



International developments



Oil and raw materials

Sustained level of prices, supply and demand on the up

In Q3 2013, the oil price increased considerably, driven by Middle-East geopolitical tensions. These tensions have now eased in part and the price of Brent is around \$110 today.

In H1 2014, world oil supply is set to be dynamic, driven by production that remains sustained in the United States and stronger supply from the non-OPEC emerging countries. Demand, meanwhile, should be at a standstill in Q1 but then increase in Q2, buoyed by the emerging economies.

All in all, the spontaneous increase in oil supply through to June 2014 (+1.3 million bpd year on year) should be enough to cope with the foreseeable rise in demand. The price per barrel should therefore fluctuate around its present level (\$110) over the forecast period. However, the recent easing of geopolitical tensions at a time when OECD stock levels are high, could bring oil prices down over the forecasting period. On the other hand, any additional drop in production by OPEC countries could push oil prices up very quickly, given the recent weakness of the cartel's additional capacities.

In Q3 2013, geopolitical tensions caused a rise in crude prices

The price of Brent increased in Q3 2013 against a backdrop of intensifying geopolitical tensions in the Middle East (see [Graph 1](#)). It reached a high at the end of August 2013 (\$115.8 per barrel), when

fears of western military operation in Syria were high, before returning to a lower level in September when those tensions partly eased.

World demand for oil increased clearly in Q3 (+1.2 million bpd), driven by the rise in demand from the emerging countries (+700,000 bpd, of which +500,000 in the Middle East where consumption rises in summer with increased use of air conditioning). The rise in the consumption of OECD countries was also sustained (+400,000 bpd), on the one hand in Europe (+200,000 bpd) where activity has been improving since Q2, and also in the US (+200,000 bpd), where consumption by manufacturing industry proved to be dynamic.

Oil supply increased by 530,000 bpd, due to the increase in production in OECD member countries (+600,000 bpd), in particular the United States. European production fell back slightly, meanwhile (-100,000 bpd), on account of seasonal maintenance. In contrast with the dynamism observed in the OECD, production in OPEC countries fell markedly (-270,000 bpd), with the difficulties encountered by several of its members (Libya, Iraq, Iran) being only partially offset by the rise in production in Saudi Arabia (see [Graph 2](#)).

In Q4, the physical market should ease

In Q4 2013, the price of Brent will have stayed fairly stable at around \$110. On the physical market, world demand should fall (-140,000 bpd), essentially due to OECD member countries except

1 - Price of Brent in € and in \$
Last point: 6 December 2013



Source: Financial Times

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Japan where consumption should increase with the arrival of winter.

Demand should fall in Europe (-470,000 bpd) and in the United States (-210,000 bpd), where the shutdown had a negative impact on consumption. Likewise, demand should fall seasonally in the Middle East (-600,000 bpd). Chinese consumption should be dynamic, however (+330,000 bpd).

Supply should be stable compared to the previous quarter. It is set to increase in the non-OPEC members (+600,000 bpd), in particular North America (+600,000 bpd). However, production should decrease sharply in the OPEC member countries (-600,000 bpd), notably driven by the seasonal fall in Saudi supply (-370,000 bpd between September and October).

In H1 2014, demand and supply should gain in dynamism

In Q1 2014, supply should be dynamic again (+400,000 bpd) thanks to still-strong US output (+300,000 bpd) and a rise in production of non-OPEC emerging countries. OPEC production should remain around the low level observed in October, as Libyan production is set to resume only slowly, while the rise in Iranian production remains reliant on international sanctions being lifted. In Q2, dynamic supply should be driven by world biofuels production (+400,000 bpd), while crude production in the OPEC countries should remain at a low level.

Oil demand should fall in Q1 2014 following the usual seasonal profile in Europe. World demand should increase from Q2 (+500,000 bpd), driven

by the emerging countries (+1.2 million bpd) and by Europe (+270,000 bpd). In contrast, demand should fall sharply in the OECD countries (-700,000 bpd), essentially due to the seasonal falls in consumption in Japan (-900,000 bpd).

The price of oil should fluctuate around \$110 per barrel through to mid-2014

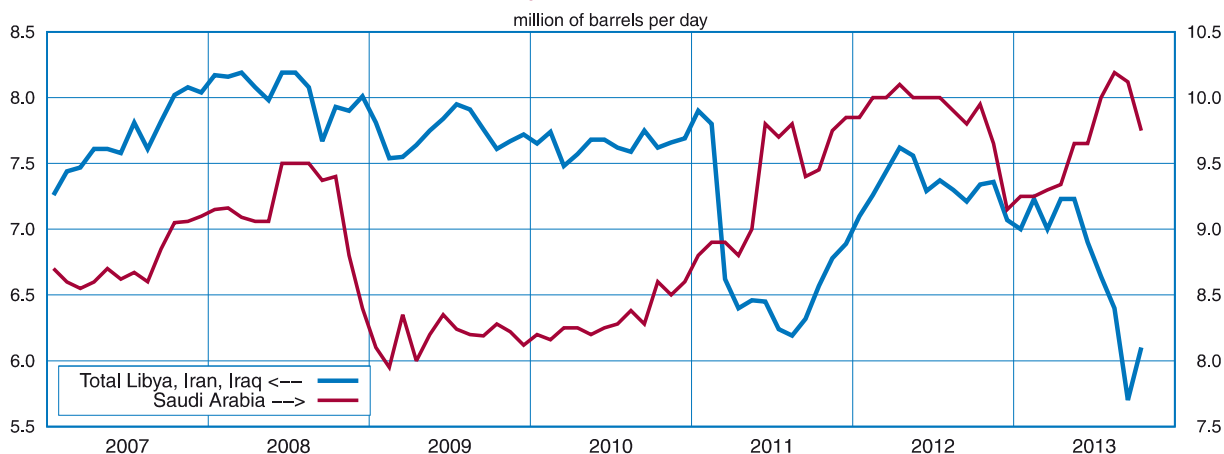
Over the forecasting period, the parallel trends in supply and demand would suggest the price should remain stable at around \$110 per barrel. This level seems compatible with a tense geopolitical environment that could weigh down on OPEC production at a time when its additional capacities are already small.

Industrial commodity prices fall

The prices of industrial metals rose in Q3, after falling sharply in Q2. Copper prices rebounded (see Graph 3), benefitting in particular from the recovery of Chinese demand, while aluminium prices levelled out. The rise in Chinese production and uncertainties surrounding the continued support of the Fed for the US economy, the world's second-biggest copper consumer, have brought prices down again in Q4, however.

