

MONTHLY REPORT • ECONOMIC AND FINANCIAL MARKET OUTLOOK

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ECONOMIC & FINANCIAL ENVIRONMENT

FINANCIAL MARKETS
China's economic liberalisation: next stop,
the bond market

INTERNATIONAL ECONOMY The fall in China's reserves

EUROPEAN UNION
The macroeconomic impact of QE

SPANISH ECONOMY
What does the price of land tell us about the future trend in house prices?

DOSSIER: FINANCIAL INSTABILITY AND ECONOMIC ACTIVITY

Financial instability, economic policy and the real economy: two opposing views

Debt: vice or virtue?

The banking sector after the crisis: more robust and stable?

Alternative channels to banking: the new challenge for financial stability



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April 2016

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 Mathieu Fort

Keynes versus Hayek, once again

This Monthly Report's Dossier tackles one of the major debates in economic policy today. Eight years since the collapse of the Lehman Brothers and the start of the Great Recession the international economy is still ailing, afflicted by a harsh combination: high debt, weak growth, low inflation and fiscal and monetary policies which, after the interventions of the last few years, have now run out of leeway. The big questions are: how did we get into this situation and what can or should be done?

This *Monthly Report* compares the two main paradigms which, more or less implicitly, attempt to achieve intellectual supremacy and thereby influence public policy; a debate which appears to take us back to the last century's controversy between John Maynard Keynes and Friedrich von Hayek.

The dominant paradigm, which we might summarise as Keynesian, fundamentally attributes the ills of the international economy to secular trends in non-financial phenomena such as demographic changes and technological stagnation, resulting in a chronic lack of aggregate demand in the economy. That's why this current of thought is identified with John Maynard Keynes although, at the time, the theories proposed by this great British economist were designed more for short-term situations than for phenomena that reflect an underlying trend.

The alternative paradigm, with fewer followers but growing influence, could be classified as Hayekian as, albeit with some small differences, it is in line with the ideas on economic cycles advocated years ago by economists such as Friedrich von Hayek, Irving Fisher and Hyman Minsky. From this perspective the root of the problem is financial as it is due to both monetary and fiscal policies that have led many countries to levels of public and private debt that are manifestly counterproductive.

These two schools of thought have opposing recipes for economic policy and the predominance of the Keynesian view can perhaps be put down to the political appeal of its proposals in many countries. The idea is to take advantage of low interest rates in an attempt to revive the economy via state investment in infrastructures, funding this by issuing more public debt. Some even propose this renewed expansion in public debt should not only be accompanied by accommodative monetary policy but also directly monetised by issuing currency. Not surprisingly the Hayekian view is less politically appealing as it recommends much more unpleasant tasting medicine consisting of deleveraging, restructuring debt, fiscal containment and supply reforms.

The complexity of this debate prevents us from drawing any simple conclusions and it is not easy to come down on one side or the other. Nevertheless the exceptional nature of our current economic and financial situation must serve as a benchmark for judging the two approaches in question.

Nominal interest rates for many low-risk financial assets with maturities of 10 years or longer have already been negative for a couple of quarters. This is a totally abnormal situation which had never happened before in the modern economy, let's say the last 200 years; not during the gold standard days or under the current paper currency system.

The aim of this *Monthly Report* is to analyse this crucial debate so that readers can judge for themselves whether this anomaly is more in line with the Keynesian paradigm and due to trends in the non-financial economy or, on the contrary, is a phenomenon more in line with the Hayekian explanation that emphasizes monetary causes and the accumulation of debt as the determining factors.

Jordi Gual Chief Economist 31 March 2016

CHRONOLOGY

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.

DECEMBER 2015

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

NOVEMBER 2015

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

AGENDA

APRIL 2016

- 4 Registration with Social Security and registered unemployment (March).
- 7 Industrial production index (February).
- 15 Financial accounts (Q4).
- 18 Loans, deposits and NPL ratio (February).
- 21 Governing Council of the European Central Bank. International trade (February).
- 26 Fed Open Market Committee. State budget execution (March).
- 28 Labour force survey (Q1).
 CPI flash estimate (April).
 Index of economic sentiment euro area (April).
 US GDP (1T).
- 29 Flash GDP (Q1).
 Balance of payments (February).

MAY 2016

- 4 Registration with Social Security and registered unemployment (April).
- 6 Industrial production index (March).
- 13 GDP of the euro area (Q1).
- **18** Loans, deposits and NPL ratio (March). Japan's GDP (Q1).
- **20** International trade (March).
- **26** Quarterly national accounts (Q1).
- 30 CPI flash estimate (May). Index of economic sentiment euro area (May).
- **31** State budget execution (April). Balance of payments (March).

Central banks take central stage again

The markets end their episodes of financial turbulence.

After the financial instability of January and a large part of February, the investment climate has now become more favourable again. Equity and corporate bond prices have stabilised and financial assets have become appreciably less volatile within a short period of time. This improved financial confidence is mainly a result of somewhat more positive macroeconomic figures than expected, especially in the US, as well as the support provided by central banks and in particular the Federal Reserve (Fed) and ECB, and also the upswing in the price of crude oil which has risen by almost 50% since mid-January. In short, a financially turbulent episode has ended whose ultimate impact in growth terms is nevertheless likely to be limited. One good indication of this is that we expect world growth to reach 3.4% in 2016, a figure higher than the growth recorded in 2015. In spite of this benign scenario, however, we must remember that there are still significant downside risks including a hypothetical worsening of financial uncertainty, difficulties in ensuring a soft landing for the Chinese economy and further deterioration in the situation of fragile emerging countries such as Brazil and Russia.

The Fed is facing the dilemma of whether to act on the domestic front now or wait until global financial risks have calmed down. The American giant is going through mature phases of the cycle. Apart from some short-lived fluctuations, US growth reached a cruising speed in the order of 2% year-on-year in the second half of 2015 and looks like continuing around this figure for most of 2016. One key factor behind this situation is the solid labour market which, since the start of the recovery, has created more than 12 million jobs and has brought unemployment down to a low 4.9%. Within this context, inflation, which is still relatively contained, will take an upward turn over the coming months thanks to the recovery in oil prices, higher pressure on wages and strong domestic demand. Given this outlook, the path of monetary normalisation started by the Fed in December makes complete sense. However, the accommodative bias of its last communication, even taking into account the recent financial turbulence and uncertainty surrounding world growth, was greater than expected by investors. It appears that, facing the dilemma of whether to take immediate action because of the economy's mature phase in the cycle or waiting until external uncertainties become clearer, the Fed has chosen the latter. Nevertheless we believe this to be a temporary

pause and monetary normalisation to continue in the second half of 2016.

The euro area is going in a different monetary direction; a much more accommodative one. In response to what the ECB sees as the euro area's worsening macroeconomic situation, the institution announced a further package of measures: interest rate cuts (reducing the Refi rate to 0.00% and the deposit rate to -0.40%), enlargement of its bond purchase or QE programme (by an additional 20 billion euros, up to 80 billion), inclusion of corporate bonds in the QE programme and four new TLTROs which, if certain conditions are met, will have a negative interest rate. On the whole these actions, more than expected, have boosted the stimuli to provide credit and strengthen expectations of very low interest rates for a substantial period of time. Although the final impact of this package of measures, in terms of higher growth and inflation, may be relatively small and take some time to be noticed, it should affect the segment of corporate debt which influences certain aspects of the financial markets, such as a change in the price of certain assets, as well as strengthening investor confidence.

Spain is entering a more mature phase of the cycle. In

the coming quarters the Spanish economy will moderately reduce its rate of growth and, after growing by a dynamic 3.2% in 2015, in 2016 GDP growth will be 2.8% according to our forecasts. This slowdown is essentially the result of the gradual disappearance of tailwind effects that boosted growth in 2015 such as falling oil prices and the euro's depreciation. It is also due to less support from fiscal policy, which is very unlikely to be as expansionary as in 2015 if the public debt targets are to be met. In short, less growth but of higher quality, at least in terms of its sustainability. In particular, the greater predominance of the foreign sector, whose contribution will grow in 2016, is a positive development. So is the continued recovery in the real estate sector, growth in bank loans and the improved labour market; three trends that mean the country is still making progress towards full economic normalisation.

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 | 3.4 | 3.7 | 3.1 | 2.9 | 3.2 | 3.3 | 3.4 | 3.5 |
| Developed countries | 1.8 | 1.9 | 1.9 | 2.0 | 1.9 | 1.7 | 1.8 | 1.8 | 1.8 | 2.1 |
| United States | 2.4 | 2.4 | 2.1 | 2.2 | 2.1 | 2.0 | 2.3 | 1.9 | 2.0 | 2.3 |
| Euro area | 0.9 | 1.5 | 1.6 | 1.7 | 1.6 | 1.6 | 1.4 | 1.4 | 1.6 | 1.8 |
| Germany | 1.6 | 1.4 | 1.6 | 1.7 | 1.7 | 1.3 | 1.4 | 1.4 | 1.6 | 1.9 |
| France | 0.2 | 1.1 | 1.3 | 1.4 | 1.1 | 1.4 | 1.0 | 1.4 | 1.5 | 1.5 |
| Italy | -0.4 | 0.6 | 1.1 | 1.2 | 0.8 | 1.0 | 0.9 | 0.9 | 1.1 | 1.3 |
| Spain | 1.4 | 3.2 | 2.8 | 2.1 | 3.4 | 3.5 | 3.3 | 2.9 | 2.7 | 2.4 |
| Japan | -0.1 | 0.5 | 0.9 | 0.7 | 1.7 | 0.8 | 0.2 | 1.0 | 0.8 | 1.4 |
| United Kingdom | 2.9 | 2.3 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 |
| Emerging countries | 4.6 | 4.0 | 4.4 | 4.9 | 4.0 | 3.8 | 4.3 | 4.4 | 4.4 | 4.5 |
| China | 7.3 | 6.9 | 6.5 | 6.3 | 6.9 | 6.8 | 7.0 | 6.6 | 6.3 | 6.2 |
| India ¹ | 7.2 | 7.4 | 7.4 | 7.6 | 7.7 | 7.3 | 7.2 | 7.4 | 7.4 | 7.4 |
| Indonesia | 5.0 | 4.8 | 5.2 | 5.5 | 4.7 | 5.0 | 5.0 | 5.1 | 5.3 | 5.4 |
| 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 | 2.8 | 2.5 | 2.4 | 2.5 | 2.7 | 3.2 |
| Chile | 1.9 | 2.1 | 2.2 | 3.2 | 2.2 | 1.3 | 1.5 | 1.7 | 2.5 | 2.9 |
| Russia | 0.6 | -3.7 | -0.8 | 1.5 | -4.1 | -3.8 | -2.2 | -0.7 | -0.4 | 0.0 |
| 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 | 3.5 | 3.5 | 3.6 | 3.7 | 3.5 | 3.5 | 3.6 | 3.5 |
| South Africa | 1.6 | 1.2 | 0.9 | 1.5 | 1.1 | 0.3 | 0.6 | 0.7 | 1.1 | 1.1 |
| INFLATION | | | | | | | | | | |
| Global | 3.5 | 3.2 | 3.4 | 3.7 | 3.2 | 3.3 | 3.4 | 3.3 | 3.3 | 3.6 |
| Developed countries | 1.4 | 0.3 | 1.1 | 2.2 | 0.2 | 0.4 | 0.8 | 0.7 | 1.1 | 1.6 |
| United States | 1.6 | 0.1 | 1.4 | 2.5 | 0.1 | 0.5 | 1.2 | 1.1 | 1.4 | 1.9 |
| Euro area | 0.4 | 0.0 | 0.6 | 1.9 | 0.1 | 0.2 | 0.0 | 0.1 | 0.7 | 1.4 |
| Germany | 0.8 | 0.1 | 0.6 | 2.0 | 0.0 | 0.2 | 0.1 | 0.2 | 0.8 | 1.4 |
| France | 0.6 | 0.1 | 0.5 | 1.9 | 0.1 | 0.2 | 0.1 | 0.1 | 0.7 | 1.3 |
| Italy | 0.2 | 0.1 | 0.5 | 1.8 | 0.3 | 0.2 | 0.0 | 0.0 | 0.6 | 1.3 |
| Spain | -0.2 | -0.5 | 0.0 | 2.2 | -0.4 | -0.3 | -0.7 | -0.8 | 0.1 | 1.2 |
| Japan | 2.7 | 0.8 | 0.9 | 2.0 | 0.2 | 0.3 | 0.3 | 0.3 | 1.1 | 1.7 |
| United Kingdom | 1.5 | 0.0 | 0.9 | 1.9 | 0.0 | 0.1 | 0.4 | 0.7 | 1.0 | 1.4 |
| Emerging countries | 5.1 | 5.4 | 5.6 | 5.8 | 5.4 | 5.4 | 5.9 | 5.7 | 5.4 | 5.5 |
| China | 2.0 | 1.4 | 1.9 | 2.1 | 1.7 | 1.5 | 2.0 | 1.9 | 1.7 | 2.1 |
| India | 6.6 | 4.9 | 4.9 | 5.2 | 3.9 | 5.3 | 5.4 | 5.4 | 4.4 | 4.3 |
| Indonesia | 6.4 | 6.4 | 4.5 | 4.9 | 7.1 | 4.8 | 4.4 | 4.6 | 4.1 | 4.8 |
| Brazil | 6.3 | 9.0 | 7.8 | 6.3 | 9.5 | 10.4 | 9.5 | 8.0 | 7.0 | 6.8 |
| Mexico | 4.0 | 2.7 | 3.2 | 3.2 | 2.6 | 2.3 | 2.8 | 3.0 | 3.3 | 3.5 |
| Chile | 4.4 | 4.3 | 3.8 | 3.2 | 4.8 | 4.1 | 4.5 | 4.0 | 3.5 | 3.3 |
| Russia | 7.8 | 15.5 | 7.7 | 5.7 | 15.7 | 14.5 | 9.3 | 8.0 | 7.0 | 6.5 |
| Turkey | 8.9 | 7.7 | 7.5 | 6.3 | 7.3 | 8.2 | 8.8 | 7.1 | 7.0 | 7.0 |
| Poland | 0.2 | -0.9 | 0.9 | 1.9 | -0.8 | -0.8 | -0.2 | 0.8 | 1.3 | 1.5 |
| South Africa | 6.1 | 4.6 | 6.2 | 6.1 | 4.7 | 4.9 | 6.2 | 5.5 | 5.9 | 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 | 2.9 | 2.1 | 3.6 | 3.5 | 3.5 | 3.2 | 2.6 | 2.4 |
| General government consumption | 0.0 | 2.7 | 0.4 | -0.7 | 3.0 | 3.7 | 1.3 | 0.8 | -0.2 | -0.5 |
| Gross fixed capital formation | 3.5 | 6.4 | 4.6 | 3.7 | 6.7 | 6.4 | 5.9 | 4.4 | 4.2 | 4.0 |
| Capital goods | 10.7 | 10.1 | 6.5 | 3.6 | 11.2 | 10.9 | 9.8 | 6.9 | 5.2 | 4.2 |
| Construction | -0.1 | 5.3 | 3.7 | 3.8 | 5.2 | 4.6 | 4.2 | 3.1 | 3.5 | 3.8 |
| Domestic demand (contr. Δ GDP) | 1.6 | 3.7 | 2.6 | 1.8 | 4.1 | 4.1 | 3.3 | 2.9 | 2.1 | 2.1 |
| Exports of goods and services | 5.1 | 5.4 | 5.6 | 4.9 | 4.5 | 5.3 | 5.7 | 5.7 | 5.4 | 5.7 |
| Imports of goods and services | 6.4 | 7.5 | 5.4 | 4.4 | 7.2 | 7.7 | 6.4 | 6.1 | 4.1 | 5.0 |
| Gross domestic product | 1.4 | 3.2 | 2.8 | 2.1 | 3.4 | 3.5 | 3.3 | 2.9 | 2.7 | 2.4 |
| Other variables | | | | | | | | | | |
| Employment | 1.1 | 3.0 | 2.5 | 2.0 | 3.1 | 3.0 | 2.8 | 2.4 | 2.3 | 2.3 |
| Unemployment rate (% labour force) | 24.4 | 22.1 | 19.9 | 18.5 | 21.2 | 20.9 | 21.2 | 20.0 | 19.2 | 19.3 |
| Consumer price index | -0.2 | -0.5 | 0.0 | 2.2 | -0.4 | -0.3 | -0.7 | -0.8 | 0.1 | 1.2 |
| Unit labour costs | -0.8 | 0.3 | 0.6 | 1.1 | -0.2 | 0.4 | -0.7 | 1.0 | 0.7 | 1.4 |
| Current account balance (cum., % GDP)1 | 1.0 | 1.4 | 1.6 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.6 |
| Net lending or borrowing rest of the world (cum., % GDP) ¹ | 1.4 | 2.0 | 2.2 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 |
| Fiscal balance (cum., % GDP) ¹ | -5.9 | -5.2 | -3.9 | -2.1 | | | | | | |

