017	07/17	08/17	09/17	10/17
General	-0.5	-0.2	1.0	2.7	2.0	1.5	1.6	1.8	1.6
Core	0.6	0.8	0.9	1.0	1.1	1.4	1.2	1.2	...
Unprocessed foods	1.8	2.3	1.0	4.1	2.5	-1.0	-1.6	2.2	...
Energy products	-9.0	-8.4	1.6	15.3	8.0	4.1	6.3	5.8	...

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

	2015	2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	07/17	08/17
Trade of goods								
Exports (year-on-year change, cumulative over 12 months)	4.3	1.7	1.8	1.7	5.1	5.6	6.8	6.9
Imports (year-on-year change, cumulative over 12 months)	3.7	-0.4	-0.3	-0.4	3.7	5.7	7.7	8.2
Current balance	12.2	21.5	19.3	21.5	21.6	21.0	20.9	20.7
Goods and services	25.3	33.7	31.9	33.7	32.0	32.3	31.7	32.0
Primary and secondary income	-13.1	-12.2	-12.6	-12.2	-10.4	-11.3	-10.8	-11.2
Net lending (+) / borrowing (-) capacity	19.2	24.2	24.4	24.2	24.1	23.1	23.0	22.8

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

	2015	2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	07/17	08/17
Net lending (+) / borrowing (-) capacity¹	-5.3	-4.5	-2.9	-4.5	-0.4	-2.2	-	-
Central government	-2.6	-2.7	-2.6	-2.7	-0.4	-1.1	-1.9	-1.8
Autonomous regions	-1.7	-0.8	-0.1	-0.8	-0.2	-0.7	0.0	0.1
Local government	0.4	0.6	0.5	0.6	0.1	0.2	-	-
Social Security	-1.2	-1.6	-0.6	-1.6	0.1	-0.5	-0.5	-0.6
Public debt (% GDP)	99.4	99.0	99.9	99.0	99.9	99.8	-	-

Note: 1. Includes aid to financial institutions.

Source: CaixaBank Research, based on data from the IGAE, Ministry of Taxation and Bank of Spain.

Credit and deposits in non-financial sectors¹

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

	2015	2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	07/17	08/17	09/17
Deposits²									
Household and company deposits	-0.6	2.5	3.2	3.0	3.2	2.5	1.3	2.3	2.6
Sight and savings	14.7	16.0	15.7	16.2	18.6	18.8	16.3	17.2	17.3
Term and notice	-16.3	-16.0	-15.1	-17.7	-22.0	-24.9	-25.1	-25.1	-25.0
General government deposits	6.7	-14.2	-9.4	-29.1	-28.0	-26.7	1.8	8.9	9.4
TOTAL	-0.2	1.2	2.4	0.4	1.0	0.5	1.4	2.6	3.0
Outstanding balance of credit²									
Private sector	-5.5	-3.6	-3.3	-3.2	-2.7	-2.2	-2.5	-2.4	-2.2
Non-financial firms	-7.3	-5.3	-5.2	-5.2	-4.3	-3.2	-4.0	-4.0	-3.8
Households - housing	-4.6	-3.7	-3.3	-3.1	-3.0	-2.8	-2.8	-2.7	-2.7
Households - other purposes	-2.6	2.0	3.1	2.9	3.6	3.1	2.8	3.2	3.9
General government	0.2	-2.9	-2.2	-2.7	-3.2	-12.6	-11.6	-10.8	-12.1
TOTAL	-5.2	-3.6	-3.2	-3.2	-2.7	-2.9	-3.2	-3.0	-2.9
NPL ratio (%)³	10.1	9.1	9.2	9.1	8.8	8.4	8.5	8.5	...

Notes: 1. Aggregate data from Spain's banks. 2. Residents in Spain. 3. Data up to end of period.

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

BUBBLES AND FINANCIAL STABILITY

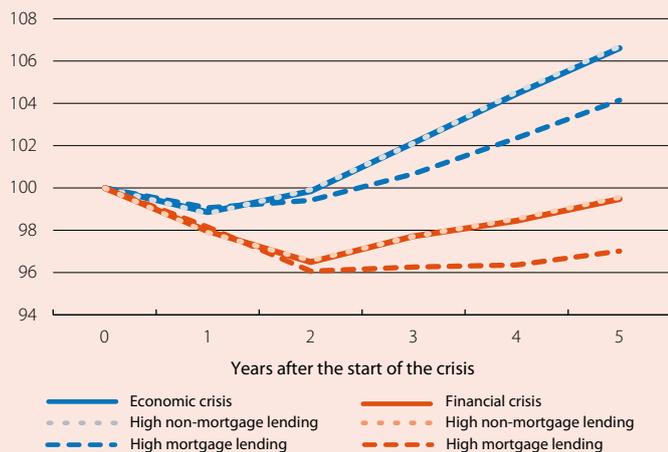
Financial instability and the business cycle

The financial crisis represented a watershed in prevailing macroeconomic thought. For many years the analysis of economic fluctuations ignored the financial system. Logically, the financial crisis changed that. Now, almost 10 years after the start of the crisis, the time has come to examine the current cycle. Have we learned from the errors of the past or are we sowing the seeds of the next financial crisis? By way of a summary, this article shows that the severity of financial crises is related to rate of growth of credit, particularly that of mortgages, preceding such crises. We will focus on presenting new, recently published empirical evidence rather than discussing the mechanisms that might lead to financial instability. We also show that, although credit does not appear to have reached an alarming level in most developed economies, it could be a problem in some emerging countries.