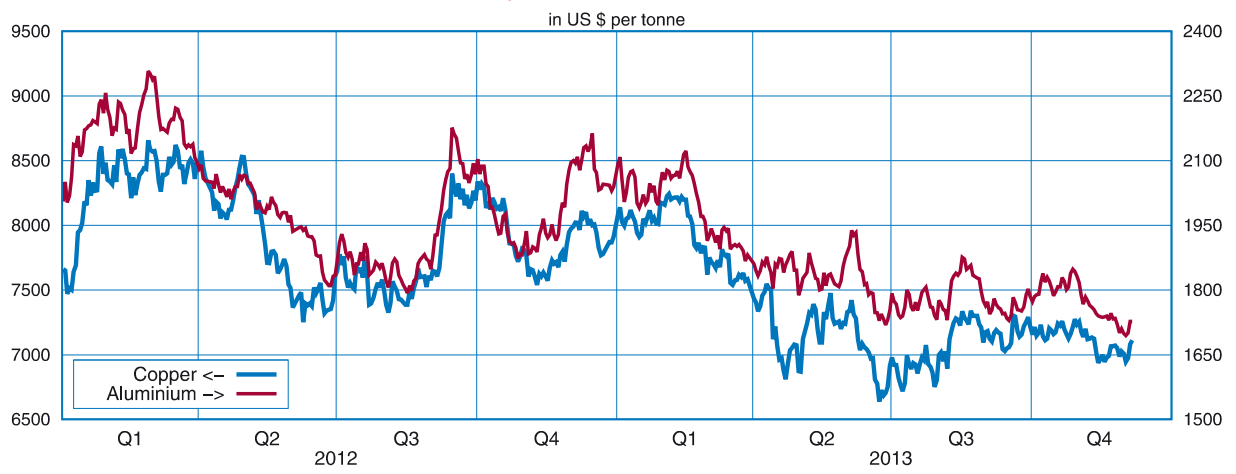
Fluctuations in the volume of world supply of several commodities generated large movements in prices, notably in those of cereals. In particular, favourable climate conditions announcing a particularly abundant harvest triggered a sharp slide in prices in July. ■

2 - Oil production in Saudi Arabia, Libya, Iran and Iraq
Last point: October 2013



Source: AIE

3 - Prices of industrial metals Last point: 6 December 2013



Source: London Metal Market

Financial markets

Tighter monetary policies can wait

With the sovereign debt market no longer showing any signs of tension, monetary authorities in the advanced countries are continuing to provide strong support for financing of the real economy by keeping their base rates very low and via unconventional strategies. While the European Central Bank (ECB) brought its base rate down in November to step up its support for the economy, the Fed has been talking since Q2 2013 of an upcoming reduction in its monthly securities buying as the US economy recovers.

On the money market, the role of the central banks remains important, in particular in the Eurozone where the banks of Southern Europe are still carrying out a large part of their refinancing thanks to the long-term loans granted by the ECB. The interbank market remains fragmented and the interest rates granted by banks remain distinctly less favourable in these countries.

The rise in long-term rates on bonds observed over summer 2013 stopped in September. The United States, Germany and France are the countries perceived as being the soundest financially and are still enjoying excellent refinancing conditions on their sovereign debt, while certain countries that have known greater difficulties (Ireland and, to a lesser extent, Spain and Italy) have seen a return to low interest rates in Q4.

On the equity market, stock market indices in the advanced countries continued their rise in Q3 2013, still profiting from the low level of bond and money rates. After a fall in Q3, stock market indices in emerging countries returned to the same levels as at the start of the year, profiting from a return of foreign capital.

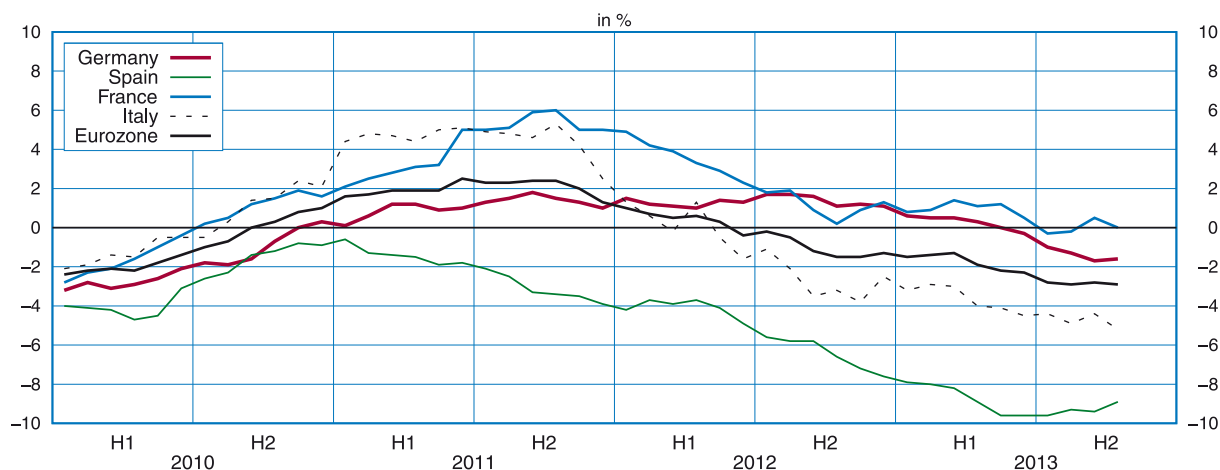
On the foreign exchange market, the Euro rose against the Dollar from September 2013, driven notably by the continuation of monetary easing in the US. Over the forecasting period, the conventional hypothesis taken for exchange rates are \$1.35 dollar, 137 yen and £0.85 to one Euro.

Monetary policies still supporting the economy

The central banks of the advanced countries continue to apply accommodating monetary policies, although their prospects diverge. Against the backdrop of a continuing decline in the credit market and low inflation, the ECB cut its main base rate in early November by 25 base points to 0.25%. It also declared itself to be ready to intervene if interbank market rates should rise again, including via a long-term refinancing operation (LTRO).

In the United States, the Fed is still applying a base rate of 0.25% and maintaining its securities purchasing programme under which it is acquiring

1 - Year-on-year change in outstanding bank lending to non-financial enterprises in the Eurozone (Last point: October 2013)



Source: European Central Bank

\$85 billion in securities each month. However, the improvement in prospects for activity has led it since Q2 2013 to outline a strategy to stop these purchases gradually (see *Focus*). Before the end of 2014, but more probably in H1 2014, the Fed could therefore begin to reduce the level of its buying.

In line with the quantitative easing programme it started in early 2013, the Bank of Japan is still conducting an aggressive monetary policy, expanding the money base at an annual rate of around 15 % of GDP.

Imbalances continue on the European money market

The working of the Eurozone interbank market remains marked by the important role of the ECB, which is providing the banks with access to low-cost refinancing via the cut in its base rate and by continuing its fixed-rate tender procedure for main refinancing operations. Consequently, interbank market rates remain low and not very volatile, but the volumes traded there overnight are low. The market has therefore not returned to normal operation and the banks of the peripheral countries still have a substantial part of the liquidities the ECB supplied to them in the two LTROs in December 2011 and February 2012.

