

ECONOMIC & FINANCIAL ENVIRONMENT

NUMBER 384 | NOVEMBER 2014

FINANCIAL MARKETS
Upheaval in the crude oil market:
converging factors

INTERNATIONAL ECONOMY Hong Kong: good prospects, in spite of everything

EUROPEAN UNION European banks are more resilient to wheather future crises

SPANISH ECONOMY Spain's Central Government Budget for 2015: the economic recovery should help but to what extent?

DOSSIER: NATIONAL ACCOUNTS IN THE DIGITAL ERA

On measuring and using GDP

Intangibles: the new investment in the knowledge era

Even free things have a price

Does a country's GDP reflect its well-being?



MONTHLY REPORT -ECONOMIC AND FINANCIAL MARKET OUTLOOK

November 2014

CaixaBank, S.A.

Strategic Planning and Research

Av. Diagonal, 629, torre I, planta 6 08028 BARCELONA Tel. 34 93 404 76 82 Telefax 34 93 404 68 92 www.lacaixaresearch.com

For general information and inquiries: estudis@lacaixa.es

For subscriptions (new, cancellations, etc.): publicacionesestudios@lacaixa.es

Date this issue was closed: 31 October 2014

Jordi Gual

Chief Strategy Officer

Enric Fernández

Director, Bank Strategy

Oriol Aspachs

Director, Macroeconomics

Avelino Hernández

Director, Financial Markets

INDEX

- 1 EDITORIAL
- **3 EXECUTIVE SUMMARY**
- 4 FORECASTS
- **6 FINANCIAL MARKETS**
- 9 Upheaval in the crude oil market: converging factors
- 10 Global financial stability: in the hands of growth

12 INTERNATIONAL ECONOMY

- 15 Will the narrowing of global external imbalances last?
- 16 Hong Kong: good prospects, in spite of everything

18 EUROPEAN UNION

- 21 Investment in infrastructures: an appetising proposition but often with unexpected consequences
- 22 European banks are more resilient to wheather future crises

24 SPANISH ECONOMY

- 27 Is the deleveraging of Spanish SMEs coming to an end?
- 28 *Spain's Central Government Budget for 2015: the economic recovery should help but to what extent?*
- 29 Structural reforms: slowly but surely

32 DOSSIER: NATIONAL ACCOUNTS IN THE DIGITAL ERA

- 32 On measuring and using GDP Judit Montoriol-Garriga
- 34 Intangibles: the new investment in the knowledge era Clàudia Canals
- 36 Even free things have a price Ariadna Vidal Martínez
- 38 Does a country's GDP reflect its well-being?
 Maria Gutiérrez-Domènech



EDITORIAL MR11

Importing deflation

Imagine, dear reader, a small country in population terms but advanced in economic terms. In other words, with a high per capita income. A sovereign state that is very much a part of the global economy but which has managed to maintain a high degree of independence both in its monetary and budgetary policy in spite of belonging to the European Union.

Consider, dear reader, the key macroeconomic figures for this country for the current year, according to the European Commission: expected GDP growth of 2%, a 7.9% unemployment rate, a 5.7% current account surplus, a budget balance of –2.4% and public debt totalling 40.3% of GDP. A country, moreover, that throughout the global financial crisis has admirably managed to weather the storm, posting cumulative GDP growth of 6.1% between 2007 and 2013.

Given all these figures you would agree with me, dear reader, that the economic situation of the country in question is, at the very least, enviable when compared with that of many developed countries. However, there is a reason why economics is called the «dismal science» and not all can be good news. It appears that this country, which is actually Sweden, is also suffering from a disease affecting many advanced economies: the risk of deflation.

In spite of more than reasonable growth, in spite of the fact that, even with the crisis, its excess capacity is not particularly substantial and that interest rates are already rock-bottom, inflation expectations have gradually fallen and the inflation figure itself has been negative on several occasions during 2014. So what is happening? Where does this unusual deflationary pressure come from?

One key factor is one of Sweden's economy most outstanding traits over the last few years: the tendency for its currency, the krona, to appreciate as a consequence of its economic growth, its high degree of competitiveness and its stability-driven monetary and fiscal policy.

It is precisely this appreciation of the currency that has led Sweden to import deflation, at a time when many of its trading partners (particularly the United States, United Kingdom, Japan and, to a lesser extent, the euro area) were embarking on unconventional monetary policies. The currency's continued appreciation directly reduces the price of imported goods and services, pushing down the general consumer price index.

In conclusion, dear reader, in the highly interconnected world we live in today, and whether it wants to or not, a small open economy like Sweden's also feels the effects of the economic policies implemented by the large blocks, especially when these are very aggressive policies. In fact, to a certain extent something similar could be argued for the euro area. It is true that, as a whole, the euro area has a less open economy than Sweden and that its point in the business cycle, as well as its excess capacity, are different. But it is also true that its monetary policy has been much less daring than that of the United States, the United Kingdom or Japan. A portion of the risk of Europe's deflation has therefore been imported. And, for this reason, the European Central Bank may be forced, very much against its will, to implement policies of quantitative easing such as those carried out by the main central banks of the advanced economies.

Jordi Gual Chief Economist 31 October 2014



CHRONOLOGY

OCTOBER 2014

26 The ECB and EBA publish the results from the stress tests carried out on 130 European banks. 25 banks failed in total, with a capital deficit of 24.6 million euros at year-end 2013. This exercise was the precursor to the start of the Single Supervisory Mechanism in November.

SEPTEMBER 2014

4 The ECB reduces the Refirate to 0.05% and the deposit facility rate to –0.20%. It also announces a programme to buy up asset-backed securities (ABS) and covered bonds.

JULY 2014

15 The sixth BRICS summit establishes the ground rules of the New Development Bank for development projects and the creation of a Contingent Reserve Arrangement allocated 100 billion dollars.

JUNE 2014

5 The ECB reduces the refi rate to 0.15% and the deposit facility rate to –0.10%. It also announces an extensive package of measures, particularly refinancing operations targeting lending (LTROs), to be held every quarter from September 2014 to June 2016.

MAY 2014

- 23 Standard & Poor's raises Spain's credit rating from BBB— to BBB.
- **25** European Parliament elections for the 2014-2019 legislature.

APRIL 2014

29 The European Banking Authority publishes the methodology and macroeconomic scenarios used to carry out the stress tests on Europe's banks.

AGENDA

NOVEMBER 2014

- 4 Registration with Social Security and registered unemployment (October).
- 6 Governing Council of the European Central Bank.
- 7 Industrial production index (September).
- 17 Foreign trade (October).
 GDP flash estimate for Japan (third quarter).
- 18 Loans, deposits and NPL ratio (September).
- 25 Actual expenditure of the central government (October).
- **27** Economic sentiment index of the euro area (November). Flash CPI (November).
- Quarterly national accounts (third quarter). **28** Balance of payments (September).

DECEMBER 2014

- **2** Registration with Social Security and registered unemployment (November).
- 4 Governing Council of the European Central Bank.
- 5 Industrial production index (October).
- 17 International trade (November).Quarterly labour cost survey (third quarter).Fed Open Market Committee.
- **18** Loans, deposits and NPL ratio (October). European Council.
- 23 Actual expenditure of the central government (November).
- 30 Flash CPI (December).
 Balance of payments (October).
 Net international investment position (third quarter).

The economic recovery may be disparate but it is happening

There and back again, in October. Although world growth overall is continuing to speed up, October began with doubts regarding the extent of the recovery. The most evident manifestation of these doubts was the notable upswing in volatility experienced by the financial markets in October, resulting in extensive stock market losses during the first two weeks. Investors became cautious given the IMF's moderately alarmist message (although its autumn forecasts were only slightly worse than those from July, the Fund's sombre tone did the trick), as well as somewhat disappointing macroeconomic figures in the euro area and rather unclear communication from central banks. As more positive hard data were announced (particularly Q3's GDP growth figures for the United States and China) and the imminent actions to be taken by the Fed and the Bank of Japan became clear, a large part of this excessive pessimism evaporated, a change reflected by risk assets that clearly recovered the ground they had lost. In short, after an October filled with financial uproar we are almost back to where we started: the engines (United States and China) are still working while Japan and the euro area are temporarily weak. If the forecasts come about, all this should be the precursor to a reasonably positive 2015 at a global level.

The mainstays of the global recovery, United States and China, have had a calming effect. The economic indicators for the United States, especially GDP growth for Q3 (up by 0.9% quarter-on-quarter, similar to Q2), point to the US giant's expansion becoming stronger. This GDP figure, together with the good trend for ISM business activity indicators, the absence of significant inflationary pressures and the continued recovery in the labour market endorse our scenario of growth for 2014 and 2015 (2.2% and 3.1%, respectively). Given this situation, the Fed, as expected, has confirmed that it is ending its asset purchase programme, although it has also insisted that interest rates will remain low for considerable time (probably until mid-2015). In the case of China, its growth figure for Q3 (7.3% year-on-year, higher than the consensus of analysts) has dispelled fears of a hard landing. Moreover the first data published for Q4 suggest that activity is still on course. Unlike these good signs from the United States and China, Japan is sailing in choppier waters. Although the country's current situation is still being distorted by the effect of April's VAT hike, and we should therefore see activity pick up again

in Q3, the underlying trend is still not positive. This has forced the Bank of Japan to broaden its asset purchase programme to a degree that has taken both analysts and investors by surprise.

The current situation of the euro area is still weak. The euro area's recovery continues to be characterised by its slow rate and uneven spread. This slowness and geographical disparity, certainly greater than expected months ago, as well as a series of setbacks (Russia, Middle East, irregular international trade, etc.) have fuelled doubts regarding the revival in the countries of the single currency, with some even predicting a third recession. This is an extreme hypothesis we do not share. Data for Q4 point to activity probably having bottomed out in Q3, and this also seems to be the case for inflation which picked up moderately in October. Moreover, if we move away from excessively pessimistic short-term perspectives and focus on the long term, it can be seen that such different economic speeds have been a predominant feature since before the crisis and largely depend on the structural reforms carried out. Two of the countries that will grow the most in 2015 will be Germany (which carried out its reforms at the beginning of the millennium) and Spain (although there is surely still a lot to be done, it is undoubtedly one of the countries that has carried out most reforms since the start of the crisis). On the other hand, it is important to note that the publication of the stress tests on Europe's banks has led to positive results in general terms, which should serve to reduce recurring doubts regarding the overall solvency of Europe's banking system.

Spain's economy is approaching cruising speed.

The figures for economic growth confirm that activity is tending to slow down very gradually but it is still notably dynamic compared with the growth seen in its neighbours (up by 0.5% quarter-on-quarter in Q3, just 0.1 pp less than in Q2). Judging by the initial indicators for Q4, this slight moderation will continue in the last few months of 2014. In short, it appears that the Spanish economy, after the upswing in activity in Q2, has reached what might be its cruising speed for the coming quarters. Given this situation of a gradual recovery, one of the most frequently mentioned risks, namely deflation, should progressively vanish. For the time being, growth for inflation in October stood at -0.1%, a figure that, although low, is already 0.1 pp higher than in September.



FORECASTS

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

International economy

	2012	2013	2014	2015	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2
GDP GROWTH										
Global ¹	3.4	3.2	3.3	3.9	3.3	3.2	3.2	3.3	3.9	3.9
Developed countries										
United States	2.3	2.2	2.2	3.1	1.9	2.6	2.3	2.2	3.5	3.0
Euro area	-0.6	-0.4	0.8	1.4	1.0	0.7	0.9	0.9	1.1	1.5
Germany	0.6	0.2	1.5	1.5	2.2	1.3	1.3	1.1	0.9	1.5
France	0.4	0.4	0.4	1.0	0.8	0.1	0.3	0.3	0.6	0.9
Italy	-2.4	-1.8	-0.1	0.8	-0.4	-0.2	0.0	0.1	0.4	0.8
Spain	-1.6	-1.2	1.3	1.7	0.5	1.2	1.6	1.8	1.9	1.7
Japan	1.5	1.5	1.1	1.3	2.7	0.0	0.6	1.1	0.0	2.2
United Kingdom	0.7	1.7	3.0	2.2	2.9	3.2	3.0	2.9	2.6	2.2
Emerging countries										
China	7.7	7.7	7.5	7.4	7.4	7.5	7.3	7.6	7.8	7.5
India ²	4.5	4.7	5.9	6.2	4.6	5.7	5.8	5.9	6.0	6.2
Indonesia	6.3	5.8	5.2	5.7	5.2	5.1	5.1	5.3	5.5	5.8
Brazil	1.0	2.5	0.3	1.3	1.9	-0.9	-0.1	0.2	0.4	1.4
Mexico	4.0	1.1	2.5	3.6	1.9	1.6	3.1	3.5	3.5	3.6
Chile	5.4	4.1	2.1	3.4	2.4	1.9	1.9	2.0	2.7	3.2
Russia	3.4	1.3	0.3	1.1	0.9	0.8	0.0	-0.3	0.7	0.8
Turkey	2.1	4.1	2.7	3.5	4.7	2.1	2.1	2.1	2.6	3.2
Poland	2.1	1.6	3.0	3.2	3.5	3.3	2.7	2.6	2.7	3.0
South Africa	2.5	1.9	1.7	2.5	1.8	1.1	1.9	1.9	2.5	2.7
INFLATION										
Global ¹	4.1	3.7	3.5	3.4	3.5	3.7	3.5	3.2	3.3	3.4
Developed countries										
United States	2.1	1.5	1.7	1.6	1.4	2.1	1.8	1.7	1.6	1.4
Euro area	2.5	1.4	0.6	1.2	0.7	0.6	0.4	0.7	0.9	1.1
Germany	2.1	1.6	0.9	1.5	1.0	0.9	0.8	1.0	1.2	1.4
France	2.2	1.0	0.7	1.2	0.9	0.8	0.5	0.6	0.9	1.1
Italy	3.3	1.7	0.2	0.8	0.5	0.4	-0.1	0.1	0.5	0.7
Spain	2.4	1.4	0.1	1.0	0.0	0.2	-0.3	0.3	0.6	0.9
Japan	0.0	0.4	2.9	2.0	1.5	3.6	3.3	3.2	3.4	1.2
United Kingdom	2.8	2.6	1.7	2.1	1.7	1.7	1.5	1.7	2.0	2.0
Emerging countries										
China	2.7	2.6	2.2	2.5	2.3	2.2	2.0	2.3	2.7	3.1
India ³	7.5	6.3	4.5	5.3	5.4	5.8	2.4	4.6	5.6	5.3
Indonesia	4.0	6.4	6.2	5.4	7.8	7.1	4.5	4.3	5.4	5.4
Brazil	5.4	6.2	6.3	5.7	5.8	6.4	6.6	6.5	6.0	5.8
Mexico	4.1	3.8	3.9	3.4	4.2	3.6	4.1	3.9	3.6	3.4
Chile	3.0	2.1	4.1	3.3	3.2	4.5	4.7	4.0	3.5	3.4
Russia	5.0	6.8	7.4	7.2	6.4	7.6	7.7	8.0	8.1	7.4
Turkey	8.9	7.5	8.9	6.9	8.0	9.4	9.2	8.8	7.3	6.9
Poland	3.8	1.2	0.4	1.4	0.9	0.5	-0.1	0.4	0.8	1.5
South Africa	5.7	5.8	6.1	5.0	5.9	6.5	5.9	6.3	4.4	4.9

Notes: 1. In purchasing power parity. 2. Annual figures represent the fiscal year and factor costs. 3. Wholesale prices.

