

ECOWEEK

No. 18-37, 12 October 2018

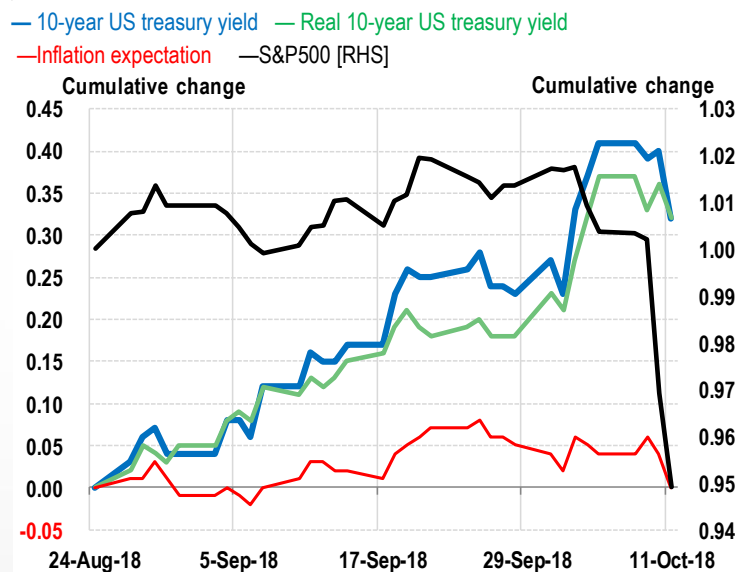
A sudden drop in risk appetite

■ The eruption of US equity market volatility, with global spillover effects, is a delayed reaction to a rather significant increase in bond yields since the second part of August ■ Market-implied inflation expectations didn't move that much so the rise in long term rates reflects an increase in real yields which in turn is related to strong growth numbers ■ Historically the relationship between weekly changes in yields and stock market performance is weak ■ This implies that one should focus on drivers of investor risk appetite and in particular signs of slower growth

Research shows that the surprise component of economic data releases, i.e. the difference from the consensus forecast, is incorporated in financial asset prices within minutes. However, the relevance of new data goes well beyond this timespan because they allow investors to finetune their assessment of the economic environment. It implies that a significant cumulative change can end up impacting market sentiment even though the short term reaction to news had been negligible. This week saw an example of such a delayed reaction. Since the second half of August, 10 year US treasury yields have risen 32 bp (chart 1). This corresponds to the increase in the inflation-protected treasury yield (TIPS) because market-implied inflation expectations have been stable. Considering the strong data in recent weeks, we can assume that the rise in real yields reflects an increase in expectations for real GDP growth. Everything else being the same, the rise in yields should have been accompanied by a decline in equity prices. In reality the equity market increased on the back of a more upbeat assessment of the earnings outlook and/or a decline in the required risk premium. This week's market rout would then reflect a sudden drop in investor risk appetite. Possible explanations could be: a change in the attractiveness of an expensive equity market versus treasury bonds which start to offer increasingly appealing inflation-adjusted yields; concern about the trade war (the IMF's new World Economic Outlook was quite vocal on the risks this entails); an increasing conviction that the Fed would hike more than expected lately. It could also be, quite simply, a delayed reaction to the rise in bond yields.

.../...

CUMULATIVE CHANGE OF US TREASURY YIELDS AND S&P500



Source: Thomson Reuters, BNP Paribas.

