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MONTHLY REPORT • ECONOMIC AND FINANCIAL MARKET OUTLOOK

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ECONOMIC & FINANCIAL ENVIRONMENT

DOSSIER: THE CONSEQUENCES OF INEQUALITY

CaixaBank Research

MONTHLY REPORT - ECONOMIC AND FINANCIAL MARKET OUTLOOK
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The issue of inequality

All democratic societies decide, to some extent, what degree of inequality they wish to live with. To this end they use policies that promote equal opportunities and help to achieve minimally acceptable living conditions for all citizens. Education, healthcare, pensions, progressive taxes, unemployment subsidies and mandatory minimum wages are all examples of measures with a decisive impact on the distribution of wealth and social welfare. After three decades of increasing inequality in most advanced economies, and with the entailed risk of creating social division and a potential breeding ground for populist ideologies, discussion regarding how to put a stop to growing inequality has been gaining in both strength and substance.

Although it is true that most of this decline in equality was concentrated in the 1980s and 90s and the change has been greater in certain countries such as the US, the overall trend in developed countries has been towards more inequality. A trend that reflects a faster rate of growth in wages (after tax and transfers) within the top income deciles compared with the middle and especially the bottom deciles. In turn, this increasing dispersion in wealth results from the uneven evolution of earnings: essentially the wages of higher-paid workers have grown faster than those of lower-paid workers.

Although there are many different causes, two stand out in particular: technological changes and economic globalisation. On the one hand, technological changes, for instance associated with the digital revolution, have favoured more highly educated workers and their earnings, which were already among the highest at the outset. For many years the demand for qualified labour has grown at a faster rate than the availability of this type of worker (what has been described as a «race between education and technology»), creating what is known as the education premium. On the other hand, economic globalisation has affected the distribution of wealth in advanced economies by reducing the demand for less qualified workers who compete directly (via relocations) or indirectly (via imports) with workers from emerging economies. At the same time, economic globalisation has increased market size and thereby pushed up the wages of more highly qualified workers as their productivity has grown (for example, the revenue produced by big football stars for their teams).

Other factors which may have also had an impact on the development of inequality, although the evidence is less conclusive, include lower minimum wages and the liberalisation of some sectors which, when they were protected from competition, used to generate monopolistic rents and could afford to pay higher wages. On the other hand, public policies do not seem to have lessened their efforts to redistribute wealth over the last 30 years, so they do not appear to be responsible for the rise in inequality.

Policies aimed at curtailing the rise in inequality must take into account the reasons underlying this trend. In this respect, given the relevance of technological changes and globalisation, policies related to education and to the labour market are of the utmost importance, such as encouraging continued training and programmes to supplement the lowest wages or support those workers hardest hit by globalisation. All this does not necessarily mean more spending; in many cases it is enough to spend better.

Neither should we ignore the usefulness of public policies that encourage economic growth and generate wealth and employment. In short, policies that determine the size of the cake to be shared out. The goal should not be for everyone to be equally poor or to redistribute poverty but to achieve, as far as possible, greater upward equality.

Enric Fernández
Chief Economist
31 December 2016

CHRONOLOGY

DECEMBER 2016

4 Italy holds a referendum, resulting in the rejection of the proposed constitutional reform. The Prime Minister, Matteo Renzi, resigns and is replaced by Paolo Gentiloni.
8 The ECB prolongs QE up to December 2017 and reduces its monthly asset purchases from 80 to 60 billion euros as from April.
14 The US Federal Reserve raises the fed funds rate by 25 bps to 0.50%-0.75%.
22 The Italian bank, Monte dei Paschi di Siena, fails in its attempt to increase its capital by 5 billion euros and the Italian government creates a 20 billion bailout fund to prop up the country's banking sector.

NOVEMBER 2016

8 Donald Trump is elected President of the US.
30 OPEC members reach an agreement to cut oil production to 32.5 million barrels a day.

OCTOBER 2016

29 Mariano Rajoy is sworn in as President of the Spanish government.

SEPTEMBER 2016

21 The Bank of Japan readjusts its ultra-expansionary monetary policy instruments in order to achieve a sharper interest rate curve.

AUGUST 2016

4 The Bank of England cuts its official interest rate to 0.25% and surprises by introducing more expansionary measures than expected.

JULY 2016

11 The Japanese Prime Minister, Shinzo Abe, approves a new package of fiscal stimuli.
27 The European Council annuls its fines on Spain and Portugal for not having taken effective measures to correct their excessive deficits and sets new budget targets.
29 The results of the EBA's stress tests are published.

AGENDA

JANUARY 2017

4 Registration with Social Security and registered unemployment (December).
11 Industrial production index (November).
16 Financial accounts (Q3).
18 Loans, deposits and NPL ratio (November).
19 Governing Council of the European Central Bank.
International trade (November).
26 Labour force survey (Q4).
27 US GDP (Q4).
29 Flash GDP (Q4).
31 Balance of payments (November).
CPI flash estimate (January).
Fed Open Market Committee.
GDP of the euro area (Q4).

FEBRUARY 2017

2 Registration with Social Security and registered unemployment (January).
8 Industrial production index (December).
13 Japan's GDP (Q4).
17 Loans, deposits and NPL ratio (December).
20 International trade (December).
27 GDP flash estimate (February).
Economic sentiment index of the euro area (February).
28 Balance of payments (December).

Increasing economic growth in an uncertain environment

The US is still the centre of attention. Almost two months after the US presidential elections there is still great uncertainty regarding the announced changes in economic policy. This is inevitable because the new administration is still coming together and the messages issued are necessarily generic in nature. However, a new narrative has taken shape in the financial markets for the US economy; namely reflation, higher growth with higher inflation, which will revolve around fiscal stimuli (tax cuts and investment in infrastructures), less regulation (especially on banks) and a change in focus for international trade relations. As a result, those sectors most sensitive to the economic cycle (including banking) have driven the advanced stock markets, yields on US Treasury bond have rocketed and the dollar is now at its highest level against the euro since 2003. Investors have also taken aim at the weaker flank of this new macroeconomic scenario: there have been significant portfolio capital outflows from emerging countries accompanied by depreciatory pressure on some currencies (the Mexican peso and Turkish lira in particular).

Few changes in the macroeconomic conditions of emerging and advanced economies. In spite of this change in financial indicators, the macroeconomic trend has continued along more or less the same lines as in the last few months and analysts have decided to be cautious when translating the expectations discounted by the markets into appreciable revisions of their growth and inflation figures for the US and the rest of the major economies. In the group of emerging economies, the latest activity figures for China have been positive but this trend has not lessened the perception that the country is facing considerable risks (in financial, real estate and exchange rate terms). Neither have the so-called «fragile» emerging economies left the zone of risk. The latest national account data indicate that Brazil is exiting its recession very slowly while Turkey has surprised with a drop in GDP that few expected. In both cases economic difficulties have been aggravated by a political situation that is still complicated. Regarding the advanced economies, the US has confirmed that its economic growth accelerated in the last part of the year. In this context, and as was expected, the Federal Reserve increased the target range for its fed funds rate by 25 bps to 0.50%-0.75%, also noting that it would carry out three additional interest rate hikes in 2017, a plan that coincides with the CaixaBank Research scenario but which is slightly more hawkish than market expectations.

In Europe the source of uncertainty is still predominantly political. The national account data for 2016 Q3 and latest activity indicators suggest that Europe's economy will maintain a similar growth rate to previous months. The only slight exceptions to this pattern are Germany and Portugal, the former because its indicators point to activity speeding up and the latter because the composition of its growth has been more promising than expected. For its part the ECB announced, in addition to other technical decisions, that QE would be prolonged until December 2017 and the volume of purchases reduced to 60 billion euros as from April 2017, indicating to the market that tapering will be very gradual. In this situation of few changes, uncertainty of a political nature is perhaps the most apparent. In December it was Italy's turn. Although, after the «no» victory in the constitutional referendum, there was a rapid changeover at the head of the Italian government, snuffing out the more agitated fears of political instability and enabling quick decisions to be taken on how to resolve the problems of the banking sector, the threat of future elections is still hovering over the country. Should this come about, it would be in addition to crucial elections in France and Germany.

The Spanish economy is still progressing at a fast cruising speed. The macroeconomic data published in the last few weeks have hardly revealed anything new: the economy is growing in line with its recent trend observed at the end of 2016. From this point on, expansion is expected to continue in 2017 albeit at a somewhat slower rate than 2016 due to less impact from its temporary support factors (oil and fiscal policy in particular). However, structural factors (gains in competitiveness and a moderately more flexible labour market) together with accommodative monetary conditions and the new upward cycle in the real estate sector are factors that will continue to boost growth. In this context, which means the Spanish economy will continue to be one of the most dynamic in Europe, the main risk to the scenario forecast is an appreciable worsening in the external environment affecting the internal dynamics of growth in activity. Although this is not very likely to happen, at least in the short term, it would be advisable for our economy to continue improving its resilience in case of any external shocks.

FORECASTS

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

International economy

	2015	2016	2017	2018	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3
GDP GROWTH										
Global	**3.2**	**3.1**	**3.5**	**3.6**	**3.1**	**3.1**	**3.2**	**3.5**	**3.6**	**3.5**
Developed countries	*2.1*	*1.6*	*1.9*	*2.0*	*1.5*	*1.6*	*1.8*	*1.9*	*1.9*	*1.8*
United States	2.6	1.6	2.3	2.4	1.3	1.7	2.0	2.3	2.5	2.2
Euro area	1.9	1.7	1.5	1.6	1.7	1.7	1.6	1.5	1.5	1.5
Germany	1.5	1.8	1.5	1.6	1.7	1.7	1.8	1.4	1.4	1.6
France	1.2	1.2	1.1	1.3	1.2	1.1	1.1	0.8	1.2	1.2
Italy	0.6	0.9	0.8	0.8	0.8	1.0	0.9	0.7	0.8	0.7
Portugal	1.6	1.2	1.3	1.3	0.9	1.6	1.6	1.6	1.6	1.0
Spain	3.2	3.3	2.6	2.2	3.4	3.2	3.0	2.9	2.6	2.4
Japan	1.2	1.0	1.0	0.8	0.9	1.0	1.6	1.2	1.1	0.9
United Kingdom	2.2	2.0	1.0	1.5	2.0	2.2	1.8	1.7	1.1	0.7
Emerging countries	*4.0*	*4.2*	*4.7*	*4.8*	*4.2*	*4.2*	*4.2*	*4.6*	*4.7*	*4.7*
China	6.9	6.6	6.3	5.9	6.7	6.7	6.5	6.6	6.5	6.2
India [1]	7.6	7.2	7.5	7.7	7.1	7.3	7.1	7.2	7.2	7.6
Indonesia	4.8	5.1	5.4	5.6	5.2	5.0	5.3	5.3	5.4	5.4
Brazil	–3.8	–3.3	1.1	2.1	–3.6	–2.9	–1.3	0.5	1.2	1.3
Mexico	2.6	2.1	2.0	2.5	2.6	2.0	1.6	1.8	1.9	2.1
Chile	2.3	1.7	2.0	2.5	1.6	1.6	1.5	1.8	1.9	2.1
Russia	–3.7	–0.6	1.3	1.6	–0.6	–0.4	–0.4	1.0	1.3	1.4
Turkey	6.0	1.8	2.4	3.0	4.5	–1.8	–0.1	1.5	2.5	2.7
Poland	3.9	2.7	3.3	3.1	3.1	2.2	2.8	3.4	3.4	3.4
South Africa	1.2	0.5	1.3	1.9	0.8	0.8	1.0	1.1	1.2	1.3
INFLATION										
Global	**2.8**	**2.8**	**3.3**	**3.3**	**2.8**	**2.7**	**2.9**	**3.3**	**3.3**	**3.4**
Developed countries	*0.3*	*0.8*	*1.9*	*1.9*	*0.6*	*0.7*	*1.2*	*1.9*	*1.9*	*2.0*
United States	0.1	1.3	2.5	2.4	1.0	1.1	1.8	2.6	2.5	2.7
Euro area	0.0	0.2	1.5	1.6	–0.1	0.3	0.7	1.4	1.5	1.6
Germany	0.1	0.3	1.7	1.7	0.0	0.4	0.8	1.5	1.6	1.7
France	0.1	0.3	1.6	1.6	0.1	0.4	0.7	1.4	1.5	1.7
Italy	0.1	–0.1	1.1	1.4	–0.3	–0.2	0.0	0.8	1.2	1.2
Portugal	0.5	0.7	1.3	1.5	0.5	0.7	1.1	1.2	1.3	1.3
Spain	–0.5	–0.2	2.1	1.5	–0.9	–0.2	1.0	2.3	2.2	2.1
Japan	0.8	–0.1	0.9	0.8	–0.3	–0.5	0.5	1.0	0.8	1.2
United Kingdom	0.0	0.7	2.4	2.5	0.4	0.7	1.2	2.1	2.4	2.6
Emerging countries	*4.7*	*4.4*	*4.4*	*4.3*	*4.5*	*4.3*	*4.2*	*4.3*	*4.4*	*4.4*
China	1.4	2.0	2.0	2.1	2.1	1.7	2.1	1.5	2.0	2.3
India	4.9	5.0	5.1	5.4	5.7	5.2	4.1	5.5	5.1	4.5
Indonesia	6.4	3.5	4.0	5.0	3.5	3.0	3.4	3.5	4.2	3.8
Brazil	9.0	8.8	6.5	5.3	9.2	8.7	7.3	6.7	6.5	6.5
Mexico	2.7	2.9	3.4	3.3	2.6	2.8	3.4	3.4	3.4	3.4
Chile	4.3	4.0	3.2	3.3	4.2	3.8	3.3	3.0	3.1	3.2
Russia	15.5	7.2	5.7	5.4	7.3	6.8	6.1	5.7	5.8	5.6
Turkey	7.7	7.9	7.7	6.8	6.9	8.0	8.1	8.1	7.9	7.6
Poland	–0.9	–0.6	1.5	2.0	–1.1	–0.8	0.4	1.3	1.5	1.5
South Africa	4.6	6.3	5.7	6.0	6.2	6.0	6.6	5.9	5.3	5.5

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

Forecasts

Spanish economy

	2015	2016	2017	2018	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3
Macroeconomic aggregates										
Household consumption	2.8	3.1	2.5	2.0	3.2	2.8	2.8	2.7	2.6	2.5
General government consumption	2.0	1.3	1.0	0.8	0.8	1.4	1.0	0.7	1.6	0.8
Gross fixed capital formation	6.0	3.6	2.9	2.9	3.6	3.1	2.8	2.8	2.4	3.1
Capital goods	8.9	5.7	2.8	2.8	6.2	5.0	4.0	3.6	2.1	2.6
Construction	4.9	2.3	3.1	3.0	2.0	2.0	2.3	2.5	2.8	3.4
Domestic demand (contr. Δ GDP)	3.3	2.8	2.2	1.8	2.9	2.6	2.3	2.2	2.3	2.2
Exports of goods and services	4.9	4.2	3.7	4.1	6.4	2.8	3.6	4.2	2.1	4.5
Imports of goods and services	5.6	3.1	3.0	3.2	5.1	0.9	1.5	2.5	1.4	4.2
Gross domestic product	**3.2**	**3.3**	**2.6**	**2.2**	**3.4**	**3.2**	**3.0**	**2.9**	**2.6**	**2.4**
Other variables										
Employment	3.0	2.8	2.3	2.0	2.7	2.7	2.9	2.6	2.5	2.3
Unemployment rate (% labour force)	22.1	19.7	18.0	16.7	20.0	18.9	18.7	19.0	18.2	17.4
Consumer price index	–0.5	–0.2	2.1	1.5	–0.9	–0.2	1.0	2.3	2.2	2.1
Unit labour costs	0.2	–0.2	0.6	1.3	–0.3	–0.4	0.2	0.2	0.5	1.1
Current account balance (cum., % GDP)[1]	1.4	2.2	1.8	1.6	1.8	1.9	2.2	2.1	2.0	1.9
Net lending or borrowing rest of the world (cum., % GDP)[1]	2.0	2.8	2.4	2.2	2.4	2.4	2.8	2.7	2.6	2.5
Fiscal balance (cum., % GDP)[2]	–5.0	–4.6	–3.4	–2.5						

Financial markets

INTEREST RATES										
Dollar										
Fed Funds	0.26	0.52	1.04	1.94	0.50	0.50	0.58	0.75	1.00	1.08
3-month Libor	0.32	0.74	1.41	2.20	0.64	0.79	0.92	1.11	1.31	1.51
12-month Libor	0.79	1.37	2.00	2.63	1.25	1.46	1.62	1.76	1.92	2.08
2-year government bonds	0.67	0.84	1.71	2.75	0.77	0.72	1.00	1.32	1.58	1.84
10-year government bonds	2.13	1.84	2.88	3.49	1.75	1.56	2.13	2.67	2.84	2.95
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	–0.31	–0.21	–0.26	–0.30	–0.31	–0.31	–0.31	–0.31
12-month Euribor	0.17	–0.03	–0.07	0.05	–0.02	–0.05	–0.07	–0.07	–0.07	–0.07
2-year government bonds (Germany)	–0.24	–0.58	–0.65	–0.29	–0.52	–0.64	–0.71	–0.70	–0.68	–0.65
10-year government bonds (Germany)	0.53	0.10	0.44	0.84	0.12	–0.12	0.11	0.32	0.40	0.48
EXCHANGE RATES										
$/€	1.11	1.11	1.03	1.04	1.13	1.12	1.08	1.04	1.02	1.02
¥/€	134.33	120.28	117.40	116.30	121.91	114.26	117.91	121.35	118.29	115.94
£/€	0.73	0.82	0.87	0.86	0.79	0.85	0.87	0.86	0.88	0.87
OIL										
Brent ($/barrel)	53.61	45.63	59.32	65.79	47.35	47.49	51.96	56.17	58.57	60.50
Brent (€/barrel)	48.30	41.28	57.78	63.08	41.94	42.55	48.25	53.81	57.27	59.31

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

Forecasts

FINANCIAL OUTLOOK ·

International markets get ready for the new global financial environment

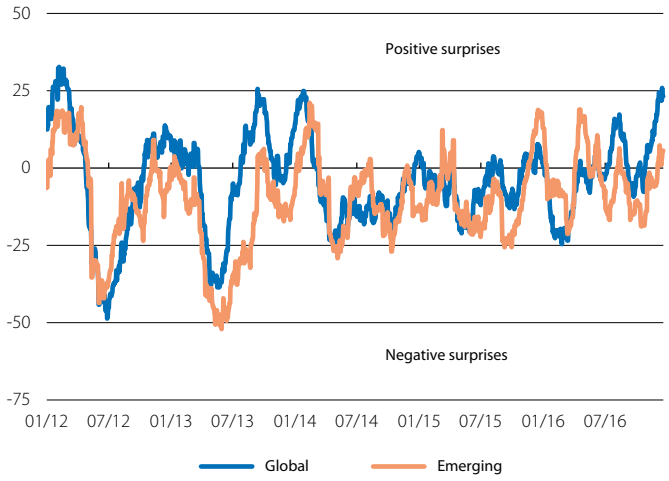
International markets are still adjusting to recent political events. The trend in international markets over the last few weeks has continued to be dominated by the impact of Donald Trump's victory. Whereas the prospect of more fiscal stimuli has particularly benefitted equity in the US, doubts regarding the new US administration's policies continue to weigh heavy on emerging assets. In Europe, the «No» result of the Italian referendum has not hindered the restructuring of the banking sector as had been feared, supporting the strong gains made by banks in the principal European stock markets. Lastly, regarding monetary policy, the main central banks acted as per market expectations, with the Federal Reserve (Fed) raising its benchmark fed funds rate by 25 bps and the ECB extending QE until December 2017.

Towards a less accommodative global financial environment. One of the key changes which the market will have to adapt to is the adjustment in the US policy mix with a more expansionary fiscal policy and a somewhat more restrictive monetary policy. Although the main implications of this change can already be glimpsed, there are still several sources of uncertainty. In particular, the extent of the fiscal stimulus and the potential impact of other policies which may be implemented by the new administration, for example in the area of trade. On the monetary policy front, the sources of uncertainty have diminished and the fact that the Fed's projections and market expectations have recently become more aligned, together with the continuing scenario of very gradual interest rate hikes, reduces the risk of any sudden adjustments. On the whole, this new environment should be more favourable for equity than bond markets and, in any case, appears to be more challenging for emerging assets. Nonetheless, the trends observed in key macroeconomic figures, which have been quite robust, lead us to believe that financial assets are tackling the increasingly accommodative global financial environment with relatively solid support.