Forecasts





Spanish economy

	2012	2013	2014	2015	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2
Macroeconomic aggregates										
Household consumption	-2.8	-2.1	2.1	1.6	1.7	2.4	2.3	2.2	1.9	1.6
General government consumption	-4.8	-2.3	0.1	-1.6	-0.2	1.1	-1.0	0.7	-2.6	-2.9
Gross fixed capital formation	-7.0	-5.0	0.8	4.1	-1.2	1.2	1.4	1.7	3.3	4.1
Capital goods	-3.9	2.3	9.1	7.4	11.0	8.7	8.4	8.2	7.4	7.4
Construction	-9.7	-9.6	-4.0	2.3	-8.6	-3.4	-2.3	-1.7	2.1	1.9
Domestic demand (contr. Δ GDP)	-4.1	-2.7	1.4	1.3	0.7	1.8	1.4	1.7	1.2	1.0
Exports of goods and services	2.1	4.9	3.7	4.9	7.4	1.7	2.5	3.3	5.4	5.1
Imports of goods and services	-5.7	0.4	4.5	4.0	8.6	3.9	2.1	3.2	3.7	3.4
Gross domestic product	-1.6	-1.2	1.3	1.7	0.5	1.2	1.6	1.8	1.9	1.7
Other variables										
Employment	-4.8	-3.4	1.0	1.4	-0.4	0.8	1.5	2.0	2.0	1.6
Unemployment rate (% labour force)	24.8	26.1	24.5	23.1	25.9	24.5	23.7	23.9	24.0	22.8
Consumer price index	2.4	1.4	0.1	1.0	0.0	0.2	-0.3	0.3	0.6	0.9
Unit labour costs	-3.0	-1.5	-0.3	0.4	-0.9	0.0	-0.1	-0.2	0.8	0.0
Current account balance (cum., % GDP)1	-1.2	0.8	0.3	0.8	0.2	-0.2	0.1	0.3	0.4	0.6
Net lending or borrowing rest of the world (cum., % GDP) ¹	-0.6	1.5	0.9	1.4	1.0	0.5	0.7	0.9	1.0	1.2
Fiscal balance (cum., % GDP) ¹	-10.6	-7.1	-5.6	-4.2						

Financial markets

INTEREST RATES										
Dollar										
Fed Funds	0.25	0.25	0.25	0.50	0.25	0.25	0.25	0.25	0.25	0.33
3-month Libor	0.43	0.27	0.24	0.73	0.24	0.23	0.23	0.29	0.34	0.56
12-month Libor	1.01	0.68	0.57	1.22	0.56	0.54	0.56	0.67	0.77	1.02
2-year government bonds	0.27	0.30	0.44	1.26	0.36	0.40	0.50	0.65	0.72	1.05
10-year government bonds	1.78	2.33	2.56	3.11	2.75	2.61	2.49	2.40	2.66	2.96
Euro										
ECB Refi	0.88	0.54	0.16	0.05	0.25	0.22	0.12	0.05	0.05	0.05
3-month Euribor	0.57	0.22	0.21	0.05	0.30	0.30	0.16	0.07	0.05	0.05
12-month Euribor	1.11	0.54	0.48	0.33	0.56	0.57	0.44	0.34	0.32	0.32
2-year government bonds (Germany)	0.08	0.13	0.05	0.09	0.14	0.10	-0.01	-0.05	-0.01	0.05
10-year government bonds (Germany)	1.55	1.62	1.27	1.34	1.68	1.43	1.06	0.91	1.24	1.30
EXCHANGE RATES										
\$/euro	1.29	1.33	1.34	1.25	1.37	1.37	1.33	1.28	1.26	1.25
¥/euro	102.71	129.65	139.75	138.51	140.98	140.11	137.68	140.22	140.02	139.12
£/euro	0.81	0.85	0.81	0.85	0.83	0.82	0.80	0.79	0.78	0.78
OIL										
Brent (\$/barrel)	111.38	108.47	102.11	92.37	107.74	109.65	103.38	87.66	89.60	91.77
Brent (euros/barrel)	86.61	81.67	76.43	73.99	78.61	79.96	78.02	68.66	70.92	73.22

Note: 1. Four quarter cumulative.

Forecasts

CURRENT SITUATION •

Autumn storm

October witnessed an abrupt rise in volatility. The main trigger came from fears of a slowdown in global growth and particularly the threat of a third recession in the euro area. A series of negative cyclical indicators during the first two weeks of the month put investors on their guard, and warnings from the IMF regarding economic risks plus messages from the main central banks also contributed negatively. While the Federal Reserve (Fed) warned of the impact on US growth of the deterioration in Europe's economy, the ECB provided few details regarding its asset purchase programme. Given this panorama, investors took refuge in safe havens, damaging stock markets and corporate and emerging bonds. Fortunately such storms tended to abate towards the end of the month. Volatility is likely to remain higher than the levels observed in spring and summer, which were certainly abnormally low with latent sources of geopolitical tension and the communication strategies of central banks being the main potential sources of instability in the short term.

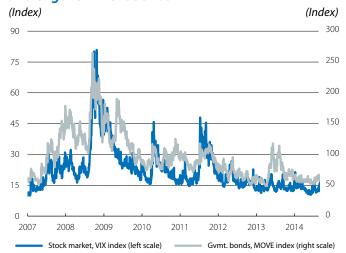
Nonetheless the trend over the medium to long term still looks moderately positive for risk assets as the euro area appears to be getting back on the path to recovery and the world economy as a whole advances at a satisfactory pace. High levels of liquidity will continue to support this favourable dynamic in spite of the end of monetary stimuli in the US. Intensification of bond purchases by the Bank of Japan up to 80 billion yen per year (from the current figure of 60-70 billion) provides a clear example of this pattern.

The Fed, prudent but optimistic. As expected, the US central bank has brought QE3 to an end. This decision is in line with its favourable assessment of labour market conditions (where the underutilisation of labour resources is «gradually diminishing») and with the outlook of moderate but sustained expansion in economic activity. The Fed also recognises that inflationary pressure could remain absent for some months yet. Based on this assessment, and appealing to the twofold mandate for its monetary policy, the Federal Open Market Committee announced its intention to keep official interest rates at their current level for «considerable time». However, it noted that the trend in the different indicators for activity and inflation will determine the pace of future hikes in the federal funds rate, also warning that, should both types of variable progress towards the Fed's objectives more quickly than expected, increases will probably occur sooner than currently anticipated.

The effectiveness of the ECB's measures is in the balance.

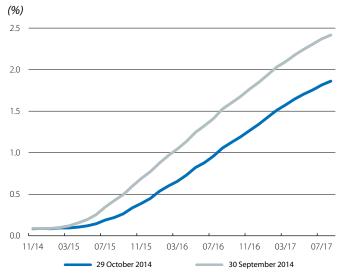
At its October meeting, in addition to keeping official interest rates unchanged the ECB's Governing Council also announced the operational details of its asset-backed securities purchase

USA: implied volatility of the stock market and of government bonds



Source: "la Caixa" Research, based on Bloomberg data

USA: forwards of the Federal Reserve official interest rate



Source: "la Caixa" Research, based on Bloomberg data.

Euro area: Euribor interest rates



Source: "la Caixa" Research, based on Bloomberg data.

programme (ABSPP) and covered bond purchase programme (CBPP3). Similarly, and in an attempt to calm financial markets, Draghi insisted that the sum of both programmes, together with its targeted long-term refinancing operations (TLTROs), will have a «sizeable impact» on the bank's balance sheet. This should ultimately result in economic recovery and rising inflation but, if no improvements are seen in these areas, the ECB will consider the use of additional unconventional instruments. Fulfilling its promises, the bank has started a round of purchases of covered bonds from several countries in the euro area and is expected to do the same with ABS in November. However, numerous investors doubt the effectiveness of the measures adopted to date and believe that the ECB will finally opt to extend the purchase of financial assets (to include, for example, corporate bonds).

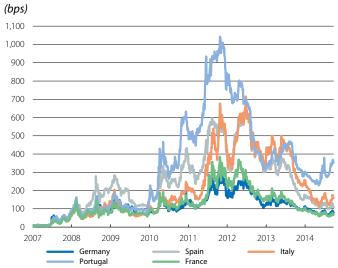
Meanwhile European banks have passed the ECB's stress tests. Only 25 banks did not make the grade out of the 130 analysed, concentrated mainly in Italy, Greece and Cyprus and with a joint capital shortfall of almost 25 billion dollars, a figure that decreases to 9.5 billion euros if we take into account the capitalisation measures already carried out in 2014. Although, in some cases, considerable punishment has been meted out in the stock markets, the tenuous impact observed on bank risk premia as a whole would suggest that this test has helped to dispel uncertainty regarding Europe's banking system, which was to be expected. All this should help the ECB to take on its new role as the single banking supervisor as from 4 November.

Yields on treasuries are falling (even further). In the first few weeks of October, the increase in risk aversion and financial volatility pushed investors towards safe haven assets. This is the case of US sovereign debt, whose yield fell sharply and returned to levels close to its all-time low throughout all tranches of the curve. Nevertheless a gentle upward trend in yields started to be observed towards the end of the month, boosted by the Fed's latest announcements regarding the dynamism of economic growth in the US.

Bund yields are at an all-time low. As in the case of the United States, this risk-off episode also affected German public debt. The increase in capital flows searching for a safe haven has pushed down yields, now in negative terrain for the 3-year bund and clearly below 1% for the 10-year bund. This situation has also been caused by doubts regarding the effectiveness of the ECB's financial asset purchases to avoid the threat of deflation. Also revealing is the fact, as published by the monetary authority, that European banks reached a new peak in sovereign debt holdings for the region in September (a total of 1.84 trillion euros).

Spain, leading the periphery. In spite of a turbulent October, sovereign yields for the periphery saw very contained increases in general, although the differences between countries have become even more marked. On the one hand Spain's satisfactory rating revision, Spanish banks passing the

Euro area: CDS premia of the banking sector



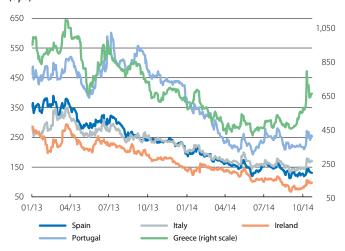
Source: "la Caixa" Research, based on data from Thomson Reuters Datastream

Yields on 10-year public debt



Source: "la Caixa" Research, based on Bloomberg data

Euro area: spreads on 10-year public debt * (bps)



Spread with the German bund

Source: "la Caixa" Research, based on data from Thomson Reuters Datastream



ECB's stress tests and the improvement in the economy have all helped Spanish debt. On the other, Italy's budget deviations and the delicate situation of some of its banks, together with the threat of Greece abandoning its bail-out plan, have pushed up the risk premia for both countries.

International stock markets in sharp retreat. The risk of corrections that had hovered over stock markets for months has materialised with the return of volatility. The adjustment was triggered by the deterioration in global economic growth forecasts, sufficient reason to put a stop to investors' high degree of complacency. Within a short period of time the signs of over-buying have vanished and indications of over-selling have even appeared in some markets, such as Europe's. Another aspect that has caught investors' attention is the start of the Q3 corporate earnings campaign. To date, the announcements have been encouraging. In the US the earnings of companies in the S&P 500 are far outstripping analysts' estimates, supporting the US stock market which had already recovered a large part of its losses by the end of the month. In the euro area companies are announcing tighter profits due to the weaker economic environment and temporary aspects such as the veto on exports to Russia. As far as the emerging economies are concerned, and unlike other occasions, the increased instability in October has not led to any additional deterioration in the financial environment although Brazil warrants a mention apart, where the process that has resulted in Dilma Rousseff being re-elected as the country's President has acted as a specific source of volatility.

The dollar remains firm while oil prices decline further.

Volatility in the foreign exchange markets has also increased as a result of the divergent monetary strategies being implemented by the main economies. Although the dollar is the currency that has appreciated the most since the summer, doubts regarding the pace of monetary normalisation in the US have slightly slowed down its rise against the euro and yen. Meanwhile the price of a barrel of oil has lost its 90-dollar benchmark due to increasing over-supply.

Trends in the main international stock markets

(January 2011 = 100)



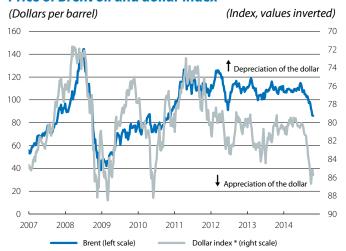
Source: "la Caixa" Research, based on Bloomberg data

Brazil: value and volatility of the Brazilian real



Source: "la Caixa" Research, based on Bloomberg data.

Price of Brent oil and dollar index



Note: * Compared with a broad basket of currencies. **Source:** "la Caixa" Research, based on Bloomberg data.

FOCUS · **Upheaval in the crude oil market: converging factors**

Oil prices have moved centre stage again, this time to the joy of importing countries with the price of Brent oil accumulating a sharp drop of 25% between July and October, plummeting to 84 dollars per barrel, a level not seen since 2010. This put an abrupt end to the long period of stability seen since mid-2012. Various factors have contributed to this fall, some short-term but others of a structural nature, some related to supply and others to demand. Such complexity makes it difficult to determine each factor's influence and complicates any definite projections. However, a few issues can be quite clearly identified.

Demand factors are having the most impact in the short and medium term. The cooling down of world growth prospects due to upsets in the euro area and some emerging countries has led to a widespread reduction in the forecasts for global commodity consumption, naturally including crude oil. For example, since last June the International Energy Agency (IEA) has cut its growth forecast for the world demand of crude in 2014 from 1.3 mb/d to 0.7 mb/d. These new expectations have altered the behaviour of oil-related agents and not just end consumers. In fact, «pseudo-financial» operators in derivative crude oil markets have also left their mark: the hasty closure of the large number of long speculative positions held at the start of the summer has helped to increase the downward pressure on oil prices (within an overall risk-off situation). Meanwhile developments on the supply side have not helped to curb this. Of note is Saudi Arabia's reticence to cut production (the largest producer of the OPEC countries with one third of the total), possibly due to a strategy aimed at defending market share now that the United States is reducing its imports and even thinking of exporting hydrocarbons from the shale revolution. In addition to this is the renewed dynamism in the production of countries such as Libya, Iran and Iraq. And a financial factor has also come into play on the supply side: the appreciation of the dollar, allowing exporting countries to maintain revenues in spite of the drop in the dollar price.

In short, we have witnessed a rather unusual convergence of downward pressures acting on the price of crude oil. Some will gradually disappear and even change direction. Two will be crucial: the disappearance of fears of a euro area recession with global repercussions and the continuation of reasonably high growth rates in large emerging countries such as China and India. At the same time, the two financial factors mentioned above will also ease eventually. Moreover, OPEC is likely to end up agreeing measures to stop oil prices from falling any further, and sooner rather than later. We therefore expect

the price of Brent oil to pick up next year, coming close to 100 dollars a barrel and going slightly above this level in 2016

Nevertheless, the long-term prospects are more uncertain due to the emergence and growing importance of the technological factor, its paradigms being the aforementioned boom in the US, and other countries, of shale oil (extracted via fracking) and Canada's tar sands. In fact, according to a report by the IEA, the United States could become the world's leading oil producer by 2017. The perfecting of extraction techniques, as is also the case with storage and distribution methods, is resulting in a larger and more flexible supply, prolonging the downward pressure on prices. The question is how such technological changes may affect the future of the crude oil market.

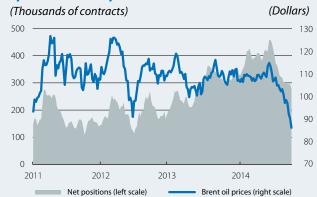
US oil production and imports

(Millions of barrels a day)



Source: "la Caixa" Research, based on data from Bloomberg and the IEA

Speculative net positions in crude oil *



Note: * Futures contracts in crude oil (spread between the number of long and short contracts).

Source: "Ia Caixa" Research, based on data from Bloomberg and the CFTC.

FOCUS · Global financial stability: in the hands of growth

Over the last few weeks the risk of instability in international financial markets has once again taken centre stage. Firstly, a series of disappointing cyclical indicators for the euro area and some emerging countries aroused fears of a global economic slowdown, resulting in sharp falls in stock markets and other risk assets. Secondly, coinciding with the start of this turbulence, a voice as authoritative as the IMF issued warnings regarding the overheating of some financial asset prices, caused by the abundant liquidity provided by the monetary policies implemented over the last few years. Both aspects are closely related: «financial stability», «economic growth» and «liquidity» make up a trio with complex interactions and uncertain outcomes. If growth picks up, then the risks to financial stability will be limited and manageable. If not, there will be serious reasons to worry about the current situation of extremely accommodative monetary conditions.

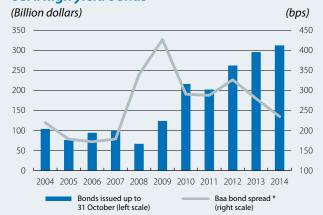
The IMF examines this issue in detail in its twice-yearly report on global financial stability (GFSR). Ultimately, the overriding impression is that the IMF is somewhat more concerned than on previous occasions. In its opinion, global financial vulnerability has been aggravated by two factors. First, the continued fall in risk aversion among investors. According to various measures, halfway through 2014 risk aversion had returned to the minimal level seen before the 2007 crisis. This comes as no surprise. Very low levels of interest rates and volatility, resulting from monetary ease, have encouraged investors to search for yield, turning to higher risk assets such as shares and corporate bonds. This has pushed up the price of these assets and narrowed the spreads of their yields compared with other safer investments. One clear example are the gains made by the US stock market since the end of 2012, almost half of which can be explained by the drop in the stock market risk premium, according to IMF estimates. The IMF documents that excessive financial risk taking is widespread, both geographically and also regarding the types of assets involved. However, without denying this evidence, in our opinion the risk of speculative bubbles is still limited and focused primarily on the corporate bond markets. Specifically, the gains made by US high yield bonds and the large volumes of assets issued over the last few months in these markets are clear symptoms of overheating.

Another aspect, which usually receives less attention but which the IMF quite correctly points to as a second factor that could undermine global financial stability, is the underestimation of market liquidity risk, understood as the potential difficulty in finding counterparties to close

large-scale operations easily and efficiently (a different concept to monetary liquidity or the aforementioned financing). This higher liquidity risk in the market comes largely from some structural changes occurring in the institutional framework. In particular, the progressive adoption of new regulations for banks, in addition to strengthening the sector as intended, has also led to a reduction in the presence of banks (as investors and market makers) in markets of assets with high credit risk and low liquidity. This effectively reduces the potential breadth and depth of such markets. On the other hand, the relative weight of the non-banking sector has increased significantly. Also in this area, the main cause for concern is the market for US corporate bonds (and foreign bonds) given that households now own, directly or indirectly, 30% of the total (compared with 25% in 2010). The consequences of this change in the nature of the corporate bond market's participants are not irrelevant: higher volatility and a greater likelihood that any initial small losses will be amplified and the negative feedback loop exacerbated.

Nonetheless, we believe that risks to financial stability are limited: sooner rather than later the gradual recovery of the economy will end up supporting the financial markets, taking over this role from liquidity. Meanwhile the correct use of macroprudential policies will be enough to mitigate any overheating that may appear in some localised markets. However, the events of the last few weeks remind us of the possible risks to financial stability involved in any deviation from this scenario.