Financial markets

| 0.25 | | | | | | | | | |
|--------|--|---|--|---|---|---|---|---|---|
| 0.25 | | | | | | | | | |
| 0.25 | | | | | | | | | |
| 0.25 | 0.26 | 0.58 | 1.25 | 0.25 | 0.29 | 0.50 | 0.50 | 0.58 | 0.75 |
| 0.23 | 0.32 | 0.78 | 1.54 | 0.31 | 0.41 | 0.62 | 0.71 | 0.84 | 0.96 |
| 0.56 | 0.79 | 1.26 | 1.89 | 0.83 | 0.95 | 1.17 | 1.25 | 1.29 | 1.34 |
| 0.44 | 0.67 | 1.05 | 1.80 | 0.67 | 0.83 | 0.86 | 0.98 | 1.10 | 1.25 |
| 2.53 | 2.13 | 2.03 | 2.71 | 2.21 | 2.19 | 1.92 | 1.96 | 2.06 | 2.19 |
| | | | | | | | | | |
| 0.16 | 0.05 | 0.01 | 0.00 | 0.05 | 0.05 | 0.03 | 0.00 | 0.00 | 0.00 |
| 0.21 | -0.02 | -0.26 | -0.06 | -0.03 | -0.09 | -0.19 | -0.28 | -0.30 | -0.29 |
| 0.48 | 0.17 | -0.03 | 0.23 | 0.16 | 0.09 | 0.01 | -0.04 | -0.05 | -0.04 |
| 0.05 | -0.24 | -0.41 | 0.01 | -0.24 | -0.32 | -0.46 | -0.40 | -0.40 | -0.37 |
| 1.23 | 0.53 | 0.36 | 1.34 | 0.69 | 0.57 | 0.31 | 0.33 | 0.35 | 0.44 |
| | | | | | | | | | |
| 1.33 | 1.11 | 1.09 | 1.07 | 1.11 | 1.09 | 1.10 | 1.10 | 1.08 | 1.07 |
| 140.42 | 134.35 | 129.71 | 128.19 | 135.89 | 132.94 | 127.18 | 129.67 | 130.95 | 131.06 |
| 0.81 | 0.73 | 0.78 | 0.76 | 0.72 | 0.72 | 0.77 | 0.78 | 0.78 | 0.77 |
| | | | | | | | | | |
| 99.45 | 53.61 | 43.31 | 65.62 | 51.10 | 44.70 | 35.73 | 39.81 | 45.50 | 52.20 |
| 74.54 | 48.30 | 39.92 | 61.26 | 46.00 | 40.82 | 32.41 | 36.24 | 42.05 | 48.99 |
| | 0.56 0.44 2.53 0.16 0.21 0.48 0.05 1.23 1.33 140.42 0.81 | 0.23 0.32 0.56 0.79 0.44 0.67 2.53 2.13 0.16 0.05 0.21 -0.02 0.48 0.17 0.05 -0.24 1.23 0.53 1.33 1.11 140.42 134.35 0.81 0.73 99.45 53.61 | 0.23 0.32 0.78 0.56 0.79 1.26 0.44 0.67 1.05 2.53 2.13 2.03 0.16 0.05 0.01 0.21 -0.02 -0.26 0.48 0.17 -0.03 0.05 -0.24 -0.41 1.23 0.53 0.36 1.33 1.11 1.09 140.42 134.35 129.71 0.81 0.73 0.78 99.45 53.61 43.31 | 0.23 0.32 0.78 1.54 0.56 0.79 1.26 1.89 0.44 0.67 1.05 1.80 2.53 2.13 2.03 2.71 0.16 0.05 0.01 0.00 0.21 -0.02 -0.26 -0.06 0.48 0.17 -0.03 0.23 0.05 -0.24 -0.41 0.01 1.23 0.53 0.36 1.34 1.33 1.11 1.09 1.07 140.42 134.35 129.71 128.19 0.81 0.73 0.78 0.76 99.45 53.61 43.31 65.62 | 0.23 0.32 0.78 1.54 0.31 0.56 0.79 1.26 1.89 0.83 0.44 0.67 1.05 1.80 0.67 2.53 2.13 2.03 2.71 2.21 0.16 0.05 0.01 0.00 0.05 0.21 -0.02 -0.26 -0.06 -0.03 0.48 0.17 -0.03 0.23 0.16 0.05 -0.24 -0.41 0.01 -0.24 1.23 0.53 0.36 1.34 0.69 1.33 1.11 1.09 1.07 1.11 140.42 134.35 129.71 128.19 135.89 0.81 0.73 0.78 0.76 0.72 99.45 53.61 43.31 65.62 51.10 | 0.23 0.32 0.78 1.54 0.31 0.41 0.56 0.79 1.26 1.89 0.83 0.95 0.44 0.67 1.05 1.80 0.67 0.83 2.53 2.13 2.03 2.71 2.21 2.19 0.16 0.05 0.01 0.00 0.05 0.05 0.21 -0.02 -0.26 -0.06 -0.03 -0.09 0.48 0.17 -0.03 0.23 0.16 0.09 0.05 -0.24 -0.41 0.01 -0.24 -0.32 1.23 0.53 0.36 1.34 0.69 0.57 1.33 1.11 1.09 1.07 1.11 1.09 140.42 134.35 129.71 128.19 135.89 132.94 0.81 0.73 0.78 0.76 0.72 0.72 99.45 53.61 43.31 65.62 51.10 44.70 | 0.23 0.32 0.78 1.54 0.31 0.41 0.62 0.56 0.79 1.26 1.89 0.83 0.95 1.17 0.44 0.67 1.05 1.80 0.67 0.83 0.86 2.53 2.13 2.03 2.71 2.21 2.19 1.92 0.16 0.05 0.01 0.00 0.05 0.05 0.03 0.21 -0.02 -0.26 -0.06 -0.03 -0.09 -0.19 0.48 0.17 -0.03 0.23 0.16 0.09 0.01 0.05 -0.24 -0.41 0.01 -0.24 -0.32 -0.46 1.23 0.53 0.36 1.34 0.69 0.57 0.31 1.33 1.11 1.09 1.07 1.11 1.09 1.10 140.42 134.35 129.71 128.19 135.89 132.94 127.18 0.81 0.73 0.78 0.76 0.72 </td <td>0.23 0.32 0.78 1.54 0.31 0.41 0.62 0.71 0.56 0.79 1.26 1.89 0.83 0.95 1.17 1.25 0.44 0.67 1.05 1.80 0.67 0.83 0.86 0.98 2.53 2.13 2.03 2.71 2.21 2.19 1.92 1.96 0.16 0.05 0.01 0.00 0.05 0.05 0.03 0.00 0.21 -0.02 -0.26 -0.06 -0.03 -0.09 -0.19 -0.28 0.48 0.17 -0.03 0.23 0.16 0.09 0.01 -0.04 0.05 -0.24 -0.41 0.01 -0.24 -0.32 -0.46 -0.40 1.23 0.53 0.36 1.34 0.69 0.57 0.31 0.33 1.40.42 134.35 129.71 128.19 135.89 132.94 127.18 129.67 0.81 0.73 <</td> <td>0.23 0.32 0.78 1.54 0.31 0.41 0.62 0.71 0.84 0.56 0.79 1.26 1.89 0.83 0.95 1.17 1.25 1.29 0.44 0.67 1.05 1.80 0.67 0.83 0.86 0.98 1.10 2.53 2.13 2.03 2.71 2.21 2.19 1.92 1.96 2.06 0.16 0.05 0.01 0.00 0.05 0.05 0.03 0.00 0.00 0.21 -0.02 -0.26 -0.06 -0.03 -0.09 -0.19 -0.28 -0.30 0.48 0.17 -0.03 0.23 0.16 0.09 0.01 -0.04 -0.05 0.05 -0.24 -0.41 0.01 -0.24 -0.32 -0.46 -0.40 -0.40 1.23 0.53 0.36 1.34 0.69 0.57 0.31 0.33 0.35 140.42 134.35 129.</td> | 0.23 0.32 0.78 1.54 0.31 0.41 0.62 0.71 0.56 0.79 1.26 1.89 0.83 0.95 1.17 1.25 0.44 0.67 1.05 1.80 0.67 0.83 0.86 0.98 2.53 2.13 2.03 2.71 2.21 2.19 1.92 1.96 0.16 0.05 0.01 0.00 0.05 0.05 0.03 0.00 0.21 -0.02 -0.26 -0.06 -0.03 -0.09 -0.19 -0.28 0.48 0.17 -0.03 0.23 0.16 0.09 0.01 -0.04 0.05 -0.24 -0.41 0.01 -0.24 -0.32 -0.46 -0.40 1.23 0.53 0.36 1.34 0.69 0.57 0.31 0.33 1.40.42 134.35 129.71 128.19 135.89 132.94 127.18 129.67 0.81 0.73 < | 0.23 0.32 0.78 1.54 0.31 0.41 0.62 0.71 0.84 0.56 0.79 1.26 1.89 0.83 0.95 1.17 1.25 1.29 0.44 0.67 1.05 1.80 0.67 0.83 0.86 0.98 1.10 2.53 2.13 2.03 2.71 2.21 2.19 1.92 1.96 2.06 0.16 0.05 0.01 0.00 0.05 0.05 0.03 0.00 0.00 0.21 -0.02 -0.26 -0.06 -0.03 -0.09 -0.19 -0.28 -0.30 0.48 0.17 -0.03 0.23 0.16 0.09 0.01 -0.04 -0.05 0.05 -0.24 -0.41 0.01 -0.24 -0.32 -0.46 -0.40 -0.40 1.23 0.53 0.36 1.34 0.69 0.57 0.31 0.33 0.35 140.42 134.35 129. |

Note: 1. Four quarter cumulative.

Forecasts

FINANCIAL OUTLOOK · The

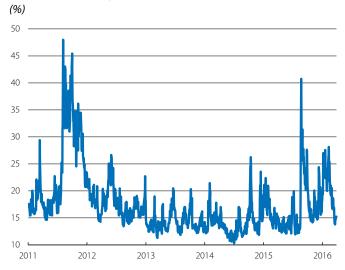
turbulence has passed

The storm gives way to calm in global markets. After the financial instability of January and a large part of February, the investment climate has now become more favourable. Equity and corporate bond prices have stabilised and financial assets have become appreciably less volatile within a short period of time. Several elements lie behind this situation. Firstly, fears of recession in the US have eased, being confirmed as exaggerated. The strength shown by several activity and labour market indicators in the US have been vital in calming the nerves of investors. The absence of unpleasant surprises from China has also been a great help. Secondly, the price of crude oil has recovered by almost 50% since the minimum reached in January. Lastly, the support provided by central banks and in particular the Federal Reserve (Fed) and ECB, still exercising considerable influence over the price formation of financial assets. Nonetheless it would be overconfident to assume the period of instability that started in the summer of 2015 is over; the astonishing speed at which asset prices have recovered their levels prior to the sell-off and the low volatility must not make us lower our guard.

Unfortunately the risks for the international financial scenario are still downwards. China continues to be a source of risk in spite of remaining very much in the background over the last few weeks. However, the Asian giant's recent economic policy actions are in the right direction to provide the economy with «more marketoriented» structures. The opening up of its domestic bond market to foreign investors is a case in point. Another potentially disruptive event is the referendum on the UK's membership of the EU, to be held in June. British betting firms set the probability of a no vote winning at around 30%, a significant figure. Lastly, the continuation of an environment of rock bottom and even negative interest rates, for example in the euro area, might accentuate vulnerabilities in areas such as banking.

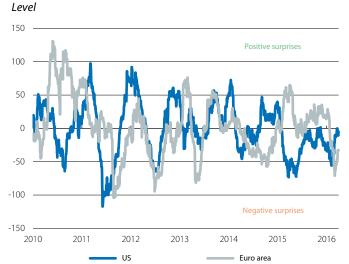
Given this situation, the Fed has once again made it clear that it prefers to err on the side of caution in terms of the speed of its actions. At the Federal Open Market Committee meeting on 16 March, the Fed maintained the benchmark interest rate at 0.25%-0.50%, as was expected. However, the markedly accommodative stance of its official communication surprised a large number of the investor community. The monetary authority once again referred to global risks and the slowdown in external growth at the same time as slightly lowering its growth and inflation forecasts. In the area of interest rates, Fed members are now only forecasting two hikes in the fed funds rate compared with the four projected last December. The forecast for the terminal or long-term level for the benchmark interest rate also fell from 3.5% to 3.25%. In a context of relative strength in which investors expected the

Implied volatility of the US stock markets



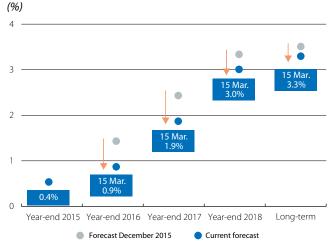
Source: CaixaBank Research, based on Bloomberg data.

Index of economic surprises



Source: CaixaBank Research, based on Bloomberg data.

US: appropriate level for the benchmark interest rate according to Fed members (meeting of 16 March)



Source: CaixaBank Research, based on data from the Federal Reserve.

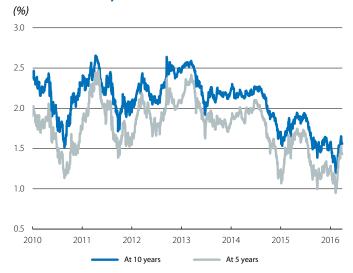
Fed to toughen up its discourse, the institution's warnings and messages have grabbed the attention. Nevertheless, the Fed's dovish tone and the convergence of its interest rate forecasts with those of the market were warmly welcomed in international markets.

The Fed's greater tolerance of a period of higher inflation may turn out to be counterproductive, however. In the last few months several inflation indicators in the US have shown notable acceleration and the inflation expectations expressed in indexed bonds also show considerable gains. Although it might be premature to talk of inflationary pressures in the US, these factors do introduce considerable risks and a timid response by the Fed to such pressure may harm its credibility. If participants in the bond market perceive that the central bank is behind the curve, this could lead to sharp upswings in long-term interest rates and tougher financial conditions. The Fed would then be forced to speed up its rate of benchmark interest rate hikes with the risks this would entail for the US economy.

Meanwhile the ECB announces a further package of monetary stimuli, particularly the purchase of corporate bonds. Risks from the external environment and deflationary dynamics led the ECB's Governing Council to announce farreaching measures at its last meeting. In addition to cutting the Refi and deposit rates to 0.00% and -0.40%, respectively, Draghi also announced an enlargement of the ECB's asset purchase programme (QE) by 20 billion euros a month. The second new addition is the ECB extending the assets eligible for QE and also buying corporate bonds. This last measure is especially aimed at relieving any lack of public debt that may have been caused after monthly purchases are expanded up to 80 billion euros. The Council also approved a second round of four new TLTRO, all with maturities of four years. One key difference to previous TLTROs is the cost entailed for banks, which could be negative if the number of loans they grant exceeds a specific threshold set by the ECB. In any case the cost of the funds requested will be -0.40% (the yield earned by the deposit facility). The ECB believes these new incentives will encourage banks to take part in this kind of auction. So far the results of the seven TLTROs have been imperceptible, with a total amount requested of 426 billion euros.

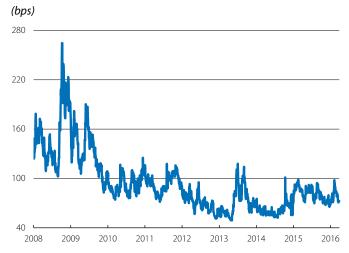
Europe's corporate bond market celebrates the inclusion of this kind of asset in the ECB's QE. The European monetary authority will buy investment grade euro-denominated bonds of non-banking enterprises located in the euro area; positive news for this market after the difficult months it has been through. Although more details have yet to be published, the universe of eligible assets totals 500-600 billion euros and total purchases could cover between 15% and 25% of the target market. The emergence of such a large-scale buyer should boost the performance not only of investment grade debt but also the high yield segment and risk premia have seen significant drops in both cases.

US: inflation expectations



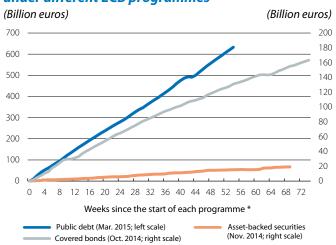
Source: CaixaBank Research, based on Bloomberg data

US: implied volatility of the government bond market



Source: CaixaBank Research, based on Bloomberg data.

Euro area: cumulative asset purchases under different ECB programmes



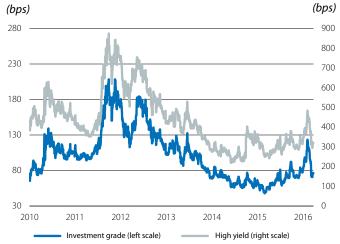
Note: * In brackets, the date each programme started. Source: CaixaBank Research, based on Bloombera data.

After the ECB's announcements investors turn their attention back to Draghi's words. Particularly important were the ECB President's comments regarding the fact that further cuts in the official interest rates were unlikely. This point caused some concern in the markets and interbank and monetary rates reacted with moderate upswings. On the foreign exchange market the euro appreciated by almost 2% against the dollar, reaching around 1.12 dollars. Draghi's comments were probably aimed at curbing expectations of further cuts in the deposit rate, limiting a source of vulnerability in the banking sector. Along these lines, several monetary market instruments did not anticipate further cuts in the deposit rate given the expectation that this would be −0.50% before the ECB's last meeting.

Stock markets move away from the sharp losses of winter and are livening up again. Since the peak of tension reached mid-February, international stock markets have reported solid gains of between 10% and 15% while the implied volatility index of the S&P 500 has fallen sharply and is now at levels similar to those observed before the episode of instability last summer. Both circumstances suggest that the stock market losses in January and February were the result of investors overreacting. Moreover the sectors of energy and banking, sources of volatility in the US and Europe respectively, have led the gains in their respective stock markets. In the short term the macroeconomic figures should continue to help consolidate this upward trend, especially in the developed bloc, and put to rest the fears of recession in the US once and for all, although the rate of growth in the stock markets is likely to lose steam and adopt a more intermittent tone. Lastly, the 2016 Q1 earnings campaign in the US, which is about to begin, is expected to be important as it will serve as a thermometer for the state of corporate accounts in 2016.

A barrel of Brent crude oil consolidates in the 40 dollar zone. Changes in expectations of a sharp slowdown in global growth and the apparently greater coordination of oil-producing countries have pushed the price of oil up by almost 50% since its annual minimum level. The outcome of the extraordinary meeting held by OPEC on 17 April and, in particular, the agreements that may be reached to limit the supply of oil will set the course for its price over the coming months. At the same time other commodities closely linked to the economic cycle, such as metals and industrial materials, are also showing a similar trend, albeit with less intensity.

