

# ECOWEEK

No.19-06, 8 February 2019

## Eurozone: what does weakening sentiment tell us about growth?

■ The European Commission now expects 1.3% growth for the eurozone this year, down from 1.9% in its previous forecast ■ This downward adjustment doesn't come as a surprise, considering the declining trend of several survey indicators ■ The recent performance of these indicators in tracking GDP growth is mixed, which makes the assessment of the current growth momentum challenging

The European Commission has joined the IMF and private sector forecasters in revising downwards the growth outlook for the eurozone this year. GDP is now expected to grow 1.3% versus a previous forecast of 1.9%. The revision is significant and reflects, amongst other factors, trade tensions, slower foreign growth, in particular in China, Brexit uncertainty. By coincidence, on the very same day that the Commission published its Winter Forecast, the Bank of England cut its forecast for UK growth this year from 1.7% to 1.2%, which corresponds to the weakest level since 2009. The cost of Brexit uncertainty becomes increasingly visible. These forecast revisions don't come as a surprise: after all, survey indicators had been declining for several months in a row. This is illustrated in the charts which show three important indicators for the eurozone: the European Commission economic sentiment index (ESI), the Markit purchasing managers index for the manufacturing sector (PMI) and the IFO economic climate, which reflects the sentiment of economic experts. Part of the disappointment of the downward adjustments may come from expectations which simply had risen too high: at the end of 2017, there was increasing concern about a possible gap between soft data (survey indicators) and hard data (GDP). In order to assess this, a GDP estimate has been constructed based on the historical relationship between survey indicators and realised GDP. In this respect, chart 1 shows that the European Commission's ESI overestimated growth in 2017 and 2018.

.../...

p. 3

Markets Overview

p. 4

Pulse & Calendar

p. 5

Economic scenario

ECONOMIC RESEARCH DEPARTMENT

### EUROZONE ECONOMIC GROWTH AND SENTIMENT (ESI)

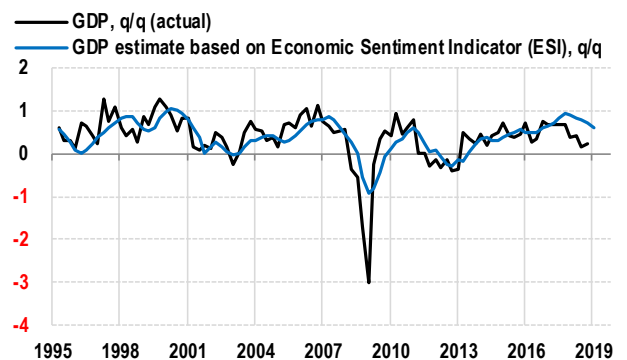


Chart 1

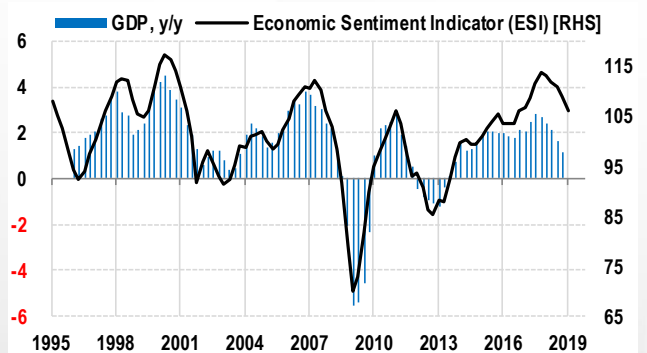


Chart 2

Source: Datastream, DG ECFIN, BNP Paribas

Eco  
WEEK



BNP PARIBAS

The bank  
for a changing  
world

A similar conclusion applies when using the PMI (chart 3) although the gap has now closed. The IFO indicator tracked growth pretty well in 2018 (chart 5)

These relationships help to put the recent survey indicators into perspective. Despite its decline since the end of 2017, the ESI is still at a rather high level but its recent tendency to overestimate growth implies that we shouldn't be too upbeat about the still high level of the index. Following its big drop last year, the IFO index has now reached a particularly low level, which would not bode well for growth at the start of this year. On the other hand, the current level corresponds to the one last seen during the eurozone sovereign crisis. Clearly, the determinants of final demand and the financial and monetary conditions were then far worse compared with today. This provides hope that sentiment would start to stabilise although this essentially

depends on whether the external headwinds (Brexit, trade, China) will start to lose power. Finally, it is worth referring to recent research by the Bank of England which suggests "that during periods of high uncertainty the relationship between survey responses and GDP growth weakens"<sup>1</sup>. This would imply that in the current environment, which is characterised by a high level of uncertainty, greater caution is needed when interpreting the signal coming from survey data.

