

MONTHLY REPORT • ECONOMIC AND FINANCIAL MARKET OUTLOOK

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# ECONOMIC & FINANCIAL ENVIRONMENT

FINANCIAL MARKETS
The ECB enters the European corporate
bond market

INTERNATIONAL ECONOMY The fall in oil prices: an inscrutable blessing?

EUROPEAN UNION *ECB liquidity in the core and periphery* 

SPANISH ECONOMY
The seasonal nature of tourism

#### DOSSIER: THE TIME OF CITIES

Towards an increasingly urban world

The keys to the city of the future

The cost of city life: the diseconomies of agglomeration

The urban factor of the labour market



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June 2016

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# The United Kingdom, the European Union and the euro area

On 23 June British citizens will vote on whether their country should remain in the European Union (EU). This is an incredibly important political event for the future of the Union. A vote in favour of Brexit would seriously weaken the European project at a time when it is facing huge challenges that require strong leadership and a high degree of cohesion among member states.

The most immediate challenge is undoubtedly how to tackle the waves of immigrants both from conflict zones and also from neighbouring countries with much lower standards of living than the Union's. This migratory pressure on its borders has jeopardised some of the EU's fundamental principles such as the free and unrestricted movement of people and the Schengen Area and, together with other issues of an economic nature, explains the rise in populist parties in many European countries, almost always strongly Eurosceptic.

This migratory challenge is naturally closely related to the Union's geopolitical and defence issues as the possible political responses have repercussions on various countries with which the EU has highly complex relations (Russia, Turkey and the countries in the Middle East and North Africa) and on which different factions within the EU often do not agree.

The other great challenge is to push forward with building a sufficiently complete and stable economic and monetary union (EMU). The crisis in the euro area uncovered serious deficits in the current design of the single currency and, although a great deal of measures have been implemented (advances in banking union and in coordinating budget and competitiveness policies), the accomplishments to date are still far from what is required.

The aspects in which the EU needs to make progress require a high degree of political integration as they entail significant losses of sovereignty in terms of policy, such as budgets and employment, which have always been national concerns.

If the EMU is not perfected enough over the next few years, the risk for its member states (and essentially for the EU as a whole) is unacceptable as, sooner or later, strong economic and financial tensions will reappear in the euro area which could be lethal for the single currency. The EMU is not adequately supported by political institutions (for instance, a single ministry for the economy and taxation) and neither does it have enough of its own economic policy tools to combat the imbalances that may arise within.

Europe's current political situation is not helping initiatives towards greater political integration to advance at the required rate. Its slow exit from the recession, with growth that is still weak and high levels of unemployment, as well as the aforementioned migratory tensions make it difficult for leaders to emerge in those member states that resolutely support such integration.

Given this situation, the centrifugal force caused by Brexit, especially if the UK votes not to remain the EU, represents both a huge risk and an opportunity for the euro area. Citizens of the region and their governments must realise that, for the EMU, the only possible response is even more integration. This response is vital for the very continuity and stability of the monetary union but, most particularly, it is crucial to combat adverse, uncertain scenarios, precisely like the one caused by the United Kingdom potentially leaving the EU.

Paradoxically, the euro area's reaction to the centrifugal force caused by the United Kingdom's political gambit should be one of centripetal force; advancing towards greater integration.

Jordi Gual Chief Economist 31 May 2016

## **CHRONOLOGY**

#### **MAY 2016**

- 11 The Brazilian Senate temporarily suspends President Dilma Rousseff from office, intensifying the country's political instability.
- 18 The European Commission proposes new public deficit targets for Spain, of 3.7% of GDP in 2016 and 2.5% in 2017, whose approval is postponed to July, together with the decision regarding a penalty for not meeting the 2015 deficit target.
- 24 The Eurogroup approves the first review of financial assistance for Greece and payment of the second tranche (10.3 billion euros). It also agrees to extend repayment dates and delay the payment of interest on public debt, but without providing any details.

#### **APRIL 2016**

29 The Government presents the 2016-2019 Stability Programme, with a more relaxed fiscal consolidation target. Specifically, the deficit for 2016 has been raised by 0.8 pps to 3.6% while the target of bringing the deficit below the figure of 3% set by the Stability and Growth Pact has been postponed to 2017.

#### **MARCH 2016**

10 The ECB cuts its benchmark interest rates (the Refi rate to 0%, the marginal lending facility to 0.25% and the deposit facility yield to –0.40%), makes changes to its asset purchase programme (extending the monthly rate of purchases by 20 billion up to 80 billion and including corporate bonds in the basket of eligible assets) and announces four new 4-year refinancing operations (TLTRO II) at an interest rate that could be –0.40% if lending benchmarks are reached.

#### **FEBRUARY 2016**

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

#### **JANUARY 2016**

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

#### **AGENDA**

#### **JUNE 2016**

- 2 Governing Council of the European Central Bank. Registration with Social Security and registered unemployment (May).
- 7 Industrial production index (April).
- 14 Fed Open Market Committee.
- 16 Quarterly labour cost survey (Q1).
- 17 Loans, deposits and NPL ratio (April).
- 20 International trade (April).
- 28 European Council. State budget execution (May).
- 29 CPI flash estimate (June). Household savings rate (Q1). Economic sentiment index of the euro area (June).
- 30 Balance of payments (April).
  Net international investment position (Q1).

#### **JULY 2016**

- 4 Registration with Social Security and registered unemployment (June).
- 6 Industrial production index (May).
- 15 Financial accounts (Q1).
- 18 Loans, deposits and NPL ratio (May).
- 21 International trade (May).
  Governing Council European Central Bank.
- 26 State budget execution (June).Fed Open Market Committee.
- 28 Labour force survey (Q2). Index of economic sentiment euro area (July).
- 29 Flash GDP (Q2).

Flash GDP of the euro area (O2).

Flash GDP of the US (Q2).

Flash CPI (July).

Balance of payments (May).

# Macroeconomic acceleration; on hold financially

Although the world economy continues to expand, financial markets are still waiting for more definite signs. In May the relative dissonance continued between macroeconomic indicators that are tending to point to a progressive acceleration in growth as the year progresses and developments in the financial markets, which have yet to find solid ground. Although the macroeconomic context is still reasonably positive, the financial markets have put on hold the episode of gains in risk asset prices that began mid-February. So what is weighing so heavy on investor sentiment? Probably several important events occurring in June, a month that will decide whether the United Kingdom will remain in the EU and in which the Fed's meeting has come to the fore after the unexpectedly tough tone (for a large proportion of investors) given off by the minutes of April meeting, fuelling expectations of another interest rate hike in June. Our scenario in this respect is clear: although the probability of Brexit is not low, we expect the British referendum to be won by the Remain camp, and we also believe that the US macroeconomic conditions more than justify an interest rate hike. Nonetheless it is natural for investors to play the waiting game, although such valid caution should not entertain any serious doubts regarding the macroeconomic scenario.

In global macroeconomic terms, May ended with continued expansion in activity. Particularly encouraging were the figures confirming that the US is still growing at an acceptable cruising speed (in the zone of 2% year-on-year, a rate it has achieved thanks to a strong labour market, almost in a situation of full employment), that Europe is gradually speeding up its growth rate and that China, in spite of the variability of its indicators, remains on course for a soft landing. There were also some positive surprises, such as higher growth than expected in Japan (advancing by 0.4% quarter-on-quarter in Q1 compared with 0.0% in the previous quarter) and the first signs that Russia might now be leaving the worst of the recession behind it, although its outlook is definitely not risk-free. Certainly other sources of uncertainty remain, such as Brazil's unpredictable political crisis (which has not stabilised in spite of suspending its President) and the doubts regarding countries with imbalances, such as Turkey and South Africa, which could be hard hit by an interest rate hike by the Fed. But the overall situation is that of the global economy fulfilling expectations and growing by around 3.3% in 2016, slightly more than 2015's figure of 3.1%.

The euro area is en route to 1.6% in 2016. As we have already mentioned, Europe is still progressively speeding up its rate of activity. In 2016 Q1 quarter-onquarter growth was 0.5% (1.5% year-on-year) thanks fundamentally to the push provided by Spain, Germany and France. This is a positive figure considering that it is occurring at a time when certain factors that had provided a temporary boost for activity are starting to weaken (in particular cheaper oil). In any case Europe's economy has built up enough steam to accelerate even without such a strong tailwind. This is what the European Commission expects, for example, predicting 1.6% growth in 2016 and 1.8% in 2017, a scenario similar to the one provided by CaixaBank Research. Given this situation of recovery, inflation will also tend to move away from the abnormally low levels of 2015, something that will be particularly visible in 2017.

Domestic demand is supporting Spain's recovery. The Spanish economy continues to enjoy a positive moment in the cycle. Growth stood at 0.8% quarter-on-quarter (3.4% year-on-year) in 2016 Q1, the same rate of activity as in the last two quarters. Domestic demand is still the driver for this expansion, contributing the most to GDP growth thanks to the boost from private consumption and investment, while the foreign sector also slightly reduced its negative contribution to GDP growth posted in preceding quarters. This good start to the year endorses our macroeconomic scenario which predicts GDP growth of 2.8% in 2016, representing a slight slowdown compared with the rate of 3.2% in 2015. This gentle deceleration is the result of a decline in some temporary support factors for activity that had a strong effect last year, such as the aforementioned cheaper oil. In 2017 growth will reach 2.4%. In short, the economy is moving towards more mature phases of the cycle but its activity is still at a substantial level. A favourable situation which needs to be maximised to continue with the country's fiscal consolidation and push forward with the agenda of structural reforms that are still pending. Because, as we are reminded by recent economic history, an unwillingness to reform during boom periods entails higher social costs at times of economic adversity.

# **FORECASTS**

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

## International economy

	2014	2015	2016	2017	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q
GDP GROWTH										
Global	3.4	3.1	3.3	3.6	3.1	3.0	3.2	3.2	3.3	3.5
Developed countries	1.8	1.9	1.8	2.0	1.9	1.8	1.7	1.7	1.8	2.1
United States	2.4	2.4	2.0	2.2	2.1	2.0	2.0	1.8	2.0	2.3
Euro area	0.9	1.5	1.6	1.7	1.6	1.6	1.5	1.6	1.7	1.8
Germany	1.6	1.4	1.6	1.7	1.7	1.3	1.6	1.4	1.6	1.9
France	0.7	1.2	1.4	1.4	1.1	1.4	1.4	1.6	1.4	1.4
Italy	-0.4	0.6	1.1	1.2	0.8	1.1	1.0	0.9	1.1	1.3
Spain	1.4	3.2	2.8	2.4	3.4	3.5	3.4	3.0	2.6	2.3
Japan	-0.1	0.6	0.7	0.6	1.8	0.9	0.0	0.7	0.7	1.6
United Kingdom	2.9	2.3	2.0	2.2	2.2	2.1	2.1	1.9	2.0	2.0
Emerging countries	4.6	4.0	4.3	4.9	4.0	3.9	4.3	4.2	4.3	4.5
China	7.3	6.9	6.5	6.3	6.9	6.8	6.7	6.3	6.4	6.5
India <sup>1</sup>	7.2	7.6	7.4	7.6	7.6	7.2	7.9	7.3	7.4	7.4
Indonesia	5.0	4.8	5.1	5.4	4.7	5.0	4.9	5.0	5.2	5.3
Brazil	0.1	-3.8	-3.4	1.1	-4.5	-5.9	-5.7	-4.0	-2.7	-1.3
Mexico	2.2	2.5	2.7	3.2	2.7	2.4	2.7	2.5	2.7	2.9
Chile	1.9	2.1	2.2	3.2	2.2	1.3	1.5	1.7	2.5	2.9
Russia	0.7	-3.7	-1.1	1.3	-3.7	-3.8	-1.2	-2.0	-1.1	0.1
Turkey	3.1	4.0	2.9	3.4	3.9	5.7	3.8	3.0	2.2	2.5
Poland	3.3	3.6	3.4	3.5	3.4	4.0	2.6	3.6	3.7	3.7
South Africa	1.6	1.2	0.7	1.3	1.1	0.3	0.2	0.8	0.9	1.0
INFLATION										
Global	3.5	3.3	3.4	3.7	3.2	3.3	3.4	3.3	3.3	3.5
Developed countries	1.4	0.3	0.9	2.1	0.2	0.4	0.7	0.6	1.0	1.4
United States	1.6	0.1	1.4	2.5	0.1	0.5	1.1	1.1	1.4	1.8
Euro area	0.4	0.0	0.3	1.7	0.1	0.2	0.0	-0.1	0.4	1.0
Germany	0.8	0.1	0.4	1.8	0.0	0.2	0.1	-0.1	0.5	1.1
France	0.6	0.1	0.3	1.7	0.1	0.2	0.0	-0.1	0.4	1.0
Italy	0.2	0.1	0.2	1.6	0.3	0.2	0.0	-0.3	0.3	0.9
Spain	-0.2	-0.5	-0.2	2.1	-0.4	-0.3	-0.7	-1.0	-0.1	0.9
Japan	2.7	0.8	0.5	1.6	0.2	0.3	0.1	-0.1	0.6	1.3
United Kingdom	1.5	0.0	0.7	1.7	0.0	0.1	0.3	0.4	0.8	1.1
Emerging countries	5.1	5.5	5.6	5.8	5.4	5.4	5.8	5.7	5.5	5.6
China	2.0	1.4	2.2	2.2	1.7	1.5	2.1	2.3	2.0	2.4
India	6.6	4.9	4.9	5.2	3.9	5.3	5.3	4.9	4.6	4.6
Indonesia	6.4	6.4	4.0	4.6	7.1	4.8	4.3	3.9	3.6	4.3
Brazil	6.3	9.0	8.7	6.5	9.5	10.4	10.2	8.8	8.4	7.3
Mexico	4.0	2.7	3.1	3.2	2.6	2.3	2.7	3.0	3.3	3.5
Chile	4.4	4.3	3.9	3.2	4.8	4.1	4.6	4.0	3.5	3.3
Russia	7.8	15.5	7.5	5.7	15.7	14.5	8.3	8.0	7.0	6.5
Turkey	8.9	7.7	7.5	6.3	7.3	8.2	8.6	8.0	7.0	6.5
Poland	0.2	-0.9	0.1	1.9	-0.8	-0.8	-1.1	-0.4	0.3	1.4
South Africa	6.1	4.6	6.5	6.3	4.7	4.9	6.5	6.1	6.1	7.3

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

Forecasts

## Spanish economy

	2014	2015	2016	2017	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
Macroeconomic aggregates										
Household consumption	1.2	3.1	3.0	2.2	3.6	3.5	3.7	3.5	2.7	2.3
General government consumption	0.0	2.7	1.9	0.8	3.0	3.7	2.6	2.1	1.5	1.3
Gross fixed capital formation	3.5	6.4	3.5	3.2	6.7	6.4	5.2	3.5	2.9	2.4
Capital goods	10.7	10.1	6.1	3.0	11.2	10.9	9.8	6.7	4.6	3.3
Construction	-0.1	5.3	2.1	3.3	5.2	4.6	3.1	1.7	1.7	1.8
Domestic demand (contr. Δ GDP)	1.6	3.7	3.0	2.1	4.1	4.1	3.8	3.3	2.5	2.3
Exports of goods and services	5.1	5.4	4.1	5.2	4.5	5.3	3.7	4.2	3.9	4.4
Imports of goods and services	6.4	7.5	4.9	4.6	7.2	7.7	5.4	5.7	3.8	4.7
Gross domestic product	1.4	3.2	2.8	2.4	3.4	3.5	3.4	3.0	2.6	2.3
Other variables										
Employment	1.1	3.0	2.5	2.1	3.1	3.0	3.2	2.6	2.2	2.1
Unemployment rate (% labour force)	24.4	22.1	19.9	18.5	21.2	20.9	21.0	20.0	19.3	19.5
Consumer price index	-0.2	-0.5	-0.2	2.1	-0.4	-0.3	-0.7	-1.0	-0.1	0.9
Unit labour costs	-0.8	0.3	0.2	0.7	-0.2	0.4	-0.5	0.4	0.3	0.4
Current account balance (cum., % GDP)1	1.0	1.4	1.6	1.4	1.4	1.4	1.4	1.5	1.5	1.6
Net lending or borrowing rest of the world (cum., % GDP) <sup>1</sup>	1.4	2.0	2.2	2.0	1.9	2.0	1.9	2.1	2.1	2.2
Fiscal balance (cum., % GDP) <sup>2</sup>	-5.8	-5.0	-3.9	-3.1						

#### Financial markets

INTEREST RATES										
Dollar										
Fed Funds	0.25	0.26	0.58	1.25	0.25	0.29	0.50	0.50	0.58	0.75
3-month Libor	0.23	0.32	0.72	1.50	0.31	0.41	0.62	0.65	0.75	0.86
12-month Libor	0.56	0.79	1.26	1.92	0.83	0.95	1.17	1.24	1.29	1.33
2-year government bonds	0.44	0.67	0.92	1.78	0.67	0.83	0.85	0.80	0.92	1.09
10-year government bonds	2.53	2.13	1.93	2.63	2.21	2.19	1.92	1.81	1.92	2.07
Euro										
ECB Refi	0.16	0.05	0.01	0.00	0.05	0.05	0.03	0.00	0.00	0.00
3-month Euribor	0.21	-0.02	-0.24	-0.06	-0.03	-0.09	-0.19	-0.26	-0.26	-0.25
12-month Euribor	0.48	0.17	-0.01	0.23	0.16	0.09	0.01	-0.02	-0.02	0.00
2-year government bonds (Germany)	0.05	-0.24	-0.43	0.01	-0.24	-0.32	-0.46	-0.48	-0.42	-0.37
10-year government bonds (Germany)	1.23	0.53	0.31	1.34	0.69	0.57	0.30	0.20	0.30	0.44
EXCHANGE RATES										
\$/€	1.33	1.11	1.10	1.07	1.11	1.09	1.10	1.13	1.10	1.07
¥/€	140.42	134.35	128.67	127.52	135.89	132.94	127.28	127.76	131.26	128.40
£/€	0.81	0.73	0.77	0.73	0.72	0.72	0.77	0.79	0.76	0.75
OIL										
Brent (\$/barrel)	99.45	53.61	45.14	65.58	51.10	44.70	35.72	44.57	47.74	52.53
Brent (€/barrel)	74.54	48.30	41.11	61.23	46.00	40.82	32.41	39.52	43.41	49.11

 $\textbf{\textit{Note:}} \ \textit{1. Four quarter cumulative.} \ \textit{2. Cumulative over four quarters.} \ \textit{Does not include aid to financial institutions.}$ 

Forecasts

## FINANCIAL OUTLOOK · Markets

# lose steam over the last few months

The international markets have put on hold the recovery they started mid-February. The beginning of May was marked by widespread losses on international stock markets and particularly in the emerging markets. This greater risk aversion continued during most of the month but reversed in the last few days. The global stock market index (MSCI) remained stable in May (-0.2%), standing at 0.8% above its level at the end of last year. Investor sentiment was initially affected by weaker US GDP growth figures than forecast for the first quarter and disparate results from the labour market in April. Moreover, activity indicators for the Chinese economy, also weaker than expected, reminded investors of concerns regarding a possible, albeit unlikely, hard landing for the Asian giant. Last but by no means least is the tougher message given out by the Federal Reserve (Fed), which led to significant adjustments both in equity and also bond markets.