p. 3

Markets Overview

p. 4

Pulse & Calendar

p. 5

Economic scenario

Eco
WEEK

ECONOMIC RESEARCH DEPARTMENT



BNP PARIBAS

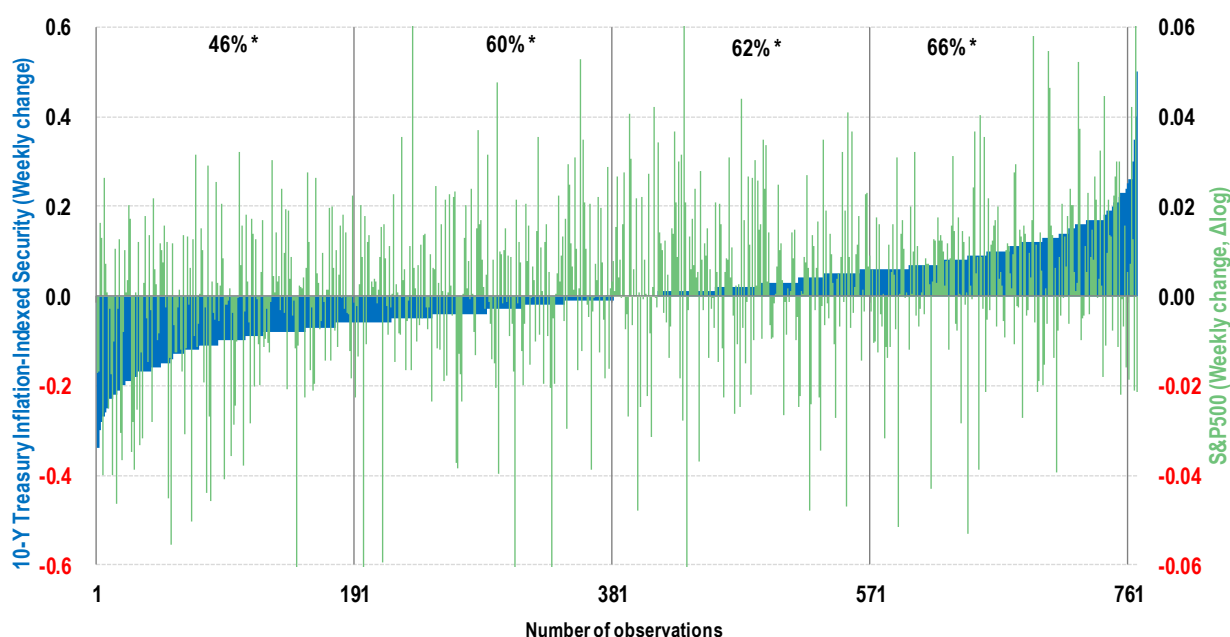
The bank
for a changing
world

Based on the developments in the past two weeks (jump in bond yields, equity market decline), it is tempting to make a strong link between bond yields and the equity market when assessing what the future may bring. To explore the historical record of such an approach, chart 2 shows the ranked weekly change in real bond yields and the associated change in the S&P500. The observations are split in four windows to allow for a non-linear correlation. Running regressions for each subsample shows that only in the case of significant declines in interest rates there is a statistically significant positive relationship between bond yields and the equity market: big declines in yields reflect a poor growth environment so equities suffer. For the other subsamples there is no such relationship. Moreover, in slightly more than 60% of the observations, the equity market has positive weekly returns, an illustration that in the long run the S&P500 tends to rise.

It also means of course that in about 40% of observations, weekly returns are negative. Statistically speaking this has little to do with the short-term behaviour of bond yields so one should look at other factors. One would be a threshold effect in bond yields: if the cumulative change is large enough, the mindset of investors changes, causing a drop in risk appetite. Such a drop can also be triggered by exogenous shocks obviously, fluctuations in uncertainty and doubts about economic growth. For the coming months, the last point is, perhaps counterintuitively given the recent concerns about too strong a rate of US growth, the more relevant one to focus on. After all, US household confidence has risen in tandem with the equity bull market so a lasting correction would hit confidence. Business optimism would also suffer. The rest of the world would also be impacted via international trade, declining commodity prices, equity market correlations, etc.

William De Vijlder

RANKED WEEKLY CHANGE OF US REAL YIELD AND ASSOCIATED CHANGE IN S&P500 **



* Percentage of positive observations of the SP500 ** period 2003-2018 excluding May 2008 - May 2009

Chart 2

Source: Thomson Reuters, BNP Paribas.



BNP PARIBAS

The bank
for a changing
world

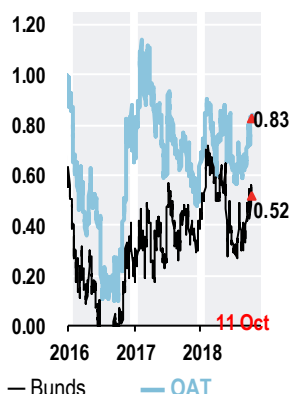
Markets overview

The essentials

Week 5-10 18 > 11-10-18

➤ CAC 40	5 359	➤ 5 106	-4.7 %
➤ S&P 500	2 886	➤ 2 728	-5.4 %
➤ Volatility (VIX)	14.8	➤ 25.0	+10.2 pb
➤ Euribor 3M (%)	-0.32	➤ -0.32	+0.0 bp
➤ Libor \$ 3M (%)	2.41	➤ 2.43	+1.7 bp
➤ OAT 10y (%)	0.84	➤ 0.83	-0.8 bp
➤ Bund 10y (%)	0.56	➤ 0.52	-4.6 bp
➤ US Tr. 10y (%)	3.23	➤ 3.13	-9.6 bp
➤ Euro vs dollar	1.15	➤ 1.16	+0.4 %
➤ Gold (ounce, \$)	1 202	➤ 1 219	+1.4 %
➤ Oil (Brent, \$)	85.0	➤ 81.0	-4.7 %