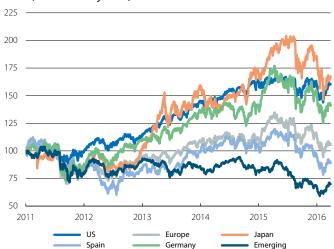
Europe: corporate bond spreads



Source: CaixaBank Research, based on Bloomberg data

Main international stock markets

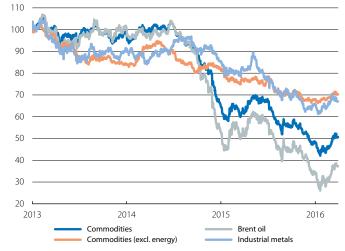
Index (100 = January 2011)



Source: CaixaBank Research, based on Bloomberg data

Commodities

Index (100 = January 2013)



Source: CaixaBank Research, based on Bloomberg data

FOCUS · China's economic liberalisation: next stop, the bond market

China has been at the epicentre of numerous turbulent financial episodes throughout the last year and the first few months of 2016. Given this situation the government has decided to boost its agenda of reforms. In August 2015 the authority made the mechanism to establish the yuan's exchange rate more flexible. In October they suppressed the limit on bank deposit interest rates. Now the People's Bank of China (PBoC) has surprised with an announcement that it is opening up the domestic debt market, the third largest in the world, to the community of international investors. A decision that has created huge expectation and is likely to become one of the landmarks in the liberalisation of the Asian giant's financial account and the internationalisation of its currency.

One of the particular features of China's bond market is that, in spite of being large (equivalent to 6 trillion dollars in 2015, 60% of GDP), the share of foreign investors is only 1.9% of this sum and just over 1% of GDP, which can be put down to the restricted access to China's domestic bond market. To date, foreign investors could only acquire assets from this market via three programmes: the Qualified Foreign Institutional Investor (QFII), the Renminbi Qualified Foreign Institutional Investor (RQFII) and a specific facility of the PBoC. One common feature of all these systems is that they have quotas for the amounts invested and each transaction requires approval from China's regulatory authorities.

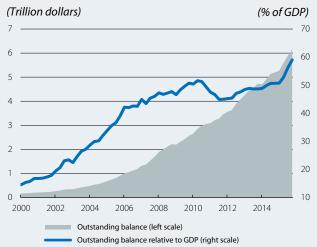
From now on, however, almost all non-resident institutional investors will be able to access the local bond market without being subject to quotas.¹ Although some technical aspects have yet to be specified, the opening up of such a large market is an important event, both for international investors and also for the domestic agents themselves. For China, a more open bond market will attract global funds and widen and diversify its investor base, which could particularly benefit Chinese private companies whose access to the capital market had been limited since domestic banks tend to prefer public or semi-public issuers (see the second graph).

In the short term there is unlikely to be a large inflow of investment into the Chinese bond market given the uncertainty surrounding the trend in the renminbi. However, over the coming years international exposure to this market could increase considerably. In comparison,

1. Banks, mutual and pension funds, insurers, sovereign wealth funds and brokerage firms will be able to access China's debt market while restrictions will remain in place for hedge funds.

foreign investors hold debt in yen and Canadian dollars totalling 10% and 15% of the GDP of Japan and Canada, respectively. Similar exposure by international investors to debt instruments in the renminbi would result in an inflow of capital of between 0.8 and 1.3 trillion dollars. This expectation alone could help stabilise the value of China's currency, one of the goals pursued by the Chinese authorities.

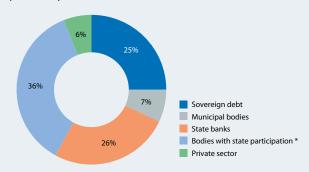
China: domestic bond market



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

China: composition of the outstanding balance of bonds by issuer type

(% of total)



Note: * This item is made up of state or semi-state companies and so-called local government financing vehicles.

Source: CaixaBank Research, based on data from Goldman Sachs.

FOCUS · **Growth investing**

One major goal of all stock market investors is to outperform the market but without taking on more risk than the risk entailed in investing in that representative basket of assets. One strategy that has shown itself to be effective in this respect is value investing (see the Focus «The real value of value investing» in MR03/2016). Another strategy, growth investing, is related to the investment approach of Thomas Rowe Price, the founder, in 1937, of the management firm that still bears his name.

Growth investing focuses on companies with high potential growth in earnings. In contrast with the strategy of value investing, it tends to ignore the shares of mature companies with moderate growth figures in sales or earnings, although these may be undervalued. A growth portfolio tends to contain mostly shares from innovative industries with high technological component (information technologies, biotechnology, etc.). In many cases these are young or relatively small firms that do not pay out dividends, either because they are still in an initial phase and do not make a profit or because they reinvest in order to continue growing. The nature of these companies is partly the reason why they offer higher returns than the market average: small firms are less covered by specialised analysts and high growth rates in earnings tend to result in higher uncertainty (or less precision) in their estimates. Given this situation, investors demand a higher risk premium.

Assets for a growth investing portfolio can be chosen based on various criteria. The simplest would consist of buying shares with a relatively high P/E ratio (price to earnings), reflecting the expectation of strong growth in profits. Empirical evidence suggests caution, however, as companies with high P/E ratios tend to perform worse than those with low P/E ratios. An alternative focus consists of identifying shares with a recent history (or with projections, either the investor's own or a third party's) of high growth in earnings. Nevertheless, basing a decision on past growth always involves the risk that the future may not be as brilliant while trusting in projections entails the cost of the resources required to make such forecasts or to evaluate the quality of the predictions made by others. A third criterion is a mix of the previous two; selecting companies that are expected to achieve large profits in relation to their P/E ratio (the quotient between these two figures is called the price/ earnings to growth or PEG ratio). This criterion, known as the GARP strategy (growth at reasonable price) and combining aspects of value and growth investing, was popularised by Peter Lynch, the legendary investor at Fidelity.

There are currently several indices that are considered to represent the features of growth investing in accordance with some of the simple criteria mentioned (and therefore a somewhat rough approximation of the strategy). For example, the S&P 500 Growth in the US stock market, which contains a sub-set of shares on the S&P 500 (on average its shares currently have a P/E ratio of 22 compared with 19 for the S&P 500). The annual return of the S&P 500 Growth in the last 10 years (6.1%) exceeds that of the index as a whole by almost 2 pps.

Various academic studies have investigated the results of this strategy more thoroughly. Damodaran,1 for example, concludes that a growth investing strategy can provide returns above the market average especially when the investment horizon is long and the timing for buying and selling shares is well-chosen. In any case the results achieved tend to be worse than those via a value investing strategy. Empirical evidence indicates that the best time to invest in growth coincides with downward phases in the economic cycle, partly because the profits from this kind of companies are less correlative with the cycle and also because, in a weakening context, investors seem to suffer from excessive scepticism regarding the prospects of such firms.

Growth investing, however, also entails significant risks. In particular this kind of firms are more prone to generate bubbles (such as the tech rally) or to suffer from strong losses in a highly unstable environment (such as the financial crisis of 2008-2009). A reminder of the wisdom of maintaining a suitably diversified portfolio.

Growth investing performance compared with the market

Index (100 = *December* 1994)



Source: CaixaBank Research, based on Bloomberg data.

^{1.} Damodaran, A. (2012), «Growth Investing: Betting on the Future?», New York University, 27 July.

KEY INDICATORS

Interest rates (%)

| | 31-Mar | 29-Feb | Monthly change (bps) | Year-to-date (bps) | Year-on-year change (bps) |
|------------------------------------|--------|--------|-------------------------|-----------------------|------------------------------|
| Euro area | | | | | |
| ECB Refi | 0.00 | 0.05 | -5 | -5.0 | -5.0 |
| 3-month Euribor | -0.24 | -0.21 | -4 | -11.3 | -26.3 |
| 1-year Euribor | -0.01 | -0.02 | 1 | -7.0 | -20.8 |
| 1-year government bonds (Germany) | -0.45 | -0.48 | 3 | -7.2 | -23.9 |
| 2-year government bonds (Germany) | -0.49 | -0.57 | 8 | -14.5 | -23.8 |
| 10-year government bonds (Germany) | 0.15 | 0.11 | 4 | -47.9 | -3.0 |
| 10-year government bonds (Spain) | 1.44 | 1.53 | -9 | -33.1 | 22.8 |
| 10-year spread (bps) ¹ | 128 | 142 | -14 | 14.3 | 25.3 |
| US | | | | | |
| Fed funds | 0.50 | 0.50 | 0 | 0.0 | 25.0 |
| 3-month Libor | 0.63 | 0.63 | -1 | 1.2 | 35.4 |
| 12-month Libor | 1.21 | 1.18 | 3 | 3.2 | 51.6 |
| 1-year government bonds | 0.58 | 0.60 | -2 | -1.7 | 35.1 |
| 2-year government bonds | 0.72 | 0.77 | -5 | -32.8 | 16.5 |
| 10-year government bonds | 1.77 | 1.73 | 4 | -49.9 | -15.3 |

Spreads corporate bonds (bps)

| | 31-Mar | 29-Feb | Monthly change (bps) | Year-to-date (bps) | Year-on-year change (bps) |
|--------------------------------|--------|--------|----------------------|-----------------------|------------------------------|
| Itraxx Corporate | 73 | 100 | -28 | -4.6 | 16.7 |
| Itraxx Financials Senior | 89 | 108 | -19 | 12.2 | 22.7 |
| Itraxx Subordinated Financials | 201 | 237 | -37 | 45.1 | 65.6 |

Exchange rates

| | 31-Mar | 29-Feb | Monthly change (%) | Year-to-date (%) | Year-on-year change (%) |
|---------|---------|---------|--------------------|---------------------|----------------------------|
| \$/euro | 1.138 | 1.087 | 4.7 | 4.8 | 6.0 |
| ¥/euro | 128.110 | 122.530 | 4.6 | -1.9 | -0.6 |
| £/euro | 0.793 | 0.781 | 1.4 | 7.5 | 9.4 |
| ¥/\$ | 112.570 | 112.690 | -0.1 | -6.4 | -6.3 |

Commodities

| | 31-Mar | 29-Feb | Monthly change (%) | Year-to-date (%) | Year-on-year change (%) |
|---------------------|---------|---------|--------------------|---------------------|----------------------------|
| CRB Commodity Index | 401.2 | 383.6 | 4.6 | 7.1 | -3.3 |
| Brent (\$/barrel) | 38.7 | 35.9 | 7.7 | 8.3 | -27.4 |
| Gold (\$/ounce) | 1,232.7 | 1,238.7 | -0.5 | 16.1 | 4.1 |

Equity

| | 31-Mar | 29-Feb | Monthly change (%) | Year-to-date (%) | Year-on-year change (%) |
|--------------------------|----------|----------|-----------------------|---------------------|----------------------------|
| S&P 500 (USA) | 2,059.7 | 1,932.2 | 6.6 | 0.8 | -0.4 |
| Eurostoxx 50 (euro area) | 3,004.9 | 2,945.8 | 2.0 | -8.0 | -18.7 |
| lbex 35 (Spain) | 8,723.1 | 8,461.4 | 3.1 | -8.6 | -24.3 |
| Nikkei 225 (Japan) | 16,758.7 | 16,026.8 | 4.6 | -12.0 | -12.7 |
| MSCI Emerging | 836.8 | 740.3 | 13.0 | 5.4 | -14.1 |
| Nasdaq (USA) | 4,869.8 | 4,558.0 | 6.8 | -2.7 | -0.6 |
| | | | | | |

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

INTERNATIONAL ECONOMY MR

ECONOMIC OUTLOOK · The

acceleration of global growth receives further support

The world economy's rate of growth will speed up in 2016

to 3.4% (3.1% in 2015). In the main developed countries the business indicators published for 2016 Q1 have reinforced the scenario of stabilisation in growth, as was expected, whereas the wave of negative surprises has eased in the bloc of emerging countries although the delicate situation of some countries, such as Brazil, is still a cause for concern.

The recovery in world growth is supported by various factors in March, particularly the easing of the risk-off episode both in developed countries and in the emerging economies. Lower risk aversion has boosted flows of capital towards the emerging countries which have picked up moderately after several months of sharp drops. Moreover, a more accommodative monetary environment thanks to the measures announced by the ECB and communications from the Fed and Bank of England also favour the expected scenario of a recovery. Lastly the gradual rise in oil prices will relieve financial pressures on several emerging countries whose weakness was being closely watched.

China sets a more moderate economic growth target. For

EMERGING ECONOMIES

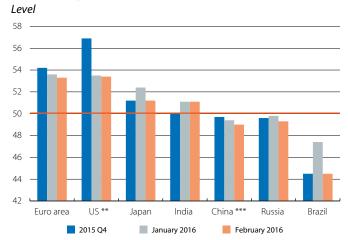
ratio at the beginning of March).

the first time the Chinese government has employed a range to set the growth target for GDP in 2016, placing it between 6.5% and 7.0%. The forecast by CaixaBank Research is towards the lower end of this range, a scenario that appears to be the most plausible given the downward trend in most activity indicators. For example exports fell by a huge 25.4% year-on-year in February, a sharper drop than expected although this was largely the result of calendar effects caused by the change in date for the Chinese New Year. Imports also continued to fall in nominal terms (-13.8% year-on-year in February) even without taking into account the component of energy and metals, hard hit by falling commodity prices. This slump reflects a slowdown in domestic demand in the last few months. Inflation stood at 2.3% in February, 0.5 pps above the figure for January and helped by a strong increase in the food component. Nonetheless this figure is still below the target of 3%, giving monetary authorities margin to maintain

Brazil's worsening recession is confirmed. GDP fell by 5.9% year-on-year in 2015 Q4 (–3.8% for the year as a whole and –4.5% in 2015 Q3), a worse figure than expected. This deterioration has mainly been the consequence of a slump in domestic demand and in particular in investment. Moreover the immediate outlook is still negative and the economy is expected to continue its decline in 2016. The continuation of

expansionary measures (the central bank cut the cash reserve

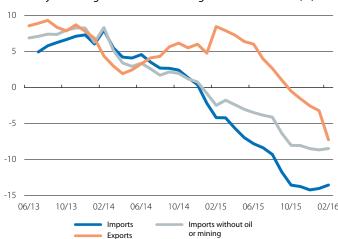
PMI activity indicator *



Notes: * PMI services for advanced countries and PMI manufacturing for emerging countries. ** The ISM index is used for the United States. *** The official PMI is used for China. Source: CaixaBank Research, based on data from Markit, ISM and the National Statistics Office of China.

China: exports and imports *

Year-on-year change in the cumulative figure over 12 months (%)



Note: * Nominal value of imports and exports. **Source:** CaixaBank Research, based on data from the Chinese Customs.

Mexico and Brazil: GDP

Year-on-year change (%)



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

large macroeconomic imbalances (the public deficit went up to 8.2% in 2015 and inflation stood at 10.4% in February) and the institutional impasse faced by the country are complicating the scenario. Potential accusations of corruption against the former president Lula and the uncertainty surrounding the impeachment of Rousseff, whose probability has increased slightly after the party allied to the president left the coalition, are particularly cause for concern. Given the bad end to 2015, the weak start by activity in 2016 and increased political uncertainty, we have revised downwards our growth forecast for this year from -2.8% to -3.4%.

The Turkish economy speeded up in 2015. Turkey's GDP grew by 5.7% year-on-year in 2015 Q4, much more than expected. Annual growth was 4.0% (3.1% in 2014) thanks to dynamic domestic demand. In spite of this acceleration, however, the large macroeconomic imbalances still suffered by the country and sources of political uncertainty, both internal and external, suggest that activity will slow down in 2016.

Oil prices are starting to recover gradually, going above 40 dollars per Brent barrel during most of March. One of the factors behind this upward movement is the confirmation of a meeting between the OPEC countries planned for mid-April, when they will discuss freezing the supply of crude oil. Although volatility will probably remain high, over the coming months we expect the recovery in the price of oil to consolidate over the coming months (55 dollars by the end of 2016, 72 by December 2017), thanks to the recovery in world growth and to the reduction in investment in the main oil-producing countries.

UNITED STATES

The US economy keeps up a good rate of growth. According to the third estimate by the Bureau of Economic Analysis, US GDP grew more than initially estimated in 2015 Q4 (by 0.3% quarter-on-quarter compared with 0.2%), boosted by more solid growth in private consumption. More recent indicators also point to growth in 2016 Q1 being in line with expectations (0.5% quarter-on-quarter) although it is worrying that, in the last few years, first quarter GDP growth has tended to be disappointing due to the figures being badly adjusted for seasonal biases. Given this situation we have maintained our GDP growth forecasts for 2016 (2.1%) and 2017 (2.2%). These are significant growth figures although slightly more moderate than the 2.4% recorded in 2015.

The solid labour market will support growth in 2016.

242,000 jobs were created in February, passing the threshold of 200,000 and above the figure for January. Specifically, since the start of the recovery, the US economy has created more than 12 million jobs, a figure far in excess of the 8 million jobs that were lost between 2008 and 2010. Similarly, in February unemployment remained at the very low figure of 4.9% and the ratio of unemployed people to new jobs has been below the pre-crisis average

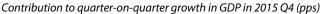
Commodities: oil price *

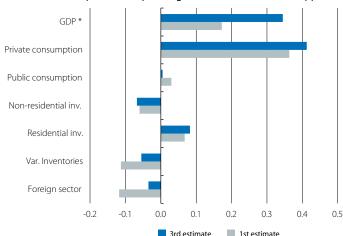


Note: * Brent, one-month forward contracts.

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

US: GDP

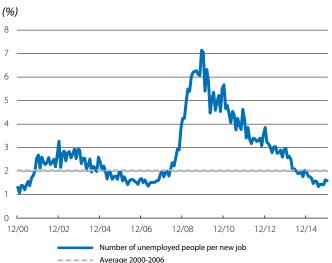




Note: * Quarter-on-quarter change.

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

US: labour market



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

for months now, suggesting a smaller slack in the labour market.