Several important dates in June will play a critical role in the trend for financial assets over the coming weeks. June's agenda is packed with key events that could be accompanied by spikes of nervousness in international markets. Firstly, the Fed's next meeting will monopolise investor attention at the beginning of the month until its latest decision regarding the official interest rate is published mid-month. Moreover, the end of the month will be marked by two important elections. On June 23rd is the referendum on whether the United Kingdom should remain in the EU, whose outcome still seems uncertain due to the persistence of a large number of undecided voters who could go either way. Three days later Spain repeats its general election and the polls, for the time being at least, point to a result similar to December's. None of these events should cause disruption in the financial markets although they might provide a significant boost for safer financial assets that act as a safe haven at times of uncertainty.

The Fed returns to the centre of the international financial scene and considers the possibility of raising interest rates in June. Although there was no meeting of the Federal Open Market Committee (FOMC) in May, the US monetary institution was still in the spotlight that month. After the cautious message hinted at by the official communication from its April meeting, the less accommodative tone of the minutes from the same meeting, published mid-May, came as some surprise, with several members of the FOMC believing that an interest rate hike in June was «appropriate». This more restrictive rhetoric was echoed throughout the month in the numerous statements made by various Fed members,

## International stock markets by geographical location

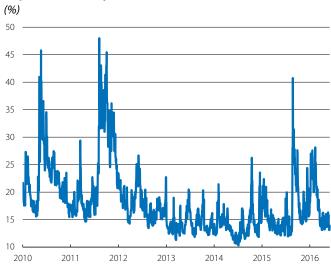
Index (100 = January 2011)150 140 130 120 110 100 80 70 50 2012 2013 2014 2011 2015 2016

Emerging

Global Advan

Source: CaixaBank Research, based on Bloomberg data.

#### Implied volatility of US stock markets



Source: CaixaBank Research, based on Bloomberg data

# **US:** probability associated with an increase in the federal funds rate \*



**Note:** \* Obtained from Fed fund futures. **Source:** CaixaBank Research, based on Bloomberg data.

including Yellen. Nonetheless, and in spite of the upcoming presidential elections in November, we still expect the Fed to carry out the next hike in September 2016. The gradual recovery by inflation, which picked up slightly in April, and the consolidation of the US economic cycle, which is likely to be confirmed at the end of July with solid GDP figures for 2016 Q2, are the main factors that should encourage the Fed coincide its hike in the fed funds rate with the end of the summer.

The Fed's more hawkish message makes the markets adjust their expectations. Since the start of monetary policy normalisation in the US in December last year, uncertainty has been high regarding the rate at which monetary policy would become tougher and market expectations have varied according to the data being published and the Fed's messages. The month of May was no exception. The more restrictive tone suggested by the minutes of April's meeting led to a significant adjustment in market expectations which started to predict the next interest rate hike in the US for the summer when, just a few weeks before, it had been predicted for the end of 2016 and even the beginning of 2017. International stock markets reacted to the possibility of a June hike with losses, especially those of the emerging block. The yield on 10-year US Treasury bonds picked up once the minutes had been published, rising by around 10 bps to 1.85%, a level comparable with the one observed at the beginning of the month. Lastly, the dollar accelerated its appreciation against the euro.

In the European bond market Greece is once again in the spotlight, but with good news. In May the yield on the German bund remained at very low levels, remaining most of the month below 0.17%. In the periphery Spain's risk premium started a downward slide during the second part of the month after moving above 150 bps early in May. In any case, the similarity of these fluctuations with those of Italy's risk premium seems to indicate they are not due to changes in the country's idiosyncratic risk but are particularly dependent on political uncertainty. Nevertheless the most noticeable news in Europe's sovereign bond market that month was undoubtedly the encouraging performance by Greek sovereign debt whose risk premium fell sharply: the approval of the first review of Greece's bail-out programme by the Eurogroup at the end of May pushed the country's risk premium to below 700 bps, its lowest level in six months. However, the slight upswing posted in the following days is a reminder of the difficulties of the Greek case (in particular the large amount of fiscal consolidation that still needs to be carried out).

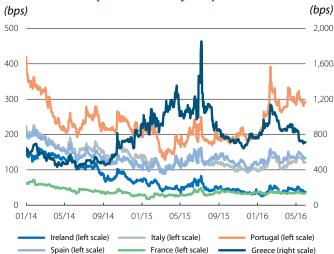
Emerging stock markets suffer considerable losses while the European stock market manages to end the month in positive figures thanks to a sharp upswing at the last moment. In May, emerging equity markets recorded losses of close to 4% on average. This relapse was due to two types

#### Yields on 10-year public debt



Source: CaixaBank Research, based on Bloombera data

#### Euro area: risk premia of 10-year public debt



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

#### Main international stock markets

*Index* (100 = *January* 2011)



Source: CaixaBank Research, based on Bloomberg data

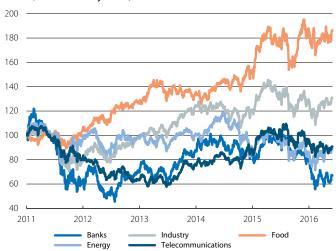
of factors: firstly global factors, especially the Fed's tougher message; and secondly domestic factors, still dominated by geopolitical risks. Brazil, with heightened political uncertainty due to developments in the impeachment of its President, is still the most worrying case. In the advanced block, after a weak start to the month, Europe's stock market saw gains of 1.2%, supported by positive advances in the Greek situation. This optimistic tone was widespread in large sectors although bank equity benefitted the most. In the US, the S&P 500 posted gains of a similar size with growth of 1.5%.

In the foreign exchange market the prevalent trend since the start of the year reversed thanks to the dollar's slight appreciation. After going above 1.15 dollars at the beginning of the month, the euro depreciated against the US currency which clearly benefitted from the support provided by the Fed's less accommodative message. With regard to the emerging block, most of the currencies could not rely on such a strong recovery in commodity prices as in previous months. The Fed's influence once again dominated the trend in emerging currencies, which depreciated by more than 4% on average.

The widespread recovery in commodity prices comes to a halt. Oil continued to pick up but at a slower rate than in the last few months, after rising by more than 20% in April. However, this weaker growth, which only reached 3.2% in the monthly figure, did not stop a barrel of Brent from reaching the 50 dollar barrier in the last few sessions of the month. With regard to other commodities, while agricultural goods increased in price it is worth noting the bad performance by precious and industrial metals. In particular, the price of copper, a leading indicator of industrial activity, fell by more than 8% in spite of a slight upswing at the end of the month.

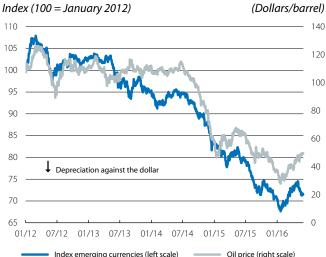
#### Euro area: stock market trend by sector

Index (100 = January 2011)



Source: CaixaBank Research, based on Bloomberg data.

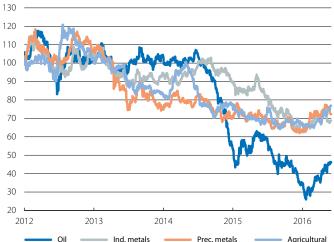
#### **Emerging currencies and Brent oil price**



Source: CaixaBank Research, based on Bloomberg data.

#### **Trends in commodities**

Index (100 = January 2012)



Source: CaixaBank Research, based on Bloomberg data.

FINANCIAL MARKETS MRO

# **FOCUS** · The present and future of financial integration in Europe

The European Central Bank (ECB) recently published its annual report on the degree of financial integration in the euro area and Europe as a whole. Its main conclusion is that, although the degree of integration has gradually recovered since the minimum levels reached in 2012, there is still a long way to go. Europe has relatively fragmented financial markets.

The financial integration indicators used by the ECB show a clear recovery since the OMT (outright monetary transactions) programme was introduced for public debt purchases (see the graph). These composite indicators are based on quantity (the volume of assets issued by another European country held by residents of a specific country) and price (the spread of prices in the bond, equity, interbank and credit markets between different European countries). The improvement observed over the last few years has been supported by the implementation of the banking union, as well as various expansionary monetary policies that have injected liquidity and have helped to improve investor confidence. In this respect, the reduction in macroeconomic imbalances in the periphery has also been significant. However, the recent episode of financial instability affecting global markets since mid-2015 has led to a certain hiatus, albeit probably temporary, in this improvement in the degree of integration.

Advances in the area of banking union and steps to create capital markets union, which the European authorities want to promote, should result in greater financial integration over the coming years. With regard to banking union (or banking integration), in its report the ECB stresses the need to harmonise the regulatory framework applicable in the different member states (in particular reducing to a minimum the so-called national discretions which had been established in European directives when the banking union had not yet been agreed) and also the importance of establishing, as soon as possible, a single deposit guarantee scheme at a European level with a public funding backstop such as the European Stability Mechanism (which would separate bank risk even more from sovereign risk). Both measures, as well as others, should boost the cross-border activity of European banks. In the area of capital markets union, the ECB notes the possibility of advancing quickly in some aspects such as promoting the asset-backed securities market (helping issuing banks to release capital) and laying the foundations for a single covered bond market.

In any case we must remember that it is not just the degree of financial integration that is important but also its quality. Integration will be more desirable the more robust it is and the more it can withstand shocks of a financial or economic nature, and provided it promotes efficient risk sharing among the residents of different countries. The most favourable type of integration is therefore based on flows of capital holdings and foreign direct investment, on the ownership of long-term rather than short-term debt and on retail bank loans rather than flows of interbank loans. Various studies have found that, in a country with a high degree of financial integration such as the US, the diversification of the investment portfolios held by residents of a state with assets from other states is a considerable help in reducing the correlation between the GDP of a state and the consumption of the residents in the same state. Undoubtedly a great deal needs to be done before we can reach the same situation in Europe. where 50% of company shares are in the hands of national investors.

# Price-based and quantity-based financial integration composites

Level (1 = maximum integration)



**Source:** ECB (ECB, «Financial integration in Europe», April 2016).

1. ECB, «Financial Integration in Europe», April 2016.

# **FOCUS** · The ECB enters the European corporate bond market

In just over a year since the start of the public sector purchase programme (sovereign QE) the ECB is about to begin its private debt purchase programme (corporate QE). The institution has two aims with this move: to improve financing conditions for firms and to diversify the type of assets purchased, which should boost monthly debt purchases by 20 billion euros. Although the effective start of corporate QE will take place in June, its announcement in March has already begun to be felt.

Firstly, a clear drop can already be seen in yields and risk premia for European corporate debt. The yields and spreads (compared with sovereign bonds) of investment grade (IG) corporate bonds from non-financial firms have fallen by 28 and 25 bps to 0.98% and 120 bps respectively. The speculative or high yield (HY) segment of this market and European bank debt (both outside the ECB's radar) have also seen their respective yields and spreads fall, especially the former. Secondly, the upswing in the rate of IG and HY bonds issued by European non-financial firms is another of the effects associated with the announcement of corporate QE. In March and April 65 billion euros were issued, a very high figure that contrasts with the inactivity dominating the capital markets in January and February.

Regarding the design of corporate QE, one of the most relevant aspects is the range of eligible bonds, which has been wider than expected. Specifically bonds from the IG segment will be eligible, denominated in euros and issued by non-banking corporations located in the euro area.<sup>2</sup> The bonds of insurers and financial firms whose parent companies are not a credit institution will also be eligible. But it is in the technical section where corporate QE has surprised the most, both because of the target market for the purchases (primary and secondary) and also for the high limit to the ECB's share in each bond (70% except in the case of companies with a notable public holding). Moreover, there will be no minimum amount per issue, which will particularly help medium-sized firms, and purchases will include almost all types of maturity (from 6 months to 31 years). Based on these parameters and the rest of the technical aspects stipulated by the ECB, the universe of eligible corporate bonds totals 670 billion euros.

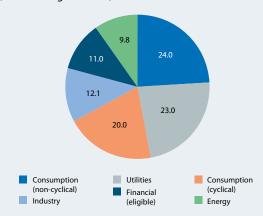
Lastly, the size of corporate QE and, consequently, the rate of monthly purchases is an area for which the ECB

1. Fixed Income indices of Bank of America Merrill Lynch.

has not established any targets ex ante. A simple and reasonable estimate would be to extrapolate the experience of the last covered bond purchase programme by the ECB (CBPP3), very similar in several ways to its corporate QE. Based on the ECB's pattern of purchases in the primary and secondary covered bond markets in 2015, monthly bond purchases could total around 7-8 billion euros and the volume for the programme as a whole could be as much as 72 billion (in 9 months, up to March 2017). This is a relatively modest size in comparison with the target market, which should help corporate QE to be implemented without too much difficulty.

# Corporate QE: sector share of the eligible bond market

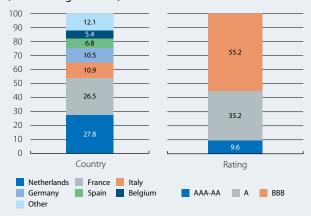
(% of the target market)



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

# Corporate QE: breakdown of the target market by country and credit rating

(% of the target market)



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

<sup>2.</sup> More specifically, the ECB will use the criterion of the country where the issuer is incorporated, which means that the bonds of companies incorporated in the euro area but whose parent company is outside will be eligible provided they meet the programme's other criteria.