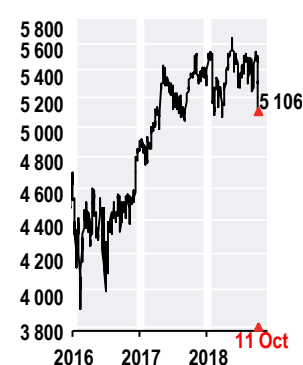
10 y bond yield, OAT vs Bund



Euro-dollar



CAC 40



Money & Bond Markets

Interest Rates	highest' 18	lowest' 18
€ ECB	0.00 at 01/01	0.00 at 01/01
Eonia	-0.37 at 31/08	-0.37 at 18/05
Euribor 3M	-0.32 at 01/10	-0.33 at 01/01
Euribor 12M	-0.16 at 09/10	-0.19 at 19/02
\$ FED	2.25 at 27/09	1.50 at 01/01
Libor 3M	2.43 at 10/10	1.69 at 01/01
Libor 12M	2.97 at 10/10	2.11 at 01/01
£ BoE	0.75 at 02/08	0.50 at 01/01
Libor 3M	0.80 at 06/08	0.52 at 04/01
Libor 12M	1.09 at 10/10	0.76 at 03/01

At 11-10-18

Yield (%)	highest' 18	lowest' 18
€ AVG 5-7y	1.03 at 09/10	0.41 at 18/04
Bund 2y	-0.54 at 25/09	-0.79 at 29/05
Bund 10y	0.52 at 15/02	0.27 at 19/07
OAT 10y	0.83 at 08/02	0.57 at 13/07
Corp. BBB	1.78 at 10/10	1.17 at 08/01
\$ Treas. 2y	2.84 at 05/10	1.89 at 01/01
Treas. 10y	3.13 at 08/10	2.41 at 01/01
Corp. BBB	4.48 at 10/10	3.59 at 01/01
£ Treas. 2y	0.86 at 05/10	0.40 at 01/01
Treas. 10y	1.68 at 10/10	1.23 at 01/01

At 11-10-18

10y bond yield & spreads

5.07%	Greece	455 pb
3.59%	Italy	307 pb
2.02%	Portugal	149 pb
1.65%	Spain	113 pb
0.90%	Belgium	38 pb
0.83%	France	30 pb
0.78%	Finland	26 pb
0.77%	Ireland	25 pb
0.73%	Austria	20 pb
0.63%	Netherlands	11 pb
0.52%	Germany	

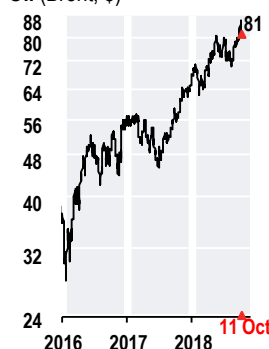
Commodities

Spot price in dollars	lowest' 18	2018(€)
Oil, Brent	62.2 at 13/02	+26.3%
Gold (ounce)	1 179 at 17/08	-2.9%
Metals, LMEX	2 981 at 15/08	-9.4%
Copper (ton)	5 759 at 15/08	-9.8%
CRB Foods	316 at 30/08	+4.1%
wheat (ton)	155 at 16/01	+17.3%
Corn (ton)	115 at 18/09	+4.8%

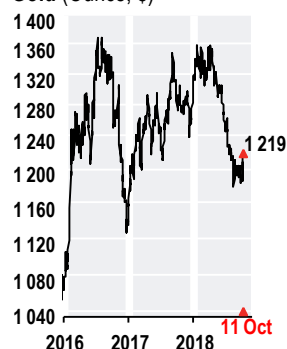
At 11-10-18

Variations

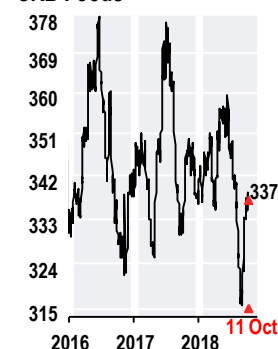
Oil (Brent, \$)