**William De Vijlder**

<sup>1</sup> Bank of England, Inflation Report February 2019, p. 11

**EUROZONE ECONOMIC GROWTH AND PMI MANUFACTURING**

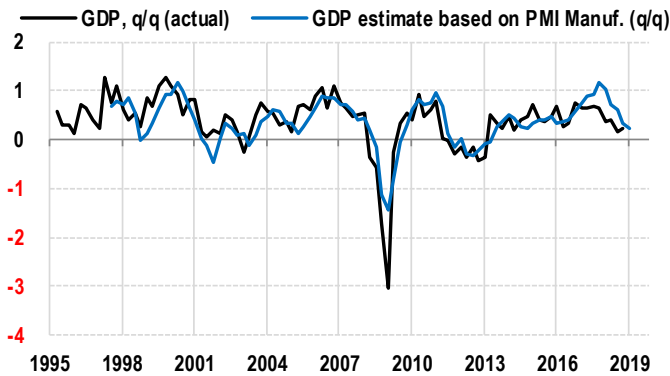


Chart 3

**EUROZONE ECONOMIC GROWTH AND EUROZONE IFO**

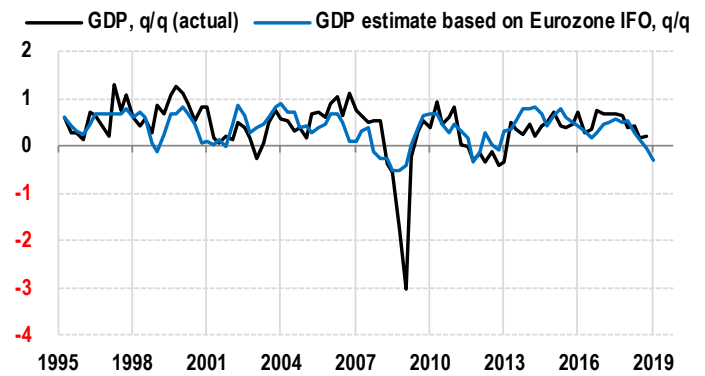


Chart 5



Chart 4

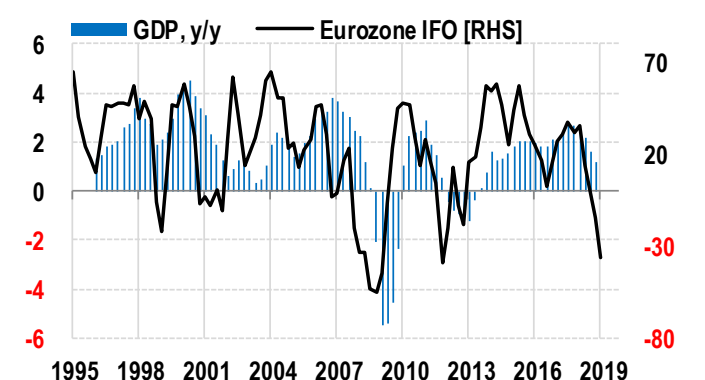


Chart 6

Source: Datastream, Markit, BNP Paribas

Source: Datastream, IFO Institute World Economic Survey, BNP Paribas



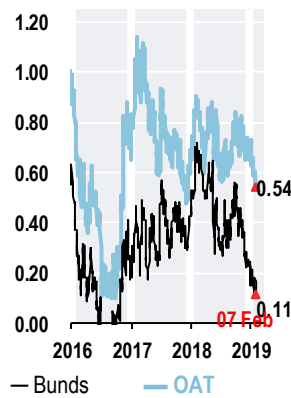
## Markets overview

### The essentials

Week 1-2 19 > 7-2-19

➤ CAC 40	5 019	▶ 4 986	-0.7 %
➤ S&P 500	2 707	▶ 2 706	-0.0 %
↗ Volatility (VIX)	16.1	▶ 16.4	+0.2 pb
↗ Euribor 3M (%)	-0.31	▶ -0.31	+0.0 bp
↗ Libor \$ 3M (%)	2.73	▶ 2.74	+0.5 bp
➤ OAT 10y (%)	0.57	▶ 0.54	-2.2 bp
➤ Bund 10y (%)	0.17	▶ 0.11	-5.2 bp
➤ US Tr. 10y (%)	2.69	▶ 2.65	-4.0 bp
➤ Euro vs dollar	1.15	▶ 1.14	-1.0 %
➤ Gold (ounce, \$)	1 318	▶ 1 310	-0.6 %
➤ Oil (Brent, \$)	62.2	▶ 61.4	-1.3 %

