

# ECOWEEK

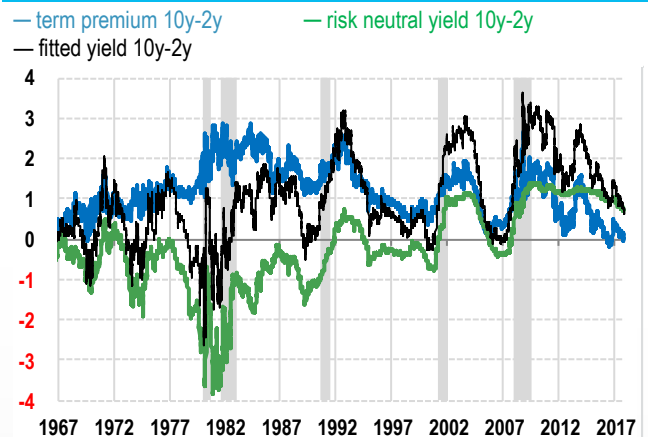
No. 17-45, 8 December 2017

## US: self-reinforcing curve inversion worries?

■ The US treasury curve has flattened significantly this year ■ Historically such a flattening has been a good leading indicator of recessions ■ The signal has become less reliable but the question remains whether it will end up influencing confidence about the outlook

In a recent speech, James Bullard, president and CEO of the Federal Reserve Bank of St Louis, reminded his audience that “*yield curve inversion is a naturally bearish signal for the economy*” adding that “*this deserves market and policymaker attention*”. The black line on the chart illustrates Bullard’s point. It shows the difference between the 10-year and 2-year US treasury fitted yields (“fitted” means it is based on an econometric estimation although the difference with observed yields is negligible). In the run-up to recessions (the grey bars) the curve flattened significantly and sometimes even inverted. The yield on a treasury bond consists of a risk neutral part (an anticipation of the future policy rate) and a term premium so changes in the slope can be attributed to changes in the rate expectations slope (green line) and changes in the term premium slope (blue line). Before previous recessions, the rate expectations slope flattened very significantly and inverted. The behaviour of the term premium slope was less stable. Since the start of this year, the term premium slope has seen a considerable flattening and this has been the key contributor to the flattening of the yield curve. The rate expectations slope (green line) did flatten as well, but less so. Moreover, historically speaking it remains rather steep. This would mean that we should not be too concerned about the flattening of the curve. Another reason is that central bank QE has squeezed the term premium so the signal of the yield curve with respect to the economy outlook has become noisy. However, there are lingering concerns. Economic agents could question the statistical quality of the yield curve decomposition and prefer to look at yields as a whole rather than at risk-neutral yields. More importantly, risk-averse investors could adopt a “better safe than sorry attitude” and give credence to the signal of the curve, despite its noisiness. This could reinforce the curve flattening and end up weighing on confidence about the economic outlook.