USA: high yield bonds



Note: * Compared with the yield on 10-year US bonds, average of the first 10 months of the year.

Source: "la Caixa" Research, based on Bloomberg data.



KEY INDICATORS

Interest rates (%)

	31-Oct	30-Sep	Monthly	Year-to-date	Year-on-year change
Euro		·	change (bps)	(bps)	(bps)
ECB Refi	0.05	0.05	0	-20.0	-45.0
3-month Euribor	0.09	0.08	0	-20.1	-14.4
1-year Euribor	0.34	0.34	0	-21.6	-20.8
1-year government bonds (Germany)	-0.06	-0.06	0	-24.3	-13.1
2-year government bonds (Germany)	-0.06	-0.08	2	-27.3	-17.5
10-year government bonds (Germany)	0.84	0.95	-11	-108.9	-83.4
10-year government bonds (Spain)	2.08	2.14	-6	-207.1	-195.2
10-year spread (bps)	124	119	4	-98.7	-112.3
Dollar					
Fed funds	0.25	0.25	0	0.0	0.0
3-month Libor	0.23	0.24	-1	-1.6	-1.2
12-month Libor	0.55	0.58	-3	-3.3	-5.3
1-year government bonds	0.09	0.10	-1	-2.2	-0.1
2-year government bonds	0.49	0.57	-8	11.0	18.5
10-year government bonds	2.34	2.49	-15	-68.8	-21.4

Spreads corporate bonds (bps)

	31-Oct	30-Sep	Monthly change (bps)	Year-to-date (bps)	Year-on-year change (bps)
Itraxx Corporate	65	63	3	-5.2	-18.2
Itraxx Financials Senior	67	64	4	-19.8	-50.3
Itraxx Subordinated Financials	155	92	62	25.8	-24.4

Exchange rates

	31-Oct	30-Sep	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
\$/euro	1.253	1.263	-0.8	-8.9	-7.8
¥/euro	140.680	138.490	1.6	-2.8	5.3
£/euro	0.783	0.779	0.5	-5.7	-7.6
¥/\$	112.320	109.650	2.4	6.7	14.2

Commodities

	31-Oct	30-Sep	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
CRB Index	458.9	473.4	-3.1	0.6	0.4
Brent (\$/barrel)	84.8	93.2	-9.0	-23.5	-22.1
Gold (\$/ounce)	1,173.5	1,208.2	-2.9	-2.7	-11.3

Equity

	31-Oct	30-Sep	Monthly change (%)	Year-to-date (%)	Year-on-year change (%)
S&P 500	2,018.1	1,972.3	2.3	9.2	14.9
Eurostoxx 50	3,113.3	3,225.9	-3.5	0.1	1.5
Ibex 35	10,477.8	10,825.5	-3.2	5.7	5.8
Nikkei 225	16,413.8	16,173.5	1.5	0.8	14.6
MSCI Emerging	1,016.1	1,005.3	1.1	1.3	-1.8
Nasdaq	4,630.7	4,493.4	3.1	10.9	18.1

NOVEMBER 2014 www.lacaixaresearch.com

CURRENT SITUATION · The United States and China lead the recovery

The IMF has slightly lowered its forecasts for world growth.

In its autumn World Economic Outlook, the international organisation predicts 3.3% growth for the world's economy in 2014 and 3.8% in 2015, 0.1 and 0.2 pps below its July forecasts, respectively. In spite of this downward revision, the IMF still predicts a scenario of gradual acceleration and its slight alteration is due to deteriorating prospects for the euro area, Japan and Brazil. Neither the improved outlook for the United States and Japan nor the still significant GDP growth predicted for China is enough to offset this downturn. The IMF also highlighted the increasing disparity between countries and warned that downside risks had intensified, such as the threat of deflation in the euro area, geopolitical tensions, the repercussions of possible financial excesses and the effects of monetary normalisation in the US.

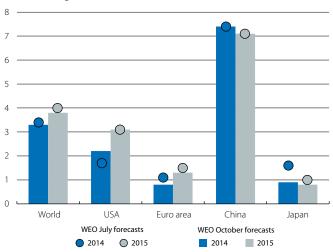
UNITED STATES

Strong Q3 GDP supported the IMF's forecasts for the country. GDP grew by a considerable 0.9% quarter-on-quarter (2.3% year-on-year) and, although this might seem like a slowdown compared with Q2 (1.1% quarter-on-quarter), we should note that a large part of the strong spring was simply due to a rebound effect after the drop in GDP in Q1 (in turn caused by winter storms). The summer's good figure is no longer a rebound but indicates that the US economy is approaching cruising speed. Expansion is in line with our scenario and we have therefore maintained our forecast of 2.2% growth for 2014. Nonetheless it should be noted that private consumption and investment, in spite of still being key elements for growth, have slowed down compared with the previous quarter. On the other hand, the sharp rise in public spending and positive contribution from the foreign sector have come as a welcome surprise.

Other activity indicators confirm the US economy is performing well. According to the field study regularly produced by the Federal Reserve (Beige Book), economic activity is still growing at a good rate and business and consumer sentiment continues to improve, auguring significant economic progress. In September the ISM for manufacturing stood at 56.6 points, a little below August's figure but clearly above the threshold of 50 points (the boundary between expansion and recession). The index for services also fell moderately to 58.6 points but is also still in the expansionary zone. For its part the Conference Board Consumer Confidence index climbed to 94.5 points in October, its highest for the last seven years, backed by improved expectations. Lastly, September's industrial production index also posted a surprising increase, accelerating to 4.3% year-on-year from the 4.0% posted in August.

IMF: growth forecasts for 2014 and 2015

Annual change (%)



Source: "la Caixa" Research, based on IMF data.

USA: GDP

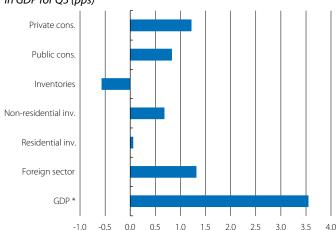
Quarter-on-quarter and year-on-year change (%)



Source: "Ia Caixa" Research, based on data from the Bureau of Economic Analysis.

USA: GDP by demand component

Contribution to annualised quarter-on-quarter growth in GDP for Q3 (pps)



Note: * Annualised quarter-on-quarter change.

 $\textbf{Source: "} la\ Caixa"\ Research, based\ on\ data\ from\ the\ Bureau\ of\ Economic\ Analysis.$

The labour market still looks dynamic while real estate fails to take off as expected. Specifically 248,000 jobs were created in September, once again above the threshold of 200,000 that is indicative of a strong market. The unemployment rate fell by 0.2 percentage points to 5.9% while the participation rate remained almost flat at 62.7%. This stagnant participation rate slightly tones down the good unemployment figures since a part of the improvement is due to the increase in discouraged workers during the crisis. On the other hand, the latest figures from the real estate market continue to show that, although the sector is continuing to recover, its performance is still far from what was forecast, namely that this improvement would be a key support for US expansion. The Case-Shiller index of prices for 20 metropolitan areas slowed down once again in August to 5.6% year-on-year (6.7% in July) while, on the positive side, sales of both new and second-hand residential properties rose in September compared with August (0.2% and 2.4%, respectively).

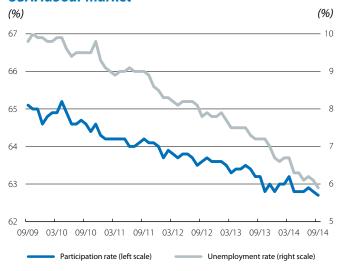
The Fed ends its asset purchase programme within an environment of stable prices. In spite of the strong trend for US activity, inflation is still contained with September's CPI increasing by just 1.7% year-on-year, equalling August's figure. A further fall in fuel prices was offset by a rise in food prices and rent. For its part the core index (without foods or energy) also repeated its figure of 1.7%. Given this situation of below-target inflation, the Fed announced the end of its asset purchase programme but has repeated its intention to keep interest rates low for a «considerable time».

JAPAN

Downside risks encourage Japan's central bank to extend its programme of monetary stimuli. The recovery of the Japanese economy seems to be at a standstill given weak private consumption that is still suffering from the VAT hike carried out on 1 April this year (from 5% to 8%). Consumer confidence fell again in September down to 39.9 points, its lowest figure since May. Prices failed to be as dynamic as expected, remaining flat in September compared with August's figures (3.3% year-on-year, 1.3% discounting the VAT effect). Because of this, Japan's central bank surprised most analysts by deciding to increase its purchases of financial assets, a programme underway since April 2013.

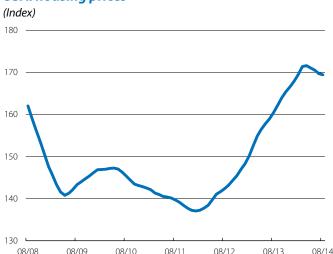
The positive side of the coin is provided by industry. In September industrial production made up what it had lost in August, although the index is still below its level at the beginning of the year. Along the same lines, in Q3 the Tankan business sentiment index posted an improvement for manufacturing, machinery sales grew in September for the third consecutive month and exports picked up in the same month after looking lethargic in August. This contrast between one type of indicator and others illustrates just how difficult it is for Abenomics to set in motion a complete and sustainable expansion of the Japanese economy, especially when the determination seen on the monetary front is not accompanied by the same drive from the fiscal front or structural reforms.

USA: labour market



Source: "Ia Caixa" Research, based on data from the Department of Labor

USA: housing prices



Note: Case-Shiller index. 20 metropolitan areas Source: "la Caixa" Research, based on data from Standard & Poor's

Japan: consumer confidence

(Index)



Source: "Ia Caixa" Research, based on data from the Japanese Ministry of Communications

EMERGING ECONOMIES

China's GDP figure for Q3 allays fears of a hard landing.

The Asian giant's GDP rose by a significant 7.3% year-on-year in 2014 Q3, in line with our forecasts but a positive surprise for the consensus of analysts. The good tone of the latest activity indicators points to growth still being solid in Q4. October's PMI, produced by Markit, rose slightly to 50.4 points (50.2 in September) while the industrial production index advanced to 8.0% year-on-year in September from a modest 6.9% in August. We have therefore kept our forecast for 2014 as a whole at 7.5%, in line with the IMF's estimate (7.4%). Nonetheless, in the short term some of the risks hovering over the country are far from disappearing. In real estate, 69 of the 70 cities analysed by China's National Bureau of Statistics reported falling house prices in September, a situation that contrasts with the 65 cities reporting increases at the end of 2013. In the long term the challenge consists of implementing reforms towards a «more market-driven» economy that enables a smooth transition towards a new model of growth. In this respect the fourth Communist Party Central Committee Plenum, meeting at the end of October, tackled questions regarding improvements to the rule of law in the country.

Disparity is still rife in the rest of the emerging economies.

India, with considerable growth figures and significant improvements in correcting its imbalances, contrasts with Brazil and Turkey whose GDP growth in Q2 was disappointing and whose margin for expansionary policies is limited due to inflationary tensions (among other problems). India's wholesale prices grew by 2.4% year-on-year in September, far below the 6.4% at the end of 2013 while the worrying trend in Brazil's inflation, together with a weak real, has pushed Brazil's central bank to raise the official interest rate by 25 bps to 11.25%. This gives a clear warning signal to the government of re-elected President, Dilma Rouseff, on the need to tackle, decisively and without delay, the correction of imbalances and to implement the structural reforms the country needs.

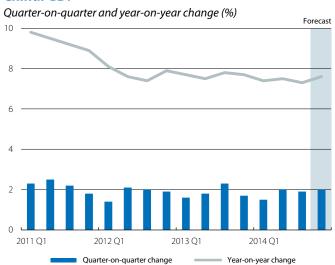
Japan: industrial production and machinery orders *



Note: * Machinery orders, moving average of 12 months.

Source: "Ia Caixa" Research, based on data from the Japanese Ministry of Communications.

China: GDP



Source: "la Caixa" Research, based on data from the National Statistics Office of China.

Emerging countries: CPI

Year-on-year change (%)



Note: The wholesale price index has been used in the case of India.

Source: "la Caixa" Research, based on data from the respective national statistics offices

FOCUS · Will the narrowing of global external imbalances last?

During the years prior to the start of the great economic crisis, the widening of global current account balances was a cause for concern due to the worldwide risk of sudden disorderly correction. Almost ten years later the substantial narrowing observed in these imbalances could lead us to believe that the problem had been solved. However, far from resolving itself, what has actually happened is that the debate has altered, today revolving around how long this external adjustment will last. In other words, once the recovery has built up steam and spread, will external balances bounce back to where they started? Or, on the other hand, will their correction be permanent? In its most recent World Economic Outlook (WEO), the IMF makes some interesting points in this respect.

Broadly speaking, the sum of current account imbalances (adding together surpluses and deficits in absolute terms) has gone from 5.3% of world GDP in 2006 to 3.4% in 2013. In addition to the evident narrowing of imbalances, of note is also the fall in the concentration of deficits in just a few economies. While, in 2006, the five countries with the largest deficits accounted for 80% of the total deficit, in 2013 these accounted for less than 65%. At a country level, the US has led the field in large external imbalance adjustment. It was and still is the country with the largest current account deficit in absolute terms but, between 2006 and 2013, the US economy deficit shrank by half (from 807 to 400 billion dollars, from 1.6% to 0.54% of world GDP). At the other end of the scale is China, the country with the largest surplus in 2006, which also made a large contribution by cutting its positive balance in terms of world GDP by almost half (from 0.46% of world GDP to 0.25%) and now ranks second in surplus terms after Germany, which has hardly moved in terms of its external balance. Lastly Japan, also on the side of large surpluses in 2006, posted a current account deficit in November 2013 for the first time since 1980.

The IMF has attempted to determine the nature of this correction to predict just how far it might reverse in the future. To this end it has focused on two ways (not mutually exclusive) that external imbalances are adjusted: via a drop in domestic demand, particularly pronounced in some countries, and via changes in the composition of demand. When imbalances have narrowed primarily due to a fall in demand, they are likely to widen again as this is essentially a temporary phenomenon. However, the opposite would be true if the adjustment were due mostly to a change in demand's composition. The slump in domestic demand in deficit countries has undoubtedly played an important part in the correction but there are also structural factors that suggest a substantial

1. Changes in a country's production structure can also alter external imbalances.

proportion of this correction will remain in the long term. The main factors are: (i) the decrease in potential GDP of some large deficit countries; (ii) the reduction (at a global level) of policies encouraging significant external distortions; and (iii) energy shocks in the US and in Japan. Without doubt the harshness of the crisis has caused permanent damage to numerous countries' potential output so that, once these economies recover and get back to operating at full capacity, their actual output will still be lower than in the past and, consequently, their external imbalances will also be smaller.

It is also worth noting that, during the period analysed, either as a result of the nature of the crisis or in parallel to it, some of the practices that used to distort external imbalances have disappeared. One significant example is the value of the yuan, a currency that used to be accused of being undervalued in order to promote China's exports (and therefore a larger external imbalance). The Chinese government's commitment to changing the country's economic model towards a system where domestic consumption plays are more important role is yet another reason to believe that the adjustment in China's current account balance will last.

Lastly, the substantial increase in the production of shale gas and oil in the US has had, and will continue to have, positive implications for reducing the external deficit of the world's leading economic power. On the other side of the world, the nuclear moratorium established in Japan after the terrible accident at Fukushima will mean that a large part of the shift occurring in the country's trade balance will remain.

In short, although global external imbalances are likely to widen again in the future, the IMF's projections point to half the adjustment remaining. Such continuity is not only due to the fall in potential output of some large economies, clearly an undesirable effect of the crisis, but also to the fact that policies distorting countries' external balances have been successfully reduced.

Global current account imbalances

(% of world GDP)



Note: Due to methodological differences between countries, the graph shows a discrepancy between surpluses and deficits worldwide.

Source: "la Caixa" Research, based on IMF (WEO) data.

FOCUS · Hong Kong: good prospects, in spite of everything

Recent demonstrations in the streets of Hong Kong demanding greater democratic commitment from the Beijing government have once again highlighted the fragility of the Hong Kong-China set-up, in spite of these events having ended peacefully. Hong Kong has a special relationship with China, encapsulated in the slogan «one country, two systems», that originates in the Chinese-British agreement of 1984 to agree the return of the colony to China in 1997, establishing a favourable institutional framework for business that co-exists with its rule by the Chinese authorities.

This special relationship has been decisive in the economy's success and a determining factor for a considerable number of international investors choosing Hong Kong as their entry point to mainland China. Such success has undeniably also been influenced by its capitalist system, its highly skilled population, a GDP per capita that equals Japan's (around 40,000 dollars a year), the fact that it is one of Asia's main commercial ports (and the world's third cargo port) and that it has the fourth largest stock market in the world in terms of company market value.

Nonetheless, this small country of 7.2 million inhabitants is now facing significant challenges. In the short term, it is thought that the economic consequences of the recent protests will be limited. Apart from concentrating on the tourism industry (which accounts for a small 3% of GDP), the close cultural ties and common interests that unite Hong Kong and China should help both sides to come quickly to an understanding. But there are other, particularly important challenges that must be overcome by Hong Kong's economy in the coming months, such as the Fed's normalisation strategy for its monetary policy.

