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ECONOMIC RESEARCH DEPARTMENT

EcoWEEK

Summary

United Sates

Ceasing purchases is the plan

Two rate hikes and a supposedly expansionary fiscal policy raise the question of the downsizing of the Fed's balance sheet.

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Italy

Monte dei Paschi: What's next?

MPS private recapitalisation had not met the expected success. The bank should be subject to a precautionary recapitalisation provided by the Italian state. The terms and conditions of MPS recovery plan need to be reassessed.

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Eco TV WEEK

Focus on a classical nexus

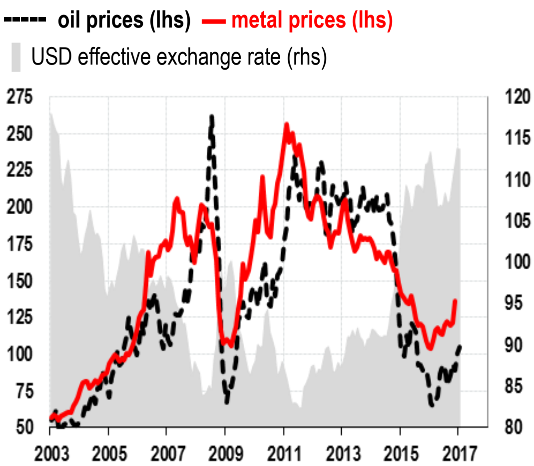
■ The correlation between oil and metal prices and the USD has become positive during 2016 ■ However it remains fragile

Between 2003 and early 2016, the negative correlation between prices of oil and metals, on the one hand, and the USD on the other hand was the rule. Until 2010, this was the result of excess demand of commodities generating upward pressures on prices, and accommodative US monetary policy. From 2011 to mid-2014, as world growth was slowing, quantitative easing in the US maintained the USD at a low level and then reinforced the role of commodities as financial assets. Lastly, from mid-2014 to early 2016, a spike in risk aversion for emerging markets boosted the dollar at the expense of commodity prices.

During 2016, the correlation has become positive again. On the one hand, the recovery in industry and construction in China and growth acceleration in the US have triggered upward pressures on commodity prices again. On the other hand, US monetary tightening and the reduction in the energy trade deficit in the US, thanks to the development in shale gaz & oil, are supportive factors for the USD.

Are those factors expected to last? Probably yes regarding the USD. But, the recovery in commodity prices remains fragile because supply of commodities may adjust relatively rapidly to demand, especially for oil, and there remain downward risks on the Chinese growth.

COMMODITY PRICES AND USD
2005=100



Sources: Datastream – IMF – BNP Paribas

THE WEEK ON THE MARKETS

Week 13-1 17 > 19-1-17

↘	**CAC 40**	4 922	► **4 841**	**-1.7**	%
↘	**S&P 500**	2 275	► **2 264**	**-0.5**	%
↗	Volatility (VIX)	11.2	► 12.8	+1.6	%
↘	**Euribor 3M** (%)	-0.33	► **-0.33**	**-0.2**	bp
↗	Libor $ 3M (%)	1.02	► 1.03	+0.7	bp
↗	OAT 10y (%)	0.81	► 0.86	+4.2	bp
↗	Bund 10y (%)	0.18	► 0.38	+20.0	bp
↗	US Tr. 10y (%)	2.38	► 2.46	+8.0	bp
↘	**Euro vs dollar**	1.06	► **1.06**	**-0.1**	%
↗	Gold (ounce, $)	1 195	► 1 202	+0.6	%
↘	**Oil (Brent, $)**	55.3	► **54.3**	**-1.8**	%

Source: Thomson Reuters

United States

Ceasing purchases is the plan

- **Activity rebounded since the middle of 2016, while the labour market is close to full employment. If inflation remains subdue, in all likelihood it will move closer to the Fed's target in the medium term.**
- **The normalisation of the US monetary policy can go on. Its pace will depend on the fiscal outlook, but the path followed has been decided a long time ago.**
- **The Fed will stop rolling over maturing debt in order to downsize its balance sheet, not only at first, as it intends to use net sells at last resort only.**