# **KEY INDICATORS**

#### Interest rates (%)

	31-May	29-Apr	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	-0.26	-0.25	-1	-13.0	-24.9
1-year Euribor	-0.02	-0.01	-1	-8.0	-18.0
1-year government bonds (Germany)	-0.53	-0.49	-4	-15.2	-31.3
2-year government bonds (Germany)	-0.51	-0.48	-3	-16.5	-28.5
10-year government bonds (Germany)	0.14	0.27	-13	-48.9	-34.7
10-year government bonds (Spain)	1.47	1.59	-12	-30.1	-36.8
10-year spread (bps) <sup>1</sup>	133	132	1	19.2	-1.6
US					
Fed funds	0.50	0.50	0	0.0	25.0
3-month Libor	0.69	0.64	5	7.7	40.6
12-month Libor	1.34	1.23	11	16.2	59.0
1-year government bonds	0.67	0.55	12	7.3	42.6
2-year government bonds	0.88	0.78	10	-16.8	27.5
10-year government bonds	1.85	1.83	2	-41.9	-27.1

# Spreads corporate bonds (bps)

	31-May	29-Apr	Monthly change (bps)	Year-to-date (bps)	Year-on-year change (bps)
Itraxx Corporate	72	73	0	-5.0	6.6
Itraxx Financials Senior	90	90	0	12.8	12.6
Itraxx Subordinated Financials	194	202	-8	38.0	36.4

#### Exchange rates

	31-May	29-Apr	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
\$/euro	1.113	1.145	-2.8	2.5	1.3
¥/euro	123.250	121.940	1.1	-5.7	-9.6
£/euro	0.769	0.784	-1.9	4.3	7.0
¥/\$	110.730	106.500	4.0	-7.9	-10.8

#### **Commodities**

	31-May	29-Apr	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
CRB Commodity Index	412.3	417.7	-1.3	10.0	-2.9
Brent (\$/barrel)	48.3	46.4	4.2	35.1	-24.4
Gold (\$/ounce)	1,215.3	1,293.0	-6.0	14.5	2.1

## **Equity**

	31-May	29-Apr	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
S&P 500 (USA)	2,097.0	2,065.3	1.5	2.6	-0.5
Eurostoxx 50 (euro area)	3,063.5	3,028.2	1.2	-6.2	-14.2
lbex 35 (Spain)	9,034.0	9,025.7	0.1	-5.3	-19.5
Nikkei 225 (Japan)	17,235.0	16,666.1	3.4	-9.5	-16.2
MSCI Emerging	807.5	840.2	-3.9	1.7	-19.6
Nasdaq (USA)	4,948.1	4,775.4	3.6	-1.2	-2.4

 $\textbf{Note:}\ 1.\ Spread\ between\ the\ yields\ on\ Spanish\ and\ German\ 10-year\ bonds.$ 

INTERNATIONAL ECONOMY MR

# growth accelerates in 2016 but with downside risks that have yet to disappear

The Fed, Brexit and Brazil's political situation once again came to the fore in May. The minutes of the April meeting by the Federal Reserve (Fed), which were published in May, were more hawkish in tone than expected by the markets, suggesting a possible second hike in interest rates over the coming months, as contained in CaixaBank Research's forecast scenario. The monetary authority's stance has been helped by the improvement in global financial stability after the upsets in the early part of 2016 and the good figures for the US economy although there are several latent sources of risk in the short term. The uncertainty regarding Brexit is still high (and is damaging the United Kingdom's rate of activity) while political instability has intensified in Brazil due to the temporary suspension of President Rousseff. Nonetheless these events, among others, are within the expected parameters so they should not spoil world growth which will accelerate slightly in 2016 to 3.3% (from 3.1% in 2015). Specifically we expect the emerging countries to advance slightly more than the figures posted in 2015 (from 4.0% to 4.3%) and for moderate growth to consolidate in the advanced economies (close to 2%).

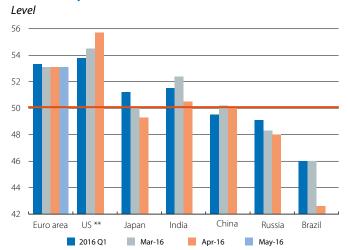
#### **UNITED STATES**

The Fed gets ready for a second interest rate hike. The minutes from the April meeting of the Federal Open Market Committee (FOMC) revealed that the institution might once again raise the Fed funds rate in the summer provided there is confirmation of the solidity of US economic activity. As a result the markets brought forward, from December to September, the most likely date for the second hike in the official interest rate, in line with the forecast of CaixaBank Research. However, apart from the exact month when the Fed will raise interest rates, of note is the confidence shown by the Fed in the solidity of US growth and in the ability of the global economy to withstand a less accommodative monetary environment, two aspects which, to date, had plagued the financial markets.

# Inflation is gradually recovering, augmenting the favourable scenario for the Fed's interest rate hike.

Inflation stood at 1.1% in April, 0.2 pps above the previous month's figure, while core inflation remained at a solid 2.1%. Going into more detail, of note was the sharp increase in the energy component in month-on-month terms (+3.4%) although it still posted a drop in year-on-year terms. Apart from energy prices, the rest of the components saw widespread gains.

#### PMI activity indicator \*

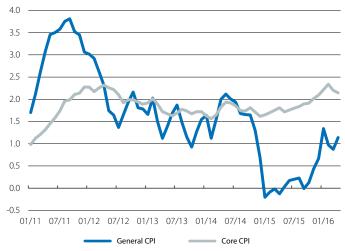


**Notes:** \* PMI services for the advanced countries and PMI manufacturing for the emerging. \*\* The ISM index is used for the United States.

Source: CaixaBank Research, based on data from Markit, ISM and the Chinese Statistics Office.

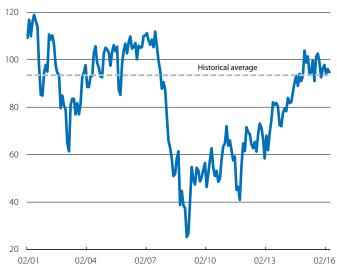
#### **US: CPI**

#### Year-on-year change (%)



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

#### **US:** consumer confidence index



Source: CaixaBank Research, based on data from the Conference Board.

The US economy continues to expand. According to the second estimate produced by the Bureau of Economic Analysis, in the United States GDP grew by 0.2% guarter-onquarter in Q1, higher than the 0.1% of the first estimate. Although this increase is somewhat smaller than the one posted in 2015 Q4, we should remember that, every year, the GDP growth figure for the first quarter tends to be systematically underestimated by approximately 0.3 pps in terms of quarter-on-quarter growth. Regarding the different GDP components, private consumption continued to perform particularly well, up by 0.5% quarter-on-quarter and contributing 0.3 pps to GDP growth. In fact, in May the consumer confidence index produced by the Conference Board was in line with the historical average (at 92.6 points). For its part the ISM business sentiment index for manufacturing fell slightly in April to 50.8 points. However, this initial disappointment was amply offset by the solid ISM figure for services, a sector that accounts for 80% of economic activity and 85% of the jobs in the private sector.

The labour market continues its strong recovery and is approaching full employment. 160,000 jobs were created in April, a disappointing figure as it was below the threshold of 200,000 but which should not be taken as cause for alarm considering the strong recovery registered by the labour market since 2009. Unemployment remained stable at a low 5.0% and the percentage of employees working part-time but who would like to work full-time continued to fall. The rise in wages also came as a positive surprise, standing at 2.5% year-on-year, a particularly significant figure if we remember that inflation is still low.

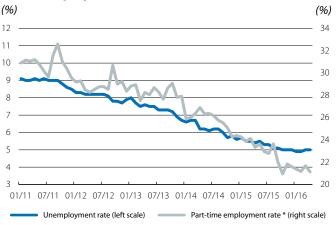
#### **JAPAN**

Japan grows more than expected in 2016 Q1 but doubts still hover over the solidity of the Japanese economy. After the previous quarter's drop, GDP grew in Q1 by 0.4% quarteron-quarter (0.0% year-on-year), a slightly higher figure than predicted. Although the data from Japan's National Accounts system must be interpreted with great care as they are quite erratic and tend to be revised subsequently, the improvement in the foreign sector came as a positive surprise although domestic demand continued to look weak. In particular, the advance in private consumption did not manage to offset the strong decline in capital goods and residential investment. Given this situation, a voluminous fiscal package is very likely to be approved (in the order of 1.5% of GDP), coming into force as from the second half of 2016 and expected to last until 2017. In spite of this the outlook for Japan's growth is still quite mediocre with GDP growth that will only rise slightly above 0.5% both this year and the next.

#### **EMERGING ECONOMIES AND COMMODITIES**

China's activity indicators look weak again in April. However, the drop in intensity shown by some indicators is within the

# US: involuntary part-time employment rate and unemployment rate



**Note:** \* Involuntary part-time employment rate: workers involuntarily working part-time due to economic reasons but who would like to work full-time as a percentage of all part-time workers. **Source:** CaixaBank Research, based on data from the Bureau of Labor Statistics.

#### Japan: GDP

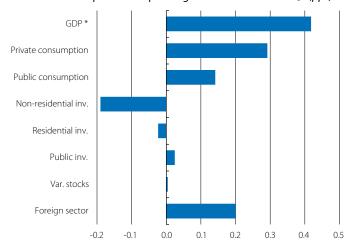
Year-on-year and quarter-on-quarter change (%)



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

#### Japan: GDP

Contribution to quarter-on-quarter growth in GDP in 2016 Q1 (pps)



Note: \* Quarter-on-quarter change

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

typical variations for this kind of data. In particular, exports fell again, down by 1.8% year-on-year after enjoying solid growth the previous month. Industrial production grew by 6.0% year-on-year, below its March figure of 6.8%, while retail sales were up 10.1% year-on-year, without showing any clear improvement on March's figure of 10.5%. However, we need to pay more attention to capital movements in China after the serious episode of outflows in 2015 (see the Focus «China's capital flight, a risk to be taken into account» in this *Monthly Report*). Although the rate of outflows appears to have slowed down in 2016, the Fed's less accommodative tone could affect this moderating trend.

In Latin America, Mexico's good performance contrasts with the recession in Brazil. Mexico speeded up its growth in 2016 Q1, according to preliminary figures reaching 2.7% year-on-year (0.8% quarter-on-quarter). This growth is larger than expected and, judging by available indicators, the boost was probably provided by domestic demand and, in particular, private consumption. Over the coming quarters the Mexican economy is expected to remain dynamic, supported by positive expectations of a recovery in oil prices and a certain acceleration in the US in what remains of 2016. On the other hand Brazil's activity indicators continue to show that Latin America's largest economy is still immersed in a serious recession. Within this recessionary context, the downside risks have increased even further due to the political crisis and the temporary suspension of Dilma Rousseff by the Senate. The country's situation is very difficult to resolve in the short term, preventing it from taking decisions regarding its economic policy, particularly the urgently required fiscal adjustment.

The recession moderates in Russia. According to preliminary estimates, GDP fell by 1.2% year-on-year in 2016 Q1, a better figure than expected and suggesting the country has put the worst of the recession behind it. However, the fact that there are still sources of geopolitical risk and the existence of demanding international financial conditions are slowing up Russia's exit from the recession, so 2016 will probably end with another drop in GDP, which will be around 1.1%.

Oil prices continue to recover gradually. In May the trend continued of a slow recovery in the price of Brent, reaching 50 dollars a barrel, in line with CaixaBank Research forecasts. Undoubtedly the decline in investment over the last year and a half will support this scenario of price rises, in the same way that the reduction in US stocks and less supply from Iraq have supported the recent appreciation in the short term.

#### China: exports and imports \*

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



Note: \* Nominal value of imports and exports.

Source: CaixaBank Research, based on data from the Chinese Customs.

#### **Russia and Mexico: GDP**

Year-on-year change (%)



Source: CaixaBank Research, based on data from the national statistics offices.

#### Oil: price of Brent barrel

(Dollars per barrel)



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

## FOCUS · China's capital flight, a risk to be taken into account

After years of capital inflows, China suffered a serious episode of outflows between 2014 and 2015 (see the graph). Uncertainty surrounding the possible continuity of capital outflows has been added to growing concerns regarding the true state of the Asian economy. A detailed study of this episode, examining the channels through which the outflows occurred, is vital in order to assess the situation. With this aim in mind, we have analysed China's financial account which measures the flows of capital to and from China, and classify them by investment type (portfolio, direct and other type).

The capital outflows episode studied involved both international investors and especially Chinese residents and have one common denominator: fear of the renminbi (RMB) depreciating even further. International investors concentrated on reducing their offshore deposits in RMB. These deposits are used both for commercial settlements with China as well as for investment and the significant correction in «Other investments» in non-resident flows towards China is partly due to this phenomenon (see the table).

The increase in capital outflows as a result of decisions taken by Chinese residents was also considerable. There are three channels through which these outflows were carried out. Firstly, numerous Chinese firms paid off their debt in foreign currency. This is also reflected in the «Other investments» of non-resident flows: a large part of this debt had been taken out with local banks which had acquired obligations with foreign banks. This pay-off of debt by companies therefore reduced the loans taken out with non-resident banks (disinvestment).<sup>2</sup>

The second channel through which resident capital outflows took place is the so-called «over-invoicing of imports», a resource used by Chinese firms to avoid capital controls. This is reflected in the significant rise in «Errors and omissions», which usually includes capital transactions not officially reported. The huge discrepancy between the data reported by the Chinese Customs Agency for imports and bank transactions for commercial purposes, namely 700 billion dollars in 2015, has set off the alarm bells.

1. Although these deposits are not in mainland China, foreign banks with offshore deposits in RMB usually have a correspondent bank in mainland China where they also carry out deposits in the Chinese currency, so a reduction in offshore deposits of international investors entails a drop in onshore deposits of non-resident banks.

Lastly the rise in capital outflows by Chinese residents can also be seen in the sharp increase in investment by Chinese firms in foreign assets (FDI), which is partly due to the doubts they have regarding their economy's growth capacity.

Having examined the nature of the outflows and their reasons, China's capital flight is a risk that must be taken into account. As long as China accomplishes a soft landing and the Fed's interest rate hikes are very gradual, capital outflows are likely to diminish. However, the fact that a very significant proportion of the outflows is due to Chinese firms themselves is not exactly a sign of confidence in their economy's capacity to grow.

#### China: capital flows \*



**Note:** \* Net capital flows plus «Errors and omissions». (+) corresponds to foreign capital inflows to China and (–) to capital outflows from China to the rest of the world. **Source:** CaixaBank Research, based on data from SAFE.

#### China: capital flows \*

(Billion dollars)

	Average 2011-2013	2015
Net capital flows + errors and omissions	134	-674
Flows of Chinese non-residents towards China	439	-94
FDI	271	250
Portfolio	42	7
Other investment	126	-352
Flows of Chinese residents outside China	-250	-392
FDI	-62	-188
Portfolio	-2	-73
Other investment	-186	-128
Errors and omissions	<b>-</b> 55	-188

**Note:** \* (–) corresponds to capital outflows from China to the rest of the world. **Source:** CaixaBank Research, based on data from SAFE.

<sup>2.</sup> According to the BIS (*Quarterly Review*, March 2016), these flows totalled 163 billion dollars up to 2015 Q3.

# FOCUS · The fall in oil prices: an inscrutable blessing?

Between June 2014 and January 2016 the price of Brent oil went from 115.3 dollars per barrel to 27.5 dollars per barrel, a drop of 76.1%. However, unlike previous slumps, the dividend of cheap energy did not speed up growth: global GDP rose in 2015 by 3.1%, less than the figure of 3.4% in 2014. Why?

In general, provided a drop in the oil price is not due to a fall in demand, this benefits world growth. The reason lies in the different propensities to consume and save between oil-exporting countries and oil importers. Specifically, when revenue increases, importers are more likely to consume than exporters, so an increase in consumption of the former more than offsets the lower consumption and investment by the latter.

However, on this occasion different elements have come into play against the generally positive effect of lower oil prices, even though this fall was essentially due to a shock in supply. Firstly, the size and speed of the fall have led to exceptional reductions in consumption and investment in the 34 oil-exporting countries, to such an extent that their total growth went from 2.3% in 2014 to 0.6% in 2015. Similarly, the considerable reduction in oil revenue has drastically worsened their macroeconomic situation (their aggregate fiscal deficit went from 1.7% of GDP to 5.7% and their current surplus of 2.6% of GDP became a deficit of 1.6%) , in many cases leading to social unrest and political instability.

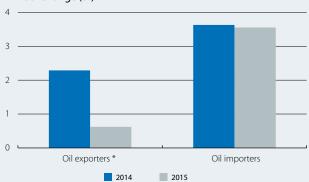
Secondly, the increase in domestic demand in countries that import oil has been disappointing for several reasons. One of these is the sharp drop in investment in the US, which is a net importer of energy but also one of the world's large oil producers. This decrease in investment has spread beyond the US energy sector, probably because the current fall in oil prices has been accompanied by greater uncertainty regarding the global macroeconomic situation. Another reason is the fact that it has coincided with a widespread tightening up of financial conditions caused by the Fed starting to raise interest rates, and with growing doubts regarding China's slowdown. Undoubtedly tighter financial conditions and China's slowdown have negatively affected the growth of numerous net oil importers (mostly emerging countries). The aggregate growth of all importers therefore remained unchanged between 2014 and 2015 and held steady at 3.6%.

Lastly, the IMF points to a third element that may have offset the positive effect of cheaper oil. The slump in crude might have lowered inflation expectations (although there is no clear evidence for this) and pushed up real interest rates. Higher real interest rates hinder investment and consumption and ultimately reduce growth. Under normal circumstances, the monetary authorities could offset this effect by lowering the nominal interest rate but, at zero-lower bound, there is no more room to manoeuvre in this area.

So what can we expect for this year and the next? As long as oil continues to appreciate gradually, as expected, we should finally witness a positive effect on world growth. For net oil exporters, higher oil prices will relieve their finances. And for net importers it will represent a manageable loss since the price is only expected to recover very gradually. Exceeding the threshold of 45-55 dollars per barrel will also make shale oil and offshore extraction more profitable, leading to a significant rise in investment and production.

# GDP growth: oil-exporting and importing countries

Annual change (%)



**Note:** \* The net oil exporters are 34 countries that account for 15.8% of global GDP measured in purchasing power parity.

Source: CaixaBank Research, based on IMF data.

#### Oil prices and inflation expectations



**Note:** \* Inflation expectations at one year for US consumers. **Source:** CaixaBank Research, based on data from Thomson Reuters Datastream and the University of Michigan.