This improvement in the labour market will also encourage wage rises. In February, general inflation in the US stood at 1.0%, 0.4 pps below January's figure due to a larger fall in energy prices (-12.7% year-on-year) than expected. However, over the coming months inflation will pick up notably (to 2.5% by 2017 Q1) partly due to the recovery in oil prices. The solidity of core inflation (2.3% in February) also supports this scenario, as well as the strong improvement in the labour market which will heighten pressure on wages. An intense recovery in the inflation rate could cause some confusion for the Fed's normalisation strategy as, for the moment, its message is very much focused on the current low rate of inflation. In its March communication the Federal Open Market Committee stressed that inflation is still below its long-term target. The most likely scenario is still one of a second interest rate hike (from 0.50% to 0.75%) in September and medium to long term interest rates (interbank and public debt) gradually rising. However, the expected increase in inflation in the second half of 2016 and in 2017 might speed up the recovery in interest rates in the long tranche of the curve.

JAPAN

Japan, the only advanced economy to decline in 2015 Q4.

The GDP figure for 2015 Q4 was revised upwards by 0.1 pps but it nevertheless fell by 0.3% compared with the previous quarter. This figure, which does not alter the growth figure of 0.5% for the whole of 2015, continues to reflect weak private consumption which has continued in 2016 Q1: this fell by 3.1% in January (according to the survey of households) while consumer confidence lost 2.4 points in February. The good news is provided by the foreign sector. Japan achieved a trade surplus in February, boosted by sales to China and the United States, two of its main markets. In particular, exports to China grew by 5.2% year-on-year in nominal terms after falling by 17.4% the previous month, a considerable increase although partly due to the change in dates for the Chinese New Year.

Inflation is still at zero, reflecting weak domestic demand.

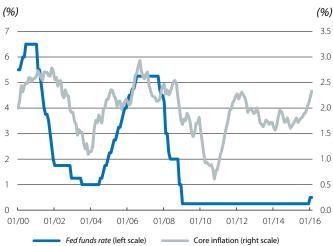
In February the CPI without food but with energy (the benchmark used by the Bank of Japan) posted a zero year-on-year rise, repeating January's figure. However the core CPI (without energy or foods) advanced by 0.8%, 0.1 pps more than in January. Nonetheless we expect inflation to remain close to zero over the coming months. Given this situation, the Bank of Japan will probably increase its rate of asset purchases in 2016 Q2.

US: labour market



Source: CaixaBank Research, based on data from the Bureau of Labor Statistics and the National Federation of Independent Business (NFIB).

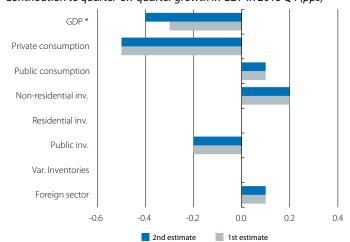
US: core inflation and benchmark interest rate



Source: CaixaBank Research, based on data from Thomson Reuters Datastream and the Bureau of Labor Statistics.

Japan: GDP

Contribution to quarter-on-quarter growth in GDP in 2015 Q4 (pps)



Note: * Quarter-on-quarter change.

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

FOCUS · The fall in China's reserves

After years of relentless growth, by mid-2014 China's international reserves started to diminish steadily, a situation which, should it continue, could affect one of the most important buffers for the Asian country to defend its currency against the volatility dominating the markets. But should we be worried about this fall in the reserves and how reasonable is it to expect this decline to get worse?

Between July 2014 and January 2016 China's reserves fell by 762.32 billion dollars, reaching 3.23 trillion dollars. Part of this fall was due to the valuation effect suffered by the stock of reserves: 1 the depreciation of the euro, the yen and other emerging currencies pushed down the value expressed in dollars although the latter was the predominant currency for the reserves. However, the main factor behind this huge drop in reserves is the capital outflows over the last few months. Neither the considerable limitations that still restrict flows of capital to and from China nor the huge current account surplus of 293.2 billion dollars (equivalent to 2.7% of GDP) in 2015 have been able to offset the net outflows abroad which totalled 637 billion dollars in 2015 and have come close to a trillion dollars since mid-2014.²

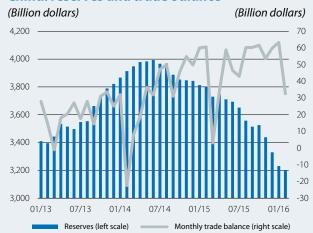
This situation is a cause for concern not only because of the size of the outflows but also because of their acceleration, in spite of the fact that the country's level of reserves is still comfortable according to several measurements used by the IMF. In 2015 China's reserves covered the equivalent of 20 months' imports, a ratio below the 27 months reached in 2009 but still much higher than the 3 months established by the IMF as a benchmark. As a percentage of short-term external debt, the figure, close to 600%, far exceeds the 100% set as a benchmark. The M2 monetary aggregate is the only measurement that considers the size of the country's reserves to be slightly vulnerable: in September 2008 they were equivalent to 28.7% of the M2 aggregate but, since then, have almost halved (down to 15.0% in January 2016), below the 20% set by the IMF as the upper limit of a prudent range. Nonetheless it is worth noting that this last measurement is particularly suitable for economies which, in addition to having a large banking sector, also enjoy a very open capital account, something that is still not the case in China.

1. Calculating the valuation effect as the difference between the stock of reserves according to the People's Bank of China and foreign reserve holdings in the balance of payments, in 2015 one third of the loss of reserves can be put down to this effect: a percentage which has fallen over the last few months.

2. Calculated as the balance of the financial account (excluding reserves) plus errors and omissions. One part of the capital outflow is due to the repayment of debt in dollars held by Chinese firms with local banks (see BIS, Quarterly Review, March 2016, Box 1).

In this respect the first reaction by the Asian giant to these capital outflows has been to increase controls on some of them, which will help to stabilise reserves in the short term but denotes a level of intervention which the government had promised to minimise. In the medium term it is essential to restore confidence in the Chinese economy's growth capacity. This is ultimately the best remedy to retain local capital and attract international investors.

China: reserves and trade balance



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

China: net capital flows *



Source: CaixaBank Research, based on data from the IIF

FOCUS · Why is trade declining in Asia?

The significant drop of 25.4% year-on-year recorded by Chinese exports in nominal terms last February illustrates the deterioration in international trade in emerging Asia. Specifically, and in real terms, this fell by almost 4% in 2015 in contrast to the 0.6% growth posted by total world trade. The pattern of growth from just a few years ago has therefore been broken, when trade in emerging Asian countries grew by an average annual rate of 10.9%, doubling the already solid 5.4% growth enjoyed by world trade (see the first graph). One of the questions raised by this change is whether it is temporary or due to factors of a structural nature.

China joining the World Trade Organization in 2001 represented a watershed for the role played by emerging Asia in international trade. Thanks to its more open stance, a large value chain developed with China at its heart. The high degree of fragmentation of this chain brought about a sharp rise in trade flows between the region's countries³ and emerging Asia's share of total global trade flows, which in the 1990s had hardly grown from 6% to 8%, came close to 17% in 2010. Today the figure is around 19% and reaches 26% if we add the region's advanced economies (such as Japan and Korea), which also form part of this peculiar industrial and commercial structure.⁴

However, just as the boost provided by China was crucial for Asia's growth in trade in the first decade of the millennium, the transformations currently affecting the country go a long way to explaining the commercial slowdown in the region. In particular, Asian trade with China is facing a threefold problem. Firstly, the country has more fully integrated the production chain for its exports, lowering the demand for intermediate inputs from its neighbours. The slowdown in the Asian giant's domestic demand and greater share of the services sector as the country changes its production model are the other two elements resulting in weak Asian trade. This growth in services, much less tradable than the rest of the products, has come close to 11% year-on-year in the last three years compared with 4% for manufacturing (see the second graph).5

According to data from the CPB World Trade Monitor. It only considers manufacturing trade and we have calculated the growth with the average

- for flows of imports and exports by volume.
 2. Annual average between 2000 and 2008 (before the sharp fall in trade).
- 3. For more details on the global Asian value chain see CaixaBank Research: «China, at the heart of «Factory Asia»», MR06/2014.
- 4. According to data from the IMF (DOTS) for exports of goods in current terms (measured in dollars).
- 5. See IIF, «EM Asia: The Trade Engine Has Broken», 11 February 2016.

The structural nature of these three factors suggests that part of the slowdown in growth of Asian trade flows is not temporary. Moreover, in addition to this boom in services the region has also been affected by global financial volatility in the last few months which has been particularly intense in Asia due to doubts regarding China's growth. As this uncertainty diminishes trade flows will pick up again but we should not expect them to achieve the energy of the boom years in 2000-2007.

Trade in goods by volume

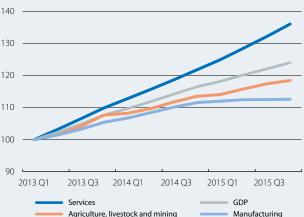
Year-on-year change (%)



Source: CaixaBank Research, based on data from the CPB World Trade Monitor.

China: GDP by supply sector

Index (100 = 2013 Q1)



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

KEY INDICATORS

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

UNITED STATES

| | 2013 | 2014 | 2015 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | 02/16 | 03/16 |
|---|------|-------|---------|---------|---------|---------|-------|-------|-------|
| Activity | | | | | | | | | |
| Real GDP | 1.5 | 2.4 | 2.9 | 2.7 | 2.1 | 2.0 | _ | | _ |
| Retail sales (excluding cars and petrol) | 3.4 | 3.9 | 4.9 | 3.7 | 4.0 | 3.5 | 3.6 | 4.3 | |
| Consumer confidence (value) | 73.2 | 86.9 | 101.3 | 96.2 | 98.3 | 96.0 | 97.8 | 94.0 | 96.2 |
| Industrial production | 1.9 | 3.7 | 3.5 | 1.5 | 1.1 | -0.8 | -0.7 | -1.0 | |
| Manufacturing activity index (ISM) (value) | 53.8 | 55.6 | 53.2 | 52.6 | 51.0 | 48.6 | 48.2 | 49.5 | |
| Housing starts (thousands) | 928 | 1.001 | 978 | 1.158 | 1.158 | 1.135 | 1.120 | 1.178 | |
| Case-Shiller home price index (value) | 158 | 171 | 177 | 179 | 179 | 183 | 186 | | |
| Unemployment rate (% lab. force) | 7.4 | 6.2 | 5.6 | 5.4 | 5.2 | 5.0 | 4.9 | 4.9 | |
| Employment-population ratio (% pop. > 16 years) | 58.6 | 59.0 | 59.3 | 59.3 | 59.3 | 59.4 | 59.6 | 59.8 | |
| Trade balance 1 (% GDP) | -2.9 | -2.9 | -3.0 | -3.0 | -3.0 | -3.0 | -4.0 | | |
| Prices | | | | | | | | | |
| Consumer prices | 1.5 | 1.6 | -0.1 | 0.0 | 0.1 | 0.5 | 1.4 | 1.0 | |
| Core consumer prices | 1.8 | 1.7 | 1.7 | 1.8 | 1.8 | 2.0 | 2.2 | 2.3 | |

Note: 1. Cumulative figure over last 12 months

Source: CaixaBank Research, based on data from the Department of Economic Analysis, Department of Labor, Federal Reserve, Standard & Poor's, ISM and Thomson Reuters Datastream.

JAPAN

| | 2013 | 2014 | 2015 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | 02/16 |
|--|------|------|---------|---------|---------|---------|-------|-------|
| Activity | | | | | | | | |
| Real GDP | 1.4 | -0.1 | -1.0 | 0.7 | 1.6 | 0.7 | _ | |
| Consumer confidence (value) | 43.6 | 39.3 | 40.7 | 41.5 | 40.9 | 42.3 | 42.5 | 40.1 |
| Industrial production | -0.6 | 2.1 | -2.2 | -0.5 | -0.4 | -0.5 | -2.3 | |
| Business activity index (Tankan) (value) | 6.0 | 13.5 | 12.0 | 15.0 | 12.0 | 12.0 | - | |
| Unemployment rate (% lab. force) | 4.0 | 3.6 | 3.5 | 3.3 | 3.4 | 3.2 | 3.2 | 3.3 |
| Trade balance 1 (% GDP) | -2.4 | -2.6 | -1.8 | -1.4 | -1.0 | -0.6 | -0.5 | -0.3 |
| Prices | | | | | | | | |
| Consumer prices | 0.4 | 2.7 | 2.3 | 0.5 | 0.2 | 0.3 | -0.1 | 0.3 |
| Core consumer prices | -0.2 | 1.8 | 2.1 | 0.4 | 0.8 | 0.8 | 0.7 | 0.8 |

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

| | 2013 | 2014 | 2015 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | 02/16 |
|---|------|------|---------|---------|---------|---------|-------|-------|
| Activity | | | | | | | | |
| Real GDP | 7.7 | 7.3 | 7.0 | 7.0 | 6.9 | 6.8 | _ | |
| Retail sales | 15.5 | 12.0 | 10.6 | 10.2 | 10.7 | 11.1 | 10.2 | 10.2 |
| Industrial production | 9.7 | 8.3 | 6.4 | 6.3 | 5.9 | 5.9 | 5.4 | 5.4 |
| PMI manufacturing (value) | 50.8 | 50.7 | 49.9 | 50.2 | 49.8 | 49.7 | 49.4 | 49.0 |
| Foreign sector | | | | | | | | |
| Trade balance 1 (value) | 258 | 383 | 489 | 542 | 577 | 602 | 605 | 577 |
| Exports | 7.8 | 6.0 | 4.6 | -2.2 | -5.8 | -5.1 | -11.4 | -25.4 |
| Imports | 7.3 | 0.4 | -17.6 | -13.5 | -14.3 | -11.6 | -18.6 | -13.8 |
| Prices | | | | | | | | |
| Consumer prices | 2.6 | 2.0 | 1.2 | 1.4 | 1.7 | 1.5 | 1.8 | 2.3 |
| Official interest rate ² (value) | 6.00 | 5.60 | 5.35 | 4.85 | 4.60 | 4.35 | 4.35 | 4.35 |
| Renminbi per dollar (value) | 6.1 | 6.2 | 6.2 | 6.2 | 6.3 | 6.4 | 6.6 | 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.

ECONOMIC OUTLOOK · The

ECB surprises with more accommodative measures

The ECB makes a surprisingly extensive move. On 10 March the ECB announced a new package of measures: interest rate cuts (lowering the Refi rate to 0.00% and the deposit facility rate to –0.40%), enlarging the bond purchase programme (by an extra 20 billion euros a month, up to 80 billion, which would place the ECB's balance sheet at around 3 trillion euros in 2017), including corporate bonds in the purchase programme and holding four new TLTROs which, if certain conditions are met, will be at a negative interest rate. As a whole these actions, more accommodative than expected, intensify incentives to grant loans and reinforce expectations of very low interest rates for a long time to come. Given this situation it is essential to look at the reason for this further accommodation of monetary conditions in the euro area and ultimately their potential economic impact.

The ECB justifies this package of measures as a response to the euro area's worsening macroeconomic situation.

When current forecasts are compared with those previously used by the ECB we can see a notable downward revision of the forecast for inflation and, to a lesser extent, for growth, particularly in 2016. The main reasons given by the institution for this downward adjustment are more acute risks faced by the world economy, higher volatility in financial markets and the euro's appreciation against the currencies of its trading partners as a whole. But is this scenario enough to warrant such ambitious measures of monetary accommodation? First of all we should note that, taking the medium-term view which should also be taken monetary policy, if the ECB's forecasts are accurate, in 2017-2018 the economy will grow at a rate slightly above its potential and growth in inflation will approach more normal rates (1.3% in 2017 and 1.6% in 2018). We must also remember that the ECB's scenario is sensitive to alternative hypotheses concerning oil prices. The forecasts of CaixaBank Research, for example, predict slightly higher growth in 2016 (1.6% compared with 1.4% by the ECB) and a clear recovery in inflation that could reach 2% in 2017 Q1 (partly due to a more dynamic recovery in oil prices).

The effects of the new measures will be noted in the long term. The ECB's forward guidance means that the first reference interest rate hike is unlikely to come before March 2018, a different timescale for the recovery throughout the interest rate curve compared with expectations before the announcement in March 2016. Nevertheless, as interbank rates and public debt cannot fall much further, this is likely to limit the effect of the measures on growth and inflation in the short and medium term, both via credit and also the fiscal savings entailed for countries with large borrowing requirements. The consequences of these measures will

Euro area: ECB forecasts

Annual change (%)

| | | Forecast | | Change compared with December 2015 forecast (pp: | | | | |
|------------------------------|------|----------|------|---|-------|------|--|--|
| | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | | |
| GDP | 1.4 | 1.7 | 1.8 | ▼ 0.3 | ▼ 0.2 | _ | | |
| HICP * | 0.1 | 1.3 | 1.6 | ▼ 0.9 | ▼ 0.3 | _ | | |
| HICP without energy or foods | 1.1 | 1.3 | 1.6 | ▼0.2 | ▼ 0.3 | _ | | |

Note: * Harmonised index of consumer prices.

Source: CaixaBank Research, based on data from the ECB (ECB Staff Macroeconomic Projections).

Euro area: ECB balance sheet *

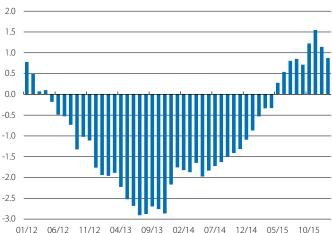
(Billion euros)



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

Euro area: private credit

Year-on-year change (%)



Note: Loans by financial institutions to households and non-financial firms **Source:** CaixaBank Research, based on data from the ECB.

be more relevant for corporate debt, although this is a relatively small market with little capacity to grow in the short and medium term, as well as for certain aspects of the financial markets such as price changes for some assets, and also in reinforcing investor confidence. In summary we expect the ultimate impact on growth and inflation in the euro area to be relatively subdued and not to materialise until 2018-2019.