US growth seems to have hit a new stride in the second half of 2016. GDP growth rebounded to 3.5% in the third quarter after nine months of performing below potential: between end-2015 and the second quarter of 2016, growth was limited to an annualised quarterly rate of just 1%. Although preliminary estimates for the final 2016 quarter are not available yet, the Atlanta Fed's nowcasting model points to growth of 2.8%. At the same time, the main job market indicators are very upbeat: job creations are strong enough to absorb new entrants to the job market; the unemployment rate is as low as 4.8% and the hourly wage rate is accelerating. Inflation remains weak: in November, the personal consumption expenditures (PCE) price index was up 1.4% year-on-year, or 1.6% excluding energy and food prices. Yet at a time of robust growth and quasi full employment, inflation is bound to rise towards the Fed's medium-term target. In December, the FOMC, the Fed's monetary policy committee, unsurprisingly raised the Fed funds target rate by 25 basis points.

It's sad, so sad. It's a sad situation

Yet what caught our attention was not this decision – which would have been risky not to make seeing how convinced the financial markets were in its ineluctability – but Janet Yellen's speech afterwards. Admittedly, the press conference following the latest FOMC meeting was not very informative. Indeed, most of the questions pertained to fiscal policy, which the Fed is careful not to comment on in order to preserve its independence. Even so, Janet Yellen did end up saying that the Fed did not esteem that the time was very ripe for fiscal stimulus. If public spending were to be used as leverage, then it should focus on raising growth potential, notably through support for education. To sum up: as the output gap has been closed, a short-term stimulus would lead to overheating, and to foster better economic performances, it is first necessary to boost potential growth.

The closing of the output gap – the difference between observed and potential growth – is not as positive as it might seem. The gap was closed through the erosion of potential growth, and not through stronger-than-potential growth rate. This observation boils down to saying that the accumulated shortfall in production during and after the crisis will never be made up. There is little chance that those experiencing what Janet Yellen calls "shadow unemployment" will return to full-time employment. Their only chance lies in a structurally more dynamic economy, which is not within the reach of monetary policy.

Air pocket passed

Quarterly annualised growth rate, % GDP, Final domestic demand

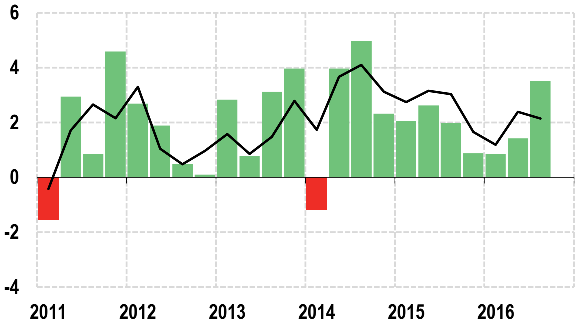


Chart 1 Source: US Bureau of Economic Analysis

Moreover, if the Fed esteems that the output gap has closed at a potential growth rate of just below 2%, then we can conclude that it will take a restrictive bent whenever growth exceeds that rate, to keep inflation from accelerating and/or bubbles from forming. The reaction of the financial markets fits within this analysis: any fiscal stimulus will come at the cost of a more restrictive monetary policy.

How many key rate hikes in 2017?

For the moment, the Fed is being cautious. The rate projections of the various FOMC members have barely changed. Granted, the median is no more for two but for three rate increases in 2017. But Janet Yellen calls for caution, implying that the consensus[1] continues to be built around two rate increases… as projections currently stand. For the moment, with the exception of a few members, no one has integrated fiscal stimulus in their scenario. To do so, they would first have to wait for Congress to debate any draft bills. Only then could the Fed estimate their expected effects on the economy and adapt its policy accordingly. The Fed undoubtedly would adopt a more restrictive stance if it were to conclude that changes in household and corporate taxation and/or shifts in public spending were to accelerate growth. In this case, we can expect the Fed's wording to shift from the "normalisation" of monetary policy to "accommodation

[1] The FOMC is comprised of voting members (currently five governors, the president of the New York Fed and the presidents of 3 of the 11 other regional Feds, who rotate each year), and non-voting members (the remaining 8 presidents of the regional Feds). The projections published by the FOMC pool together the opinions of all voting and non-voting members, which means it does not necessarily reflect the sentiment of the voting members.

removal", and then more or less quickly thereafter to the need for "policy firming".