The ECB announces an adjustment in its asset purchase programme to keep monetary policy accommodative. At its December meeting, the Governing Council (CG) of the euro area's highest monetary authority decided to extend QE until December 2017 and, as from April 2017, to reduce the pace at which it purchases assets from the current rate of 80 billion per month to 60 billion. The ECB also introduced some technical adjustments to QE, consisting of including, within the asset purchase programme, securities with a maturity of between one and two years and, as necessary, securities with a yield to maturity below the interest rate on the ECB's deposit

Index of economic surprises

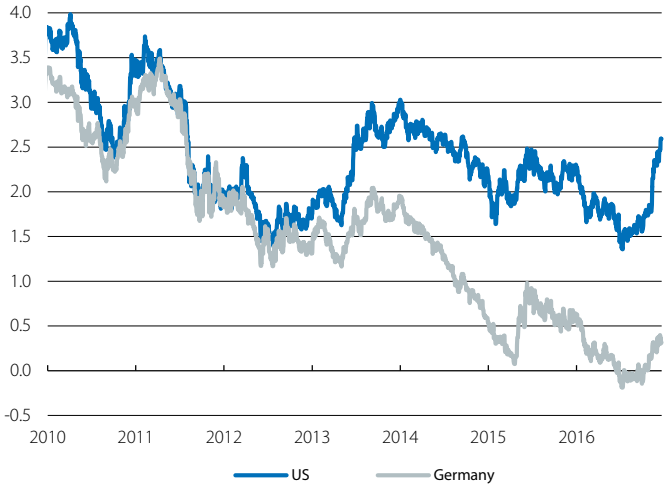
Level



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

Yields on 10-year public debt

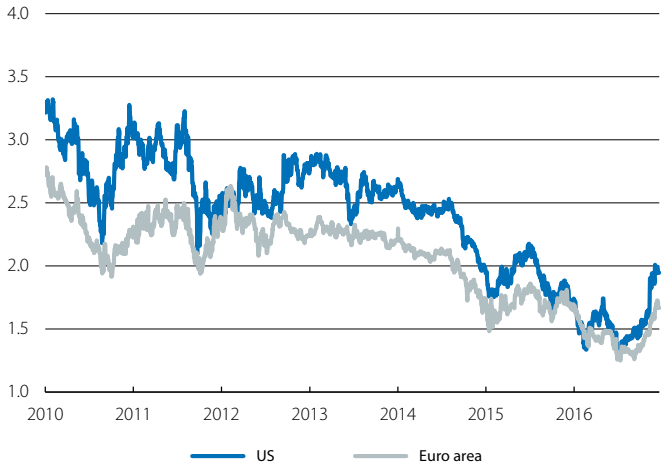
(%)



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

*Inflation expectations: * US and euro area*

(%)



Note: ** Inflation Swap Forward 5Y5Y.*
Source: *CaixaBank Research, based on Bloomberg data.*

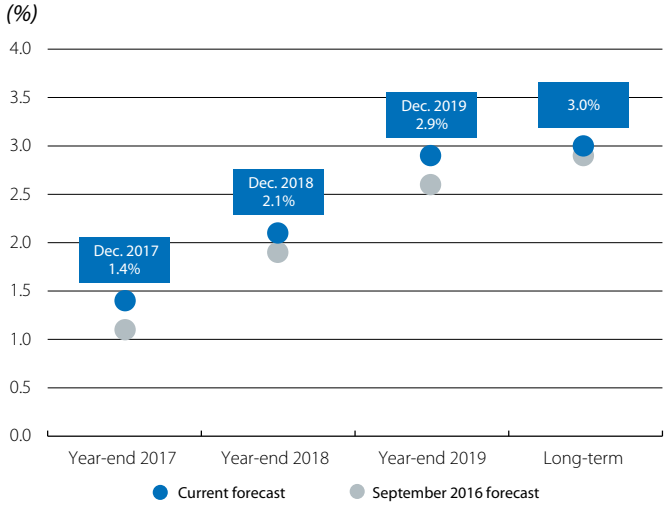
facility. Draghi stressed the fact that tapering was not being implemented as the adjustments adopted did not consist of a gradual reduction in the volume of purchases. The ECB President also made it clear that the possibility of ending QE had not been considered, and that the volume of purchases may be increased or the programme extended, if required. Financial markets welcomed these announcements with gains in European stock markets, in particular in bank share prices, given the prospect of a steeper yield curve.

The Fed resumes the process of normalising its benchmark federal funds rate. One year after the first interest rate hike in eight years, as expected the Fed announced an increase of 25 bps in the benchmark rate to 0.50%-0.75%. The members of the Federal Open Market Committee (FOMC) supported this decision given the strength shown by the different indicators for activity and the labour market in the US, believing these trends will continue in the future. However, most attention regarding this meeting was focused on any clues that might be provided by the Fed concerning the rate of interest rate hikes in the coming quarters. Specifically, the FOMC members now expect three hikes in 2017 while the projections published in September only considered two. Therefore, in spite of this slight change, the Fed is still expected to normalise monetary conditions very gradually. One of the factors that may alter this forecast is the Fed's assessment of the impact on growth and inflation of the new economic policy to be implemented by Trump's administration. A unknown factor which the Fed will reveal once the announcements made by Trump become concrete measures.

The US bond market is still going through a corrective phase. After the strong upswing caused by Trump's victory, yields on US government bonds, especially long-term, have continued to rise, albeit more gradually. Far from slowing down this trend, the Fed's messages have acted as a catalyst to push up yields even further. In the second half of December, the interest rate on 10-year US Treasury bonds was around 2.5%, its highest since mid-2014. The prospect of a change in economic policy, with more emphasis on fiscal stimuli, is still the main reason for this spike in US sovereign bond yields. But in the last few weeks other factors, such as strong business indicators and the upswing in oil prices, have also helped to push up yields.

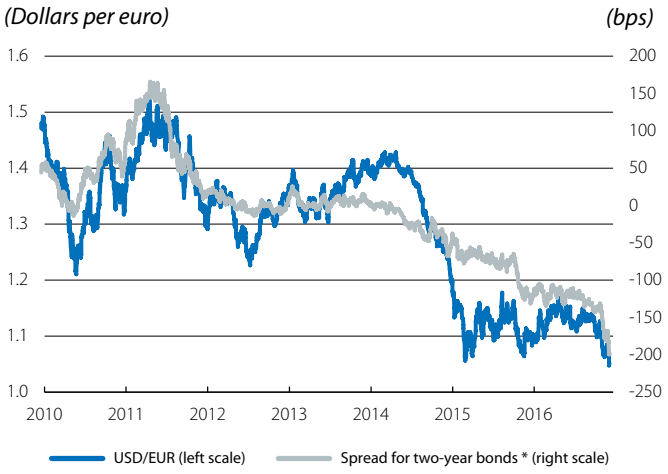
The dollar appreciates strongly against the euro while emerging currencies are showing signs of stabilising. The euro-dollar exchange rate is approaching parity, reaching its lowest level since 2003, mainly because of expectations of prolonged divergence between monetary policy in the US and the euro area. However, emerging currencies have shown signs of stabilising against the dollar after the strong correction caused by Trump's victory. The upswing in oil prices and the reduction in risk aversion to minimal levels are the main factors behind this stabilisation. However, higher interest rates in the US could put the pressure back on the emerging currencies in the coming quarters.

*US: expected level of the benchmark interest rate **



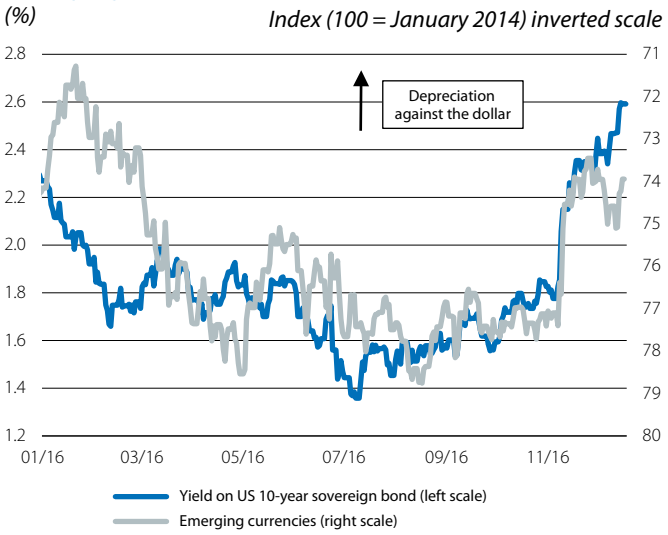
Note: ** Median of the projections by members of the FOMC of the Federal Reserve.*
Source: *CaixaBank Research, based on data from the Federal Reserve.*

Dollar-euro exchange rate and spread for two-year bond yields



Note: ** Spread between yields on German and US 2-year bonds.*
Source: *CaixaBank Research, based on Bloomberg data.*

Emerging currencies and bonds in the US



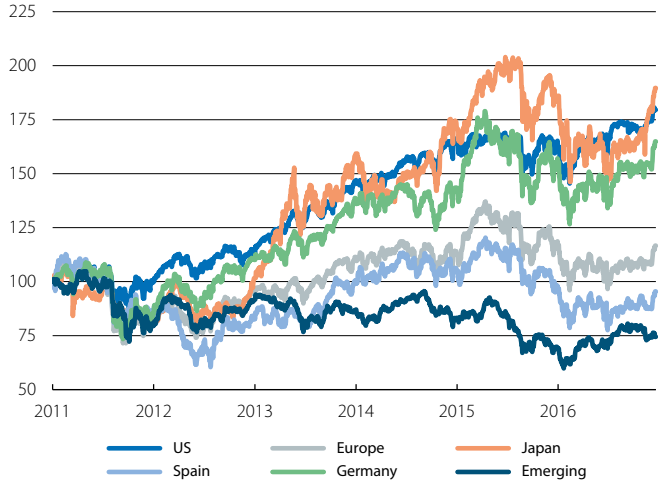
Source: *CaixaBank Research, based on Bloomberg data.*

Emerging stock markets continue to digest Trump's victory while the banking sector boosts European stock markets. Unlike most of the developed stock markets, Trump's victory continues to penalise a large proportion of the emerging equity markets. In spite of stabilising to some extent, emerging stock markets have remained close to the minimum levels reached after the electoral result was announced. Doubts regarding the policies that may be implemented by the new US administration, in particular regarding trade, are the main factor behind this stagnation in emerging securities. Clarification of this source of uncertainty, together with tougher global financial conditions, will determine how emerging assets perform over the next few months. In the advanced bloc, the three main US stock market indices (S&P 500, Nasdaq and Dow Jones) have reached all-time highs. In Europe stock markets have picked up strongly due to the boost provided by the banking sector resulting from the adjustments introduced by the ECB to its QE programme and especially thanks to the dissipation of fears of a stalemate in resolving the ailing Italian banking sector.

The OPEC agreement pushes oil prices to their highest level since the summer of 2015, hovering around 55 dollars per barrel of Brent quality. This strong upswing in the price of crude oil occurred in two stages. Firstly, on the announcement that production would be cut by 1.2 million barrels a day by the cartel's member states, on 30 November. Secondly, on 10 December with the confirmation that the other 12 oil-producing countries which are not members of OPEC (including Russia) have joined the agreement, cutting their production by 600,000 barrels a day. Beyond these ambitious targets to limit production, Saudi Arabia's leadership and the implementation, for the first time, of a control mechanism to ensure the agreement is fulfilled make this development more credible and the impact on oil prices could therefore continue for some time. Nonetheless, in the long term the upward trend in oil prices appears to be relatively limited as this could make it easier for other producers to enter the market, in particular shale oil producers (for more details, see the Focus «The oil producer agreement: the cartel is back» in this *Monthly Report*).

Main international stock markets

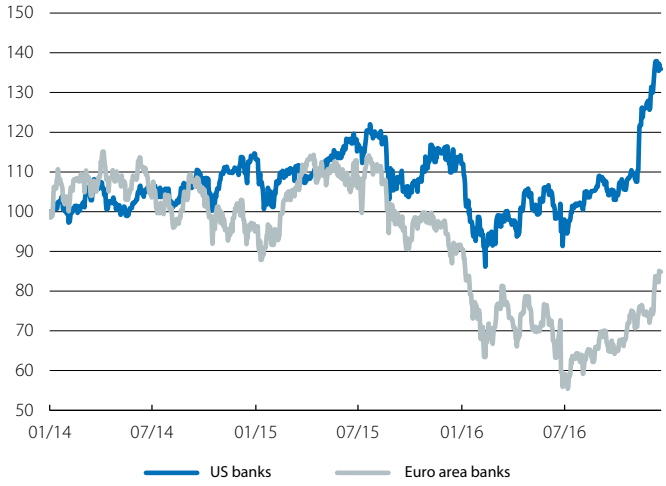
Index (100 = January 2011)



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

Banking sector: US and euro area

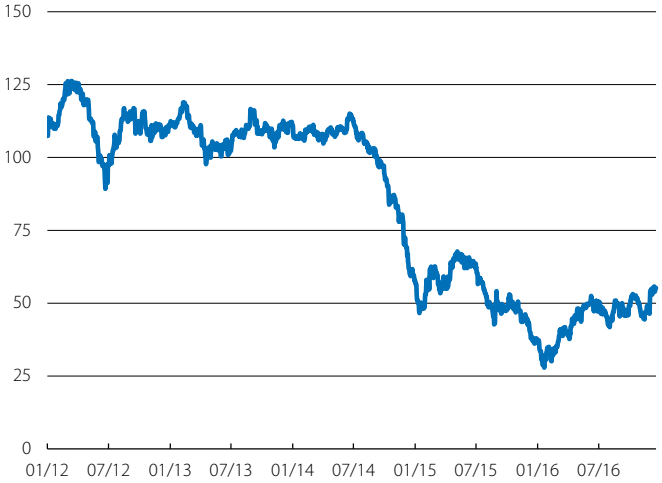
Index (100 = January 2014)



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

Brent oil prices

(Dollars per barrel)



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

FOCUS · Opportunities for investment and portfolio diversification

Over the last few months an increasing number of people have noted that the correlation, or degree of synchronisation, has increased between the returns on different financial assets (see the enclosed graph). This is incredibly important as it represents a fundamental aspect in building up investment portfolios: it is vital for a portfolio to be able to appropriately diversify its asset allocation in order to match its risk profile to each investor's requirements.

In addition to this importance for investors at an individual level, the degree of correlation between assets is also closely monitored by central banks and the different institutions responsible for safeguarding financial stability such as the IMF and the Bank for International Settlements, as a more positive correlation between the different financial assets also makes economies more vulnerable to adverse sentiment shocks in financial markets.

In recent years, concerns about an increase in this correlation have often been repeated and there is intense debate regarding the factors that lie behind this situation. Over the last few decades, one element that has been fundamental to the stocks/bonds correlation remaining negative (with the result that portfolios can be easily diversified) has been the implementation of appropriate and effective monetary policies which have adjusted interest rates to cushion the impact of any adverse shocks. This has meant that inflation expectations have remained relatively stable for many years and has enabled bonds to act as a safe haven when stocks have gone through corrective episodes. However, central banks have lost some of their credibility in the last few years and doubts are increasing regarding their capacity to control inflation in a world where prices are increasingly affected by global conditions. Additionally, the instruments that can be used by central banks seem to be more limited now that inflation continues to be sluggish in spite of interest rates being at an all-time low.

Another factor to take into account when assessing the possibilities to diversify a portfolio is the globalisation of financial markets. On the one hand, this should give investors access to a wider range of investment opportunities and should therefore make diversification easier. However, the fear is that greater portfolio diversification at an international level results in the price of the different assets being more determined by global factors than by local or idiosyncratic factors.

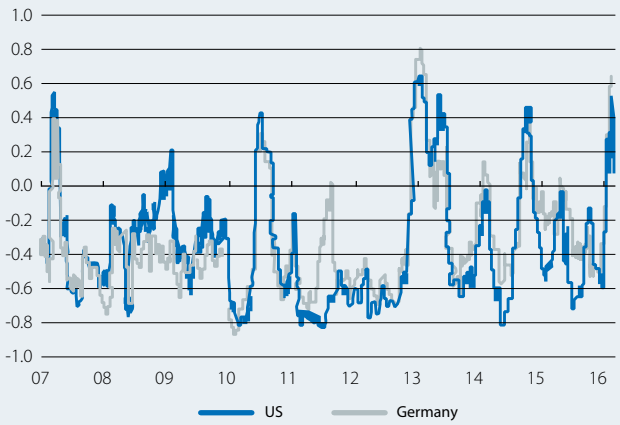
Lastly, another factor that is often put forward as increasing the correlation between assets returns is the application of very similar portfolio management techniques by agents operating in the markets, based on algorithms that generate automatic orders to buy and sell. However, although this does seem to play an important role in some specific cases, resulting in upswings in volatility in certain assets, there is no reliable evidence to suggest, at present, that this is causing any secular increase in the correlation between asset yields.

In the last few quarters concern regarding the financial assets correlation has grown due to the appearance of two forces that may apparently increase this synchronisation. On the one hand, the fact that interest rates now seem to have bottomed out and an upward trend has probably begun (which reduces bond prices) worries investors who believe equity is unlikely to see many gains. Several arguments have been put forward along these lines. In the US, the S&P 500 is at an all-time high while stock market indices in the euro area have been hindered by still sluggish growth and high uncertainty.

Nevertheless, there are also reasons to be optimistic. In particular, the rise in inflation predicted for the next few quarters should boost stock prices. Easier fiscal conditions, especially in the US and UK, will also support cyclical sectors such as those related to consumption or investment in infrastructures. Moreover, the normalisation of interest rates ultimately responds to an improvement in macroeconomic conditions and, if this is the case, sooner or later such improvement should also be reflected in the main stock market indices performing well.

Correlation between bonds and equity

(Correlation index)



Note: *To calculate the correlation index, the MSCI World Index and 10-year public debt in the US and Germany have been used, respectively. The index shows the evolution of correlations over 3-month windows for weekly returns.*
Source: *CaixaBank Research, based on data from Goldman Sachs Investment Research.*

FOCUS · The euro area: corporate bond issuances are starting 2017 in good shape

The international corporate bond markets have looked very strong in the last few years. The euro area is a case in point: bonds issued by non-financial firms totalled 1.04 trillion euros in the period 2013-2015 compared with 0.86 trillion in 2010-2012 and 0.52 trillion in 2004-2006. This boom in bonds did not change in 2016, as shown by the 0.39 trillion issued up to November, a figure that is higher than the volume recorded for the whole of 2015. Both demand and supply conditions suggest this upward pattern in issuance in the euro area will continue in 2017.

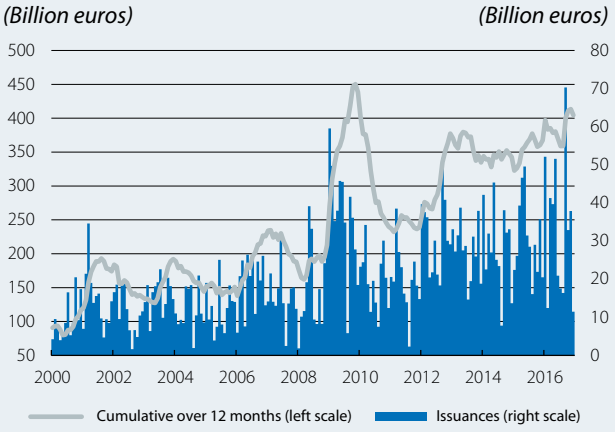
This strong demand for corporate bonds is likely to continue thanks to the inestimable help of the central banks. Since 2009, monetary policies of ultra-low (and even negative) interest rates have boosted the demand for bonds at an international level and numerous investors have been tempted to search for yield in assets such as corporate bonds. In the case of the euro area, this has been a key factor in the success of a market that, historically, had tended to play a second fiddle to public debt, the stock market and bank loans. This process has been accentuated with the implementation of unconventional monetary policies. The start-up of the ECB's corporate bond purchase programme last spring revitalised the rate of issuances, which had slowed down in the early months of 2016. Although they may diminish slightly, these forces will continue to boost bonds in 2017. Firstly because the ECB's sovereign and corporate bond purchase programmes will continue as before. Secondly because 2017 will more than likely be the first year that issuers and investors will glimpse the start of tapering in the euro area, reducing monetary stimuli. Given this situation, companies are likely to intensify their use of the capital markets before financing costs go up. This now takes us to the supply conditions.

The trend in corporate balance sheets and companies' «capital allocation policies» also favour continued and decisive use of the bond market. Regarding corporate balance sheets, although it should be admitted that listed European companies may not have completed their particular deleveraging, it is nevertheless undeniable that this process is very much in an advanced stage. Moreover, corporate balance sheets are remarkably solid and corporate debt default is very contained, around 2%. All this suggests that the rate of corporate bond issuances will not slacken, especially as the debt maturing in 2017 does not seem too extreme.

Current trends in «capital allocation policies» seem to back up this positive view of the primary corporate bond market. Broadly speaking, companies can employ their financial resources (both those generated internally and also those obtained externally by taking out loans or by issuing shares and bonds) in five ways: investing in capital (capex), through mergers and acquisitions with other companies (M&A), by repaying debt or by distributing their resources to shareholders via dividends or share buybacks. The likely moderation in capex and the reluctance of companies in the euro area to carry out share buybacks do not suggest an increase in bond issuances. However, both dividend payments and especially a resurgence in M&A will certainly be powerful drivers. For some quarters now it has been noted that European companies are resorting to inorganic growth strategies, which tend to involve more bond issuances, especially if we remember that, historically, mergers and acquisitions have become the main destination for resources among the five areas mentioned above (now with a share of around 40%).

In summary, the euro area's primary bond market will continue to enjoy tailwinds in 2017.