Lending continues to fall back in the Eurozone

In the Eurozone, financing terms by bank lending remained difficult in Q3 2013 and at the beginning of Q4, and outstanding bank lending to non-financial enterprises fell in all the Eurozone countries, except for France where it progressed slightly (see *Graph 1*). This negative trend is visible in the surveys, which indicate a slight tightening of lending terms for businesses and a further fall in demand for bank lending. In Q4, these conditions should ease.

In France, outstanding lending to non-financial enterprises stabilised at the end of Q3 2013 with a year-on-year change of -0.1% in October. Investment lending continued to grow (+1.9% in October) and was more dynamic than short-term liquidity credit, which fell back again (-6.1 %).

For households, outstanding consumer credit also fell on an annual basis in October for the 16th consecutive month. However, this fall masks a certain dynamism in new consumer loans. Regarding property lending, the rate of growth in new loans remained sustained in October.

Bond market normalisation continues

The declarations of the Fed Chairman as to a possible reduction in the institution's monthly security purchases by the by the end of 2013 caused a rise in uncertainty and in sovereign rates before the summer. By the end of Q3 2013 these concerns had eased with the more accommodating messages put out by the Fed and the decision made at its meeting in September, surprising the markets, not to reduce its purchases. Financing terms on the sovereign debt of the States that are soundest financially (United States, Germany and France) remain most advantageous. Meanwhile, the financing terms on Spanish and Italian sovereign debt are improving. In Greece, interest rates on the secondary market in government debt have fallen considerably, although the country is still not issuing any long-term sovereign debt. However, interest rates are barely falling any more in Portugal in Q4 2013. Its exit from the Troika aid programme it has benefited from since 2011, and which expires in 2014, therefore seems uncertain.

Share prices remain high in the advanced countries

Driven by better growth prospects in the United States and Eurozone, the stock market indices in advanced economies progressed again in H2. The rate of this rise has eased, however, due to uncertainty as to the Fed's attitude in coming months.

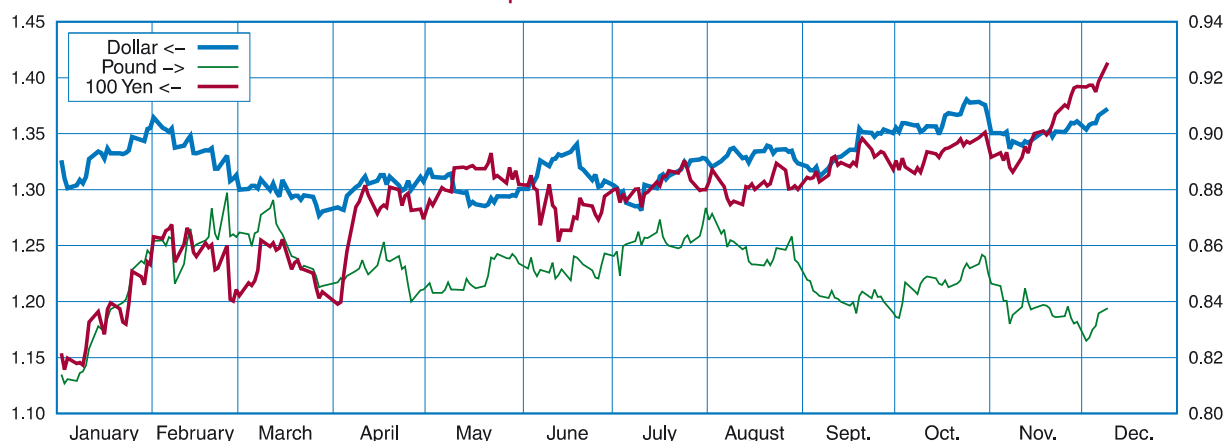
The stock market indices of the emerging countries had fallen sharply in Q3 2013, but the announcement of continued monetary easing in the US led to a rise in stock markets from September onwards.

The Euro at a high level against the Dollar

The continuation of US monetary easing announced back in September, combined with the impact of the shutdown, strengthened the Euro against the Dollar from September onwards. At the beginning of October, the exchange rate hit \$1.38 to 1 Euro, its highest since November 2011. In early December, the Euro stood at \$1.36 (see *Graph 2*). ■

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2 – Euro exchange rates Last point: 9 December 2013



Source: European Central Bank

Quantitative easing: what effects on the US economy?

Since 2008, the Fed has been implementing monetary policies never seen before in the United States

In response to the 2008 crisis, the Fed cut its base rate sharply between August 2007 and December 2008, from 5.25% to 0.25%. Since then, to continue easing its monetary policy further, it has applied a policy never seen before in the United States: large-scale assets purchases, referred to as quantitative easing (QE). These successive operations, consisting mainly in buying US Treasury bonds and mortgage-backed securities (MBS), are summarised below (see Table).

All in all, the Fed now holds around \$3,500 billion in securities (of which close to 40% of mortgage-backed securities, see Graph 1), against less than \$800 billion in 2007 (US Treasury bonds only). In addition to this, the average maturity of the securities held has increased sharply: while those with residual maturity exceeding 5 years represented 20% of the Fed's securities portfolio in 2007, they count for 68% today.

These large-scale assets purchases have contributed to reducing interest rates

The Fed's objective is to keep long-term interest rates low to support consumption and investment. While the base rate, that is the traditional tool of the central banks, influences short-term interest rates first, quantitative easing acts directly on long-term interest rates formation, via two channels that are not mutually exclusive, as well as directly on the mortgage market.

Lowering interest rates via the portfolio channel

The securities purchases are financed by the Fed by increasing the reserves the banks hold in central bank currency, which can only be used in interbank relations. Contrary to what many say, quantitative easing therefore is not just creating money without backing: there is no immediate increase in the volume of the financial assets of private agents, just a modification in structure.

However, quantitative easing does have a mechanical effect on the yield of the securities that are purchased: as quantities of US Treasury bonds and MBS on markets have decreased, their prices increase and their yields therefore fall. Some investors may also seek to balance their portfolios by acquiring other securities, whose prices then rise in turn.

By its intervention, the Fed is also endorsing a part of the various risks to which holders of securities are exposed, thereby amplifying the reduction in their yield via a decrease in the term premium (the premium agents demand in return for the uncertainty of the real yield on long-maturity securities). This additional effect is weak, by definition, for risk-free assets such as US treasury bonds, but potentially high in the case of MBS in 2009, which were very illiquid.