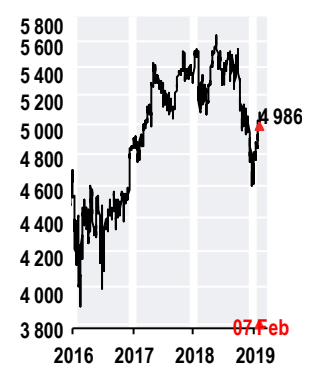
10 y bond yield, OAT vs Bund



Euro-dollar



CAC 40



### Money & Bond Markets

Interest Rates	highest' 19	lowest' 19
€ ECB	0.00 at 01/01	0.00 at 01/01
Eonia	-0.36 at 01/01	-0.37 at 18/01
Euribor 3M	-0.31 at 01/01	-0.31 at 02/01
Euribor 12M	-0.11 at 06/02	-0.12 at 02/01
\$ FED	2.50 at 01/01	2.50 at 01/01
Libor 3M	2.74 at 01/01	2.73 at 01/02
Libor 12M	2.96 at 21/01	2.96 at 01/02
£ BoE	0.75 at 01/01	0.75 at 01/01
Libor 3M	0.90 at 29/01	0.90 at 07/01
Libor 12M	1.17 at 11/01	1.16 at 22/01

At 7-2-19

Yield (%)	highest' 19	lowest' 19
€ AVG 5-7y	0.54 at 09/01	0.47 at 31/01
Bund 2y	-0.58 at 06/02	-0.62 at 03/01
Bund 10y	0.11 at 01/01	0.10 at 31/01
OAT 10y	0.54 at 08/01	0.54 at 07/02
Corp. BBB	1.74 at 08/01	1.74 at 07/02
\$ Treas. 2y	2.48 at 18/01	2.39 at 03/01
Treas. 10y	2.65 at 18/01	2.55 at 03/01
Corp. BBB	4.31 at 01/01	4.31 at 07/02
£ Treas. 2y	0.70 at 14/01	0.68 at 03/01
Treas. 10y	1.18 at 18/01	1.18 at 07/02

At 7-2-19

10y bond yield & spreads

4.45%	Greece	433 pb
2.97%	Italy	285 pb
1.67%	Portugal	155 pb
1.37%	Spain	125 pb
0.71%	Belgium	59 pb
0.54%	France	42 pb
0.40%	Ireland	28 pb
0.37%	Finland	26 pb
0.34%	Austria	22 pb
0.22%	Netherlands	10 pb
0.11%	Germany	

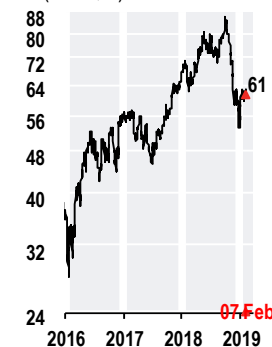
### Commodities

Spot price in dollars	lowest' 19	2019(€)
Oil, Brent	53.1 at 01/01	+16.3%
Gold (ounce)	1 281 at 21/01	+3.0%
Metals, LME	2 730 at 03/01	+6.9%
Copper (ton)	5 714 at 03/01	+5.4%
CRB Foods	324 at 01/01	+3.0%
wheat (ton)	197 at 01/01	+2.7%
Corn (ton)	136 at 01/01	+2.4%

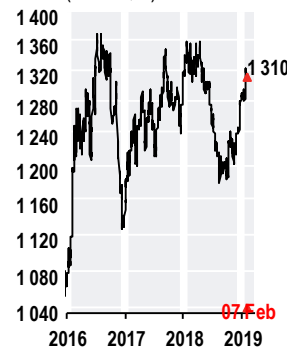
At 7-2-19

Variations

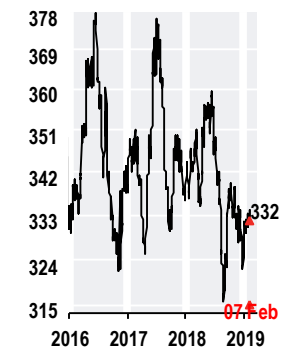
Oil (Brent, \$)