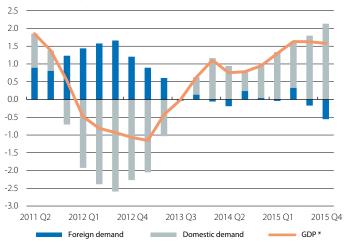
Domestic demand is driving the economic expansion of the euro area. When we move from the medium term, the timescale over which the ECB's measures will take effect, to short-term factors, it can be seen that domestic demand is still the fundamental support for the euro area's recovery. The figures of 0.3% growth quarter-on-quarter and 1.6% year-on-year for 2015 Q4 had already been published, similar to those posted in previous quarters, but the breakdown by component, published recently, confirms that the latest trends are consolidating. In year-on-year terms the contribution made by domestic demand increased (2.1 pps compared with 1.8 pps for Q3), particularly due to the acceleration in investment and public consumption (although private consumption slowed up moderately). This increasing contribution from domestic demand offset the growing negative contribution by the foreign sector (deducting 0.6 pps compared with -0.2 pps in the previous quarter) as a result of larger imports.

Activity rallies in 2016 Q1. The business indicators published throughout the first few months of the year point, on the whole, to growth being somewhat higher than the figure recorded at the end of 2015, a trend that is particularly reflected by supply indicators. The euro area's industrial production increased in January by 1.8% (average yearon-year change over the last three months), 0.2 pps above December's figure thanks to Germany joining the advances recorded in Spain, France and Italy after several months of a slowdown. The composite PMI activity indicator for the euro area also picked up to 53.7 points in March after two months of falls (probably reflecting the financial turbulence in January and February). By component, of note is the improvement in the PMI services indicator up to 54.0 points (53.3 in February) while manufacturing only rose by 0.2 pps to 51.4 points.

Demand indicators underline the recent tone seen in consumption. As we have already mentioned, private consumption ended 2015 with slightly less growth than in previous quarters and demand indicators are confirming a similar trend in the first few months of 2016. Retail sales, although still growing at a faster rate than their historical average, increased by around 2% year-on-year in December and January. We do not expect any major changes in the coming months although the expectations component of the consumer confidence indicator fell very slightly in March. In short, consumption is growing but not accelerating.

Euro area: GDP

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



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

Euro area: PMI activity indicators



Source: CaixaBank Research, based on data from Markit.

Euro area: consumption indicators



Source: CaixaBank Research, based on Eurostat data

The euro area's economic recovery can be seen in its improved labour market. Employment rose by 0.3% in 2015 Q4, the same rate as in Q3, while unemployment fell to 10.3% in January, its lowest level since August 2011. Labour costs increased by 1.6% year-on-year in 2015 Q4, 0.1 pps more than the same period a year ago. The low inflation rate seems to be moderating wage increases, especially in Germany where wage costs rose by 1.6%, a slightly lower rate than in 2014 Q4 although its labour market is close to full employment.

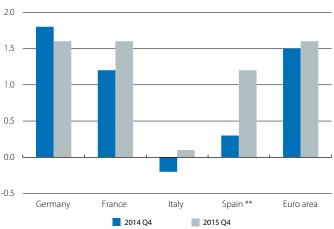
Inflation continues in negative terrain in March. The general HICP shrank by 0.1% year-on-year in March, somewhat less than the previous month (–0.2%). This decline in the general level of prices was particularly due to the larger drop in the energy component in response to falling oil prices. This factor has been the main reason why the consensus of analysts have lowered their inflation forecasts for 2016, reduced by more than 1 pps in less than six months down to 0.3% in spite of the stability observed in core inflation at around 1%. However, at CaixaBank Research we expect the price of oil to recover as from 2016 Q3, a little earlier than most institutions, and thereby push up inflation.

The extent of the refugee crisis and the UK's potential exit from the EU; internal risk factors over the coming months.

The rate of asylum applications recorded by the EU in January and February was similar to last year (in 2015 more than 1.25 million applications were registered). In March the European Council reached an agreement with Turkey in an attempt to reduce the flow of illegal immigrants. The main measure consists of returning to Turkey all illegal immigrants arriving in Greece in exchange for accepting the same number of Syrian refugees who are currently in Turkey. This agreement, the first far-reaching decision taken by the EU in the crisis, is nevertheless complicated to implement, especially in Greece although also in some EU countries that do not want to accept large numbers of refugees and might block decisions in the EU over the coming months. Immigration is also a conflictive issue in the debate regarding whether the UK should remain in the EU. The possibility of a Brexit is fuelling uncertainty, pushing down the value of the pound sterling over the last few weeks. The economic consequences of a Brexit are difficult to evaluate as the exact relationship the UK would have with other EU member states is not clear, nor how long it would take to establish such a relationship. However the costs during the transition period could be significant for the British economy.

Euro area: hourly wage costs *

Year-on-year change (%)



Notes: * Data seasonally adjusted. ** Upswing in 2015 Q4 because 25% of the extraordinary pay from 2012 was refunded to civil servants.

Source: CaixaBank Research, based on Eurostat data.

Euro area: trend in the inflation forecast for 2016 by the consensus of analysts

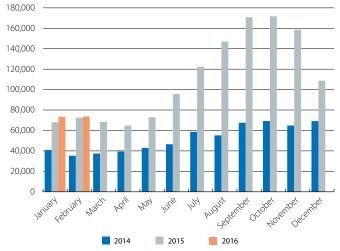
Year-on-year change (%)



Source: CaixaBank Research, based on data from Consensus Forecasts

European Union: asylum applications

Monthly number



Source: CaixaBank Research, based on Eurostat data

FOCUS · Does the euro area have an investment problem?

In 2015 the rate of growth for investment in the euro area accelerated to 3.1%. But from a slightly broader perspective investment has yet to return to the levels reached before the crisis and the underlying trend is weaker than in other recoveries. This has led several international institutions (the IMF, OECD and the European Commission) to suggest that measures should be taken to encourage investment. With the aim of evaluating to what extent there are reasons to be concerned, we will analyse why investment is less dynamic than usual.

The relative share of investment in the euro area went from 19.8% of GDP in 1996 to 22.3% in 2007, a peak that had still not been repeated in 2015 in spite of gains being recorded as from 2013. To a large extent this trend is due to fluctuations in investment in construction which includes the excesses committed before the crisis. Gross fixed capital formation, excluding construction, saw a more stable trend of 8.2% of GDP in 1996 up to 10.4% in 2008, another peak that has yet to be repeated. It is important to note that not all the components of investment have behaved equally: investment in intellectual property rights has grown steadily, even during the crisis years (at an annual rate of 8% on average and reaching 3.85% of GDP in 2015) while the level of machinery and capital goods investment has remained at around 6% of GDP throughout the period and has even lost share as a percentage of the total investment.¹

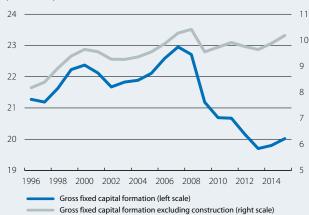
Several structural changes in the euro area economies explain why investment requirements have altered. The growing importance of the services sector in detriment to industry has altered the composition of the production structure and has reduced investment requirements as the former is less investment-intensive than the latter. According to the OECD, in countries such as Italy and France this change has led to a reduction in investment requirements of around 0.5 pps in the ratio of investment to GDP between 1997 and 2013. Globalisation has also led to a larger proportion of world investment going to emerging economies over the same period. An increase in investment abroad can equally reduce the need to invest in the country (the substitution effect) or increase it (the complementary effect) but the impact has not been the same for all countries (more substitution in the United Kingdom and more complementary in Germany, for example).2

Technological change has also pushed investment towards intangible capital and ICTs, reducing the need to invest in physical capital, as we have seen. Higher investment in intangibles is important as it is associated with higher economic growth per capita³ but it should be noted that not all intangibles are measured in the national accounts (R&D expenditure and software are included but not advertising or training, for instance) and are therefore undervalued. In addition to this undervaluation of investment is the fact that falling technology prices mean that investment in ICTs can increase in real terms while investing the same resources in nominal terms.

In summary, various structural factors affect investment and show that it is not easy to determine whether the current level of investment is low. In any case it is important to analyse the trend in investment over the longer term while also taking its composition into account.

Gross fixed capital formation





Source: CaixaBank Research, based on Eurostat data.

Gross fixed capital formation by component *Index* (100 = 1999)

130

120

% of GFCF (2015): 19.2

110

90

80

70

1996 1998 2000 2002 2004 2006 2008 2010 2012 2014

Intellectual property rights

Machinery and equipment

Construction

Source: CaixaBank Research, based on Eurostat data

3. See Corrado et al. (2012), «Intangible Capital and Growth in Advanced Economies: Measurement Methods and Comparative Results», IZA DP 6733.

^{1.} Investment in machinery and equipment has gone from accounting for 67% of the total investment in 1996-2000, excluding construction, to accounting for 62% in 2010-2015.

^{2.} See the Bank of Spain, «La debilidad de la inversión empresarial en las economías desarrolladas», *Boletín Económico*. no. 57, July-August 2015 and OECD, «Lifting investment for higher sustainable growth», *OECD Economic Outlook*, Volume 2015/1, Chapter 3.

FOCUS · The macroeconomic impact of **QE**

One year after the start of its quantitative easing programme (QE), the ECB has decided to extend it based, among other reasons, on the fact that QE is fulfilling its task of stimulating the economy. In previous Focus articles we have seen how the programme's implementation has gone as the ECB planned.¹ We will now analyse the macroeconomic impact of the programme to answer the following questions: does QE work and does it need to be extended?

The most immediate effect of the announcement and implementation of QE as from the first quarter of 2015 has been downward pressure on interest rates. This has reduced the cost of credit for companies and households and has depreciated the euro against the euro area's main trading partners. QE therefore stimulates the economy both by boosting domestic demand and also by making European exports more competitive in the rest of the world.

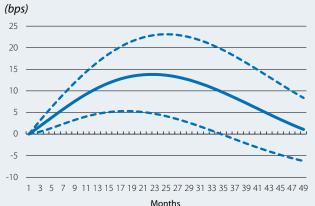
To quantify the macroeconomic effect of QE we exploited the historical relations between the rate of growth in GDP and the ECB's benchmark interest rate to calculate the impact of monetary accommodation.² As can be seen in the graph, according to our calculations a 25 bps drop in the interest rate produces a gradual increase in the GDP growth rate up to a maximum of around 13.75 additional bps after about two years. How can we extrapolate this figure to estimate the repercussion of QE? After the ECB's meeting on 3 December 2015, Mario Draghi revealed that the results achieved with QE were equivalent to what would have been produced by cutting the Refi rate by 100 bps. Extrapolating the estimated figures, our calculations indicate that QE may add 55 bps to the yearon-year growth rate in GDP at the end of 2017 (the cumulative effect would place GDP 1% higher). However, although the effect of QE on the economy may be equivalent to a reduction in the Refi rate of 100 bps, the measures used to achieve this impact have gone much further. As we saw in a previous Focus,3 the so-called «shadow interest rate» summarises the unconventional measures in an interest rate equivalent to the Refi rate. In fact, it suggests that QE would have resulted in amonetary expansion equivalent to a 380 bps reduction in the Refi rate. The data may therefore suggest that, in the current environment, a 380 bps reduction in the Refi rate has the same macroeconomic impact as a reduction of just 100 bps in normal times.

1. See the Focus «QE: the ECB is going shopping» in MR12/2015. 2. For our estimate we have used a vector autoregression model with the year-on-year growth rate for quarterly GDP, year-on-year core inflation and the shadow interest rate between December 1999 and December 2015. 3. See the Focus «Discovering monetary policy in the shadow» in MR02/ 2016.

One possible explanation for this discrepancy is that the transmission of monetary policy weakens when interest rates are already very low. For example, at current levels the cost of credit for companies and households cannot fall much further without compromising the solvency of banks, which are key in the transmission of monetary policy. It is also possible that the financial volatility with which the programme has coexisted has made it less effective.

In short, our estimates show has QE has a significant positive impact. However, they also indicate that the effect on the economic level is not immediate and the maximum impact appears after about two years. It is therefore important for the ECB and markets to be patient and give the measures time to take effect. Answering our initial questions, QE is capable of providing a strong boost for activity but precisely for this reason it is important to give the economy enough time to absorb the considerable easing of monetary policy occurring in 2015.

GDP growth: response to a 25 bps fall in the interest rate



Note: The dotted lines represent an 80% confidence interval. Source: CaixaBank Research.

QE: changes in selected macro variables

| Changes observed | Benchmark period | Change |
|------------------------------|-----------------------|-----------|
| Real effective exchange rate | Dec. 2014 - Feb. 2016 | -6.80% |
| Cost of credit * | | |
| Periphery | Dec. 2014 - Jan. 2016 | -47% |
| Core | Dec. 2014 - Jan. 2016 | -23% |
| Own estimates | | |
| ΔGDP ** | Jan. 2016 - Dec. 2017 | 97.44 bps |

Notes: * Core includes Belgium, Germany, Netherlands, France and Austria; periphery includes Spain, Ireland, Italy and Portugal. ** Response according to a VAR model Source: CaixaBank Research, based on data from the ECB.

4. An internal analysis by the ECB itself points to similar effects: a 1% increase in GDP between 2015 and 2017 and a 50 bps increase in inflation in 2016 and 33 bps in 2017.

EUROPEAN UNION MR04

KEY INDICATORS

Activity and employment indicators

Values, unless otherwise specified

| | 2014 | 2015 | 2015 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | 02/16 | 03/16 |
|--|-------|-------|---------|---------|---------|---------|-------|-------|-------|
| Retail sales (year-on-year change) | 1.2 | 2.5 | 2.4 | 2.5 | 3.1 | 2.0 | 2.0 | | |
| Industrial production (year-on-year change) | 0.8 | 1.6 | 1.6 | 1.4 | 2.0 | 1.3 | 2.8 | | |
| Consumer confidence | -10.2 | -6.2 | -6.2 | -5.2 | -7.0 | -6.4 | -6.3 | -8.8 | -9.7 |
| Economic sentiment | 101.5 | 104.2 | 102.5 | 103.6 | 104.4 | 106.2 | 105.0 | 103.9 | 103.0 |
| Manufacturing PMI | 51.8 | 52.2 | 51.4 | 52.2 | 52.2 | 52.8 | 52.3 | 51.2 | 51.4 |
| Services PMI | 52.5 | 54.0 | 53.5 | 54.1 | 54.0 | 54.2 | 53.6 | 53.3 | 54.0 |
| Labour market | | | | | | | | | |
| Employment (people) (year-on-year change) | 0.6 | 1.0 | 0.9 | 0.9 | 1.0 | 1.2 | | | |
| Unemployment rate: euro area (% labour force) | 11.6 | 10.9 | 11.2 | 11.0 | 10.7 | 10.5 | 10.3 | | |
| Germany (% labour force) | 5.0 | 4.6 | 4.8 | 4.7 | 4.6 | 4.4 | 4.3 | | |
| France (% labour force) | 10.3 | 10.4 | 10.4 | 10.4 | 10.5 | 10.1 | 10.2 | | |
| Italy (% labour force) | 12.6 | 11.9 | 12.3 | 12.2 | 11.5 | 11.5 | 11.5 | | |
| Spain (% labour force) | 24.5 | 22.1 | 23.1 | 22.5 | 21.7 | 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 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | 02/16 |
|---|-------|------|---------|---------|---------|---------|-------|-------|
| Current balance: euro area | 2.5 | 3.2 | 2.7 | 3.0 | 3.1 | 3.2 | 3.2 | |
| Germany | 7.3 | 8.5 | 7.6 | 8.0 | 8.3 | 8.5 | 8.4 | |
| France | -0.9 | -0.1 | -0.5 | 0.1 | 0.2 | -0.1 | -0.2 | |
| Italy | 1.9 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | |
| Spain | 1.0 | 1.4 | 1.1 | 1.3 | 1.4 | 1.4 | 1.4 | |
| Nominal effective exchange rate 1 (value) | 101.8 | 92.3 | 93.0 | 91.1 | 92.7 | 92.4 | 93.5 | 94.7 |

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

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 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | 02/16 |
|--|------|------|---------|---------|---------|---------|-------|-------|
| Private sector financing | | | | | | | | |
| Credit to non-financial firms 1 | -2.6 | -0.2 | -0.8 | -0.4 | 0.1 | 0.4 | 0.6 | 0.9 |
| Credit to households 1, 2 | -0.1 | 0.8 | 0.2 | 0.5 | 1.0 | 1.3 | 1.4 | 1.6 |
| Interest rate on loans to non-financial firms ³ (%) | 2.0 | 1.6 | 1.7 | 1.6 | 1.5 | 1.5 | 1.4 | |
| Interest rate on loans to households for house purchases 4(%) | 2.6 | 2.1 | 2.2 | 2.0 | 2.1 | 2.0 | 2.0 | |
| Deposits | | | | | | | | |
| On demand deposits | 6.0 | 11.5 | 9.7 | 11.8 | 12.4 | 11.9 | 11.3 | 11.2 |
| Other short-term deposits | -2.0 | -3.9 | -3.1 | -4.0 | -4.7 | -3.9 | -2.7 | -2.5 |
| Marketable instruments | -7.2 | 3.1 | 3.9 | 5.7 | 2.0 | 0.7 | -1.5 | -1.1 |
| Interest rate on deposits up to 1 year from households (%) | 1.3 | 0.8 | 1.0 | 0.9 | 0.7 | 0.7 | 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.

SPANISH ECONOMY

ECONOMIC OUTLOOK · Spain:

from recovery to expansion

Economic growth is gradually maturing with figures that, over the next few quarters, will be slightly lower than those observed in the last year but which will support more balanced growth in economic activity. This changing pattern can already be glimpsed in the figures for 2016 Q1. According to the CaixaBank Research forecast model, the guarter-onquarter growth rate stood at 0.7% in 2016 Q1, only 0.1 pps below the rate recorded in 2015 Q4. Domestic demand continues to dominate most of this growth, boosted by household consumption and investment although the foreign sector is also gradually coming back to the fore. Also of note is the fact that this slowdown is due to the gradual but expected disappearance of the tailwind effects that boosted growth in 2015 such as falling oil prices and the euro's depreciation. This slowdown is therefore occurring as expected in spite of the recent episode of financial turbulence at the beginning of the year and, on the domestic front, the lack of an agreement to form a government.