# **KEY INDICATORS**

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

#### **UNITED STATES**

2014	2015	2015 Q2	2015 Q3	2015 Q4	2016 Q1	04/16	05/16
2.4	2.4	2.7	2.1	2.0	2.0	-	
4.5	4.3	4.1	4.1	3.5	4.0	4.4	
86.9	98.0	96.2	98.3	96.0	96.0	94.7	92.6
2.9	0.3	0.4	0.1	-1.6	-1.6	-1.1	
55.6	51.3	52.6	51.0	48.6	49.8	50.8	
1,001	1,108	1,156	1,156	1,135	1,147	1,172	
171	179	179	179	182	187		
6.2	5.3	5.4	5.2	5.0	4.9	5.0	
59.0	59.3	59.3	59.3	59.4	59.8	59.7	
-2.9	-3.0	-3.0	-3.0	-3.0	-3.0		
1.6	0.1	0.0	0.1	0.5	1.1	1.1	
1.7	1.8	1.8	1.8	2.0	2.2	2.1	
	2.4 4.5 86.9 2.9 55.6 1,001 171 6.2 59.0 -2.9	2.4 2.4 4.5 4.3 86.9 98.0 2.9 0.3 55.6 51.3 1,001 1,108 171 179 6.2 5.3 59.0 59.3 -2.9 -3.0	2.4 2.4 2.7 4.5 4.3 4.1 86.9 98.0 96.2 2.9 0.3 0.4 55.6 51.3 52.6 1,001 1,108 1,156 171 179 179 6.2 5.3 5.4 59.0 59.3 59.3 -2.9 -3.0 -3.0 1.6 0.1 0.0	2.4     2.4     2.7     2.1       4.5     4.3     4.1     4.1       86.9     98.0     96.2     98.3       2.9     0.3     0.4     0.1       55.6     51.3     52.6     51.0       1,001     1,108     1,156     1,156       171     179     179     179       6.2     5.3     5.4     5.2       59.0     59.3     59.3     59.3       -2.9     -3.0     -3.0     -3.0       1.6     0.1     0.0     0.1	2.4     2.4     2.7     2.1     2.0       4.5     4.3     4.1     4.1     3.5       86.9     98.0     96.2     98.3     96.0       2.9     0.3     0.4     0.1     -1.6       55.6     51.3     52.6     51.0     48.6       1,001     1,108     1,156     1,156     1,135       171     179     179     179     182       6.2     5.3     5.4     5.2     5.0       59.0     59.3     59.3     59.3     59.4       -2.9     -3.0     -3.0     -3.0     -3.0       1.6     0.1     0.0     0.1     0.5	2.4     2.4     2.7     2.1     2.0     2.0       4.5     4.3     4.1     4.1     3.5     4.0       86.9     98.0     96.2     98.3     96.0     96.0       2.9     0.3     0.4     0.1     -1.6     -1.6       55.6     51.3     52.6     51.0     48.6     49.8       1,001     1,108     1,156     1,156     1,135     1,147       171     179     179     179     182     187       6.2     5.3     5.4     5.2     5.0     4.9       59.0     59.3     59.3     59.3     59.4     59.8       -2.9     -3.0     -3.0     -3.0     -3.0     -3.0       1.6     0.1     0.0     0.1     0.5     1.1	2.4     2.4     2.7     2.1     2.0     2.0     -       4.5     4.3     4.1     4.1     3.5     4.0     4.4       86.9     98.0     96.2     98.3     96.0     96.0     94.7       2.9     0.3     0.4     0.1     -1.6     -1.6     -1.1       55.6     51.3     52.6     51.0     48.6     49.8     50.8       1,001     1,108     1,156     1,156     1,135     1,147     1,172       171     179     179     179     182     187        6.2     5.3     5.4     5.2     5.0     4.9     5.0       59.0     59.3     59.3     59.3     59.4     59.8     59.7       -2.9     -3.0     -3.0     -3.0     -3.0     -3.0        1.6     0.1     0.0     0.1     0.5     1.1     1.1

**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 Q2	2015 Q3	2015 Q4	2016 Q1	04/16
Activity							
Real GDP	-0.1	0.6	0.7	1.8	0.9	0.0	-
Consumer confidence (value)	39.3	41.3	41.5	41.0	42.2	41.4	40.8
Industrial production	2.1	-1.2	-0.8	-0.4	-1.1	-3.2	-1.9
Business activity index (Tankan) (value)	13.5	12.8	15.0	12.0	12.0	6.0	_
Unemployment rate (% lab. force)	3.6	3.4	3.4	3.4	3.3	3.2	3.2
Trade balance 1 (% GDP)	-2.6	-0.6	-1.4	-1.0	-0.6	-0.2	-0.1
Prices							
Consumer prices	2.7	0.8	0.5	0.2	0.3	0.1	-0.3
Core consumer prices	1.8	1.0	0.4	0.8	0.8	0.7	0.7

**Note:** 1. Cumulative figure over last 12 months.

 $\textbf{Source:} \ \textit{CaixaBank Research, based on data from the Communications Department, Bank of Japan and Thomson \textit{Reuters Datastream}.$ 

#### **CHINA**

	2014	2015	2015 Q2	2015 Q3	2015 Q4	2016 Q1	04/16
Activity							
Real GDP	7.3	6.9	7.0	6.9	6.8	6.7	_
Retail sales	12.0	10.7	10.2	10.7	11.1	10.3	10.1
Industrial production	8.3	6.1	6.3	5.9	5.9	5.9	6.0
PMI manufacturing (value)	50.7	49.9	50.2	49.8	49.7	49.5	50.1
Foreign sector							
Trade balance <sup>1</sup> (value)	383	601	540	576	601	603	616
Exports	6.0	-2.6	-2.3	-5.8	-5.1	-9.6	-1.8
Imports	0.4	-14.2	-13.3	-14.3	-11.6	-13.3	-10.9
Prices							
Consumer prices	2.0	1.4	1.4	1.7	1.5	2.1	2.3
Official interest rate <sup>2</sup> (value)	5.60	4.35	4.85	4.60	4.35	4.35	4.35
Renminbi per dollar (value)	6.2	6.3	6.2	6.3	6.4	6.5	6.5

**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.

EUROPEAN UNION MR06

#### FCONOMIC OUTLOOK · Growth

# in the euro area continues as expected

#### The euro area consolidates considerable growth prospects.

The European Commission has maintained a scenario of a gradual recovery for the euro area with a growth forecast of 1.6% for 2016 and 1.8% for 2017. The institution points out that the ECB's accommodative monetary policy will continue to support domestic demand, in particular household consumption and investment. However, it warns of the fragility of the recovery and especially stresses the need to intensify the rate of structural reforms to bolster and boost the euro area's economy. In this respect, making use of the experience garnered in Cyprus and Greece, the Commission has set up a Structural Reform Support Service to help those countries whose reformist drive appears to have diminished recently.

#### As predicted, the euro area's GDP increased in 2016 Q1

by 0.5% growth quarter-on-quarter, 0.2 pps more than the previous guarter and 0.1 pp above the average for 2015. This growth was principally led by Spain, Germany, France and Austria. Spain grew by 0.8% quarter-on-quarter, the same rate as the last two quarters. Germany posted its best figure for the last two years with growth of 0.7% (1.6% year-on-year) while France advanced by 0.6% (1.4% year-on-year). However, the figures for Italy and Portugal remained below average, with Italian GDP at 0.3%, in line with our forecasts, and Portuguese GDP growing by 0.1% quarter-on-quarter, less than expected. Q2 activity indicators for Portugal suggest this slump is temporary and that the country will return to a faster growth rate in the coming quarters. Nevertheless, for the euro area as a whole the CaixaBank Research scenario has growth remaining at similar levels to those of Q1 in the coming quarters.

Emerging Europe continues to grow but unevenly. In Q1 the region continued to post acceptable growth rates, as verified by the fact that three countries, Romania, Slovakia and the Czech Republic, have maintained year-on-year increases in GDP of more than 3% while Poland has been slightly less dynamic (2.5% year-on-year). Hungary is still the weak link for the region with growth at a low 0.5% year-on-year. As this is the underlying trend, the latest push in activity reveals that the discrepancies between emerging countries are increasing. Quarter-on-quarter growth was surprising lively in Romania, Slovakia and the Czech Republic with figures ranging from 1.6% to 2.0% but unexpectedly negative in the case of Poland (-0.1%), although this figure is probably a result of the situation normalising after an uncharacteristically vigorous end to 2015. With the exception of the Hungarian economy, emerging Europe's growth prospects are positive in 2016.

#### Euro area: GDP forecasts of the European Commission

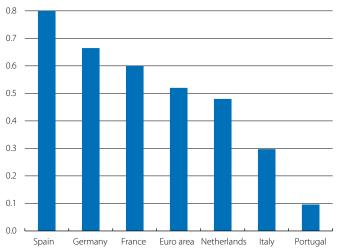
Annual change (%)

		Fore	ecast	Change con February 2016	npared with forecast (pps)
	2015	2016	2017	2016	2017
Euro area	1.7	1.6	1.8	▼-0.1	▼-0.1
Germany	1.7	1.6	1.6	<b>▼</b> -0.2	▼-0.2
France	1.2	1.3	1.7	=	=
Italy	0.8	1.1	1.3	▼-0.3	=
Spain	3.2	2.6	2.5	<b>▼</b> -0.2	=

**Source:** CaixaBank Research, based on European Commission data (European Economic Forecast, Spring 2016).

#### Euro area: GDP in 2016 Q1

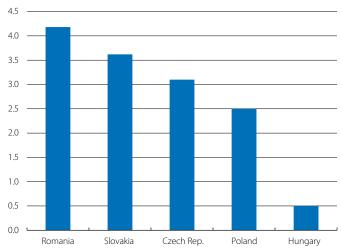
Quarter-on-quarter change (%)



Source: CaixaBank Research, based on Eurostat data.

#### **Emerging Europe: GDP in 2016 Q1**

Year-on-year change (%)



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

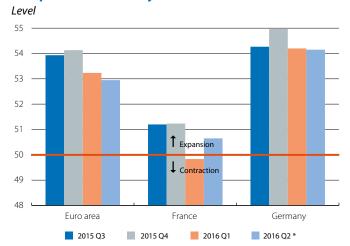
The pace of growth in activity continues in 2016 Q2. The composite PMI for the euro area as a whole registered 52.9 points in May, an expansionary level (above the 50 points) and very similar to the previous month. By country, the best figures were achieved in the core (in Germany and France it picked up to 54.7 and 51.1 points respectively) while growth slowed down slightly in the periphery. Industrial production increased by 0.1% year-on-year in March, a lower figure than the one posted in the first two months of the year. German industrial production also saw a weaker increase in March (0.2% year-on-year) while French industrial production dipped (–0.7% year-on-year). The indicators as a whole, therefore, point to the expansion continuing at a moderate rate in 2016 Q2.

Consumption continues to improve. Demand indicators have remained stable in the first half of 2016. Retail sales grew by 2.3% year-on-year in 2016 Q1, a little below the average figure of 2015 (2.8%). Meanwhile consumer confidence stabilised at –8.2 for the year so far, 5 points above the historical average, with a significant increase in the month of May to –7. This improvement in confidence suggests that private consumption will continue as one of the major supports for the euro area's economic recovery.

Inflation picks up but remains in negative terrain. The year-on-year change in the euro area's harmonised index of consumer prices (HICP) stood at -0.1% in May, 0.1 pp above the previous month's figure, partly due to the smaller drop in the price of the energy (-8.1% year-on-year) and also to a larger increase in the prices of the services component (from 0.9% year-on-year in April to 1.0% year-on-year in May), in turn positively affecting core inflation by 0.1 pp (to 0.8%). We expect this gradual rise in inflation to continue, supported by the progressive increase in oil prices and a somewhat more moderate rise in core inflation. In the first half of 2017, the ECB's expansionary monetary policies and the solid economic recovery in the euro area will push inflation up to levels close to the central bank's target.

The euro's depreciation over the coming months should help exports. In the last two years, the euro area has been supported by the euro's depreciation as an additional factor boosting exports from the monetary union as a whole. Specifically, from the beginning of 2014 up to November 2015, the euro depreciated by approximately 12% compared with a representative basket of currencies. This situation has been reversed temporarily in the last five months, with the euro appreciating by 4%. However, the continuation of the ECB's accommodative monetary policy, the opposite to the Fed which has announced that it will soon raise interest rates, should encourage the euro to depreciate again over the coming months. Exports grew by around 5% year-on-year in 2015 and are currently advancing at a slightly slower rate (below 4%). In spite of the support of a slightly weaker euro, it is important for the export sector to continue focusing on

#### **Composite PMI activity indicator**



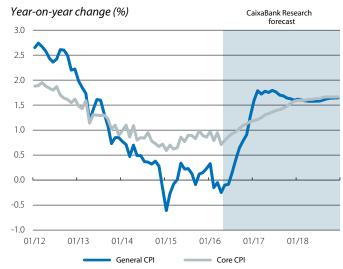
**Note:** \* 2016 Q2 includes only the data from April and May. **Source:** CaixaBank Research, based on data from Markit.

#### **Euro area: consumption indicators**



**Note:** \* 2016 Q2 includes only the data from April and May. **Source:** CaixaBank Research, based on data from Eurostat and the European Commission.

#### **Euro area: Harmonised CPI**



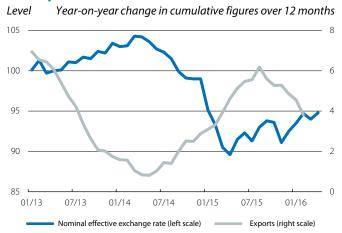
Source: CaixaBank Research, based on Eurostat data

improving its competitiveness and on promoting innovation and the differentiation of the goods and services exported to international markets.

The Eurogroup approves the first review of Greece's bail-out **programme**. The Eurogroup gave a green light to the reforms and fiscal measures carried out by the Greek government, which include a contingency plan of additional measures should the fiscal targets not be met. Although the mediumterm target (2018) for the primary surplus is still 3.5%, the measures taken should help to achieve this. Greece can now receive the second tranche of its bail-out (10.3 billion euros). The sustainability of Greek public debt was also tackled and the main guidelines were agreed to achieve this, without haircuts, as from 2018. Gross borrowing should not exceed 15% of GDP up to 2030, which would be achieved particularly by cutting interest rates and extending maturities, although the details have yet to be specified (and approved). In any case the Greek economy's growth will continue to be the main factor ensuring debt is paid back and, to this end, it is vital to implement the agreed reforms effectively.

Germany has an energetic start to 2016 with high growth and a solid composition. In Q1 Germany grew by 0.7% quarter-on-quarter, a figure it has only bettered twice in the last five years, supported primarily by the strong contribution from domestic demand (+0.7 pps). Private investment led growth and posted its largest increase in the last two years, while private consumption maintained its good rate of 2015 (0.4% quarter-on-quarter). Moreover, domestic demand was also helped by an increase in public expenditure related to the arrival of a large number of refugees in the country. External demand reduced its negative contribution to growth (-0.1 pps) with a substantial increase both in exports and imports. The CaixaBank Research outlook for Germany is therefore positive given the good composition of its growth in Q1 and the more positive tone of indicators in Q2.

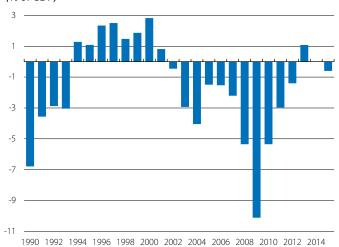
# Euro area: nominal effective exchange rate and exports



**Note:** Weighted by flows of international trade. Higher figures indicate the currency has appreciated. **Source:** CaixaBank Research, based on Eurostat data.

#### **Greece:** primary deficit

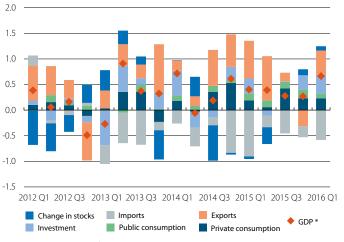




**Source:** CaixaBank Research, based on IMF data (WEO).

#### Germany: quarter-on-quarter growth in GDP

#### Contribution to growth (pps)



Note: \* Quarter-on-quarter change (%).

Source: CaixaBank Research, based on data from Destatis.

# **FOCUS** · **ECB liquidity in the core and periphery**

The euro area's recovery is continuing with a more balanced economic performance than in the years prior to the crisis. This has been helped by the correction of part of the trade imbalances between European economies. However, there are still some financial imbalances that continue to reflect significant differences between the core and periphery of the euro area.

From the creation of the euro up to the outbreak of the financial crisis, strong growth in investment in Europe's peripheral countries was largely financed by foreign resources. The core countries, whose level of savings was higher than their domestic investment, were the main creditors. Although, since 2011, the periphery has corrected its external deficit, as indicated by the prevailing flow of current account surpluses in the balance of payments since 2013, 1 the existing stock of external debt continues to characterise the peripheral countries as economies that need to obtain (re)financing while the core countries still have a high savings rate.