Gold (Ounce, \$)



CRB Foods



Exchange Rates

€ =	highest' 18	lowest' 18	2018
USD	1.25 at 25/01	1.13 at 15/08	-3.7%
GBP	0.91 at 28/08	0.86 at 17/04	-1.4%
CHF	1.20 at 19/04	1.12 at 07/09	-2.2%
JPY	129.78 at 02/02	124.96 at 15/08	-4.1%
AUD	1.63 at 11/09	1.53 at 09/01	+5.9%
CNY	8.10 at 25/09	7.42 at 29/05	+2.4%
BRL	4.88 at 14/09	3.87 at 08/01	+9.0%
RUB	81.62 at 10/09	68.06 at 09/01	+10.8%
INR	85.66 at 11/10	75.92 at 08/01	+11.8%

At 11-10-18

Variations

Equity indices

Index	highest' 18	lowest' 18	2018	2018(€)
CAC 40	5 640 at 22/05	5 066 at 26/03	-3.9%	-3.9%
S&P500	2 931 at 20/09	2 581 at 08/02	+2.0%	+6.0%
DAX	13 560 at 23/01	11 539 at 11/10	-10.7%	-10.7%
Nikkei	24 271 at 02/10	20 618 at 23/03	-0.8%	+3.4%
China*	101 at 26/01	70 at 11/10	-21.0%	-18.2%
India*	642 at 29/01	496 at 11/10	-5.8%	-15.7%
Brazil*	2 393 at 26/01	1 561 at 11/09	+7.3%	-1.5%
Russia*	707 at 26/02	551 at 23/08	+11.0%	+2.1%

At 11-10-18

Variations

* MSCI index



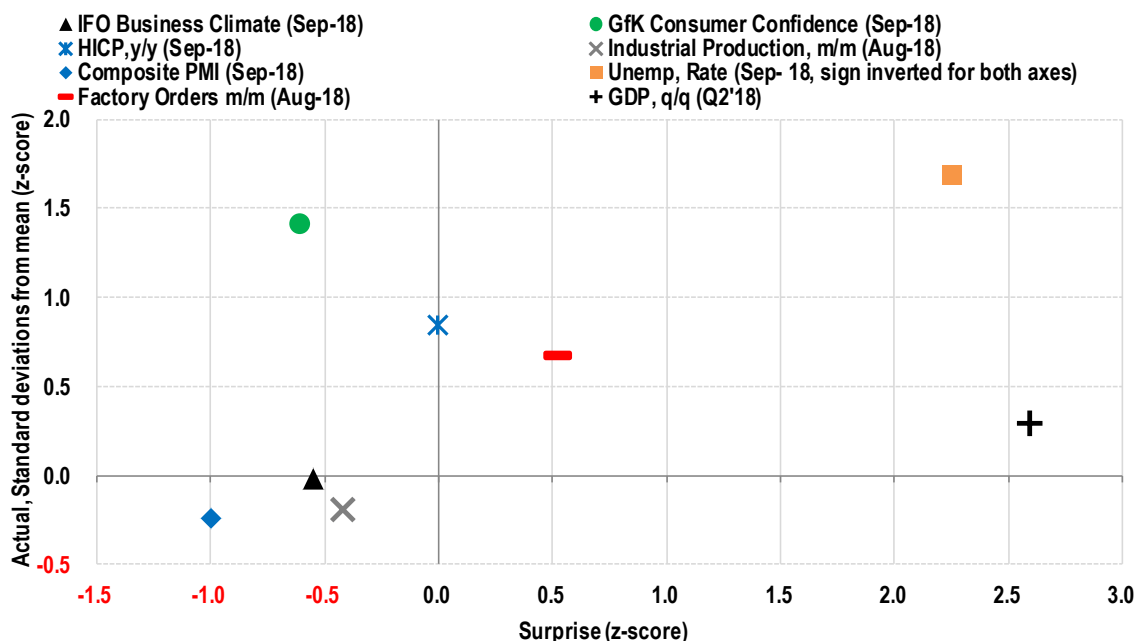
BNP PARIBAS

The bank
for a changing
world

Pulse

Germany: At a cyclical turning point

The German economy has arrived at a cyclical turning point. Uncertainty among enterprises has increased sharply according to the dispersion indicator of the German IFO institute. Between May and September, the indicator gained 6.2 points, an increase similar to that during the global financial crisis 2008-09. The growing uncertainty is also picked up by our "Pulse indicator". Negative surprises were recorded in the business cycle indicators PMI and IFO. Moreover, markets were disappointed about the small increase in consumer confidence. Nevertheless, all these indicators remain close to their recent peak. The composite PMI stood at 55 in September, indicating that activity is still growing at a robust pace. This is in line with our scenario of slowing economic growth to the potential rate, estimated at 1.5%.