Assessing the robustness of the financial sector throughout the business cycle and how this might affect the economy as a whole could require monitoring a large number of variables. However, the economist Borio¹ suggests this interrelationship is essentially reflected in the cyclical behaviour of bank lending to the non-financial private sector (credit, henceforth) and house prices. On the one hand, Borio shows that financial crises tend to be preceded by periods of strong growth in credit and property prices. On the other hand, Jordà, Schularick and Taylor, based on data from 17 advanced economies between 1870 and 2013, show that economic and financial crises preceded by above-average growth in credit tend to be longer and more severe than those preceded by below-average growth.²

Real GDP per capita

Index (100 = start of the crisis)



Source: CaixaBank Research, based on data from Jordà et al. (2016).

But not all types of credit seem to affect the business cycle in the same way. The central role played by mortgages in the financial system after the Second World War (WWII) has, in turn, altered their impact on the business cycle.³ First, there is evidence to suggest that mortgage booms may be a source of financial instability. This can be inferred, for instance, from the fact that the dynamics of mortgage credit have gone from being a relatively poor predictor of a financial crisis in the pre-WWII period to being a good indicator in the post-WWII sample.⁴ Second, mortgage booms, in these cases that have been followed by an economic recession, have had much more severe economic consequences than those preceded by booms in other types of credit (see the first chart).⁵

Nevertheless, this last conclusion needs to be qualified. Although empirical evidence suggests that mortgage lending could be a source of financial instability, the risk entailed by this type of credit depends crucially on the regulatory and

institutional framework of a country's financial sector. According to the IMF, the degree and quality of financial regulation and supervision and less dependency on foreign-currency-denominated loans are, among others, key factors in mortgage lending having a positive effect on economic growth.⁶

At this point, however, we must ask whether, in the current expansionary phase spreading throughout the world, the errors of the past are once again being committed. In this discussion, we focus on the trend in credit and property prices (which has a high

1. Borio, C. 2014, «The financial cycle and macroeconomics: what have we learnt?», *Journal of Banking and Finance*, no. 45.

2. Jordà, Ò., Schularick, M. and Taylor, Alan M. (2016a), «Macrofinancial History and the New Business Cycle Facts», *NBER Macroeconomics Annual*, vol. 31, no. 1.

3. According to the database of Jordà et al., mortgage lending has gone from representing around 40% of the total credit to GDP ratio between 1870 and 1940 to 56% between 2000 and 2013. This is partly due to a higher proportion of households owning their own home. There are several reasons behind this phenomenon, including changes in the tax treatment of house purchases and in bank capital requirements for mortgage loans.

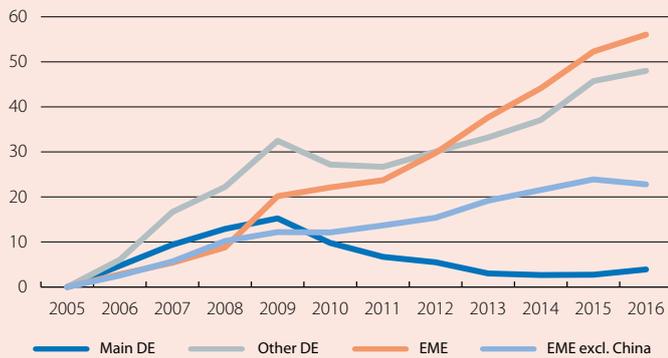
4. Jordà, Ò., Schularick, M. and Taylor, Alan M. (2016b), «The Great Mortgaging: Housing Finance, Crises, and Business Cycles», *Economic Policy*, vol. 31, no. 85.

5. This last point is similar to the conclusion reached by Jordà et al. (2015) in their article «Leveraged Bubbles». There the authors show that the bursting of the financial bubble results in a much more virulent crisis if this bubble was accompanied by a credit boom. The authors also show that the most severe crises have been those following the bursting of a real estate bubble financed by a mortgage lending boom.