Euro area: corporate bond issuances *



Note: ** Senior debt issuances with maturities over two years of non-financial corporations established in the euro area.*
Source: *CaixaBank Research, based on Bloomberg data.*

KEY INDICATORS

Interest rates (%)

	30-Dec	30-Nov	Monthly change (bps)	Year-to-date (bps)	Year-on-year change (bps)
Euro area					
ECB Refi	0.00	0.00	0	–5.0	–5.0
3-month Euribor	–0.32	–0.31	–1	–18.8	–18.7
1-year Euribor	–0.08	–0.08	0	–14.0	–13.9
1-year government bonds (Germany)	–0.80	–0.80	0	–42.2	–42.2
2-year government bonds (Germany)	–0.77	–0.73	–4	–42.5	–42.5
10-year government bonds (Germany)	0.21	0.28	–7	–41.9	–41.9
10-year government bonds (Spain)	1.38	1.55	–17	–39.1	–39.1
10-year spread (bps) [1]	118	128	–10	3.4	3.4
US					
Fed funds	0.75	0.50	25	25.0	25.0
3-month Libor	1.00	0.93	7	38.7	38.8
12-month Libor	1.69	1.64	5	51.2	51.5
1-year government bonds	0.81	0.77	4	21.3	21.3
2-year government bonds	1.19	1.11	8	14.2	11.9
10-year government bonds	2.44	2.38	6	17.1	14.6

Spreads corporate bonds (bps)

	30-Dec	30-Nov	Monthly change (bps)	Year-to-date (bps)	Year-on-year change (bps)
Itraxx Corporate	72	80	–7	–5.0	–5.1
Itraxx Financials Senior	93	107	–14	16.7	16.6
Itraxx Subordinated Financials	221	245	–23	65.7	65.6

Exchange rates

	30-Dec	30-Nov	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
$/€	1.052	1.059	–0.7	–3.2	–3.8
¥/€	122.970	121.190	1.5	–5.9	–6.7
£/€	0.854	0.847	0.8	15.8	15.7
¥/$	116.960	114.460	2.2	–2.7	–3.0

Commodities

	30-Dec	30-Nov	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
CRB Commodity Index	423.1	421.0	0.5	12.9	13.2
Brent ($/barrel)	55.4	49.9	11.1	55.0	58.1
Gold ($/ounce)	1,152.3	1,173.3	–1.8	8.6	8.6

Equity

	30-Dec	30-Nov	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
S&P 500 (USA)	2,238.8	2,198.8	1.8	9.5	8.5
Eurostoxx 50 (euro area)	3,290.5	3,051.6	7.8	0.7	0.1
Ibex 35 (Spain)	9,352.1	8,688.2	7.6	–2.0	–3.0
Nikkei 225 (Japan)	19,114.4	18,308.5	4.4	0.4	0.4
MSCI Emerging	862.3	862.8	–0.1	8.6	8.9
Nasdaq (USA)	5,383.1	5,323.7	1.1	7.5	6.3

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

ECONOMIC OUTLOOK · Acceleration in 2017 but with downside risks

The global economy grew by 3.1% in 2016, a very similar rate to that of 2015 (3.2%). 2016 went from less to more, particularly supported by the acceleration of the emerging economies in the second half of the year while the growth achieved by advanced economies, although significant, was slightly below the figure posted in 2015. At a global level, economic growth was boosted by the main central banks continuing to implement highly accommodative monetary policies and by a slight recovery in oil prices, relieving several emerging countries (crude oil exporters) from their financial pressures, yet not hurting oil-importing countries since the recovery was sufficiently small. In this respect, the agreement to limit oil production reached by the OPEC countries, also joined by several non-OPEC countries (including Russia), will help this recovery in oil prices to continue (see the Focus «The oil producer agreement: the cartel is back» in this *Monthly Report*).

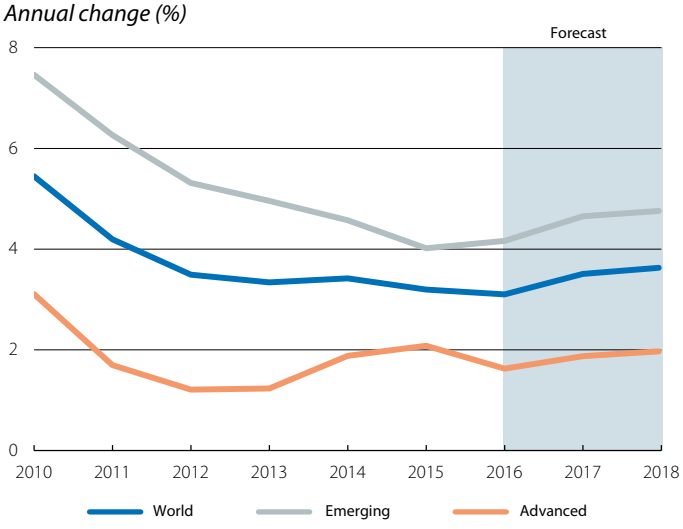
The growth rate will accelerate moderately in 2017 although uncertainty will still be high. Specifically, CaixaBank Research predicts that growth in economic activity at a global level will speed up to 3.5% thanks to the emerging economies and a slight improvement in the advanced countries. The main risks to this scenario are political in nature (the stance taken by the Trump administration, Brexit negotiations and elections in Europe, among others) but the impact of the monetary normalisation the Federal Reserve (Fed) is expected to carry out throughout the year will also have to be monitored closely, as well as China's financial stability.

UNITED STATES

The US economy enters a more mature phase of the economic cycle with moderate growth rates and high production capacity utilisation, suggesting the upward trend in prices and wages will consolidate in the coming quarters. The US is in its fourth longest expansionary cycle since 1950, now in its seventh year of positive growth and only exceeded by the cycles occurring in 1992 (16 years), 1959 (15 years) and 1983 (8 years) (see the Focus «The US: in a mature phase of the business cycle and with an expansionary fiscal policy» in this *Monthly Report*). Moreover, the different activity indicators continue to point to its growth rate consolidating. This scenario of solid growth in economic activity was reinforced by the upward revision of GDP for Q3, growing by 0.9% quarter-on-quarter (1.7% year-on-year), clearly accelerating in comparison with the first half of the year. Specifically, in 2016 Q3 GDP was supported by solid growth in private consumption (2.8% year-on-year), accounting for 70% of GDP.

World GDP

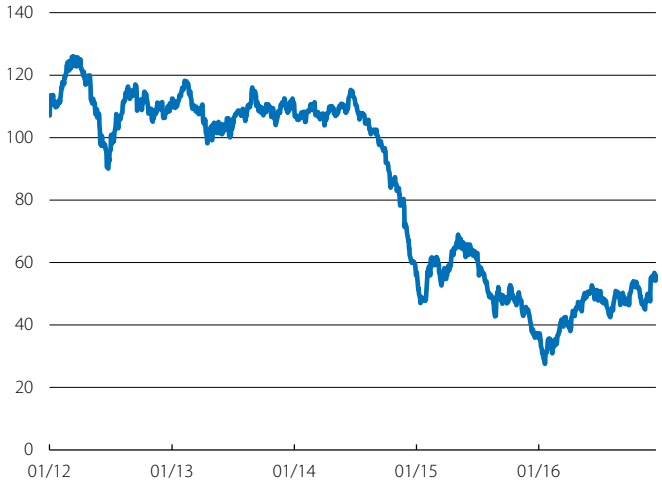
Annual change (%)



Source: *CaixaBank Research.*

Oil: price per barrel of Brent quality

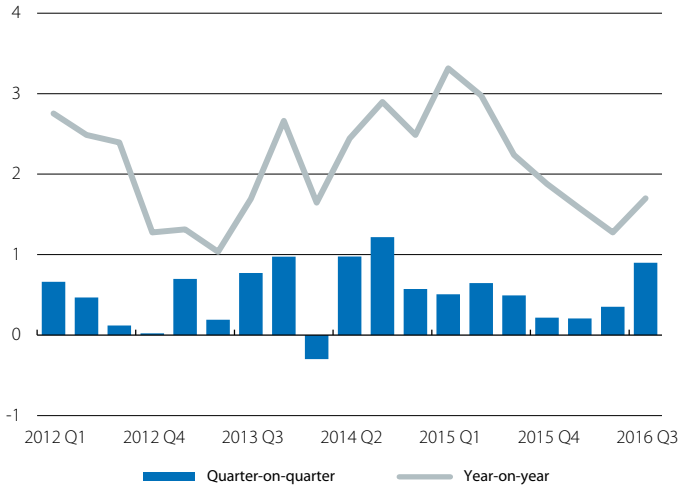
(Dollars per barrel)



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

US: GDP

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



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

Also of note was the strong rise in exports and the positive contribution made by the inventories component, after several quarters of deductions.

The Fed restarts interest rate hikes, encouraged by the upward trend in inflation. At its December meeting, the US Fed increased its fed funds rate target range by 25 bps, taking it to 0.50%-0.75%, as expected. The monetary institution also noted that, in 2017, it plans to carry out three more interest rate hikes, in contrast to the two hikes announced at the meeting in September 2016. This new plan coincides with the CaixaBank Research forecast scenario but is slightly more hawkish than expected by the market.

US headline CPI increased by 1.7% year-on-year in November, 0.1 pps more than the previous month's figure, boosted by solid growth in the energy component and by the increase in the shelter index, which accounts for a large share of the US CPI. This recovery in inflation will continue to be supported by the good performance by consumption, in turn helped by a strong labour market. In November, 178,000 jobs were created, unemployment fell to 4.6% and wages rose by a considerable 2.5% year-on-year. The broader measure of unemployment produced by the Bureau of Labor Statistics, the U6 (which counts as unemployed those people working part-time but who would like to work full-time), also fell to 9.3%, higher than the figure of 8% reached in 2006 and 2007 but clearly below the historical average. It therefore comes as no surprise that, in its December communication, the Fed should indicate that it had decided to raise interest rates due to «in view of realised and expected labour market conditions and inflation».

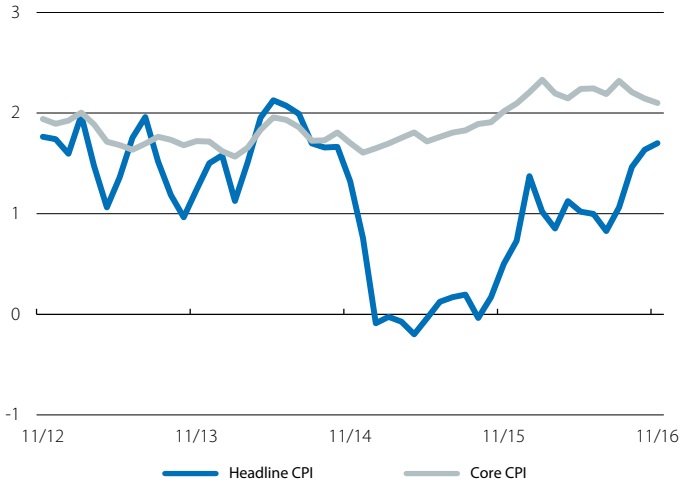
Q4 business indicators continue to point to substantial increases. The business confidence indicator (ISM) for manufacturing rose to 53.2 points in November, its highest level in the past five months, while the same indicator for services climbed to 57.2 points, its highest level for the last 13 months. Along the same lines, business indicators for manufacturing produced by the Philadelphia Fed and New York Fed also rose considerably, endorsing the good performance by the economy in the final tranche of 2016.

JAPAN

Japan is still fragile although the revised figure for the historical GDP series shows slightly better advances in the last few years. Specifically, and according to the new data, GDP grew by 1.2% in 2015 compared with 0.6% in the previous estimate. Similarly, in the first three quarters of 2016 the average year-on-year growth was 0.7%, almost 0.2 pps more than the previous figure. The latter has led to a technical revision of the CaixaBank Research growth forecast for 2016 as a whole, from 0.7% to 1.0%, and for 2017, from 1.1% to 1.0%. In spite of this revision of the GDP series, however, the Japanese economy still looks weak, mostly due to the lack of dynamism in private consumption.

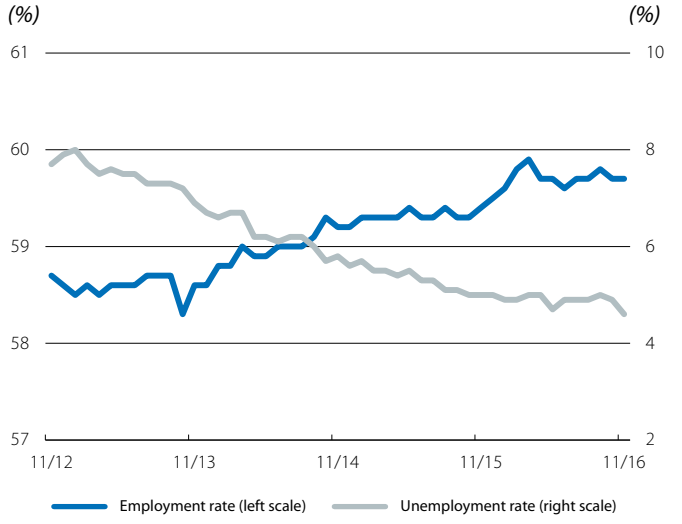
US: CPI

Year-on-year change (%)



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

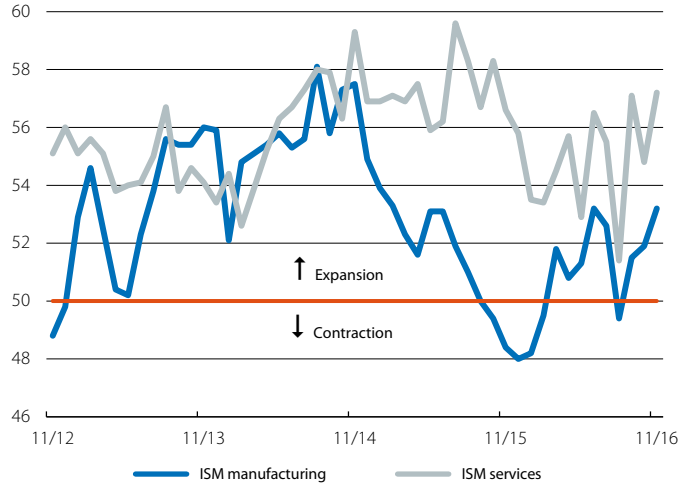
US: labour market



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

US: activity indicators

Level



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

Activity indicators improve slightly at the end of 2016 but doubts remain regarding 2017. In particular, the foreign sector improved in November with exports notably slowing down their rate of decline in nominal terms, from –10.2% year-on-year in October to –0.4% currently. This improvement was also substantial in volume terms, with exports growing by +7.4% year-on-year, boosted by sales to China and the US. The depreciation of the yen in the final tranche of the year, down to 117 yen per dollar, should continue to support this improvement in exports towards the US market, while the Tankan business sentiment index indicated some improvement for large manufacturers in Q4.

EMERGING ECONOMIES

China's good activity figures show that growth has stabilised although there are still risks. Retail sales grew by 10.8% year-on-year in November, the best figure for 2016; industrial production advanced by 6.2% year-on-year, 0.2 pps higher than the average between January and October, and trade flows grew after months of declines. Exports increased by 0.1% year-on-year, the first rise since March (although the 12-month cumulative figure still posts a decline, namely –6.2%), and imports rose by 6.7% year-on-year, the highest growth since September 2014 (–6.4% for the 12-month cumulative figure). In spite of these improved activity indicators, the country's financial stability is still a source of concern. In this respect, capital outflows seem to have intensified again in the last month, as reflected by November's reduction of 69 billion dollars in the foreign reserves, the largest monthly decline since January 2016. Fears of a sudden and disorderly depreciation of the RMB are partly responsible for this phenomenon (see the Focus «China's capital flight, a risk to be taken into account» in MR06/2016).

Unexpected drop in Turkey's GDP, down by 1.8% year-on-year in 2016 Q3 (+4.5% in Q2). A poor performance by consumption and exports is largely responsible for this adjustment. It should be noted that a methodological change has also been made which has notably altered the historical GDP series: the level is now 11% higher and growth in 2015 was 6.0%, compared with the previous figure of 3.9%. Beyond this methodological change, the latest figures point to a loss of *momentum*, which CaixaBank Research predicted would occur throughout 2017 and has therefore happened sooner than expected. After the series' revision, and given the already evident weakness in 2016 Q3, CaixaBank Research has substantially lowered its growth forecast for 2016 (from 3.2% to 1.8%) and for 2017 (from 2.9% to 2.4%).

Japan: revision of the GDP series

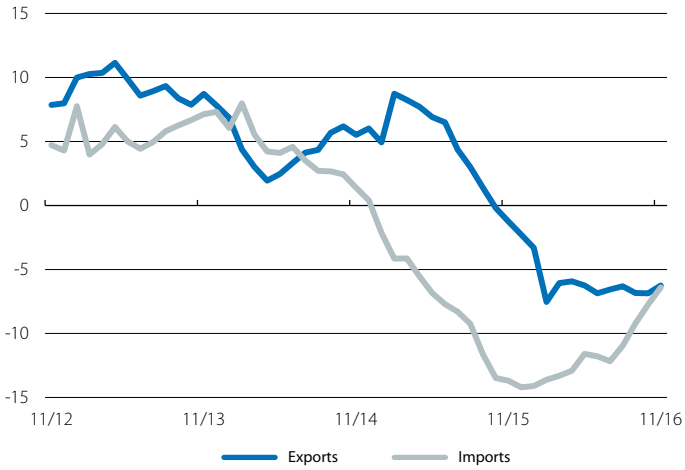
Year-on-year growth (%)

	2013	2014	2015	2016 Q1	2016 Q2	2016 Q3
Before	1.4	–0.1	0.6	0.1	0.8	0.8
After	2.0	0.2	1.2	0.3	0.9	1.0
Difference (pps)	*0.66*	*0.36*	*0.66*	*0.17*	*0.1*	*0.22*

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

*China: international trade of goods **

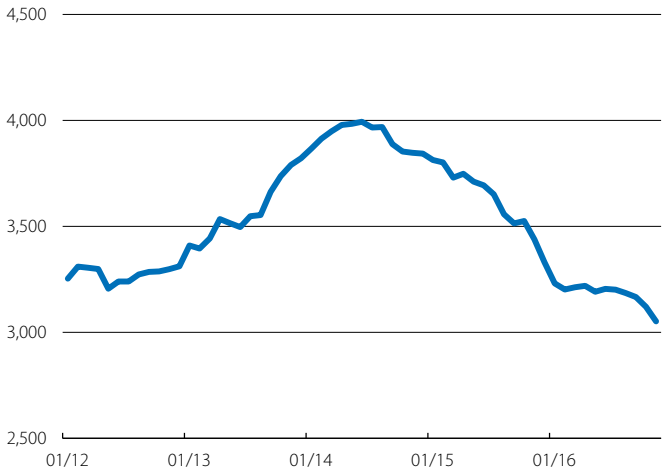
Year-on-year change, cumulative over 12 months (%)



Note: ** Nominal data in dollars.*
Source: *CaixaBank Research, based on data from the Chinese customs.*

China: foreign reserves

(Billion dollars)



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

FOCUS · The US: in a mature phase of the business cycle and with an expansionary fiscal policy

A trillion dollars to improve infrastructures in the US and an extensive tax breaks, two of the promises made by President Trump to his voters. But does the US need a fiscal stimulus if its unemployment rate is below 5.0% and growth has remained above 2% since 2010? Although this fiscal impulse will boost US growth, if the economy is at full employment it may be less effective and, moreover, could result in inflationary pressures and postpone the adjustment of its public debt.

It is not easy to determine an economy's business cyclical position but the conclusion provided by the main indicators seems clear for the case of the US. Starting with some basic indicators, core inflation has been above 2% for several months now and wages have posted increases of around 2.5% year-on-year. Both these figures are typical of moments when the US economy has been in a mature phase of its business cycle.

A slightly more sophisticated way to assess an economy's point in the cycle is by using the output gap.[1] According to the most recent estimates by the IMF, the US economy is about to close its output gap after years of this being negative. Although the margin of error for such estimates is high, other organisations such as the OECD have also suggested the US will close its gap in 2017 (see the first graph).

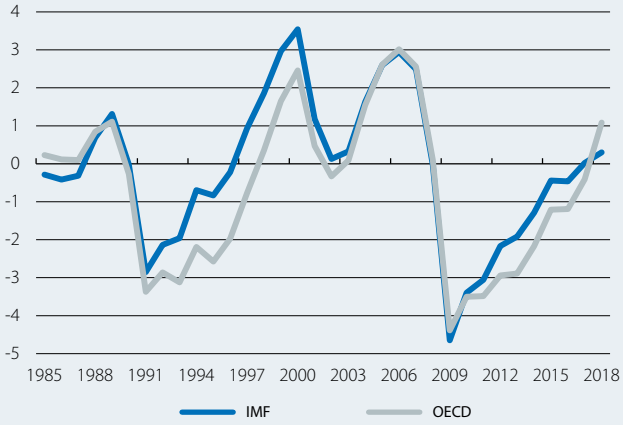
On the other hand, there is also a set of macrofinancial indicators that tend to be good predictors of an economy's cyclical position in the medium term. Along these lines, the OECD produces a variable that brings together several of these indicators for a group of countries, including the US.[2] Using this variable, we can construct a «clock» which, like a conventional one, «tells the time» in the cycle an economy will reach after about three quarters. What we can see from the US clock is that, in 2015, the economy already seemed to be close to finishing the recession-expansion cycle started at the end of 2007 (see the second graph). In 2016, and with the data available so far, which do not include the final tranche of the year, this clock seems to have gone backwards, a consequence of the upswing in financial volatility at a global level occurring at the end of 2015 and beginning of 2016 and the sharp drop in oil prices, substantially affecting the country's energy industry.

1. The output gap is defined as the difference between actual GDP and the GDP compatible with stable inflation close to 2%. For more information on this concept see the Dossier in MR05/2013 («Potential GDP, a crucial but unclear concept»).
2. This is the Composite Leading Indicator (CLI), a time series which, in the case of the US, is constructed based on seven indicators, including housing starts, the business sentiment index (ISM) and the NYSE trend.

In this respect, the clear improvement observed in leading business indicators in the last few months, as well as the recovery in the price of crude oil, are factors that should return the clock to a similar position as in 2015, coinciding with a mature phase of the business cycle.