This dichotomy can be seen in the different use made of the liquidity instruments provided by the European Central Bank (ECB) by the economies in the core and periphery of the euro area. On the one hand the ECB offers liquidity via loans granted to the banking sector through refinancing operations (called MROs, LTROs and TLTROs). On the other hand banks can also store resources with the ECB's deposit facility and receive interest (although the interest rate is currently negative).2 As can be seen in the two graphs, the peripheral countries have taken advantage of the ECB's liquidity injections but have hardly placed any deposits with the ECB. The core economies, however, require far fewer loans from the central bank but make up the most of the resources stored with the ECB. While the ECB's financing is ending up mainly in the periphery, the core continues to have a high level of savings.

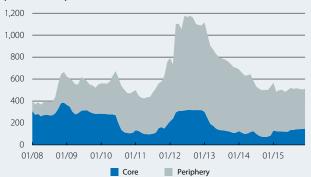
The ECB's instruments have been employed differently by the core and periphery constantly since the financial and sovereign debt crisis. After the shut down of the interbank market and, given the periphery's need to finance its, at that time, current account deficit, it had to resort to the ECB, which began significant injections of liquidity via refinancing operations.<sup>3</sup> In the core, however, the banking sector liquidated a large amount of the assets it held in the periphery and, as there were few attractive

investment opportunities, stored its liquidity with the ECB's deposit facility. Moreover, as from the beginning of 2015 and with the start of QE, an increase has been observed in core deposits with the ECB, suggesting that the liquidity received by its banking sector is being parked, at least partially, with the deposit facility.

In summary, the recovery of the euro area is moving in the right direction thanks, among other factors, to the correction of trade imbalances between countries. However, the crisis has left its mark on the financial imbalances which still exist and can be seen in the different use made of the ECB's liquidity instruments, with a periphery that is monopolizing the loans offered by the central bank and a core that, lacking better investment opportunities, is continuing to park its resources with the ECB's deposit facility.

# Use of refinancing operations (MROs and LTROs) by country



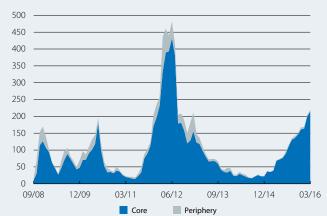


**Note:** Core: includes Germany, Austria, Belgium, Finland, France and Luxembourg; Periphery: includes Spain, Greece, Ireland, Italy and Portugal.

Source: CaixaBank Research, based on data from the national central banks of the euro area.

#### Use of the deposit facility by country

#### (Billion euros)



**Note:** Core: includes Germany, Austria, Belgium, Finland, France and Luxembourg, **Periphery:** includes Spain, Ireland, Italy and Portugal.

**Source:** CaixaBank Research, based on data from the national central banks of the euro area.

<sup>1.</sup> See the Focus «Will the euro area's current account surplus last?» in MR05/2016.

<sup>2.</sup> Specifically -0.40%.

<sup>3.</sup> The maximum reached in 2012 was due to the introduction of two LTROs with 3-year maturity carried out in December 2011 and February 2012.

## FOCUS · Poland: new rules, worse outlook?

Poland will grow by around 3.5% year-on-year in 2016 and 2017, strong progress that will be achieved without too much inflationary tension (remaining below 2% in 2017) and without an escalating current account deficit. An enviable outlook which is not as surprising as it may seem in the context of the EU since Poland did not actually enter into a recession in 2008-2009 (it was the only country not to do so, remember) and was able to average annual growth in the order of 4% between 2005 and 2015. However, the rules of the game that helped Poland to achieve one of the best institutional frameworks in Eastern Europe are being altered and taking on a stance that might end up harming Polish interests in the medium and long-term.

During the last year far-reaching have been announced; institutional, regulatory and also in the area of economic policy. In the strictly institutional area, the workings of the Constitutional Court have been modified while, in legislation, rules have been adopted that are specifically aimed at the media and banking, increasing state intervention in both sectors. In terms of economic policy, public finances have been given an expansionary twist (increasing social expenditure), budget control procedures have been relaxed and discretionary taxes can now be levied on banks.

In fact, banking is one of the sectors most affected by the changes underway. In 2015 the government established a series of restrictions to interest rates on consumer credit. It also announced its decision to legislate in three key areas, establishing a bank tax, a larger contribution to the Bank Guarantee Fund (equivalent to the Spanish Deposit Guarantee Fund) and a plan to change mortgages in Swiss francs to the zloty. The first of these transformations has already been put into practice. Last January a 0.44% tax was approved on the bank assets of private entities (excluding the public debt on bank balance sheets). The effects of this tax will be markedly adverse as it will considerably reduce the sector's profitability and, according to calculations by Poland's central bank, force 20% of the sector into making a loss. 1 The revenue from this tax (around 6.2 billion zloty, 0.3% of GDP) will be allocated in its entirety to finance social expenditure policies.

According to preliminary statements, the new financing model for the Bank Guarantee Fund could result in banks having to increase their current contributions by a third (from 24 bps of their risk-weighted assets to

1. According to available estimates, this duty is equivalent to 0.38% of total assets, approximately. In 2015, the return on assets was 0.8%.

36 bps) and, according to some estimates, the additional contribution would total around 1.15 billion zloty.

Although quite substantial, these figures pale into insignificance, however, before the initial estimates for the impact of the forced conversion of mortgages. Although the details have yet to be announced (in particular, which exchange rate will be applied, which group of creditors will benefit and how banks will be able to accrue their losses), based on the information available for the project, the central bank has estimated that the measure might cost the banking sector between 38 and 44 billion zloty, depending on the parameters considered.<sup>2</sup> Given that the sector's total earnings, before tax, were 15.5 billion zloty in 2015, most analysts believe that Polish banks will simply not be able to assume the cost and that, ultimately, the new legislation will be more realistic.

International investors and analysts do not take kindly to these institutional and regulatory changes<sup>3</sup> and are most concerned about the medium and long-term consequences. If the case of Hungary is anything to go by, the country having implemented quite similar policies to those planned by Poland, then the latter can expect a period of less credit being granted, higher financing costs and a more adverse international perception. If this happens, the country could end up nostalgically remembering the days of 4% annual growth.

#### **Poland: main macroeconomic indicators**

	2005- 2012	2013	2014	2015	2016 (f)	2017(f)
Real GDP growth (%)	4.6	1.3	3.3	3.6	3.4	3.5
Inflation CPI (%)	3.0	1.2	0.2	-0.9	0.1	1.9
Current account balance (% of GDP)	-4.8	-1.3	-2.0	-0.5	-1.8	-2.1
Fiscal balance (% of GDP)	-4.6	-4.0	-3.3	-2.6	-2.6	-3.1
Public debt (% of GDP)	49.5	56.0	50.5	51.3	52.0	52.7

Note: (f) Forecast.

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

<sup>2.</sup> At the beginning of 2016, 36.2% of the outstanding mortgage balance was in Swiss francs and 7.2% in euros. Together these represented 9.3% of GDP.

<sup>3.</sup> Significantly, the credit rating agency S&P lowered its rating for the country in January, from A– to BBB–, the first drop since 1996.

EUROPEAN UNION MR 06 2

## **KEY INDICATORS**

#### **Activity and employment indicators**

Values, unless otherwise specified

	2014	2015	2015 Q2	2015 Q3	2015 Q4	2016 Q1	04/16	05/16
Retail sales (year-on-year change)	1.5	2.8	2.6	3.4	2.5	2.3		
Industrial production (year-on-year change)	0.9	1.6	1.4	2.0	1.3	1.6		
Consumer confidence	-10.2	-6.2	-5.2	-7.0	-6.4	-8.3	-9.3	-7.0
Economic sentiment	101.5	104.2	103.7	104.5	106.2	104.0	104.0	104.7
Manufacturing PMI	51.8	52.2	52.2	52.2	52.8	51.7	51.7	51.5
Services PMI	52.5	54.0	54.1	54.0	54.2	53.3	53.1	53.1
Labour market								
Employment (people) (year-on-year change)	0.6	1.0	0.9	1.0	1.2			
Unemployment rate: euro area (% labour force)	11.6	10.9	11.0	10.7	10.5	10.3	10.2	
Germany (% labour force)	5.0	4.6	4.7	4.6	4.4	4.3		
France (% labour force)	10.3	10.4	10.4	10.5	10.2	10.1		
Italy (% labour force)	12.7	11.9	12.2	11.6	11.6	11.5		
Spain (% labour force)	24.5	22.1	22.6	21.6	20.9	20.5		

**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 Q2	2015 Q3	2015 Q4	01/16	02/16	03/16	04/16
Current balance: euro area	2.6	3.4	3.1	3.3	3.4	3.3	3.3	3.3	
Germany	7.3	8.5	8.0	8.3	8.5	8.5	8.6	8.7	
France	-0.9	-0.2	-0.1	0.0	-0.2	-0.2	-0.5	-0.9	
Italy	1.9	2.2	2.0	2.2	2.2	2.2	2.2	2.3	
Spain	1.0	1.4	1.3	1.4	1.4	1.4	1.4	1.4	
Nominal effective exchange rate <sup>1</sup> (value)	101.8	92.3	91.1	92.7	92.4	93.5	94.7	94.0	94.8

 $\textbf{\textbf{Note:}}\ 1.\ Weighted\ by\ flow\ of\ foreign\ trade.\ Higher\ figures\ indicate\ the\ currency\ has\ appreciated.$ 

**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 Q2	2015 Q3	2015 Q4	01/16	02/16	03/16	04/16
Private sector financing									
Credit to non-financial firms 1	-2.6	-0.1	-0.4	0.2	0.5	0.7	1.0	1.1	1.2
Credit to households 1, 2	-0.1	0.7	0.5	1.0	1.3	1.4	1.5	1.6	1.5
Interest rate on loans to non-financial firms 3 (%)	2.0	1.6	1.6	1.5	1.5	1.4	1.4	1.4	
Interest rate on loans to households for house purchases 4(%)	2.6	2.1	2.0	2.1	2.0	2.0	2.0	1.9	
Deposits									
On demand deposits	6.0	11.5	11.8	12.4	11.9	11.4	11.2	11.0	10.7
Other short-term deposits	-2.0	-3.9	-4.0	-4.7	-3.9	-2.7	-2.6	-2.4	-2.8
Marketable instruments	-7.2	3.0	5.7	2.0	0.6	-1.2	-2.4	-1.0	-1.6
Interest rate on deposits up to 1 year from households (%)	1.3	0.8	0.9	0.7	0.7	0.6	0.6	0.6	

**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.

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# ECONOMIC OUTLOOK · The good trend continues for the Spanish economy

Strong growth in economic activity in Q1 has been confirmed, of 0.8% quarter-on-quarter (3.4% year-on-year). Key to this increase is dynamic domestic demand, contributing 3.8 pps to the year-on-year growth in GDP thanks to the good performance by consumption and investment while exports made a less negative contribution of –0.4 pps (–0.6 pps in Q4). According to CaixaBank Research forecasts, the Spanish economy will grow by 2.8% in 2016 (3.2% in 2015), a figure befitting a mature phase of the cycle although we expect a progressive slowdown in the second half of the year due to the gradual disappearance of some tailwinds, such as the slump in oil prices which have now bottomed out and have actually started to pick up again. In any case the medium-term outlook is still favourable and economic activity is very likely to grow by around 2.4% in 2017.

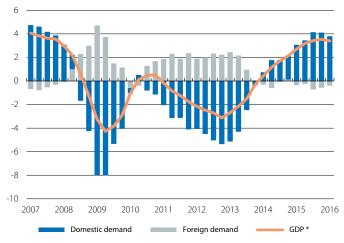
Domestic demand consolidates its role as the main driver of growth thanks especially to the increase in private consumption which stood at 0.9% in Q1 in quarter-on-quarter terms. The improvement in the labour market and in financial conditions continues to support the situation of households which, in turn, helps to maintain a good rate of growth in consumption as well as the deleveraging process (see the Focus «Private debt: some benchmarks for the Spanish case» in this *Monthly Report*). Capital goods investment also continued to advance a good rate (1.3% quarter-on-quarter) albeit more slowly than in previous quarters.

The good pace of job creation has continued in Q2, a sign of corporate vitality that has been improving for several quarters now. According to data from the National Accounts system, full-time equivalent employment increased by 0.9% quarteron-quarter in Q1, placing the year-on-year growth figure at 3.2%. The average salary per employee fell by 0.3% year-onyear, indicating that wage moderation has continued during the first part of the year. With a view to Q2, April's figures suggest that the favourable performance posted in Q1 is continuing. Specifically, the number of registered workers affiliated to Social Security increased by 55,307 people (data seasonally adjusted), keeping the year-on-year increase at a high level, namely 2.7%. All the sectors, with the exception of public administration, made a positive contribution to growth (see the Focus «The good trend in the labour market is consolidating» in this Monthly Report).

**Public consumption continued to post expansionary figures**, advancing by a notable 0.8% quarter-on-quarter in Q1 (2.6% year-on-year). Although this provides a boost for economic growth in the short term, the consequences for public debt, which was higher than 100% of GDP in Q1, must also be taken into account. The position of the European

#### GDP

Contribution to year-on-year growth (pps)



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

#### **Breakdown of GDP**

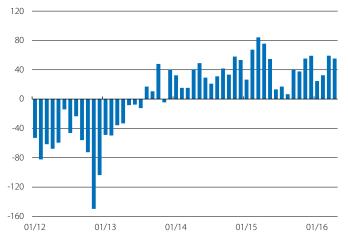
Quarter-on-quarter change (%)

	2015 Q2	2015 Q3	2015 Q4	2016 Q1
Private consumption	0.8	1.1	0.8	0.9
Public consumption	0.7	0.5	0.4	0.8
Investment (FBKF)	2.3	1.3	1.1	0.4
Capital goods investment	3.6	2.6	1.9	1.3
Investment in construction	1.9	0.7	0.6	-0.2
Exports	1.4	1.8	0.9	-0.5
Imports	1.5	3.1	0.3	0.3
GDP	1.0	0.8	0.8	0.8

Source: CaixaBank Research, based on INE data.

#### Registered workers affiliated to Social Security \*

Month-on-month change (thousands of people)



Note: \* Series seasonally adjusted.

Source: CaixaBank Research, based on data from the Ministry of Employment and Social Security.

Commission is still firm in this respect. Firstly, it has reminded Spain that it is vitally important not to abandon the country's agenda of structural reforms as these must be implemented to be able to maintain a moderate and balanced rate of growth in the long term. And, secondly, it will probably raise Spain's budget deficit targets (to 3.7% of GDP in 2016 and 2.5% in 2017), delaying the correction of the excessive deficit by one year, and has announced that, in July, it will decide whether the country should be penalised for not meeting its 2015 deficit target. Focusing on the new deficit targets, the one recommended by the Commission for this year is similar to the target contained in the Stability Plan (PE), namely 3.6%. The AIReF has endorsed the macroeconomic assumptions used to draw up the PE but also believes that achieving the 3.6% deficit target this year is feasible but demanding. Nonetheless, its achievement depends on implementing the measures to contain expenditure announced by the government. For the coming year, the target recommended by the European Commission is more ambitious than the one contained in the PE, namely 2.5% and 2.9% of GDP respectively, so more fiscal consolidation will still be required.

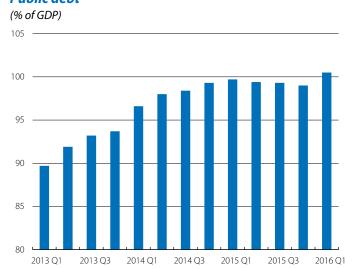
Economic activity has dipped in Q2 but remains at a high level. This can be seen in the PMI indices for the services and manufacturing sectors, which have remained in an expansionary zone for months now but appear to be running out of steam. This pattern can also be observed in new industrial orders. An overall view is provided by the OECD's leading indicator for activity, designed to reflect turning points in the economic cycle, and the message is very similar: the positive momentum of economic growth is still stable. In line with this, private consumption data continue to be favourable: retail sales, adjusted for seasonal and calendar effects, rose by 4.1% in April compared with the same month last year.

Real estate activity is on the up. According to data from the National Accounts system, in 2016 Q1 investment in housing continued to recover, growing by 1.2% quarter-on-quarter (3.3% year-on-year). Demand for housing also looked very dynamic, as shown by the good trend in house sales, up by 11.1% year-on-year in March (cumulative over 12 months). This boost from demand has been passed on to house prices which, in spite of having slowed down their growth in quarter-on-quarter terms (0.2% in 2016 Q1 according to the Ministry of Public Works), have maintained the upward trend started in 2015, growing by 2.4% in year-on-year terms (1.8% in Q4). Over the coming months regional divergences in terms of excess supply and growth in sales will keep the pressure on prices different in each province.

