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BNP PARIBAS

Eco WEEK

ECONOMIC RESEARCH DEPARTMENT

Summary

United States

Jackson Hole 2016: conventional monetary policy redefined

Structurally low interest rates will limit the possibility of the Fed of cutting rates when the next recession hits and QE will have to be used again. That is the message of Janet Yellen at Jackson Hole.

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Eurozone

Summer's end

Growth held at about 1.6% y/y for the fifth consecutive quarter in Q2. Survey data for the third quarter suggest that the prospect of Brexit has not yet had a significant impact on activity.

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France

Growth hits another snag

French growth was nil in Q2 2016. Although a little sharper than expected, this payback is essentially due to temporary factors. Rather good news on the labour market front helps keep in perspective this poor growth performance.

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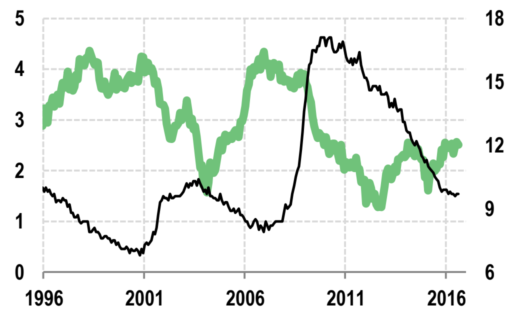
Labour Day

■ The US economy creates 151k jobs in August ■ The unemployment rate remains unchanged ■ Still no sign of further acceleration in wages

In August, the US economy created 151k jobs, a touch below the average performance of the previous three months (190k). As this is more or less the figure that allows stabilising the unemployment rate, while the labour participation ratio was unchanged (62.8%), the rate of unemployment remained below 5% (4.9%). This highlights a strong labour market. Still, whether the US is in full-employment or not remains an open question. Since last October, the unemployment rate fluctuates within the estimation range of the NAIRU (Non-Accelerating Inflation Rate of Unemployment, estimated between 4.6% and 5% by FOMC members). However, wages are still not on a sustained upwards trend. For the core of US workers (non-supervisory production employees of the private sector) average hourly earnings were up by 2.5% y/y in August, a stable rate since last December. This lacks of wage inflation is puzzling with such a low rate of unemployment rate. However, if instead of the U3-measure of unemployment, a broader measure is considered, the flat lining of wage growth makes perfect sense (see chart). The U6-measure (which adds marginally attached workers and those employed part-time for economic reasons to unemployed) remains almost two points above its pre-crisis low, meaning that there still is a large pool of available workers, which caps the increase in earnings.

US LABOUR MARKET



Source: US Bureau of Labor Statistics

THE WEEK ON THE MARKETS

Week 22-7 16 > 28-7-16

↗	**CAC 40**	4 381	► **4 421**	**+0.9**	%
↘	**S&P 500**	2 175	► **2 170**	**-0.2**	%
↗	Volatility (VIX)	12.0	► 12.7	+0.7	%
↗	**Euribor 3M** (%)	-0.30	► **-0.30**	**+0.1**	bp
↗	Libor $ 3M (%)	0.72	► 0.75	+3.1	bp
↘	OAT 10y (%)	0.22	► 0.14	-7.4	bp
↘	Bund 10y (%)	-0.08	► -0.14	-6.0	bp
↘	US Tr. 10y (%)	1.57	► 1.51	-5.6	bp
↗	**Euro vs dollar**	1.10	► **1.11**	**+1.0**	%
↗	Gold (ounce, $)	1 321	► 1 338	+1.3	%
↘	**Oil (Brent, $)**	45.5	► **42.9**	**-5.8**	%

Source: Thomson Reuters

United States

Jackson Hole 2016: conventional monetary policy redefined

- **Janet Yellen's speech at Jackson Hole provided important insights into the future conduct of monetary policy.**
- **The Federal Reserve will have less leeway to cut interest rates when the next recession hits because the peak level of interest rates in the current business cycle will be lower than before.**
- **Forward guidance and asset purchases will have to be used again in addition to interest rate cuts.**
- **Other policies need to complement monetary policy in order to stabilise the business cycle and boost potential GDP growth.**

Every year towards the end of August, the Federal Reserve Bank of Kansas City organises an economic policy symposium in Jackson Hole, Wyoming. Attended by central bankers, policymakers, academics and economists from around the globe, the event has met with increased interest from the media and markets in recent years. This is explained, at least in part, by important speeches delivered on that occasion. Ben Bernanke's contribution in 2012 was considered to be an implicit announcement that the Federal Reserve would launch QE3, which did happen soon after. In 2014 Mario Draghi addressed the issue of "Unemployment in the euro area", insisting on the drop in inflation expectations in the eurozone, adding that "the Governing Council will acknowledge these developments and within its mandate will use all the available instruments needed to ensure price stability over the medium term". This was interpreted as a signal that the ECB would eventually embark on a QE programme.

Janet Yellen on the near-term outlook

This year's symposium ("Designing resilient monetary policy frameworks for the future") was devoted to the future of monetary policy from an implementation viewpoint and also covered the question of how this policy affects the economy. In consideration of the current size of the Federal Reserve's balance sheet and the low level of interest rates, both questions are important from the perspective of the conduct of monetary policy when the next recession hits. Fed Chair Janet Yellen started her speech by discussing the current economic situation and outlook. Activity continues to expand, led by solid household spending despite subdued foreign demand and business investment remaining soft . The FOMC expects that even if moderate, growth will continue leading to a further strengthening in the labour market. Inflation should rise to 2 percent over the next few years. In summary the FOMC sees a benign evolution of the economy that should justify a gradual increase in the federal funds rate. Janet Yellen was echoing recent statements by other Fed officials that *"in light of the continued solid performance of the labor market and our outlook for economic activity and inflation, I believe the case for an increase in the federal funds rate has strengthened in recent months"*.