The Feds's balance sheet

This brings us to the question of the Fed's balance sheet, which has swollen under the various waves of quantitative easing (QE). The current policy of rolling over securities as they reach maturity does not change the size of its balance sheet. Very early on, the Fed provided the broad outlines of its QE exit strategy. In February 2010, in the final weeks of QE1, Ben Bernanke presented Congress with the successive steps for normalising monetary policy[2]. These steps were officialised at the FOMC meeting of June 2011 and then amended slightly a little over three years later[3].

The stated aim is to reach a "normal" balance sheet, in which securities (mainly Treasuries) are held in the amounts needed – no more and no less – to effectively conduct monetary policy. To reduce its balance sheet, the Fed will begin by halting the roll-over of securities as they reach maturity. Only Treasuries are likely to be sold off. Agency-issued mortgage backed securities (MBS) will be held until maturity. Selling securities appears to be an ultimate, hypothetical step, and as the Fed points out, the public would be informed far in advance of the details of any operations, including the date, duration and amount.

To sum up, we should not expect the Fed to begin liquidating its balance sheet this year. Security disposals seem to be a measure of last resort that would only be used if the economy were to overheat and/or the Fed were to esteem that bond yields are too low. In the short term, there is very little probability that these conditions will come together. The Fed could, however, totally or partially halt the rolling over of debt at maturity. This would be totally up to the Fed's discretion. The only firm indication is that such a move would not be made before the first key rate increases. Key rates were raised in December 2015 and again in December 2016, which means the door is open, but the Fed is by no means obliged to act. The Fed clearly stated that "the timing will depend on how economic and financial conditions and the economic outlook evolve".

Since the presidential elections, long-term rates have surged, even though this movement, which accompanied the dollar's appreciation,

Fed balance sheet

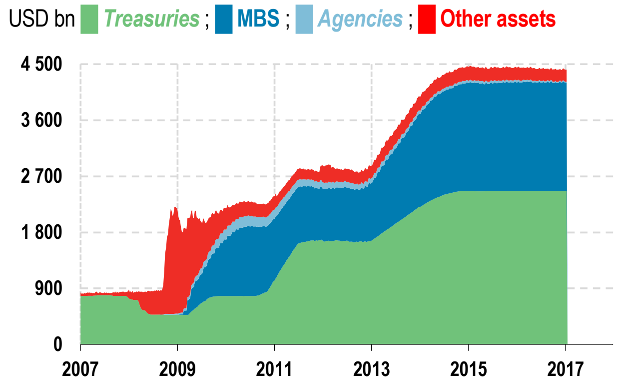


Chart 2 Source: US Federal Reserve

has since levelled off. Between 8 November and 16 January, the yield on 10-year Treasuries gained 72 basis points to 2.40%. It was accompanied by similar pressures on mortgage rates and by slightly less marked pressures on corporate bonds. A broad measure of the effective exchange rate shows that the dollar has appreciated by 4.7%. In conclusion, monetary and financial conditions have tightened and could strain the recovery. Under these conditions, it is hard to imagine that the Fed would add to these pressures. Unless, of course, fiscal policy effectively proves to be very expansionist. To evaluate this, we must first wait until Congress debates any draft proposals. It is hard to define a precise calendar. Yet we can refer to the timetable that was followed after George W. Bush took office in 2001: the piece of law was introduced in the House of Representatives in early May, definitely adopted by the Senate eight days later and signed into law in a month. The first rebates arrived in mail boxes in August. First, tax cuts resulted in a surge in the saving ratio. This was to be expected: either saved for good or eventually spent, tax rebates first appear as "savings" in the national accounts. Try and estimate the final effects of the 2001 tax cuts on the economy is simply impossible, though. On September 11th, 2001 America was attacked.

[2] "*Federal Reserve's exit strategy*", Ben S. Bernanke, Testimony before the Committee on Financial Services, U.S. House of Representatives, February 10, 2010.
[3] "*Policy Normalization Principles and Plans*", September 17, 2014.

Italy

Monte dei Paschi: What's next?