6. IMF (2017), «Global Financial Stability Report», October.

Bank lending to the non-financial private sector as a ratio to GDP

Deviation compared with 2005 figure (pp)

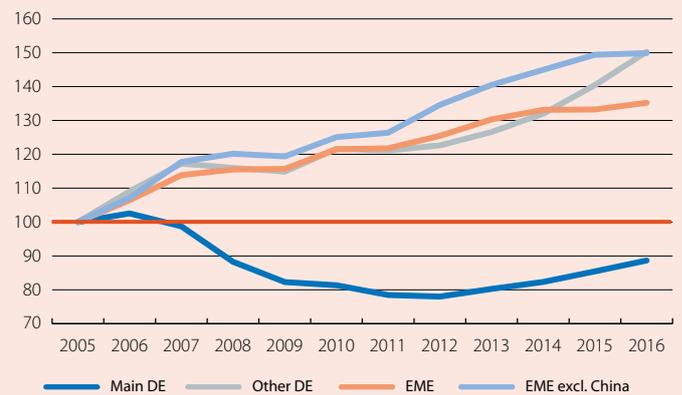


Note: Main DE include the euro area, UK, Japan and US. Other DE include Australia, Canada, Denmark, Norway, New Zealand, Sweden and Switzerland. GDP-weighted averages adjusted for purchasing power parity.

Source: CaixaBank Research, based on data from BIS.

Price of housing

Index (100 = 2005)



Note: Main DE include the euro area, UK, Japan and US. Other DE include Australia, Canada, Denmark, Norway, New Zealand, Sweden and Switzerland. GDP-weighted averages adjusted for purchasing power parity. Housing prices are CPI deflated.

Source: CaixaBank Research, based on data from BIS.

correlation with mortgage lending, see Borio¹). The second chart plots the percentage point difference relative to the 2005 value of the ratio of bank lending to the non-financial private sector to GDP of the main advanced economies, other developed economies, emerging economies and emerging economies excluding China (on the left) and growth in property prices (on the right).

The chart illustrates that, after a period of consolidation resulting from the financial crisis, the leverage ratio in the main advanced economies picked up slightly in 2016, although the level is still clearly below the peak observed just before the crisis. Regarding property prices, although these have tended to rise since 2013, they are still below their pre-crisis level. This is not the case for the other developed countries, however. These countries were not so hard hit by the financial crisis, limiting their deleveraging. In some cases their economies have also been boosted by the ultra-accommodative monetary conditions provided by the policies of the main central banks, such as the Fed and the ECB, or in other cases by the slump in oil prices and other commodities. In these countries, both leverage ratios and property prices are high. Finally, China stands out among the group of emerging economies. If we exclude China from the group, we can see that, in the last year, both the leverage ratio and property prices have started to moderate their growth, largely due to the economic crises in Brazil and Russia. However, if we include China, we can see that credit has soared.⁷

Nevertheless, a longer-term perspective raises concerns, even among those countries that have deleveraged as a result of the crisis. The IMF notes that, in a context of accommodative monetary policies and improved macroeconomic figures, lower volatility in the financial markets and compressed interest rates could intensify the expansionary cycle of credit.⁸

In short, all the indicators we have reviewed in this article suggest that financial system risks seem to have gravitated from the main developed economies towards those countries that were not in the epicentre of the financial crisis, particularly China. Nevertheless, due to the extensive integration of the world's financial systems, this represents a global risk. Given the how damaging financial crises can be, we should seize the opportunity provided by today's favourable macroeconomic conditions to implement policies that increase the financial system's resilience.

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7. According to BIS data, between 2007 and 2016, China's leverage ratio grew by 70 pp to 166% of GDP.

8. IMF (2017), «Global Financial Stability Report», October.

Bubble economics: an analysis looking into effervescent prices

In economics, one of the most fascinating areas of study is economic and financial bubbles. All societies in which goods have a price run the risk of substantial deviations from what might be deemed a reasonable price. But what is a bubble and why are they important? These questions are more relevant than might first appear. The notion of a bubble has tended to be used too lightly in economics. It is actually a sophisticated concept which, even today, causes heated debate between prominent economists. This article examines the keys to bubble economics. However, a few points need to be clarified first.

Stages in the US dot.com bubble

Nasdaq index (100 = January 1971)



Source: CaixaBank Research, based on data from the Federal Reserve Bank of Saint Louis.

To start with, there is no universal definition of what a bubble is. They are often defined as situations in which there is a substantial and sustained deviation in an asset's price from its fundamental value. This serves as a starting point but it does not tell us how big the deviation must be and particularly how the fundamental value is calculated. Even the Nobel prize-winner Eugene Fama has claimed that it is impossible to define when a bubble exists. Although an asset's fundamental or intrinsic value is defined as the present discounted value of expected future flows, estimating this value is a Herculean task and complicates the analysis considerably. Estimates of fundamental value may vary as they are based on expected future returns and interest rates, a variable which may also be affected by monetary policy changes at any given time (for more details see the article «US equity prices: a cause for concern?» in this Dossier).