Lowering interest rates via the monetary policy signal channel

Large-scale assets purchases boosts the credibility of the Fed's low-rate policy over the long term. First of all, the purchases act on investors as a sign of the institution's opinion of the economic situation. Also, a rise in the base rate would result not only in a reduction in the value of the securities held by the Fed, but also in a rise in remuneration of the banks' reserves, which are very large today.

A fall of 15 to 25 base points for \$600 billion in securities purchases due to QE2

The long-term interest rates, whether on US Treasury bonds, mortgage-backed securities (MBS), or even corporate bonds, have fallen significantly since the end of 2008 (see Graph 2), while the Fed base rate has remained unchanged at 0.25%. Many researchers have attempted to quantify the contribution of quantitative easing to the fall observed in long-term rates and to distinguish between the respective roles of the two channels mentioned previously. These studies have mainly looked into QE1 and QE2, as QE3 is still too recent. Several empirical studies have concluded that the monetary policy signal channel exists, using the so-called "event studies" method: they measure the change in interest rates

immediately after the announcement of a monetary policy event, before the said measure has been implemented (see, for example, *Bauer and Rudebusch (2013)* or *Krishnamurthy and Vissing-Jorgensen (2011)*). In addition to this, the (upwards) movement in interest rates observed in May 2013 when the Fed announced an upcoming reduction in the rate of securities acquisitions, then the (downwards) movement in September 2013 on the announcement that securities acquisitions would be continuing at the same rate, confirm the importance of the monetary policy signal channel. The importance of the portfolio channel in the fall in interest rates is more open to debate. On the one hand, no matter how large they may be, the sovereign bond acquisitions by the Fed only represent a small proportion of the debt issued by the Federal State on the US bond market, which has increased sharply since the beginning of the crisis. In addition to this, the purchases have concerned very specific market segments in which the Fed has been a dominant buyer.

All in all, the downward impact of quantitative easing on long-term rates is fairly beyond doubt, but it does seem to have been more pronounced in the beginning, when the aim was to counter the sharp deterioration in financing conditions. While consensus in the studies conducted on the first programme of securities buying considers that it allowed a reduction in long-term rates by about 50 base points, *Williams (2013)* estimates, based on a review of all the studies collected on the subject, that the purchase of \$600 billion in securities in the second operation produced a fall in the long-term interest rate of 15 to 25 base points, which corresponds to the effect generally produced by a 75- to 100-points cut in the base rate.

The effect on the real economy is a subject of debate

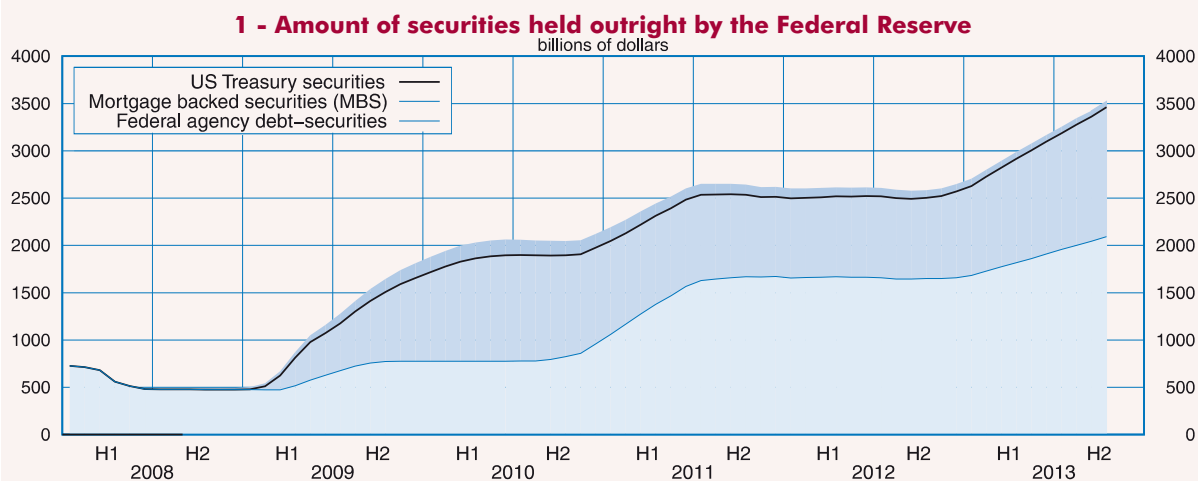
Most of the research so far has focused on the impact of quantitative easing on interest rates, and few studies have focused on the impact of these measures on the real economy, for several reasons: for lack of a longer-term view of phenomena that are likely to work through to the economy slowly, and also because it is difficult to construct the trajectory the economy would have taken without these measures (a "counterfactual" scenario), notably in the absence of historic precedents to provide statistical regularities.

A reduction in corporate financing costs, but what impact on corporate investment?

The drop in interest rates has allowed corporate financing costs to be reduced, all the more so in the US where the share of bond debt in financing is higher than in Europe. Smaller companies with less access to capital markets may have been able to benefit from a second-round effect, via an increase in demand from large corporations for their products and services, when they are suppliers of such corporations, or via a rise in commercial credit when they buy supplies from them.

However, this reduction in financing costs has come at a time when the financial situation of US companies is excellent on the whole, whether it is measured in terms of margin rate, profit ratios or free cash flow. The fall in interest rates generated by quantitative easing therefore probably made little contribution to the upturn in corporate investment, which remains subdued anyway. The investment rate has not increased since mid-2011 and remains below its long-term average.

Opération	Operation Period	Securities purchased by the Fed
QE1	From December 2008 to March 2010	MBS (\$1,250 billion) + government agency debt (\$175 billion) + Treasury bonds (\$300 billion)
QE2	From November 2010 to June 2011	Long-maturity Treasury bonds only (\$600 billion)
MEP (twist operation)	From September 2011 to December 2012	Swap (\$667 billion) of Treasury bonds to increase the residual maturity of the securities held
QE3	Until September 2012	MBS (\$40 billion per month, still underway)
QE3 expanded	Until January 2013	Treasury bonds (\$45 billion per month, still underway)



Source: Board of Federal Reserve

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Share prices buoyed by quantitative easing

The fall in interest rates on bonds has made shares more profitable in relative terms, thereby increasing demand for them among investors. Consequently, their prices have increased simultaneously with the securities purchases made by the central bank (see Graph 3). It remains difficult, however, to quantify the impact of quantitative easing on the rise that has been observed. On the one hand, the average price-to-earnings ratio¹ of US companies does not seem to be at a particularly high level, although it has risen from its low point during the crisis: it is now at its average level for 2004-2006. On the other hand, the rise in bond rates further to the announcement of the Fed's exit strategy in May and June 2013 has not resulted in a downwards adjustment in share prices, thereby placing the impact on them of the central bank's policy in perspective.