### DECOMPOSING THE FLATTENING OF THE US YIELD CURVE



Sources: Federal Reserve Bank of St. Louis, BNP Paribas

William De Vijlder

p. 2

Markets Overview

p. 3

Pulse

p. 4

Economic scenario

ECONOMIC RESEARCH  
DEPARTMENT

Eco  
WEEK



BNP PARIBAS

The bank  
for a changing  
world

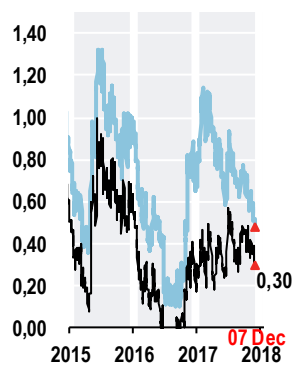
## Markets overview

### The essentials

Week 1-12 17 > 7-12-17

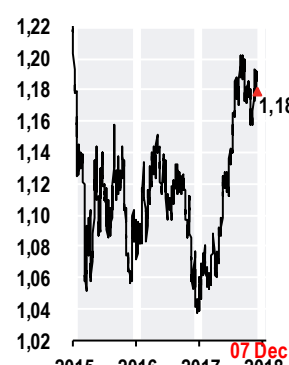
➤ CAC 40	5 317	➤ 5 384	+1.3 %
➤ S&P 500	2 642	➤ 2 637	-0.2 %
➤ Volatility (VIX)	11.4	➤ 10.2	-1.3 pb
➤ Euribor 3M (%)	-0.33	➤ -0.33	+0.1 bp
➤ Libor \$ 3M (%)	1.49	➤ 1.52	+2.8 bp
➤ OAT 10y (%)	0.51	➤ 0.48	-3.0 bp
➤ Bund 10y (%)	0.30	➤ 0.30	-0.6 bp
➤ US Tr. 10y (%)	2.36	➤ 2.38	+1.3 bp
➤ Euro vs dollar	1.19	➤ 1.18	-0.6 %
➤ Gold (ounce, \$)	1 283	➤ 1 254	-2.2 %
➤ Oil (Brent, \$)	64.0	➤ 62.0	-3.2 %

10 y bond yield, OAT vs Bund

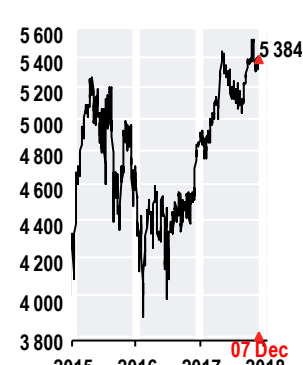


— Bunds — OAT

Euro-dollar



CAC 40



### Money & Bond Markets

Interest Rates	highest' 17	lowest' 17
€ ECB	0.00 at 02/01	0.00 at 02/01
Eonia	-0.33 at 30/11	-0.37 at 05/06
Euribor 3M	-0.33 at 02/01	-0.33 at 10/04
Euribor 12M	-0.19 at 02/01	-0.19 at 15/11
\$ FED	1.25 at 15/06	0.75 at 02/01
Libor 3M	1.52 at 06/12	1.00 at 02/01
Libor 12M	1.99 at 05/12	1.68 at 06/01
£ BoE	0.50 at 02/11	0.25 at 02/01
Libor 3M	0.52 at 13/11	0.28 at 01/09
Libor 12M	0.77 at 02/11	0.59 at 06/09

At 7-12-17

Yield (%)	highest' 17	lowest' 17
€ AVG 5-7y	0.26 at 17/03	0.18 at 21/06
Bund 2y	-0.79 at 27/06	-0.96 at 24/02
Bund 10y	0.30 at 06/07	0.18 at 18/04
OAT 10y	0.48 at 06/02	0.48 at 07/12
Corp. BBB	1.10 at 01/02	1.06 at 07/11
\$ Treas. 2y	1.81 at 05/12	1.14 at 24/02
Treas. 10y	2.38 at 13/03	2.05 at 08/09
Corp. BBB	3.60 at 14/03	3.38 at 05/09
£ Treas. 2y	0.46 at 29/11	0.01 at 28/02
Treas. 10y	1.28 at 26/01	0.87 at 14/06

At 7-12-17

10y bond yield & spreads

5.28%	Greece	498 pb
1.81%	Portugal	151 pb
1.64%	Italy	134 pb
1.40%	Spain	110 pb
0.49%	Belgium	19 pb
0.48%	Ireland	18 pb
0.48%	France	18 pb
0.44%	Finland	14 pb
0.44%	Austria	14 pb
0.39%	Netherlands	8 pb
0.30%	Germany	

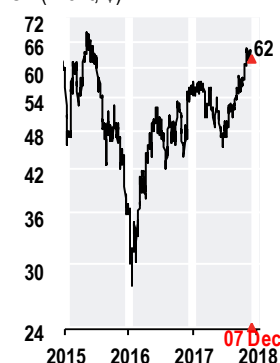
### Commodities

Spot price in dollars	lowest' 17	2017(€)
Oil, Brent	62,0 at 26/06	-2.2%
Gold (ounce)	1 156 at 03/01	-3.1%
Metals, LMEX	2 639 at 03/01	+4.3%
Copper (ton)	5 462 at 08/05	+5.8%
CRB Foods	325 at 24/04	-9.7%
wheat (ton)	143 at 02/10	-4.2%
Corn (ton)	120 at 18/09	-15.1%