Nevertheless, economists tend to analyse bubbles using a five-stage model proposed by the academics Kindleberger and Minsky in the 1970s. According to their model, a bubble begins with an «initial displacement»; i.e. a new technology or financial innovation that improves the prospective price of a certain asset. Subsequently a «boom» occurs when the asset's price starts to rise and deviate from its fundamental value. In the third stage, «euphoria», investors trade frenetically in the asset and prices soar. Many investors buying the asset realise it may be overvalued but they believe its price will go on rising. In the fourth stage, «profit-taking», more experienced investors sell out their positions in the overvalued asset to make a profit and the price rise eases. Finally, we reach the «panic» stage, with a sharp drop in price and severe losses incurred by those investors who did not «jump off» the bubble in time.

Now that we have explained what bubbles are, we also need to classify them. Economics literature differentiates between two types: rational and irrational. The former occur in economies with rational economic agents. This means that agents properly process all the available information in the markets and take optimal decisions based on it. But, if we assume all individuals are rational, why are there still bubbles? Economics literature has come up with several theories to explain this apparent paradox. One of the most appealing suggests that some individuals prefer to keep hold of an asset, even though they realise there is a bubble, because they believe a lot of investors are still unaware of its existence. Such investors expect prices to rise even further. The key lies in jumping early enough, before enough investors are ready for bursting the bubble.

In contrast to the rational models, behavioural economics claims that bubbles are irrational. To justify this claim, several cognitive dysfunctions are said to occur in decision-making. For instance, the tendency of some investors to invest according to recent performance (trend-chasing bias) or to overestimate their own ability in making projections (overconfidence). Such dysfunctions mean that different investors have very different expectations for the same financial asset because they process the available information differently. The economist Robert Shiller coined the term «irrational exuberance» to describe such behaviour. This can create bubbles since optimistic investors who decide to buy an asset because they expect its price to increase can considerably push up the price.

Some economists have carried out laboratory experiments to study how and when bubbles are created and their findings are certainly interesting. Smith, Suchanek and Williams¹ were the first to run such an experiment. Participants were assigned

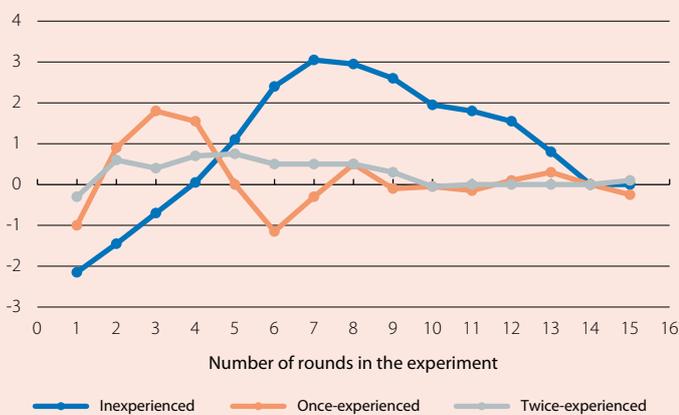
1. See Smith V. L., Suchanek, G. and Williams A. W. (1988), «Bubbles, crashes and endogenous expectations in experimental spot asset markets», *Econometrica*, vol. 56, no. 5.

different amounts of money to invest in a fictitious financial asset that paid out dividends over 15 trading periods from a probability distribution known by all the participants. In the experiment, participants could buy and sell the asset in each round via an auction. A lot of trading took place during the experiment. The classic bubble pattern was observed with positive, significant price deviations compared with its fundamental value in the initial stages and correction in the final stages, with a sharp drop in prices. This finding is important as it shows that, even when all agents have the same expectations about an asset's dividends, bubbles can occur. Some economists have seen this as conclusively supporting the theory of irrational bubbles. A subsequent study with a very similar design ran the experiment three times in a row. The result was that bubbles occurred when participants were taking part in the experiment for the first time. However, as they participated more, these bubbles disappeared.² This suggests that bubbles may occur due to confused, inexperienced investors who do not have a full grasp of how markets work.

Having explained the different types of bubble, we now need to look at their impact on the economy. They can have positive and alleviate constraints. Some economists argue that bubbles, while they expand, can stimulate productive investment since they reduce credit restrictions on some investors with good ideas but limited capital.³ However, these potentially positive effects are

Bubbles and laboratory experiments

Price minus fundamental value (monetary units) *



Note: * The fundamental value is the current value minus the future dividends for the asset in each period. Participants took part in three 15-period sessions. During each session they traded the asset in the laboratory.