For the last three decades, the Hong Kong dollar has been pegged to the US dollar, thereby subjecting the country's monetary policy to the decisions taken by the Fed and, by extension, the US economic cycle. Over the last four years, Hong Kong has «virtually» imported a more expansionary monetary policy than the one required by the state of its economy and this has led to notorious excesses, fundamentally in real estate (house prices increased by 75% between 2008 and 2013). Given this situation, the Fed's interest rate hike will cool down the real estate market, a process which should be gentle and have no dire consequences for the country's financial sector (its NPL ratio is below 1%). Perhaps the greatest cause for concern are the episodes of volatility in international flows that may accompany the United States' monetary normalisation. Nonetheless, should these occur they are likely to be temporary and limited

in scope as the central bank's extensive reserves, its strict bank supervision and Hong Kong's high fiscal surplus place the country in a relative strong position compared with other Asian economies.

In the long term the country's economic development will be affected, and necessarily so, by its relations with its bigger brother. In this respect China's slowdown (going from annual growth of around 10% to figures close to 7%) has been reflected in the growth rates of Hong Kong's economy. However, the gradual liberalisation and modernisation of China's financial system will help to reinforce the already existing synergies (such as Hong Kong being the main offshore centre for the Chinese renminbi) and produce new ones (such as the recent agreement to simultaneously list companies on the Hong Kong and Shanghai stock markets). In short, the Asian giant's shift towards a «more market-driven» economy should strengthen the existing ties between both countries.

Hong Kong: main macroeconomic indicators

	2007- 2011	2012	2013	2014 (f)	2015 (f)
Real GDP growth (%)	3.5	1.6	2.9	2.1	3.2
Inflation (%) (y)	3.2	3.8	4.3	3.7	3.5
Current account balance (% of GDP)	10.1	1.6	1.9	1.4	0.7
Fiscal balance (% of GDP)	3.5	3.2	0.8	2.6	0.5
Public debt (% of GDP)	4.9	6.8	6.7	6.5	6.3

Note: (f) Forecast; (y) Year-end figure.

Source: "Ia Caixa" Research, based on data from Thomson Reuters Datastream, the IMF and

"la Caixa" Research www.lacaixaresearch.com



KEY INDICATORS

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

UNITED STATES

	2012	2013	2013 Q4	2014 Q1	2014 Q2	2014 Q3	09/14	10/14
Activity								
Real GDP	2.3	2.2	3.1	1.9	2.6	2.3	-	_
Retail sales (excluding cars and petrol)	4.2	3.6	3.6	2.3	4.1	4.2	3.9	
Consumer confidence (value)	67.1	73.2	74.0	80.5	83.4	90.9	89.0	94.5
Industrial production	3.8	2.9	3.3	3.3	4.2	4.4	4.3	
Manufacturing activity index (ISM) (value)	51.8	53.9	56.7	52.7	55.2	57.6	56.6	
Housing starts (thousands)	783.8	929.7	1.025	925	985	1.024	1.017	
Case-Shiller home price index (value)	141.3	158.2	165	170	171			
Unemployment rate (% lab. force)	8.1	7.4	7.0	6.7	6.2	6.1	5.9	
Employment-population ratio (% pop. > 16 years)	58.6	58.6	58.5	58.8	58.9	59.0	59.0	
Trade balance 1 (% GDP)	-3.3	-2.8	-2.8	-2.8	-2.9			
Prices								
Consumer prices	2.1	1.5	1.2	1.4	2.1	1.8	1.7	
Core consumer prices	2.1	1.8	1.7	1.6	1.9	1.8	1.7	

Note: 1. Cumulative figure over last 12 months.

Source: "Ia Caixa" Research, based on data from the Department of Commerce, Department of Labor, Federal Reserve, Standard & Poor's, ISM and Thomson Reuters Datastream.

JAPAN

	2012	2013	2013 Q3	2013 Q4	2014 Q1	2014 Q2	07/14	08/14	09/14
Activity									
Real GDP	1.5	1.5	2.4	2.4	2.7	0.0	-		_
Consumer confidence (value)	40.0	43.6	44.0	41.7	38.8	39.1	41.5	41.2	39.9
Industrial production	0.2	-0.6	2.0	5.8	8.3	2.6	-0.6	-2.0	-0.8
Business activity index (Tankan) (value)	-5.0	6.0	12.0	16.0	17.0	12.0	-	13.0	-
Unemployment rate (% lab. force)	4.3	4.0	4.0	3.9	3.6	3.6	3.8	3.5	3.6
Trade balance 1 (% GDP)	-1.4	-2.4	-2.1	-2.4	-2.8	-2.9	-2.9	-2.9	-2.9
Prices									
Consumer prices	0.0	0.4	0.9	1.4	1.5	3.6	3.4	3.3	3.3
Core consumer prices	-0.6	-0.2	0.0	0.5	0.6	2.3	2.3	2.2	2.2

Note: 1. Cumulative figure over last 12 months.

Source: "la Caixa" Research, based on data from the Communications Department, Bank of Japan and Thomson Reuters Datastream.

CHINA

	2012	2013	2013 Q3	2013 Q4	2014 Q1	2014 Q2	07/14	08/14	09/14
Activity									
Real GDP	7.7	7.7	7.8	7.7	7.4	7.5	_	7.3	_
Retail sales	14.3	13.1	13.3	13.5	11.9	12.3	12.2	11.9	11.6
Industrial production	10.0	9.9	10.1	10.0	8.7	8.9	9.0	6.9	8.0
PMI manufacturing (value)	50.8	50.8	50.8	51.3	50.3	50.7	51.7	51.1	51.1
Foreign sector									
Trade balance 1 (value)	230	258	250	258	233	253	283	305	321
Exports	8.0	7.8	3.9	7.4	-3.4	5.0	14.5	9.4	15.3
Imports	4.3	7.3	8.6	7.1	1.7	1.4	-1.6	-2.4	7.0
Prices									
Consumer prices	2.7	2.6	2.8	2.9	2.3	2.2	2.3	2.0	1.6
Official interest rate 2 (value)	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Renminbi per dollar (value)	6.3	6.1	6.1	6.1	6.1	6.2	6.2	6.2	6.1

Notes: 1. Cumulative figure over last 12 months. Billion dollars. 2. End of period.

Source: "la Caixa" Research, based on data from the National Bureau of Statistics and Thomson Reuters Datastream.

CURRENT SITUATION · More

EUROPEAN UNION

pessimism than weakness

Growth is still weak in the euro area but is gradually building up steam. The IMF has lowered its forecasts for the main economies of the euro area except Spain and predicts a slow recovery at differing speeds. Germany and Spain will grow at a faster rate than France and Italy, the latter even falling into recession in 2014. Given this situation of weak growth, small shocks are felt more keenly here than in countries with higher growth rates where a similar reduction in growth is less problematic. Perhaps this is why the IMF has accompanied its downward revision of forecasts for the euro area with a very pessimistic discourse although its central scenario is one of gradual recovery. Broadly speaking, the deceleration in growth occurring over the last few quarters is the result of the slowdown in trade at a global level and of the reappearance on the scene of latent geopolitical conflicts. Both are temporary factors and should therefore not sully the recovery in the medium term.

The underlying trends differ greatly between countries.

This deterioration in growth prospects has highlighted the need to take measures to boost growth in the euro area. However, the differences between countries are very notable and, consequently, although a high level of coordination is desirable at a European level, each case needs to be treated separately. A brief review of growth per capita over the last few years is highly illustrative. Germany and France experienced similar trends up to the global financial crisis but their paths have diverged since then. Germany has benefitted from the structural reforms carried out at the beginning of the millennium while the lack of dynamism suffered by France's economy has become evident. The deeply-rooted ills of the Italian economy have been known for years and pose a real challenge for Mateo Renzi's government. Lastly, Spain grew continuously up to 2008 but lacked solid growth and slumped from then on. However, the correction of its main macroeconomic imbalances and far-reaching structural reforms carried out are helping the country to enjoy a recovery which, for the present, is surprisingly vigorous. The challenge for Spain will be to ensure its growth is balanced and sustainable in the longer term.

Pressure is rising for France and Italy to take measures to boost their long-term growth capacity. The vulnerability demonstrated by France and Italy over the last few months has once again highlighted deficiencies in both economies. Given this situation, an intense and sometimes tense debate has broken out at a European level regarding which measures should be adopted. It finally seems that a balance has been struck between slightly less fiscal adjustment than initially planned in exchange for a stronger agenda of reforms. The reduction in the structural deficit forecast for these countries is 0.5 pps for France and 0.3 pps for Italy, an adjustment which,

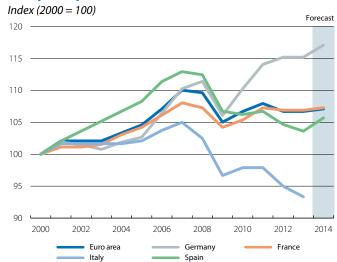
Euro area: IMF forecasts

Annual change (%)

		GDP forecast		Difference co the forecast	
	2013	2014	2015	2014	2015
Euro area	-0.4	0.8	1.3	▼ 0.3	▼ 0.2
Germany	0.5	1.4	1.5	▼ 0.5	▼ 0.2
France	0.3	0.4	1.0	▼ 0.4	V 0.5
Italy	-1.9	-0.2	0.8	▼ 0.5	▼ 0.3
Spain	-1.2	1.3	1.7	▲ 0.1	▲ 0.1

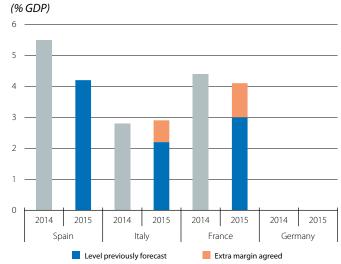
Source: "Ia Caixa" Research, based on IMF (WEO) data.

GDP per capita



Source: "la Caixa" Research, based on Eurostat data

Euro area: public deficit forecast for 2014 and 2015



Source: "Ia Caixa" Research, based on data from the respective national governments.

in principle, Brussels has accepted in spite of the fact that the deficit targets set for 2015 will not be met (4.1% compared with 3.0% in France and 2.9% compared with 2.2% in Italy). With regard to the reforms to be carried out, a change in attitude can now be glimpsed. In addition to its «crédit d'impôt pour la compétitivité et l'emploi» plan and the recent Responsibility and Solidarity Pact, France has added measures such as reducing taxes in regulated sectors and bureaucracy when starting up a company. Progress is being made in Italy to pass labour reform that reduces the substantial rigidity that often prevents firms from taking on new staff. All these reforms should boost the competitiveness of firms and potential growth, although they are tentative in comparison with those undertaken by several peripheral countries and need to go a lot further, in particular in the labour market.

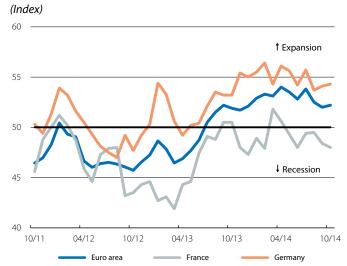
Most activity indicators improved slightly in October.

In the short term, the poor trend for Q3 indicators does not necessarily mean a third recession and signs of slight improvement can actually be seen for Q4. Both the PMI and the economic sentiment index in October point to slightly positive growth, helping to allay fears of a third recession. However, the still tenuous growth in the euro area is forcing many firms to reduce their margins. By country, of note is the slight improvement in both indicators in Germany where the PMI has been expansionary for the last 18 months although it is still lower than at the beginning of the year. France and Italy, however, remain in the recessionary zone.

Demand indicators are also improving slightly. August's retail sales performed better than in the first few months of the year although they are still at a low level. The consumer confidence index also improved in October after several months of decline. However, as with the business indicators, the disparity between countries is notable. Germany stands out on the positive side while France and Italy take centre stage on the negative.

The slow improvement in the labour market is limiting the capacity for domestic demand to recover. The euro area's unemployment rate held steady at 11.5% in September 2014, lower than the figure of 12.0% recorded a year earlier but unchanged from the previous two months. Moreover, unemployment expectations do not point to any notable improvement in the short term, although they have improved slightly. By country, while Germany's unemployment rate is still at an all-time low and the periphery countries are seeing improvements, neither France nor Italy are managing to recover. At a European level the level of unemployment among young people aged 16 to 25 is still the greatest concern, this being 21.6%, with almost five million young people in the euro area unemployed. The problem is particularly pressing in Spain (53.7%), Greece (50.7%), Italy (42.9%) and France (24.4%). Acceleration in the structural reforms for the labour markets, as well as good use of the funds available from programmes such as the Young

Composite PMI



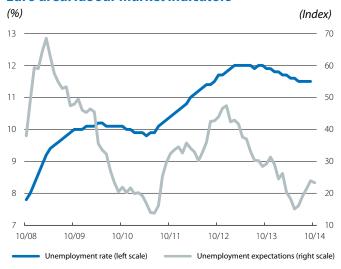
Source: "la Caixa" Research, based on data from Markit Economics.

Euro area: consumption indicators



Source: "la Caixa" Research, based on Eurostat data

Euro area: labour market indicators



Source: "Ia Caixa" Research, based on data from Eurostat and from the European Commission.

Employment initiative and the European Social Fund should help to improve the chances of young people in the job market.

Inflation, reflecting economic activity, will gradually change its tune. The general inflation rate rose by 0.1 pp in September to 0.4% year-on-year while core inflation held steady at 0.8%. This rise in general inflation is due to the most volatile components, in particular higher food prices and the moderation in the fall of energy prices. Over the coming months, as fears of a third recession disappear, domestic demand picks up and the euro continues to depreciate, inflation should embark on a clear upward trend. In any case we do not expect any sharp rise as the elements pushing up inflation are weak and, furthermore, the fall in oil prices will help to push it back down.

The foreign sector will become more important in the coming quarters. Both exports of goods and imports of goods were down in August compared to the previous month (0.9% and 3.1% respectively) although showing an improvement over the first half of the year. The weakness seen since the beginning of the year is due to temporary factors such as the slowdown in trade at a global level and the emergence of geopolitical conflicts in Ukraine and the Middle East. Consequently, as these factors lose their effect, the foreign sector should gradually regain the importance it has enjoyed over the last few years. The depreciation of the euro and the fall in oil prices are additional factors that should improve the competitive position of Europe's economy and thereby boost the recovery in exports in the short and medium term.

Bank credit will also help to support the recovery. The criteria applied to grant loans continued to ease in 2014 Q3, particularly for large firms. The bank lending survey carried out by the ECB also showed that, in loans to households, the net percentage of banks relaxing conditions to purchase housing increased in Q3, albeit at a slower rate than in Q2. Also of note are the easier conditions for granting consumer loans, a factor that should help to revive consumption in the euro area. This improvement in banks' credit capacity is closely linked to the completion of the asset quality review (AQR) and stress tests carried out by the ECB. As mentioned in the Focus «European banks are more resilient to weather future crises», these tests have been successfully passed by the sector as a whole, reinforcing its credibility.

Euro area: inflation

Year-on-year change (%)



Source: "la Caixa" Research, based on Eurostat data.

Euro area: exports

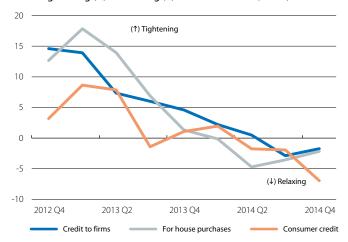
Value and year-on-year change (%)



Source: "la Caixa" Research, based on data from Eurostat and from the European Commission.

Euro area: bank lending survey

Banks tightening (+) or relaxing (-) credit standards (net %)



Source: "Ia Caixa" Research, based on ECB data.

Euro area

FOCUS · Investment in infrastructures: an appetising proposition but often with unexpected consequences

After a long time wandering the desert, a large number of advanced countries are now thirsty for growth, especially the main countries of the euro area. Given this situation, the benefits which, according to the IMF, could be enjoyed through large-scale investment in infrastructures have been welcomed by many countries like rain after a drought. Several also see this as a chance to renew infrastructures that have deteriorated after years of continuous public spending cuts. Nevertheless the success of such a programme is not guaranteed. It is obviously crucial to choose the right project to finance but how such projects are financed, the macroeconomic context and level of debt are equally or even more important. Some of these factors are now advantageous but there are others that could represent a threat.

The figures provided by the IMF are truly appetising: an unanticipated increase in public spending of 1 pp of GDP increases the level of output by 0.4% the same year and by 1.5% after four years. In the short term, this effect on economic activity occurs through greater demand and the possible knock-on effect of private investment while the long-term economic impact results from supply, increasing the output of the country's economy.

The IMF has also noted that the impact on demand is even greater during a weak economic context where there is surplus productive capacity. The macroeconomic impact can also be greater if public investment is debt-financed as this helps to adjust the cost of financing the programme more closely to the timescale for any returns on this investment. In other words, it avoids having to raise taxes or cut public spending in the short term, while the investment has yet to produce any return. Debt-financed investment is particularly attractive in the current monetary environment with rock-bottom real interest rates. This is therefore an appetising proposition for those economies that have yet to define a roadmap to ensure more vigorous and sustainable rates of growth in the long term.

However, the IMF's report contains one important proviso. Countries with debt that is already high must remember that, in the short term, a programme of such characteristics could entail undesirable effects. Given that such investment projects are normally long-term, if the potential productivity is not sufficiently credible, doubts may emerge regarding the sustainability of public finances. There are several economies in the euro area that must take this risk very much into account but others, such as Germany, have greater margin and could seriously consider the IMF's proposal.

1. See Chapter 3 of the IMF World Economic Outlook for October 2014. The IMF assumes that the investment's impact on infrastructures is very similar.