The fall in mortgage rates has contributed to the upturn in real estate

The purchases of mortgage securities have brought a reduction in property lending rates. This did not have an immediate effect on activity, as the real-estate crisis had generated a large stock of homes for sale from foreclosures on households that had defaulted on their loans, thereby postponing the upturn in prices to the end of 2011. This

upturn coincided with that in housing starts (after falling 59% between 2007 and 2009 then levelling out, they increased by 28% in 2012) and with the recovery in new mortgage contract signatures (see Graph 4). The impact of quantitative easing on the property market recovery seems all the clearer in that the rise in mortgage rates in summer 2013 went hand-in-hand with a fall in housing starts.

The rise in asset prices seems to have contributed to a fall in the household savings ratio

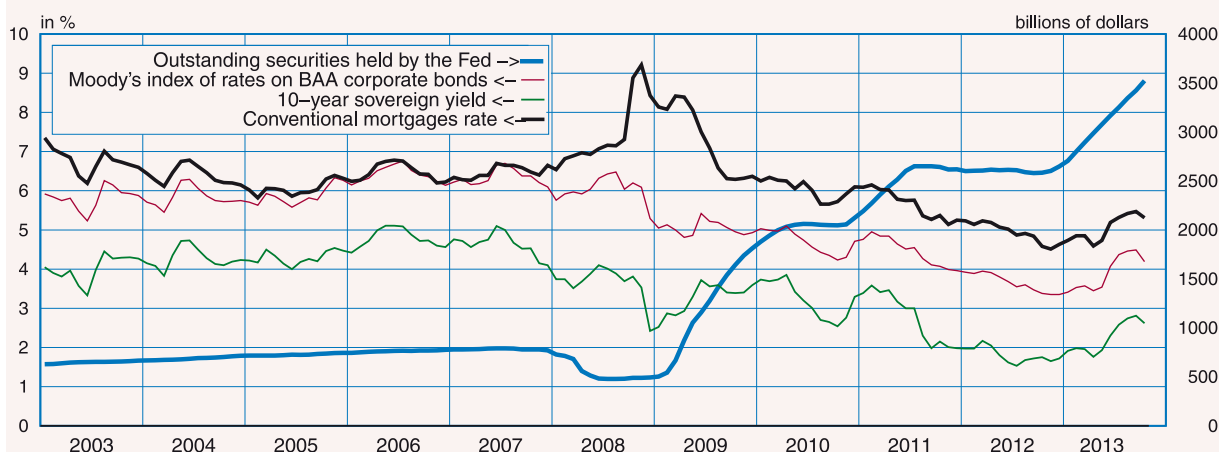
In the United States, unlike in mainland Europe, there is empirical evidence of a causal link in the past between variations in asset prices and the savings ratio; this is what is called the "wealth effect". It can be observed that the increase in households' net assets since 2009 has gone hand-in-hand with a downward trend in the US household savings ratio (see Graph 5).

What has been the overall macro-economic impact?

The only studies evaluating the overall impact of quantitative easing on the US economy are in fact simulations based on macro-economic models, rather than actual evaluations. Chung et al. (2012) take a forecasting model used by the Fed

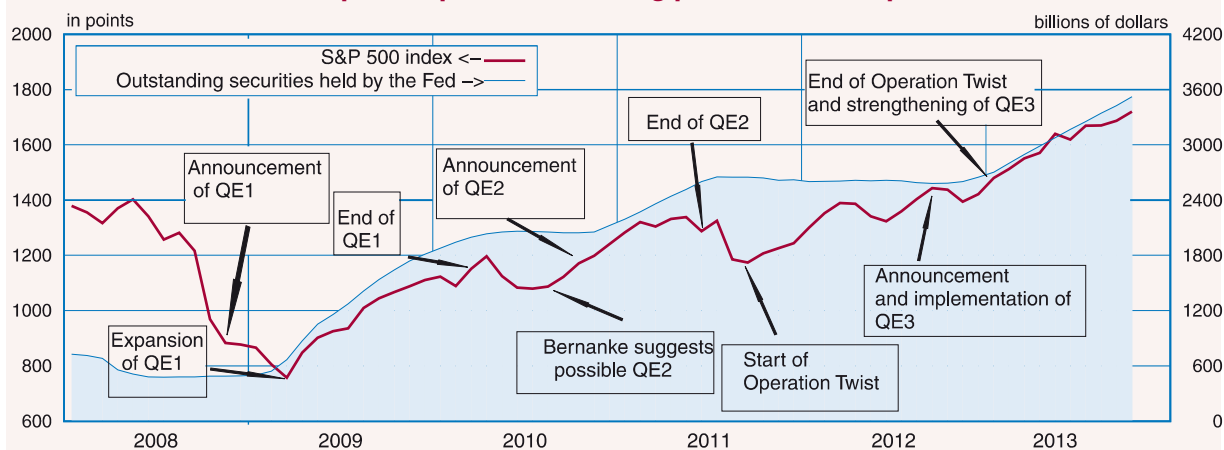
(1) The price-to-earnings ratio is equal to the market capitalisation of an enterprise divided by its net profit. It is a measure of the discount rate of future profits by investors.

2 - Impact of quantitative easing policies on US public and private long-term rate



Source: Board of Federal Reserve

3- Impact of quantitative easing policies on share prices



Sources: Board of Federal Reserve, Standard and Poor's

and modified to include the possibility of transmission via the portfolio channel, and estimate the impact of the first programme to have been a rise of 2 points in GDP and the cumulative effect of the first two programmes to have been a rise of 3 points in GDP. According to *Chen et al. (2012)*, the \$600 billion in securities acquisitions in the second programme generated a rise in US GDP of between 0.2% and 1.0% depending on the method used, as compared to a situation in which the Fed had not conducted any such operations. Their model also finds a much smaller impact of the securities purchases if the Fed had not committed over the long term to keep long-term rates at low levels, illustrating the importance of the monetary policy signal channel. However, the fact that the specifications of these models are based on the hypothesis of the effective working of quantitative easing transmission channels suggests that their conclusions should be read with caution.

Conclusion: the effects are difficult to measure, the exit strategy perilous

Effects on the real economy difficult to measure and limited in any case

According to the empirical studies, quantitative easing therefore seems to have had an impact on reducing interest rates. The effect is probably limited, however, at between 15 and 25 base points for \$600 billion in securities purchases.

It is difficult to estimate the effect of this reduction in financing costs on corporate investment. However, the effect on household expenditure (on consumption via the wealth effect and on housing via the fall in rates) seems more visible.

In addition to this, the increase in the price of all assets driven by quantitative easing has had major anti-distribution effects, as these assets are mainly held by the wealthiest households (see report by the Bank of England (2012)).