- **The private recapitalisation of Monte dei Paschi di Siena (MPS) had not met the expected success.**
- **A new solution will have to be found to make the bank's situation more viable.**
- **The Italian government temporary support could be provided in the months ahead to shore up both solvency and liquidity.**

Monte dei Paschi di Siena failed to finalise its plan to raise EUR 5 bn in new equity. The absence of anchor investor(s) and the bank's announcement of deteriorating liquidity explain among other things the market's lack of interest in the recovery package. The EUR 2 bn that was already raised via two voluntary plans to convert bonds into shares was not enough to bolster investor confidence (the conversion only took effect if the capital increase was successful). In any case, another recovery plan will have to be drawn up for MPS.

After the private capital increase was abandoned even before the 31 December 2016 deadline, Italy's Council of Ministers approved law-decree n°237/2016. The latter authorises the Treasury to raise an additional EUR 20 bn to shore up Italy's domestic banking sector. The funds will be allocated to the Minister of Finance, and are designed to reinforce bank liquidity and solvency. It also provides for a guarantee on newly issued bonds, as well as for purchases of bank shares if necessary. On 29 December 2016, the European Commission (EC) authorised Italy to extend its guarantee scheme to support banks' liquidity for an additional six months. The funds injected as part of the decree's solvency component are not to be considered as State aid, and thus are subject to EC approval on a case-by-case basis.

According to the actual considered plan, MPS will be subject to a "precautionary recapitalisation" to "preserve Italy's financial stability". This objective justifies the exceptional, temporary measure, which does not imply the resolution of the bank and authorises state intervention[1]. For MPS to benefit from this support, the European Central Bank (ECB) must have first confirmed that the bank was solvent. This assessment is based on the results of the baseline scenario of the stress tests conducted by the European Banking Authority (EBA) in 2016.

As an exception to the "bail-in" rule, however, the amount of the capital injection must be estimated based on the adverse scenario of the EBA stress tests. The amount of the capital shortfall is now estimated at EUR 8.8 bn[2]. This would allow MPS to conserve a fully loaded CET1 ratio of 8% and a total capital ratio of 11.5% during a crisis such as the hypothetical one used to calibrate the stress tests.

While awaiting a more precise evaluation, the Bank of Italy estimates the amount of government assistance for MPS at EUR 6.6 bn: EUR 4.6 bn for the recapitalisation of MPS and EUR 2 bn to compensate 40,000 individual investors of the bank. The Italian government justifies this compensation mechanism on the lack of information on the real risks being undertaken by retail investors during the sale of subordinated bank bonds. Compensation could take the form of the conversion of subordinated bonds into shares, followed by their conversion into senior bonds with the same value. The actual question focuses on whether the compensation should be made regarding junior bonds' nominal value or, as argued by the chairperson of market regulator Consob, according to the price paid by investors if they bought the bonds below par on the secondary market. The transitory nature of this support might limit the cost for taxpayers. "Other" entities would be called on to contribute the remaining EUR 2.2 bn necessary to reach the EUR 8.8 bn target. Their bonds should be converted at 18%, 75% and 100% of nominal value.

The Italian State would temporarily become MPS' majority shareholder, with a stake of more than 70%, which might jeopardise the participation of the private fund Atlante in the disposal of MPS's non-performing loans (NPL). The fund stated that if the government's participation in the recapitalisation plan exceeded EUR 1 bn, then it would not take part in the purchase of NPLs. If this is effectively the case, the market is bound to take a more cautious view of the bank.

All in all, MPS could soon issue EUR 15 bn in bonds with state support to ensure its liquidity in the months ahead. The precautionary recapitalisation could be orchestrated within the next few months. This leaves open the question of the amount and timetable for the disposal of MPS's non-performing loan portfolio. To date, Consob continues to suspend trading in MPS shares, which plunged 28% between 19 and 22 December 2016.

[1] "What is a precautionary recapitalisation and how does it work?" European Central Bank, 27 December 2016.
[2] "The 'precautionary recapitalization' of Banca Monte dei Paschi di Siena", Bank of Italy, 29 December 2016.