Gold (Ounce, \$)



CRB Foods



### Exchange Rates

€ =	highest' 19	lowest' 19	2019
USD	1.15 at 10/01	1.14 at 24/01	-0.7%
GBP	0.88 at 03/01	0.87 at 25/01	-2.5%
CHF	1.14 at 05/02	1.12 at 02/01	+0.9%
JPY	125.77 at 04/02	122.54 at 03/01	-0.6%
AUD	1.63 at 03/01	1.57 at 31/01	-1.6%
CNY	7.87 at 09/01	7.65 at 07/02	-2.5%
BRL	4.43 at 01/01	4.18 at 31/01	-4.5%
RUB	79.30 at 01/01	74.65 at 24/01	-5.6%
INR	81.07 at 04/02	79.57 at 04/01	+1.6%

At 7-2-19

Variations

### Equity indices

Index	highest' 19	lowest' 19	2019	2019(€)
CAC 40	5 083 at 05/02	4 611 at 03/01	+5.4%	+5.4%
S&P500	2 738 at 05/02	2 448 at 03/01	+7.9%	+8.7%
DAX	11 368 at 05/02	10 417 at 03/01	+4.4%	+4.4%
Nikkei	20 884 at 04/02	19 562 at 04/01	+3.7%	+4.3%
China*	78 at 05/02	68 at 03/01	+11.3%	+11.9%
India*	559 at 01/01	538 at 30/01	+2.4%	+0.8%
Brazil*	2 304 at 04/02	1 944 at 01/01	+7.2%	+12.3%
Russia*	641 at 05/02	572 at 01/01	+7.2%	+12.7%

At 7-2-19

Variations

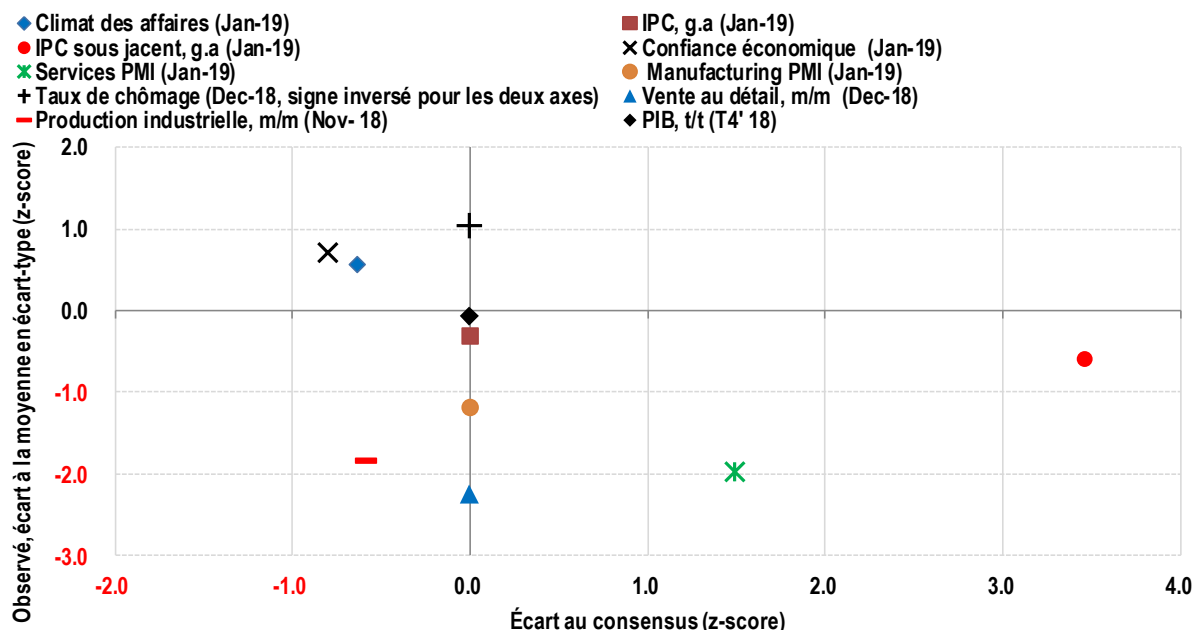
\* MSCI index



## Pulse

## Eurozone: Resistant but still slow growth

Most economic data remain low regarding their long-term average. Following three months of decline, the PMI services stabilized in January (51.2) and surprised on the upside. Economic growth in the Eurozone remained stable at 0.2% q/q in Q4 2018, reflecting divergent developments. In particular, Italy slipped into recession in late 2018 while French growth was resilient. Core inflation, still well below ECB's medium-term inflation target, was above expectations.