# Inflation remains in negative terrain but there will be a significant change in trend over the coming months.

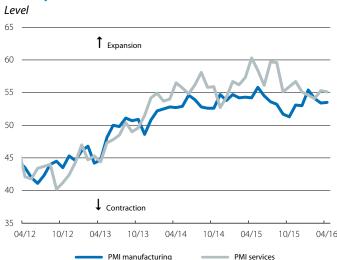
In April the consumer price index shrank by 1.1% in year-onyear terms but this latest drop in the inflation rate was caused by temporary factors, particularly the fall in the price of package holidays in year-on-year terms (which always see

#### Public debt



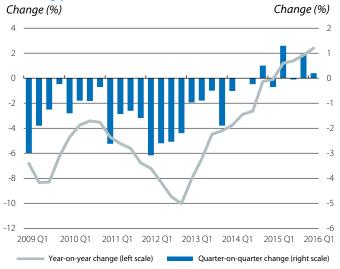
Source: CaixaBank Research, based on data from the Bank of Spain.

#### **Activity indicators**



Source: CaixaBank Research, based on data from Markit.

#### **Housing prices**



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

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a temporary spike during the Easter holidays) due to the fact that, this year, all the public holidays fell in the month of March instead of being shared between March and April, as happened last year. This factor also had a significant impact on the core inflation rate, which fell by 0.4 pps in April to 0.7%. May's general inflation rate rose by 0.1 pp to -1.0%, a change in trend that will consolidate over the coming months, supported by the growth in household consumption and rising oil prices. In fact, the inflation rate will go slightly above 1% by the end of 2016.

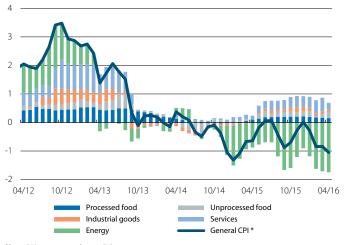
#### International trade slowed down temporarily in March.

Nominal exports, which had been growing energetically for several guarters with year-on-year changes of more than 3% (cumulative over three months), rose in March by a mere 0.2% year-on-year, partly due to the Easter effect. In fact, exports grew by 1.6% once the figures have been seasonally adjusted. Imports did not look particularly strong either, dropping by 0.7% year-on-year (cumulative over three months). However, as in the case of exports, there are some fine distinctions to be made: part of the drop in imports was due to the fall in oil prices. The trend in imports of goods in real terms continues very strong. A good reflection of this is the 5.4% year-on-year rise contained in the quarterly national accounts for Q1 as a whole. The current account balance improved in Q1 and reached 1.4% of GDP, thanks to the reduction in the deficit of primary and secondary income.

The restructuring and privatisation of banks owned by the central government is progressing as planned, although it has yet to be completed. This is the conclusion of the fifth assessment carried out by the European Commission after the end of the bank bail-out programme. The report states that the banking sector is still on a favourable path thanks to the strength of the economic recovery and the ECB's monetary stimuli. In March non-performing loans fell to 129,222 million euros, accumulating a 34% decline since the peak reached in January 2014. The NPL ratio also continued its downward trend, falling below 10% for the first time in four years. Over the coming months, the improvement in the economy and low interest rates will continue to help reducing banks' NPL ratio.

#### **CPI**

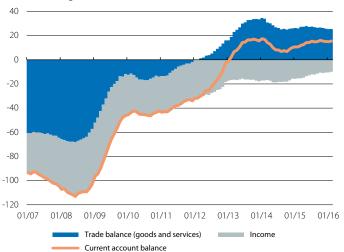
Contribution to year-on-year growth (pps)



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

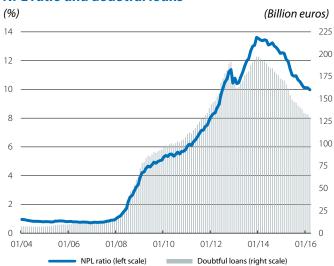
#### **Current balance**

Cumulative figures over 12 months (billion euros)



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

#### NPL ratio and doubtful loans



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

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# FOCUS · The good trend in the labour market is consolidating

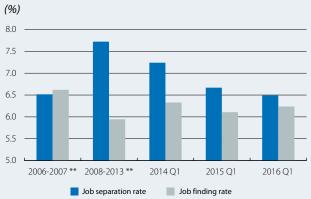
According to data from the LFS, employment saw strong growth in 2016 Q1 of 3.3% year-on-year. However, before analysing the figures, we need to make two brief technical points. Firstly, the job separation rate is the ratio between the number of people who have lost or left their employment and the number of employed people in the previous quarter. The job finding rate is defined in the same way but with those people who have found employment. Secondly, the seasonal nature of Spain's labour market means that, in the first three months of the year, there are systematic falls in employment; i.e. a higher job separation rate than the job finding rate.

Moving on to our analysis of the data, in 2016 Q1 the job separation rate was 6.5%, very similar to the one prior to the crisis, slightly lower than the one for 2015 Q1 and far below the figure recorded, on average, during the recession. The job finding rate increased a little to 6.2% but was still below its 2007 level. These data show that the improvement in employment is particularly due to fewer job losses.

Looking at the employment transitions of the three main sectors in the economy, it is encouraging to see that, in 2016 Q1, the job finding rate for industry was higher than in 2007 Q1 and that, moreover, it exceeded the job separation rate for the same quarter. The services sector also performed relatively well in 2016 Q1 although there is still room for improvement compared with 2007.

From this analysis of labour flows we can surmise that employment's recovery in industry and services is mature, something that can also be observed in the data for registered workers affiliated to Social Security. In 2015 Q1 job creation intensified, supported by employment in the public sector and in construction related to public tenders. At the time there were fears this growth in employment might quickly run out of steam once the temporary support from the public sector had dwindled. However, in the second half of the year other sectors livened up, helping employment to continue growing at a high rate. Recently it had been assumed that the fact that Easter fell entirely in March may have temporarily contributed to the growth in employment in 2016 Q1. However, the employment figures for April seem to rule out this possibility as, with the exception of public administration, all sectors (and not just tourism) made a positive contribution to the year-on-year growth rate in Social Security contributors. In summary, the favourable performance of less seasonal sectors seems to suggest that the recovery in employment will continue.

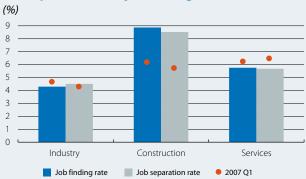
#### **Job separation and job finding rate \***



**Notes:** \*Job finding rate: quotient between the number of people finding employment in the current quarter and the number of employed people in the previous quarter. **Job separation rate:** quotient between the number of people losing or leaving their employment and the number of employed people in the previous quarter. \*\*Average of the Q1s.

Source: CaixaBank Research, based on INE data (LFS).

#### Job separation and job finding rate in 2016 Q1 \*

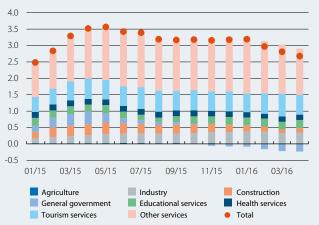


Note: \* Job finding rate: quotient between the number of people finding employment in the current quarter and the number of employed people in the previous quarter. Job separation rate: quotient between the number of people losing or leaving their employment and the number of employed people in the previous quarter.

Source: CaixaBank Research. based on INE data (LFS).

#### **Employment by sector**

Contribution of the sectors to year-on-year growth (pps)



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

#### **FOCUS** · The seasonal nature of tourism

The tourism sector, one of the pillars of the Spanish economy, is booming after exceeding the figure of 68 million international tourists achieved in 2015, thanks to its great competitiveness¹ and to a tailwind provided by the euro's depreciation, the euro area's economic recovery and the difficulties faced by some of its main competitors. Nevertheless the sector is now facing a very important challenge: how to become less seasonal.

Seasonality has a negative effect on the labour market as it directly contributes to temporary employment, which in Spain's case reaches 25.7%, the second highest in the EU and only exceeded by Poland. Moreover, to meet the peaks in demand during the high season, infrastructures are created whose potential is not maximised in the low season (for example, in 2015, hotel occupation in December was 45% compared with 77% in August).

Tourism tends to be seasonal at a global level but this feature is particularly strong in Spain where travel for leisure and holidays, more concentrated during the summer period, accounts for more than 80% of the country's international tourism compared with 70% worldwide (see the first graph).<sup>2</sup> Although seasonality dropped considerably in Spain between the 1970s and 2000s, since then there has been no significant adjustment, although the percentage has not risen again. The increasing number of tourists, from 46 million in 2000 to 68 million in 2015, have continued the seasonal pattern, which means that the current low season is similar to the previous high season: tourist arrivals between October 2015 and January 2016 were very similar to those registered between June and September in the year 2000.

A number of factors affect seasonality, such as company and school holidays, and to some extent limit just how much it can be improved. An ideal strategy to reduce seasonality would be to encourage business tourism (a type of tourism which, additionally, has a higher average daily expenditure than the rest, as shown in the second graph), given that trade fairs and congresses tend to be held in the spring and autumn. Although Spain is already a highly competitive country in this kind of tourism, 3 with 20% growth and more than five million business tourists in 2015, it barely accounts for 8% of the country's tourism, half the share it occupies in global

In 2015, Spain came first in the Travel and Tourism Competitiveness

Index produced by the World Economic Forum.

tourism. Another way to mitigate seasonality would be to continue fostering the loyalty of tourists visiting Spain, which is already high. For example, as suggested by the OECD, the traveller's experience could be improved by increasing the efficiency of connections between regions via transport hubs, using integrated payment systems that include public transport, tickets to museums and shows or by taking advantage of the facilities offered by smartphone apps to provide user-friendly, multilingual information.

#### **Distribution of tourism in 2015**

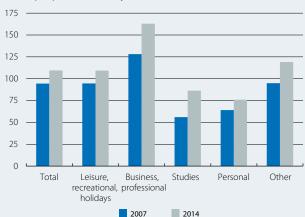
Index (100 = average)



**Source:** CaixaBank Research, based on data from the World Tourism Organisation and INE (Frontur).

#### **Expenditure by reason for travelling**

(Euros per person and day)



Source: CaixaBank Research, based on data from the IET (Egatur).

4.80% of the tourists that came to Spain in 2012 were repeating their visit and half of them had been 10 times or more.

5. See OECD (2016), OECD Tourism Trends and Policies 2016, OECD Publishing, Paris.

IPK International (2012), ITB World Travel Trends Report 2012/2013.
 As demonstrated by the fact that Spain is the third most popular venue for trade fairs and congresses in the world, behind only the USA and Germany.

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## **FOCUS** · **Private debt: some benchmarks for the Spanish case**

Debt is a double-edged sword. Used in moderation it increases the well-being of a society since it allows consumers and companies to smooth their consumption and investment when faced with a variable income. However, high and increasing debt is a warranted source of concern: it hinders economic growth and increases vulnerability to potential shocks.

The Spanish economy was in this situation in 2010, the moment when private debt went above 200% of GDP (in consolidated terms). Not only was the high level of this debt a cause of concern, far beyond the 133% threshold set as a benchmark by the European Commission in its Macroeconomic Imbalance Procedure (MIP), but also the speed with which this debt had been accumulated: the flow of credit to the private sector grew at an annual rate equivalent to 18 pps of GDP between 1999 and 2007, above the threshold of 14% established in the MIP.

In 2010 Spanish households and firms embarked on the arduous process of deleveraging and Spain's private debt has fallen by almost 50 pps of GDP in the last five years, the largest reduction registered among European economies (see the graph) except for Luxembourg (–67 pps). Consequently, debt in Spain's private sector, at 154% of GDP in 2015 Q4, is now approaching levels considered to be more sustainable and our forecasts predict it will fall below the 133% threshold within three years.

Other measurements widely used as a benchmark come from economic literature, calculating the level of debt as from which any increase usually has a negative impact on GDP growth. Specifically, a study by the Bank for International Settlements for the private sector of the OECD countries<sup>3</sup> concludes that the threshold for corporate debt is 90% of GDP and 85% for households, although it should be noted that the estimate for households is very imprecise. According to these calculations, Spanish firms still have a relatively high level of debt, 15 pps above the threshold while households would be in a healthier situation. Nevertheless it is useful to remember that debt thresholds must be used with caution as they do not take into account the particular features of each country that have a direct effect on their

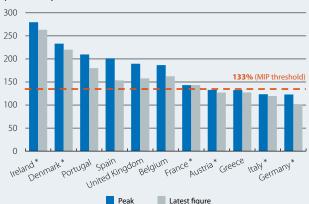
debt capacity, such as the economy's growth potential, the soundness of the banking system and the quality of insolvency procedures, among others.

Another benchmark that has recently come to the fore in the area of economic policy is the ratio of bank credit to GDP in relation to its long-term trend, known as the «credit gap». The macroprudential policy introduced by Basel III uses this measurement as a guide to determine the countercyclical capital buffer required by banks. In Spain, bank credit as a proportion of GDP has fallen by 51.8 pps since the peak of 2010, exceeding the correction historically observed on average after systemic bank crises (33 pps)<sup>4</sup> and, at present, is far below its long-term trend. According to estimates by the Bank of Spain, the credit gap is in negative terrain, standing at -57.7% of GDP in 2015 Q3, a figure that is very far from the +2% threshold set as a benchmark to potentially activate the buffer. Nonetheless we should remember that the methodology used overestimates the credit gap after episodes of expansion.

Deleveraging in Spain's private sector has therefore been very intense, both when compared with what other European economies have accomplished over the same period and also historically, in relation to other banking crises. However, unlike the last five years, the debt-to-GDP ratio will fall in the future due to growth in nominal GDP, and credit could start to increase slowly.

#### **Private debt**

(% of GDP)



**Note:** \*Consolidated debt within the same institutional sector. The figure for countries marked with an asterisk corresponds to 2014. The rest, to 2015. **Source:** CaixaBank Research, based on Eurostat data.

<sup>1.</sup> Non-consolidated private debt reached 218% of GDP while 15 pps corresponded to the debt of non-financial firms with this same institutional sector as counterparty.

<sup>2.</sup> This threshold is determined based on the third quartile of the annual empirical distribution of the euro area for the period 1995-2007. See «Scoreboard for the surveillance of macroeconomics imbalances», Occasional Papers 92, European Commission, February 2012.

3. See Cerchetti. S. G., Mohanty, M. S. and Zampolli. F. «The real effects of

<sup>3.</sup> See Cecchetti, S. G., Mohanty, M. S. and Zampolli, F. «The real effects of debt», BIS Working Paper, no. 352, September 2011.

<sup>4.</sup> See Aspachs, O., Gual, J. and Jódar, S. (2011), «Perspectivas de desapalancamiento en España», Documentos de economía de "la Caixa", no. 23, December 2011.

# **KEY INDICATORS**

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

#### **Activity indicators**

2014	2015	2015 Q2	2015 Q3	2015 Q4	2016 Q1	04/16	05/16
-0.1	1.6	-0.1	2.5	2.5	-0.5	3.0	
1.3	3.3	3.5	4.0	4.2	2.6		
-7.1	-0.3	0.9	0.7	0.3	-1.9	-2.2	-4.2
53.2	53.6	54.8	52.8	52.5	54.3	53.5	
-7.7	20.0	17.0	19.7	31.1	45.2		
-5.6	10.8	10.3	12.3	11.6	10.3		
7.2	5.6	5.9	5.0	4.8	5.9	7.1	
55.2	57.3	58.3	58.1	55.9	54.7	55.1	
1.0	3.0	2.8	3.3	3.4	3.9	4.2	
18.4	21.3	13.6	23.1	17.1	8.0	21.2	
-8.9	0.3	1.6	-1.3	1.6	-2.5	-4.3	-3.0
	-0.1 1.3 -7.1 53.2 -7.7 -5.6 7.2 55.2 1.0 18.4	-0.1 1.6 1.3 3.3 -7.1 -0.3 53.2 53.6  -7.7 20.0 -5.6 10.8  7.2 5.6 55.2 57.3  1.0 3.0 18.4 21.3	-0.1     1.6     -0.1       1.3     3.3     3.5       -7.1     -0.3     0.9       53.2     53.6     54.8       -7.7     20.0     17.0       -5.6     10.8     10.3       7.2     5.6     5.9       55.2     57.3     58.3       1.0     3.0     2.8       18.4     21.3     13.6	-0.1       1.6       -0.1       2.5         1.3       3.3       3.5       4.0         -7.1       -0.3       0.9       0.7         53.2       53.6       54.8       52.8         -7.7       20.0       17.0       19.7         -5.6       10.8       10.3       12.3         7.2       5.6       5.9       5.0         55.2       57.3       58.3       58.1         1.0       3.0       2.8       3.3         18.4       21.3       13.6       23.1	-0.1       1.6       -0.1       2.5       2.5         1.3       3.3       3.5       4.0       4.2         -7.1       -0.3       0.9       0.7       0.3         53.2       53.6       54.8       52.8       52.5         -7.7       20.0       17.0       19.7       31.1         -5.6       10.8       10.3       12.3       11.6         7.2       5.6       5.9       5.0       4.8         55.2       57.3       58.3       58.1       55.9         1.0       3.0       2.8       3.3       3.4         18.4       21.3       13.6       23.1       17.1	-0.1       1.6       -0.1       2.5       2.5       -0.5         1.3       3.3       3.5       4.0       4.2       2.6         -7.1       -0.3       0.9       0.7       0.3       -1.9         53.2       53.6       54.8       52.8       52.5       54.3         -7.7       20.0       17.0       19.7       31.1       45.2         -5.6       10.8       10.3       12.3       11.6       10.3         7.2       5.6       5.9       5.0       4.8       5.9         55.2       57.3       58.3       58.1       55.9       54.7         1.0       3.0       2.8       3.3       3.4       3.9         18.4       21.3       13.6       23.1       17.1       8.0	-0.1       1.6       -0.1       2.5       2.5       -0.5       3.0         1.3       3.3       3.5       4.0       4.2       2.6          -7.1       -0.3       0.9       0.7       0.3       -1.9       -2.2         53.2       53.6       54.8       52.8       52.5       54.3       53.5         -7.7       20.0       17.0       19.7       31.1       45.2          -5.6       10.8       10.3       12.3       11.6       10.3          7.2       5.6       5.9       5.0       4.8       5.9       7.1         55.2       57.3       58.3       58.1       55.9       54.7       55.1         1.0       3.0       2.8       3.3       3.4       3.9       4.2         18.4       21.3       13.6       23.1       17.1       8.0       21.2