US: output gap

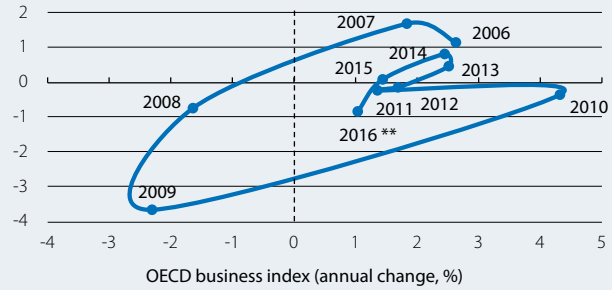
(% of potential GDP)



Source: *CaixaBank Research, based on data from the IMF (WEO, October 2016) and the OECD.*

US: business cycle clock

*OECD business index * (deviation from the long-term trend)*



Notes: ** A leading business indicator constructed by the OECD (CLI) based on seven macrofinancial variables. Values above 0 are observed when the indicator is higher than the long-term trend.*
*** The data for 2016 do not include the final tranche of the year in which the US posted an acceleration in its rates of economic growth.*
Source: *CaixaBank Research, based on OECD data.*

FOCUS · The oil producer agreement: the cartel is back

OPEC is back. After eight years without reducing its production quotas, on 30 November 2016 it announced a cut of 1.2 million barrels a day, equivalent to 4% of its production, which will total, as from 1 January 2017 and providing the agreement is fulfilled, 32.5 million barrels a day. A few days later, a significant number of countries that do not form part of the oil cartel, including most importantly Russia, undertook to reduce their production by 600,000 barrels a day. These decisions were received by the market with notable price gains although some of this rally receded later. Nevertheless, by the end of December the price was 17% higher than before the decisions to reduce supply.

Although experience shows that, on average, the actual cuts following OPEC agreements tend to be 20% less than the agreed level, this occasion may turn out to be different. First of all, Saudi Arabia is taking on a substantial part of the cut (in the order of 40%), motivated by domestic factors (essentially the erosion of its fiscal revenue, on which the country's economy heavily depends). This is a complete turnaround from the previous Saudi strategy to keep supply plentiful in order to eliminate its less profitable rivals (shale but also other conventional producers). The second factor that makes it more likely this agreement will be complied with is the setting up of a monitoring committee made up of three OPEC members and two non-OPEC oil-producing countries, which will keep an eye on the implementation of the agreed cuts. Sources considered to be more objective will also be used to monitor the trend in production. Such transparency and control are unprecedented in the cartel's history.

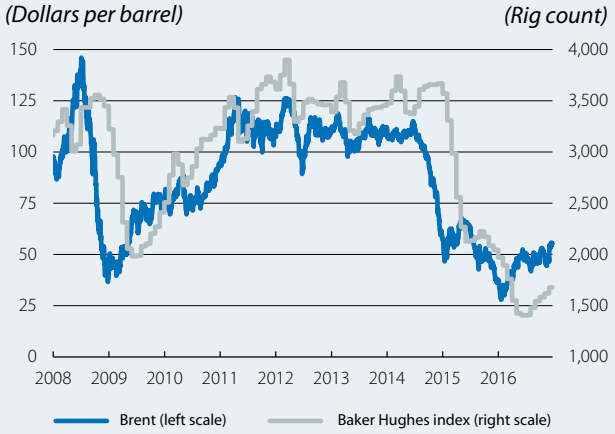
Assuming, therefore, that this agreement is reasonably credible, a second aspect that helps in its evaluation is to analyse what it represents in terms of the future global supply of oil. Although it may seem paradoxical, cutting production will not stop the global supply from remaining close to its historical peak in 2017. Based on forecasts by the US Energy Information Administration (EIA), world oil production in 2017 will be, at most, around 700,000 barrels a day less after the agreement (out of a global production of 97.42 million barrels), since the agreed cut will be partly offset by growth from countries not covered by the agreement, including the US, whose production will see a notable rise of 6% in 2017.

This improvement in US production points directly to shale, a production technology that is on the rise and makes the expected supply scenario more uncertain. The EIA is not very precise in this area but it does mention one key aspect that most analysts agree with: if oil goes above 50 dollars a barrel, shale producers will reactivate their supply.

Given this situation, although many shale sites are not considered to be profitable below a price of 65-70 dollars, the latest analyses suggest that a lot of the new sites are profitable in the 60-dollar zone or even below this, since shale production is undergoing substantial innovation, in addition to benefitting from falling prices for basic inputs such as cement and steel. These estimates are consistent with the fact that production by existing shale sites has recovered strongly in the last six months (see the graph). We should also note that the number of already drilled but not fully operational wells is high, suggesting a notable response capacity among shale producers to any slight improvement in the price of oil.

In short, the adjustment in oil supply agreed by OPEC and other producers is not disproportionate but neither is it negligible. Without this first step, growth in supply in 2017 would have probably pushed oil prices down even further. But it might have the effect, undesirable in the eyes of OPEC, of encouraging a complete resurrection of shale. Nonetheless, it adds support to scenarios forecasting a gradual improvement in oil prices in 2017, as in the CaixaBank Research scenario which predicts growth in the price of crude oil towards the 60-dollar zone by the end of 2017.

Oil prices and global shale production indicator



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

KEY INDICATORS

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

UNITED STATES

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	10/16	11/16	12/16
Activity									
Real GDP	2.4	2.6	1.9	1.6	1.3	1.7	–	...	–
Retail sales (excluding cars and petrol)	4.5	4.3	3.6	4.0	4.4	3.6	4.3	3.8	...
Consumer confidence *(value)*	86.9	98.0	96.0	96.0	94.8	100.7	100.8	109.4	113.7
Industrial production	2.9	0.3	–1.6	–1.6	–1.1	–1.0	–0.8	–0.6	...
Manufacturing activity index (ISM) *(value)*	55.6	51.3	48.6	49.8	51.8	51.2	51.9	53.2	...
Housing starts *(thousands)*	1,001	1,108	1,135	1,151	1,159	1,145	1,340	1,090	...
Case-Shiller home price index *(value)*	171	179	183	187	188	189	190	...	...
Unemployment rate *(% lab. force)*	6.2	5.3	5.0	4.9	4.9	4.9	4.9	4.6	...
Employment-population ratio *(% pop. > 16 years)*	59.0	59.3	59.4	59.8	59.7	59.7	59.7	59.7	...
Trade balance[1] *(% GDP)*	–2.8	–2.8	–2.8	–2.7	–2.7	–2.7	–3.5	...	...
Prices									
Consumer prices	1.6	0.1	0.5	1.1	1.0	1.1	1.6	1.7	...
Core consumer prices	1.7	1.8	2.0	2.2	2.2	2.2	2.1	2.1	...

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

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	10/16	11/16
Activity								
Real GDP	0.2	1.2	1.2	0.3	0.9	1.0	–	...
Consumer confidence *(value)*	39.3	41.3	42.2	41.4	41.2	42.1	42.3	40.9
Industrial production	2.1	–1.2	–1.1	–3.2	–1.7	0.5	0.2	2.9
Business activity index (Tankan) *(value)*	13.5	12.8	12.0	6.0	6.0	6.0	–	10.0
Unemployment rate *(% lab. force)*	3.6	3.4	3.3	3.2	3.2	3.0	3.0	...
Trade balance[1] *(% GDP)*	–2.5	–0.5	–0.5	–0.2	0.1	0.5	0.8	0.9
Prices								
Consumer prices	2.8	0.8	0.2	0.0	–0.3	–0.5	0.2	0.5
Core consumer prices	1.8	1.0	0.7	0.6	0.6	0.2	0.2	0.1

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

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	10/16	11/16
Activity								
Real GDP	7.3	6.9	6.8	6.7	6.7	6.7	–	...
Retail sales	12.0	10.7	11.1	10.3	10.2	10.5	10.0	10.8
Industrial production	8.3	6.1	5.9	5.9	6.1	6.1	6.1	6.2
PMI manufacturing *(value)*	50.7	49.9	49.7	49.5	50.1	50.2	51.2	51.7
Foreign sector								
Trade balance[1] *(value)*	383	608	608	601	602	585	573	563
Exports	6.0	–2.3	–5.2	–11.5	–5.0	–6.2	–7.3	0.1
Imports	0.4	–14.2	–11.8	–13.7	–6.8	–4.6	–1.4	6.7
Prices								
Consumer prices	2.0	1.4	1.5	2.1	2.1	1.7	2.1	2.3
Official interest rate[2] *(value)*	5.60	4.35	4.35	4.35	4.35	4.35	4.35	4.35
Renminbi per dollar *(value)*	6.2	6.3	6.4	6.5	6.5	6.7	6.7	6.8

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 · The euro area's recovery continues to be supported by a low interest rate environment

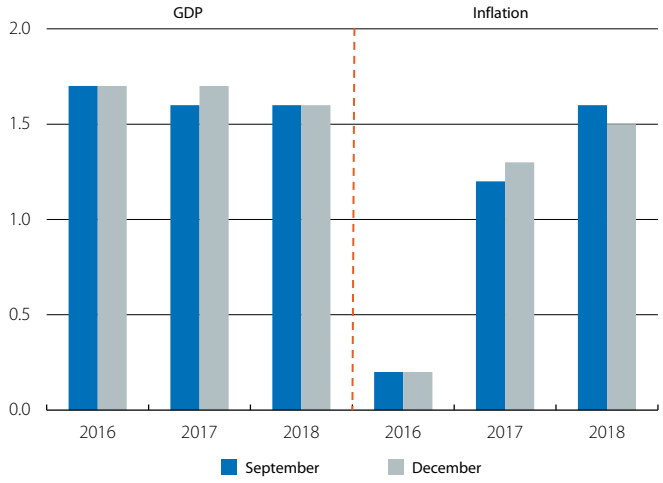
Growth in activity consolidates in 2017 but there are still risks. In spite of the many different economic and political events occurring throughout the year, the euro area economy expanded at a modest but constant rate in 2016 and this tone is expected to remain very similar in 2017. Specifically, the CaixaBank Research scenario predicts the region will have ended 2016 with 1.7% growth and forecasts a moderate 1.5% growth for 2017. The ECB agrees with these projections; in its quarterly update of the macroeconomic situation it revised its 2017 growth forecast up to 1.7% (+0.1 pps), keeping its projection of a slight slowdown in medium-term growth (1.6% in 2018) unchanged. The ECB also made a small upward revision to its 2017 projection for inflation, now at 1.3% (+0.1 pps) on account of the upward revision in projected oil prices this year. However, the monetary institution expects inflationary pressures to pick up very gradually in the medium term, posting figures it believes will not be close enough to its target for 2018 and 2019. The ECB has also warned of the high risks around its projections, both external and also related to the euro area's political situation, such as the start of negotiations for the UK to leave the EU and important elections taking place in Germany, France and possibly also Italy. All this means that very accommodative monetary policy is still the most appropriate stance.

The ECB prolongs its asset purchase programme to December 2017 to ensure a very substantial degree of monetary accommodation in the medium term. Although the volume of asset purchases will fall to €60 billion a month as from April (currently €80 billion), the ECB stressed that it still believes it is necessary to keep financial conditions very favourable in order to support the recovery in the euro area's economic activity, crucial for bringing inflation closer to the ECB's target. One example of the extent of the measures being taken by the ECB is the fact that its balance sheet is expected to reach €4.5 trillion by the end of 2017, double the figure when QE began in March 2015. Mario Draghi also stated that inflation will not achieve the ECB's target in the next three years, suggesting the ECB will continue to take a very accommodative monetary stance beyond December 2017. He also noted that there are still important downside risks and, if necessary, the volume of purchases may be increased further. In line with these messages, both the scenario for the CaixaBank Research forecasts and that of the consensus of analysts believe the ECB will not raise its benchmark interest rate until mid-2019.

Given this situation of low interest rates, demand for credit is gradually picking up. The ECB's monetary policy has helped

Euro area: ECB GDP and inflation forecasts

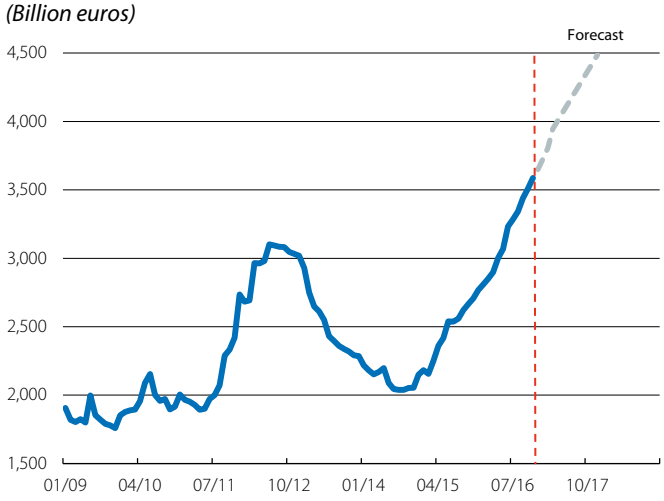
Annual change (%)



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

*Euro area: ECB balance sheet **

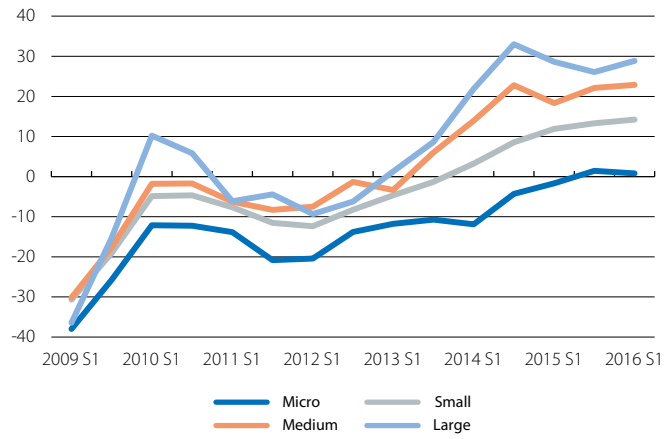
(Billion euros)



Note: ** Total assets on the ECB balance sheet.*
Source: *CaixaBank Research, based on data from the ECB.*

Euro area: access of enterprises to external financing across firm size

(% of enterprises reporting improvements compared with the preceding period)



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

to push interest rates down to an all-time low, with the aim of boosting credit and economic activity. According to the survey carried out by the ECB, SMEs have been enjoying considerably better financing conditions in the last few quarters. Companies confirmed both an increase in the availability of bank loans and in the willingness of banks to provide credit at lower interest rates. This survey also shows that, on the back of improved financing conditions, companies no longer see access to credit as one of their main concerns. Now they can focus their efforts on tackling other challenges more closely related to their business, such as finding customers or cutting production costs.

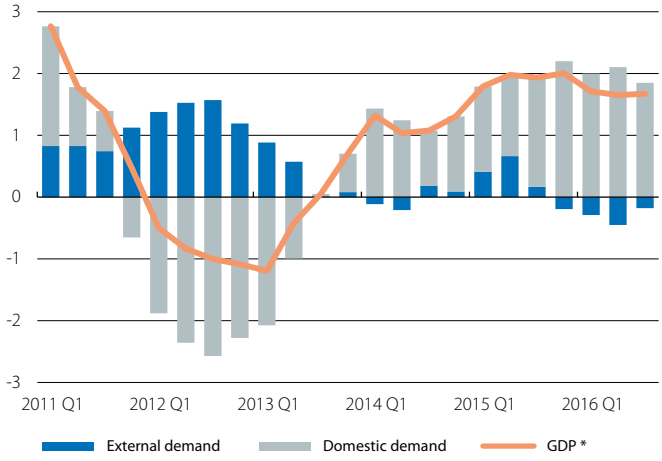
Domestic demand is still driving the euro area's recovery. As in previous quarters, domestic demand made a significant contribution to euro area GDP growth in 2016 Q3 (+0.4 pps). This was underpinned by private consumption, up by +0.3% quarter-on-quarter, and by a strong increase in public consumption of +0.5%. However, gross fixed capital formation remained weak (+0.2%). External demand deducted from growth (–0.1 pps) owing to weak exports and a moderate increase in imports. With a view to the coming quarters, we expect domestic demand to continue as the mainstay for growth.

Most activity indicators point to growth accelerating in Q4. The euro area industrial production index rose by 1.5% year-on-year in October (three month average), a notably larger increase than in the first half of the year. Both the composite PMI and economic sentiment index for the euro area reached annual peaks in Q4 and are clearly in an expansionary zone. By country, Germany continues to lead this acceleration, its composite PMI reaching 55.0 points and its economic sentiment 108.0 points (average for October and November). France also posted good figures, pointing to slightly greater economic growth in Q4 (0.4% GDP growth quarter-on-quarter, higher than the 0.2% posted in Q3). Italy was the only country to post a decline in its economic sentiment in November, resulting from the uncertain political climate caused by the referendum on constitutional reform and by the weak situation of some of its banks. However, progress was made on both fronts in December: the new Prime Minister took over quickly and without tensions and the new Italian government reached an agreement with the European Commission to use public funds to bail out the weakest banks. However, the new government led by P. Gentiloni is provisional until elections can be held, probably at the end of 2017, and it will take some time to sort out Italy's banking sector. All this means that Italy is perceived as one of the main sources of risk in 2017.

Consumption indicators point to resilient domestic demand. Retail sales rose by 2.5% year-on-year in October, higher than the figure posted in 2016 Q3 (1.5%). This growth continues to place private consumption as one of the mainstays for the euro area's economic recovery. The consumer confidence index for the euro area as a whole rose considerably in December, reaching –5.1 points, its highest

Euro area: GDP

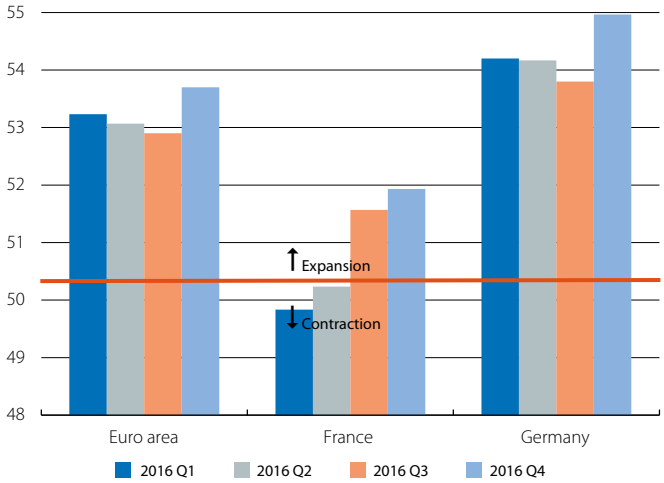
Contribution to year-on-year growth in GDP (pps)



Note: ** Year-on-year change (%).*
Source: *CaixaBank Research, based on Eurostat data.*

Euro area: composite PMI activity indicator

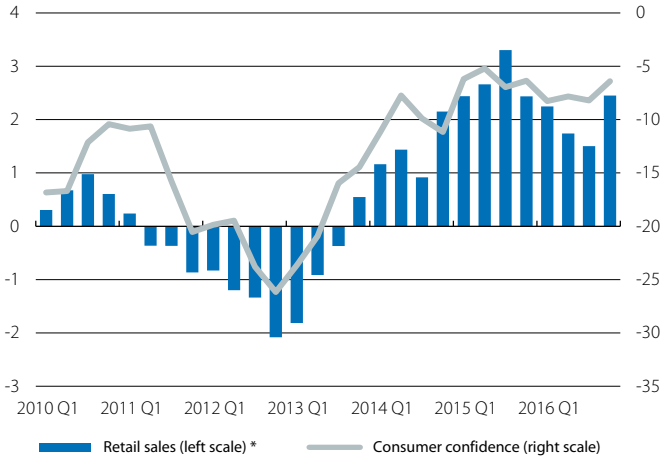
Level



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

Euro area: consumption indicators

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



Note: ** 2016 Q4 only includes October's figure.*
Source: *CaixaBank Research, based on data from Eurostat and the European Commission.*

level in the past 20 months. Next year we expect household consumption to continue growing, underpinned by the improving labour market and low interest rates, thereby helping to push up inflation.

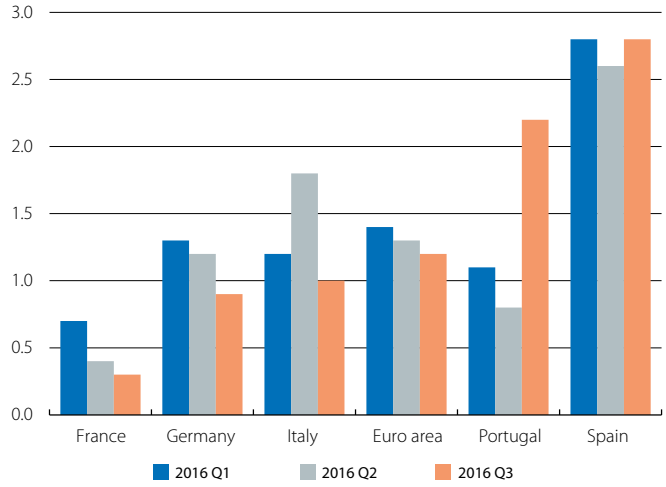
The improvement in the labour market consolidates, boosting household consumption. Euro area employment increased by 0.2% quarter-on-quarter in 2016 Q3 (0.4% in Q2), reaching the same total number of employees as before the economic recession (153.4 million). By country, of note is the employment growth observed in Portugal (1.3%), Spain (0.8%) and Ireland (0.6%), contrasting with smaller increases in Germany and France (+0.1% quarter-on-quarter) and the drop in Italy (–0.1%). Labour costs rose by 1.6% year-on-year in 2016 Q3, slightly more than the average for the first half of the year. This increase is broadly on account of the 2.4% annual rise in Germany's wage costs, 0.4 pps more than the increase posted in the first half of the year.

The upward trend in inflation is consolidating. In November, the harmonised index of consumer prices (HICP) increased by 0.6% year-on-year, 0.1 pp more than the growth posted in October. Along the same lines, core inflation stood at 0.8% compared with 0.7% in October. We expect this gradual increase to continue over the coming months on the back of growth in activity and labour market recovery, with both headline and core inflation reaching 1.5% by the end of 2017.