Markets overview

The essentials

Week 13-1 17 > 19-1-17

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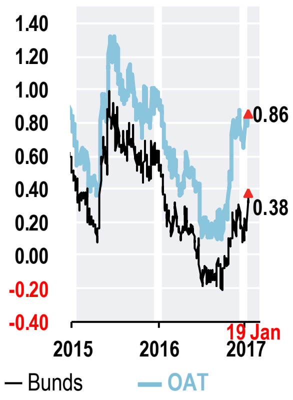
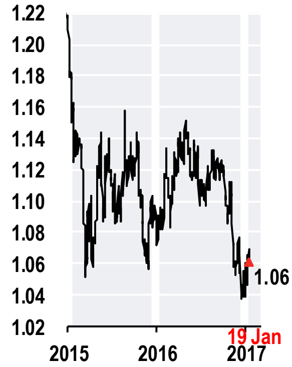
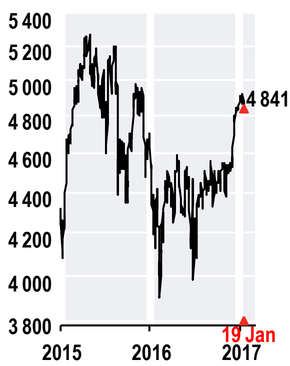
10 y bond yield, OAT vs Bund



Euro-dollar



CAC 40



Money & Bond Markets

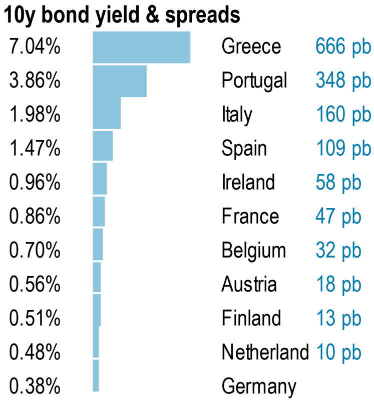
Interest Rates		highest' 17		lowest' 17	
€ ECB	**0.00**	0.00	at 02/01	0.00	at 02/01
Eonia	**-0.35**	-0.35	at 04/01	-0.36	at 02/01
Euribor 3M	**-0.33**	-0.32	at 02/01	-0.33	at 17/01
Euribor 12M	**-0.10**	-0.08	at 02/01	-0.10	at 19/01
$ FED	**0.75**	0.75	at 02/01	0.75	at 02/01
Libor 3M	**1.03**	1.03	at 18/01	1.00	at 02/01
Libor 12M	**1.71**	1.71	at 18/01	1.68	at 06/01
£ BoE	**0.25**	0.25	at 02/01	0.25	at 02/01
Libor 3M	**0.36**	0.37	at 05/01	0.36	at 18/01
Libor 12M	**0.77**	0.78	at 09/01	0.77	at 16/01

At 19-1-17

Yield (%)			highest' 17		lowest' 17	
€	AVG 5-7y	**0.35**	0.35	at 19/01	0.23	at 02/01
	Bund 2y	**-0.70**	-0.70	at 19/01	-0.79	at 02/01
	Bund 10y	**0.38**	0.38	at 19/01	0.09	at 02/01
	OAT 10y	**0.86**	0.86	at 19/01	0.67	at 02/01
	Corp. BBB	**1.58**	1.58	at 19/01	1.49	at 02/01
$	Treas. 2y	**1.23**	1.24	at 04/01	1.16	at 17/01
	Treas. 10y	**2.46**	2.46	at 19/01	2.33	at 17/01
	Corp. BBB	**3.79**	3.81	at 03/01	3.68	at 17/01
£	Treas. 2y	**0.19**	0.22	at 06/01	0.06	at 02/01
	Treas. 10y	**1.40**	1.40	at 19/01	1.24	at 02/01