Indicators preview

Many US data will be released next week, in particular with respect to the housing market: NAHB index, housing starts, building permits, existing home sales. This will allow to assess whether higher rates start to have an impact. Also important are retail sales, the FOMC minutes and the survey of the Philadelphia Fed for October. Amidst Brexit uncertainty, markets will pay attention to retail sales in the UK and CBI business optimism.

Date	Country	Event	Period	Prior
10/15/18	United States	Retail Sales Advance MoM	Sep	0.1%
10/16/18	United States	Industrial Production MoM	Sep	0.4%
10/16/18	United States	Capacity Utilization	Sep	78.1%
10/16/18	United States	NAHB Housing Market Index	Oct	67
10/17/18	Eurozone	EU27 New Car Registrations	Sep	31.2%
10/17/18	United Kingdom	CPI MoM	Sep	0.7%
10/17/18	Eurozone	CPI MoM	Sep	0.2%
10/17/18	United States	Housing Starts	Sep	1.282e+06
10/17/18	United States	Building Permits	Sep	1.229e+06
10/17/18	United States	FOMC Meeting Minutes	46266	--
10/18/18	United Kingdom	Retail Sales Ex Auto Fuel MoM	Sep	0.3%
10/18/18	United States	Philadelphia Fed Business Outlook	Oct	22.9
10/19/18	United States	Existing Home Sales	Sep	5.34e+06
10/19/18-10/25/18	United Kingdom	CBI Business Optimism	Oct	-3

Source: Bloomberg, BNP Paribas



BNP PARIBAS

The bank
for a changing
world

Economic scenario

UNITED STATES

- Economy is expected to expand at a 3% or so in 2018, thanks to tax cuts, booming profits and credit. However, the current weakening in external trade indexes puts the risk on the downside.
- Inflation is accelerating in the wake of higher oil prices and more evident tensions in the labour market.
- The Fed will keep on normalizing monetary conditions. We forecast the Fed Funds target rate to reach 2.75% in Q1 2019.

CHINA

- Economic growth will decelerate in 2018-2019. The export outlook is significantly darkened by US protectionist measures. Private domestic demand should be affected by the worsening performance of the export manufacturing sector and the continued moderation in the property market.
- In order to contain the slowdown, the central bank has started to ease liquidity and credit conditions. At the same time, the reduction in financial instability risks should remain a top policy priority. Fiscal policy will also be expansionary and infrastructure spending is projected to rise.

EUROZONE

- The recovery is continuing, although it has been weaker than expected at the start of the year. Intra-EU trade grows with domestic demand, especially corporate investment.
- Inflation has rebounded in the wake of higher oil prices, but the core CPI trend remains subdued. Along with renewed tensions over sovereign debt spreads (Italy) this argues for the ECB to maintain the status quo on the refinancing rate for a long period of time.

FRANCE

- Growth slows down but remains above potential. Households' consumption should get a boost from the planned tax cuts and the jobs recovery but inflation reduces purchasing power gains. Business investment dynamics remain favourable. The global backdrop is less supportive. A slight rise in core inflation is appearing but remains to be confirmed.

INTEREST RATES AND FX RATES

- In the US, ongoing strong growth and a very low unemployment rate pave the way for more rate hikes. We expect 2 more this year and 1 in the first half of 2019 after which the Fed will want to see how the economy reacts. As a consequence, US treasury yields should increase, although to a limited degree: the market expects that the tightening cycle is already well advanced. The ECB has announced it intends to stop its net asset purchases at the end of 2018. A first hike of the deposit rate is expected after the summer of 2019. As a consequence, bond yields should increase. No change expected in Japan.
- The narrowing bond yield differential between the US and the eurozone should cause a strengthening of the euro, all the more so considering it is still below its long-term fair value (around 1.34).