How much policy leeway?

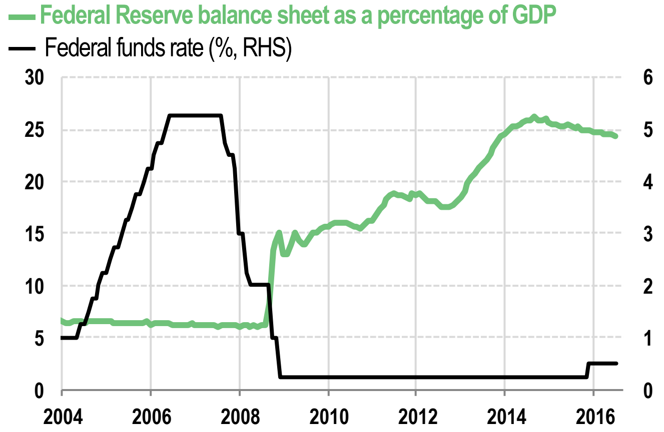


Chart Sources: Federal Reserve, BNP Paribas

Going forward: unconventional becomes conventional

In recent years major central banks have adopted unconventional monetary policy measures to repair the monetary transmission mechanism and stimulate the economy. These measures have ranged from large scale asset purchases (e.g. public and private debt securities) to direct lending to banks[1]. They were called upon when traditional monetary policy based on setting a policy rate had reached its limits (zero lower bound). Interestingly, unconventional measures were needed despite the fact that in the United States the federal funds rate had been reduced by roughly 5 percentage points in about 18 months. This is a reflection of the severity of the Great Recession and the subsequent hesitant recovery.

Although the most recent recession was deeper than normal, previous recessions had already seen huge interest rate cuts. The current economic environment is characterised by still very low interest rates although the US is at, or close to, full employment. In this cycle, the federal funds rate was hiked only once in December 2015 when the target rate was moved to a 0.25-0.50% range. Treasury yields are also very low. This raises the question of how the Federal Reserve will react when the US economy enters a recession in consideration of the fact that the room to cut the policy rate will be significantly lower than in previous cycles. Various factors explain the prospect of a lower cyclical peak in interest rates: lower inflation than in previous cyclical expansions and the ongoing cautious stance of the Federal Reserve; if this stance were to change to a more hawkish approach, it would probably create negative reactions in financial markets with an impact on the economy and thereby cap

[1] "The impact of unconventional monetary policy measures by the Systemic Four on global liquidity and monetary conditions", Yevgenia Korniyenko and Elena Loukoianova, IMF Working Paper December 2015

the increase in policy rates. Another important reason is the low level of the neutral rate of interest, which is the real rate at which monetary policy is neither stimulating nor restraining economic growth. This concept has become increasingly important in the assessment of monetary policy. Estimates show this real rate is still very low, which implies that the current policy is less expansionary than it seems and also that the cumulative tightening necessary to normalise the level of policy rates, i.e. to trigger a convergence towards the neutral rate, is not that high.

A lower peak level of the federal funds rate implies less leeway to boost the economy by cutting rates because the zero lower bound will be reached very quickly, so one would expect that asset purchases would again be used and/or that a negative rate on banks' excess reserves would be introduced. Interestingly, the latter point is not mentioned as a possibility by Janet Yellen. Apart from domestic considerations, the criticism this policy has met with in the eurozone and Japan may also be a factor. On the other hand, she is very clear on asset purchases: "*Despite these caveats, I expect that forward guidance and asset purchases will remain important components of the Fed's policy toolkit*"[2]. The 'caveats' refer to the risk of unintended consequences such as excessive risk taking in reaction to forward guidance that rates would be low for a very long time.

Monetary policy should not be the "only game in town"

The point of unintended consequences has also been addressed by ECB executive board member Benoît Coeuré in his speech at Jackson Hole[3]. Acknowledging that because of a very low neutral rate, short-term rates will be pushed to the effective lower bound more frequently, which would mean that unconventional policies would be used more frequently, he insisted this could give rise to negative side effects in terms of financial stability, financial intermediation and international spillovers. One could even imagine situations whereby the negative effects would end up being dominant.

The inevitable conclusion already drawn in the past by many central bank officials is that monetary policy cannot be the "only game in town". Coeuré referred to the role of micro- and macro-prudential measures to address financial stability concerns related to very low rates as well as greater international policy cooperation and alignment to avoid competitive devaluations. Structural policies have an important role to play, as is emphasised by Mario Draghi time and again, to increase the potential growth of GDP, which in turn would push up the neutral rate of interest and hence create more policy leeway for central banks to stabilise the business cycle. This was echoed by Janet Yellen at Jackson Hole (*"we should explore ways to raise productivity growth*"). Although these policies are very important, we should not consider them to be instruments to boost activity when the economy is in a recession. However, they can increase the effectiveness of monetary policy easing during a downturn[4]. This implies that even in a multi-pronged policy approach, monetary policy remains the key for managing downturns or periods of overheating. However, this begs the question of whether there will be enough leeway. Yellen's speech provides results of model-based simulations. As expected, much depends on the level of interest rates when the easing cycle starts because the lower the level, the more QE would be needed and/or the longer the horizon of the forward guidance would need to be: if the real neutral rate were to stay at the current low level, "*then the average level of the nominal federal funds rate down the road might turn out to be only 2 percent, implying that asset purchases and forward guidance might have to be pushed to extremes to compensate*". This probably explains why she also insisted on the role of fiscal policy ("*Beyond monetary policy, fiscal policy has traditionally played an important role in dealing with severe economic downturns*") whilst maintaining long-run fiscal sustainability.