At 7-12-17

Variations

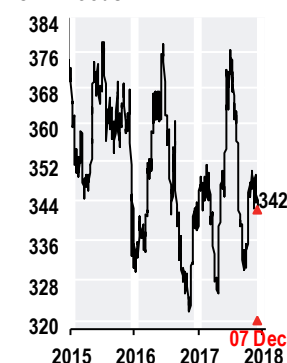
Oil (Brent, \$)



Gold (Ounce, \$)



CRB Foods



### Exchange Rates

1€ =	highest' 17	lowest' 17	2017
USD	1.20 at 29/08	1.04 at 03/01	+11.8%
GBP	0.93 at 29/08	0.84 at 19/04	+2.9%
CHF	1.17 at 30/11	1.06 at 08/02	+9.2%
JPY	132.91 at 25/10	115.57 at 17/04	+8.0%
AUD	1.57 at 30/11	1.37 at 23/02	+7.6%
CNY	7.99 at 03/08	7.22 at 03/01	+6.4%
BRL	3.91 at 15/11	3.24 at 15/02	+13.3%
RUB	69.75 at 02/08	59.66 at 17/04	+8.3%
INR	76.14 at 22/09	68.18 at 07/04	+6.4%

At 7-12-17

Variations

### Equity indices

Index	highest' 17	lowest' 17	2017	2017(€)
CAC 40	5 518 at 03/11	4 749 at 31/01	+10.7%	+10.7%
S&P500	2 648 at 30/11	2 239 at 02/01	+17.8%	+5.4%
DAX	13 479 at 03/11	11 510 at 06/02	+13.6%	+13.6%
Nikkei	22 938 at 07/11	18 336 at 14/04	+17.7%	+8.9%
China*	91 at 22/11	59 at 02/01	+44.6%	+28.7%
India*	596 at 06/11	445 at 03/01	+23.6%	+16.2%
Brazil*	2 168 at 05/10	1 639 at 21/06	+17.8%	+4.0%
Russia*	622 at 03/01	497 at 22/06	-5.0%	-12.9%

At 7-12-17

Variations

\* MSCI index



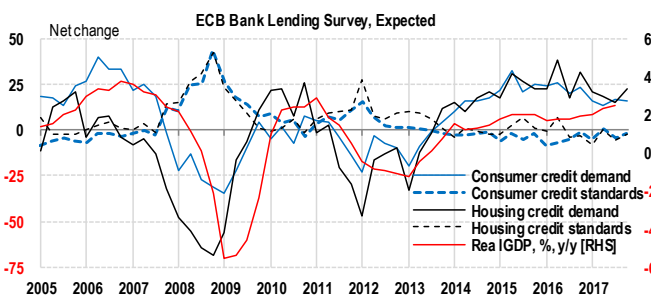
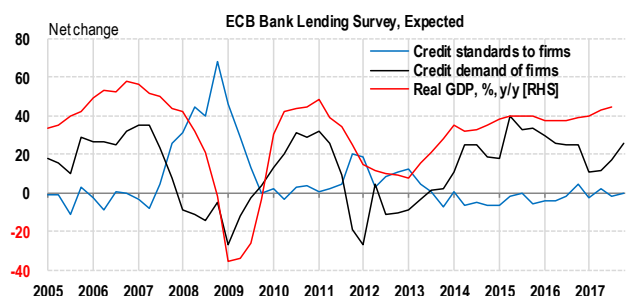
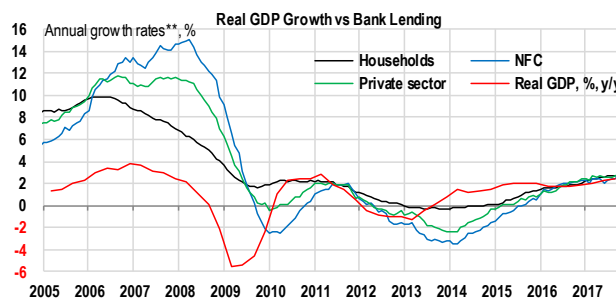
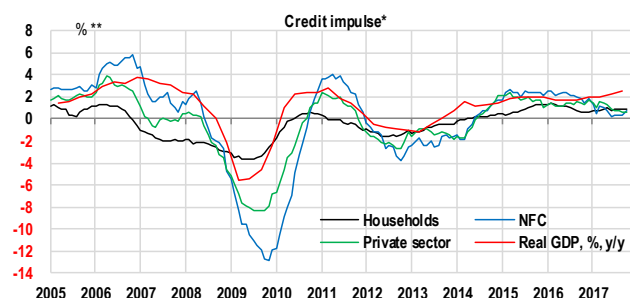
BNP PARIBAS