SUMMARY

%	GDP Growth			Inflation		
	2017	2018 e	2019 e	2017	2018 e	2019 e
Advanced	2.2	2.2	1.5	1.8	2.1	1.9
United-States	2.2	2.8	1.8	2.1	2.5	2.1
Japan	1.7	0.9	0.6	0.5	1.0	1.0
United-Kingdom	1.7	1.3	1.6	2.7	2.4	2.1
Euro Area	2.5	2.0	1.5	1.5	1.9	1.9
Germany	2.5	1.9	1.6	1.7	1.9	2.1
France	2.3	1.7	1.6	1.2	2.2	1.8
Italy	1.6	1.2	1.0	1.3	1.5	1.9
Spain	3.1	2.7	2.0	2.0	1.8	1.8
Netherlands	3.0	2.3	1.7	1.3	1.7	1.8
Emerging	5.9	5.8	5.8	2.4	2.9	2.8
China	6.9	6.4	6.1	1.6	2.1	1.9
India	6.7	7.4	7.6	3.6	4.5	4.4
Brazil	1.0	1.5	3.0	3.4	3.7	3.7
Russia	1.5	1.8	1.6	3.7	2.6	3.5

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

INTEREST RATES & FX RATES

Interest rates, %		2018	2019				2017	2018e	2019e
End of period		Q4e	Q1e	Q2e	Q3e	Q4e			
US	Fed Funds	2.50	2.75	2.75	2.75	2.75	1.50	2.50	2.75
	Libor 3m \$	2.36	2.80	2.85	2.65	2.55	1.69	2.36	2.55
	T-Notes 10y	3.10	3.15	3.20	3.10	3.00	2.41	3.10	3.00
Ezone	ECB Refi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Euribor 3m	-0.30	-0.30	-0.25	-0.20	-0.15	-0.33	-0.30	-0.15
	Bund 10y	0.75	0.85	1.00	1.10	1.20	0.42	0.75	1.20
	OAT 10y	1.00	1.10	1.25	1.35	1.45	0.66	1.00	1.45
UK	Base rate	0.75	0.75	1.00	1.00	1.25	0.50	0.75	1.25
	Gilt 10y	1.55	1.70	1.80	1.90	2.00	1.23	1.55	2.00
Japan	BoJ Rate	-0.10	-0.10	-0.10	-0.10	-0.10	-0.04	-0.10	-0.10
	JGB 10y	0.14	0.12	0.10	0.04	0.02	0.05	0.14	0.02

Exchange Rates			2019						
End of period		Q4e	Q1e	Q2e	Q3e	Q4e	2017	2018e	2019e
USD	EUR / USD	1.20	1.22	1.25	1.28	1.30	1.20	1.20	1.30
	USD / JPY	106	102	100	99	98	113	106	98
	GBP / USD	1.30	1.34	1.40	1.45	1.49	1.35	1.30	1.49
	USD / CHF	0.97	0.97	0.96	0.95	0.94	0.97	0.97	0.94
EUR	EUR / GBP	0.92	0.91	0.89	0.88	0.87	0.89	0.92	0.87
	EUR / CHF	1.16	1.18	1.20	1.22	1.22	1.17	1.16	1.22
	EUR / JPY	127	124	125	127	127	135	127	127

Source : GlobalMarkets (e: Estimates & forecasts)



GROUP ECONOMIC RESEARCH

■ **William DE VIJDER**
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

■ **Alexandra ESTIOT**

Works coordination - United States - United Kingdom - Globalisation

+33.(0)1.58.16.81.69

alexandra.estiot@bnpparibas.com

■ **Hélène BAUDCHON**

France (short-term outlook and forecasts) - Labour markets

+33.(0)1.58.16.03.63

helene.baudchon@bnpparibas.com

■ **Frédérique CERISIER**

Euro Area (European governance and public finances), Spain, Portugal

+33.(0)1.43.16.95.52

frederique.cerisier@bnpparibas.com

■ **Thibault MERCIER**

Euro Area (short-term outlook and monetary policy), France (structural reforms)

+33.(0)1.57.43.02.91

thibault.mercier@bnpparibas.com

■ **Catherine STEPHAN**

Nordic countries - World trade - Education, health, social conditions

+33.(0)1.55.77.71.89

catherine.stephan@bnpparibas.com

■ **Raymond VAN DER PUTTEN**

Germany, Netherlands, Austria, Switzerland - Energy, climate - Long-term projections