Greece continues to post positive growth figures but there is still a lot of work to be done. The Greek economy reported a notable Q3 growth rate, namely 0.8% quarter-on-quarter. However, the trend in economic activity has been highly erratic over the last few years and the economic recovery still looks very fragile. One of the issues that continue to jeopardise the sustainability of this recovery is the country's high public debt. The Eurogroup was willing to grant some debt relief measures but Tsipras's government has made several pledges to increase public spending not agreed with the Eurogroup, which has created tension between both sides. The Greek soap opera is far from over.

Employment

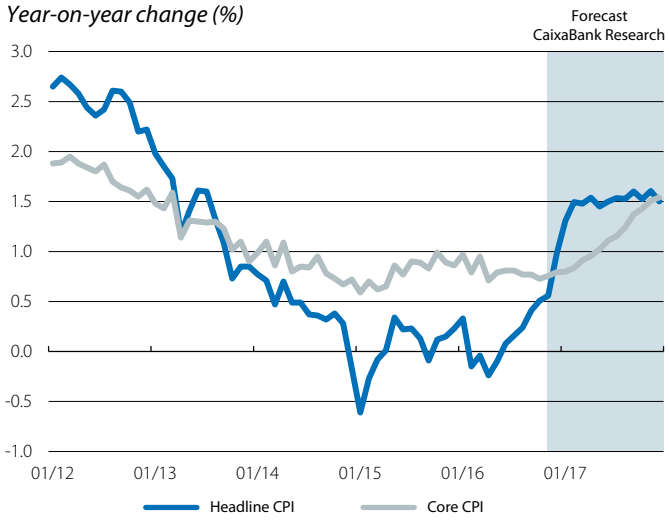
Year-on-year change (%)



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

Euro area: harmonised CPI

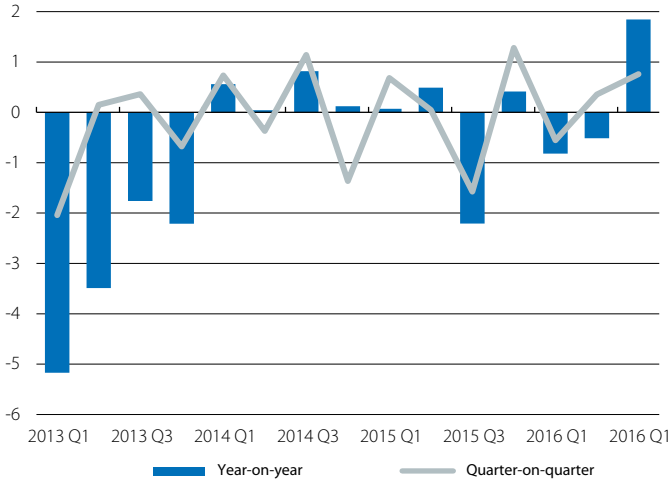
Year-on-year change (%)



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

Greece: GDP

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



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

FOCUS · Understanding the ECB: economics, politics and communication

On 8 December 2016, the European Central Bank (ECB) decided to prolong its asset purchase programme (known as QE) until December 2017. Below we examine how this decision fits the economic scenario for 2017.

The ECB bases its monetary policy decisions on a macroeconomic and financial analysis. On the economic front, since the announcement of QE in January 2015, euro area activity has consolidated its recovery with growth between 1.6% and 2% year-on-year, supported by the good transmission of monetary policy (see the enclosed table). However, the slump in oil prices in 2014 and 2015, which also benefitted activity, resulted in a drop in headline inflation and stagnation in core inflation. Moreover, in the financial sphere, the observation of lower inflation rates during 2015 and the first half of 2016 led markets to reduce their long-term inflation expectations to considerably below the 2% target.[1] In March 2016, facing inflation rates of around 0%, market reductions of long-term inflation expectations and the episode of financial instability observed in the first half of 2016, the ECB decided to significantly expand its QE.

After this extension the programme was meant to end in March 2017. Yet, in spite of a reasonably good macroeconomic outlook for 2017, the ECB has revised its decision because of the important risks that lie ahead. The ECB's own forecasts predict a firming up of the recovery with sustained growth in activity (1.7% for 2017 and 1.6% for 2018) and a gradual rise in inflation (1.3% in 2017 and 1.5% in 2018). The recovery in oil prices is the main factor behind this increase in inflation and, on the back of this, the ECB estimates that the risk of deflation has almost «disappeared». However, it still predicts a very gradual rise in core inflation (the variable that indicates underlying inflationary trends) and believes its medium-term inflation projection (1.7% in 2019) is not close enough to the target of 2%.

In addition to these macroeconomic perspectives, in which neither growth nor inflation really manages to accelerate, Europe's economy will also experience greater political uncertainty in 2017. First, the uncertainty caused by the Brexit victory in the UK and Donald Trump's election in the US in 2016 will still be relevant in 2017. Negotiations between the European Union and the UK will begin in the first half of 2017 and the complexity of reaching an orderly agreement in just two years could lead to upswings in uncertainty. Second, at a domestic level, 2017 itself has a packed electoral calendar: there will be elections in France, the Netherlands and Germany, all with the ingredient of the rise in Euroscepticism, and in Italy the government is less stable after the outcome of the constitutional referendum. Third, at the international level, markets will keep a very close eye on the Fed's normalisation of monetary policy and will be highly sensitive to the stance taken by the Trump administration.

On the whole, the ECB's policy is therefore facing a combination of ingredients but it has nevertheless given out a clear message: QE will continue for longer. The decision to prolong QE at a lower rate of purchases (60 billion per month as from April instead of the current figure of 80 billion) indicates that any tapering will be very gradual. This is the conclusion reached by the markets, which do not expect an interest rate hike until the second half of 2019 (see the enclosed graph).

1. For example, in July 2016, long-term inflation expectations based on financial instruments were below 1.3%.

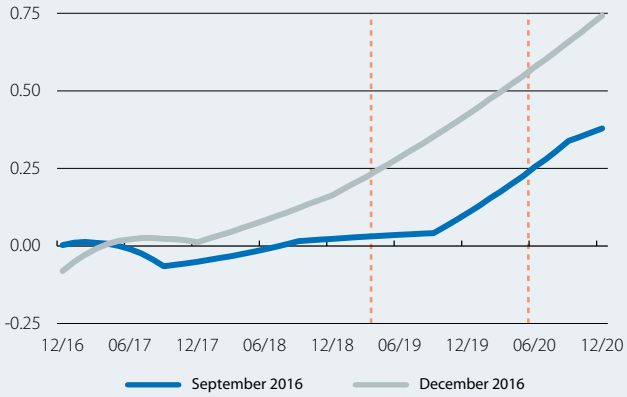
Economic-financial conditions and QE

	December 2014	November 2016	Cumulative change
Forecast Δ GDP next year *	1.1%	1.3%	0.2
Forecast Δ HICP next year *	0.6%	1.3%	0.7
$/€ exchange rate	1.2331	1.0799	–12.42%
Interest rate on 10-year German debt	0.64%	0.16%	–49 p. b.
Interest rate on 10-year Spanish debt	1.77%	1.42%	–34 p. b.
12-month Euribor	0.33%	–0.07%	–40 p. b.
Cost of credit for firms	2.44%	1.83% **	–61 p. b.
Eurostoxx 50	3,159.77	3,026.40	–4.22%

Notes: ** Forecasts of the consensus of analysts. ** Figure from October 2016.*
Source: *CaixaBank Research, based on data from Bloomberg, Thomson Reuters Datastream and Consensus Economics.*

Market expectations for the 12-month Euribor

(%)



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

FOCUS · Fiscal adjustment in the periphery: a never-ending story

In spite of the efforts made over the last few years, the peripheral countries have yet to complete their fiscal adjustment. Nevertheless, some figures indicate that the consolidation is well advanced. Now that these countries can benefit from some tailwinds and are no longer the main focus of attention of the markets, we will examine whether the policies announced for 2017 are appropriate or whether, conversely, fiscal policy has been relaxed in the absence of such market pressure.

When analysing the planned public deficit reduction in the periphery, several figures stand out: both the pace of adjustment and the level reached should be viewed positively. In 2017, the peripheral governments expect to reduce their public deficit by an average of 0.8 pps of GDP, a similar rate to that observed over the last few years. And, if these forecasts are met, the primary surplus in the periphery will increase to 0.9% of GDP (from 0.4% in 2014). Moreover, public debt will fall slightly, from 119.9% of GDP in 2016 to 119.3% in 2017.

However, we need to consider the expected economic context and examine both the composition and credibility of the planned adjustment in order to analyse it thoroughly.

When the expected environment for fiscal adjustment is taken into account, we can see that this will largely occur thanks to economic growth.[1] Consequently, in Ireland and also in Portugal and Spain the respective governments forecast that fiscal policy will practically be neutral. In Italy, however, the government plans to implement an expansionary fiscal policy and reduce its primary structural surplus by 0.8 pps.

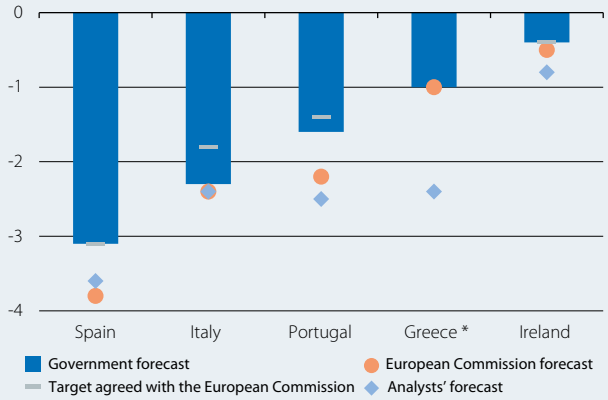
This positive view is further compromised when we look at the composition of the announced adjustment. On the expenditure side, the aim is still to improve public administration efficiency, albeit differently depending on the country and measure used. However, this has been a recurring proposal over the last few years, and its success has been limited. On the revenue side, part of the increase in tax receipts is expected to come from a reduction in the size of the informal economy (also a recurring strategy in the last few years and which, with the odd exception, has had limited success).

Various analysts believe that the deficit reductions announced by the peripheral governments are not entirely realistic. First of all, it is notable that, in several countries, the budgets presented propose a deficit target that is higher than the target agreed with Brussels.

Moreover, analysts forecast an even greater deviation from target, and expect fiscal policy in the periphery to be slightly accomodative in 2017.

Fiscal balance

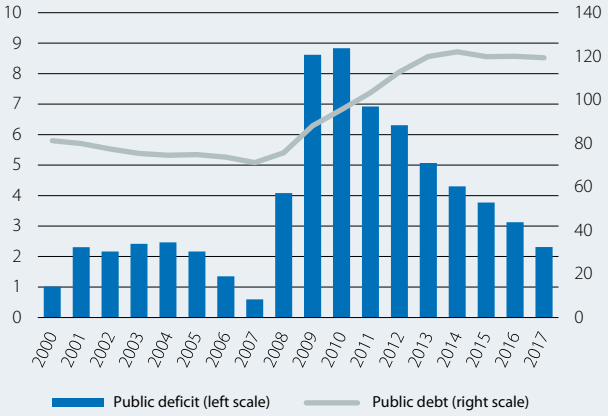
(% of GDP)



Note: ** Greece's target is not available as the agreement relates to the primary balance.*
Source: *CaixaBank Research, based on data from the European Commission and Bloomberg.*

Public deficit and public debt in the periphery

(% of GDP) *(% of GDP)*



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

1. The expected reduction in financial costs is also notable and especially due to the ECB's accommodative monetary policy.

KEY INDICATORS

Activity and employment indicators

Values, unless otherwise specified

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	10/16	11/16	12/16
Retail sales *(year-on-year change)*	1.4	2.7	2.5	2.2	1.7	1.4	2.4	...	...
Industrial production *(year-on-year change)*	0.9	2.0	1.7	1.3	1.1	1.1	0.6	...	...
Consumer confidence	–10.2	–6.2	–6.4	–8.3	–7.8	–8.2	–8.0	–6.1	–5.1
Economic sentiment	101.5	104.2	106.2	104.0	104.3	104.3	106.4	106.5	...
Manufacturing PMI	51.8	52.2	52.8	51.7	52.0	52.1	53.5	53.7	54.9
Services PMI	52.5	54.0	54.2	53.3	53.1	52.6	52.8	54.1	53.1
Labour market									
Employment (people) *(year-on-year change)*	0.6	1.0	1.2	1.4	1.4	1.2	–	...	–
Unemployment rate: euro area *(% labour force)*	11.6	10.9	10.5	10.3	10.1	10.0	9.8	...	...
Germany *(% labour force)*	5.0	4.6	4.5	4.3	4.2	4.2	4.1	...	...
France *(% labour force)*	10.3	10.4	10.2	10.2	9.9	10.1	9.7	...	...
Italy *(% labour force)*	12.6	11.9	11.6	11.6	11.6	11.6	11.6	...	...
Spain *(% labour force)*	24.5	22.0	20.9	20.4	20.1	19.4	19.2	...	...

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

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	10/16	11/16
Current balance: euro area	**2.5**	**3.3**	**3.3**	**3.3**	**3.5**	**3.4**	**3.4**	**...**
Germany	7.3	8.3	8.3	8.5	8.9	8.7	8.6	...
France	–1.1	–0.2	–0.2	–0.8	–0.9	–1.4	–1.6	...
Italy	1.9	1.6	1.6	1.9	2.3	2.6	2.7	...
Spain	1.1	1.4	1.4	1.4	1.7	1.9	1.9	...
Nominal effective exchange rate[1] *(value)*	**101.8**	**92.3**	**92.4**	**94.1**	**94.8**	**95.1**	**95.4**	**94.9**

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

Financing and deposits of non-financial sectors

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

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	10/16	11/16
Private sector financing								
Credit to non-financial firms[1]	–2.6	–0.4	0.4	1.2	1.7	2.0	2.1	2.2
Credit to households[1, 2]	–0.1	0.7	1.3	1.5	1.7	1.8	1.8	1.9
Interest rate on loans to non-financial firms[3] *(%)*	2.0	1.6	1.5	1.4	1.4	1.3	1.3	...
Interest rate on loans to households for house purchases[4] *(%)*	2.6	2.1	2.0	2.0	1.8	1.8	1.8	...
Deposits								
On demand deposits	6.0	11.1	11.6	11.2	10.1	9.5	8.7	9.6
Other short-term deposits	–2.0	–3.8	–3.8	–2.4	–1.8	–1.2	–1.7	–2.0
Marketable instruments	–7.2	2.6	0.8	–1.0	2.3	5.6	1.8	2.4
Interest rate on deposits up to 1 year from households *(%)*	1.3	0.8	0.7	0.6	0.6	0.5	0.5	...

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 · **Good outlook for the new year**

The outlook for the Spanish economy in 2017 is very favourable. After ending the period of 2015-2016 with GDP growth in excess of 3% in both years, most analysts and major international institutions predict a slight slowdown in the growth rate of Spain's economy in 2017. According to the CaixaBank Research forecast, growth will remain high, at around 2.6%, supported by the effect of the structural reforms carried out over the last few years which, for instance, have led to a notable increase in competitiveness. Additional support is provided by the positive evolution of the labour market, accommodative monetary conditions and the recent upward trend in the real estate market. Nevertheless, the risks hovering over the macroeconomic scenario are still high although, unlike in the last few years, the biggest now come from abroad. The economic policy finally implemented by the Trump administration in the US, the packed electoral calendar in Europe and the financial fragility of several emerging countries, particularly China, are some of the most important risks.

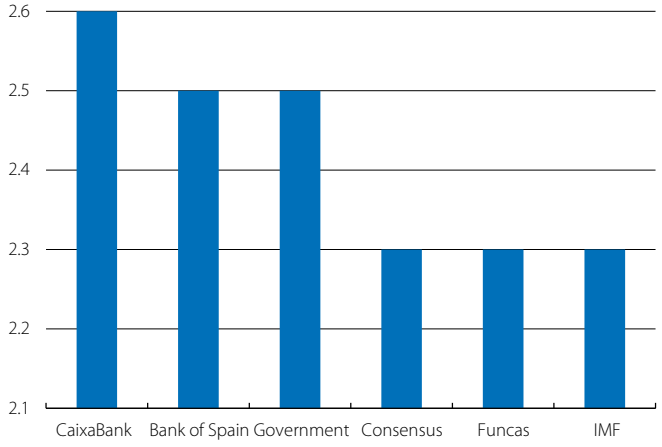
The rate of growth remains high in Q4. The latest figures indicate solid expansion for economic activity which, for the moment, is showing no signs of slowing down. The CaixaBank Research GDP forecast model predicts 0.68% growth quarter-on-quarter in Q4, a growth rate similar to the figure in Q3 (0.71% quarter-on-quarter). In general, the different indicators published over the last month point to this rate of expansion continuing. Particularly promising is the solidity shown by private consumption indicators, suggesting this component will continue to be the main driver of domestic demand.

In terms of supply, activity indicators show the economy is still comfortably in the expansionary zone. According to the business sentiment index (PMI) for November, activity grew strongly at the end of the year. The indicator for services is still at a very high level (55.1 points), while the one for manufacturing rose to 54.5 points, its highest level since January. Other data confirm this improvement in the industrial sector after a dip in the summer, with the sector's turnover increasing by 2.0% year-on-year in October. The strong upswing in new industrial orders (5.5% year-on-year in October), especially orders from the euro area, suggests this sector will continue to perform well.

The good activity figures are reflected in the labour market's positive trend, although the number of registered workers affiliated to Social Security in November was slightly worse than expected. Specifically, this fell by 32,832 people while, in the last two years, the affiliation figures had increased slightly in the month of November. However, this drop can largely be explained by the prolongation of the tourist season until October and the consequent higher job

GDP growth forecasts for 2017

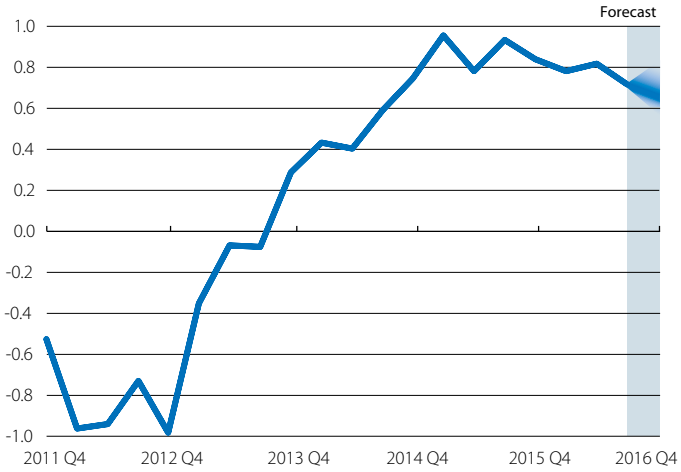
Annual change (%)



Note: *Forecasts at December 2016.*
Source: *CaixaBank Research, based on data from the Bank of Spain, the Ministry of Finance, Consensus Economics, Funcas and the IMF.*

GDP

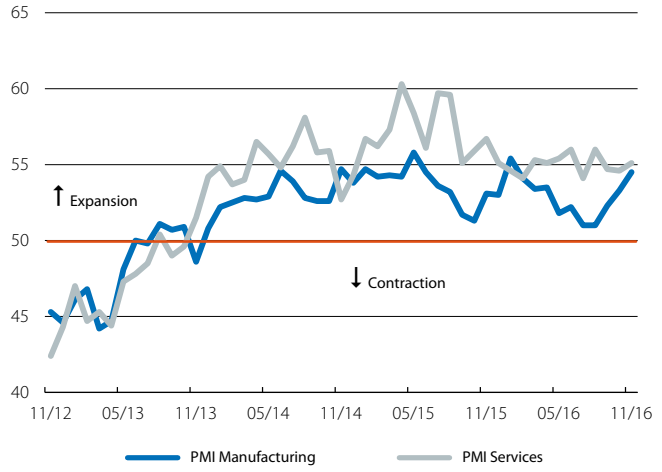
Quarter-on-quarter change (%)



Note: *90% confidence interval.*
Source: *CaixaBank Research, based on data from the INE.*

Activity indicators

Level



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

losses in hotels and restaurants in November. If we look at the two months together, the balance is very positive, a favourable trend expected to continue in December as a good Christmas season is predicted. With a view to 2017, we expect the job creation rate to slow down slightly to 2.3%, in line with the lower growth expected in GDP, resulting in around 370,000 more people in work.

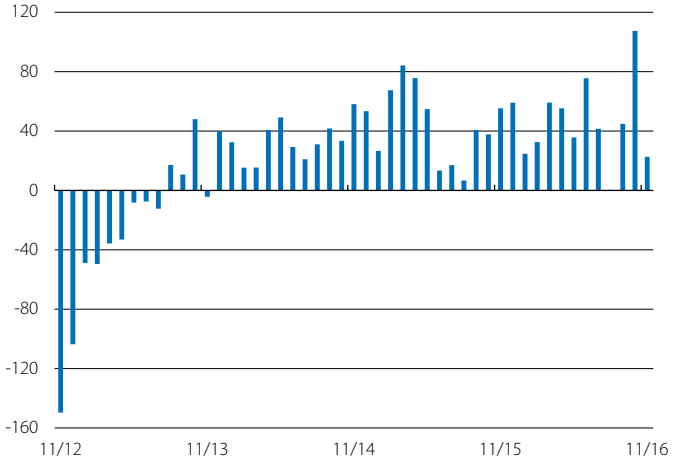
Contained wage rises are helping to regain competitiveness. According to the harmonised labour cost index, wage costs rose by 0.2% quarter-on-quarter in 2016 Q3, equalling the figure recorded for Q2. For the time being, the wage increases included in sector agreements, namely 1.1% year-on-year in October, show that rises were still contained in Q4. However, labour costs could see a higher increase in 2017. On the one hand, the government has approved an 8% increase in the minimum wage (see the Focus «The minimum wage in Spain» in this *Monthly Report*). On the other hand, wage rises may intensify as inflation picks up. According to the CPI flash estimate for December, inflation stood at 1.5% (0.8 pps higher than the previous month's figure), resulting from higher energy prices. In fact, the rise in oil prices will push inflation above 2% in 2017 Q1. Spain's inflation differential compared with the euro area will therefore be positive again after being negative for more than three years. This will be due mostly to higher oil prices, which have relatively more impact on the Spanish economy, but it is also an early warning that should serve to further encourage efforts to consolidate the competitiveness gained over the last few years (see the Focus «Spain's inflation differential with the euro area: historical trend and outlook» in this *Monthly Report*). Core inflation, unaffected by any fluctuations in energy prices, will continue to rise very gradually thanks to stronger household consumption, still supported by the sustained improvement in the labour market and in conditions to access credit.