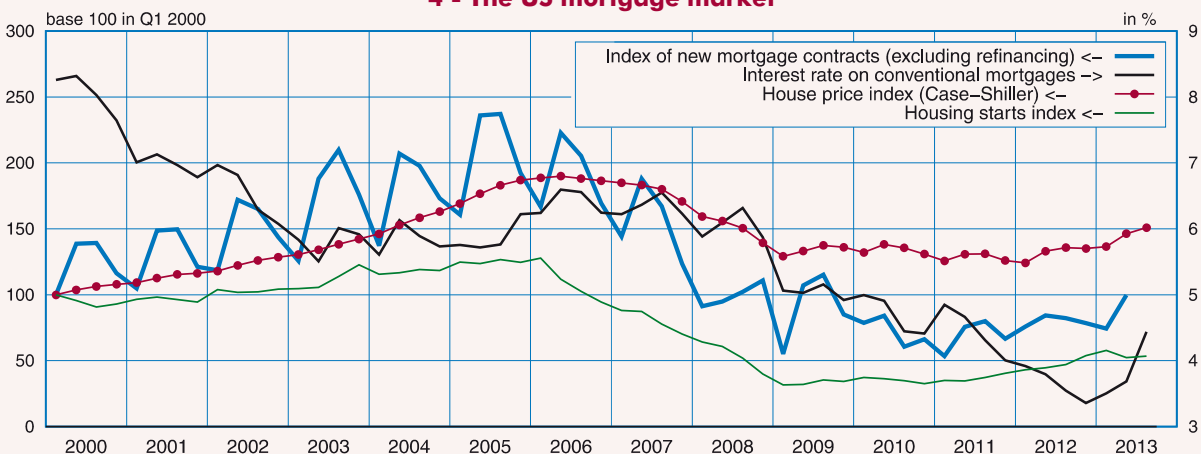
A complex exit route to be managed

Quantitative easing was introduced against a backdrop of acute economic crisis and deflation concerns. As the upturn takes shape with the rise in credit that should result from it, a need is also emerging to ease the expansion in the monetary base, at the risk of asset price expectations (real estate, financial assets) to be disanchored.

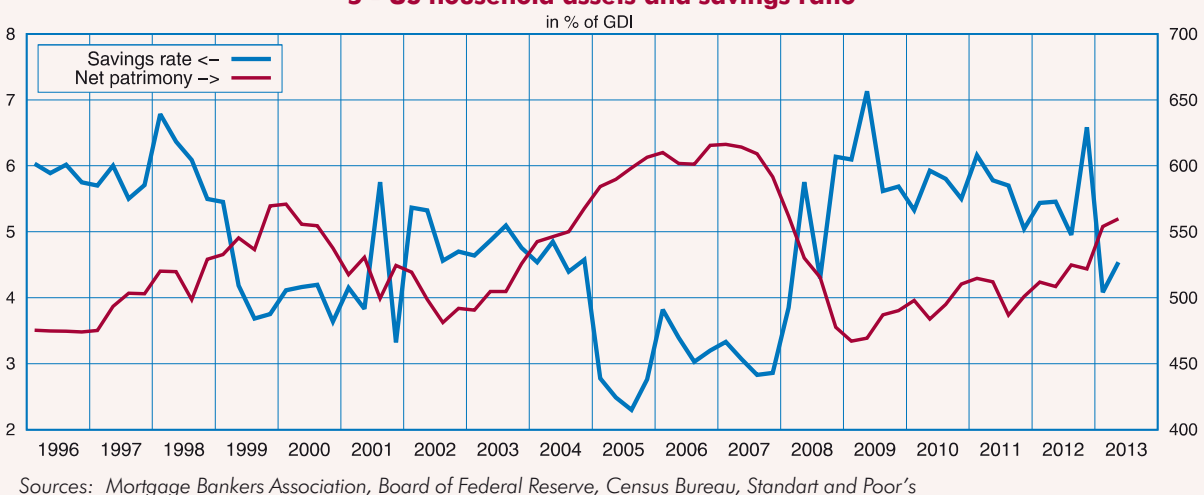
By a series of successive announcements since Q2 2013, the Fed has been attempting to provide insights into its "exit strategy". On 22 May 2013, the Fed set out its doctrine:

- stage 1: if the economic situation allows, the Fed could begin to scale back the monthly volume of its purchases before the end of 2013,
- stage 2: monthly purchases could end around mid-2014,
- stage 3: the base rate will remain at a low level "for a long time" after the end of the monthly acquisitions.

4 - The US mortgage market



5 - US household assets and savings ratio



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This timeline has become more uncertain since then, however, and has probably been postponed, as the announcement of this strategy led to a pronounced rise in sovereign and mortgage rates, by almost 100 base points, even though it was only a gradual stop to securities purchases and not a reduction in the stock of securities held. In fact, it is highly likely that the markets interpret any reduction in QE as a sign that the date of the rise in short-term rates is approaching. The exit route from this system will therefore remain perilous, as long as the Fed has not managed to disconnect agents' long-term base-rate expectations from the monthly volumes of securities purchases.

Forward guidance seems to generate considerable results

In order to hold interest rates down, the Fed has also provided forward-looking indications of its future base-rate policy (forward guidance). This new communication does seem to have had immediate and pronounced effects. For example, in August 2011, when the Fed announced that it would "probably guarantee low base rates at least until mid-2013", interest rates immediately dropped by 20 base points and market expectations of the period of time before any change in rates increased from 4 to 7 quarters. This type of effect was observed once again in January 2012 and September 2012 (when that timescale was pushed back to the end of 2014 and mid-2015 respectively). ■

Eurozone

An upturn, but a moderate one

In Q3 2013, activity in the Eurozone slowed (+0.1% after +0.3% in Q2). Exports slowed sharply in all countries of the Eurozone.

Business tendency surveys have continued to recover and the business climate in industry is now in the expansion zone. Activity in the Eurozone is therefore likely to grow moderately again from Q4 2013 (+0.3% per quarter). The decline in purchasing power should ease due to a lesser fall in employment. With business and employment prospects improving, households should bring down their precautionary savings and consumption should therefore rise slightly. The gradual pick-up in activity and the need to renew production capacities after a marked adjustment phase should sustain the recovery of investment in equipment. In construction, the drop in investment should ease. The contribution of foreign trade to growth is likely to be virtually nil, with the recovery of imports cancelling out the rise in exports.

All in all in 2013, activity should slip back by 0.4%, after -0.6% in 2012. The 2014 growth overhang at end June should however be positive, at +0.9%.

Weak growth in Q3 2013

In Q3 2013 GDP grew by 0.1%, confirming the end of the recession in the Eurozone. This slower growth than in Q2 (+0.3%) is due to a very sharp

slowdown in exports across all countries of the Eurozone (+0.2% after +2.1%). The contribution of foreign trade was -0.3% against +0.3% in Q2 2013.