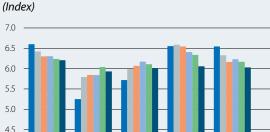
Public investment



Source: "la Caixa" Research, based on OFCD data

Infrastructure quality by country

Advanced economies

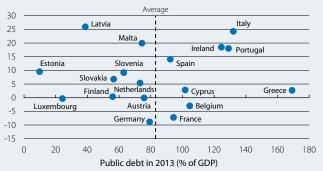




Source: "la Caixa" Research, based on the World Economic Forum data.

Level of public debt and infrastructure quality by country

Infrastructure quality index (change between 2006 and 2014, %) *



Note: * Subindex of the World Economic Forum competitiveness index. Source: "la Caixa" Research, based on data from the World Economic Forum competitive index

FOCUS · European banks are more resilient to wheather future crises

In October the ECB and the EBA published the results of the comprehensive assessment of Europe's banks as a prior step to the start of the Single Supervisory Mechanism which sets up the ECB as the euro area's single banking supervisor as from November.

This analysis of the health of the balance sheets and solvency of Europe's banks consisted of two sequential exercises: an asset quality review (AQR) and a stress test. As a result of both, a maximum capital deficit has been identified totalling around 24.6 billion euros, located in 25 of the 130 banks analysed. After taking into account the measures adopted by these banks throughout 2014, this deficit falls to about 9.5 billion euros and is concentrated in just 13 banks: four Italian, two Greek, two Slovenian, one Irish, one Portuguese, one Belgian, one Cypriot and one Austrian. These banks must present their recapitalisation plans by 10 November and have six to nine months to increase their top quality capital (common equity tier1 or CET1).

The AQR entailed an adjustment to the capital position at the beginning of the stress test. The detailed review of balance sheets in December 2013 included an assessment of asset quality and the appropriateness of the level of provisions based on a harmonised definition of bad debt. Under this new definition, loans totalling 136 billion euros (equivalent to 0.6% of the total assets for the the banks examined) have been reclassified as non-perfoming, resulting in a need for larger provisions and an adjustment of the average CET1 ratio by 0.4 pps. The difference with regard to the 8% capital threshold translates into a total capital shortfall at the starting point of around 5 billion euros. The AQR has had most impact on Greece, Cyprus and Slovenia with reductions in the CET1 ratio of more than 2 pps. Spain, on the other hand, had the least adjustment in the euro area, with a fall of just 0.2 pps in CET1. This reflects the efforts made to clean up balance sheets and the adoption of highly conservative asset classification criteria by the Spanish financial system over the last few years.

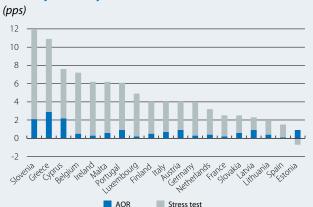
Taking the AQR-adjusted CET1 as the starting point, the stress test analysed the ability of banks to withstand two macroeconomic scenarios for the period 2014-2016 (one baseline scenario and one adverse). On average, the result in the adverse scenario was a fall of 3 pps in banks' CET1. In those banks whose capital ratio falls below the 5.5% threshold set for this scenario, this impact leads to an aggregate capital shortfall of just over 24 billion euros. The effect of the adverse scenario on the Spanish banking system was less than the

average for Europe: the CET1 ratio only fell by 1.4 pps and none of the banks analysed went below the 5.5% threshold which, once again, demonstrates the ambitious restructuring carried out by Spain's banks.

On the whole, the results are positive for Europe's banks and particularly for Spain, to such an extent that they will help to dispel doubts regarding solvency levels because the capital requirements are relatively modest (no country expects to resort to significant state aid). It should be noted that most banks, accounting for more than 70% of all banking assets in the euro area, would have a CET1 ratio above 8% in the adverse scenario (this happens in 13 of the 15 Spanish banks analysed). These are banks that can be considered to have passed the test with very high marks. Only nine banks in the euro area have passed by a narrow margin (CET1 of between 5.5% and 6.5%, and none of these is Spanish.

Improved confidence in European banks should ease their access to the markets and reduce their cost of equity. The results, as they eliminate the uncertainty regarding possible demands for capital from the supervisor, should also encourage banks to grant more loans. Nonetheless, for there to be a significant recovery in credit, doubts also need to be dispelled regarding the economic outlook for the euro area as a whole, with the economic recovery picking up. The exercise carried out by the ECB and the EBA reveals that, particularly in Spain, the banking sector is ready to meet the demand for solvent credit and to accompany this recovery.

Net impact of the adverse scenario on the CET1 ratio by country *



Note: * Positive values indicate a fall in the CET1 ratio. **Source:** "la Caixa" Research, based on ECB data.

KEY INDICATORS

Activity and employment indicators

Values, unless otherwise specified

	2012	2013	4T 2013	1T 2014	2T 2014	07/14	08/14	09/14	10/14
Retail sales (year-on-year change)	-1.6	-0.9	0.4	0.9	1.4	0.5	1.9		
Industrial production (year-on-year change)	-2.5	-0.7	1.5	1.4	1.0	1.6	-1.9		
Consumer confidence	-22.1	-18.7	-14.4	-11.2	-7.7	-8.3	-10.0	-11.4	-11.1
Economic sentiment	90.8	93.8	99.1	101.6	102.2	102.2	100.6	99.9	100.7
Manufacturing PMI	46.2	49.6	51.9	53.4	52.5	51.8	50.7	50.3	
Services PMI	47.6	49.3	51.3	52.1	53.0	54.2	53.1	52.4	
Labour market									
Employment (people) (year-on-year change)	-0.6	-0.8	-0.4	0.1	0.5	-		-	-
Unemployment rate: euro area (% labour force)	11.3	12.0	11.9	11.7	11.6	11.5	11.5	11.5	
Germany (% labour force)	5.5	5.3	5.2	5.1	5.0	4.9	4.9	5.0	
France (% labour force)	9.8	10.3	10.2	10.1	10.2	10.5	10.5	10.5	
Italy (% labour force)	10.7	12.2	12.5	12.5	12.5	12.6	12.3	12.6	
Spain (% labour force)	24.8	26.1	25.8	25.3	24.7	24.5	24.4	24.0	

Source: "Ia Caixa" 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

	2012	2013	4T 2013	1T 2014	2T 2014	07/14	08/14	09/14
Current balance: euro area	1.6	2.1	2.1	2.2	2.2	2.3	2.3	
Germany	7.1	6.8	6.8	6.9	6.8	7.1	7.2	
France ¹	-1.5	-1.4	-1.4	-1.5	-1.7	-1.6	-1.6	
Italy	-0.5	1.0	1.0	1.3	1.3	1.4	1.5	
Spain	-0.3	1.5	1.5	1.1	0.4	0.3	0.2	
Nominal effective exchange rate ² (value)	97.8	101.6	103.1	103.8	103.8	102.6	101.9	100.3

Notes: 1. Methodology changed as from 2014. 2. Weighted by flow of foreign trade. Higher figures indicate the currency has appreciated.

Source: "la Caixa" 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

	2012	2013	4T 2013	1T 2014	2T 2014	07/14	08/14	09/14
Private sector financing								
Credit to non-financial firms 1	-0.3	-2.3	-2.9	-3.1	-2.5	-2.2	-2.0	-1.8
Credit to households 1,2	1.2	0.3	0.3	0.3	0.4	0.5	0.5	0.6
Interest rate on loans to non-financial firms ³ (%)	2.4	2.2	2.3	2.2	2.1	2.0	1.8	
Interest rate on loans to households for house purchases 4(%)	3.1	2.8	2.8	2.8	2.7	2.6	2.6	
Deposits								
On demand deposits	4.1	7.9	6.6	5.9	5.1	5.6	5.9	6.3
Other short-term deposits	2.0	0.0	-1.5	-2.5	-2.0	-1.8	-1.7	-1.5
Marketable instruments	0.5	-14.8	-16.8	-12.6	-11.7	-6.9	-6.5	-4.1
Interest rate on deposits up to 1 year from households (%)	2.8	2.0	1.6	1.6	1.4	1.3	1.2	

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: "la Caixa" Research, based on data from the European Central Bank.

CURRENT SITUATION · Withstanding

Europe's slowdown

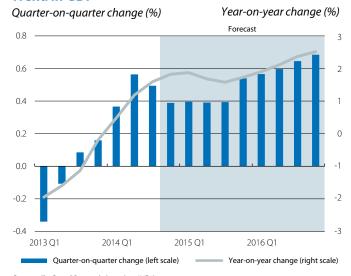
GDP grew by 0.5% quarter-on-quarter in Q3. Although a slightly lower rate of growth was expected than in Q2 (0.6% quarter-on-quarter), in the end the slowdown has been very modest, only 0.1 pp. With this figure, the Spanish economy has enjoyed five consecutive quarters of growth and the year-on-year rate of change for GDP is 1.6%. Although the GDP's breakdown by component has yet to be published, the bulk of the evidence available suggests that growth is still being driven by domestic demand and especially by household consumption and investment in capital goods. Given such good figures, we have improved our growth forecast for 2014 by 0.1 pp to 1.3%. Our central scenario predicts this expansion will continue but at a slightly slower rate, namely 0.4% quarter-on-quarter, bringing growth in 2015 to about 1.7%.

Economic activity has remained expansionary but is expected to ease slightly. October's business confidence index, based on the expectations of entrepreneurs regarding how business is going, rose by 0.2% in relation to Q3, a very modest increase compared with the substantial rises recorded in previous quarters. Moreover, the component of expectations has remained at the same level as in Q3 without any further rises. For their part industrial orders, which usually anticipate the trend in industrial production over the coming months, dipped slightly in August due to the slowdown in external orders both in the euro area and the rest of the markets. The recovery in domestic orders points to domestic demand continuing to grow at a good rate, which might temporarily offset the fall in foreign demand. It therefore looks like the Spanish economy is withstanding the recent slowdown in activity in Europe. After extensive correction in macroeconomic imbalances and the structural reforms implemented, it is less vulnerable and more prepared for growth. In any case, the economy's resilience to external weakness is limited and, ultimately, its recovery still depends on the euro area overcoming its most recent setback.

The good tone in economic activity is reflected in the figures for the labour market. In Q3 the number of employed increased for the fourth consecutive quarter (0.4% quarteron-quarter, seasonally adjusted), a figure that was expected after the good data for workers registered with Social Security. As has been the case over the last few quarters, employment grew in the private sector (+154,900) but fell in the public (-3,900). The unemployment rate fell by slightly more than expected, from 24.5% to 23.7%, thanks to job creation but also due to a reduction in the labour force (-58,000 people), especially among foreign workers.

Employment's revival moves beyond the services sector, making the recovery more solid. Apart from agriculture, which is highly volatile, employment rose in services

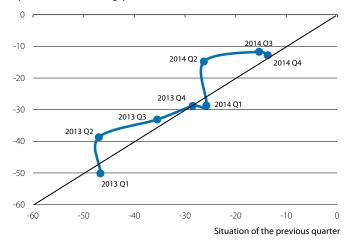
Trend in GDP



Source: "Ia Caixa" Research, based on INF data

Business confidence

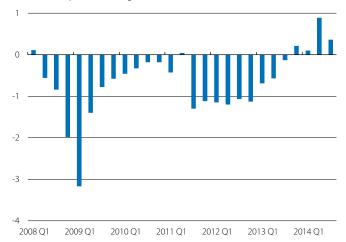
Net balance of favourable responses minus unfavourable responses (%) Expectations for the coming quarter



Source: "la Caixa" Research, based on INE data.

Employed *

Quarter-on-quarter change (%)



Note: * Series seasonally adjusted.

Source: "Ia Caixa" Research, based on INF data

(+108,800), industry (+71,800) and, for the second consecutive quarter, construction (+43,500). Moreover, employment expectations also continued to improve, suggesting a good employment trend in the coming quarters. After the significant increase in Q2, expectations for the services and retail sectors remained at the levels achieved in Q3. However, employment expectations in industry and construction, which had fallen slightly in Q2, improved considerably in Q3 and especially in the latter sector, going from -44.7 in April to -23.2 in September. This recovery in construction employment certainly suggests that job creation is spreading, albeit very gradually, throughout the different sectors.

The fall in prices is easing off. October's inflation rate stood at −0.1%, 0.1 pp higher than the figure for the previous month. This increase can be partly explained by the rise in food prices. Although inflation has been in negative terrain for the last four months, a tentative change in trend can now be seen, supported by the recovery in domestic demand and the euro's depreciation, and we expect the risk of deflation to gradually disappear within a context of gradual recovery.

Tourism looks like enjoying another record year. For the first time the number of tourists in September went above seven million, a year-on-year increase of 8.1%, auguring record figures for 2014. The tourism industry's superb performance contrasts with the trend in exports of goods which fell by 5.1% year-on-year in August. Although substantial, this drop can be partly explained by the series' own volatility. The average for the last three months, which shows the underlying trend, is somewhat more favourable although still lower than imports. These figures are reflected in the current account balance, accumulating a deficit of 4.6 billion euros between January and August compared with an 8.7 billion surplus over the same period in 2013. We expect this trend to change direction over the coming months, with exports also contributing once again to GDP growth. Firstly, the improvement in global demand should boost exports. Secondly, the growth in domestic demand, and in imports, should moderate. There are downside risks due to the uncertainty surrounding these factors, however. What does seem clear is that the current account balance is unlikely to repeat the figure posted in 2013 (0.8% of GDP).

Private consumption continues to drive growth. September's strong increase in retail sales (1.1% year-on-year in the series adjusted for seasonal and calendar effects) suggests that private consumption will have performed well in Q3. As in Q2, domestic consumption will have driven growth, supported both by the improved labour market and a fall in the savings rate. According to the latest data available, the savings rate of households fell to 9.1% of their gross disposable income in Q2, in a context in which gross disposable income is still falling (-0.2% quarter-on-quarter). With a view to the coming quarters, this downward slide in savings appears to be limited so further growth in

Employment expectations

Moving average of three months (index)



Source: "la Caixa" Research, based on European Commission data.

CPI

Year-on-year change (%)



Source: "la Caixa" Research, based on INE data.

International trade of goods

Year-on-year change, moving average of three months (%)



Note: Nominal data

Source: "Ia Caixa" Research, based on data from the Customs Department.



consumption would have to be supported by an increase in gross disposable income. Household wealth, which reached maximum levels in Q2, should also be a significant support for consumption in the medium term.

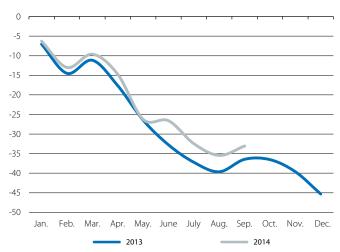
The improvement in activity boosts fiscal consolidation.

Higher tax revenues helped the central government to reduce its deficit to just over 33 billion euros in September (3.1% of GDP), 9.3% lower than in 2013. The fiscal balance for the rest of the administrations has followed suit, apart from the autonomous communities which, according to the latest figures from August, had already reached their deficit target for 2014 as a whole (1.0%). We have therefore maintained our forecast of a slight deviation from the deficit targets for this year.

After successfully withstanding the ECB's stress test, the banking sector is starting to grant new loans. After the extensive restructuring carried out by Spain's banks over the last few years, the results of the European stress test showed that all Spanish banks are solvent enough to withstand an adverse scenario in which the euro area's GDP in 2016 would be 6.6% lower than the baseline scenario. Only one Spanish bank had not passed the test at December 31, 2013 but this has now covered its capital requirements detected with issuances carried out in 2014. These results demonstrate the solvency of the sector which is now ready to start injecting credit into the real economy again. This can be seen in the data for new loans. Between January and September, new loans for acquiring housing reached nearly 19 billion euros, 18.9% more than in 2013. New loans given to households for consumption and other purposes also performed well with 24 billion euros being granted between January and September, 11.4% more than in the same period of 2013. New loans to SMEs also increased (105 billion euros, 7.4% more than in 2013) but credit to large firms is still far from the levels reached in 2013, partly because these companies prefer other sources of financing. Such figures for new loans contrast with the considerable drop still being seen in the outstanding balance for credit, with a year-on-year change of -8.0% in September, somewhat lower than the previous month (-8.3% in August). The overall volume of credit will still take some time to stabilise as the deleveraging of firms and households, now relatively advanced in some segments, has yet to be completed.

Central government balance

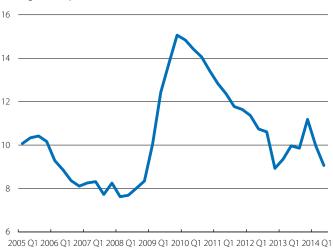
Cumulative figures for the year to date (billion euros)



Source: "la Caixa" Research, based on data from the State Public Accounts.

Household savings rate

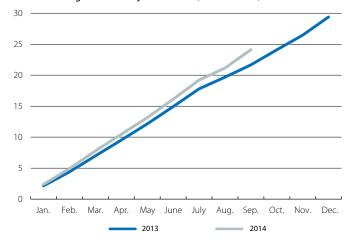
(% of gross disposable income)



Source: "la Caixa" Research, based on INE data.

New loans granted to households for consumption and other purposes

Cumulative figures for the year to date (billion euros)



Source: "Ia Caixa" Research, based on data from the Bank of Spain.

FOCUS · Is the deleveraging of Spanish SMEs coming to an end?