The external imbalance continues its adjustment. The improvement in competitiveness, partly achieved thanks to production costs remaining contained, has been key to boosting exports. In 2016 up to October, the exports of non-energy goods increased by 2.5% year-on-year. Service exports performed particularly well (6.1% year-on-year from January to September), reflecting the excellent tourist season: 67.5 million tourist arrivals from January to October, equivalent to a 10.2% increase year-on-year. Regarding imports, these saw a very moderate rise (0.6% year-on-year from January to September) on account of the sharp fall in energy imports (–28.7% year-on-year from January to September). With a view to 2017, rising oil prices will result in a certain deterioration of the current account surplus to 1.8% of GDP (2.2% predicted in 2016).

The public sector continues its fiscal consolidation but adjustment is still incomplete. The government presented an update of its 2017 Budget Plan, which includes budgetary measures that should help to bring down the public deficit towards the target of 3.1% of GDP. The public deficit targets

*Registered workers affiliated to Social Security **

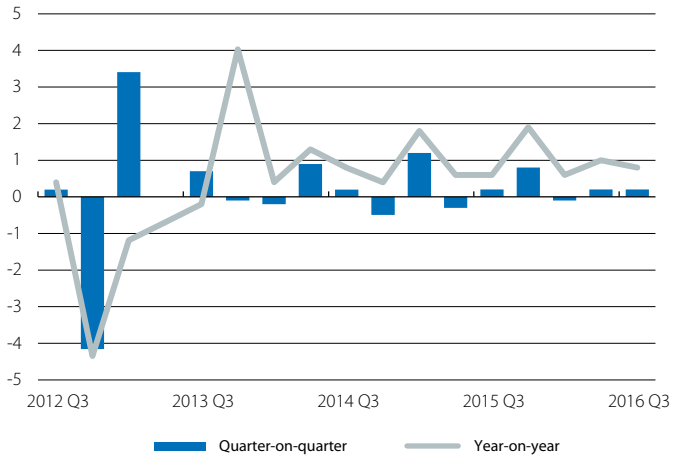
Month-on-month change (thousands)



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

*Hourly wage costs **

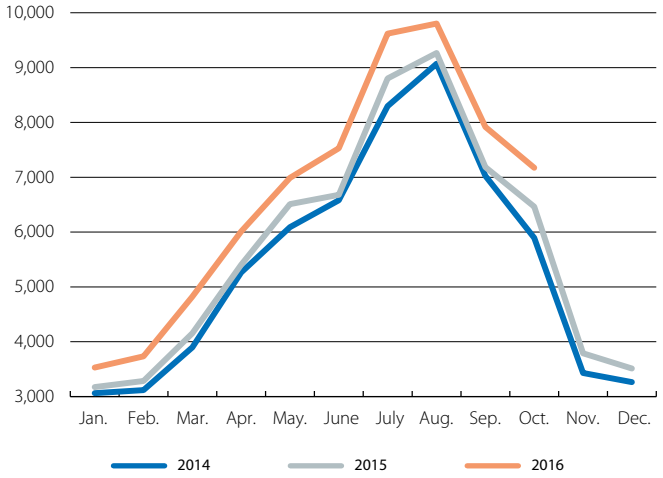
Quarter-on-quarter and year-on-year change (%)



Note: ** Data adjusted for calendar and seasonal effects.*
Source: *CaixaBank Research, based on data from the INE (ICLA).*

Foreign visitor arrivals

(Thousands)



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

by administration were also approved. Most of the adjustment falls to central government as the rest of the administrations had already carried out a large part of the adjustment in previous years. The Social Security deficit remains high, revealing its structural nature, while the autonomous communities will achieve a balanced budget in 2019. The report produced by the IMF every year on the Spanish economy has emphasised the need to reduce the public deficit via increases in indirect taxes and by controlling expenditure, particularly on education and healthcare.

The real estate sector remains dynamic. House prices based on sales grew by 4.0% year-on-year in 2016 Q3 (3.9% in Q2), a larger increase than the valuation price index (1.6% year-on-year in Q3). Although price trends vary across the autonomous regions, they have all posted positive annual growth. The Balearic Islands, Catalonia and the Community of Madrid particularly stand out with increases above the state average. This big increase in sales, in October growing at a rate of 13.4% year-on-year (cumulative over 12 months), indicates that the sector's recovery will get stronger in the coming quarters. However, new building permits are still at a low level, suggesting that pressure on prices will continue (see the Focus «Real estate is starting to pick up again» in this *Monthly Report*).

The banking sector is also enjoying a good trend. In their follow-up report on the banking sector, the European Commission and ECB praise the efforts made to secure improvements in asset quality, levels of capital and changes in business model. Nevertheless, the report also notes that there is still work to be done on reducing repossessed assets and privatising state-owned banks, necessary steps to strengthen the sector's financial stability. Spain's banking sector is therefore more robust and increasingly in a better position to support the recovery. In fact, new bank loans granted to households are increasing strongly. Both consumer credit and loans to purchase housing are still posting high growth rates, 29.4% and 21.8% for the cumulative figure from January to October, compared with the same period in 2015. However, credit to firms continued to slow down in the case of SMEs (2.8%) and to contract sharply for large firms (–33.5%). The NPL ratio increased slightly in October to 9.3% (9.2% in September), but this slight rise can be put down to the commencement of the Bank of Spain's Annex IX, which has resulted in doubtful assets being reclassified.

Deficit targets by administration

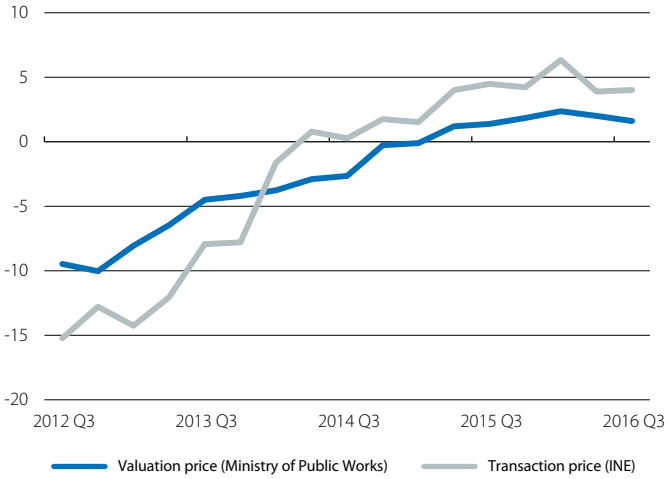
(% of GDP)

	2015	2016	2017	2018	2019
Central government	–2.5	–2.2	–1.1	–0.7	–0.3
Autonomous regions	–1.7	–0.7	–0.6	–0.3	0.0
Local government corporations	0.4	0.0	0.0	0.0	0.0
Social Security	–1.3	–1.7	–1.4	–1.2	–1.0
Total public administration	**–5.1**	**–4.6**	**–3.1**	**–2.2**	**–1.3**

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

Housing prices

Year-on-year change (%)



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

Credit and non-performing loans (2016 Q3)

	Balance (billion euros)	Year-on-year change (%)	NPL ratio (%)
Households (housing)	540	–3.1	4.7
Households (consumption)	115	4.7	8.3
Productive activities	604	–7.7	13.5
Construction	41	–9.3	29.1
Developers	123	–9.3	25.6
Services	314	–9.2	8.5
Industry	107	–2.9	9.3
Agriculture	19	5.6	9.2
Total *	**1,259**	**–4.8**	**9.2**

Note: ** The total balance does not include loans to NPISH or unclassified loans.*
Source: *CaixaBank Research, based on data from the Bank of Spain.*

FOCUS · The minimum wage in Spain

On December 2nd, the government approved an 8% rise of the interprofessional minimum wage (SMI in Spanish) for 2017. With this increase, the SMI now stands at 707.6 euros per month with 14 payments per year, 52.4 euros a month more than in 2016. This increase is much higher than what would have resulted from updating the SMI by the CPI, the most widely-used indicator to measure the change in the cost of living, as the inflation forecast for 2017 is 1.7%. In fact, the annual increase in the SMI has been above inflation for the last three years although this has not been enough to regain the purchasing power lost between 2010 and 2013. The increase in 2017, however, will help to reverse this situation and will take the SMI to above the 2009 level in purchasing power terms (see the first graph).

Another comparison that illustrates the evolution of the minimum wage over time consists of comparing it with the trend in the average wage and also the median wage.[1] The first graph shows how, since 2009, the SMI increase has been smaller than that of wages. Specifically, the SMI increased by 3.9% in cumulative terms between 2009 and 2015 while average and median wages grew by 5.6% and 10.5%, respectively, over the same period. These data suggest that the SMI has lagged behind the wage trend in the economy as a whole.

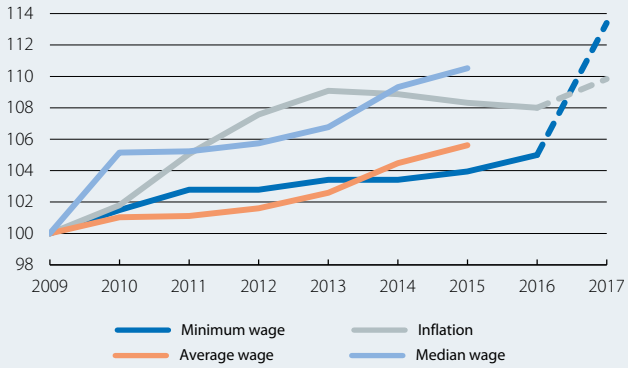
Spain's minimum wage is also in the lower band at an international level. Although it is true that, in absolute terms, it ranks 9th among the 22 EU countries that have a minimum wage,[2] this ranking alters substantially once we consider the minimum wage as a ratio of the average wage, an indicator known as the Kaitz index (see the second graph). In the EU,[3] the minimum wage as a percentage of the average gross wage ranges between the 50% of France and the 31% of Spain. Only two OECD countries, Mexico (29%) and the US (25%), have a lower percentage. We get the same picture if, instead of the average wage, we compare the minimum wage with the median wage, which is more appropriate for an international comparison as it takes into account differences in the spread of wages between countries: the minimum wage represents 37% of the median wage in Spain and only the US has a lower percentage (36%).

The 8% increase approved for the SMI in 2017 will raise Spain's Kaitz index. By way of example, if the average wage remained constant at 2015's value, the index would increase to 34% and 40% in comparison with the average and median wage, respectively. Nonetheless, Spain will still rank below other EU countries such as France, Germany, Belgium and Portugal.

The direct effect of this higher minimum wage on labour costs and the rate of job creation will probably be limited as the number of workers that currently receive a wage lower than the SMI passed by the government and therefore those who should see a wage rise is relatively small.[4] Ultimately the impact will also depend on whether the increase in the SMI is applied to other salaries although, with unemployment still very high, this effect should be very limited as well.

Spain: trend in the minimum wage compared with inflation, the average and median wage

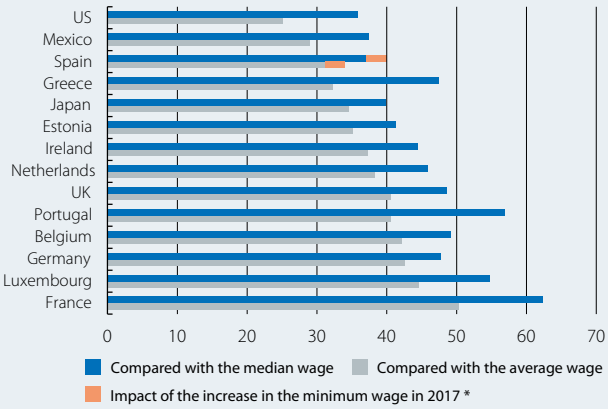
Index (100 = 2009)



Note: *The trend in the average wage and median wage is calculated using the OECD's Kaitz index.*
Source: *CaixaBank Research, based on data from Eurostat and the OECD.*

Minimum wage compared with the average and median wage in 2015

(% of the average or median wage)



Note: ** Assuming the average and median wage remain constant at 2015 levels.*
Source: *CaixaBank Research, based on OECD data.*

1. The median is the value of the variable that is in the middle of a range; i.e. in the case of the median wage, 50% of workers receive a lower wage and the remaining 50% a higher wage.
2. Adjusting the data by purchasing power, Spain's minimum wage ranks 10th out of the 22 EU countries, according to Eurostat data at July 2016.
3. Data from 2015.
4. See F. Felgueroso (2016), *El aumento del salario mínimo: no tan trivial*, available online: www.nadaesgratis.es

FOCUS · Real estate is starting to pick up again

The recovery in the real estate sector is evident when we look at the trend in house prices (up by 4.0% year-on-year in 2016 Q3)[1] or in housing demand, which has been growing by more than 10% for several months now. Nevertheless, *a priori* this picture is less conclusive when we look at the activity indicators for real estate.

The sector seems to be having trouble in adapting to the new environment of economic growth, as shown by completion certificates for buildings, which specifically posted a negative growth rate in September of –13% year-on-year in cumulative terms over 12 months. Such figures are not encouraging but we must remember that it takes time to complete a building. Thus, the number of finished residences today reflects the sector's expectations at the end of 2014, a time when prices had bottomed out.

The figures for new building permits provide a much more dynamic picture. Although the number of new residences being built is still small, the rate of increase has been very strong for some months now. Specifically, in September the growth rate reached 40% year-on-year in Spain (cumulative over 12 months). Improved financial conditions and the recovery in economic activity are boosting this recovery in the real estate sector throughout Spain but it should be noted that the growth rate is highly disparate between regions: in September 2016 new building permits increased by more than 60% year-on-year in 13 provinces while they were still decreasing in another 13.[2]

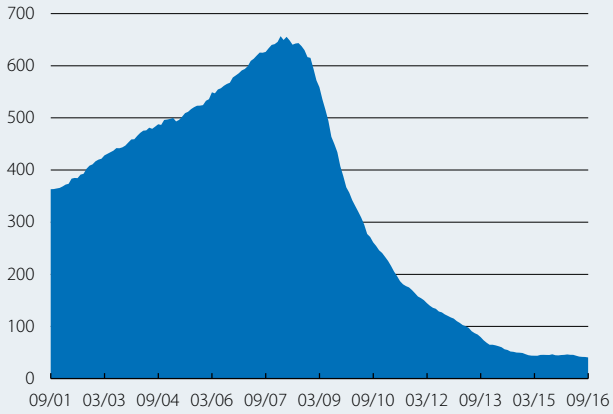
This great disparity is partly due to demand factors, such as the strong growth in tourism and the entrance of foreign investors in some regions,[3] but supply factors are also significant. The sector's recovery is concentrated in those provinces where the number of new residences available for sale is smaller while provinces such as Toledo or Ciudad Real, where this figure is still high, are posting levels of new building permits which are far below their historical average. In fact, it comes as no surprise that, in such provinces, new building permits are still declining.

In summary, the real estate revival is gradually adjusting to the new economic cycle. The recovery has already started in those regions and cities where demand is growing more strongly and there is a smaller number of residences available for sale and this is likely to spread, slowly but surely, to the rest of Spain.

1. According to INE data, based on the transaction price.
2. Cumulative figures over 12 months.
3. See the Focus «Demand for housing: uneven growth» in MR11/2016 for a more detailed look at the heterogeneous nature of housing demand in Spain.

Completion certificates

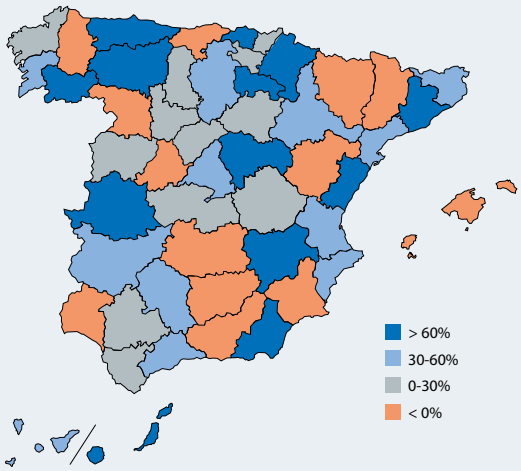
Cumulative figures over 12 months (thousands)



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

New building permits

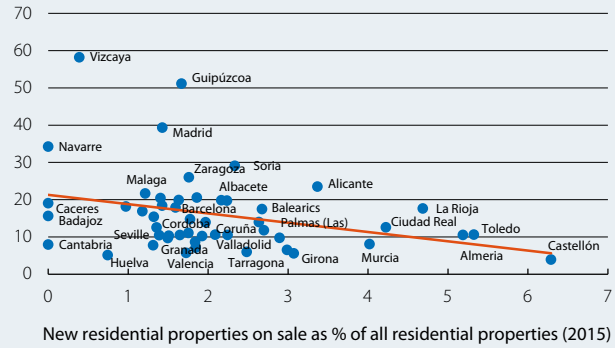
Cumulative figures over 12 months, annual change (%)



Note: *Data up to September 2016.*
Source: *CaixaBank Research, based on data from the Ministry of Public Works.*

New residential properties on sale and number of new building permits

*New building permits as % of the historical average **



Note: ** Cumulative figures over 12 months up to September.*
Historical average calculated between 1992-2015.
Source: *CaixaBank Research, based on data from the Ministry of Public Works.*

FOCUS · Spain's inflation differential with the euro area: historical trend and outlook

Spanish inflation is rising. In December, it increased by 0.8 pps to 1.5%, far exceeding euro area inflation (1.1%),[1] and the projections for 2017 also expect this differential to increase substantially. This raises the spectre of a return to the first decade of the euro, when Spain's inflation was repeatedly higher than inflation in the euro area, resulting in a considerable loss of competitiveness. So are there reasons to be concerned about this widening gap in inflation? In principle, the answer is no.

The difference between Spanish and euro area inflation is determined by three fundamental factors: relative unit labour costs, the cyclical position of each economy and oil prices, which have more impact on Spanish inflation because the country is a heavier consumer of hydrocarbons. The relative importance of each factor has gradually altered over the last few years.

The trend in the inflation differential in the first 18 years of the euro's life can be divided into three different stages: the inflationary decade, the adjustment period and the recovery stage. In the inflationary decade (1999-2008), Spain's inflation was, on average, 1 pps higher than inflation in the euro area. Although rising oil prices in this period helped to widen the gap between inflation rates, most can be explained by the difference in core inflation, which does not include energy (see the first graph). Prices in Spain grew faster due to a higher increase in unit labour costs, which rose by 17% compared with euro area countries, and also due to the overheating of the economy in this expansionary phase.

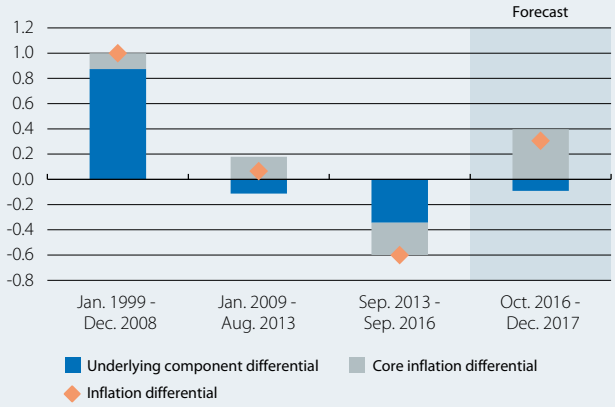
The adjustment in the inflation differential that occurred between 2008 and early 2013 was characterised by price correction caused by the Great Recession, which was more severe in the case of the Spanish economy, and by the considerable adjustment in labour costs in relative terms, partly helped by the country's labour reform. However, headline inflation was still higher in Spain than in the euro area due to rising oil prices.

In September 2013, the inflation differential became negative: the adjustment in relative labour costs continued and the cyclical position of the Spanish economy was still weaker than the euro area's position. But an additional factor was the slump in oil prices, down by 16% year-on-year between 2013 and 2016.

In 2017 oil prices will continue to be the dominating factor for the inflation differential but in the opposite direction. In contrast with the inflationary period, this year the inflation differential is expected to be positive again, entirely because of oil. This is important, as the effect of oil will be temporary and, consequently, if wage trends continue the same, the inflation differential will revert to type in 2018.

Breakdown of Spain's inflation differential with the euro area

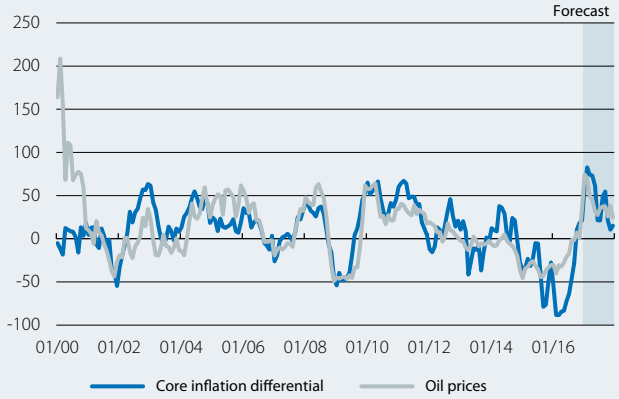
(pps)



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

Core inflation differential between Spain and the euro area and oil prices

Differential (bps), euros per barrel (year-on-year change, %)



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

1. The year-on-year change in the HICP was 1.4% in Spain in December. The article's assessment and conclusions remain the same with both price indicators.