## Indicators preview

Next week will see important releases in France (Banque de France industrial sentiment, unemployment rate), Germany (GDP) and the eurozone (GDP). Following the significant downward revision of the growth outlook by the Bank of England, data for the UK will be monitored with great interest: industrial production, GDP, inflation, retail sales. In the US we will have small business sentiment, retail sales, consumer prices, producer prices, industrial production, capacity utilisation, University of Michigan sentiment. Japan publishes its GDP growth.

Date	Country/Region	Event	Period	Prior
02/11/19	France	Bank of France Ind. Sentiment	Jan	103
02/11/19	United Kingdom	GDP QoQ	4Q	0.6%
02/11/19	United Kingdom	Industrial Production MoM	Dec	-0.4%
02/12/19	United States	NFIB Small Business Optimism	Jan	104.4
02/13/19	United Kingdom	CPI MoM	Jan	0.2%
02/13/19	Eurozone	Industrial Production SA MoM	Dec	-1.7%
02/13/19	United States	CPI MoM	Jan	-0.1%
02/14/19	Japan	GDP SA QoQ	4Q	-0.6%
02/14/19	France	ILO Unemployment Rate	4Q	9.1%
02/14/19	Germany	GDP SA QoQ	4Q	-0.2%
02/14/19	Eurozone	Employment QoQ	4Q	0.2%
02/14/19	Eurozone	GDP SA QoQ	4Q	--
02/14/19	United States	PPI Final Demand MoM	Jan	-0.2%
02/15/19	United Kingdom	Retail Sales Ex Auto Fuel MoM	Jan	-1.3%
02/15/19	United States	Retail Sales Advance MoM	Jan	--
02/15/19	United States	Industrial Production MoM	Jan	0.3%
02/15/19	United States	Capacity Utilization	Jan	78.7%
02/15/19	United States	University of Michigan Sentiment	Feb	--

Source: Bloomberg, BNP Paribas



## Economic scenario

### UNITED STATES

- Growth is expected to slow to 2.1% this year. Trade war uncertainty acts as a drag, the housing market is softening, corporate investment should slow, as well as exports in reaction to the past strengthening of the dollar against a broad range of currencies.
- Core inflation remains well under control and has eased a bit.
- Following the dovish message from the January FOMC meeting, markets are pricing in a policy easing in the course of 2020.

### CHINA

- Economic growth is slowing due to both structural and cyclical reasons. The export outlook is significantly darkened by US tariff hikes. Private domestic demand should be affected by the knock-on effect of the worsening performance of the export manufacturing sector, the slowdown of retail sales and the continued moderation in the property market.
- In order to contain the slowdown, the central bank is easing liquidity and credit conditions. At the same time, the reduction in financial instability risks via regulatory tightening should remain a top policy priority. Fiscal policy is also turning expansionary (tax cuts, increased infrastructure spending).

### EUROZONE

- The slowdown is becoming increasingly evident, especially in the German economy, which has suffered from one-off factors but also from a slowdown of exports to China. Capacity constraints also play a role. Business expectations continue to decline. Italy has now entered a technical recession with quarterly growth negative in the third and fourth quarter of 2018.
- Inflation is now expected to decelerate following the past drop in the oil price, while core CPI is hardly moving. The growth slowdown also implies that the pick-up in core inflation should be slower than expected until recently. We do not expect the ECB to move rates this year (see below).
- We have revised growth for this year downward from 1.4% to 1.0% and for 2020 from 1.2% to 1.1%. Headline inflation has been revised downward as well: from 1.8% to 1.4% this year and from 1.5% to 1.4% next year.