The implications for the eurozone

The considerations with respect to the US provide food for thought for the eurozone where the output gap is still very negative, the real neutral rate of interest is lower than in the US[5] and the start of monetary policy normalisation is a distant prospect. Against this backdrop, the challenge of using monetary policy to address a significant slowdown in growth looks even greater than it is in the US.

[2] "The Federal Reserve's Monetary Policy Toolkit: Past, Present, and Future", Janet L. Yellen, 2016, p. 16

[3] "The European Central Bank's operational framework in post-crisis times", Benoît Coeuré, ECB

[4] Successfully addressing financial stability issues should reduce concerns about tail risk whereas faster potential GDP growth on the back of structural policy measures could reduce the amplitude of cyclical swings in activity (by reducing uncertainty) and create more room to cut rates because the neutral rate would be higher.

[5] See http://www.frbsf.org/economic-research/publications/working-papers/wp2016-11.pdf

Eurozone

Summer's end

- **GDP rose 0.3% q/q in Q2 2016. On a year-on-year basis, growth held at about 1.6% for the fifth consecutive quarter.**
- **Survey data for the third quarter suggest that the UK's prospects of exiting the EU have not yet had a significant impact on activity.**
- **At this point, our forecast that eurozone growth should slow to about 1% in 2017 – which was made in the wake of the UK's Brexit vote – seems conservative, in line with the most recently available information.**
- **Inflation is still very low (0.2% in August) and the core component has failed to pick up.**

In Europe, as elsewhere, the summer holidays proved to be much calmer than feared at the start of season[1]. Based on economic and survey data, the news is mildly positive.

Eurostat recently confirmed its preliminary GDP growth estimate of 0.3% q/q in Q2 2016, after 0.6% in Q1. This fall back was expected and should not be over-interpreted. On a year-on-year basis, growth held at about 1.6% for the fifth consecutive quarter (see chart), which is much higher than current estimates of potential growth. This clearly seems to be the catching-up pace that the economic and monetary union (EMU) strikes up as soon as member states' budget policies are virtually neutral for the Eurozone as a whole, which has already been the case for several quarters.

For the moment, we do not have any information on the estimated breakdown of European growth in Q2[2], although the figures are available for Germany and France. Despite different growth rates (+0.4% q/q for Germany, vs. 0% in France; see on page 6), some factors were the same, including sluggish household consumption and especially the slump in investment spending. It is highly probable that these trends will be confirmed for the eurozone as a whole, in which case, the lack of an upturn in private investment is bound to create some disappointment, especially since it occurs after a rather dynamic Q1 for both France and Germany. In Italy, the stagnation of Q2 growth was disappointing and augurs poorly for the country's economic performance through the end of the year. In Spain, in contrast, growth barely slowed (+0.7% q/q after +0.8%) and remains in a rapid recovery phase (+3.2% y/y). All in all, the eurozone as a whole staged a rather strong H1 performance, and at the end of Q2, acquired growth was 1.3% for 2016.

The impact of the UK's Brexit vote on survey data is only just beginning to be felt

At this point, the Q3 survey data available so far are rather reassuring. The flash composite PMI held virtually flat in August at 53.3 points, compared to 53.2 in July. This is a very slight increase on the H1 average of 53.1. Although it masks divergent trends between France and Germany (PMI increased in France from a very low level, and declined in Germany from a very high level), the stable business climate suggests that for the eurozone, the short-term effects of the UK's Brexit vote will not really be seen until after Q3. Surely it will take a few more weeks before the sudden slowdown in activity that is beginning to be felt in the UK carries over into a significant slowdown in eurozone trade with the UK, under the double impact of a dip in UK demand and higher GBP prices for eurozone goods.

Yet other surveys tend to tone down our optimism. In Germany, the IFO business climate index fell more than 2 points in August to 106.2. The European Commission's surveys also call for caution. After levelling off for several months, the economic sentiment index shed one point in August. This downturn could be seen in all economic sectors and in most of the big eurozone countries (Germany, Italy,

Eurozone forecasts

Variations annuelles, %	2015	2016 e	2017 e
PIB	1,6	**1,5**	**1,0**
Consommation privée	1,7	1,6	1,1
Investissement	2,7	2,4	0,9
Exportations	5,1	2,2	2,4
Indice des prix à la consommation (IPC)	0,0	0,2	1,1
IPCH hors alimentation et énergie	0,8	0,8	0,8
Taux de chômage (%)	10,9	10,1	9,9
Balance courante (% PIB)	3,2	2,9	2,7
Solde des Adm. Publiques (% PIB)	-2,1	-2,1	-1,9
Dette publique (% PIB)	90,8	90,3	89,9

Table 1 Sources: Eurostat, BNPParibas

Cruising speed

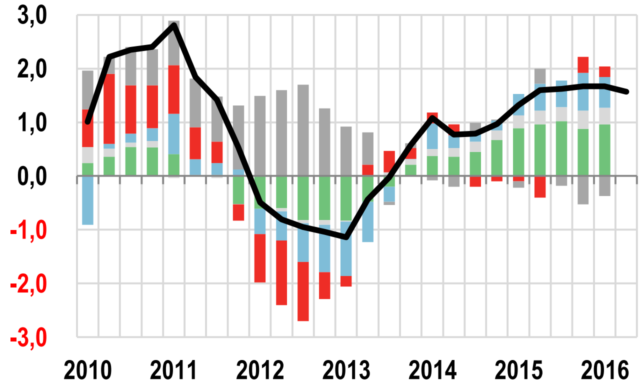


Chart 1 Source: Eurostat

[1] See "A midsummer month's dream", A. Estiot, Ecoweek of 29/07/2016.

[2] Eurostat will release these figures on 6 September.