Source: CaixaBank Research, based on data from Hussman, R., Porter, D. and Smith, V. (2008), «Thar She Blows: Can Bubbles Be Rekindled with Experienced Subjects?», American Economic Review.

short-term and completely vanish once the bubble bursts, with severe repercussions for the business cycle. This is because bubbles distort the decisions taken by economic agents. As a result, some take wrong decisions, which ends up harming the economy. Since the 1950s, 91% of financial crises and 63% of recessions have been associated with bubbles.⁴

Before concluding, it is useful to look at some of the most prominent bubbles in history. One of the first occurred in the Netherlands in the 16th century, with tulips imported from the Ottoman Empire. These flowers soon became a national symbol, resulting in tulipmania. Between November 1636 and February 1637 the price of tulips rose twenty-fold, before dropping sharply. In fact, at the bubble's peak, a single tulip was sold for the equivalent of USD 60,000 in today's prices! Another prime example is the South Sea Bubble. In this case a British company, the South Sea Company, persuaded a large number of investors that its strategy would earn them huge profits since it had a monopoly to trade with the Spanish

colonies in Latin America. The euphoria created multiplied the company's stock by 700% in the first half of 1720. But the company directors started to sell their shares when they realised the exaggerated share price far outweighed the actual business prospects. The company's stock consequently collapsed. More recent examples are the dot.com bubble which burst in the year 2000, and the real estate bubble leading to the 2008 financial crisis in the US.

In summary, the study of bubbles is currently in vogue, both due to their powerful implications for the business cycle and also to the need for greater insight into how prices are formed. Nevertheless, bubble phenomena are still relatively shrouded in mystery and can puzzle many economists. This should come as no surprise. Even back in 1720, after losing GBP 20,000 in the South Sea Bubble, the famous physicist, Isaac Newton, said «I can calculate the motion of heavenly bodies, but not the madness of people».

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2. See Hussman, R., Porter, D. and Smith, V. (2008), «Thar She Blows: Can Bubbles Be Rekindled with Experienced Subjects?», American Economic Review 98:3.

3. See Martín, A. and Ventura, J. (2014), «Managing credit bubbles», IMF Working Paper.

4. See Jordá, O., Shularick, M. and Taylor, A. (2015), «Leveraged Bubbles», Journal of Monetary Economics.

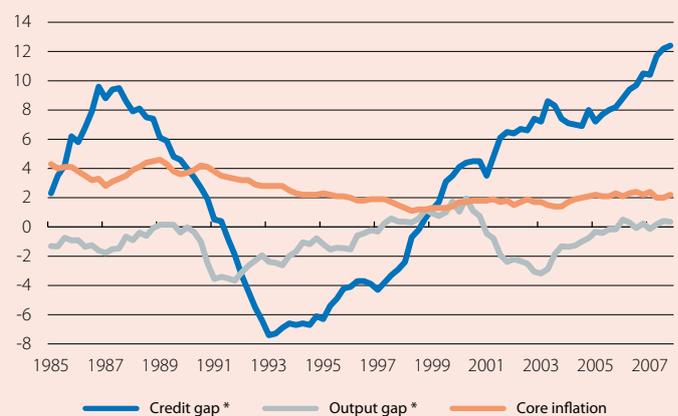
Economic policy against financial instability

In the 20th century, economic policy was affected by two big events: the Great Depression from 1929 to 1939 and stagflation¹ in the 1970s. The US saw its highest unemployment rates in the whole of the 20th century in both these episodes, over 25% in 1933, 20% in 1938 and 10.8% in 1982. Both events shook the theoretical pillars of economics and the role played by economic policy. Keynesianism appeared after the Great Depression, emphasising demand-oriented economic policies, while stagflation gave rise to a neoclassical revolution and a new consensus that gave monetary policy the responsibility of ensuring moderate, stable inflation. This consensus survived until the next big event, which occurred in 2007 with the outbreak of a global financial crisis and the Great Recession (2007-2009), resulting in the highest peak in unemployment since the 1980s. This article shows how financial instability is a key factor in understanding the changes in economic policy brought about by this last episode.

The macroeconomic consensus emerging in the 1980s gave economic policy the role of stabilising inflation and GDP growth. In fact, economists believed the financial sector tended naturally to self-stabilise, as far as financial stability was concerned economic policy limited itself to supervising the robustness of the main institutions. However, as can be seen in the chart, significant financial imbalances built up between 2002 and 2007, albeit latently behind stable inflation and economic growth figures. The fact that different financial subsectors also became increasingly interrelated also gave rise to sources of systemic risk which supervisory authorities were oblivious to since they lacked an overall view of the situation. For instance, subprime mortgages only accounted for 4% of the US mortgage market but triggered a crisis that affected a large part of the world's financial sector. Lastly, the severity of the Great Recession called the prevailing consensus into question, revealing that financial instability has significant repercussions on macroeconomic stability. In fact, as detailed in the article «Financial instability and the business cycle» in this Dossier, evidence is mounting regarding the links between financial instability and the state of the real economy throughout history. In the past few years, a new consensus has emerged in which financial stability is considered necessary to ensure macroeconomic stability. The question is which policies or instruments should be used.