 $\textbf{Source:} \ \textit{CaixaBank Research, based on data from the \textit{Ministry of Finance, Ministry of Public Works, INE, Markit and European Commission.}$ 

### **Employment indicators**

	2014	2015	2015 Q2	2015 Q3	2015 Q4	2016 Q1	03/16	04/16
Registered as employed with Social Security	<b>y</b> 1							
Employment by industry sector								
Manufacturing	0.1	2.2	2.2	2.4	2.7	2.8	2.6	2.8
Construction	-1.6	4.7	5.6	4.6	4.1	2.6	1.8	2.2
Services	2.2	3.5	3.7	3.5	3.4	3.1	3.1	2.9
Employment by professional status								
Employees	1.4	3.5	3.8	3.6	3.6	3.4	3.2	3.0
Self-employed and others	2.2	1.9	2.2	1.7	1.4	1.2	1.3	1.1
TOTAL	1.6	3.2	3.5	3.3	3.2	3.0	2.8	2.7
Employment <sup>2</sup>	1.2	3.0	3.0	3.1	3.0	3.3	_	_
Hiring contracts registered <sup>3</sup>								
Permanent	18.8	12.3	7.7	9.7	7.6	8.3	4.5	18.2
Temporary	13.1	11.2	11.2	9.7	11.8	6.2	4.7	6.0
TOTAL	13.4	11.3	10.9	9.7	11.5	6.4	4.7	7.0
Unemployment claimant count <sup>3</sup>								
Under 25	-8.2	-11.0	-9.3	-13.4	-11.7	-10.9	-11.1	-10.7
All aged 25 and over	-5.3	-7.2	-7.4	-7.7	-7.5	-7.8	-7.7	-7.1
TOTAL	-5.6	-7.5	-7.6	-8.2	-7.9	-8.1	-8.0	-7.4

 $\textbf{Notes:}\ 1.\ \textit{Mean monthly figures.}\ \ 2.\ \textit{LFS estimate.}\ \ 3.\ \textit{Public Employment Offices.}$ 

**Source:** CaixaBank Research, based on data from the Ministry of Employment and Social Security, INE and Public Employment Offices.

#### **Prices**

	2014	2015	2015 Q2	2015 Q3	2015 Q4	2016 Q1	04/16	05/16
General	-0.1	-0.5	-0.3	-0.4	-0.3	-0.7	-1.1	-1.0
Core	0.0	0.6	0.5	0.8	0.9	1.0	0.7	
Unprocessed foods	-1.2	1.8	1.9	2.3	2.5	2.1	3.2	
Energy products	-0.8	-9.0	-6.4	-9.7	-10.2	-13.1	-15.1	

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

SPANISH ECONOMY MR

#### Foreign sector

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

	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	01/16	02/16	03/16
Trade of goods									
Exports (year-on-year change)	2.5	4.3	4.4	5.4	3.4	3.8	2.1	2.7	-3.3
Imports (year-on-year change)	5.7	3.7	2.5	5.8	3.3	3.3	0.8	1.2	-3.6
Current balance	10.2	15.1	11.9	14.3	15.1	15.1	14.9	15.5	15.5
Goods and services	26.0	25.7	27.3	27.1	26.5	25.7	25.4	25.4	25.0
Primary and secondary income	-15.7	-10.5	-15.4	-12.8	-11.4	-10.5	-10.4	-9.9	-9.6
Net lending (+) / borrowing (–) capacity	14.7	21.1	15.6	18.4	20.8	21.1	20.2	21.5	21.1

**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 01	2015 O2	2015 O3	2015 04	01/16	02/16	03/16
Net lending (+) / borrowing (–) capacity	-5.8	-5.0	-0.7	-2.9	-3.1	-5.1			
Central government <sup>1</sup>	-3.6	-2.5	-0.9	-1.8	-2.1	-2.5	-0.6	-1.1	-0.8
Autonomous regions	-1.7	-1.7	-0.2	-0.8	-1.1	-1.7	-0.1	-0.1	-0.1
Local government	0.6	0.4	0.1	0.2	0.3	0.4			
Social Security	-1.0	-1.3	0.3	-0.4	-0.3	-1.3	0.1	0.1	0.2
Public debt (% GDP)	99.3	99.2	100.2	99.8	99.7	99.2			

**Note:** 1. Does not include 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 Q1	2015 Q2	2015 Q3	2015 Q4	01/16	02/16	03/16	Balance 03/16 <sup>1</sup>
Financing of non-financial sectors <sup>2</sup>										
Private sector	-6.2	-3.9	-4.5	-3.9	-4.0	-3.1	-3.3	-3.6	-4.0	1,623.4
Non-financial firms	-7.1	-4.0	-4.7	-4.0	-4.3	-2.9	-3.4	-3.9	-4.8	905.3
Households <sup>3</sup>	-5.1	-3.7	-4.2	-3.7	-3.6	-3.3	-3.2	-3.2	-3.0	718.1
General government⁴	6.9	4.7	5.5	4.6	4.3	4.3	2.9	3.4	4.1	1,095.4
TOTAL	-1.8	-0.7	-0.9	-0.8	-0.9	-0.3	-0.9	-0.9	-0.9	2,718.7
Liabilities of financial institutions due to firn	ns and househol	ds								
Total deposits	-0.9	-1.0	-1.3	-1.2	-1.1	-0.5	0.1	-0.4	-1.0	1,145.3
On demand deposits	10.8	18.5	17.9	19.5	18.8	17.7	17.9	15.1	15.6	396.3
Savings deposits	5.8	12.9	10.5	12.3	13.7	15.2	14.1	13.0	13.2	256.3
Term deposits	-7.6	-15.3	-13.5	-15.5	-16.3	-15.8	-15.1	-14.6	-16.5	471.9
Deposits in foreign currency	1.1	5.6	8.9	10.5	5.1	-2.3	-4.2	0.1	-7.8	20.8
Rest of liabilities <sup>5</sup>	-8.2	-13.0	-11.4	-11.5	-14.0	-15.1	-11.8	-19.0	-19.5	98.8
TOTAL	-1.7	-2.2	-2.3	-2.2	-2.3	-1.9	-0.9	-2.0	-2.8	1,244.1
NPL ratio (%)6	12.5	10.1	12.1	11.0	10.7	10.1	10.1	10.1	10.0	
Coverage ratio (%)6	58.1	59.2	58.5	60.0	60.6	59.2	59.6	59.7	59.0	

**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.

DOSSIER

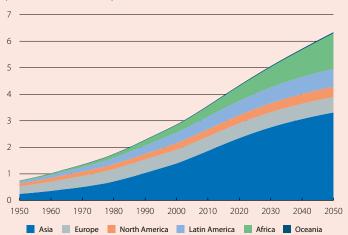
#### THE TIME OF CITIES

# Towards an increasingly urban world

At the end of the 19th century Sir Arthur Conan Doyle, the creator of Sherlock Holmes, wrote an article that is hard to associate with the world-famous detective: «On the geographical distribution of British intellect». This article listed what Conan Doyle called «British worthies» and he was surprised to find that 235 of the 824 celebrities identified were from London: although London only accounted for 7% of Britain's total population, the city contributed almost one third to the United Kingdom's production of talent. But this is not just an old anecdote from the Victorian era. Based on contemporary statistics, the data on the distribution of human capital in US cities leave no room for doubt: the larger the city, the greater the share of population with higher qualifications. Whereas 41.7% of the labour force has a university qualification in the New York-Newark-New Jersey conurbation (with a working age population of 10.5 million people), this percentage falls by 10 pps when the urban area comes from the group of conurbations with under one million people of working age.

#### **Urban population by continent**

(Billions of inhabitants)



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

For an economist, a city accumulating more human capital than other smaller urban areas is likely to mean that its productivity is also higher. In aggregate terms, there is a high correlation between a country's urbanisation rate (i.e. the share of its total population living in cities) and its degree of development. And according to data from the United Nations, this is actually the case: on average, those countries with 80% and 60% of their population living in urban areas have, respectively, high and medium incomes, while those with a 30% urban population have low incomes. If we add to this the fact that, in 2007, the world's urban population exceeded its rural population for the very first time, and that this trend towards greater urbanisation is expected to continue in the future, the conclusion seems clear: we are moving towards a more urbanised and more prosperous world.

This economy of the future, let's say by 2050, will reveal that there has been a complete turnaround in just 100 years as,

according to the United Nations' projections, whereas two thirds of the population was rural in 1950, by 2050 two thirds will be urban. This is due to strong growth in the urban population: between 2014 and 2050 the annual rate of growth in the urban population in less advanced countries will double that of the total population and quadruple that of advanced countries. Of course most of this rise in urbanisation will occur in Asia and Africa, accounting for 90% of the increase: by 2050 half the world's urban population will be concentrated in Asia (25% in China and India) and 21% in Africa.

But will the nature of cities change to any great extent? Are we moving towards a world of megacities? According to the United Nations, the distribution of the future will be similar to the current distribution albeit with a greater trend towards large agglomerations. Looking at a somewhat nearer timescale, by 2030 the percentage of the urban population living in megacities (i.e. with over 10 million inhabitants) will be 14.4% of the total urban population, somewhat higher than the figure of 11.7% of 2014. In 2030 there will be 41 megacities, four of them European: by ranking of population, Istanbul, Moscow, Paris and London. The urban population living in the large city category (from 5 to 10 million inhabitants) will go from the current figure of 7.7% to 8.6%, and from 21.3% to 22.3% for medium-sized cities (from 1 to 5 million inhabitants). However, smaller urban areas of one million inhabitants or fewer will house a smaller share of the population: whereas in 2014 the rate was 59.3% by 2030 it will be 54.7%.

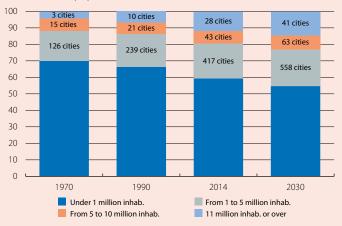
The phenomenon of urbanisation is therefore relevant and will be even more so in the future. Given this situation, a good understanding of the economic phenomena that lead to urban growth is vital. The justification given for the existence of cities from an economic point of view is that people and activities tend to concentrate together because the benefits of agglomeration outweigh the costs. But this general assertion leaves a lot that requires further clarification. The next three articles in this Dossier analyse in detail how economies of agglomeration are generated; i.e. the productivity gains that occur when population density

increases (see «The keys to the city of the future») but also the costs involved (see «The cost of city life: the diseconomies of agglomeration»). We also examine a particularly important market for urban growth, namely the labour market, in which the economies and diseconomies of agglomeration balance out (see «The urban factor of the labour market»).

None of these analyses is trivial because the urban economy is notably complex, especially as there are phenomena that affect both benefits and costs. Such is the case of a situation that has been growing over the last few decades, namely technological change (in particular the development and spread of information and communication technologies). These new technologies can encourage a different spatial pattern from the traditional one. They might especially be reducing the advantages of agglomeration economies but could also be reducing some of its costs as well. In those

#### Distribution of the urban population by city size

(% total urban population)



Source: CaixaBank Research, based on data from the United Nations.

cases where maximum advantage is taken of new technologies, the range of personal choice available in terms of where to live and work is likely to be expanded to a degree we have never seen before.

All this intellectual exercise is inevitable because urban growth is important, and not only because of the growth per se but also because of its association with increased activity at an aggregate level. For example, Hsieh and Moretti (2015) point out that the limited housing supply in the US between 1964 and 2009, by reducing labour mobility, pushed down average annual growth by 0.3%, the equivalent to a cumulative impact over 35 years of 13.5% of GDP.<sup>1</sup>

Conan Doyle was probably right to be surprised at the concentration of talent in Victorian London. Now we have to move beyond mere statement and further our understanding of the implications of urbanisation using the tools of economists. Because, when all is said and done, an increasingly larger proportion of the population lives, works and relates to each other in our cities. These are also places where productivity is high, although agglomeration also entails costs. New technologies are also likely to foster new equilibriums between agglomeration economies and the costs associated with population density. And all this, added together, has an effect that goes beyond the local economy, reaching an aggregate level. The time for cities has probably arrived. And therefore the time for the urban economy. Why not drop by and have a read: visit the articles as if they were different neighbourhoods in the same city to discover why cities should be the focus of analysis by economists and of interest to the well-informed reader.

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<sup>1.</sup> See Hsieh, C. and Moretti, E. (2015), «Why Do Cities Matter? Local Growth and Aggregate Growth». NBER Working Paper, no. 21154.



# The keys to the city of the future

We live in cities to be closer to our work or university, to see our family and friends more often or to have shops, cinemas and theatres conveniently close by. Nevertheless the role of cities goes beyond providing their inhabitants with a good quality of life: cities are a key component in the workings of production that determines its efficiency and therefore a country's growth potential. In this article of the Dossier we analyse the factors that have encouraged growth in cities in the past and especially those that will encourage it in the future.

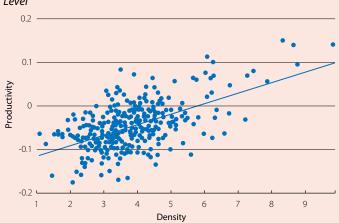
We economists call the economic benefits generated by a larger population density the «agglomeration economies» or «urbanscale economies». The existence of these can be inferred when we see that company productivity is higher in larger cities. But this correlation does not necessarily mean that higher density leads to higher productivity on its own: other factors could also lie behind this relationship, such as when cities are in particularly favourable zones for companies or when they provide better access to certain natural resources. Nevertheless empirical evidence shows that this higher productivity is particularly

the result of agglomeration economies. For example, a widely cited study shows that, in the US, doubling the density of the population increases the productivity of work by 6%, all other things being equal. The evidence for the case of French firms is also convincing: those companies in more densely populated areas achieve 9.7% higher productivity than those in less densely populated areas, thanks to agglomeration economies. <sup>2</sup>

The benefits resulting from bringing workers and companies together in an urban agglomeration are therefore an important reason for cities to exist. The next step consists of understanding the mechanisms behind these advantages. Here we can highlight three major effects: lower transport costs for goods, the creation of a denser labour market and a more favourable environment to generate and spread innovative ideas.<sup>3</sup>

Lower transport costs was one of the main reasons for companies to cluster together during the period of

# Relationship between total factor productivity and population density in urban areas Level



**Note:** Productivity is defined as log total factor productivity and density as log employment density by the greating question.

Source: Combes, Duranton, Gobillon, Puga and Roux (2012).

industrialisation. Manufacturing firms concentrated in cities to be close to their suppliers and clients, cutting their transport costs for both intermediate and final goods.<sup>4</sup> These agglomeration economies led to the proliferation of industrial districts in many cities in the 19th century, such as the East End of London and Poblenou in Barcelona, a process that intensified during the 20th century and, it is estimated, resulted in a 90% reduction in transport costs in real terms.<sup>5</sup>

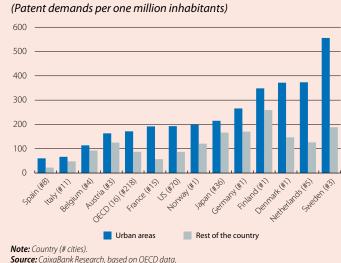
The second factor, the concentration of workers in urban areas, increases labour market efficiency. On the one hand, concentrating workers in the same population reduces the cost of losing employment: when workers lose a job it is easier for them to find another if there is a larger number of companies in the city. The faster they can shift from one job to another decreases the decapitalisation suffered by workers when they are unemployed. Moreover, the fact that a large number of companies and workers are concentrated in cities makes it easier to match people with jobs. One clear example of this is the City in London, where a cluster has been formed of large banks and investment funds as well as the professionals required by such companies, benefitting both. Thanks to this agglomeration, companies can hire the best specialist economists, lawyers or IT experts and these professionals can find the jobs that best suit their interests and skills.