Business indicators consolidate at levels typical of an advanced phase in the cycle. Particularly of note are the PMI indices, both for services and manufacturing. For months now both have remained at levels clearly above 50 points, the threshold from which positive growth rates are normally seen. These indices have fallen slightly in the last two months, however, a movement that is in line with the gradual but expected slowdown in the rate of growth. This pattern can also be seen in the industrial production index, down in January to 3.2% after remaining close to 4.0% during the second half of 2015. Another indicator that reflects how, little by little, the Spanish economy is entering a more mature phase of the economic cycle is industrial capacity utilisation which stood at 77.8% in 2015 Q4, a similar figure to the average value posted between 2000 and 2008.

The real estate sector is making headway and starting to get back to normal. All indicators for the real estate sector show a markedly upward trend, both in activity and prices. Of note is the strong growth in new building permits, in December totalling almost 50,000 in cumulative terms over 12 months. Although this figure represents growth of 43% in year-on-year terms, it is worth noting that the level is still low, especially when compared with the figures achieved before the recession. Indicators for price and demand also report notable increases. Sales increased by 9.8% in January (cumulative over 12 months) and the number of mortgages on residential properties rose by 10.6% in the same month. The price index of the Spanish statistics institute (INE) advanced by 4.2% year-on-year in 2015 Q4 and the bulk of the evidence available suggests that this trend will gain traction in 2016 (see the Focus «What does the price of land tell us about the future trend in house prices?» for a more

GDP





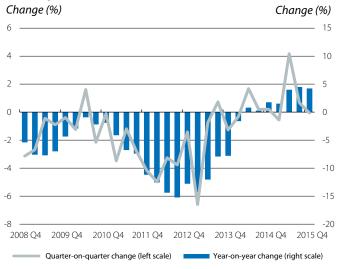
Source: CaixaBank Research, based on INE data

Activity indicators



Source: CaixaBank Research, based on data from Markit

House prices



Source: CaixaBank Research, based on INF data

detailed analysis of the expected growth in house prices over the next few years).

Domestic demand weakens but is still growing at a high rate. The strong push provided by demand, and especially by household consumption, is the result of both greater confidence in the economy's growth capacity and also the improved labour market. With regard to the first factor, the recent trend in consumer confidence is particularly important, remaining high although falling slightly in the first two months of the year. We should also remember that the figure recorded for December was an historical high. Vehicle sales and sales by large firms are also a good indication of the dynamism currently enjoyed by household consumption. Specifically, vehicle sales grew by 15.1% year-on-year in February (the average for the last three months) while sales by large firms increased by 3.2% in January. In both cases these figures are slightly lower than those from the second half of 2015 but are still at levels compatible with a notable advance in household consumption.

The solid recovery in the labour market will continue to support domestic demand. The labour market's support for the recovery in demand is particularly due to the good rate of job creation. In the last two years almost one million jobs have been created or, put another way, the number of registered workers affiliated to Social Security has increased by 2.4% on average. In the month of February this rate stood at 3.0%, a figure that will probably fall to 2.0% over the coming months up to December but, once again, the year will still end with more than 400,000 jobs being created. This solid recovery in the labour market is partly due to wage moderation which has helped Spanish firms to gain in competitiveness. The upswing in the year-on-year growth in wage costs in 2015 Q4 might therefore come as some surprise, reaching 0.9% (0.1% in Q3). However, it is important to note that this was largely the result of the refund of 25% of civil servants' extraordinary pay and was not due to any change in the underlying trend in wages.

Household consumption is also being helped by low oil prices. The energy component has a share of 11.4% in the basket of consumer goods for Spanish households and the drop in oil prices therefore has a direct impact on their purchase capacity. Although, on the whole, the price of non-energy goods (core inflation) has been growing at a rate close to 1.0% for the last two quarters, the sharp drop in oil prices means that the general CPI has a negative year-on-year change rate. Specifically, in March it remained at -0.8%. Over the coming months the general inflation rate will remain in negative terrain as a reflection of weak oil prices, but in the second half of the year it will embark on a rapid upward trend and will go above 2% by 2017 Q1.

Expansionary fiscal policy, crucial for the growth in domestic demand in 2015, will be very difficult to maintain. At the end of 2015 the public deficit was above the target

agreed with Brussels, standing 1.0 pps higher at 5.2% of GDP.

Consumer confidence

Quarterly average



Source: CaixaBank Research, based on European Commission data

Hourly wage costs *

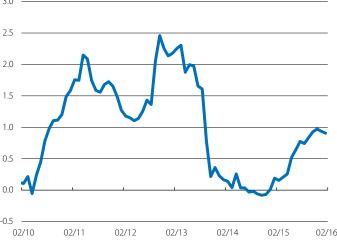
Change (%)



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

Core CPI

Year-on-year change (%)



Source: CaixaBank Research, based on INE data.

2015 O1

2015 O3

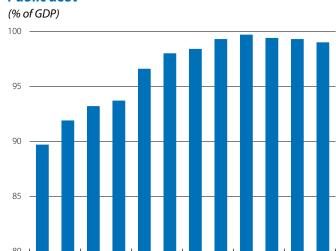
2014 O3

It is worth noting that this deviation occurred in a year in which growth was clearly higher than expected at the time the budget was approved, unlike the deviations that occurred in the toughest years of the economic and financial crisis, which the European Commission is more than likely to bear in mind. In fact, the strong growth in economic activity in 2015 would have brought the public deficit close to the target agreed with Brussels if fiscal policy had been neutral, so we can assume that fiscal policy was clearly expansionary last year. This is a support which the Spanish economy cannot count on over the coming years if it wants its public debt to embark on a markedly downward path.

The foreign sector, a fundamental factor that has constantly supported growth. Although, in net terms, the contribution made by the foreign sector to growth was negative in 2015, exports maintained a considerable growth rate. Specifically, real exports of goods and services grew by 5.4% for the year as a whole. This figure is particularly noteworthy when we remember that world trade slowed down and the growth rate of Spain's main trading partners, European countries, was slightly lower than expected. The fundamental trends are prevailing in 2016. In particular, nominal exports of goods grew by 5.0% year-on-year in January (cumulative over three months), largely boosted by growing demand in the euro area. However, the strong growth enjoyed by imports, up by 4.7% in the same month, means that the foreign sector's contribution in net terms is still small.

The improvement in the economic cycle can also be seen in the trend in credit, as shown by the decrease in the NPL ratio recorded during the last year, namely 2.4 pps, falling to 10.1%. This is particularly due to the considerable reduction in NPLs to developers, of 8.7 pps, and to construction, of 2.6 pps, although this downward trend has been widespread. Improved economic activity, together with low interest rates, will help the NPL ratio to continue falling over the coming months, a key factor for the growth in credit to consolidate.

Public debt



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

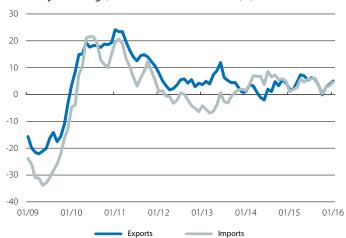
International trade of goods *

2013 03

2013 O1

Year-on-year change, cumulative over 3 months (%)

2014 01



Note: * Nominal data.

Source: CaixaBank Research, based on data from the Customs Department

Credit and NPL ratio in 2015 Q4

| | Credit balance (billion euros) | Year-on-year change (%) | NPL ratio (%) |
|--------------------------|--------------------------------|----------------------------|---------------|
| Households (housing) | 552 | -4.8 | 4.9 |
| Households (consumption) | 112 | 1.3 | 9.1 |
| Productive activities | 644 | -4.4 | 14.6 |
| Construction | 44 | -11.7 | 30 |
| Development | 135 | -10.1 | 27.5 |
| Services | 337 | -2.2 | 8.9 |
| Industry | 110 | -1.6 | 10.9 |
| Agriculture | 18 | 2.3 | 10.1 |
| Total * | 1,308 | -4.1 | 10.1 |

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

FOCUS · The labour force in perspective

The labour force depends on two factors: the working age population and the percentage of this that is active (the participation rate). Recent dynamics in both variables by demographic group (nationality, age and gender) help us to understand the reduction in the labour force and to project its trend over the medium term.

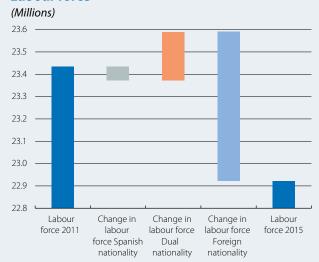
A breakdown of the reduction in the labour force between 2011 and 2015 by nationality (see the first graph) reveals the sharp fall in foreign workers while Spanish workers saw a slight decline and those with dual nationality an increase. However, this slight reduction in the Spanish labour force hides a highly disparate trend depending on gender and age (see the second graph). The smaller share of younger generations caused the drop in the labour force in the age range between 25 and 341 while the participation rate of the group aged between 16 and 24 fell significantly, which would be positive if, subsequently, this led to a more highly trained labour force. This withdrawal among the younger labour force was offset by a rise in older members, increasing because the population volume for this age range also increased, as well as the participation rate of women aged over 35 and men aged over 55.

Based on population projections by the INE and three different hypotheses on the participation rate, we can estimate three scenarios for the trend in the labour force over the next five years (see the third graph).2 The first assumes that participation rates remain stable at the levels of 2015. As a result of the ageing population, the labour force would shrink by more than 800,000 people up to 2020. The second scenario assumes a slight increase in the participation rate of middle aged women and especially a rise in the participation rate of individuals over 55, bringing it close to the pattern observed in other euro area countries. This scenario, which we believe to be the most plausible, would lead to an increase in the labour force 400,000 people. The third scenario assumes larger increases in the participation rate and, consequently, the labour force. From this exercise we can see that, in spite of the share of the young population decreasing, the increases expected in the participation rate of the older groups, especially among women, will ensure that the labour force will continue to grow in the medium term.

1. Emigration barely contributed to this reduction.

2. In the three scenarios, the change in the population aged over 16 between 2015 and 2020, of 100,000 people in total, is based on INE projections. The hypotheses for the participation rate have been produced using a total of 30 groups in the analysis: comparing five age ranges (16-24, 25-34, 35-44, 45-54 and 55+), three nationalities (Spanish, dual and foreign) and two genders (male and female).

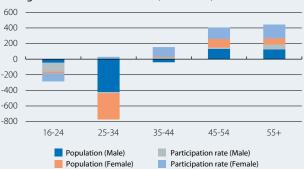
Labour force



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

Breakdown of the change in the Spanish labour force *

Change between 2011 and 2015 (thousands)

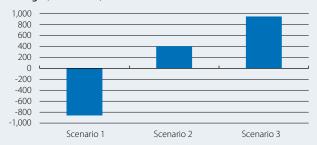


Note: * LF_{2015} - $LF_{2011} = PR_{2015}$ (P_{2015} - P_{2011}) / $100 + P_{2011}$ (PR_{2015} - PR_{2011}) / 100), where LF denotes the labour force, P is the population aged over 16 and PR the participation rate. The first factor is the effect of the changes in P and the second, in PR. This has been calculated by age group and gender.

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

Change in the labour force between 2015 and 2020 *

Change (thousands)



Note: *In the three scenarios, it is assumed that the population aged 16 and over increases by 100,000 between 2015 and 2020, according to the projections by INE. In scenario 1 it is assumed that the participation rate by group remains the same in 2020 as in 2015. In scenario 2 the participation rate of Spanish females aged 45-54 rises by 3 points and of those over 55 by 7 points, except for dual nationals. In scenario 3 the increases in the participation rate of these groups are 5 and 10 points respectively, and the group of women aged between 35 and 44 also increases by 3 points.

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

FOCUS · The rise in exports of non-tourism services

The good trend in service exports is one of the factors behind the improvement seen in the current account balance in the last few years. Although it is true that tourism has been a key factor, the role played by exports of the rest of services, which we will look at here, has also been notable.

Since 2003 exports of services not related to tourism have almost doubled, thereby increasing their share in service exports overall. The trend in the ICT sector has been particularly positive, increasing threefold, as well as business services such as consultancy and R&D. These sectors, together with those related to transport, accounted for more than 80% of the exports of nontourism services in 2015 (see the first graph). Business services have done particularly well compared with other countries: according to a report by the European Federation of Management Consulting Associations (FEACO), ¹ Spanish consultancies provide the largest percentage of their services abroad; 30% compared with 8% by Italy and France and 19% by the UK, mainly for services provided in Latin America.

A more detailed analysis of the main characteristics of the sectors driving growth in exports of non-tourism services reveals the positive impact this phenomenon is having on the economy as a whole. To begin with, we will look at two features: productivity² in the different sectors and the average size of firms in each one. On the whole the productivity of non-tourism services is 30% lower than for industry but if we look at those sectors where the majority of exports of non-tourism services are concentrated, their productivity is comparable to that of industry. Specifically, productivity of those sub-sectors with a higher export intensity³ double the productivity of the sectors exporting the least.

Company size is another of the key factors behind exports of non-tourism services, as it also happens in industry. In the case of services, factors such as reputation, vital in order to be competitive in the international market, are usually associated with larger firms. The evidence in this area is overwhelming: in the sub-sectors of the more export-intense services, the share of companies with over 100 workers is 80% higher than in the rest of the sectors.4

The companies that are leading this rise in exports of non-tourism services are therefore larger in size and

1. FEACO (2015), «Survey of the European Management Consultancy Market 2014/15».

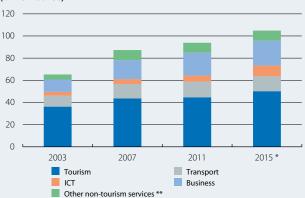
2. Productivity is defined as value added at factor cost per employee.

more productive. Given such characteristics it comes as no surprise that the impact this phenomenon is having on the labour market is clearly positive. As can be seen in the second graph, in those sectors where export intensity is the highest, the average wage for workers is also higher.

In summary, the Spanish economy has been able to boost exports of non-tourism services in the last few years. It would be beneficial for this good trend to consolidate in the coming years, both due to the need to correct the country's external imbalance and also due to the positive effects it has on Spain's labour market.

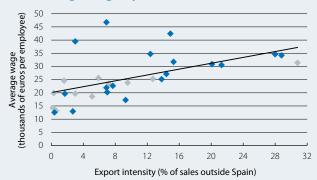
Exports of services





Notes: * Cumulative figures over four quarters, up to 2015 Q3. ** Includes construction, intellectual property, insurance and pensions, financial, governmental and personal services. Source: CaixaBank Research, based on data from the Bank of Spain.

Relationship between export intensity and average wage by sector (2013)



Note: Each dot represents one sector. The blue dots are sectors with an above-average share of large firms (+100 employees); the grey dots are sectors with a lower share Source: CaixaBank Research, based on INE data (Anual Services Survey and Central Business

4. We have classified sectors in the upper tercile as higher intensity and those in the lower tercile as lower intensity.

^{3.} Export intensity is defined as sales outside Spain compared with total sales.

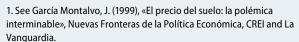
FOCUS · What does the price of land tell us about the future trend in house prices?

The price of land fundamentally depends on the expected price of housing and the construction costs. It therefore provides extremely valuable information about the expected trend in house prices in the short and medium term¹ and now that we are witnessing a significant change in trend in house prices, the information provided by an analysis of land prices has become even more useful.

Historical data on land and house prices in Spain show a very close correlation between both variables, to the extent that the price of the former determines 92% of the variability in the price of the latter one year later (see the first graph). After the adjustment that began in 2007, the price of land reached its lowest level in 2014 Q1 and posted its first positive year-on-year growth figure at the end of 2014. House prices, however, bottomed out later and did not start to post even slightly positive growth rates until 2015 Q2. Given that the price of land grew by 4.5% in 2015, and assuming its historical relationship with house prices is still in play, we estimate that the latter will rise by around 3% in 2016 for the whole of Spain.

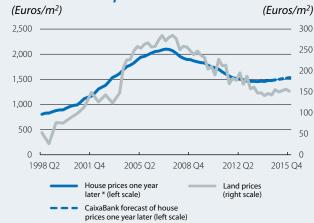
However, the heterogeneous nature of the trend in land prices between provinces observed in 2015 suggests that the trend in house prices will continue to be disparate in 2016. In particular, in those areas where more than 10% growth in land prices has been seen (such as Madrid, Vizcaya and the Balearic Islands), and given the relationship between both land and house prices at the level of province, house prices could increase, on average, by 4% in 2016. On the other hand the price of land fell in 24 of the 50 provinces in 2015, suggesting that house prices in these areas might continue to adjust in 2016. This is the result of the difference between provinces in the stock of new residential properties available for sale: provinces with a lower stock of homes are seeing larger increases in land prices and we therefore expect them to also see larger increases in house prices this year.

In conclusion, the recent trend in land prices points to house prices gaining traction in the coming quarters although the speed of their recovery will remain disparate between the different provinces in the short and medium term.



^{2.} The estimated equation is $House \, price_t = a + \beta \, Land \, price_{t-4} + \mu_t$. Quarter-on-quarter data since 2004 Q1.

Land and house prices

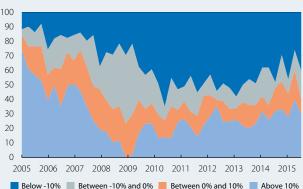


Note: * For example, the house price in the graph for 2014 Q3 refers to the house price observed in 2015 O3.

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

Growth in land prices * by province

(% of all provinces)

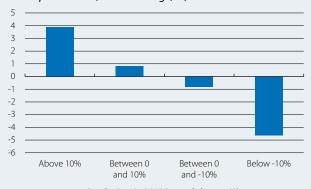


Note: * Year-on-year change in the price of land in nominal terms.