+33.(0)1.42.98.53.99

raymond.vanderputten@bnpparibas.com

■ **Tarik RHARRAB**

Statistics and Modelling

+33.(0)1.43.16.95.56

tarik.rharrab@bnpparibas.com

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

■ **Thomas HUMBLLOT**

+33.(0)1.40.14.30.77

thomas.humbloit@bnpparibas.com

EMERGING ECONOMIES AND COUNTRY RISK

■ **François FAURE**

Head - Argentina, Central European countries

+33.(0)1 42 98 79 82

francois.faure@bnpparibas.com

■ **Christine PELTIER**

Deputy Head - Greater China, Vietnam, other North Asian countries, South Africa

+33.(0)1.42.98.56.27

christine.peltier@bnpparibas.com

■ **Stéphane ALBY**

Africa (French-speaking countries)

+33.(0)1.42.98.02.04

stephane.alby@bnpparibas.com

■ **Sylvain BELLEFONTAINE**

Turkey, Central European countries

+33.(0)1.42.98.26.77

sylvain.bellefontaine@bnpparibas.com

■ **Sara CONFALONIERI**

Africa (Portuguese & English-speaking countries)

+33.(0)1.42.98.43.86

sara.confalonieri@bnpparibas.com

■ **Pascal DEVAUX**

Middle East, Balkan countries

+33.(0)1.43.16.95.51

pascal.devaux@bnpparibas.com

■ **Hélène DROUOT**

Korea, Thailand, Philippines, Mexico, Andean countries

+33.(0)1.42.98.33.00

helene.drouot@bnpparibas.com

■ **Salim HAMMAD**

Latin America

+33.(0)1.42.98.74.26

salim.hammad@bnpparibas.com

■ **Johanna MELKA**

India, South Asia, Russia, Kazakhstan, CIS

+33.(0)1.58.16.05.84

johanna.melka@bnpparibas.com

■ **Michel BERNARDINI**
Contact Média

+33.(0)1.42.98.05.71

michel.bernardini@bnpparibas.com



BNP PARIBAS

The bank
for a changing
world

OUR PUBLICATIONS



CONJUNCTURE

Structural or in news flow, two issues analysed in depth



EMERGING

Analyses and forecasts for a selection of emerging economies



PERSPECTIVES

Analyses and forecasts for the main countries, emerging or developed



ECOFASH

Data releases, major economic events. Our detailed views...



ECOWEEK

Weekly economic news and much more...



ECOTV

In this monthly web TV, our economists make sense of economic news



ECOTV WEEK

What is the main event this week? The answer is in your two minutes of economy

The information and opinions contained in this report have been obtained from, or are based on, public sources believed to be reliable, but no representation or warranty, express or implied, is made that such information is accurate, complete or up to date and it should not be relied upon as such. This report does not constitute an offer or solicitation to buy or sell any securities or other investment. It does not constitute investment advice, nor financial research or analysis. Information and opinions contained in the report are not to be relied upon as authoritative or taken in substitution for the exercise of judgement by any recipient; they are subject to change without notice and not intended to provide the sole basis of any evaluation of the instruments discussed herein. Any reference to past performance should not be taken as an indication of future performance. To the fullest extent permitted by law, no BNP Paribas group company accepts any liability whatsoever (including in negligence) for any direct or consequential loss arising from any use of or reliance on material contained in this report. All estimates and opinions included in this report are made as of the date of this report. Unless otherwise indicated in this report there is no intention to update this report. BNP Paribas SA and its affiliates (collectively "BNP Paribas") may make a market in, or may, as principal or agent, buy or sell securities of any issuer or person mentioned in this report or derivatives thereon. BNP Paribas may have a financial interest in any issuer or person mentioned in this report, including a long or short position in their securities and/or options, futures or other derivative instruments based thereon. Prices, yields and other similar information included in this report are included for information purposes. Numerous factors will affect market pricing and there is no certainty that transactions could be executed at these prices. BNP Paribas, including its officers and employees may serve or have served as an officer, director or in an advisory capacity for any person mentioned in this report. BNP Paribas may, from time to time, solicit, perform or have performed investment banking, underwriting or other services (including acting as adviser, manager, underwriter or lender) within the last 12 months for any person referred to in this report. BNP Paribas may be a party to an agreement with any person relating to the production of this report. BNP Paribas may, to the extent permitted by law, have added upon or used the information contained herein, or the research or analysis on which it was based, before its publication. BNP Paribas may receive or intend to seek compensation for investment banking services in the next three months from or in relation to any person mentioned in this report. Any person mentioned in this report may have been provided with sections of this report prior to its publication in order to verify its factual accuracy.