Spanish non-financial firms have spent the last four years deleveraging. Their gross debt has fallen by more than 25 pps of GDP since the peak reached in 2010, down to 108% in 2014 Q2. In spite of this considerable effort, many firms are still too heavily in debt. According to EC estimates, corporate debt needs to fall by a further 10 pps to reach a sustainable level. These aggregate data hide the great disparity between different companies. It is clear that the firms that got too much into debt during the boom years must continue their deleveraging while others with healthier balance sheets already have the creditworthiness to begin investing again.

Based on company information from the BACH database, we have compared the trend in the leverage ratio (debt to equity ratio) between 2008 and 2012. While SMEs had considerably reduced their leverage over this period, specifically by 49 pps for firms in the second quartile,1 the adjustment made by large firms was much less (15 pps) and such differences are even greater when we look at the third quartile of the debt to equity ratio. In other words, those SMEs that were most indebted in 2008 are the ones that have deleveraged the most (specifically by 130 pps), while this ratio has barely fallen for the companies least in debt (first quartile). In contrast, large firms, including the most leveraged companies of the third quartile, deleveraged very little between 2008 and 2012. This pattern shows that, for the time being, SMEs, whose economic activity and external sources of financing tend not to be highly diversified, have carried out most of the adjustment.

To place the deleveraging of Spanish SMEs in context, it is useful to compare them with those in other European countries. In 2008 Spanish SMEs had very similar or even lower leveraging rates than their European peers and, between 2008 and 2012, SME deleveraging became widespread. The largest drop in the ratio can be seen among German SMEs with a median reduction of 57 pps, rising to 140 pps when, once again, we look at the third quartile.

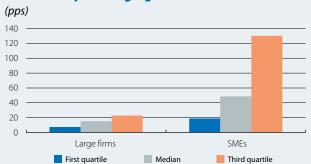
Returning to Spain, it is evident that not all industries have deleveraged at the same rate. Focusing on the third quartile (the segment most heavily in debt), it comes as no surprise that sectors such as construction, which had reached very high levels of debt (a median of 241% in 2008), have reduced their debt the most whereas SMEs in other sectors, such as hotels and restaurants, have a similar leverage ratio to that of 2008. This shows that few

1. The first (second or third) quartile is the value where 25% (50% or 75%) of the companies have a ratio below this value and the remaining 75% (50% or 25%) have a higher debt to equity ratio.

companies in these sectors were excessively in debt and, consequently, they did not need to deleverage so much.

Lastly we can also see early signs of a recovery in credit to SMEs: new loans of less than 1 million euros granted to non-financial firms have grown by a cumulative 7.4% for the year to date. It therefore appears that most of the laborious process of SME deleveraging has been completed and might actually be coming to an end.

Decrease in the leverage ratio between 2008 and 2012 by leveraging level



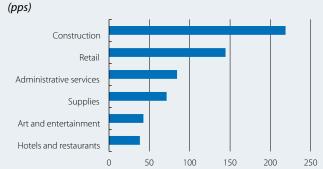
Note: The leverage ratio is defined as the debt to equity ratio. **Source:** "la Caixa" Research, based on data from BACH.

SME leverage ratio, third quartile



Source: "la Caixa" Research, based on data from BACH

Decrease in the leverage ratio between 2008 and 2012, third quartile



Source: "Ia Caixa" Research, based on data from BACH.

"la Caixa" Research

NOVEMBER 2014



FOCUS · Spain's Central Government Budget for 2015: the economic recovery should help but to what extent?

The Central Government Budget (PGE in Spanish) presented by the government for 2015 takes advantage of the current economic recovery and a more favourable state of affairs. The macroeconomic context for the PGE, rated by the Independent Fiscal Responsibility Authority (AiReF) as plausible, predicts that growth will speed up in 2015 (2.0% of GDP), particularly boosted by domestic demand with significant increases in consumption and investment. This more positive environment should lead to both a rise in revenue and a fall in expenditure, with the public deficit going from 5.5% in 2014 to 4.2% in 2015 and the government deficit from 3.5% in 2014 to 2.9% in 2015.

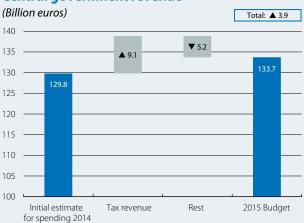
The PGE predicts an increase in central government revenue in 2015 (see the first graph) thanks to higher tax revenue (+5.4%). It should be noted that this increase would have been greater without the fiscal reform (+7.6% according to government estimates), primarily amending income tax (reducing the number of tranches as well as the marginal rates applied) and corporation tax (which will gradually fall to 25% in 2016). In fact revenue from income tax is expected to decrease by 0.6% compared with the year-end figure for 2014 in spite of the improvement in activity. The highest increase is expected in VAT revenue which should grow by 7.2%, due mainly to higher private consumption (+2.7%, a little more than in 2014). The sensitivity of tax revenue, based on the scenarios produced by the AiReF according to the economic forecasts of "la Caixa" Research (see the table), suggests that this positive trend in future revenue contained in the PGE is feasible: the lower revenue forecast in some areas would be offset by higher rises in others although the final balance may depend on the actual impact of fiscal reform.

According to the PGE, central government expenditure will fall by 1.7% in 2015 (see the second graph). By item, personnel spending will increase slightly as well as investment (including the CRECE Plan). The largest item, namely current transfers, will fall due to a smaller contribution to the Public Employment Offices for unemployment benefits, counteracting the rise in spending on other items. The next most important item, financial costs, will also fall thanks to lower interest payments on public debt (in spite of the increase in the level of debt), and might even be overestimated.

In short, the PGE contains an increase in revenue and a decrease in spending that depends especially on the business cycle and to a lesser extent on structural adjustments to central government spending and improved efficiency. But there are still downside risks, such as a slowdown in euro area growth. The

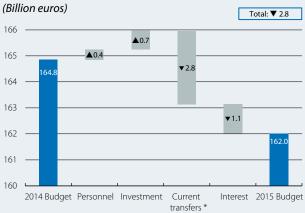
government must therefore follow the budget strictly and remain alert as the predicted reduction in the deficit to 4.2% of GDP, although plausible, is dependent on a scenario of economic recovery that is not entirely in the government's hands.

Central government revenue



Source: "la Caixa" Research, based on data from the PGE 2015.

Central government expenditure



Note: * Includes transfers to tax authorities, Social Security and the Public State Employment Service.

Source: "la Caixa" Research, based on data from the PGE 2015.

Revenue forecast

(Billion euros)

	2015 Budget "I	a Caixa" Research	AIReF
Direct taxation			
Income tax	73.0	73.3	72.1
Indirect taxes			
VAT	60.3	56.3	56.6
Tax on hydrocarbons	10.7	10.1	10.2
Social contributions	109.8	112.0	111.0

Note: Estimates based on the economic forecasts of "la Caixa" Research and the AIReF; the AIReF revenue forecast model; and the government's estimated impact of the tax reform. **Source:** "la Caixa" Research, based on data from the 2015 Budget and the AIReF.

^{1.} Plan of measures for growth, competitiveness and efficiency (CRECE) passed in June 2014.

FOCUS · Structural reforms: slowly but surely

From a constructive perspective, the long economic crisis has led to a number of reforms being implemented that are crucial to laying the foundations for sustained economic growth which would have otherwise been unlikely. For example pensions, labour legislation, the tax and financial system are all undergoing extensive reforms. However, the agenda of reforms has advanced on other fronts that may not be guite so obvious but are also important, such as changes in the insolvency act and in active employment policies.

Regarding insolvency legislation, considerable modifications have recently been made to the refinancing and restructuring of corporate debt, altering the phase prior to insolvency (Royal Decree Law or RDL 4/2014) and during insolvency proceedings (RDL 11/2014). The aim of such measures is to help companies that are economically viable but in financial difficulty to continue in business, which is beneficial not only for the firms themselves but also for the economy in general. Under previous legislation, as debtors had to repay their debts using all their personal assets, in most cases they tended to postpone insolvency proceedings until the situation had become untenable. It was also very difficult for companies to reach an agreement with their creditors in order to refinance or restructure their debt.

The creation of a «limited liability entrepreneur» (Act 14/2013 supporting entrepreneurs and their internationalisation) helped to protect private residential property during insolvency proceedings, albeit under conditions that could be rather restrictive. RDL 4/2014 also established that enforcement proceedings on a debtor's assets could be suspended while negotiations were being held with creditors. Both measures should help to protect a debtor's assets and thereby encourage them to begin insolvency proceedings sooner.

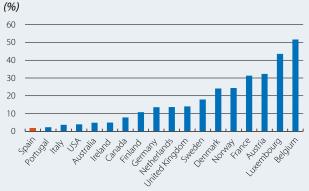
To help all parties reach an agreement, it is now easier for a majority to be established among creditors that determines the conditions for restructuring debt, imposing these conditions on all creditors, both during voluntary arrangements (RDL 4/2014) and insolvency proceedings (RDL 14/2014). It is significant that secured creditors can also be forced to accept the conditions agreed, even if this affects their security interest. After RDL 4/2014, of note is how credit from restructured operations is handled for accounting purposes, as established by the Bank of Spain. After a refinancing agreement, debts are now classified as normal risk instead of doubtful, provided there are enough objective factors to guarantee they will be repaid and if there is a viability plan to ensure the business will continue in the short and medium term. This measure undoubtedly gives banks more incentive to reach an agreement with their debtors as it helps to improve their balance sheets.

In addition to the reform of the insolvency act, other actions have also been taken to improve access to financing. On 3 October, for example, the government approved a bill to encourage corporate financing that introduced, among other changes, obligatory advance notice of three months to cancel or reduce lines of credit to SMEs by more than 35%, as well as the obligation to provide SMEs with their payment record and internal rating.

With regard to the labour market, the focus has been on improving the effectiveness of active employment policies, an incredibly important element given the current situation. The government has decided to set up a system that allocates funds to autonomous communities depending on the effectiveness of these active policies. To this end it has established a series of targets (increasing the employability of the hardest hit groups, improving training quality, etc.) and indicators to evaluate performance. The results achieved will have a progressively greater influence on the funds being allocated. In 2014, 40% of the funds have already been distributed according to the rating given to programme performance in 2013, a percentage that will rise to 60% in 2015.

This reform represents an important step towards a system with more objective and transparent assessment of the active employment policies being implemented. Work should now focus on refining the indicators used to assess the effectiveness of such policies. On the one hand, finding a wide enough range of indicators to cover the whole spectrum required to make a complete assessment but narrow enough to ensure the overall rating is transparent (there are currently 26 indicators). On the other hand, it will also be important to increase the number of indicators that measure the success of policies carried out. In any case, this reform provides the ideal platform for active employment policies to play a leading role in the long-awaited recovery of the labour market.

Insolvency proceedings for every 100 bankrupt companies



Source: "Ia Caixa" Research, based on data from the 2013 Annual Report of the Bank of Spain.



KEY INDICATORS

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

Activity indicators

	2012	2013	2013 Q4	2014 Q1	2014 Q2	07/14	08/14	09/14	10/14
Industry									
Electricity consumption	-2.2	-2.1	0.1	-0.4	0.8	0.1	0.1	1.6	
Industrial production index	-6.6	-1.5	1.1	1.5	2.6	0.8	0.6		
Indicator of confidence in industry (value)	-17.5	-13.9	-11.6	-9.1	-8.2	-5.7	-5.7	-5.7	-6.0
Manufacturing PMI (value)	43.8	48.5	50.1	52.5	53.4	53.9	52.8	52.6	
Construction									
Building permits	-42.7	-21.4	-6.5	-8.9	14.4	16.6	30.2		
House sales	-8.7	-2.4	-9.8	-9.3	6.5	10.7	-1.1		
Services									
Foreign tourists	2.0	5.6	10.8	8.1	7.8	5.9	8.8	8.1	
Services PMI (value)	43.1	48.3	51.8	54.2	55.7	56.2	58.1	55.8	
Consumption									
Retail sales	-7.1	-3.7	0.4	-0.1	0.7	-0.3	0.6	1.1	
Car registrations	-13.5	5.6	22.6	11.8	23.2	10.9	13.7	26.2	
Consumer confidence index	-31.7	-25.3	-19.4	-11.8	-6.1	-7.7	-6.4	-9.6	-10.0

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

Employment indicators

	2012	2013	2013 Q4	2014 Q1	2014 Q2	07/14	08/14	09/14
Registered as employed with Social Secur	ity ¹							
Employment by industry sector								
Manufacturing	-5.3	-4.3	-2.5	-1.3	0.0	0.6	0.6	0.7
Construction	-17.0	-12.1	-7.9	-5.3	-2.3	-1.1	-0.4	-0.2
Services	-1.7	-2.0	-0.4	1.1	2.2	2.6	2.5	2.7
Employment by professional status								
Employees	-3.8	-3.8	-1.8	0.1	1.4	1.9	1.9	2.1
Self-employed and others	-1.4	-0.6	0.4	1.4	2.3	2.4	2.5	2.6
TOTAL	-3.4	-3.2	-1.4	0.4	1.5	2.0	2.0	2.2
Employment ²	-4.3	-2.8	-1.2	-0.5	1.1	_	1.6	_
Hiring contracts registered ³								
Permanent	29.7	-14.2	-2.1	6.8	24.0	18.4	16.8	29.3
Temporary	-4.0	6.4	15.0	19.4	14.2	8.5	8.3	16.4
TOTAL	-1.6	4.0	13.5	18.2	15.0	9.1	8.8	17.4
Unemployment claimant count ³								
Under 25	4.5	-6.2	-8.0	-9.4	-10.9	-5.8	-4.9	-5.7
All aged 25 and over	11.7	3.7	-1.2	-3.7	-5.9	-6.0	-5.8	-5.9
TOTAL	10.9	2.7	-1.8	-4.2	-6.4	-5.9	-5.8	-5.9

Notes: 1. Mean monthly figures. 2. LFS estimate. 3. Public Employment Offices.

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

Prices

	2012	2013	2013 Q4	2014 Q1	2014 Q2	07/14	08/14	09/14	10/14
General	2.4	1.4	0.1	0.0	0.2	-0.3	-0.5	-0.2	-0.1
Core	1.6	1.5	0.3	0.1	0.1	0.0	0.0	-0.1	
Unprocessed foods	2.3	3.6	0.7	0.7	-2.3	-5.2	-5.4	-1.5	
Energy products	8.8	0.1	-1.1	-1.0	2.4	0.3	-0.9	0.0	

Source: "la Caixa" Research, based on data from the INE.

www.lacaixaresearch.com "la Caixa" Research

Foreign sector

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

	2012	2013	2013 Q3	2013 Q4	2014 Q1	2014 Q2	07/14	08/14
Trade of goods								
Exports (year-on-year change)	3.8	5.2	4.4	0.8	3.2	-2.0	8.7	-5.1
Imports (year-on-year change)	-2.8	-1.3	-0.6	2.0	7.0	3.7	13.4	0.5
Current balance	-3.0	15.1	15.8	15.1	11.2	4.4	3.5	1.8
Goods and services	16.5	35.7	34.3	35.7	33.6	29.1	28.0	26.7
Primary and secondary income	-19.4	-20.6	-18.5	-20.6	-22.4	-24.8	-24.5	-24.9
Net lending (+) / borrowing (–) capacity	2.3	22.0	22.7	22.0	18.3	10.8	9.7	7.8

Source: "Ia Caixa" 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

	2012	2013	2013 Q4	2014 Q1	2014 Q2	07/14	08/14	09/14
Net lending (+) / borrowing (–) capacity	-10.1	-6.8	-6.8	-0.6	-3.4	_		-
Central government ¹	-7.9	-4.8	-4.8	-0.9	-2.5	-3.1	-3.3	-3.1
Autonomous regions	-1.8	-1.5	-1.5	-0.3	-1.1	-1.0	-1.0	
Local government	0.3	0.5	0.5	0.2	0.1	_		-
Social Security	-0.9	-1.1	-1.1	0.3	-0.2	0.0	-0.1	
Public debt (% GDP)	84.4	92.1	92.1	94.9	96.3	_		-

 $\textbf{Note:} \ 1. \ Includes \ measures \ related \ to \ bank \ restructuring \ but \ does \ not \ include \ other \ central \ government \ bodies.$

 $\textbf{Source: "} \textit{Ia Caixa" Research, based on data from the IGAE, Ministry of Taxation and Bank of Spain. \\$

Financing and deposits of non-financial sectors

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

	2012	2013	2013 Q3	2013 Q4	2014 Q1	2014 Q2	07/14	08/14	Balance 08/141
Financing of non-financial sectors ²									
Private sector	-4.0	-7.8	-8.1	-7.4	-6.2	-5.7	-5.6	-5.5	1,787.6
Non-financial firms	-4.1	-9.8	-10.3	-8.8	-6.6	-6.1	-5.9	-5.9	1,025.8
Households ³	-3.8	-4.9	-5.0	-5.5	-5.6	-5.2	-5.1	-5.1	761.8
General government ⁴	15.0	16.8	17.4	13.0	8.5	6.6	5.5	6.1	1,010.0
TOTAL	0.7	-1.0	-0.9	-1.4	-1.5	-1.7	-1.9	-1.6	2,797.6
Liabilities of financial institutions due to	firms and hou	seholds							
Total deposits	-4.5	2.1	4.7	2.2	0.2	-0.8	-0.7	-1.4	1,173.8
On demand deposits	0.2	4.2	4.6	8.1	7.4	7.4	13.8	13.5	311.2
Savings deposits	-2.8	-0.1	-0.2	1.4	3.8	5.9	6.6	7.0	215.2
Term deposits	-6.7	1.7	5.7	0.2	-3.6	-6.1	-8.5	-9.8	626.3
Deposits in foreign currency	-4.0	16.8	24.1	-0.1	-1.1	0.1	0.1	0.5	21.1
Rest of liabilities ⁵	-13.2	-16.8	-15.3	-12.7	-11.1	-8.3	-0.2	-9.5	117.7
TOTAL	-5.7	-0.2	2.3	0.5	-1.1	-1.6	-0.7	-2.2	1,291.5
NPL ratio (%) ⁶	10.4	13.6	12.7	13.6	13.4	13.1	13.2	13.2	_
Coverage ratio (%) 6	73.8	58.0	63.8	58.0	58.6	59.4	59.4	59.2	_

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

Source: "Ia Caixa" Research, based on data from the Bank of Spain.