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

Land prices in 2015 and house prices in 2016

House prices 2016 (annual change, %)



Land prices in 2015 (annual change, %)

Projected house prices based on land prices

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

KEY INDICATORS

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

Activity indicators

| | 2014 | 2015 | 2015 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | 02/16 | 03/16 |
|--|------|------|---------|---------|---------|---------|-------|-------|-------|
| Industry | | | | | | | | | |
| Electricity consumption | -0.1 | 1.6 | 1.3 | -0.1 | 2.5 | 2.5 | -3.2 | -1.0 | |
| Industrial production index | 1.3 | 3.3 | 1.5 | 3.5 | 4.0 | 4.2 | 3.2 | | |
| Indicator of confidence in industry (value) | -7.1 | -0.3 | -3.2 | 0.9 | 0.7 | 0.3 | -1.3 | -2.7 | -1.6 |
| Manufacturing PMI (value) | 53.2 | 53.6 | 54.4 | 54.8 | 52.8 | 52.5 | 55.4 | 54.1 | |
| Construction | | | | | | | | | |
| Building permits (cumulative over 12 months) | -7.7 | 20.0 | 12.1 | 17.0 | 19.7 | 31.1 | 42.6 | | |
| House sales (cumulative over 12 months) | -5.6 | 10.7 | 8.9 | 10.2 | 12.2 | 11.5 | 9.8 | | |
| Services | | | | | | | | | |
| Foreign tourists (cumulative over 12 months) | 7.2 | 5.6 | 6.6 | 5.9 | 5.0 | 4.8 | 5.4 | 5.8 | |
| Services PMI (value) | 55.2 | 57.3 | 56.7 | 58.3 | 58.1 | 55.9 | 54.6 | 54.1 | |
| Consumption | | | | | | | | | |
| Retail sales | 1.0 | 3.0 | 2.6 | 2.8 | 3.3 | 3.4 | 3.7 | 3.9 | |
| Car registrations | 18.4 | 21.3 | 31.4 | 13.6 | 23.1 | 17.1 | 12.2 | 12.6 | |
| Consumer confidence index (value) | -8.9 | 0.3 | -0.6 | 1.6 | -1.3 | 1.6 | -0.9 | -1.4 | -5.1 |

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

Employment indicators

| | 2014 | 2015 | 2015 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | 02/16 |
|---|------|-------|---------|---------|---------|---------|-------|-------|
| Registered as employed with Social Security | ,1 | | | | | | | |
| Employment by industry sector | | | | | | | | |
| Manufacturing | 0.1 | 2.2 | 1.5 | 2.2 | 2.4 | 2.7 | 3.0 | 2.9 |
| Construction | -1.6 | 4.7 | 4.6 | 5.6 | 4.6 | 4.1 | 3.3 | 2.7 |
| Services | 2.2 | 3.5 | 3.5 | 3.7 | 3.5 | 3.4 | 3.2 | 3.1 |
| Employment by professional status | | | | | | | | |
| Employees | 1.4 | 3.5 | 3.0 | 3.8 | 3.6 | 3.6 | 3.7 | 3.4 |
| Self-employed and others | 2.2 | 1.9 | 2.4 | 2.2 | 1.7 | 1.4 | 1.1 | 1.3 |
| TOTAL | 1.6 | 3.2 | 2.9 | 3.5 | 3.3 | 3.2 | 3.2 | 3.0 |
| Employment ² | 1.2 | 3.0 | 3.0 | 3.0 | 3.1 | 3.0 | | |
| Hiring contracts registered ³ | | | | | | | | |
| Permanent | 18.8 | 12.3 | 24.1 | 7.7 | 9.7 | 7.6 | 4.5 | 15.9 |
| Temporary | 13.1 | 11.2 | 12.2 | 11.2 | 9.7 | 11.8 | 1.9 | 11.9 |
| TOTAL | 13.4 | 11.3 | 13.2 | 10.9 | 9.7 | 11.5 | 2.1 | 12.3 |
| Unemployment claimant count ³ | | | | | | | | |
| Under 25 | -8.2 | -11.0 | -9.8 | -9.3 | -13.4 | -11.7 | -12.1 | -9.5 |
| All aged 25 and over | -5.3 | -7.2 | -6.1 | -7.4 | -7.7 | -7.5 | -7.9 | -7.8 |
| TOTAL | -5.6 | -7.5 | -6.5 | -7.6 | -8.2 | -7.9 | -8.3 | -8.0 |

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

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

Prices

| | 2014 | 2015 | 2015 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | 02/16 | 03/16 |
|-------------------|------|------|---------|---------|---------|---------|-------|-------|-------|
| General | -0.1 | -0.5 | -1.0 | -0.3 | -0.4 | -0.3 | -0.3 | -0.8 | -0.8 |
| Core | 0.0 | 0.6 | 0.2 | 0.5 | 0.8 | 0.9 | 0.9 | 1.0 | |
| Unprocessed foods | -1.2 | 1.8 | 0.3 | 1.9 | 2.3 | 2.5 | 3.3 | 0.8 | |
| Energy products | -0.8 | -9.0 | -9.7 | -6.4 | -9.7 | -10.2 | -10.3 | -14.1 | |

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

SPANISH ECONOMY MRO

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 |
|--|-------|-------|---------|---------|---------|---------|-------|
| Trade of goods | | | | | | | |
| Exports (year-on-year change) | 2.5 | 4.3 | 4.4 | 5.4 | 3.4 | 3.8 | 2.1 |
| Imports (year-on-year change) | 5.7 | 3.7 | 2.5 | 5.8 | 3.3 | 3.3 | 0.8 |
| Current balance | 10.2 | 15.1 | 11.9 | 14.3 | 15.1 | 15.1 | 14.9 |
| Goods and services | 26.0 | 25.7 | 27.3 | 27.1 | 26.5 | 25.7 | 25.4 |
| Primary and secondary income | -15.7 | -10.5 | -15.4 | -12.8 | -11.4 | -10.5 | -10.4 |
| Net lending (+) / borrowing (–) capacity | 14.7 | 21.1 | 15.6 | 18.4 | 20.8 | 21.1 | 20.2 |

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 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | 02/16 |
|--|------|------|---------|---------|---------|---------|-------|-------|
| Net lending (+) / borrowing (–) capacity | -5.9 | -5.2 | -0.8 | -3.0 | -3.2 | -5.2 | | |
| Central government ¹ | -3.9 | -2.9 | -1.0 | -2.2 | -2.4 | -2.9 | -0.6 | -1.2 |
| Autonomous regions | -1.7 | -1.7 | -0.2 | -0.8 | -1.1 | -1.7 | -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 | |
| Public debt (% GDP) | 99.3 | 99.2 | 100.2 | 99.8 | 99.7 | 99.2 | | ••• |

Note: 1. Includes measures related to bank restructuring but does not include other central government bodies.

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

Financing and deposits of non-financial sectors

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

| | 2014 | 2015 | 2015 Q1 | 2015 Q2 | 2015 Q3 | 2015 Q4 | 01/16 | Balance 01/16 ¹ |
|---|-------------------|-------|---------|---------|---------|---------|-------|-------------------------------|
| Financing of non-financial sectors ² | | | | | | | | |
| Private sector | -6.2 | -3.9 | -4.5 | -3.9 | -4.0 | -3.1 | -3.3 | 1,636.3 |
| Non-financial firms | -7.1 | -4.0 | -4.7 | -4.0 | -4.3 | -2.9 | -3.4 | 914.7 |
| Households ³ | -5.1 | -3.7 | -4.2 | -3.7 | -3.6 | -3.3 | -3.2 | 721.6 |
| General government ⁴ | 6.9 | 4.2 | 4.9 | 4.0 | 3.8 | 4.0 | 3.5 | 1,071.6 |
| TOTAL | -1.8 | -0.9 | -1.1 | -1.0 | -1.1 | -0.4 | -0.7 | 2,707.9 |
| Liabilities of financial institutions due to firm | ns and households | ; | | | | | | |
| Total deposits | -0.9 | -1.0 | -1.3 | -1.2 | -1.1 | -0.5 | 0.1 | 1,161.9 |
| On demand deposits | 10.8 | 18.5 | 17.9 | 19.5 | 18.8 | 17.7 | 17.9 | 391.3 |
| Savings deposits | 5.8 | 12.9 | 10.5 | 12.3 | 13.7 | 15.2 | 14.1 | 253.9 |
| Term deposits | -7.6 | -15.3 | -13.5 | -15.5 | -16.3 | -15.8 | -15.1 | 496.1 |
| Deposits in foreign currency | 1.1 | 5.6 | 8.9 | 10.5 | 5.1 | -2.3 | -4.2 | 20.5 |
| Rest of liabilities ⁵ | -8.2 | -13.0 | -11.4 | -11.5 | -14.0 | -15.1 | -11.8 | 98.1 |
| TOTAL | -1.7 | -2.2 | -2.3 | -2.2 | -2.3 | -1.9 | -0.9 | 1,259.9 |
| NPL ratio (%)6 | 12.5 | 10.1 | 12.1 | 11.0 | 10.7 | 10.1 | 10.1 | |
| Coverage ratio (%) 6 | 58.1 | 59.2 | 58.5 | 60.0 | 60.6 | 59.2 | 59.6 | |

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.

FINANCIAL INSTABILITY AND ECONOMIC ACTIVITY

Financial instability, economic policy and the real economy: two opposing views

Halfway through 2015 international financial markets entered an unstable phase that is still being felt now. The slowdown of the Chinese economy and the slump in oil prices triggered tensions that quickly spread throughout all countries and asset types, sometimes becoming quite intense. This is the fourth unstable episode since the great financial crisis of 2008-2009: the major source of instability was in emerging markets in 2014, in the US government bond market in 2013 and affected the euro area between 2010 and 2012. Suspicion is now growing of a common thread linking all these episodes.

Academic economists, economic policymakers and investors are vigorously analysing and debating the origins and consequences of these repeated crises but this is a technically complex area as a wide range of interrelations needs to be taken into account between the variables of the real economy, financial variables and economic policies. It is also a controversial area in political and ideological terms since personal values and preferences determine the relative weight assigned to the costs and benefits of the various public policy alternatives whose effects are not distributed equally among the different socio-economic groups and generations. And this is also, to some extent, a familiar debate as it refers back to the old dichotomy between Keynesian and liberal economists. In fact, two clear bands or currents of thought can be discerned that are openly divergent.

The dominant view is Keynesian in nature. 1 This believes that the world economy is suffering from a problem, which has become chronic, of insufficient aggregate demand: households are saving a lot and consuming little, companies are hardly investing and governments are containing their expenditure. As a result GDP growth is slow, resources are under-utilised (high unemployment or low participation rates) and inflation is negligible (and negative in several countries). According to this view there are several reasons for this problem. Some are temporary such as political uncertainty while others are knock-on effects such as the results of heavy borrowing and the hangover from the financial crisis. But the most important reasons have been around for some time and are structural in nature, such as demographics, globalisation and technological changes. The ageing of developed countries has pushed up savings for retirement, in addition to the emergence in international markets of the huge savings carried out by Chinese companies and households (resulting from the absence of social security and public healthcare, among other causes). For their part the new digital sectors are less capital-intensive than traditional industry and construction. This produces a context of high savings and low investment, pushing down the equilibrium real interest rate to clearly negative terrain. But, given that inflation is almost non-existent and the natural lower bound for the nominal rate is around zero percent, the real interest rate in markets is higher than the equilibrium rate, which merely perpetuates the situation of weak demand and under-employment as the natural adjustment or rebalancing mechanism fails to work. In the purest Keynesian tradition the members of this current of thought propose an aggressive use of demand policies (fiscal and monetary, including a whole range of unconventional measures) to get out of this trap as soon as possible. They claim that, with sufficient stimulus, the economy can return to full employment, inflation and inflation expectations can reach the levels desired by central banks, from there on, once again operating relatively normally.

Paradoxically this vision proposes resolving what is considered to be a basic problem of the economy by stimulating one of its very causes: namely raising the levels of debt among agents and inflating the price of financial assets. In fact these channels are expected to be the main ones for monetary stimuli to reach the real economy. According to this view there are three reasons why it is worth running the risk of inflating these financial life jackets. Firstly, if the economy is reactivated and acquires self-sustaining traction, growth in nominal GDP will relieve the burden of debt and justify higher asset prices, at the same time as allowing the stimuli to be withdrawn very gradually. Secondly, the risk of local bubbles forming and of systemic contagion should they burst can be controlled by macroprudential, microprudential and financial regulatory policies. Thirdly, if the two previous arguments fail, this will still not be as bad as the alternative of passively standing by while the economy slumps into a deep hole and extensive layers of society, possibly the most vulnerable, fall into unemployment. According to this school's view, the repeated financial crises of the last few years are therefore indicative of two things. The first and most important indication is that demand policies have been badly designed and have been too timid in terms of their intensity and duration. It therefore comes as no surprise that demands are now being voiced for the Federal Reserve to stop its interest rate hikes and for Japan and the euro area

1. See, for example, Summers, L. (2014) «Reflections on the "New Secular Stagnation Hypothesis"» in the book Secular stagnation: facts, origins and cures, published by Voxeu.org.



to further push their measures into debt monetisation and negative interest rates. The second, complementary indication is that prudential and regulatory policies have had serious shortcomings.

The alternative view believes that the most important problems affecting the international economy are related to supply and not demand.² But unfortunately governments try to avoid the short-term electoral costs that tend to be involved in structural reforms and give in to the temptation to patch up the economy via expansionary demand-based policies (even central banks find it difficult to remove themselves from the climate of social and political pressure in spite of their formal independence). This neglect of supply issues naturally reduces potential growth in the long term. And this problem gets even worse when increases in public expenditure and credit are used, due to short-sightedness, haste and the ease of obtaining funds, for relatively unproductive investments that waste resources (real estate bubbles and airports without airplanes are a case in point). In addition, sooner or later and no matter how well-designed the prudential and regulatory policies may be, credit booms end up becoming financial crises that reduce the effectiveness of the economic system even further. The result is an ostensibly worse real economy than at the start of these expansionary demand-based policies with the aggravating factor that it is easy to fall into a vicious circle of slow growth, counterproductive artificial remedies, rising debt, financial crisis and even slower growth.

Those supporting this current of thought propose, as a priority, that society and authorities should adopt a long-term focus to decisively and patiently tackle the structural reforms on the supply side that help to increase potential growth, while recommending fiscal and monetary discipline related to demand policies. In other words they do not rule out applying stimuli when this is justified (as the current situation requires in some countries, in fact) but with moderation, avoiding measures more likely to cause effects contrary to those desired (for example negative interest rates) and with a willingness to put on the brakes once the boom comes. This last point is important as credit booms are not so much the result of stimuli during recessionary phases but rather the absence of restrictive measures in expansionary periods. This asymmetry has perversely distorted investor incentives since the times of the so-called «Greenspan put». Another recommendation from this school of thought in the area of incentives is to accept debt restructuring but only when warranted and carried out selectively and under control. They believe that, with such a system and the complement of a good regulatory and supervisory framework, we would have more functional financial markets that promote economic efficiency and development. In the absence of this, they interpret the chain of financial turmoil in the last few years as risk-off episodes with an initial shock (either fundamental, as in the case of falling oil prices and China's slowdown, or merely in terms of sentiment) that spreads, amplifies and feeds on itself, on top of markets artificially inflated by monetary policies, excessively indebted agents, inadequate incentives and imperfect regulation.

In summary, these are two differing currents of thought in terms of their diagnosis of the problems of the world economy and clearly opposing in terms of how such problems should be resolved (priorities, strategy and specific recommendations). Ironically both are highly critical of economic policy over the last few years, albeit for contrasting reasons (passiveness or hyperactivity). There is, however, one more legitimate point where these two approaches are in agreement: the financial system is of vital importance. The next three articles in this Dossier examine this area in detail given the far-reaching transformations affecting the financial system since the crisis of 2008-2009. Have we gained enough space to sustain additional debt? Are banks and capital markets more stable now than in the past? Are capital and risk more efficiently assigned? Positive answers would be good arguments for those in favour of increasing Keynesian stimuli at least in terms of the balance between potential reward and penalty. Negative answers, however, would warrant greater monetary and fiscal prudence. The current state of the financial world is biased towards the latter of these two views.

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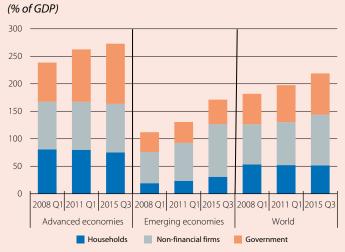
2. See, for example, the 2015 Annual Report of the Bank for International Settlements.



Debt: vice or virtue?

Imagine, for a moment, you're ten years younger. It's 2006. The world economy is growing by 5.5% in real terms, fuelled by the push from the advanced economies (3.1%) and emerging economies (8.2%). Returning to 2016, the last 10 years have certainly left their mark. The advanced economies are scarcely growing by 2% and growth in the emerging economies, although still dynamic, has fallen to rates close to 4%. At the same time the world continues to take out debt: loans to companies and households have gone from 230% to 270% of GDP in the advanced economies and from 113% to 170% in the emerging. It therefore comes as no surprise that the relationship between growth and debt has raised a fundamental question: is debt necessary to revive growth or is it a burden that slows growth down?

Total credit to the non-financial sector



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

The recent history of world debt can be divided into three volumes. In the first, between 2002 and 2008, the advanced economies accompanied their expansion with an increase in the private debt of households and companies, as can be seen in the second graph. This rise was due, at least partly, 1 to monetary policies that were too lax, as well as to badly designed regulation. Moreover these factors also encouraged investors to take too much risk and led to resources being badly allocated among sectors. And this is where the second part of our story begins, with the outbreak of the financial crisis. To alleviate its impact on the economy, automatic fiscal stabilizers generated an increase in public debt, which had remained stable until then, also absorbing part of the private sector debt. In developed economies the private sector has gradually deleveraged since then, unlike the public sector which has continued to increase its debt amid doubts regarding the strength of the recovery.

The financial crisis also sowed the seed for the third and last part of our history of world debt, which has yet to come to a conclusion. The recession in advanced economies has led to an environment of low interest rates as central banks attempt to stimulate the economy, and also to low returns. Consequently, since the financial crisis capital has flowed towards emerging economies in search for better yields. Moreover, the accommodative monetary conditions in the advanced economies have been partly passed on to the emerging countries. Lastly, the high commodity prices recorded at the time gave the feeling of safety for loans to countries exporting these resources. All these elements created a context that encouraged debt in the emerging economies, reflected in the rise in total loans to the non-financial sector which went from 110% of GDP in 2008 to 170% in 2015, mainly due to the increase in debt among private firms and following a trend that shows no signs of stabilising.