At 19-1-17

10y bond yield & spreads

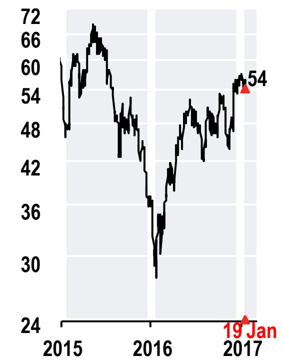


Commodities

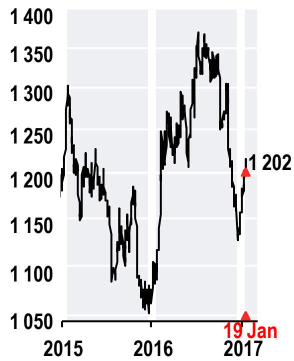
Spot price in dollars		lowest' 17			2017(€)
Oil, Brent	**54**	54	at	19/01	**-4.8%**
Gold (ounce)	**1 202**	1 156	at	03/01	**+3.2%**
Metals, LMEX	**2 808**	2 639	at	03/01	**+4.9%**
Copper (ton)	**5 714**	5 487	at	03/01	**+2.8%**
CRB Foods	**346**	339	at	02/01	**+1.5%**
wheat (ton)	**152**	146	at	02/01	**+3.4%**
Corn (ton)	**137**	133	at	02/01	**+2.9%**

At 19-1-17 *Variations*

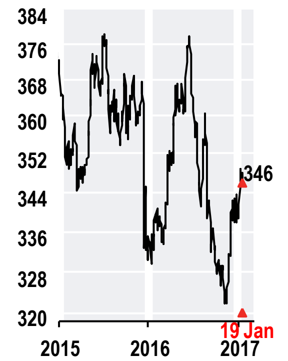
Oil (Brent, $)



Gold (Ounce, $)



CRB Foods



Exchange Rates

1€ =		highest' 17			lowest' 17			2017
USD	**1.06**	1.07	at	17/01	1.04	at	03/01	**+0.6%**
GBP	**0.86**	0.88	at	16/01	0.85	at	03/01	+1.0%
CHF	**1.07**	1.07	at	12/01	1.07	at	03/01	+0.0%
JPY	**122.35**	123.21	at	06/01	120.85	at	17/01	-0.5%
AUD	**1.41**	1.46	at	02/01	1.41	at	19/01	-3.5%
CNY	**7.30**	7.35	at	12/01	7.22	at	03/01	-0.4%
BRL	**3.40**	3.44	at	18/01	3.37	at	11/01	-0.8%
RUB	**63.53**	64.39	at	02/01	62.88	at	06/01	-1.3%
INR	**72.33**	72.78	at	18/01	70.95	at	03/01	+1.0%

At 19-1-17 *Variations*

Equity indices

	Index	highest' 17			lowest' 17			2017	2017(€)
CAC 40	**4 841**	4 922	at	13/01	4 841	at	19/01	-0.4%	**-0.4%**
S&P500	**2 264**	2 277	at	06/01	2 239	at	02/01	+1.1%	**+0.5%**
DAX	**11 597**	11 646	at	11/01	11 521	at	12/01	+1.0%	**+1.0%**
Nikkei	**19 072**	19 594	at	04/01	18 814	at	17/01	-0.2%	**+0.3%**
China*	**62**	62	at	18/01	59	at	02/01	+5.4%	**+4.7%**
India*	**459**	459	at	19/01	445	at	03/01	+3.2%	**+2.1%**
Brazil*	**1 796**	1 814	at	12/01	1 654	at	02/01	+5.9%	**+6.8%**
Russia*	**591**	622	at	03/01	591	at	19/01	-3.4%	**-2.5%**