NATIONAL ACCOUNTS IN THE DIGITAL ERA

On measuring and using GDP

GDP is undoubtedly the predominant statistic in the world of economics. It is used by governments to produce their budgets, by central banks to formulate monetary policy, by investors to administer their portfolios and also by economic policymakers. But is it appropriate to use GDP for such a wide range of purposes? As noted by Nobel prize-winner Joseph Stiglitz: «What we measure affects what we do; and if our measurements are flawed, decisions may be distorted». In other words, in order to use GDP properly we must first of all understand what it is, what it measures and what it does not measure.

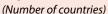
GDP measures the value of the final goods and services obtained in an economy over a certain period of time. It dates back to the Great Depression of the 1930s in the United States, when the need arose to calculate how far the economy was shrinking. Over the years, the national accounts system, first created when production was eminently agricultural and industrial, has gradually adapted to changes in economic production. In the digital era, the growing importance of research and development (R&D) in production, as well as the production of intangible goods, represent a considerable challenge for measurement: how can their value be included within GDP?

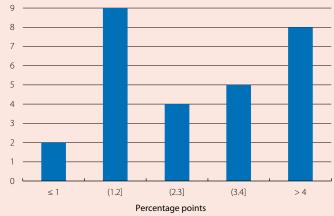
The most recent attempt to adapt the calculation of GDP to the new economy took place this very autumn. European countries have started to publish their national account data using the new European System of National and Regional accounts (ESA 2010) which, in turn, meets the standards dictated by the United Nations (SNA 2008) and implemented in the US, Australia and Canada. Among the changes introduced is the treatment of R&D expenditure as investment. Until now it had been considered as intermediate consumption in the production process and, as such, was not directly included in GDP. The new methodology recognises that R&D expenditure is actually an investment since it represents an increase in the stock of intangible capital that can be used repeatedly in production and consequently directly increases the GDP figure.

The impact of including R&D expenditure is quite substantial: nominal GDP in 2010 for the European Union has increased by 1.9 pps, rising to 4.0 pps for Finland and Sweden. In addition to this change, the new methodology for calculating GDP also includes other factors such as spending on weapons systems in the calculation of investment and illegal activities such as prostitution, drug production and trafficking and smuggling in the calculation of national revenue. If we take into account all the methodological changes implemented, the total revision of GDP amounts to 3.7 pps for the whole of the European Union and, in 8 out of the 28 countries, GDP has increased by more than 4 pps (see the graph). It is as if we have suddenly become richer, at least in statistical terms.

These data illustrate that including or excluding certain productive activities in GDP can have a considerable effect, becoming even more relevant when economic policy decisions are based on these figures without considering what they do

Impact of the methodological changes and statistical improvements on the level of GDP, 2010





Source: "la Caixa" Research, based on Eurostat data.

or do not include. This illustrates the alleged lack of investment in the main developed economies. In the euro area, the share of investment in GDP has fallen from 22% in 2007 to 18% currently and the situation is similar in the US. Given these data, many are calling for greater investment in these economies in order to boost their potential growth. But what if investment is not being correctly calculated in the GDP figures?

The considerable impact of including R&D expenditure as investment suggests that national accounts might be omitting a part, and probably a substantial one, of the investment in intangible assets such as organisational capital or brand equity (see the article «Intangibles: the new investment in the knowledge era» in this Dossier). Due to the inadequate treatment of intangible assets in national accounts, some economists have attempted to identify and calculate investment in such capital. In the US,

1. Corrado, C., Hulten, C. and Sichel, D. (2009), «Intangible Capital and U.S. Economic Growth», Review of Income and Wealth, 55, 661-85.

investment in intangible assets is significant and is growing: in 1977 it accounted for around 6% of GDP, a share that has increased up to just over 12% of GDP in 2011. The result is that total investment (including intangibles) exceeded 19% of GDP in 2011 and is showing an underlying positive trend. In this case it seems reasonable to question the need to increase investment without first analysing the situation accurately. In any case, due to the economic crisis a lot of developed countries are likely to have an investment rate (in tangible and intangible assets) that is lower than desirable but the lack of statistics for this area make it difficult to evaluate just how appropriate this kind of recommendation would be.

However the difficulties in measuring GDP presented by the digital revolution go beyond investment. One vital case in point is the measurement of the consumption of free goods

US investment in tangible and intangible goods (% GDP)



Source: "la Caixa" Research, based on data from Corrado et al. (2009).

and services (see the article «Even free things have a price» in this Dossier). Free consumption, as it is not associated with any monetary transaction, is unlikely to be included in GDP, which is estimated based on data from the monetary payments made. The problem becomes even greater due to the substitution effect; i.e. when consumption falls of a paid good (e.g. making a conventional telephone call) that would be included in GDP because a consumer uses a free good (e.g. making a call via a platform such as Skype). Although difficult to quantify, Brynjolfsson and Hee Oh (2012)² estimate that the value of free goods and services consumed in the US could total around 100 billion dollars a year, a considerable sum that is not included in the GDP figure.

As we have just seen, using GDP can sometimes be problematic because of what it *does not* include. Other times, as we will see, it is because of what it *does* contain. By way of example, the calculation of GDP includes the shadow economy and illegal activities (as mentioned above, the latter were added in the last revision). This is relevant for economic policy because a lot of measurements are based on GDP. For example, the public deficit is usually measured as a percentage of GDP. As part of the Excessive Deficit Procedure of the European Commission, Spain's public deficit target for 2013 was 6.5% of GDP. With April's estimate this target would have been exceeded by 0.1 pp (6.6% of GDP). However, the new calculation of GDP has reduced the deficit to 6.3% of GDP,³ meaning that Spain met and even bettered the target agreed with the European Union. It may seem paradoxical that this has been achieved partly due to the inclusion of illegal activities in the GDP figure, which the government receives no revenue from. A similar effect can be seen in the ratio of public debt to GDP which fell by 2.3 pps between April and October thanks to the revised GDP figure.

Given the number of limitations represented by estimating GDP, under certain circumstances other figures need to be used that are more in line with the object of the analysis. For example, instead of using GDP per capita to measure a nation's progress, indicators of social well-being have been developed that value other aspects affecting people's quality of life, such as the quality of education or the environment (see the article «Does a country's GDP reflect its well-being?» in this Dossier).

In short, GDP is, and will continue to be the main tool used to measure the progress of an economy although significant effort is certainly being made to adapt national accounts to the new economic situation. The difficulty lies in its use (and misuse) to formulate economic policies and set priorities. It is therefore necessary to be aware of the limitations of GDP and use it in conjunction with other complementary measurements. As a result, economic decisions will be more appropriate.

Judit Montoriol-Garriga Macroeconomics Unit, Strategic Planning and Research Department, CaixaBank

^{2.} Erik Brynjolfsson and Joo Hee Oh (2012), «The Attention Economy: Measuring the value of free digital services on the internet», Thirty Third International Conference on Information Systems, Orlando.

^{3.} Specifically, 0.2 pps can be attributed to the revision of GDP and 0.1 pp to the improvement in the local government corporation balance.

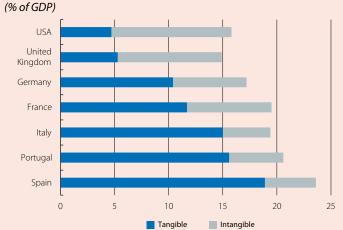
Intangibles: the new investment in the knowledge era

The shift from a broadly manufacturing economy to what is now being called a knowledge economy has involved significant changes in the productive structure of countries. Intangible assets are becoming so important in the era of digitalisation and communication that we could even say they are to the knowledge economy what machines were to the manufacturing economy. However, in spite of their growing relevance (as can be seen in the graph, the US and UK already invest more in intangible than tangible capital), the difficulty in measuring such assets has often led to them being excluded from numerous economic contexts, resulting in flawed theories and poor decision-making. This article analyses what intangibles are, why they are difficult to quantify and what happens when they are excluded.

Economic theory defines investment as what is spent today on goods and/or services (assets) to increase the stock of capital and thereby future output. The variable of stock reflects changes caused by investment decisions but has a large inertia as it contains capital accumulated in the past, after depreciation. According to this premise, intangible assets are types of capital that, by their very nature, are difficult to identify and count but whose accumulation (as happens with the more common or physical capital goods) leads to greater output in the future.

For example, when a firm decides to acquire a new machine it makes an investment. This machine then becomes part of the company's capital stock and therefore its production capacity. When the same firm gives its workers training or buys a software package (both intangible assets), this is also an investment. However, spending on specific training for workers is not treated as investment by national accounts, so companies have to account for it as an expense and cannot capitalize the expenditure. Although this might come as a surprise, it is worth noting that, just 15 years ago, national accounts did not even consider the buying of software to be an investment and this was therefore not taken into account when calculating countries' capital stock. It is even more surprising to note that the amount that individuals decide to spend on their education and training (i.e. investment in human capital) is not considered to be an investment either. This surely means that countries' capital stock is underestimated: back in 1989, Dale Jorgenson and Barbara Fraumeni estimated that US economy's stock of human capital was between five and ten times higher than the physical figure.¹

Investment in tangible and intangible assets *



Note: * In 2009. **Source:** "Ia Caixa" Research, based on data from Falk, M. (2013). New empirical findings for international investment in intangible assets (No. 30). WWWforEurope.

Intangible assets can be divided into four broad groups: (i) computerised information (ii) intellectual property (iii) human capital and (iv) economic competencies. Of the four, and as we have already mentioned, computerised information (essentially software) has been considered as investment in national accounts for some years now, while intellectual property (patents, copyright and R&D expenditure) has now become part of investment precisely with the current methodological change for calculating GDP (see the article «On measuring and using GDP» in this Dossier). So an effort is clearly being made to improve the accounting and classification of this kind of capital although there is still a long way to go, particularly regarding economic competencies.These assets, often also called organisational capital, include a wide range of elements within productive processes, business models, investment in firm-specific human capital and also brand-related elements (such as advertising campaigns and market surveys). They also appear to be extensive,

judging by the different calculations made. By way of example, and according to Corrado et al. (2007), at the beginning of the year 2000, US investment in intangible assets was around a trillion dollars a year (on a par with investment in tangible assets), of which half (half a trillion!) comes from intangibles related to economic competencies.² This means that, at present, half the investment in intangible assets is still being ignored by national accounts.

^{1.} See Jorgenson, D. and Fraumeni, B. M. (1989), «The accumulation of human and nonhuman capital, 1948-84», in *The measurement of saving, investment, and wealth* (pp. 227-286), University of Chicago Press, 1989.

^{2.} Corrado, C., Hulten, C. and Sichel, D. (2007), «Intangible Capital and Economic Growth», Research Technology Management.



Although this is investment by definition, there are considerable reasons for not including (or for such a delay in the inclusion) of intangible expenditure under this heading, particularly the fact that many of these intangible assets are not bought but developed by the company itself and it is therefore difficult to quantify their market value. Secondly, these assets tend to be «invisible» in nature, making it harder to calculate their degree of depreciation, a basic feature for any kind of capital. The fact that a machine is visible means that we can see whether it is new, old or not working. However, when is a productive process new, old or not working?

Nonetheless, and in spite of the task's complexity, in this case John Maynard Keynes's maxim should come into play, namely that «it is better to be roughly right than precisely wrong». Because excluding these intangibles as a form of investment can lead to serious errors in economic policy, both at a global and also at a company level. In particular, in accounting models of economic growth, used to estimate the factors determining labour productivity, the inclusion of intangible assets significantly alters the results, especially as follows: it reveals that intangible capital has been an important and growing source of the improvement seen in labour productivity over the last few decades and that, consequently, the importance of tangible capital and the total productivity of factors was overestimated.³ Policies based on estimates that ignore the role of intangibles will have certainly led to overinvestment in tangible capital in detriment of intangible, among other unwelcome effects.

At a company level, it is evident that treating a lot of the intangible assets as expenditure instead of investment leads to underinvestment in intangibles since managers have to weigh up future profits with the current income statement and bear in mind the risks involved in high expenditure in intangibles (as this cannot be capitalised). Similarly, and as would be the case with studies at a macroeconomic level, omitting intangibles from microeconomic studies also leads to considerable error. For example, a study by Brynjolfsson, Hitt and Yang (2002) shows, in an initial estimate, how a dollar invested in technological capital becomes ten dollars in terms of its market value, while this ratio is one to one when the investment is allocated to non-technological capital. However, the results change dramatically when an organisational capital measure is included. Specifically, while this ratio of one to ten remains for investment in technological capital in an organisational environment that prioritises self-managed teams and decentralised decision-making, this relationship becomes one to one when the organisational context does not encourage self-management or decentralisation. In other words, investment in technology is highly productive only if accompanied by suitable organisational changes.

It therefore seems clear that, although it may be imperfect, some kind of measure needs to be found for intangible assets and there are different approaches to this problem. One of the most common uses the market-to-book ratio of companies; i.e. comparing their market value with their tangible book value: the difference between both figures reflecting the importance of intangibles in such firms. It does not take much insight to realise that the real value of Google or Amazon has little to do with the value of their tangible assets but a lot to do with their intangible capital, although it is also true that market value can fluctuate considerably for different reasons, especially over the short term.

A second approach consists of grouping together the different types of expenditure that are logically associated with the creation of intangibles then capitalising these in the same way as we would do with more traditional assets. In general, the items used are expenditure on advertising, direct spending on worker training, expenses incurred in outsourcing to consultancy firms and a portion of senior management salaries since part of their time is considered to be spent on organisational innovation. Once these investment flows have been compiled with a certain degree of regularity, a rate of depreciation is assumed for each one. As has already been suggested this task is not entirely straightforward but an attempt is made to base this on the information available regarding the company's economic situation. While depreciation rates of between 5% and 15% are assumed for the more traditional physical assets, these rise to 25% for R&D and shoot up to between 30% and 55% for some IT products, as well as organisational capital.

In short, although investment may be a concept that is easy to define, its identification and quantification becomes an arduous task as economies advance towards the era of digitalisation and knowledge and intangibles become one of the key sources of wealth. Nevertheless this complexity should not act as a deterrent because, if we can only manage to identify and measure such intangibles, we can help companies in today's world to generate the competitive edge that will lead them to the best possible use of resources and thereby success.

Clàudia Canals

Macroeconomics Unit, Strategic Planning and Research Department, CaixaBank

^{3.} The total output of factors is the difference between a country's rate of growth in output and the weighted rate of increase in production factors (in general capital and labour).

^{4.} See Brynjolfsson, J., Hitt, L. M. and Yang, S. (2002), «Intangible assets: Computers and organizational capital», Brookings papers on economic activity, 2002(1), 137-198.



Even free things have a price

Who has never consulted the internet to check a user rating before booking a hotel room or finding a good restaurant? Who has never taken advantage of social networks to keep in touch with former work or school mates? Who doesn't use smartphone apps on a daily basis? All these actions, no matter how mundane they may seem, provide us with a benefit that, all together, increases the well-being of society without incurring any direct cost at all as many of the services we use to achieve such benefits come free of charge. Although we are not used to paying for them, would we be prepared to do so to continue enjoying all these conveniences? We probably would, but what is the economic activity provided by these services via such apps? Does it form part of national statistics? This article attempts to throw some light on the problems of measuring free goods and services within the national account systems.

The measurement *par excellence* of national accounts, namely GDP, attempts to measure the value of an economy's goods and services (see the article «On measuring and using GDP» in this Dossier). This is a relatively simple task in a traditional economy but the challenge is much greater for sectors more closely related to information technologies. Fears that the error in calculation may be large and growing arise, for example, when it is noticed that, according to the US national accounts, the information industry's relative share of GDP has remained constant at between 4% and 5% since 1990. Note that, according to International Data Corporation, the volume of information on the internet was 4.4 zettabytes (4 trillion gigabytes) in 2013, 50% up on the previous year. It is hard to believe that the sector's added value has remained stable in relative terms precisely over the period that has seen the greatest rise in information technologies.

USA: breakdown of GDP by sector

(% of total GDP)

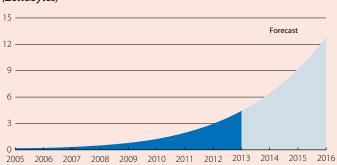
	1990	2000	2010	2013
Services	40.4	43.3	45.3	45.6
Retail and manufacturing	40.4	38.4	34.3	34.9
Information industry *	3.9	4.6	4.8	4.8
Agriculture and fishing	1.7	1.0	1.1	1.6
Public sector	13.9	12.9	14.3	13.0

Note: * Includes companies related to publishing, audiovisuals, telecommunications, broadcasting, data processing, internet publishing and other information services.