Insofar as emerging debt is due to an environment of accommodative monetary policy in developed countries and high commodity prices, the change in scenario over the last few months with the start of interest rate hikes in the US and sharp falls in commodity prices could be a cause for concern regarding the sustainability of emerging debt. Several different aspects need to be considered in this respect: debt held in foreign currency, the concentration of debt in certain sectors and the returns from the investments financed by debt. As shown in the third graph, there has been a sharp rise in debt held in dollars since 2009. On the one hand, monetary normalisation in the US will push up both interest rates in advanced economies and also the value of the dollar, making credit conditions tougher in the emerging countries. On the other hand, a considerable number of emerging companies with debt in dollars also receive their income in dollars, reducing their exposure to the risk of exchange rate fluctuations. Countries such as China, South Korea and Singapore also have large reserves in the US currency. Moreover, a considerable share of the debt in dollars has long maturities.³ Nevertheless, studies carried out by the IMF and the BIS⁴ show that debt is concentrated in construction (particularly in China and Latin America) and in industries related to commodities. Moreover, new debt is also being concentrated in companies that already have a high level of debt. Lastly, as debt has risen in the emerging

^{1.} An increase in the inequality in the distribution of income and wealth might also be one of the factors behind the rise in debt. See, for example, Rajan, R. (2010), Fault Lines. Princeton University Press.

^{2.} Low interest rates in the US and Europe force emerging central banks to set lower interest rates to moderate the appreciation of their currencies.

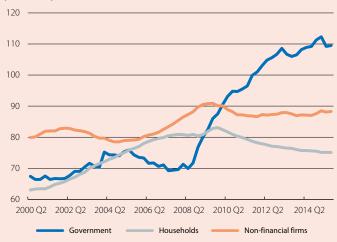
^{3.} See Caruana, J. (2016), «Credit, commodities and currencies», speech at the London School of Economics and Political Science, 5 February 2015.

^{4.} Idem. and IMF, Global Financial Stability Report, Chapter 3, October 2015.

countries, the average profitability of companies has fallen, begging the question whether this debt is financing genuinely productive investments.

The history we have just reviewed reveals a financial cycle that interacts with the economic cycle. Economic expansion makes it easier for companies and households to take out debt in order to carry out investments and increase consumption, which stimulates activity, reinforces economic expansion and, once again, makes it easier to take out debt. This formed the basis of part of the growth in the developed economies up to 2007 and this is also partly fuelling the current growth in the emerging economies. However, if the investments financed with debt fail, this virtuous circle becomes vicious as the inability to repay debt leads to companies going out of business, pushes down demand and thereby causes a further wave of bankruptcies. Precisely to lessen the amplification of the economic cycle produced by the financial cycle, the experience of the advanced economies has

Composition of credit in the advanced economies (% of GDP)

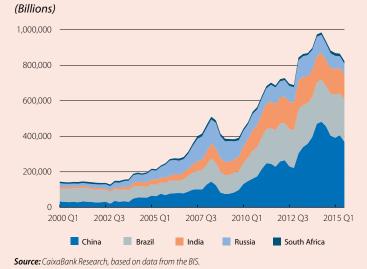


Source: CaixaBank Research, based on data from the BIS.

led them to improve the regulation and supervision of the banking system. However, the increase in relative importance of the capital market as a source of financing raises doubts as to the capacity of these measures to stabilise the financial sector as a whole.⁵

As can be deduced from our analysis, developed and emerging countries are at different points in the cycle. On the one hand, the emerging economies are continuing to increase their debt at a fast pace and some factors raise doubts as to whether this new

Cross-border bank claims in US dollars



economic policy must therefore be aimed at encouraging deleveraging in the private sector and limiting systemic risks. On the other hand, in advanced economies the rate of recovery (in general slower than expected) is generating intense debate regarding the role that should be played by monetary and fiscal policy. The levels of debt are still very high in spite of the private deleveraging carried out. Given this situation, greater stimulus from public demand or more accommodative monetary conditions could compromise debt sustainability. However, it is also true that more restrictive fiscal and monetary policies, *a priori* focused on speeding up the deleveraging process, could erode growth which is already very meagre and end up making it even more difficult to deleverage. Given this dilemma, it seems

debt is actually sustainable. Given that this accumulation has

been fuelled by the United States' lax monetary policy, the

economic policy of the emerging economies should now be prepared to face tougher credit conditions that might lead to

bankruptcies and put pressure on their currencies. Their

that the virtue will come from promoting supply-based reforms that help new productive sectors to develop while maintaining policies to support demand in the short term.

In summary, this discussion shows us that the disorderly interaction between the financial cycle and economic cycle has brought the advanced economies to a situation of high debt and moderate growth with economic policies that have little room to manoeuvre. This shows the importance of designing and implementing economic policies with a perspective that covers the whole economic cycle, reducing risks and building up buffers during the boom years to alleviate recessions.

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5. See the article «The banking sector after the crisis: more robust and stable?» and «Alternative channels to banking: the new challenge for financial stability», in this Dossier.

6. See the article «Financial instability, economic policy and the real economy: two opposing views», in this Dossier.

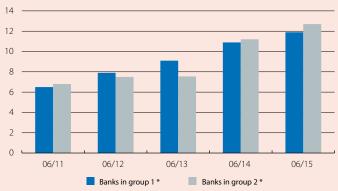


The banking sector after the crisis: more robust and stable?

The response of economic policy to the financial and real crisis over the last few years has brought in tougher financial regulation and a series of strongly expansionary monetary measures. Monetary policy that is too accommodative, however, could sow the seed for future banking crises (as happened in the first decade of the millennium), as interest rates that are too low for too long could encourage investors to take on too much risk and cause a new cycle of excessive debt. In spite of this concern, however, we must remember that, in the last few years and as a result of the global financial crisis in 2008, the regulatory framework for banks has been strengthened precisely with the aim of making the sector more robust and more able to withstand shocks. In particular the reformulation of the capital framework known as Basel III and the creation of banking union in the euro area have helped to progress towards these goals. It would be naive, however, to think that the banking system is now immune to the risk of future crises

Capital ratio with all the requirements expected for 2024

CET1 Basel III capital ratio fully loaded (%)



Note: * Banks under ECB supervision. Banks with a Tier 1 capital above 3 billion euros and an active international position belong to group 1. The rest of the banks belong to group 2. **Source:** CaixaBank Research, based on data from the EBA.

Basel III has increased banks' capital requirements as well as the quality of this capital, also introducing liquidity requirements to ensure banks can handle adverse scenarios. At the same time, banking union has also had a number of effects on the sector. Bank supervision has increased considerably, as well as widening the focus of this supervision (now including, for example, the sustainability of the business model), while a common resolution mechanism has been set up to take swift action with banks in difficulty and minimise the use of public resources (bail-outs). There have also been reforms aimed at strengthening the corporate governance of banks.

However, these higher capital and liquidity requirements also put pressure on the sector's profitability. Apart from increased requirements there is also the high regulatory uncertainty still affecting some crucial issues which could end up involving

further additional requirements to those already in place, such as the review of how risk-weighted assets (RWAs) are calculated. Another source of pressure on bank profitability comes from the resolution framework implemented. One of the cornerstones of this framework, internal recapitalisation or bail-in, requires banks to comply, by the end of 2016, with a minimum requirement for equity and permitted liabilities (the TLAC ratio or total loss absorbency capacity, for global systemic banks, and the MREL ratio or minimum required eligible liabilities). This new requirement means that banks will have to issue more and relatively expensive liabilities (also known as "bail-inables"). In general, all these measures increase banks' financing and intermediation costs.

Very low and even negative interest rates have increased this pressure on bank profits even further. This happens because interest rates on loans tend to fall in line with monetary market interest rates (with the Euribor) while the cost of the main source of bank financing, minority deposits, resists any cuts as it is difficult to pass on negative interest rates to depositors. In addition to this environment of low interest rates, bank profitability has also been affected over the last few years by weak growth in business volumes resulting from the deleveraging carried out by the private sector (households and companies) as well as the weakness of the economic recovery.

Poor banking returns are not sustainable; partly because this hinders the organic generation of bank capital (via retained earnings) and makes it difficult to attract new capital, necessary to continue issuing financing. This is a risk which, in highly bank-oriented economies such as Europe where the banking sector plays a vital role in the transmission of monetary policy, could end up affecting economic growth and financial stability. In such a context of low structural profitability some banks may also be inclined to develop excessively aggressive strategies in order to achieve larger scale advantages or may take greater risks to increase their profits. Insofar as the weighting of assets by risk is not an entirely accurate reflection of the actual risk of assets, it is not easy to

^{1.} One of the factors contributing to increased volatility in the period of stress suffered by banks at the beginning of 2016 was the uncertainty regarding the possibility of some European banks reaching the threshold to suspend payment of coupons on contingent convertible bonds (CoCos), setting off a chain reaction involving other bank liability instruments and affecting banks in other countries.



detect such strategies which, ultimately, also attempt to prevent society from becoming involved in optimum consolidation processes (regulation itself, which penalises larger banks in order to lessen the problems associated with institutions that are «too big to fail», also come into contradiction with this need for greater consolidation).

The intensification of banking regulations also tends to encourage a deviation of intermediation activity towards sectors with little regulation, such as the so-called «shadow banking» (institutions carrying out financial activities of a banking nature). These sectors could be a possible source of financial instability and systemic risks (see the article «Alternative channels to banking: the new challenge for financial stability» in this Dossier).

Last but by no means least, we should also note that the Basel III regulations do not eliminate banks' tendency towards procyclicality. This means that, in downward phases of the cycle when the economic activity and creditworthiness of borrowers worsens, RWAs increase (and affect capital ratios). This happens because the models used to calculate RWAs are based, among other parameters, on the probability of loan default and this probability tends to increase when economic activity worsens. This procyclicality in RWAs therefore exaggerates both the upward and downward phases of the cycle, distorting the capacity of banks to offer credit to the real economy. Nonetheless it should be noted that Basel III, as part of the so-called macroprudential policies, introduces buffers of additional capital such as the countercyclical capital buffer and the systemic risk buffer whose aim is precisely to ease the credit cycle. In any case, and given the limited experience in applying this kind of macroprudential measure, we will have to wait and see whether they are truly effective.

In short, the reinforcement of the regulatory framework carried out over the last few years as a result of the global financial crisis has made the banking sector more robust. But pressure on profitability due to this new framework, weak business volumes and all-time low interest rates mean that we must still keep a close eye on the risk of a possible crisis. Experience has shown us that any well-meaning reform usually has undesired effects. And future crises tend to be quite different from past ones.

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Alternative channels to banking: the new challenge for financial stability

In the last few months the international markets for equity, corporate bonds and assets from the emerging countries have gone through a phase of sharp losses and high volatility, triggered by disappointment with China's growth figures and the slump in oil prices. In other words, surprises in variables of a fundamental nature that justify readjusting asset prices. Nevertheless, the intensity and extent of this upset in the financial sphere reached an exaggerated level. Swings between euphoria and depression in the financial markets are not new but the high frequency of such episodes of severe financial instability in recent months invites us to look for causes beyond the usual macroeconomic shocks and the typical ups and downs in investors' appetite for risk. Part of the answer may lie in the mutations undergone by the micro- and institutional structure of the international financial system. What are these changes and which factors have caused them? Are they good news for financial stability? And, ultimately, what are the implications for economic policy?

In the last few years, and in an increasingly globalised and integrated economy, the international financial system has undergone structural changes in the way financial resources are assigned. Historically banks have held a dominant position as intermediaries to channel these resources from those offering them to those wanting them (namely taking deposits and granting loans; activities which, to a certain extent, can simultaneously give banks a additional role to the one of mere intermediary, taking on the parallel task of transforming maturities, guaranteeing liquidity and valuing risk). However, since approximately the end of the 1990s, and very quickly once the financial crisis of 2008-2009 was over, we have witnessed the development of two alternative channels, although in some aspects they are complementary, both to each other and to the bank channel itself. On the one hand shadow banking which, in the broadest sense of the term, refers to all entities involved in financial intermediation without being subject to regulations applicable to entities taking deposits. This group includes investment banks, securitization funds, investment and pension funds, hedge funds, insurers, private equity firms and quite a lot of others. In the last two decades the relative weight of shadow banking has gradually increased, in 2014 accounting for close to one fourth of all assets of financial institutions, in spite of the correction that took place during the devastating crisis of 2008-2009. This growth has been greater in the emerging countries (particularly in China) although shadow banking is still more prevalent in the advanced countries. On the other hand capital markets, which allow resources to be passed on directly between demanders and suppliers, although shadow banking and even traditional banks often intervene in these markets, either by buying or issuing securities. The formidable rise in bonds issued by non-financial firms is particularly relevant in both quantitative and qualitative terms. The annual volume of nonfinancial corporate bonds issued more than doubled between 2008 and 2015 and has grown at a much faster rate than bank loans. This trend has also been more pronounced in the emerging countries than in the developed.

Various factors have encouraged this trend in the international financial system towards less intermediation by banks. Among the macroeconomic causes, the ultra-expansionary monetary policies adopted by the main central banks after the financial crisis in 2008-2009 have undoubtedly been a key factor. Within an environment of abundant liquidity and low interest rates, the traditional model of banking business has become less attractive compared with that of shadow banking² and financing via capital markets, the main beneficiaries of the mechanisms set up to pass on monetary stimuli, especially in the so-called search for yield. In this respect the recent decision by the European Central Bank to include corporate bonds in its asset purchase programme has merely encouraged bank disintermediation even further. Structural factors have also contributed and will presumably continue to contribute to this mutation. These include technological innovations which make it easier to develop alternative means of financing by lowering the cost of transactions and providing new ways to evaluate borrowers and thereby reduce the problem of asymmetric information. And last but by no means least are the tougher regulations for the traditional banking system which have undoubtedly provided a very great incentive both to supply and also to demand financing via alternative channels, increasing their relative appeal.

In principle the development of shadow banking and capital markets seems to be good news for financial stability for several reasons. Firstly because it allows companies to diversify their sources of financing³ which improves their exposure to risk (in the sense that, if one fails, they can resort to another). Secondly because some shadow banking institutions (for example start-up

- 1. Excluding central banks.
- 2. For empirical evidence see IMF, Global Financial Stability Report, October 2014, Chapter 2, Annex 2.3.
- 3. In the case of shadow banking, such diversification benefits are lessened by the sometimes close links maintained by this sector with the traditional banking sector.

funds, venture capital and high yield debt) can provide financing for firms that, given their risk profile, find it more difficult to secure a bank loan. Thirdly because some shadow banking institutions such as securitization funds help to transform maturities and distribute risk towards those investors better prepared to bear and manage such risks.

However, the other side of the coin is that this new paradigm may also jeopardise financial stability. Firstly the greater importance of shadow banking and direct financing via capital markets is closely related to the growing interconnection, complexity and opacity of the international financial system given the nature of the operations carried out and the limited knowledge of the risks assumed by the different parties. This has been identified as a factor that considerably increases the likelihood of contagion. Secondly the shadow banking system is not free from the risks characteristic of traditional banking. Excessive leveraging, the accumulation of illiquid assets and vulnerability to financial panics are not the exclusive property of traditional banks, as became clear with the collapse of firms such as Bear Stearns and Lehman Brothers during the financial crisis of 2008-2009. In fact, unlike the traditional banking system which is supervised and legally required to have demanding capital and liquidity buffers (in parallel with mechanisms such as the deposit insurance scheme and the central bank as a lender of last resort), the weak supervision and regulation of shadow banking makes it more vulnerable to any risk-off episodes. Thirdly the development of direct financing increases exposure to the risk of market illiquidity; i.e. the risk faced by investors of not finding a counterparty to sell their portfolio of bonds or shares under reasonable conditions (unlike in the banking system where, thanks to the presence of the central bank as a lender of last resort, the risk of not being able to withdraw deposits is limited). In fact, one of the most important regulatory reforms over the last few years to reduce risks in the banking sector has increased the risk of illiquidity in capital markets; namely the requirement for banks to limit their operations in capital markets, forcing them to stop acting as market-makers. This means that drops in asset prices that may have been moderate and gradual under conditions of abundant, available liquidity end up being sharp and abrupt when this evaporates. ⁵ The setback of the last few months mentioned at the beginning of this article is largely due to this kind of phenomenon.

It is therefore clear that this new paradigm of the international financial system has important implications for economic policy. In terms of monetary policy, the channel used to inflate the price of some kinds of assets has become more important, with the risks entailed for financial stability. Related to this area, the impact of monetary policy on the availability of liquidity in the markets is also fundamental, as illustrated by the challenges involved in the US Federal Reserve's normalisation process. Regarding structural policies, the development of a prudential regulatory framework for shadow banking is vital. Similar to the plans to regulate the traditional banking sector, in this case the aim is to find the middle ground between the need to reduce systemic risk but not excessively impair the efficient assignment of financial resources and, ultimately, the efficiency of the economy as a whole. However, both for shadow banking and for capital markets, the progress that has been made is still at the relatively early stage of unifying information and gathering data, according to the Financial Stability Oversight Council itself, the international body in charge of promoting regulatory changes.⁶

In short, in the last few years a lot of attention has been paid to sorting out, restructuring and reforming regulations for the traditional banking system. But given the dynamics of the international financial system as a whole, we cannot say that the risks have disappeared. In a way they have moved from the traditional banking sector to the capital markets and shadow banking. Monitoring and mitigating these new risks to financial stability is a challenge we must face.

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^{4.} See Haldane, A. G. (2015), «On microscopes and telescopes», Bank of England.

^{5.} See IMF, Global Financial Stability Report, October 2015, Chapter 2.

^{6.} See FBS, Global Shadow Banking Monitoring Report 2015, 12 November 2015.

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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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