Economic policy's first response has been to strengthen regulation and prudential policies. These can be both micro, focusing on the individual health of each institution, or macro, with an overall view of the system. Instruments have been designed to lessen sources of systemic risk, build up buffers during expansionary periods (providing greater leeway in recessions) and contain financial imbalances, such as debt that is excessive and/or based on volatile sources of funding, with the potential to cause instability. Microprudential policies have essentially been aimed at increasing capital and liquidity requirements and introducing new resolution mechanisms. Today's financial institutions must have more capital of higher quality. Stricter liquidity requirements have also been put in place to ensure institutions have enough good quality liquid assets to withstand the initial onslaught of a bank run. They must also have sufficient access to stable sources of funding that will not evaporate at times of stress.² Macprudential policies, on the other hand, have focused on designing instruments to prevent financial imbalances from emerging in the system as a whole. For instance, the introduction of capital requirements and leverage ratios that vary throughout the cycle. These act as a brake during times of expansion and force buffers to be built up, while restraining overheating and cushioning the effects of a recession. Regulations also allow authorities to set capital surcharges and other limits on lending to certain sectors, which can be tightened up as the business cycle progresses.

US: measures of macroeconomic and financial stability
(%)



Note: * Above-potential growth in credit and economic activity, respectively.

Source: CaixaBank Research, based on data from the Bank of International Settlements, US Congressional Budget Office and US Bureau of Economic Analysis.

1. Period of high inflation and low economic growth, in the US characterised by four recessions in just over a decade (1969-1970, 1973-1975, 1980 and 1981-1982).

2. The liquidity coverage ratio requires banks to keep enough high-quality liquid assets to withstand, in a stress scenario, possible net outflows of cash during a 30-day period.

On the whole, all these measures should help reduce the likelihood and severity of financial crises. Those banks with the best positions in terms of capital and liquidity, both in the US and the EU, experienced fewer bankruptcies during the last crisis. After the crisis they also contributed towards the macroeconomic recovery by granting more credit.³ However, evidence regarding the effectiveness of such measures is still limited as they are relatively recent. They also make the regulatory framework more complicated, give regulatory authorities discretionary powers and are subject to regulatory arbitrage problems. Because they restrict a sector's room to manoeuvre, they encourage companies to move their business outside the regulator's scope (so-called shadow banking).⁴ Given such weaknesses, several economists have suggested that monetary policy would be a good alternative since this is passed through the whole universe of financial assets, thereby preventing regulatory arbitrage.⁵ To this end, it has been proposed that central banks fix their benchmark interest rates with the explicit aim of ensuring financial stability (as well as achieving macroeconomic stability in terms of inflation and, in some cases, GDP growth).

Using monetary policy to ensure financial stability means paying less attention to price stability. This would therefore involve higher interest rates⁶ and, consequently, has drawbacks in terms of lower inflation and somewhat weaker economic growth. The advantage is that financial crises would be less likely and less severe.⁷ The IMF believes that monetary policy has little power to prevent financial imbalances. To be effective, it would require significantly greater interest rate movements than those required to stabilise inflation and economic activity.⁸ There is also a lot of uncertainty regarding these estimates because financial crises that are preceded by a bubble and end up in recessions do not occur very often. In a group of 17 developed economies, Jordà, Shularick and Taylor identify just 14 recessions preceded by a financial crisis and a real estate bubble since 1945.⁹ An additional difficulty for using monetary policy to ensure financial stability is that it can damage a central bank's credibility. The costs, in terms of below-optimum inflation and lower economic growth, are immediately evident but the benefits are difficult to measure because they occur in the future and involve something not happening. Monetary policy would impose a permanent obstacle when, in reality, not all financial crises entail the same macroeconomic cost (for example, the dot.com crisis in 2001 had few macroeconomic repercussions). Finally, one of the reasons why the pre-crisis macroeconomic consensus defended not using monetary policy to attack bubbles is that these are difficult to identify in advance. However, monetary policy needs to be implemented beforehand because its effects take time to filter down through the economy.

In conclusion, the new prudential policies provide a first line of defence which can be adjusted to the particular requirements of each situation. But, so far, they have not been used enough to confirm their effectiveness. Whether monetary policy might still have a complementary role to play, even though it is not the most precise instrument available, is still open to debate. In any case, financial instability and its links to macroeconomic stability are once again centre stage in economic policy.

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3. Haldane, A. G. (2017), «Rethinking financial stability», speech at the Peterson Institute for International Economics.

4. Institutions which carry out financial transactions outside the regulatory framework of traditional financial institutions, such as hedge funds and structured investment vehicles.

5. See, for instance, Juselius, M. *et al.* (2017), «Monetary Policy, the Financial Cycle, and Ultra-Low Interest Rates», *International Journal of Central Banking*.

6. Higher interest rates make debt more expensive and cool down growth in credit.

7. Svensson, E. O. (2017), «Cost-Benefit Analysis of Leaning against the Wind», NBER Working Paper, estimates that the costs are greater than the benefits. On the other hand, Gourio, F., Kashyap, A. and Sim, J. (2017), «The Tradeoffs in Leaning Against the Wind», NBER Working Paper, estimate that the benefits are greater than the costs.