The bank  
for a changing  
world

## Pulse

## Eurozone: Credit pulse

The pace of bank loans increase is still slightly higher. The acceleration remains moderate for loans to households, greater for non-financial corporations. The demand of enterprises for loans grows, supported by the economic recovery, while lending criteria are virtually unchanged.



\*Credit impulse is measured as the annual change of the annual growth rate of MFI loans \*\* Adjusted for securitizations

Source: ECB, ECB BLS, BNP Paribas calculations

## Indicators preview

A very busy week ahead of us with meetings of the FOMC (a rate hike is expected), the Bank of England and the ECB. Several important data releases: PMIs for December, Tankan survey in Japan, inflation in France, Germany, UK.

Date	Country	Event	Period	Survey	Prior
12/11/17	France	Bank of France Ind. Sentiment	Nov	--	106
12/12/17	France	Total Payrolls	3Q	--	0.3%
12/12/17	United Kingdom	RPI MoM	Nov	--	0.1%
12/12/17	Germany	ZEW Survey Current Situation	Dec	--	88.8
12/12/17	United States	NFIB Small Business Optimism	Nov	--	103.8
12/12/17	United States	PPI Ex Food and Energy MoM	Nov	0.2%	0.4%
12/13/17	Germany	CPI EU Harmonized MoM	Nov	--	0.3%
12/13/17	United Kingdom	ILO Unemployment Rate 3Mths	Oct	--	4.3%
12/13/17	Eurozone	Employment QoQ	3Q	--	0.4%
12/13/17	United States	CPI Ex Food and Energy MoM	Nov	0.2%	0.2%
12/13/17	United States	FOMC Rate Decision (Upper Bound)	Dec 13	1.50%	1.25%
12/14/17	Japan	Industrial Production MoM	Oct	--	0.5%
12/14/17	Eurozone	EU27 New Car Registrations	Nov	--	5.9%
12/14/17	France	CPI EU Harmonized MoM	Nov	--	0.1%
12/14/17	France	Markit France Composite PMI	Dec	--	60.3
12/14/17	Germany	Markit/BME Germany Composite PMI	Dec	--	57.3
12/14/17	Eurozone	Markit Eurozone Composite PMI	Dec	--	57.5
12/14/17	United Kingdom	Bank of England Bank Rate	Dec 14	0.500%	0.500%
12/14/17	Eurozone	ECB Main Refinancing Rate	Dec 14	--	0.000%
12/14/17	United States	Retail Sales Ex Auto MoM	Nov	0.7%	0.1%
12/15/17	Japan	Tankan Large Mfg Index	4Q	24	22
12/15/17	United States	Empire Manufacturing	Dec	17.8	19.4
12/15/17	United States	Industrial Production MoM	Nov	0.3%	0.9%

Sources: Bloomberg, BNP Paribas



BNP PARIBAS

The bank  
for a changing  
world

## Economic scenario

### UNITED STATES

- GDP growth is accelerating along with the recovery in the emerging countries and reinforcing world trade. However the fiscal outlook remains uncertain. A fiscal stimulus still is possible, but it would not be implemented very rapidly. Potential effects are thus uncertain.
- The labour market is as buoyant as ever. Still, the support to households' disposable income is not as strong as it looks as wage inflation remains limited.
- With inflation relatively muted at this stage of the cycle, the Fed is in no rush to increase rates. We forecast the Fed Funds target rates to come at 1.50% by year-end, 2.00% by mid-2018.