KEY INDICATORS

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

Activity indicators

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	10/16	11/16
Industry								
Electricity consumption	–0.1	1.7	2.5	–0.8	0.9	–0.1	1.2	0.8
Industrial production index	1.3	3.3	4.2	2.6	1.4	1.8	0.3	...
Indicator of confidence in industry *(value)*	–7.1	–0.3	0.3	–1.9	–2.8	–3.8	–0.1	0.9
Manufacturing PMI *(value)*	53.2	53.6	52.5	54.3	52.5	51.4	53.3	54.5
Construction								
Building permits *(cumulative over 12 months)*	–7.7	20.0	31.1	45.2	48.1	44.8	43.4	...
House sales *(cumulative over 12 months)*	–5.6	10.9	11.9	10.6	14.1	13.3	13.4	...
House prices	–2.4	1.1	1.8	2.4	2.0	1.6	–	...
Services								
Foreign tourists *(cumulative over 12 months)*	7.2	5.4	4.8	5.9	7.5	9.3	10.1	10.0
Services PMI *(value)*	55.2	57.3	55.9	54.7	55.5	54.9	54.6	55.1
Consumption								
Retail sales	1.0	3.0	3.4	3.8	3.8	3.8	2.4	3.4
Car registrations	18.4	21.3	17.1	8.0	17.8	11.0	4.0	13.5
Consumer confidence index *(value)*	–8.9	0.3	1.6	–2.5	–3.2	–6.1	–4.8	–2.2

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

Employment indicators

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	10/16	11/16
Registered as employed with Social Security [1]								
Employment by industry sector								
Manufacturing	0.1	2.2	2.7	2.8	2.7	2.7	2.9	2.9
Construction	–1.6	4.7	4.1	2.6	2.1	2.7	3.3	3.4
Services	2.2	3.5	3.4	3.1	3.0	3.3	3.6	3.6
Employment by professional status								
Employees	1.4	3.5	3.6	3.4	3.1	3.5	4.0	3.8
Self-employed and others	2.2	1.9	1.4	1.2	1.0	0.9	1.0	0.9
TOTAL	**1.6**	**3.2**	**3.2**	**3.0**	**2.7**	**3.0**	**3.4**	**3.2**
Employment [2]	**1.2**	**3.0**	**3.0**	**3.3**	**2.4**	**2.7**	**–**	**...**
Hiring contracts registered [3]								
Permanent	18.8	12.3	7.6	8.3	17.4	17.9	10.0	16.5
Temporary	13.1	11.2	11.8	6.2	9.1	7.1	5.7	7.9
TOTAL	**13.4**	**11.3**	**11.5**	**6.4**	**9.8**	**7.9**	**6.1**	**8.7**
Unemployment claimant count [3]								
Under 25	–8.2	–11.0	–11.7	–10.9	–12.0	–14.4	–14.2	–11.3
All aged 25 and over	–5.3	–7.2	–7.5	–7.8	–7.5	–8.6	–9.4	–8.4
TOTAL	**–5.6**	**–7.5**	**–7.9**	**–8.1**	**–7.9**	**–9.1**	**–9.9**	**–8.7**

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

Prices

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	10/16	11/16	12/16
General	**–0.1**	**–0.5**	**–0.3**	**–0.7**	**–0.9**	**–0.2**	**0.7**	**0.7**	**1.5**
Core	0.0	0.6	0.9	1.0	0.7	0.8	0.8	0.8	...
Unprocessed foods	–1.2	1.8	2.5	2.1	2.7	3.5	0.2	0.6	...
Energy products	–0.8	–9.0	–10.2	–13.1	–13.6	–8.6	0.1	–0.5	...

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

Foreign sector

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

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	09/16	10/16
Trade of goods								
Exports *(year-on-year change)*	2.5	4.3	3.8	0.2	4.3	–1.1	0.0	–1.6
Imports *(year-on-year change)*	5.7	3.7	3.3	–0.7	–0.3	–3.7	–1.4	–1.7
Current balance	**11.2**	**14.7**	**14.7**	**15.4**	**18.9**	**20.7**	**20.7**	**20.7**
Goods and services	25.5	26.2	26.2	26.0	29.3	31.3	31.3	31.7
Primary and secondary income	–14.3	–11.5	–11.5	–10.6	–10.3	–10.6	–10.6	–10.9
Net lending (+) / borrowing (–) capacity	**16.3**	**21.7**	**21.7**	**22.2**	**25.4**	**26.2**	**26.2**	**26.0**

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

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	09/16	10/16
Net lending (+) / borrowing (–) capacity [1]	**–6.0**	**–5.1**	**–5.1**	**–0.7**	**–3.0**	**–2.8**	**–2.8**	**...**
Central government	–3.7	–2.6	–2.6	–0.8	–1.9	–2.6	–2.6	–2.0
Autonomous regions	–1.8	–1.7	–1.7	–0.1	–0.7	–0.2	–0.2	–0.3
Local government	0.5	0.5	0.5	0.1	0.1	0.5	0.5	...
Social Security	–1.0	–1.2	–1.2	0.2	–0.6	–0.6	–0.6	–0.6
Public debt *(% GDP)*	**100.4**	**99.8**	**99.8**	**101.1**	**101.0**	**100.3**	**100.3**	**...**

Note: *1. Includes aid to financial institutions.*
Source: *CaixaBank Research, based on data from the IGAE, Ministry of Taxation and Bank of Spain.*

Financing and deposits of non-financial sectors

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

	2014	2015	2015 Q4	2016 Q1	2016 Q2	2016 Q3	09/16	10/16	Balance 10/16 [1]
Financing of non-financial sectors [2]									
Private sector	–5.8	–3.9	–3.0	–3.2	–2.9	–2.1	–1.8	–1.8	1,633.9
Non-financial firms	–6.4	–4.0	–3.0	–3.4	–3.2	–2.2	–1.8	–1.6	919.4
Households [3]	–5.0	–3.6	–3.1	–3.0	–2.5	–2.0	–2.0	–2.0	714.5
General government [4]	5.9	4.0	3.7	3.5	4.2	4.6	3.8	3.9	1,103.4
TOTAL	**–1.8**	**–1.0**	**–0.5**	**–0.6**	**–0.2**	**0.5**	**0.3**	**0.4**	**2,737.3**
Liabilities of financial institutions due to firms and households									
Total deposits	–0.9	–1.0	–0.5	–0.4	–0.3	–0.3	–0.1	0.0	1,151.0
On demand deposits	10.8	18.5	17.7	16.2	16.0	16.4	16.5	18.0	438.6
Savings deposits	5.8	12.9	15.2	13.4	12.1	11.5	11.1	11.8	274.1
Term deposits	–7.6	–15.3	–15.8	–15.4	–16.4	–17.4	–17.4	–18.8	417.4
Deposits in foreign currency	1.1	5.6	–2.3	–4.0	1.6	–1.9	–1.4	3.1	20.9
Rest of liabilities [5]	–8.2	–13.0	–15.1	–16.7	–16.3	–11.3	–14.2	–20.0	81.6
TOTAL	**–1.7**	**–2.2**	**–1.9**	**–1.9**	**–1.7**	**–1.2**	**–1.3**	**–1.6**	**1,232.6**
NPL ratio *(%)* [6]	**12.5**	**10.1**	**10.1**	**10.0**	**9.4**	**9.2**	**9.2**	**9.3**	**–**
Coverage ratio *(%)* [6]	**58.1**	**58.9**	**58.9**	**59.0**	**58.7**	**59.3**	**59.3**	**60.7**	**–**

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

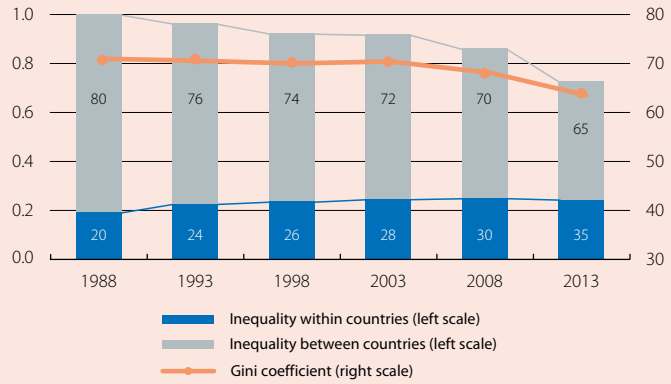
THE CONSEQUENCES OF INEQUALITY

Increasingly unequal? The recent trend in inequality

Adam Smith said that «No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable».[1] As on so many other occasions, the father of modern economics was quite right with this intuition: as confirmed by various contemporary studies, an extreme degree of inequality is not compatible with a prosperous society.[2] It is therefore crucial to determine whether the recent trend points to inequality moving in a worrying direction. Such is the aim of this article.

Global inequality (1988-2013)

(Mean log deviation) *(Gini coefficient)*



Note: *The orange line (right scale) shows the Gini coefficient of global income distribution. The height of the bars indicates the global level of inequality measured by the mean log deviation of income (left scale). The blue bars represent inequality within each country, weighted by population. The grey bars show the level of inequality between countries. The numbers correspond to the relative contribution (as a percentage) of these two sources to total global inequality.*
Source: *CaixaBank Research, based on data from the World Bank, 2016, «Taking on inequality».*

Before starting our analysis *per se*, we first need an accurate definition and measurement of inequality. In this article, and as is customary in economics literature, we will analyse the inequality of net income; i.e. the income remaining after paying taxes and receiving any social transfers.[3] Regarding measurement, the Gini coefficient will be used, which calculates the distribution of income among the whole population. This index ranges from zero (perfect income equality between individuals) to 100 (maximum inequality, when one individual has all the income), summarising the overall income distribution inequality in a single figure. This is a simple measure but suitably encapsulates a society's degree of inequality: if inequality is extreme the Gini coefficient will reflect this situation.[4]

A first level of analysis is inequality at a global level. When we analyse the inequality between all the world's inhabitants, we can see this has decreased in the last three decades: between 1988 and 2013 the global Gini coefficient fell by more than 7 pps, a drop that became sharper as from 2008.[5] This considerable reduction in inequality was mainly due to the convergence of incomes between the different countries, a process which, in turn, results largely from the fast growth seen by heavily populated emerging countries such as China, India and Indonesia. Although we certainly cannot consider the current level of global inequality to be low, it is nevertheless slightly less than the level a few decades ago and is therefore further from being extreme than in the past.

Let us now look at the situation in the more prosperous countries. One frequent comment in public debates is that inequality has become worse due to the severe economic shock of 2008-2009, the Great Recession, which, as we all know, was further aggravated by a second drop in GDP in most European countries in 2012-2013. However, the OECD's calculations of the Gini coefficient for different advanced countries show moderate growth between 2008 and 2013. Might the Gini coefficient be too general a measure of inequality in this case? Probably not, as other measurements also used by the OECD, such as the poverty rate and income shares of the top and bottom 20% of earners (see the definition in the enclosed table) also point in this direction. This is also the case of another measure which is often mentioned in the more publicised debates on this issue, obtained by calculating the percentage of a country's income that is in the hands of the top 1% of the population with the highest earnings.[6] Since these analyses suggest that the Great Recession was not an evident cause of any radical change in advanced economies, perhaps we need to broaden our timescale. However, using data since the year 2000, the essential conclusion remains the same: in the advanced countries in question, the degree of inequality measured by the Gini coefficient, and by the other indicators already

1. See Adam Smith, (1776), «The Wealth of Nations», Book I, Chapter 8: Of the wages of labour.
2. See, for example, IMF (2015), «Causes and Consequences of Income Inequality: A Global Perspective», IMF Staff Discussion Notes No. 15/13.
3. Inequality in gross income is much greater as progressive taxation and the Welfare State reduce inequality significantly, particularly in developed countries.
4. On other complementary measures of inequality, see Atkinson, A. and Brandolini, A. (2010), «On Analyzing the World Distribution of Income», The World Bank Economic Review, vol. 24, no. 1.
5. World Bank (2016), «Poverty and Shared Prosperity 2016: Taking on Inequality», Washington, D. C.
6. Estimated based on data that use information from income tax records rather than using data from household surveys, which tend to underestimate the income of the 1% of the population with the highest earnings.

Indicators of household income distribution and poverty rate by country

	Gini coefficient			S80/S20 income share ratio (%)			Poverty rate (%)		
	2000 *	2008	2013 **	2000 *	2008	2013 **	2000 *	2008	2013 **
US	35.7	37.8	38.9	6.9	7.7	8.2	23.6	24.4	24.6
UK	35.2	34.2	34.1	5.9	5.8	5.6	19.0	18.3	17.2
Spain	33.2	32.7	34.5	6.0	5.8	6.7	21.3	20.9	22.6
France	28.7	29.3	30.9	4.2	4.3	4.7	13.8	13.5	14.5
Germany	26.4	28.7	29.3	3.9	4.2	4.4	12.5	14.3	15.0

Notes: ** Data from 2000 or the latest available. ** Data from 2013 or the latest available. The S80/S20 income share ratio refers to the ratio of average income of the top 20% to the average income of the bottom 20% of the income distribution. The poverty rate corresponds to the percentage of individuals with an income below 50% of the median disposable income.*
Source: *CaixaBank Research, based on data from the OECD Income* Distribution Database.

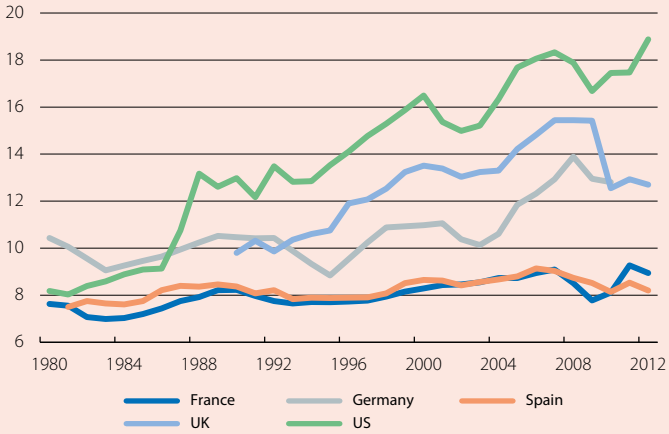
mentioned, has only increased to a moderate extent, albeit with two important exceptions: one we already know about, namely the US, while the other is perhaps more surprising, that of Germany.

In the case of Spain, and always based on the OECD figures which allow for an international comparison, the increase in inequality after the Great Recession has been somewhat more severe, as shown by the Gini coefficient, the income distribution between the 20% highest earners and the 20% bottom earners and also the poverty rate for the population.[7] A large part of this increase in inequality can be explained by the slump in employment: around 75% of the increased inequality in income from labour during the economic crisis was due to the rise in unemployment.[8] The current recovery in the labour market will therefore reduce inequality, although it is important for the Welfare State, which has played an important role in cushioning the effects of the crisis, to continue the work it has been carrying out in the recovery.

To sum up, these analyses suggest that the recent trend in inequality does not point to the overall situation getting worse in this area: at a global level inequality has tended to decrease and only in some countries is there an unquestionable trend towards greater inequality, particularly in the US, which is a case plagued with idiosyncratic aspects that would require a detailed individual analysis. Nevertheless, this does not mean we should become complacent about inequality as its impact in economic terms is potentially significant on a number of economic and political fronts: as we will see in the next articles, it can directly affect economic growth (see the article «How does inequality affect economic growth?» in this Dossier) and, indirectly, the rise in populism (see the article «Inequality and populism: myths and truths» in this Dossier) and the distribution of wealth (see the article «Can inequality cause a financial crisis?» in this Dossier).

Income of the top 1% highest earners

(% of total income)



Note: *Share of total income of the top 1% of the population with the highest earnings.*
Source: *CaixaBank Research, based on data from The World Wealth and Income Database.*

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7. OECD (2016), «Income inequality remains high in the face of weak recovery», Income inequality update (November 2016).
8. OECD (2015), «In It Together? Why Less Inequality Benefits All», OECD Publishing, Paris.

How does inequality affect economic growth?

The relationship between economic growth and inequality has been studied by economists for more than a century. Nonetheless, this issue is still far from resolved and, as explained in this article, the answer to the question of how unequal household income affects a country's growth is still not clear, both from a theoretical and also empirical perspective.

In general terms, a negative relationship can be observed between the level of inequality[1] and economic growth (see the first graph). But, as readers are only too well aware, the fact that a correlation exists does not necessarily mean there is a cause/effect relationship.

At a theoretical level, the prevailing view in the 1950s and 60s was that greater inequality could benefit growth, essentially through two mechanisms. The first is based on the fundamental idea that inequality benefits economic growth insofar as it generates an incentive to work and invest more. In other words, if those people with a higher level of education have higher productivity, differences in the rate of return will encourage more people to attain a higher level of education. The second mechanism through which greater inequality can lead to higher growth is through more investment, given that high-income groups tend to save and invest more.

Economic growth and inequality

Economic growth in the next 10 years (%)

Source: *CaixaBank Research, based on Ostry,* et al. *(2014), «Redistribution, Inequality and Growth», IMF.*

However, several voices have subsequently warned of the negative effects of inequality on growth.

One of the main arguments states that greater inequality can reduce the professional opportunities available to the most disadvantaged groups in society and therefore decrease social mobility, limiting the economy's growth potential. In particular, a higher level of inequality can result in less investment in human capital by lower-income individuals if, for example, there is no suitable state system of education or grants. For this reason, countries with a higher degree of inequality tend to have lower levels of social mobility between generations (see the second graph).

Greater inequality can also negatively affect growth if, for example, it encourages populist policies (see the article «Inequality and populism: myths and truths» in this Dossier). Along the same lines, another source of discussion is whether an increase in inequality can lead to an excessive rise in credit, which ends up acting as a brake on growth (see the article «Can inequality cause a financial crisis?» in this Dossier).

Beyond the theoretical sphere, many authors have attempted to provide empirical evidence of inequality's effects on economic growth. The findings are not always conclusive, however. This is due to the fact that it is difficult to isolate the impact of inequality on economic growth from the impact of other factors which may also be influential. In fact, this is the main criticism directed at empirical studies based on cross-country growth regressions and such studies are discussed below, so the findings need to be interpreted with due caution.[2]

Broadly speaking, there is no single, universal mechanism behind the relationship between inequality and growth; in fact, this relationship may not always be the same. Nevertheless, a relatively generalised pattern can be observed depending on a country's degree of development. When an economy is at an early stage of its development, the return from physical capital tends to be higher than the return provided by human capital and greater inequality can therefore trigger higher growth. However, as an economy achieves a more advanced stage of development, the return from physical capital tends to decrease while that from human capital tends to rise, so increases in inequality can negatively affect growth.[3]

A recent study by the IMF[4] suggests that an increase in inequality is harmful to economic growth. By way of example, the historical relationship (1980-2012) observed between inequality and growth in the 159 countries analysed shows that, if the income share

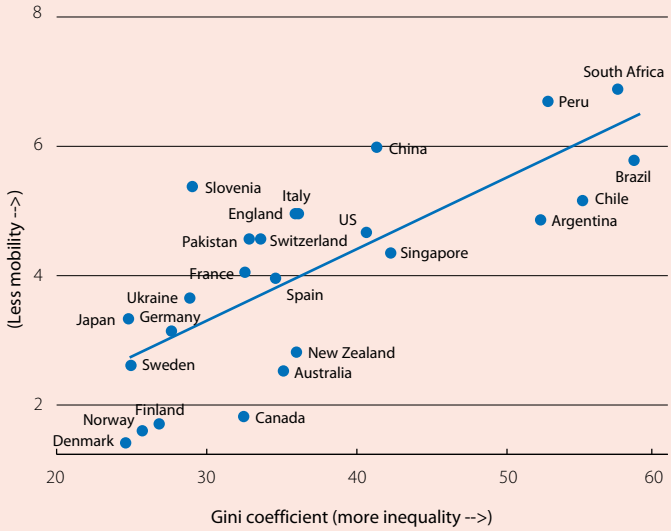
1. Usually measured using the Gini coefficient, see the article «Increasingly unequal? The recent trend in inequality» in this Dossier.
2. See Durlauf, S. N. (2009), «The Rise and Fall of Cross-Country Growth Regressions», History of Political Economy.
3. See Kuznets, S. (1955), «Economic Growth and Income Inequality», American Economic Review.
4. See Dabla-Norris, J. *et al.* (2015), «Causes and Consequences of Income Inequality: A Global Perspective», IMF.

of the richest 20% of the population increases by 1 pp (a rise in inequality), GDP growth slows down by 0.08 pps during the next five years. On the other hand, if the income share of the poorest 20% of the population increases by 1 pp (a reduction in inequality), GDP growth is 0.38 pps higher during the next five years on average.

Along the same lines, a study by the OECD[5] estimates that an increase in the Gini coefficient of three points (which coincides with the average increase recorded in OECD countries in the last two decades) would have a negative impact on economic growth of 0.35 pps per year over 25 years, representing a cumulative loss of 8.5% of GDP. Moreover, the study shows that the most negative effect on growth is caused by the inequality affecting the lowest income individuals (those at the bottom of income distribution). For example, if the bottom inequality in the UK were changed to be like that in France, or that of the US to become like that of Japan or Australia, the average annual growth in GDP would improve by almost 0.3 pps over the next 25 years, representing a cumulative rise in GDP of more than 7%.[6] Once again, it should be noted that these estimates are for illustrative purposes only and must not be interpreted as the actual effect a change in equality can have on growth in each country.