Moderate upswing in activity

The business tendency surveys have picked up since mid-2013, despite a dip in October. The business climate is now in the expansion zone for the first time since 2011.

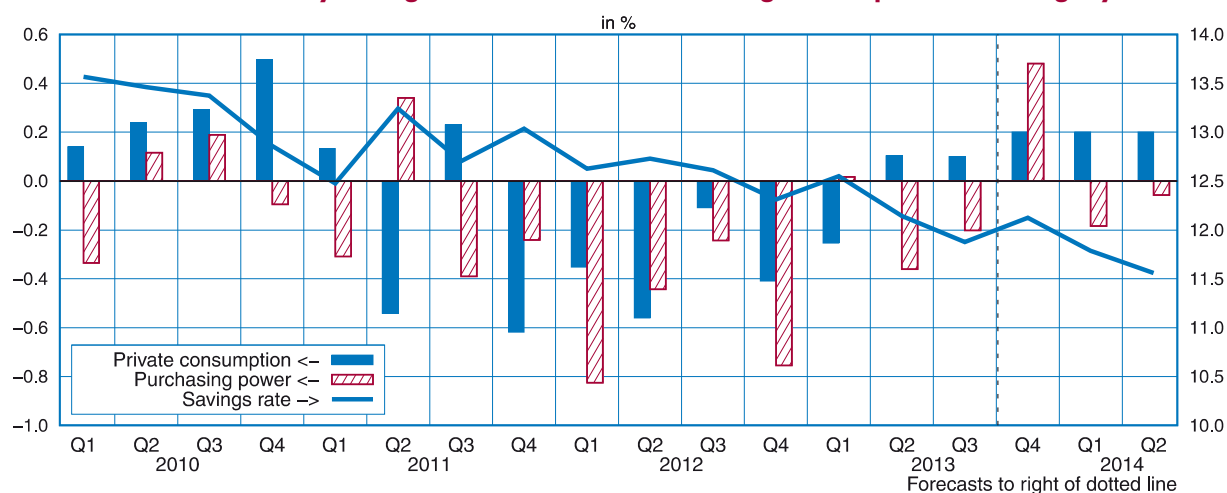
Activity in the Eurozone should grow moderately once again through to mid-2014 (+0.3% per quarter), mainly driven by domestic demand against a backdrop of less extensive fiscal consolidation.

The short-term divergence within the Eurozone should partially subside. Activity is likely to be dynamic in Germany and to a lesser extent in France, while Spain should catch up with these two countries' growth rate over the forecasting period. In Italy however, activity should grow only slightly in H1 2014.

Sluggish consumption

Employment should fall at an increasingly moderate pace and stabilise in Q2 2014. After stagnating in 2011 and 2012, productivity should continue to pick up as it has done since the start of 2013. The unemployment rate should rise again slightly and reach 12.4% in Q2 2014, against 12.1% in October 2013.

1 - Precautionary savings should be reduced allowing consumption to rise slightly



Sources: Eurostat, INSEE calculations

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Nominal wages are once again likely to progress moderately over the forecasting period, with marked rises in Germany and stability in Spain and Italy. In Q4 2013, the reinstatement of the fourteenth month in the Spanish civil service should raise wages significantly before they decline in the following quarter. All in all, the fall in purchasing power should ease over the forecasting period (year-on-year, 0.0% in Q2 2014 after -1.3% in Q2 2013).

With business and employment prospects improving, households should bring down their precautionary savings. Consumption should therefore rise slightly (+0.2% per quarter).

Investment in equipment recovering

Bank lending conditions have stopped tightening in the Eurozone since the start of 2013, except in Italy. In Spain they have even eased for the first time since 2010. This improvement is likely to continue and extend to Italy. Additionally, the gradual upswing in activity as currently anticipated by entrepreneurs in their responses to the business tendency surveys, and the need to renew production capacities after a marked phase of adjustment should sustain the recovery of investment in production, which should be strong in Spain and to a lesser extent in Italy.

In construction, the drop in investment should slow. Confidence is improving slightly in the sector, although it is still very low.

Foreign trade providing more moderate support for growth through to mid-2014

Exports should continue to grow over the forecasting period, sustained by the rise in world demand for Eurozone products. Imports should increase sharply, in line with the dynamism of exports and the recovery of domestic demand.

The contribution of foreign trade should therefore remain slightly positive until the end of 2013 and in Q1 2014 before becoming neutral in Q2 2014. Growth in the Eurozone should therefore gradually be rebalanced.

Inflation set to remain low

In November headline inflation stood at +0.9%. It should rise to +1.1% year-on-year by June 2014, sustained by energy prices. Assuming the Brent price remains stable at \$110 and under the effect of the exit from year-on-year figures of the drop that occurred in spring 2013, year-on-year prices of energy products should rise to +2.3% in June 2014.

Additionally, in the absence of inflationary pressures, which are limited by high unemployment rates in most Eurozone countries, core inflation should also fall slightly, to +0.8%. ■

Eurozone inflation differentials gradually coming back in line with the fundamentals

From 2009 to 2012 the inflation differentials within the Eurozone ran counter to economic fundamentals

The main Eurozone economies have been running along divergent paths since 2009: while the recovery has been lasting (albeit modest) in Germany, France showed virtually zero growth from mid-2011 to mid-2013, and Italy and Spain have been in deep recession since 2011. The labour market situation has been similarly contrasting from one country to the next, in terms of both unemployment level (low in Germany, very high in Spain) and unemployment trend. Yet this divergence between European economies was not reflected in inflation in 2011 and 2012, with a bigger increase in prices in Italy and Spain (2.5 to 3%) than in France and Germany¹ (below 2.5%).

In 2013, inflation differentials have gradually got back in line with economic activity

The short-term differentials have continued in 2013 in the Eurozone. Although unemployment rates are more or less stabilising, the activity growth rate in Germany is still likely to be higher than in France, with activity in Italy and Spain still very weak. However, the inflation differentials between the four economies conform far better to their respective positions in the economic cycle in 2013 than in the previous four years. As forecast¹, the temporary effects of indirect taxation and the high level of energy inflation have stopped fuelling inflation. Spain's headline inflation should therefore be close to zero at end 2013 and this headline inflation should fall back more sharply in Italy and Spain than in France and Germany (see *Graph 1*).

This drop in inflation can be broken down by product (see *Table 1*)².

The fall in energy prices has contributed to the drop in inflation in all countries, although more markedly in Italy and Spain. In this latter country the exit of the VAT rise of 1st September 2012 from the year-on-year figures has had an even greater effect.

(1) See the report in *Conjoncture in France*, March 2013, "In the Eurozone, why isn't inflation lower in the countries most affected by the crisis?"

(2) This breakdown of prices is performed at constant taxation rates or, where applicable, adjusted for variations at indirect taxation rates.