Spain and the Netherlands), with the exception of France, where the index rebounded slightly after dropping off in July. The index declined to 103.5, the lowest level since March 2016, and if it continues to slide in the months ahead, it would foreshadow a downturn in activity in the year-end period.

Sluggish core inflation

For the ECB Governing Council meeting on 8 September, the most recently available economic data is on eurozone inflation, which held at +0.2% in August (+0.07 pt), although the overall tendency has still been slightly upwards since May. Unless oil prices drop off sharply again, energy prices will naturally lift inflation in the months ahead, driving it above 1% towards the end of the year. Looking beyond these base effects, core inflation remain anaemic, at 0.8% in August -0.04 pt). Although this mild decline does not necessarily constitute a trend, on the whole, core inflation has been holding just a little below 1% for the past 3 years (see chart 2), and has obviously failed to regain any upward momentum. Under these conditions, we continue to expect the ECB to eventually announce another extension of its securities purchasing programme before the end of the year.

Still too low

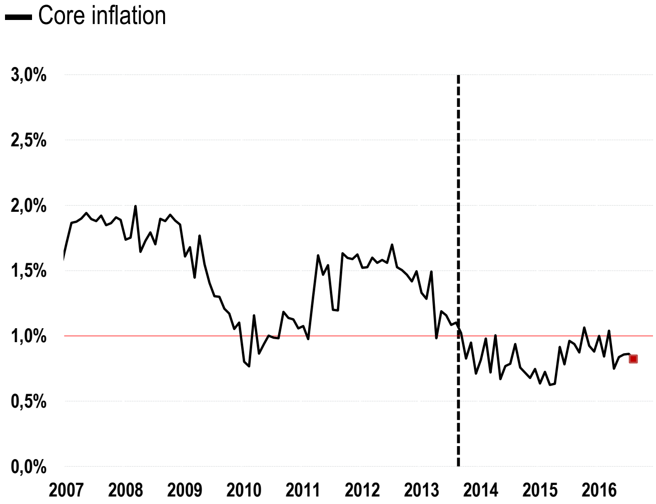


Chart 2 Source: Eurostat

France

Growth hits another snag

- **French growth was nil in Q2 2016. Although a little sharper than expected, this payback is essentially due to temporary factors.**
- **Rather good news on the labour market front helps keep in perspective this poor growth performance.**
- **A technical rebound in Q3 growth is highly likely but the survey and economic data available so far point to a lacklustre upturn (0.3% q/q according to our estimates), in keeping with the recovery as a whole.**

Among this summer's economic news, the biggest negative surprise was the flat print for Q2 growth[1]. A payback was expected after the strong Q1 performance (+0.7% q/q), but it proved to be more severe than expected. GDP stagnated, falling short of our growth forecast of 0.2% q/q and the 0.3% q/q estimates by the INSEE and Bank of France. Almost all GDP components contributed to this weak performance.

Although household consumption held up a bit better than expected (it stagnated instead of declining slightly), investment, exports and changes in business inventories were weaker than expected: the declines in investment (-0.2% q/q) and exports (-0.1% q/q) were small but unexpected, while the change in inventory made a more negative contribution than expected (-0.7 percentage points). Two factors kept growth from slipping into negative territory: the still relatively strong rise in public expenditures (0.4% q/q) and the very positive contribution of imports. Indeed, imports dropped off sharply (-2% q/q), in keeping with domestic demand. All in all, the negative contribution of inventories was offset by the very positive contribution of net exports (+0.6 points) and the barely positive contribution of final domestic demand (+0.1 point, see chart 1).

There is no reason to be overly concerned by this Q2 slump in French growth. Household consumption and corporate investment were both hit by sharp but temporary corrections after the very strong performances reported in the previous quarter. As to household consumption, the payback was mainly due to purchases of tickets and new television sets for the Euro 2016 football championship. The Q2 decline in exports also carries traces of this backlash in ticket sales to foreigners for the Euro 2016 (reported as household services exports).

As to corporate investment, the 0.4% q/q decline can be attributed in part to the expiration of the over amortization scheme, which was initially scheduled in April 2016. In the end, the measure was extended to 31 December 2017 and its positive effects on productive investment should resume and last until then. The results of the last