Source: "la Caixa" Research, based on data from the Bureau of Economic Analysis.

Volume of information on the internet



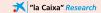


Source: "Ia Caixa" Research, based on data from the International Data Corporation.

One of the main drawbacks of GDP is that it attempts to reflect the production of goods and services via the monetary payment made when these are traded. As a result, one initial group of goods that is not reflected by GDP figures relates to activities of self-production or self-consumption, covering all the wealth produced and consumed within households. The best-known example is housework, which is only reflected in GDP when it is carried out by a third party paid for their work. A study by the Bureau of Economic Analysis estimates that, in 2010, including the value of non-market household production would have increased nominal GDP by 26%.¹ Another group not included within GDP is made up of all those goods and services exchanged without any financial transaction taking place; i.e. free of charge.

Although all these inaccuracies in the calculation are well-known and have been around for some time, they have been accentuated over the last few years due to the growing involvement of new technologies in our everyday lives. In particular, new forms of self-production have appeared while the price of many goods and services has fallen dramatically, to the point where many of them are now free. As a result of this change in the model of production, GDP cannot reflect the increase in production of such goods and services. The music industry and the press are a case in point. For the specific case of the music industry, the switch from analogue to digital drastically reduced the marginal cost of this good since the digitalisation process is much cheaper and also means that music can be transmitted instantaneously and globally at a marginal cost close to zero. In addition to digital downloads there is also the possibility of streaming songs for free from platforms such as YouTube and Spotify. Such innovation has dramatically decreased the industry's earnings and the national accounts therefore suggest that

1. Bridgman, Dugan, Lal, Osborne and Villones, Accounting for Household Production in the National Accounts, Bureau of Economic Analysis Article series, 2012.





production has fallen when, in actual fact, production in this industry has soared, increasing the consumption and well-being of many users.

The omission of self-production from the calculation of GDP has also become more accentuated with the emergence of the sharing economy. Shared consumption would most closely resemble what, in a world without internet, would be called self-production and exchange (or informal trade) but at a global rather than a local level, where goods, services and content are shared via digital platforms, such as Facebook, Tripadvisor and Wikipedia. In addition to activities where no money changes hands is a new economic activity in which private individuals provide goods and services in exchange for money on the internet. This new activity is increasing competition for traditional businesses and covers a wide range of sectors, from hotels to transport.

Given that the number of free goods and services is expected to go on rising in the coming years, if this error in calculating GDP is not put right it will expand and underestimate the economic performance of countries even further. Regarding this second point, Erik Brynjolfsson and Joo Hee Oh use an original, sophisticated methodology ² to measure the value of such services for the case of the United States. Specifically, they calculate how much money a consumer would need to receive to ensure their standard of living without using these free digital services would be the same as the standard of living achieved with them. Their analysis suggests that the increase in well-being thanks to the use of free digital services between 2007 and 2011 totalled 106 billion dollars per year on average, which would correspond to an increase in GDP of 0.74 pps. These figures are quite impressive and highlight the discrepancies between the value of a country's production activity and its performance, confirming just how important it is to develop alternative measures of a society's economic well-being (see the article «Does a country's GDP reflect its well-being?» in this Dossier).

In short, the rise in information and communication technologies is having a great impact on the value of the goods and services produced and traditional forms of measurement are failing to reflect people's well-being. Moreover, the bulk of the evidence suggests that, far from correcting itself, this error in calculation will increase in the coming years if nothing is done to stop it. If the economy changes, so must our ways of measuring it. The task, however, is no easy one.

Ariadna Vidal Martínez Macroeconomics Unit, Strategic Planning and Research Department, CaixaBank

^{2.} Erik Brynjolfsson and Joo Hee Oh, *The Attention Economy: Measuring the value of free digital services on the internet*, Thirty Third International Conference on Information Systems, Orlando 2012.

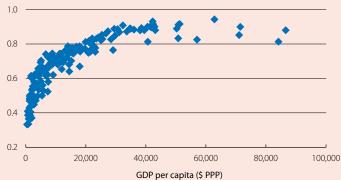
Does a country's GDP reflect its well-being?

GDP is the most prevalent way of measuring the trend in a country's economic activity. Its thorough methodology means it can be used planet-wide, making it easier to compare countries. However, although the use of GDP is common practice it is not necessarily a good indicator of a nation's well-being, a shortcoming recognised by Simon Kuznets himself, the creator of GDP in the US in the 1930s. To give an example: exploiting natural resources can boost growth at a specific point in time but at the cost of exhausting these resources and contaminating the environment, reducing the current and future well-being of a population.

Having recognised GDP's weakness as an indicator of the progress and well-being of a society, the last few years have witnessed a determined search for alternative ways of measuring this. In 2008, Nicolas Sarkozy, at that time President of France, set up a panel of experts to identify GDP's limitations both in methodological terms and also in terms of its ability to measure well-being (see www.stiglitz-sen-fitoussi.fr). The work of this commission led to the OECD's Better Life Initiative, whose aim is to develop statistical tools capable of assessing those aspects that determine people's quality of life. Other organisations such as the United Nations have also spent several years producing alternative indicators to GDP.

Relation between GDP per capita and the Human Development Index (2012)

(Human Development Index)



Source: "la Caixa" Research, based on data from the United Nations.

Trend in economic growth and degree of personal satisfaction in Spain



Source: "la Caixa" Research, based on data from the Ministry of Finance (BDMacro), INE and European Commission (Eurobarometer).

In general, the proposals made by the OECD and United Nations attempt to complement the assessment provided by the existing GDP indicator by including dimensions of a social or environmental nature. The OECD's Better Life Index takes 11 different aspects into account, measured using various indicators (see the first table): housing, income, jobs, community, education, environment, civic engagement, health, life satisfaction, safety and work-life balance. Another internationally used variable is the Human Development Index (HDI) which covers life expectancy, education and income level. In addition to these composite indices are two other subjective indicators based on opinion polls, one example being the percentage of individuals who report they are satisfied with their quality of life in the Eurobarometer surveys.

These measures undoubtedly provide a more complete view of a country's well-being. However, to what extend do the GDP figures differ substantially from those obtained using these other indicators? We have carried out two exercises to evaluate this. First we compared each country's gross national income per capita with its HDI. Secondly, we looked at the trend in economic growth and in the personal satisfaction indicator of the Eurobarometer in Spain.

From both procedures we can deduce that GDP is a reasonably good indicator of the progress being made by a society. In the global comparison, which includes highly diverse zones of wealth (see the graph on the left), it can be noted that rich countries are ranked in the upper sections both for per capita GDP and for the less economically-based indicator (HDI). The correlation gets weaker at the highest income levels, however, suggesting that other aspects of well-being start to take on more importance once the wealth threshold has been passed that allows the population to readily meet its basic needs. This is the situation when a combination of indices is likely to reflect a country's situation more accurately. In the second exercise (right-hand graph) we can see that, historically, GDP grows in parallel with the personal satisfaction of Spanish citizens, indicating that their happiness is related to the economic cycle. It therefore seems sensible to use GDP as a variable to measure the trend in a population's well-being.

This does not mean that an analysis of a country does not need to be broadened by using other variables in addition to GDP but it does mean that there is now less concern that such widespread use of GDP may suggest a different reality to the one provided by other well-being indicators. Moreover, it is important to bear in mind the fact that the more subjective indicators also have their own drawbacks, most notably that the perspective provided by a composite indicator depends not only on the factors it contains but also their relative weight.



Indicators included in the OECD Better Life Index (2014)

			Germany	France	Italy	Spain	OECD
	Housing	Homes without bathroom (% of population)	0.9	0.5	0.5	0	2.1
Material conditions		Expenditure on housing (% of gross disposable income)	21	21	23	20	21
		Rooms (number out of total people)	1.8	1.8	1.4	1.9	1.6
	Income	Household net-adjusted disposable income per capita (\$ PPP)	30,721	29,322	24,724	22,799	23,938
		Household net financial wealth (\$ PPP)	49,484	47,668	54,147	23,920	42,903
	Jobs	Employment rate (15 to 64, %)	73	64	58	56	65
Aateria		Job security (people unemployed in the current period who were working in the previous period out of total employed in previous period, %)	3.2	6.5	5.5	17.7	5.3
~		People unemployed for a year or longer (% of total labour force)	2.52	3.98	5.67	11.13	2.73
		Annual wages (\$)	41,782	38,625	33,571	34,747	41,010
	Community	Assistance from relatives or friends (% who would get this, if necessary)	93	91	91	92	89
	Education	Educated until at least the equivalent of a high-school degree (% of total population aged 25 to 64)	86	72	56	54	75
		Talent (average PISA index for reading, mathematics and science) *	515	500	490	490	497
		Years in education (years)	18.1	16.5	17	17.6	17.7
	Environment	Air pollution (micrograms per cubic metre)	16	12	21	24	20
		Satisfaction with water quality (% of total population)	94	85	80	75	84
Quality of life	Civic engagement	Degree of citizen consultation on rule-making (index) **	4.5	3.5	5	7.3	7.3
ityo		Voter turnout (%)	72	80	75	69	72
Jual	Health	Life expectancy at birth (years)	80.8	82.2	82.7	82.4	80.1
Ü		Population reporting good health (% of total)	65	68	65	75	69
	Satisfaction	Personal satisfaction (index from 0 to 10)	7	6.7	6	6.2	6.6
	Safety	Assault rate (% of population aged 15 or more)	3.6	5	4.7	4.2	3.9
		Homicide rate (per 100,000 inhabitants)	0.5	0.8	0.7	0.7	4.1
	Work-life balance	Employees working more than 50 hours per week (%)	5.6	8.7	3.7	6.0	8.8
		Leisure and personal care (hours per day)	15.3	15.3	15.0	16.1	15.0

Note: * 2/3 of the sample obtain an index of between 400 and 600. ** Index based on yes/no answers to a series of questions on the existence of an official consultation process for rule-making. The higher the figure, the greater the consultation. **Source:** "In Caixa" Research, based on data from the OECD Better Life Index.

This can clearly be seen in the tool provided by the OECD on its Better Life website. As mentioned above, the Better Life Index is made up of 11 sub-indices, each one based on several indicators. Once a rating has been obtained for these 11 sub-indices, they must be added together to calculate the final index, which means assigning a relative weight for each one. The choice of such weightings can strongly influence the final result and they should therefore reflect each country's reality as closely as possible. In fact, ideally, the relative weight of each sub-index should come from a representative survey of what is most important aspect for each population.

Having recognised the discretional nature of the weighting system and its effect on the final rating, the OECD provides the possibility of producing an à la carte Better Life Index; i.e. choosing the relative weightings to be applied. The second table shows how the ranking of this index varies when the relative weights are altered in four different scenarios. Assuming the 11 indicators are all equally important, Australia heads the list and Spain comes 21st out of 36. The order changes, however, if the worklife balance is the most important, with Denmark coming first and Spain climbing to 15th. This simple exercise reveals to what extent such indices are at the mercy of subjectivity, reducing their potential.

In short, GDP is a limited tool when evaluating the well-being of a country and this has led to complementary tools being inves-

OECD Better Life Index ranking

All 11 indicators equally weighted (1)	Income more important (5); the rest (1)	Jobs more important (5); the rest (1)	Work-life balance more important (5); the rest (1)
1. Australia	1. USA	1. Switzerland	1. Denmark
2. Norway	2. Switzerland	2. Norway	2. Norway
3. Sweden	3. Canada	3. Australia	3. Sweden
4. Denmark	4. Australia	4. Denmark	4. Netherlands
5. Canada	5. Sweden	5. Canada	5. Belgium
21. Spain	21. Spain	27. Spain	15. Spain

Note: The relative weights of the 11 indicators range from 1 (minimum) to 5 (maximum). **Source:** "la Caixa" Research, based on data from the OECD Better Life Index.

tigated. However, in general the results do not differ significantly from those provided by GDP figures. Moreover, the subjectivity of these new measures still represents a drawback at present. In the absence of better statistical formulas, GDP, albeit with some qualifications, is still an acceptable way to measure quality of life in different parts of the world.

Maria Gutiérrez-Domènech

Macroeconomics Unit, Strategic Planning and Research Department, CaixaBank





PUBLICATIONS

All publications are available online at www.lacaixaresearch.com E-mail: publicacionesestudios@lacaixa.es

WORKING PAPER SERIES

La internacionalización del renminbi: un largo camino por recorrer Clàudia Canals, 03/2013

Vulnerabilidad de las economías emergentes

Àlex Ruiz, 02/2013

Sareb: claves estratégicas Sandra Jódar-Rosell, 01/2013

Ajuste de capacidad en el sistema financiero español

Inmaculada Martínez, 09/2012

El ahorro y la eficiencia energéticos: un impulso para la competitividad de la economía española Pere Miret, 08/2012

Commodity Cycles: What Has Changed during the Last Decade?

Eduardo Pedreira and Miguel A. Canela, 06/2012

Inversiones financieras en España: impacto de la inestabilidad en los mercados

Inmaculada Martínez, 05/2012

Is There a Property Bubble in China? Clàudia Canals and Mercè Carreras-Solanas, 04/2012

El sobreendeudamiento de las empresas españolas: ¿problema común o de unas pocas?

Sandra Jódar-Rosell and Inmaculada Martínez, 03/2012

Hungría y la ayuda financiera de la UE y el FMI: ¿cambio en el mapa de riesgos?

Àlex Ruiz, 02/2012

Spanish Public Debt: Myths and Facts Oriol Aspachs-Bracons and Joan Daniel Pina, 01/2012

¿Cuándo se recuperarán los precios de la vivienda en Estados Unidos? Jordi Singla, 11/2011

DOCUMENTOS DE ECONOMÍA "la Caixa"

¿Por qué Europa genera poco crecimiento y empleo? lordi Gual

La prociclicidad del sistema financiero después de las reformas

Sandra Jódar-Rosell and Jordi Gual

Unión Bancaria: ¿de hormigón o de paja? lordi Gual

Enseñanzas latinoamericanas para una crisis europea Àlex Ruiz

Los requisitos de capital de Basilea III y su impacto en el sector bancario lordi Gual

Perspectivas de desapalancamiento en España

Oriol Aspachs-Bracons, Sandra Jódar-Rosell and Jordi Gual

Diferencial de inflación con la eurozona: ¿mejora sostenible?

La recuperación del comercio mundial. Lo que la crisis se llevó

Marta Noguer

Inmigración y mercado laboral: antes y después de la recesión Joan Elias

"la Caixa" ECONOMIC PAPERS

Banking Union: made of concrete or straw?

Jordi Gual

European Integration at the CrossroadsJordi Gual

Capital Requirements Under Basel III and Their Impact on the Banking Industry Jordi Gual

Should the ECB Target Employment? Pau Rabanal

Integrating Regulated Network Markets in Europe Jordi Gual

MR MONTHLY REPORT -ECONOMIC AND FINANCIAL MARKET OUTLOOK

Report on the economic situation (available also in Spanish version)

CURRENT ECONOMY

FINANCIAL SYSTEM

COLECCIÓN COMUNIDADES AUTÓNOMAS

CÁTEDRA "la Caixa" ECONOMÍA Y SOCIEDAD

El tiempo que llega. Once miradas desde España

José Luis García Delgado (editor)

ECONOMIC STUDIES

Europe, Like America. The Challenges of Building a Continental FederationJosep M. Colomer

El cambio climático: análisis y política económica. Una introducción

Josep M. Vegara (director), Isabel Busom, Montserrat Colldeforns, Ana Isabel Guerra and Ferran Sancho



Academic Advisory Council

Pol Antras

Harvard University

Philippe Bachetta

Université de Lausanne

Ramon Caminal

Institut d'Anàlisi Econòmica (CSIC)

Manuel Castells

Universitat Oberta de Catalunya and University of Southern California

María Paz Espinosa

Universidad del País Vasco

Josefina Gómez Mendoza

Universidad Autónoma de Madrid

Marta Reynal-Querol

Universitat Pompeu Fabra

Joan Enric Ricart

IESE Business School

Xavier Sala-Martín

Columbia University

Jaume Ventura

CREI - Universitat Pompeu Fabra

"la Caixa" GROUP: KEY FIGURES As of December 31, 2013

Financial activity	MILLION €
Total customer funds	304,636
Receivable from customers	206,479
Profit atributable to Group	745
Commercial activity and resources	
Customers (million)	13.6
Staff	33,291
Branches	5,730
Self-service terminals	9,597
Community projects: budget for activities in 2014	MILLION€
Social	335
Science and environmental	66
Cultural	64
Educational and research	35
TOTAL BUDGET	500

Publications

All "la Caixa" Research publications are available online





Follow us on Twitter to get the latest news from "la Caixa" Research.

Our aim is to create and spread economic and social knowledge to contribute towards the development of Spanish and European society.

The Monthly Report is for information purposes only and CaixaBank assumes no responsibility for any use that may be made thereof. The Monthly Report is based on information from sources considered to be reliable. However, CaixaBank does not guarantee its accuracy nor is it liable for any error or omission contained therein. The opinions and predictions given are those of CaixaBank and may change without prior notice.

© CaixaBank, S.A., 2014

The Monthly Report may be reproduced in part provided the source is acknowledged appropriately and a copy is sent to the editor.

Design and production: www.cege.es Legal Deposit: B. 21063-1980 ISSN: 1134-1920