### CHINA

- Economic growth has started to moderate during the fall and this trend should continue in the coming quarters.
- Despite the slowdown, the central bank will have to continue to act to encourage the deleveraging of financial institutions and corporates and reduce financial instability risks. The authorities should maintain an expansionist fiscal policy in the short term.
- The tightening of domestic credit conditions, restructuring measures in the industry and the correction in the property market will weigh on economic activity. Meanwhile, exports and private consumption should be supporting factors.

### EUROZONE

- The recovery is getting stronger and broader: the dispersion of economic performances among member states is receding.
- Despite the cyclical recovery, core inflation still shows no sign of a convincing upward trend. For the recovery to enter its inflationary phase the economy has to improve further, until the point at which wages will tend to increase.

The level of slack remains uncertain though. Broader measures of labor underutilization reach 18%, double the level of the current unemployment rate. The ECB is expected to remain cautious.

### FRANCE

- A clear growth acceleration is underway. Higher rates of growth should resume. Households' consumption is supported by the jobs recovery but restrained by the upturn in inflation. Investment and exports dynamics are favourable. Risks lie slightly on the upside.

- We expect the output gap to slowly narrow and the unemployment rate to progressively decline, containing the rise in inflation.

Fiscal policy should continue to combine growth supportive measures and consolidation ones. The fiscal deficit should not be a lot more reduced but it should remain below the 3% threshold.

### SUMMARY

%	GDP Growth			Inflation		
	2017 e	2018 e	2019 e	2017 e	2018 e	2019 e
<b>Advanced</b>	<b>2,1</b>	<b>2,4</b>	<b>1,7</b>	<b>1,7</b>	<b>1,7</b>	<b>1,9</b>
United-States	2,3	2,9	1,9	2,1	2,0	2,2
Japan	1,5	1,3	0,6	0,3	0,6	0,8
United-Kingdom	1,5	1,2	1,8	2,7	2,7	2,4
<b>Euro Area</b>	<b>2,3</b>	<b>2,4</b>	<b>1,8</b>	<b>1,5</b>	<b>1,6</b>	<b>1,7</b>
Germany	2,6	2,8	2,1	1,7	1,7	1,8
France	1,8	2,0	1,6	1,2	1,6	1,8
Italy	1,6	1,5	1,1	1,4	1,4	1,5
Spain	3,1	2,6	2,2	2,1	1,8	1,6
Belgium	1,6	1,6	1,5	2,1	1,9	1,9
<b>Emerging</b>	<b>4,5</b>	<b>4,8</b>	<b>4,9</b>	<b>4,0</b>	<b>4,2</b>	<b>4,2</b>
China	6,8	6,4	6,5	1,6	2,3	2,5
India	7,0	7,6	7,8	3,4	4,5	4,9
Brazil	1,0	3,0	2,5	3,5	3,5	3,9
Russia	1,8	1,6	1,5	4,0	4,3	4,5

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

### INTEREST RATES & FX RATES

Interest rates, %		2017	2018			
End of period		Q4e	Q1e	Q2e	Q3e	Q4e
<b>US</b>	Fed Funds	1,50	1,75	2,00	2,25	2,25
	Libor 3m \$	1,40	1,55	1,70	1,80	1,85
	T-Notes 10y	2,35	2,60	2,75	2,75	3,00
<b>Ezone</b>	ECB Refi	0,00	0,00	0,00	0,00	0,00
	Euribor 3m	-0,30	-0,30	-0,30	-0,30	-0,30
	Bund 10y	0,36	0,65	0,75	1,10	1,50
	OAT 10y	0,70	0,95	1,00	1,30	1,70
<b>UK</b>	Base rate	0,50	0,50	0,50	0,50	0,75
	Gilts 10y	1,30	1,45	1,55	1,90	2,30
<b>Japan</b>	BoJ Rate	-0,10	-0,10	-0,10	-0,10	-0,10
	JGB 10y	0,03	0,08	0,08	0,08	0,08

Exchange Rates		2017	2018			
End of period		Q4e	Q1e	Q2e	Q3e	Q4e
<b>USD</b>	EUR / USD	1,15	1,14	1,13	1,18	1,22
	USD / JPY	115	116	117	115	112
	GBP / USD	1,28	1,25	1,26	1,33	1,39
	USD / CHF	1,01	1,03	1,04	1,01	0,98
<b>EUR</b>	EUR / GBP	0,90	0,91	0,90	0,89	0,88
	EUR / CHF	1,16	1,17	1,18	1,19	1,20
	EUR / JPY	132	132	132	136	137