A bumpy recovery

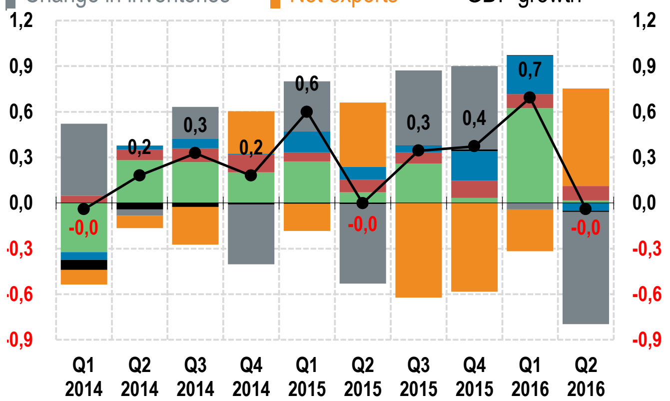


Chart 1 Source: INSEE

Metropolitan France: jobless indicators

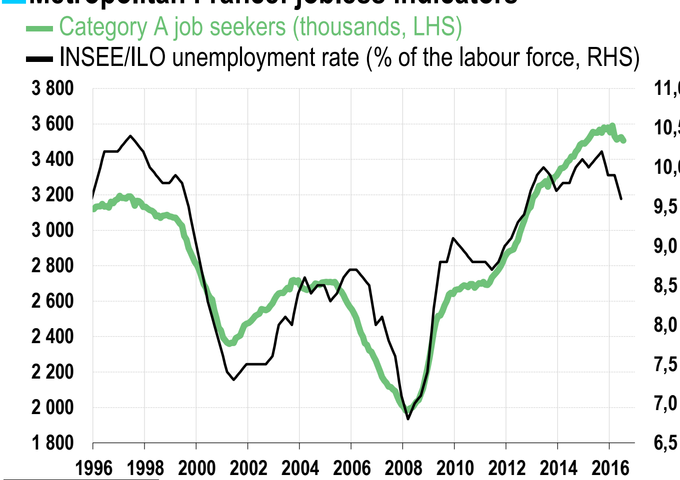


Chart 2 Sources: INSEE, Pôle Emploi

INSEE survey on industry investment (conducted in April) bode well in this regard as firms continue to expect a significant rise in their investment in 2016 (+6% in nominal terms). The decline in household investment (-0.2% q/q) is also likely to be temporary. It illustrates the fragility of the sector recovery, albeit without calling it into question, given the persistently favourable trends for housing starts and home sales. Among the other factors that temporarily strained growth in Q2, we must also point out the labour unrest in May and June. Refinery output was particularly hard hit, declining 14% q/q, and this is the main explanation for the 0.9% q/q decline in manufacturing production.

[1] These figures are based on the second series of estimates published in quarterly national accounts on 26 August 2016. Compared to the preliminary estimates of 29 July, they confirm the stability of GDP, while various revisions in the components of growth cancelled each other out.

On the labour market front, we continue to see signs of improvement even though they are small and fragile. The number of category A jobseekers has been on a downtrend for a few months, but not very strongly, which puts into perspective the sharp drop in the Q2 unemployment rate, down 0.3 points to 9.9% of the labour force (see chart 2)[2]. On the employment front, net job creations have been positive since Q2 2015, but this trend has been decelerating over the past two quarters (with 24k creations in Q2 2016 after +37k in Q1 and +47k in Q4 2015, see chart 3). Nonetheless, as mild as it may be, the improvement in the labour market situation provides a significant and lasting support to growth. Plus it is not the only support factor: there is also the ongoing pick-up in corporate margins.

We are bound to see a technical rebound in Q3 growth once the negative factors temporarily at work in Q2 no longer come into play. For the moment, however, the monthly economic data available so far do not bode well for a vigorous rebound. Household spending on goods contracted in July for the fourth consecutive month. Although July's decline (-0.2% m/m) was not as severe as in May (-0.7%) or June (-0.8%), the carry-over nonetheless adds up to a very negative 1% q/q in Q3. As to production, the most recent statistics date back to June: Q2 ended on a negative note with output down 0.8% m/m, leaving a strongly negative 0.7% q/q carry-over in Q3.

Business confidence surveys, which are available through August, also leave a mixed impression. Survey results have been rather stable over the past eight months, reflecting both the resilience to the downside of growth and its lack of momentum (see chart 4). In August, the INSEE composite index deteriorated, retracing 1 of the 2 points gained in July. At 101, the composite index is consistent with a quarterly growth rate of 0.3% to 0.4%. Based on its own surveys, the Bank of France is forecasting Q3 growth of 0.3% q/q. Our nowcasting model points to estimated growth of 0.4% on the basis of the soft data and 0% when based on hard data. However, we have too few hard data to consider this last result as significant. Based on all the information available so far, we are forecasting Q3 growth of 0.3% q/q.

In both the short term and through 2017, the conditions have not come together yet for the resumption of much more robust growth rates. In the quarters ahead, growth is likely to be curbed by the expected negative consequences of the Brexit vote. Although the negative affects cannot be seen yet, we can gleam the first possible signs of deterioration in some components of the business confidence surveys: the own-production outlook component of the INSEE industry survey, the 'new orders' and 'new export orders' components of Markit manufacturing PMI. Inflation is also expected to pick up, and even a mild acceleration (from an annual average of roughly 0% this year to about 1% in 2017) would reduce household purchasing power gains, and in turn slow consumption. Lastly, we are expecting a slightly negative fiscal impulse in 2017. Under these conditions, we are looking for average annual growth of 1.3% this year and 1% next year. Our estimates are in the lower range of the consensus forecast of 1.4% in 2016 and 1.2% in 2017. Seen in this light, the government is on the optimistic side by maintaining, according to the latest news, its growth forecasts at 1.5% for both years.

[2] While globally moving in the same direction, the ILO definition of unemployment (the one used by the INSEE) and the number of category A jobseekers (with no activity at all during the month) as counted by *Pôle emploi*(the national unemployment agency), are two different measures of jobless people. A jobseeker registered at *Pôle emploi* is, indeed, not necessarily considered as unemployed according to the ILO definition if one of the three following criteria is not respected: to be out of work, available to work (within the next two weeks) and actively seeking work (having carried out specific procedures during the past four weeks).