8. IMF (2015), «Monetary Policy and Financial Stability», Staff Report. Along the same lines, see also Ajello, A. *et al.* (2016), «Financial Stability and Optimal Interest-Rate Policy», Federal Reserve Finance and Economics Discussion Series, and Svensson (2017).

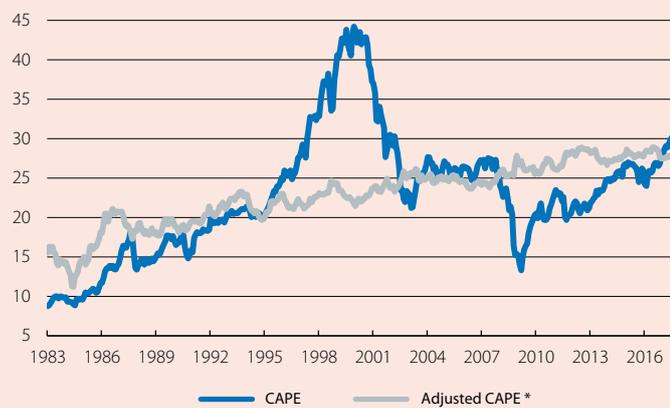
9. Jordà, O., Shularick, M. and Taylor, A. (2015), «Leveraged Bubbles», *Journal of Monetary Economics*.

US equity prices: a cause for concern?

Since the beginning of the year, the main US equity indices have posted all-time highs. The S&P 500 has increased by over 200% since Q1 2009, when the main stock market indices began to pick up, more than 14% in annualised terms. The Dow Jones trend has been similar while the Nasdaq has performed even better, up by more than 330%, almost 19% in annualised growth terms. This prolonged and sustained rise in equity prices has raised doubts and concerns about its sustainability and possible decoupling from economic fundamentals. The Bank of America Merrill Lynch fund manager survey warns that the vast majority of investors believe the stock market is overvalued.

While accurately identifying a financial bubble as it is forming is no easy task, a number of indicators can help us gauge whether assets are overpriced. In general, there are two types of indicators. The first reflect investor behaviour and investment strategies. For example, a search for short-term yield. Such behaviour tends to be accompanied by a decoupling of the observed asset price and its long-term fundamental or sustainable value. One of the benchmark indicators is the proportion of margin debt. Recent developments in the US are a clear warning sign. Margin debt totalled almost USD 600 billion in August according to official New York Stock Exchange data. This is a record figure, much higher than the figure before the dot.com bubble burst and the 2007 financial crisis erupted.

S&P 500: CAPE ratio and adjusted CAPE ratio *



Note: * CAPE predicted by the long-term interest rate.

Source: CaixaBank Research, based on data from Robert J. Shiller and Bloomberg.

However, attention should also be paid to indicators which, more directly, attempt to assess whether an asset's price is in line with its fundamental value. As discussed in the article «Bubble economics: an insight into effervescent prices» in this Dossier, estimating an asset's fundamental value is far from straightforward. This requires the calculation of the present value of expected future cash flows. The CAPE ratio (Cyclically Adjusted Price to Earnings), developed by Nobel Economics Prize winner Robert J. Shiller and measuring the relationship between share price and average corporate earnings over the past 10 years, is often used as a benchmark in assessing whether the stock market is moving away from its fundamental value. The S&P 500 now has a CAPE ratio of over 31 points, well above its historical average of around 17. The current CAPE ratio is actually close to the levels observed in the 1929 crisis. Nevertheless, it is still far from the peak reached before the most recent bubble, the dot.com, in the 2000s (see the first chart).

The overvaluation suggested by these indicators may be qualified by certain factors, however. First, technology stock seems to be particularly overvalued, especially since mid-2016 (see the second chart). Second, while a large margin debt levels may seem worrying at first glance, this does not always mean that a bubble is forming. In fact, according to figures dating back to 1959, every time margin debt has reached an all-time high, the S&P 500 was just as likely to post a positive return one year forward as after a month without record-breaking levels of margin debt.

Finally, a third element to take into account when assessing high equity prices is the current environment of low interest rates and especially the fact that this situation is unlikely to change to any great extent for some time to come. In an environment where interest rates are expected to remain very low, the present value of future cash flows increases.