- 1. Ciccone, A. and Hall, R. E. (1996), «Productivity and the density of economic activity», American Economic Review, Vol. 86, No. 1.
- 2. Combes, P. P. et al. (2012), «The productivity advantages of large cities: distinguishing agglomeration economies from firm selection», Econometrica, Vol. 80, No. 6.
- 3. Glaeser, E. (1998), «Are cities dying?», The Journal of Economic Perspectives, Vol. 12, No. 2.
- 4. Krugman, P. (1991), «Increasing returns and economic geography», Journal of Political Economy, Vol. 99, No. 3.
- 5. Glaeser, E. and Kolhase, J. (2004), «Cities, regions and the decline of transport costs», Papers in Regional Science 83.
- 6. Marshall, A. (1890), «Principles of Economics», Macmillan.

Although the two aforementioned factors are very important, today's rise in agglomeration economies comes particularly from the role played by cities in creating and spreading knowledge. Regarding creation, we only need to note that the main R&D centres for companies and universities are located in large urban areas. Another sign that cities are nurseries for new ideas is that mature industries tend to move outside cities while more innovative up-and-coming industries tend to concentrate in urban areas.<sup>7</sup>

Regarding the role played by cities in spreading knowledge, we should remember that, although we live in an increasingly interconnected world, geographical proximity between individuals living in the same city still makes it easier to propagate ideas. In this respect, an interesting and original study shows that those companies that are geographically closer tend to be cited more often in the details of registered patents.8 However, this study was carried out in 1993 and we might therefore conclude that, nowadays, the subsequent development of information and communication technologies (ICTs) has made it easier to exchange ideas, concluding that the advantages of physical closeness provided by cities to pass on information may have dwindled. Nonetheless it appears that the role of cities has become even more important, if possible. The most recent studies show that new technologies are, above all, complementary to geographical proximity: ICTs multiply the benefits produced by new ideas and these, as we have seen, are generated more readily in urban settings.9

#### Patents in urban areas and in the rest of the country



In summary, the bulk of the evidence available suggests that the role played by cities in a country's production capacity and therefore in the well-being of its citizens will continue to be crucial. However, we need to remember that those features differentiating the best cities of the future are changing, and that certain aspects are gaining ground which determine a city's capacity to generate and spread knowledge. Making sure a country's major cities have an institutional framework that helps to develop such aspects is therefore essential.

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<sup>7.</sup> Duranton, G. and Puga, D. (2001), «Nursery Cities: Urban diversity, process innovation and the life cycle of products», American Economic Review, Vol. 91, No. 5. 8. Jaffe, A., Trajtenberg, M. and Henderson, R. (1993), «Geographic localization of knowledge spillovers as evidenced by patent citations», Quarterly Journal of Economics, Vol. 108, No. 3.

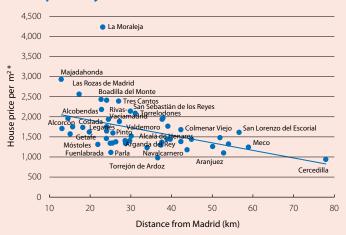
<sup>9.</sup> Glaeser, E. and Ponzetto, G. (2007), «Did the death of distance hurt Detroit and help New York?», NBER WP 13710.

## The cost of city life: the diseconomies of agglomeration

All of us who live in a city or interact with them in some way realise that, in spite of the many advantages, city life also has some drawbacks: traffic, crowds, pollution, the cost of housing, etc. This article examines the negative effects of the geographical concentration of economic activities and population or, in academic terms, the diseconomies of agglomeration.

By way of introduction we should first point out that the drawbacks associated with city life can differ depending on the type of city. A horizontal sprawling city with a lower population density, such as Los Angeles, has higher associated transport costs whereas in vertical, more compact cities with a much denser population, such as New York, house prices tend to be higher. Such cost differences, monetary or otherwise, are an important factor when it comes to understanding why cities come in so many different types and sizes.

#### House prices by distance from Madrid



Note: \* Supply price published by Idealista. Source: CaixaBank Research, based on data from Idealista. The major monetary cost associated with agglomeration is undoubtedly housing. We all know that a home in a large city is more expensive than in smaller towns. In Barcelona, for example, the price per square metre is three times that of towns such as Manresa and El Vendrell. This difference, which is significant if we consider that the cost of housing accounts for 32.4% of a household's total expenditure, is largely due to the fact that receiving a larger salary is easy in a city as explained in «The urban factor of the labour market» in this Dossier). Consequently people are willing to pay more for housing in urban than rural areas. Naturally the responsiveness of the housing supply in each city is also decisive. 2 In particular, the supply of homes in cities with more restrictive land regulations responds less rapidly; i.e. it is more inelastic and the price of housing tends to be higher.<sup>3</sup> This is the case of London, for example, whose town planning regulations limit the availability of land, making it one of the most expensive

cities in the world. For the whole of the United Kingdom, a recent study estimates that, with more flexible regulations, between 1974 and 2008 real estate prices would have grown by 90% instead of 190%.<sup>5</sup>

A second element that also needs to be taken into account is the higher cost of mobility in large cities. Returning to the case of the United Kingdom, it has been estimated that, if the time invested in commuting were valued at the same rate as the time devoted to working, the cost of commuting would represent 19% of the average wage. The cost of transport is therefore closely related to the real estate market. In fact, the price people are willing to pay for a home depends, among other factors, on the associated commuting costs: the closer a home is to a city's services, the more expensive the property because less time or money will be spent on travel, as shown in the graph.

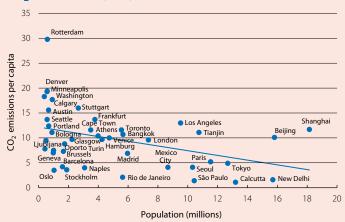
Thirdly, cities tend to have higher crime rates. Economic literature has documented the existence of a positive relationship between crime rates and the size of a city. Moreover, spending on security and the level of precaution of potential victims is greater in cities. The cost this entails is not insignificant. For example, the economists Cullen and Levitt (1999)<sup>8</sup> estimate that, in the US, a 10% increase in delinquency in a city involves a 1% reduction in its population. Higher educated households and homes with children tend to be the most sensitive to this factor. Although this cost has gradually fallen in the last few years, particularly

- 1. The category of expenditure on housing also includes costs due to water, electricity and fuel. See Encuesta de Presupuestos Familiares 2014, INE.
- 2. Glaeser, E. L. (2007), «The economic approach to cities», NBER Working Paper No. 13696 argues that the differences in housing supply seen in the US are due to barriers to new construction.
- 3. Land restrictions tend to be justified due to reasons of efficiency and to avoid negative externalities. See Duranton, G. and Puga, D. (2015), «Urban land use», Handbook of Regional and Urban Economics, Vol. 5, 2015. Amsterdam: North-Holland, 467-560.
- 4. Hilber, C. (2015), «UK Housing and Planning Policies: the evidence from economic research», Centre for Economic Performance, paper EA033.
- 5. Hilber, C. A. L. and Vermenulen, W. (2016), «The Impact of Supply Constraints on House Prices in England», The Economic Journal, Vol. 126, Issue 591, 358-405.
- 6. «Commuting costs UK workers £148bn in time alone», Randstad, 2015.
- 7. Private security, alarm systems and the habit of locking doors are more common in large urban areas.
- 8. Cullen, J. B. and Levitt, S. (1999), «Crime, Urban Flight, and the Consequences for Cities», The Review of Economics and Statistics 81 (2), 159-169.

in US cities, it is still a considerable problem in many cities in developing countries.

Lastly, one of the big problems historically associated with agglomeration is pollution. A recent study by the WHO warns that more than 80% of the people living in urban zones are exposed to pollution levels above those recommended by this organisation. However, the study notes that more advanced economies have lower air pollution levels<sup>9</sup> thanks to stricter environmental and health controls and the tertiary nature of their economies. <sup>10</sup> As developing economies progress we should therefore expect their air pollution levels to improve as well. It is also important to point out that CO<sub>2</sub> emissions per capita and the ecological footprint <sup>11</sup> tend to be lower in large cities, as shown in the graph. This also suggests that pollution will fall over the coming years because, as mentioned in the article «Towards an increasingly urban

#### CO, emissions by city size \*



**Note:** \* Information based on data from 2005 and 2006.

**Source:** Kennedy, C., et al. (2010), «The study of urban metabolism and its applications to urban planning and desing», Environmental pollution, 159 (8), 1965-1973.

world» in this Dossier, the urban population is expected to grow significantly. However, another drawback to urban life related to health, and one which has come to the fore over the last few years, is stress. Several studies are investigating the relationship between city life and mental disorders, with mixed results so far.<sup>12</sup>

With a view to the future, technology will play an important role in containing the costs of agglomeration. The new concept of smart cities, which aims to improve the quality of life in cities by incorporating technology in urban services such as the management of traffic, transport and waste, will help to considerably reduce the costs of transport and pollution. Technology therefore represents an opportunity to transform the current model of city and make it even more appealing.

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<sup>9.</sup> Data based on 3,000 cities in 103 different countries. WHO, «Air pollution levels rising in many of the world's poorest cities», 12 May 2016.

<sup>10.</sup> Kahn, M. E. (2010), «New Evidence on Trends in the Cost of Urban Agglomeration», Agglomeration Economics, The University of Chicago Press.

<sup>11.</sup> The ecological footprint measures the space required to provide the resources and absorb the waste of a specific population or economy over one year. See Rees, W. and Wackernagel, M. (1996), «Ecological Footprints and appropriated carrying capacity: measuring the natural capital requirements of the human economy», Investing in Natural Capital: The Ecological Economics Approach to Sustainability, Island Press, Washington.

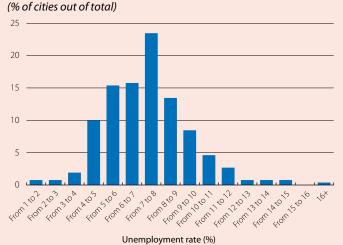
<sup>12.</sup> Lederbogen, F. et al. (2011), «City living and urban upbringing affect neural social stress processing in humans», Nature, 474, 498–501, (23 June 2011); Breslau, J. et al. (2014), «Are mental disorders more common in urban than rural areas of the United States?», Journal of Psychiatric Research, September 2014, Volume 56.



#### The urban factor of the labour market

The Great Recession hit national labour markets hard: the low unemployment rates in 2007 (8.2% in Spain, 4.6% in the US) had more than doubled by 2010 (19.9% in Spain, 9.6% in the US). The violence of such movements creates a natural need to understand the economic cycle. However, similar contrasts can also be found between the labour markets in cities, at any point in time, as shown by the first graph. In unemployment terms, travelling in 2014 from Denver (Colorado), with 4.5% unemployment, to Atlantic City (New Jersey), with 11.2%, was like travelling in time from the boom period of 2007 to the peak of the recession in 2010. Moreover such disparities are enduring and go beyond demographic differences (age, qualifications, race, etc.) between the residents of each city. This indicates that the labour market has a strong local component and can be used to exemplify the economies and diseconomies of agglomeration.

### Distribution of urban unemployment rates in the US



**Source:** CaixaBank Research, based on data from the 2014 American Community Survey.

The rest of the articles in this Dossier have provided a simple explanation for a phenomenon that, in our daily lives, seems natural to us: the existence of cities. Briefly put, the physical proximity of people, workers, companies etc. enriches us. Or, as economists would say, there are agglomeration economies. That is why, throughout history, humanity has lived in tribes, villages and, finally, cities. However, the Earth has not become one gigantic metropolis. The reason? Agglomerations also create costs, such as crime, pollution and higher housing prices. Both forces, which tend to balance each other out, can clearly be seen in the urban labour market.

On the one hand agglomeration economies mean that workers are more productive in larger cities. One sign of this is that wages increase with the size of the city, as shown in the second graph. But if you are still not convinced by this simple correlation, consider the case of a company located in New York, where the median wage for workers is 22 euros per hour. Why are companies

willing to pay wages that are 30% higher than those in Parkersburg (16.5 euros per hour)? The answer is simple: New York workers are more productive than Parkersburg workers. Moreover, even if we include workers of comparable observable characteristics, their productivity (in wage terms) increases with the size of the city where they work, suggesting the existence of economies of scale rather than reflecting a selection of inherently more productive workers in some cities. In fact big cities are larger precisely because they offer higher wages and therefore attract more workers. In other words, talking about large cities is essentially the same as talking about cities where workers are more productive.

On the other hand workers compare their nominal wages with the cost of living in each city. As explained in the article «The cost of city life: the diseconomies of agglomeration» in this Dossier, offering higher wages results in greater demand for housing, which pushes up the cost of living. In line with this intuition, the data show that housing prices increase with the size of a city, revealing that the real wage (i.e. adjusted for the cost of housing) is approximately the same in small cities as in large ones. The labour market therefore provides a good example of the equilibrium between the benefits and costs of agglomeration in what is known as «spatial equilibrium»: the adjustment of costs and benefits means there are cities with differing levels of productivity.

With this theoretical framework we can go on to examine how the urban labour market works. When considering the informative content of a city's wage levels regarding the underlying productivity of its workers, it is important to determine whether the source of this higher productivity comes from the characteristics of the city's residents or from the fact that there are a large number of workers in the same space. In other words, if it comes about because the best workers have been selected or whether

<sup>1.</sup> In the US, unemployment reached its peak in 2010. In Spain, after the economy fell into double-dip recession, unemployment reached 26.09% in 2013.

<sup>2.</sup> These differences become even more relevant if we consider that they occur in a country (United States) whose labour force is highly mobile.

<sup>3.</sup> See Kline, P. and Moretti, E. (2013), «Placed-based policies with unemployment», NBER Working Paper.

<sup>4.</sup> See Glaeser, E. and Maré, D. (2001), «Cities and skills», Journal of Labor Economics.

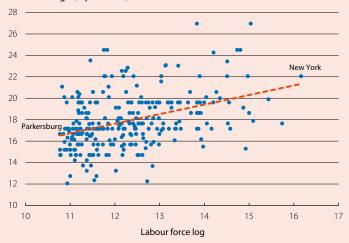
<sup>5.</sup> See Eeckhout, J., Pinheiro, R. and Schmidheiny, K. (2014), «Spatial Sorting», Journal of Political Economy.



the agglomeration economies make these workers better (for economists this distinction is the same as parents knowing whether their children's school is good because it attracts brilliant pupils or because it has excellent teachers). As we have already seen, the data indicate that agglomeration economies do play a fundamental role. However, selection is also important. By way of anecdote, Barcelona stands out in the world of football because it can attract players such as Leo Messi, in the same way that Paris attracted Pablo Picasso and New York John Lennon. In fact, Eeckhout, Pinheiro and Schmidheiny (2014)6 have found that big cities have a larger share of more talented workers. To illustrate this, the third graph shows that, in larger cities, there is a larger share of people with higher qualifications. As the authors argue, the reason is that agglomeration economies are particularly favourable for more talented individuals with a higher degree of specialisation. For example, Messi can exploit his skills to the utmost degree because he has other great players around

#### Wage increases with city size

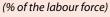
Median wage (\$ per hour)

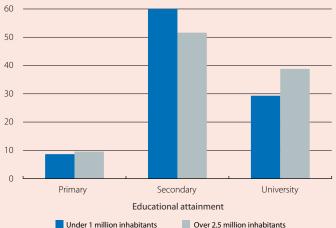


Source: CaixaBank Research, based on data from the 2014 American Community Survey.

him such as Iniesta and Busquets, as well as a great economic and technical infrastructure, in the same way that, in New York, John Lennon had access to the best musicians and recording studios.

## Breakdown of educational attainment by city size





Source: CaixaBank Research, based on data from the 2014 American Community Survey.

Moreover, the same authors have found that large cities also attract a larger proportion of lower qualified workers and argue that there is a complementary relationship between higher and lower qualified workers, with the latter becoming more productive in a big city. To give another example, readers need only think about the large supply of fast food outlets in big cities, possibly a result of the (complementary) need of their inhabitants to optimise the use of their time. Because of this complementary relationship, it comes as no surprise that there is also a positive correlation between the size of a city and inequality. However, this complementary nature also means that workers with higher and lower qualifications can take more advantage of the agglomeration economies. And there are actually more reasons why agglomeration economies occur in the labour market. For example, a denser market allows companies to find more suitable workers, just as it allows workers to find companies that are better suited to their needs. In addition, and as

explained in the article «The keys to the city of the future» in this Dossier, cities play a fundamental role in creating and spreading ideas and a part of these processes is carried out in the labour market: just think of the ideas you may have come up with or heard from your workmates in an informal conversation.

In conclusion, the labour market clearly illustrates the benefits and costs of agglomeration. These result in higher nominal wages (reflecting higher productivity) and in a higher cost of living, with the two balancing each other out. Both forces influence people's decisions regarding where to live and work. That is why the development of new technologies such as ICTs (which can decrease the benefits of physical proximity) and smart cities (which can reduce the costs of agglomeration) will have repercussions on the future spatial distribution of both workers and firms.

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<sup>6.</sup> See Eeckhout, J., Pinheiro, R. and Schmidheiny, K. (2014), «Spatial Sorting», Journal of Political Economy.

<sup>7.</sup> See Baum-Snow, N. and Pavan, R. (2013), «Inequality and city size», The Review of Economics and Statistics.

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

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

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