BNP Paribas is incorporated in France with limited liability. Registered Office 16 Boulevard des Italiens, 75009 Paris. This report was produced by a BNP Paribas group company. This report is for the use of intended recipients and may not be reproduced (in whole or in part) or delivered or transmitted to any other person without the prior written consent of BNP Paribas. By accepting this document you agree to be bound by the foregoing limitations.

Certain countries within the European Economic Area:

This report has been approved for publication in the United Kingdom by BNP Paribas London Branch. BNP Paribas London Branch is authorised and supervised by the Autorité de Contrôle Prudentiel and authorised and subject to limited regulation by the Financial Services Authority. Details of the extent of our authorisation and regulation by the Financial Services Authority are available from us on request.

This report has been approved for publication in France by BNP Paribas SA. BNP Paribas SA is incorporated in France with Limited Liability and is authorised by the Autorité de Contrôle Prudentiel (ACP) and regulated by the Autorité des Marchés Financiers (AMF). Its head office is 16, boulevard des Italiens 75009 Paris, France.

This report is being distributed in Germany either by BNP Paribas London Branch or by BNP Paribas Niederlassung Frankfurt am Main, a branch of BNP Paribas S.A. whose head office is in Paris, France. BNP Paribas S.A. – Niederlassung Frankfurt am Main, Europa Allee 12, 60327 Frankfurt is authorised and supervised by the Autorité de Contrôle Prudentiel and it is authorised and subject to limited regulation by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin).

United States: This report is being distributed to US persons by BNP Paribas Securities Corp., or by a subsidiary or affiliate of BNP Paribas that is not registered as a US broker-dealer. BNP Paribas Securities Corp., a subsidiary of BNP Paribas, is a broker-dealer registered with the U.S. Securities and Exchange Commission and a member of the Financial Industry Regulatory Authority and other principal exchanges. BNP Paribas Securities Corp. accepts responsibility for the content of a report prepared by another non-U.S. affiliate only when distributed to U.S. persons by BNP Paribas Securities Corp.

Japan: This report is being distributed in Japan by BNP Paribas Securities (Japan) Limited or by a subsidiary or affiliate of BNP Paribas not registered as a financial instruments firm in Japan, to certain financial institutions defined by article 17-3, item 1 of the Financial Instruments and Exchange Law Enforcement Order. BNP Paribas Securities (Japan) Limited is a financial instruments firm registered according to the Financial Instruments and Exchange Law of Japan and a member of the Japan Securities Dealers Association and the Financial Futures Association of Japan. BNP Paribas Securities (Japan) Limited accepts responsibility for the content of a report prepared by another non-Japan affiliate only when distributed to Japanese based firms by BNP Paribas Securities (Japan) Limited. Some of the foreign securities stated on this report are not disclosed according to the Financial Instruments and Exchange Law of Japan.

Hong Kong: This report is being distributed in Hong Kong by BNP Paribas Hong Kong Branch, a branch of BNP Paribas whose head office is in Paris, France. BNP Paribas Hong Kong Branch is registered as a Licensed Bank under the Banking Ordinance and regulated by the Hong Kong Monetary Authority. BNP Paribas Hong Kong Branch is also a Registered Institution regulated by the Securities and Futures Commission for the conduct of Regulated Activity Types 1, 4 and 6 under the Securities and Futures Ordinance.

Some or all the information reported in this document may already have been published on <https://globalmarkets.bnpparibas.com>

© BNP Paribas (2015). All rights reserved.

POUR RECEVOIR NOS PUBLICATIONS

VOUS POUVEZ VOUS ABONNER SUR NOTRE SITE ONGLET ABONNEMENT
<http://economic-research.bnpparibas.com>

ET

NOUS SUIVRE SUR LINKEDIN
<https://www.linkedin.com/showcase/bnp-paribas-economic-research/>
OU TWITTER
https://twitter.com/EtudesEco_BNPP

© BNP Paribas (2015). All rights reserved.
Prepared by Economic Research – BNP PARIBAS
Registered Office: 16 boulevard des Italiens – 75009 PARIS
Tel: +33 (0) 1.42.98.12.34 – Internet :
www.group.bnpparibas.com
Publisher: Jean Lemierre. Editor: William De Vijlder



BNP PARIBAS

The bank
for a changing
world