Social mobility and inequality

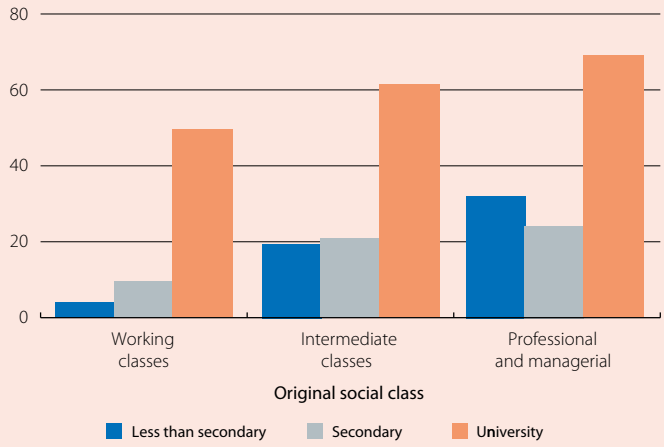
Intergenerational earnings elasticity (%)



Source: *CaixaBank Research, based on Corak (2013) «Inequality from Generation to Generation: The United States in Comparison», in Robert Rycroft (editor), The Economics of Inequality, Poverty and Discrimination in the 21st Century, ABC-CLIO.*

Frequency professional and managerial classes are accessed by original social class and educational attainment

(%)



Source: *CaixaBank Research, based on Requena (2016), «El ascensor social, ¿hasta qué punto una mejor educación garantiza una mejor posición social?», Observatorio Social de "la Caixa".*

Lastly, the report concludes that one of the key channels through which inequality acts as a brake on economic performance is by reducing the investment opportunities, primarily in education, of the poorest segments of the population. In fact, social mobility has deteriorated significantly in countries such as the US, where the percentage of children who receive a higher income than their parents has fallen from 90% for the cohort of 1940 to 50% for people born in the 1980s.[7]

In fact, less social mobility can act as an indicator of a rise in inequality. Several empirical studies have revealed a negative relationship between inequality and social mobility (see the second graph) precisely because inequality, particularly when this occurs within the lowest income groups, reduces the chances of the more disadvantaged segment of the population to invest in education, which is the main way to increase social status.[8] Spain is no exception: university graduates from a lower social background record rates of access to professional and managerial jobs that are 14 times higher than those who do not finish secondary education (see the third graph).[9]

By way of conclusion, it should be noted that, although inequality is, to some extent, an inevitable phenomenon in modern economies, the latest empirical evidence suggests that, if inequality is reduced, particularly among the lowest income groups, this has a positive effect not only in terms of social justice but also in terms of economic growth.

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5. See OECD (2014), «Focus on Inequality and Growth».
6. See Cingano, F. (2014), «Trends in Income Inequality and its Impact on Economic Growth», OECD.
7. See Chetty, R. *et al.* (2016), «The Fading American Dream: Trends in Absolute Income Mobility since 1940», NBER Working Paper.
8. For example, they are associated with a higher school drop-out rate. See Kearney, M. S. and Levine, P. B. (2016), «Income Inequality, Social Mobility, and the Decision to Drop Out of High School», Brookings Papers on Economic Activity.
9. See Requena, M. (2016), «El ascensor social, ¿hasta qué punto una mejor educación garantiza una mejor posición social?», Observatorio Social de "la Caixa".

Inequality and populism: myths and truths

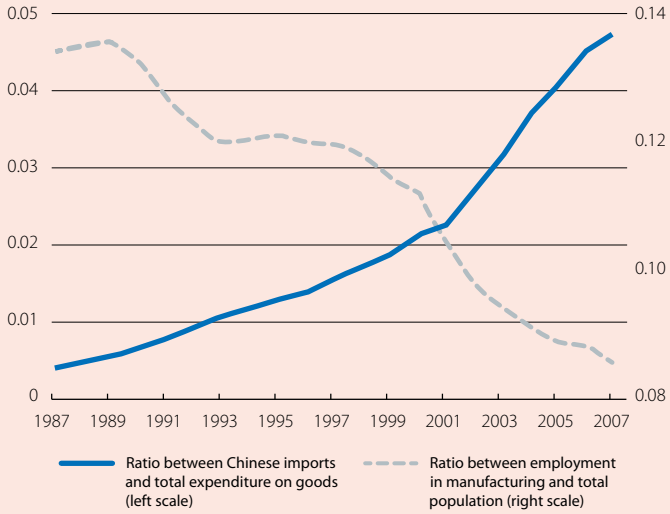
In recent times, much ink has spilled over the relationship between economic inequality and the rise in populism in advanced countries. In many cases this relationship has been taken as read, as if it were an undeniable fact that economic inequality is the main reason for the emergence of populist parties. Nevertheless, it may be rather premature to assume such a relationship exists. This article looks at whether inequality is actually one of the factors behind the rise in populism and, if so, how much impact it really has.

Focusing on the first question, it should be noted that there are hardly any academic articles in the field of economics that provide clear-cut evidence of a cause/effect relationship between inequality and populism. The exceptions are the articles that were written, in 2016, by the renowned economists David Autor, David Dorn, Gordon Hanson and Kaveh Majlesi, focusing on the US.[1] However, this contrasts with the absence of similar studies showing such a relationship in Europe. The aforementioned authors present a convincing case that it is precisely in those American districts with greater exposure to import competition from China that have elected congressional representatives with more extreme ideologies and where the Republican Party significantly increased its electoral support in 2016 compared with 2000.

Labour polarisation in the US

Changes in employment per wage percentile in each period (%)

Trade competition with China in the USC



Source: *CaixaBank Research, based on data from Autor, D. (2010) and Autor, D., Dorn, D. and Hanson, G. (2013).*

In addition to this empirical evidence, studies that contribute to understand the impact of Chinese import competition in one of the key areas behind the trend in inequality, namely the labour market, are also particularly useful for an analysis of the causal relationship between inequality and populism. An important strand of the economics literature has shown that those areas most exposed to import competition with China have suffered more job losses and more industrial plants' foreclusers.[2] In fact, according to a recent article,[3] this commercial shock resulted in 1.98 million job losses between 1999 and 2011, of which 985,000 were in manufacturing. According to another article by Autor, Dorn and Hanson,[4] competition from Chinese imports lies behind one fourth of the jobs lost in the US manufacturing sector.

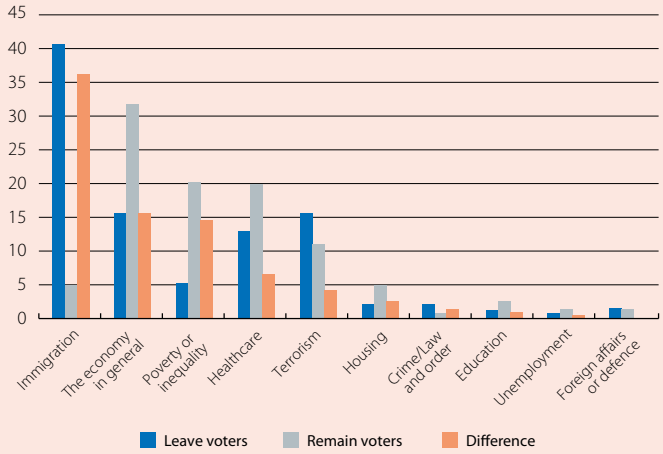
Having reached this point, it is important to note that, although these studies help show the relationship between inequality and populism, we should not infer that commercial integration is negative *per se* as there is also extensive literature documenting the positive impact of trade on an economy as a whole,[5] although there are very specific economic sectors that may be harmed by greater commercial integration, as has been the case in the US. Neither should we forget that manufacturing's progressive share loss in the economy is due mainly to changes in technology and in the production model (see the Dossier «Industry 4.0» in MR11/2016).

1. See Autor, D., Dorn, D., Hanson, G. and Majlesi, K. (2016), «Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure» and «A Note on the Effect of Rising Trade Exposure on the 2016 Presidential Election», MIT Working Papers.
2. See, among others, Pierce, J. and Schott, P. (2016), «The Surprisingly Swift Decline of US Manufacturing Employment», American Economic Review.
3. See Acemoglu, D., Autor, D., Dorn, D., Hanson, G., and Price, B. (2016), «Import Competition and the Great US Employment Sag of the 2000s», Journal of Labor Economics, 34(S1).
4. See Autor, D., Dorn, D. and Hanson, G. (2013), «The China Syndrome: Local Labor Market Effects of Import Competition in the US», American Economic Review 103(6).
5. See, among others, Grossman, G. and Helpman, E. (1991), «Trade, Knowledge Spillovers, and Growth», European Economic Review 35, 517-526.

As we look into why these changes in the labour market have increased economic inequality in the US we should remember that, in this country, inequality is a reflection of the polarised nature of labour. Between 1950 and 1980, the manufacturing sector allowed a large number of US workers without secondary education or a university degree to access the middle class. But nowadays, the labour market, with an increasing share of services in GDP, is providing more job opportunities for other types of employment in which high value activities coexist with lower value activities. As a result, the salaried class, which had been more homogeneous in wage terms, is now more polarised. This could help explain why populism has emerged recently. The key lies in the fact that the increasing polarisation of labour over the last few decades has led to the impoverishment of a part of the middle classes so that a large social group has seen how their living conditions and social status declined substantially. This phenomenon has resulted in social unrest, which is fertile ground for political proposals which claim that it is possible to go back to the good old times quickly and easily.

Brexit and the most important issue facing the UK today

(% of respondents who believe each issue is important)



Note: *Sample of 1,677 people, of white race, interviewed on 17 August 2016.*
Source: *CaixaBank Research, based on data from the joint study between Birkbeck College, Policy Exchange and YouGov.*

Summarising the analysis carried out thus far, the literature points to a certain causal relationship between inequality and populism in the US and, among the different mechanisms that may be playing a role, the studies have explored one specific channel: the one that goes from international competition to industrial job losses and from a decline in employment in the secondary sector to a rise in inequality, finally closing the circle and stating that, in these cases, political polarisation has increased.

Having confirmed the causal relationship between inequality and populism in the US, we should now examine its extent and determine whether inequality is the main source of the current political polarisation. This magnitude is not especially sizeable: in those electoral districts most exposed to commercial competition with China, electoral support for the Republican Party in 2016 was 2.2 pps higher than in those districts with little competition with China. Given this number, it would be audacious and even hasty to claim that inequality is the main factor fuelling populism, especially when we know there are other economic and financial variables that are also related to the success of populist movements. A case in point are financial crises: according to an influential article by the German economists Manuel Funke, Moritz Schularick and Christoph Trebesch, electoral support for far-right parties has increased by 30% after the financial crises occurring between 1870 and 2014 in the main developed countries, a considerable increase.[6]

Another reason to be cautious is that there is a growing body of opinion among various economists and political scientists that claims cultural factors are at least as important as economic factors, or even more so, in explaining the rise in populism. Those defending this opinion believe that people vote for populist parties because some layers of society wish to preserve their cultural homogeneity and certain social attitudes. In this respect, the political scientists of Michigan and Harvard, Ronald Inglehart and Pippa Norris, have shown that, in the European Union, cultural values are a more accurate indicatior of support for populist parties. In particular, electoral support for these parties is stronger among the elderly, men, people with less educational training and ethnic majorities. On the other hand, such conclusive findings do not hold for the economic variables. Similar analyses carried out after the Brexit vote suggest that cultural and social factors are crucial to explaining the outcome of the referendum, casting doubt on the view that inequality is the main cause of such populism. For example, a study by the Nesta think tank in the UK shows that being in favour of the death penalty is a far better predictor of voting in favour of leaving the European Union than income or social class, and a survey led by the Birkbeck College professor, Eric Kaufmann, indicates that those in favour of Brexit were much more concerned about immigration than inequality.

In short, economic inequality is a factor to bear in mind when analysing the origins of the rise in populism at a global level. In the case of the US, academic studies have appeared recently that use reliable econometric techniques and demonstrate a causal relationship. Nonetheless, this impact does not seem to be very large and there are reasonable doubts that inequality is the main driver. Whatever the case, it is evident that the rise in populism is a phenomenon of the utmost importance that warrants more in-depth study.

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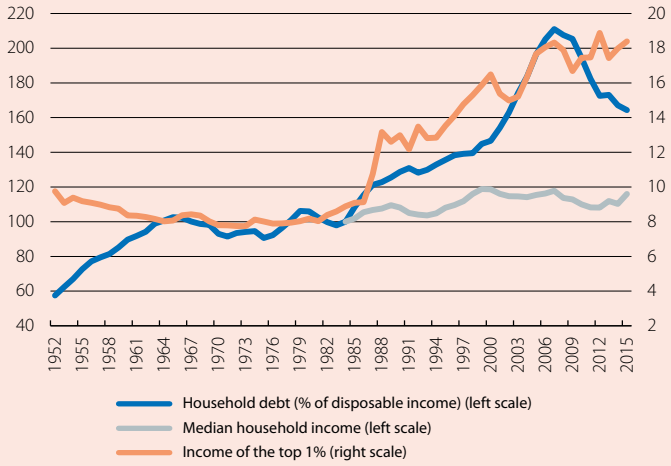
6. See Funke, M., Schularick, M. and Trebesch, C. (2015), «Going to Extremes: Politics after Financial Crises, 1870-2014», CEPR, Discussion Paper No. 10884.

Can inequality cause a financial crisis?

Far from a sensationalist headline, this question is the focus of much political and academic discussion. The figures for the US speak for themselves (see the first graph). Between 1984 and 2007, the income share corresponding to the top 1% of earners went from 8.9% to 18.3% and, at the same time, the total debt of households soared from 58.3% of earnings to 123.1%, while the median household income had only risen by 17.9% (an average annual growth of 0.7% compared with 1.8% GDP growth per household). The subsequent developments in the US economy are well known: the biggest financial and economic crisis since the Great Depression of the 1930s. Journalists and filmmakers have interpreted these events at length, developing a narrative that links economics, politics and inequality. However, there's still a lot of discussion going on in the wings: the idea of a relationship between inequality and debt is appealing but what do we really know about this apart from its correlations?

US: inequality and debt

Index (100 = 1984) *(% national earnings)*

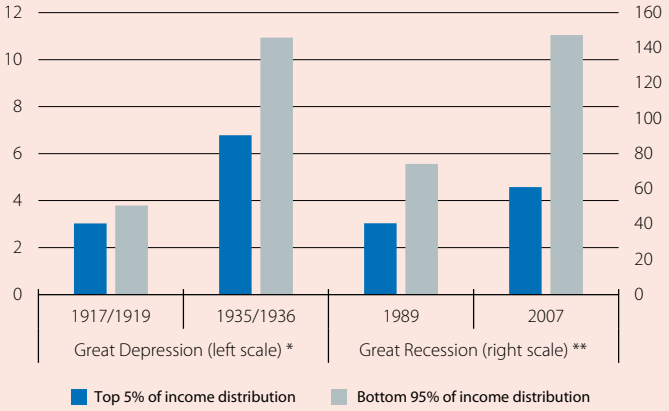


Source: *CaixaBank Research, based on data from FRED and World Wealth Income Database.*

According to classical economic theory, if inequality increases because of a permanent change in the income of one part of society, then this new situation should encourage less consumption and less debt on the part of those individuals whose income has decreased. Given that the higher inequality observed in the US is due to permanent factors[1] but the level of debt has risen in spite of this, leading economists such as Nobel prize-winners Stiglitz and Krugman, the former Chief Economist of the IMF and former Chairman of the Federal Reserve of India, Raghuram Rajan, and the prolific Daron Acemoglu from the Massachusetts Institute of Technology propose that politics and social status are key factors in encouraging debt. There are a host of examples to illustrate the role played by politics, such as the repeal of the Glass-Steagall Act (which separated commercial banking from investment banking to limit risk-taking), the reduction in capital requirements for Fannie Mae and Freddie Mac (two major sources of financing to buy housing) and the extension of mortgages insured by the Federal Housing Administration to help people take out larger mortgages with lower down payments. However, while Acemoglu[2] has claimed that the increase in inequality and debt are due to financial deregulation without there being a cause/effect relationship between inequality and debt, Rajan[3] proposes that inequality generates social pressure on politicians to promote, through regulatory changes, an increase in indebtedness beyond the level warranted by a household's solvency. In line with Rajan's view, Mian and Sufi (2009) show that there was abnormally high growth in subprime mortgage lending in poorer areas of the US.[4] Moreover, this political factor would be complemented by the role played by social status: when inequality increases, individuals want to take out loans to be able to buy the goods and services their neighbours can afford. Along this line, Bertrand and Morse (2016)[5] observe that, between 1980 and 2008, in those US regions where the earnings of higher income households increased, there was also a drop in the saving rate of the rest of households.[6]

Debt and inequality in the US: historical parallels

(% of income)



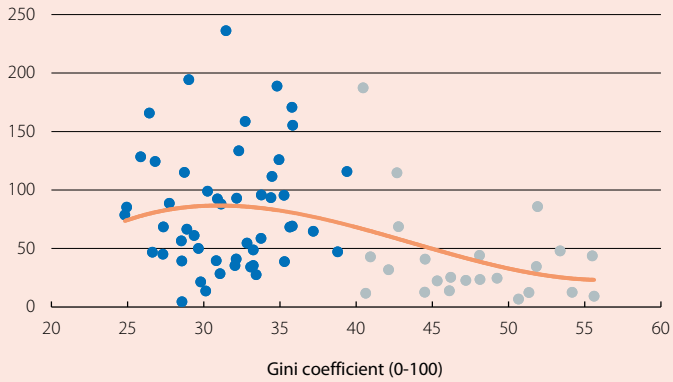
Notes: ** New credit. ** Total debt.*
Source: *CaixaBank Research, based on data from Kumhof* et al. *(2015), «Inequality, leverage and crises», American Economic Review.*

1. Of note are technological changes and the impact of globalisation. Social mobility is crucial insofar as it reduces the permanent nature of inequality.
2. See Acemoglu, A. (2011), «Thoughts on Inequality and the Financial Crisis», presentation at the congress of the American Economic Association.
3. Rajan, R. (2010), «Fault Lines», Princeton University Press.
4. Mian, A. and Sufi, A. (2009), «The Consequences of Mortgage Credit Expansion: Evidence from the US Mortgage Default Crisis», Quarterly Journal of Economics.
5. Bertrand, M. and Morse, A. (2016), «Trickle-Down Consumption», Review of Economics and Statistics.
6. This «contagion» is not due either to a larger increase in real estate prices or a larger increase in the consumer price index for the region.

One of the reasons for the appeal of a cause/effect relationship between inequality, debt and the financial crisis is that a similar correlation had already been observed before the Great Depression of the 1930s: in the years leading up to the Depression there was also an increase in the income share of the highest income segment of the population and an increase in household debt. Moreover, as shown by the second graph, in both episodes most of this debt was concentrated among the lowest income households. However, in a recent study for the US, Coibion *et al.* (2016)[7] conclude that households with fewer resources take out less debt in more unequal regions than in those with less inequality. According to this study the reason is that, in regions with greater inequality, customers with fewer resources have to compete for loans with more solvent customers (from the higher end of the income distribution) and, because of this, they are offered worse conditions (fewer loans granted and at higher interest rates). Although this study does not refute the existence of a causal relationship between an increase in inequality and debt,[8] it does question the conventional narrative. Rajan's thesis may be supported by palpable examples of regulatory changes and findings such as those by Bertrand and Morse (2016) and Mian and Sufi (2009) but the study by Coibion *et al.* (2016) suggests that greater inequality is not necessarily associated with an increase in credit taken out by the most disadvantaged segments of society. In short, the debate continues.

Inequality and financial development: international comparison

Domestic credit to private sector (% of GDP)



Note: *Each point presents a country in 2010. In blue, countries with low and medium inequality. In grey, countries with medium-high and high inequality.*
Source: *CaixaBank Research, based on data from the World Bank.*

Apart from the US, other advanced economies have also seen a considerable rise in household debt, albeit with a more moderate increase in inequality. In fact, Bordo and Meissner (2012)[9] compare 14 advanced economies between 1920 and 2008 and find no significant association between inequality and growth in credit. This finding is also reflected in the third graph, where we can see that, in advanced economies and at moderate levels of inequality, there is no clear relationship with the level of credit. However, when we look at countries with higher levels of inequality it is difficult to find any well-developed financial systems.

In fact, if we take a long-term perspective we can see that, historically, economic growth has gone hand in hand with the spread of political rights, the emergence and consolidation of a middle class and the development of financial markets. Put into historical perspective, access to credit acts as an engine for growth, particularly benefitting those with lower incomes who own fewer resources to finance their projects. However, in order for the financial system to function efficiently, there must be solid institutions that guarantee ownership rights and the fulfilment of contracts. In developing economies, those companies with good political connections tend to enjoy better access to credit and lower interest rates (mainly through state-owned banks). The development of an advanced rule of law, which is associated with lower inequality, therefore has the potential to minimise the role played by political connections and distribute credit more efficiently. It comes as no surprise that the Bank of England was set up just after the English parliament managed to restrict the powers of the monarchy in the Glorious Revolution of 1688, nor that the Industrial Revolution started in England 100 years later.

In summary, inequality, politics, financial development and economic performance are hugely important factors that have resonated throughout history. The Great Depression in the 1930s and the Great Recession of 2007-2009 are unique events in recent history whose severity has awarded them a special place in our social imaginary, revealing the power but also the complexity of such economic relationships.

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7. Coibion *et al.* (2016), «Does Greater Inequality Lead to More Household Borrowing? New Evidence from Household Data», Federal Reserve. Bank of San Francisco Working Paper.
8. Insofar as it is not studying the response of households to an increase in inequality in the region where they live but rather comparing the behaviour of households with similar income levels in regions with different levels of inequality.
9. Bordo, M. and Meissner, C. (2012), «Does Inequality Lead to a Financial Crisis?», NBER Working Papers.

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

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	MILLION €
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Spreading culture and knowledge	129.9
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