Source : GlobalMarkets (e: Estimates & forecasts)



# GROUP ECONOMIC RESEARCH

■ **William DE VIJDER**  
Chief Economist

+33.(0)1 55 77 47 31

[william.devijlder@bnpparibas.com](mailto:william.devijlder@bnpparibas.com)

## ADVANCED ECONOMIES AND STATISTICS

■ **Jean-Luc PROUTAT**  
Head

+33.(0)1.58.16.73.32

[jean-luc.proutat@bnpparibas.com](mailto: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](mailto: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](mailto: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](mailto: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](mailto: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](mailto: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](mailto:raymond.vanderputten@bnpparibas.com)

■ **Tarik RHARRAB**

Statistics and Modelling

+33.(0)1.43.16.95.56

[tarik.rharrab@bnpparibas.com](mailto:tarik.rharrab@bnpparibas.com)

## BANKING ECONOMICS

■ **Laurent QUIGNON**  
Head

+33.(0)1.42.98.56.54

[laurent.quignon@bnpparibas.com](mailto:laurent.quignon@bnpparibas.com)

■ **Céline CHOLET**

+33.(0)1.43.16.95.54

[celine.choulet@bnpparibas.com](mailto:celine.choulet@bnpparibas.com)

■ **Thomas HUMBLLOT**

+33.(0)1.40.14.30.77

[thomas.humblot@bnpparibas.com](mailto:thomas.humblot@bnpparibas.com)

## EMERGING ECONOMIES AND COUNTRY RISK

■ **François FAURE**  
Head - Argentina

+33.(0)1 42 98 79 82

[francois.faure@bnpparibas.com](mailto: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](mailto:christine.peltier@bnpparibas.com)

■ **Stéphane ALBY**

Africa (French-speaking countries)

+33.(0)1.42.98.02.04

[stephane.alby@bnpparibas.com](mailto:stephane.alby@bnpparibas.com)

■ **Sylvain BELLEFONTAINE**

Turkey, Latin America

+33.(0)1.42.98.26.77

[sylvain.bellefontaine@bnpparibas.com](mailto:sylvain.bellefontaine@bnpparibas.com)

■ **Sara CONFALONIERI**

Africa (Portuguese & English-speaking countries)

+33.(0)1.42.98.43.86

[sara.confalonieri@bnpparibas.com](mailto:sara.confalonieri@bnpparibas.com)

■ **Pascal DEVAUX**

Middle East, Balkan countries

+33.(0)1.43.16.95.51

[pascal.devau@bnpparibas.com](mailto:pascal.devau@bnpparibas.com)

■ **Anna DORBEC**

CIS, Central European countries

+33.(0)1.42.98.48.45

[anna.dorbec@bnpparibas.com](mailto:anna.dorbec@bnpparibas.com)

■ **Hélène DROUOT**

Korea, Thailand, Philippines, Andean countries

+33.(0)1.42.98.33.00

[helene.drouot@bnpparibas.com](mailto:helene.drouot@bnpparibas.com)

■ **Johanna MELKA**

India, South Asia, Russia

+33.(0)1.58.16.05.84

[johanna.melka@bnpparibas.com](mailto:johanna.melka@bnpparibas.com)

■ **Michel BERNARDINI**  
Contact Média

+33.(0)1.42.98.05.71

[michel.bernardini@bnpparibas.com](mailto: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 that is 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.

YOU WANT TO RECEIVE OUR PUBLICATIONS?

**SUBSCRIBE ON OUR WEBSITE**  
<http://economic-research.bnpparibas.com>

OR

**READ AND WATCH OUR ANALYSES ON ECO NEWS, OUR IPAD AND ANDROID APPLICATION**

© 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](http://www.group.bnpparibas.com)  
 Publisher: Jean Lemierre. Editor: William De Vijlder



**BNP PARIBAS**

The bank  
for a changing  
world