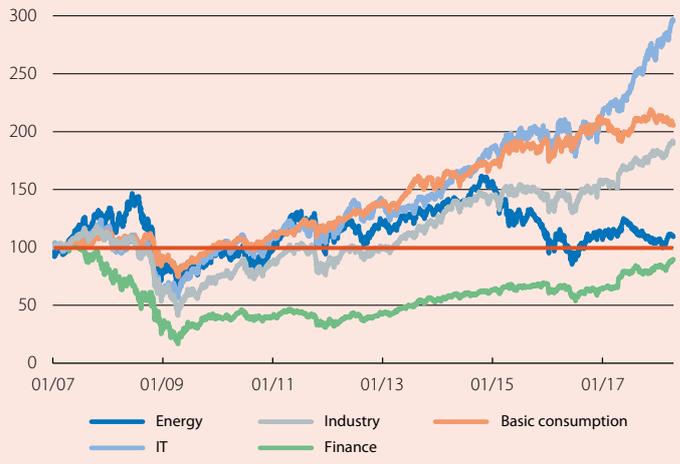
The extent to which current stock prices have been affected by this downward correction in long-term interest rates can be assessed and highlighted using a simple but illustrative exercise. Estimating the historical relationship between the CAPE ratio and long-term interest rates provides a CAPE ratio adjusted for long-term interest rates (10-year US Treasury bonds) at each point in time. In other words, the adjusted CAPE series shows the CAPE ratio predicted by long-term interest rates over time. As can be seen in the first chart, the adjusted CAPE series fluctuates much less. Episodes in which the actual CAPE ratio is clearly higher than its adjusted ratio can be interpreted as times when valuations were not due to the interest rate environment. At present, the CAPE ratio is not much higher than its adjusted figure, suggesting that the current low interest rate environment is extensively affecting share prices.

Consequently, equity does not seem to be as overvalued as it looks as long as interest rates end up being as low as the market expects. However, while there is some consensus that interest rates are very likely to remain below their historical average in the coming years, just how big this downward adjustment will be is very uncertain.¹ Should interest rates eventually be higher than market expectations, this could lead to a correction in US stock market indices.

Another simple exercise helps to gauge the extent of this phenomenon. If the long-term interest rate suddenly changed to 4% (it is currently around 2.4%), the historical relationship between the CAPE ratio and interest rates suggests that the S&P 500 would fall by approximately 17%.² Naturally, this hypothetical exercise should be taken with due caution. For example, it does not take into account the reasons for this hypothetical rise in long-term interest rates, let alone the consequences for economic activity as a whole. Interest rates are actually expected to rise gradually as economic activity and corporate earnings grow. In any case, at current CAPE levels, very large gains cannot be expected in the future since history suggests that, at times of high CAPE ratios such as those currently observed, the expected return for the US stock market over the following 10-year period is around 5% per year (see the third chart).

S&P 500: trend by sector

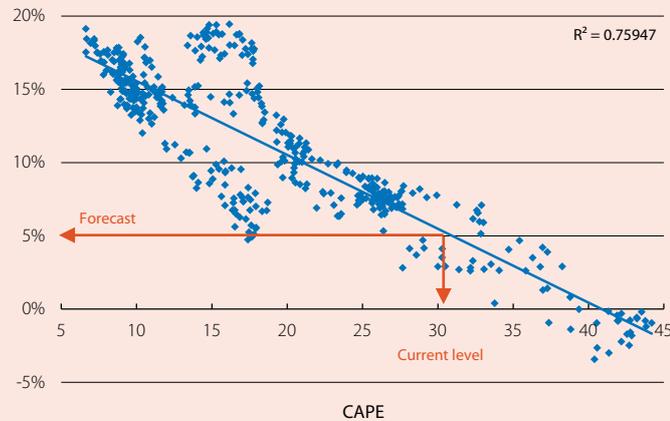
Index (100 = January 2007)



Source: CaixaBank Research, based on data from Bloomberg.

S&P 500: CAPE ratio and long-term performance

10-year performance (annualised)



Source: CaixaBank Research, based on data from Bloomberg.

At present, the US stock market is also sensitive to two additional factors: geopolitical uncertainty, such as the tensions with North Korea, and the reforms proposed by the Trump administration. Over the coming weeks, Congress is expected to approve a tax reform which has been warmly received by investors. However, the other electoral measures proposed, such as boosting public investment or a shift towards a more protectionist trade policy, have yet to be implemented.

All in all, there is every indication that the uncertainty surrounding high share prices in the US will continue over the coming months. In the short term, questions regarding the new equilibrium interest rate will not be resolved, while the uncertainty due to geopolitical factors and the Trump administration's agenda is unlikely to disappear. However, the risks appear to be imbalanced and a correction is more likely than a continuing upward trend in equity prices.

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1. See the Focus «Monetary policy frameworks for the future» in MR10/2017.
2. Earnings over the past 10 years are assumed to remain constant.

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CAIXABANK GROUP: KEY FIGURES

As of 31 March 2017

	MILLION €
Customer funds	338,053
Loans and advances to customers, gross	227,934
Profit attributable to Group, YTD	403
Market capitalisation	24,085
Customers (million)	15.8
Employees	37,638
Branches	5,525
Branches in Spain	4,990
Self-service terminals in Spain	9,461

"la Caixa" BANKING FOUNDATION COMMUNITY PROJECTS: BUDGET 2017

	MILLION €
Social	304.2
Excellence in research and training	79.6
Raising awareness of culture and knowledge	126.2
TOTAL BUDGET	510

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