Employment

Quarterly change in payrolls by sector, '000

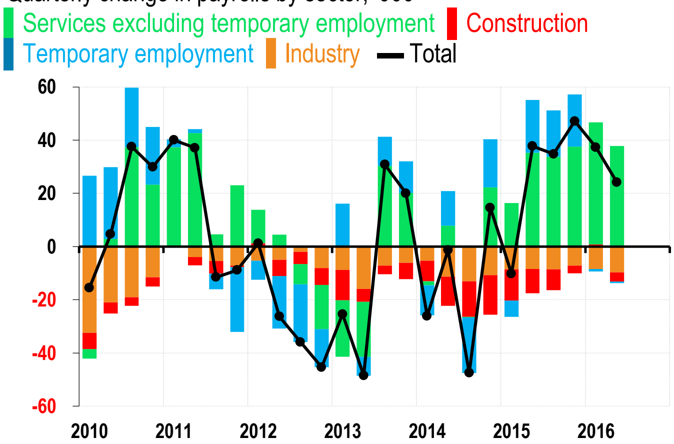


Chart 3 Source: INSEE

Business confidence

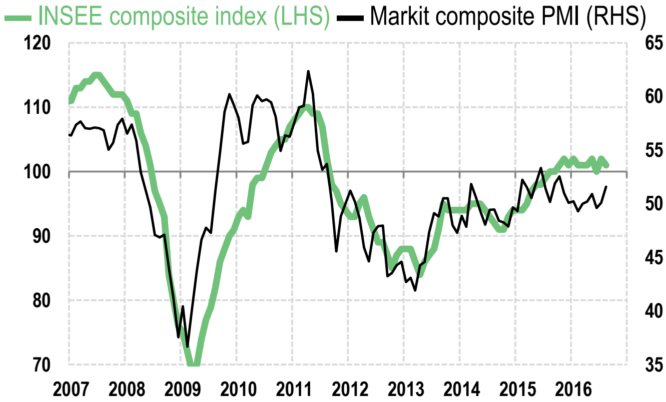


Chart 4 Sources: INSEE, Markit

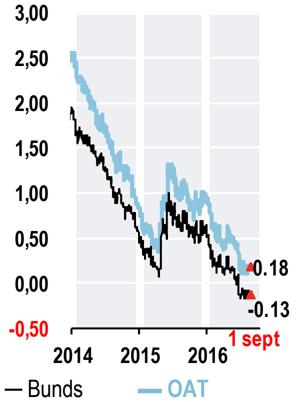
Markets overview

The essentials

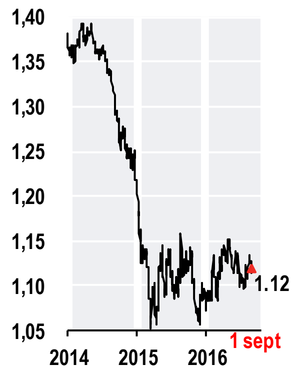
Week 26-8 16 > 1-9-16

↘ **CAC 40**	4 442	▸	**4 440**	**-0.0**	%
↗ **S&P 500**	2 169	▸	**2 171**	**+0.1**	%
↘ Volatility (VIX)	13.7	▸	13.5	-0.2	%
↘ **Euribor 3M** (%)	-0.30	▸	**-0.30**	**-0.1**	bp
↗ Libor $ 3M (%)	0.83	▸	0.84	+0.6	bp
↗ OAT 10y (%)	0.15	▸	0.18	+3.6	bp
↗ Bund 10y (%)	-0.15	▸	-0.13	+2.5	bp
↘ US Tr. 10y (%)	1.63	▸	1.57	-6.3	bp
↘ **Euro vs dollar**	1.13	▸	**1.12**	**-0.8**	%
↘ Gold (ounce, $)	1 334	▸	1 313	-1.6	%
↘ **Oil (Brent, $)**	50.2	▸	**46.0**	**-8.3**	%

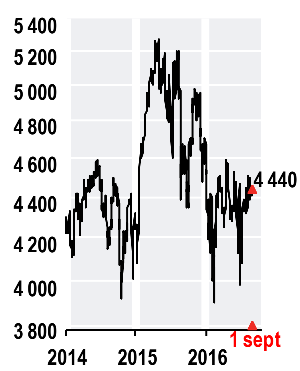
10 y bond yield, OAT vs Bund



Euro-dollar



CAC 40



Money & Bond Markets

Interest Rates		highest' 16		lowest' 16	
€ ECB	**0.00**	0.05	at 01/01	0.00	at 16/03
Eonia	**-0.34**	-0.13	at 01/01	-0.36	at 26/05
Euribor 3M	**-0.30**	-0.13	at 01/01	-0.30	at 03/08
Euribor 12M	**-0.05**	0.06	at 01/01	-0.06	at 07/07
$ FED	**0.50**	0.50	at 01/01	0.50	at 01/01
Libor 3M	**0.84**	0.84	at 30/08	0.61	at 04/01
Libor 12M	**1.56**	1.56	at 30/08	1.12	at 12/02
£ BoE	**0.25**	0.50	at 01/01	0.25	at 04/08
Libor 3M	**0.39**	0.59	at 15/02	0.38	at 10/08
Libor 12M	**0.74**	1.07	at 01/01	0.72	at 10/08

At 1-9-16

Yield (%)		highest' 16		lowest' 16	
€ AVG 5-7y	**-0.06**	0.49	at 12/01	-0.13	at 11/08
Bund 2y	**-0.63**	-0.34	at 01/01	-0.70	at 11/07
Bund 10y	**-0.13**	0.63	at 01/01	-0.18	at 08/07
OAT 10y	**0.18**	0.98	at 01/01	0.11	at 10/08
Corp. BBB	**1.20**	2.50	at 20/01	1.18	at 12/08
$ Treas. 2y	**0.79**	1.06	at 01/01	0.56	at 05/07
Treas. 10y	**1.57**	2.27	at 01/01	1.36	at 08/07
Corp. BBB	**3.28**	4.50	at 12/02	3.24	at 18/08
£ Treas. 2y	**0.12**	0.65	at 01/01	0.10	at 09/08
Treas. 10y	**0.67**	1.96	at 01/01	0.61	at 12/08

At 1-9-16

10y bond yield & spreads

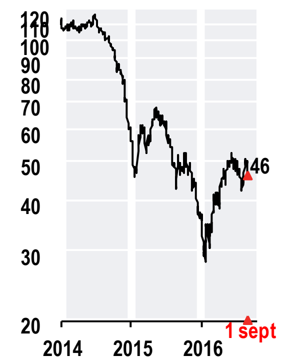
8.14%	Greece	826 pb
3.06%	Portugal	319 pb
1.18%	Italy	131 pb
1.14%	Spain	126 pb
0.46%	Ireland	59 pb
0.19%	Belgium	31 pb
0.18%	France	31 pb
0.16%	Austria	29 pb
0.07%	Finland	20 pb
0.05%	Netherland	18 pb
-0.13%	Germany	