In 2011 and 2012, food inflation was higher in Germany and France than in Italy and Spain. In October 2013, food prices have fallen more sharply in France than in Italy, while they have risen slightly in Spain and in Germany, with year-on-year food inflation contributing 0.1 points to growth in inflation between October 2012 and October 2013.

In October 2013, energy prices are lower than a year previously in each of the countries considered, particularly Spain and Italy. The energy sector should therefore make the biggest contribution to falls in prices, to the tune of -1.2 points in these two countries.

Inflation in services is likely to diminish in Spain and Italy, accounting for a 0.2-points fall in headline inflation in both countries. It should thus come back in line with the positions in the business cycle of the Spanish and Italian economies.

Lastly, inflation in manufactured goods has shown a downward trend since the start of 2012 in all four countries. Year-on-year at end October, it is however stable in Spain as it fell more sharply beforehand (see Graph 2).

The price formation mechanisms in the four countries still restricting inflation divergences

As an annual average, core inflation in Germany, Spain and Italy should be virtually identical in 2013 (in the order of +1.0%), while in France it should be significantly lower

(+0.6%)³. It should be recalled that on average in 2011-2012, Italy stood out for its much higher core inflation, while in France it was identical to that in Spain and Germany.

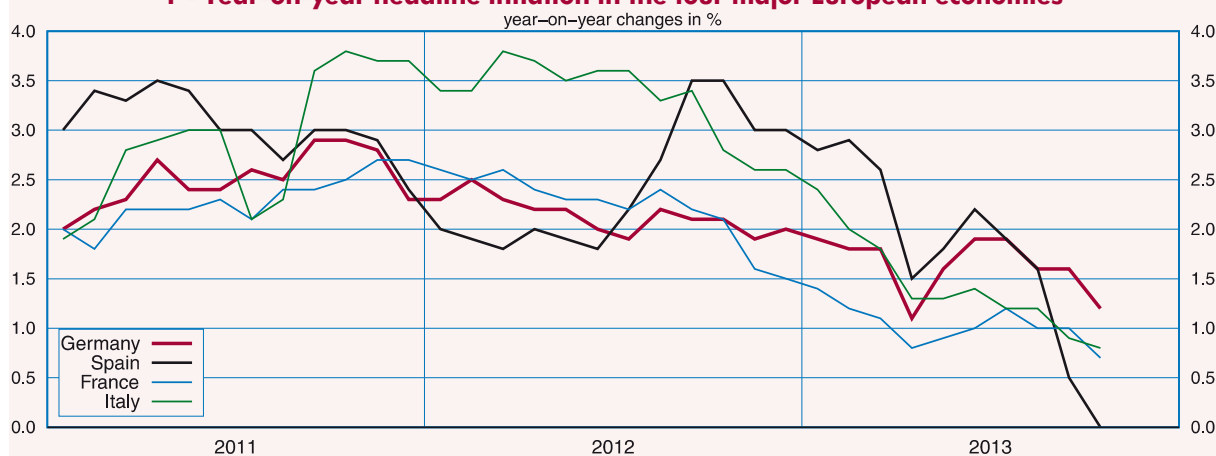
Firstly, the persistent divergences in the labour market situation between Germany and Spain have continued to filter through to wage costs, which have slowed sharply in 2013 against 2011-2012 in both countries, but the growth rate differential is still 2% (+1.9% against -0.1%). While the slowdown has also been marked in France (from +2.6% in 2011-2012 to +1.7% in 2013), Italy has seen a slight acceleration in wage costs (from +1.0% to +1.3%).

The divergence in wage costs between Germany and Spain has combined with a divergence in productivity gains, which are negative in Germany in 2013 (-0.3%) and still just as dynamic in Spain (+2.9%), to the extent that the two countries' unit wage costs are poles apart: +2.2% against -2.9%. Conversely, wage costs have grown moderately in France (+1.1%) and Italy (+1.2%) where productivity has stopped decreasing.

(3) Core inflation as harmonised for the Eurozone by Eurostat, the source of the figures given here for the four countries, is not adjusted for tax measures, unlike the definition used in France by the INSEE in its publications.

(4) The variations in margin rate given in the table correspond to the differential between variations in the price of value added and those in unit wage costs.

1 - Year-on-year headline inflation in the four major European economies



Sources: Eurostat, INSEE calculations

Table 1
Contributions of the different sectors to year-on-year variations in prices in Germany, Spain, France and Italy (differential between October 2012 and October 2013)

Country	All (non-constant tax)	Manufacturing (constant tax)	Energy (constant tax)	Food (constant tax)	Services (constant tax)	Tax effect
Germany	-0.9	-0.2	-0.7	0.1	0.0	-0.1
Spain	-3.5	0.0	-1.2	0.1	-0.2	-2.3
France	-1.4	-0.3	-0.6	-0.6	0.2	-0.1
Italy	-2.0	-0.3	-1.2	-0.3	-0.2	0.0

International developments

In Italy, France and Germany, the corporate margin rate⁴ has stabilised in 2013 after declining over the last two years. In Spain however it has continued to grow strongly, so much so that core inflation has risen again slightly despite the fall in unit wage costs. In all four countries the drop in the prices of imports in 2013 has contributed to a slowdown in core

inflation⁵ as set against the price of value added. In Spain, and to a lesser extent in Italy, this effect has been offset by the increase in indirect taxes. ■

(5) And headline inflation even more so, bearing in mind the drop in oil prices.

Table 2
Core inflation and contributions of various macroeconomic determinants

Country	Germany			Spain			France			Italy		
	1997-2007	2011-2012	2013	1997-2007	2011-2012	2013	1997-2007	2011-2012	2013	1997-2007	2011-2012	2013
Core inflation	1.0	1.3	1.0	2.7	1.2	1.1	1.3	1.3	0.6	2.2	2.0	1.1
Variation in the ratio between the core price index and the price of value added	0.7	0.4	-1.2	-0.9	0.9	0.4	-0.2	0.4	-0.7	-0.1	0.6	-0.2
Variation in the ratio between the price of VA and the unit wage cost	1.1	-1.0	0.0	0.1	2.8	3.7	0.2	-0.5	0.2	0.0	-0.8	0.0
Variation in the unit wage cost including contribution:	-0.7	1.9	2.2	3.5	-2.4	-2.9	1.3	1.4	1.1	2.3	2.3	1.2
of the per capita wage cost	1.0	2.9	1.9	2.7	1.4	-0.1	2.5	2.6	1.7	1.8	1.0	1.3
of productivity gains	-1.7	-1.0	0.3	0.8	-3.9	-2.9	-1.2	-1.1	-0.6	0.4	1.2	-0.1

Scope: non-agricultural market sectors

Source : INSEE