At 19-1-17 *Variations*

* MSCI index

Economic forecasts

	GDP Growth			Inflation			Curr. account / GDP			Fiscal balances / GDP		
En %	2016 e	2017 e	2018 e	2016 e	2017 e	2018 e	2016 e	2017 e	2018 e	2016 e	2017 e	2018 e
Advanced	**1.6**	**1.7**	**2.1**	**0.8**	**1.7**	**1.9**						
United States	**1.5**	**2.2**	**2.8**	**1.2**	**2.2**	**2.6**	**-2.5**	**-2.4**	**-2.4**	**-3.4**	**-4.2**	**-5.0**
Japan	0.8	0.9	0.7	-0.1	1.1	1.0	3.8	4.0	4.4	-4.6	-4.2	-4.1
United Kingdom	2.1	1.1	1.6	0.6	2.4	2.6	-5.5	-4.6	-3.5	-3.7	-4.0	-4.1
Euro Area	**1.6**	**1.2**	**1.5**	**0.2**	**1.2**	**1.3**	**3.2**	**2.9**	**2.9**	**-1.8**	**-1.6**	**-1.4**
Germany	1.8	1.5	1.8	0.4	1.6	1.5	8.9	8.1	8.4	0.6	0.6	0.5
France	1.3	1.1	1.5	0.3	1.0	1.1	-0.9	-0.6	-0.8	-3.4	-3.1	-2.8
Italy	0.8	0.4	0.7	-0.1	0.9	1.0	2.0	2.2	2.0	-2.5	-2.6	-2.6
Spain	3.2	2.1	1.9	-0.4	1.6	1.6	1.1	1.6	1.6	-4.6	-3.8	-3.2
Netherlands	2.2	1.5	1.4	0.1	0.8	1.2	8.5	8.2	7.9	-1.1	-0.5	-0.2
Belgium	1.4	1.2	1.4	1.8	1.6	1.6	0.8	0.6	0.6	-2.9	-1.6	-1.9
Emerging	**4.3**	**4.6**	**5.1**	**4.8**	**4.4**	**4.2**						
China	6.7	6.2	6.4	2.0	2.3	2.5	2.2	1.7	1.5	-3.0	-3.3	-3.5
India	7.5	8.1	8.3	5.0	5.7	4.9	-1.1	-0.5	-1.3	-3.9	-3.5	-3.5
Brazil	-3.7	1.0	3.0	8.8	4.9	4.4	-1.2	-1.7	-2.5	-9.6	-10.4	-8.4
Russia	-0.5	1.0	2.5	7.0	4.6	4.2	2.5	2.7	3.2	-3.9	-3.0	-1.9
World	**3.1**	**3.3**	**3.8**	**3.1**	**3.3**	**3.3**						

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

Financial forecasts

Interest rates		2016				2017						
End period		Q1	Q2	Q3	Q4e	Q1e	Q2e	Q3e	Q4e	**2016e**	**2017e**	**2018e**
US	Fed Funds	0.25-0.5	0.25-0.5	0.25-0.5	0.50-0.75	0.50-0.75	0.50-0.75	0.75-1.00	1.00-1.25	0.50-0.75	1.00-1.25	2.00-2.25
	3-month Libor $	0.63	0.65	0.85	0.91	0.90	0.90	0.95	1.10	0.91	1.10	2.45
	10-year T-notes	1.79	1.49	1.61	2.35	2.55	2.75	2.85	3.00	2.35	3.00	3.50
EMU	Refinancing rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3-month Euribor	-0.24	-0.29	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.15
	10-year Bund	0.16	-0.13	-0.19	0.30	0.40	0.50	0.60	0.70	0.30	0.70	1.20
	10-year OAT	0.41	0.20	0.12	0.75	0.90	0.90	1.00	1.10	0.75	1.10	1.70
	10-year BTP	1.23	1.35	1.19	2.05	1.90	2.10	2.30	2.50	2.05	2.50	3.00
UK	Base rate	0.50	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	3-month Libor £	0.59	0.56	0.38	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	10-year Gilt	1.42	1.02	0.76	1.55	1.70	1.65	1.75	1.90	1.55	1.90	2.15
Japan	Overnight call rate	-0.00	-0.06	-0.06	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
	3-month JPY Libor	0.10	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	10-year JGB	-0.04	-0.23	-0.08	0.00	0.05	0.05	0.10	0.15	0.00	0.15	0.15

Exchange rates		2016				2017						
End period		Q1	Q2	Q3	Q4e	Q1e	Q2e	Q3e	Q4e	**2016e**	**2017e**	**2018e**
USD	EUR / USD	1.14	1.11	1.12	1.07	1.04	1.02	1.02	1.00	1.07	1.00	1.09
	USD / JPY	112	103	101	110	115	120	125	128	110	128	135
EUR	EUR / GBP	0.79	0.83	0.87	0.86	0.84	0.82	0.82	0.80	0.86	0.80	0.76
	EUR / CHF	1.09	1.08	1.09	1.07	1.08	1.10	1.12	1.12	1.07	1.12	1.15
	EUR/JPY	128	114	114	118	120	122	128	128	118	128	147

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

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