Commodities

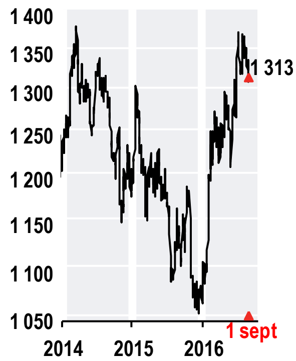
Spot price in dollars		lowest' 16			2016(€)
Oil, Brent	**46**	28	at	20/01	**+25.0%**
Gold (ounce)	**1 313**	1 062	at	01/01	**+19.9%**
Metals, LMEX	**2 348**	2 049	at	12/01	**+3.4%**
Copper (ton)	**4 620**	4 328	at	15/01	**-4.7%**
CRB Foods	**341**	329	at	11/01	**-1.2%**
wheat (ton)	**1**	1	at	16/08	**-11.7%**
Corn (ton)	**1**	1	at	31/08	**-16.3%**

At 1-9-16 *Variations*

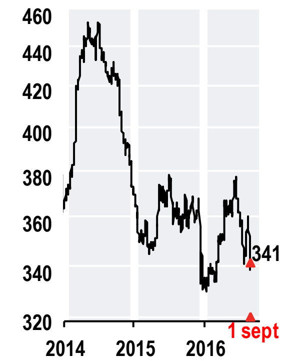
Oil (Brent, $)



Gold (Ounce, $)



CRB Foods



Exchange Rates

1€ =		highest' 16			lowest' 16			2016
USD	**1.12**	1.15	at	03/05	1.07	at	05/01	**+3.0%**
GBP	**0.84**	0.87	at	15/08	0.73	at	05/01	+14.2%
CHF	**1.10**	1.11	at	04/02	1.08	at	24/06	+0.9%
JPY	**115.52**	131.84	at	01/02	110.95	at	08/07	-11.6%
AUD	**1.48**	1.60	at	11/02	1.45	at	10/08	-0.7%
CNY	**7.48**	7.54	at	22/08	6.99	at	05/01	+6.0%
BRL	**3.64**	4.53	at	16/02	3.49	at	09/08	-15.3%
RUB	**73.70**	91.22	at	11/02	69.76	at	19/07	-7.1%
INR	**74.99**	77.50	at	11/02	71.42	at	05/01	+4.3%

At 1-9-16 *Variations*

Equity indices

	Index	highest' 16			lowest' 16			2016	2016(€)
CAC 40	**4 440**	4 637	at	01/01	3 897	at	11/02	-4.3%	**-4.3%**
S&P500	**2 171**	2 190	at	15/08	1 829	at	11/02	+6.2%	**+3.1%**
DAX	**10 534**	10 743	at	01/01	8 753	at	11/02	-1.9%	**-1.9%**
Nikkei	**16 927**	19 034	at	01/01	14 952	at	24/06	-11.1%	**+0.6%**
China*	**62**	62	at	18/08	48	at	12/02	+4.3%	**+1.2%**
India*	**490**	492	at	08/08	393	at	11/02	+8.0%	**+3.5%**
Brazil*	**1 651**	1 730	at	15/08	860	at	21/01	+31.0%	**+54.7%**
Russia*	**491**	509	at	28/04	331	at	20/01	+11.6%	**+17.7%**

At 1-9-16 *Variations*

* Indices MCSI

Economic forecasts

En %	GDP Growth 2015	GDP Growth 2016 e	GDP Growth 2017 e	Inflation 2015	Inflation 2016 e	Inflation 2017 e	Curr. account / GDP 2015	Curr. account / GDP 2016 e	Curr. account / GDP 2017 e	Fiscal balances / GDP 2015	Fiscal balances / GDP 2016 e	Fiscal balances / GDP 2017 e
Advanced	**1.9**	**1.4**	**1.3**	**0.3**	**0.7**	**1.5**						
United States	**2.6**	**1.5**	**1.6**	**0.1**	**1.2**	**2.1**	**-2.5**	**-2.6**	**-2.7**	**-2.5**	**-3.1**	**-3.1**
Japan	0.5	0.4	0.1	0.8	-0.2	0.5	3.3	3.6	3.2	-4.5	-4.3	-3.9
United Kingdom	2.2	1.6	0.7	0.0	0.5	2.2	-5.4	-5.9	-4.4	-4.1	-3.6	-4.4
Euro Area	**1.6**	**1.5**	**1.0**	**0.0**	**0.2**	**1.1**	**3.2**	**2.9**	**2.7**	**-2.1**	**-2.1**	**-1.9**
Germany	1.4	1.5	1.1	0.1	0.3	1.4	8.6	8.2	7.5	0.7	0.3	0.1
France	1.2	1.3	1.0	0.1	0.4	1.1	-0.2	-0.2	-0.4	-3.6	-3.4	-3.1
Italy	0.6	0.9	0.3	0.1	-0.1	0.8	2.2	2.2	2.1	-2.6	-2.8	-2.8
Spain	3.2	2.9	1.6	-0.6	-0.4	1.2	1.4	1.2	1.0	-5.1	-4.6	-3.5
Netherlands	2.0	1.8	1.6	0.2	0.4	0.9	9.4	9.5	9.2	-1.8	-1.8	-1.6
Belgium	1.4	1.2	1.5	0.6	1.5	1.5	0.8	1.3	1.5	-2.5	-2.7	-2.3
Portugal	1.5	1.1	1.1	0.5	0.6	1.4	0.8	0.6	0.4	-4.4	-2.9	-2.7
Emerging	**4.1**	**4.2**	**4.9**	**5.9**	**6.5**	**5.5**						
China	6.9	6.6	6.3	1.4	2.0	2.2	3.1	2.6	1.9	-2.4	-3.0	-3.2
India	7.2	7.9	8.3	4.9	5.4	5.0	-1.3	-1.1	-1.3	-4.1	-3.9	-3.5
Brazil	-3.8	-3.0	2.0	9.0	8.8	5.0	-3.3	-1.0	-1.5	-10.3	-10.1	-9.4
Russia	-3.7	0.0	2.2	15.6	7.1	5.4	5.2	2.8	3.5	-2.1	-2.8	-1.6
World	**3.1**	**3.0**	**3.3**	**3.5**	**4.0**	**3.8**						

Source : BNP Paribas Group Economic Research (e: Estimates & forecasts)

Financial forecasts

Interest rates		2015				2016						
End period		Q1	Q2	Q3	Q4	Q1	Q2	Q3e	Q4e	**2015**	**2016e**	**2017e**
US	Fed Funds	0.25	0.25	0.25	0.5	0.5	0.5	0.50-0.75	0.50-0.75	0.01	0.50-0.75	0.50-0.75
	3-month Libor $	0.27	0.28	0.33	0.61	0.63	0.65	0.65	0.85	0.61	0.85	0.95
	10-year T-notes	1.93	2.35	2.03	2.27	1.79	1.49	1.60	1.60	2.27	1.60	1.50
EMU	Refinancing rate	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.00
	3-month Euribor	0.02	-0.01	-0.04	-0.13	-0.24	-0.29	-0.30	-0.30	-0.13	-0.30	-0.30
	10-year Bund	0.18	0.77	0.59	0.63	0.16	-0.13	0.00	-0.20	0.63	-0.20	-0.20
	10-year OAT	0.42	1.20	0.90	0.98	0.41	0.20	0.30	0.10	0.98	0.10	0.10
	10-year BTP	1.29	2.31	1.73	1.60	1.23	1.35	1.40	0.90	1.60	0.90	0.80
UK	Base rate	0.50	0.50	0.50	0.50	0.50	0.50	0.25	0.10	0.50	0.10	0.10
	3-month Libor £	0.57	0.58	0.58	0.59	0.59	0.56	0.35	0.20	0.59	0.20	0.35
	10-year Gilt	1.58	2.03	1.77	1.96	1.42	1.02	0.65	0.65	1.96	0.65	0.80
Japan	Overnight call rate	0.02	0.01	0.01	0.04	-0.00	-0.06	-0.10	-0.10	0.04	-0.10	-0.10
	3-month JPY Libor	0.17	0.17	0.17	0.17	0.10	0.06	0.05	0.05	0.17	0.05	0.05
	10-year JGB	0.40	0.44	0.35	0.25	-0.04	-0.23	-0.15	-0.10	0.25	-0.10	-0.15

Exchange rates		2015				2016						
End period		Q1	Q2	Q3	Q4	Q1	Q2	Q3e	Q4e	**2015**	**2016e**	**2017e**
USD	EUR / USD	1.07	1.11	1.12	1.09	1.14	1.11	1.07	1.10	1.09	1.10	1.05
	USD / JPY	120	122	120	120	112	103	111	108	120	108	118
EUR	EUR / GBP	0.72	0.71	0.74	0.74	0.79	0.83	0.86	0.84	0.74	0.84	0.77
	EUR / CHF	1.04	1.04	1.09	1.09	1.09	1.08	1.14	1.16	1.09	1.16	0.01
	EUR/JPY	129	136	134	131	128	114	119	119	131	119	124

Source : BNP Paribas Group Economic Research (e: Estimates & forecasts)

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William DE VIJLDER Chief Economist	+33(0)1 55 77 47 31	william.devijlder@bnpparibas.com

ADVANCED ECONOMIES AND STATISTICS

Jean-Luc PROUTAT Head	+33.(0)1.58.16.73.32	jean-luc.proutat@bnpparibas.com
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BANKING ECONOMICS

Laurent QUIGNON Head	+33.(0)1.42.98.56.54	laurent.quignon@bnpparibas.com
Céline CHOULET	+33.(0)1.43.16.95.54	celine.choulet@bnpparibas.com
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EMERGING ECONOMIES AND COUNTRY RISK

François FAURE Head	+33.(0)1 42 98 79 82	francois.faure@bnpparibas.com
Christine PELTIER Deputy Head - Greater China, Vietnam - Methodology	+33.(0)1.42.98.56.27	christine.peltier@bnpparibas.com
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Pascal DEVAUX Middle East, Balkan countries - Scoring	+33.(0)1.43.16.95.51	pascal.devaux@bnpparibas.com
Anna DORBEC CIS, Central European countries	+33.(0)1.42.98.48.45	anna.dorbec@bnpparibas.com
Hélène DROUOT Asia	+33.(0)1.42.98.33.00	helene.drouot@bnpparibas.com
Johanna MELKA Asia, Russia	+33.(0)1.58.16.05.84	johanna.melka@bnpparibas.com
Alexandra WENTZINGER South America, Caribbean countries	+33.(0)1.42 98 74 26	alexandra.wentzinger@bnpparibas.com

Michel BERNARDINI Public Relation Officer	+33.(0)1.42.98.05.71	michel.bernardini@bnpparibas.com

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Registered Office: 16 boulevard des Italiens – 75009 PARIS
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Internet : www.group.bnpparibas.com - www.economic-research.bnpparibas.com

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