### FRANCE

- Growth is slowing although the economy should show some resilience. Households' consumption should get a boost from the 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, the Fed has announced to be patient before deciding on any change in its policy. We expect one rate increase this year, in June. We have changed the forecast for 10 year treasury yields and now expect a yield of 3.00% by mid-year and 2.80% at the end of the year.
- We no longer expect changes in the ECB policy rates this year. We have changed the forecast for 10 year Bund yields and now expect a yield of 0.30% by mid-year and 0.40% at the end of the year.
- No change expected in Japan.
- The prospect of a 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		
	2018 e	2019 e	2020 e	2018 e	2019 e	2020 e
<b>Advanced</b>	<b>2.2</b>	<b>1.5</b>	<b>1.2</b>	<b>2.0</b>	<b>1.5</b>	<b>1.7</b>
United-States	2.9	2.1	1.5	2.4	1.8	2.0
Japan	0.9	0.7	0.3	1.0	0.6	1.4
United-Kingdom	1.3	1.8	1.6	2.5	2.0	2.0
<b>Euro Area*</b>	<b>1.8</b>	<b>1.0</b>	<b>1.1</b>	<b>1.7</b>	<b>1.4</b>	<b>1.4</b>
Germany*	1.5	0.9	1.1	1.9	1.6	1.6
France*	1.5	1.2	1.2	2.1	1.3	1.6
Italy*	0.8	0.1	0.5	1.2	1.0	1.0
Spain*	2.5	2.1	1.7	1.7	1.0	1.3
<b>Emerging</b>	<b>5.9</b>	<b>5.9</b>	<b>5.7</b>	<b>2.7</b>	<b>2.7</b>	<b>3.1</b>
China	6.6	6.2	6.0	2.1	1.9	2.5
India	7.4	7.6	7.8	3.8	4.0	4.1
Brazil	1.3	3.0	2.5	3.7	3.8	3.6
Russia	1.8	1.7	1.6	2.8	3.6	4.2

\* Updated at 01/02/2019

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

### Interest rates, %

End of period	2019		
	Spot	Q2e	Q4e
<b>US *</b> IOER rate	2.40	2.65	2.65
T-Notes 10y	2.67	3.00	2.80
<b>Ezone *</b> ECB Deposit Rate	<b>-0.40</b>	<b>-0.40</b>	<b>-0.40</b>
Bund 10y	0.17	0.30	0.40
OAT 10y	0.58	0.65	0.70
BTP 10y	2.79	3.00	2.60
BONO 10y	1.37	1.60	1.30
<b>UK</b> Base rate	0.75	1.00	1.25
Gilt 10y	1.70	1.85	2.10
<b>Japan *</b> IOER rate	<b>-0.10</b>	<b>-0.10</b>	<b>-0.10</b>
JGB 10y	0.01	0.00	<b>-0.05</b>

Spot rates as at 31 January, \* Updated at 01/02/2019

Source : BNP Paribas Global Markets (e: Forecasts), IOER rate: Interest rate On Excess Reserves

### Exchange Rates

End of period	2019				2018	2019e	2020e
	Q1e	Q2e	Q3e	Q4e			
USD EUR / USD	1.15	1.17	1.21	1.25	1.14	1.25	1.34
USD / JPY	110	108	105	100	110	100	90
GBP / USD	1.32	1.36	1.41	1.47	1.27	1.47	1.58
USD / CHF	1.01	1.00	0.98	0.96	0.99	0.96	0.93
EUR EUR / GBP	0.87	0.86	0.86	0.85	0.90	0.85	0.85
EUR / CHF	1.16	1.17	1.18	1.20	1.13	1.20	1.25
EUR / JPY	127	126	127	125	125	125	121

Source : BNP Paribas Global Markets (e: Forecasts)

# GROUP ECONOMIC RESEARCH

**William De Vijlder**  
Chief Economist

+33 1 55 77 47 31 [william.devijlder@bnpparibas.com](mailto:william.devijlder@bnpparibas.com)

## ADVANCED ECONOMIES AND STATISTICS

**Jean-Luc Proutat**

Head – United States, United Kingdom

+33 1 58 16 73 32 [jeanluc.proutat@bnpparibas.com](mailto:jeanluc.proutat@bnpparibas.com)

**Hélène Baudchon**

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

+33 1 58 16 03 63 [helene.baudchon@bnpparibas.com](mailto:helene.baudchon@bnpparibas.com)

**Louis Boisset**

European Central Bank watch, Euro area global view, Japan

+33 1 57 43 02 91 [louis.boisset@bnpparibas.com](mailto:louis.boisset@bnpparibas.com)

**Frédérique Cerisier**

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

+33 1 43 16 95 52 [frederique.cerisier@bnpparibas.com](mailto:frederique.cerisier@bnpparibas.com)

**Catherine Stephan**

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

+33 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 1 42 98 53 99 [raymond.vanderputten@bnpparibas.com](mailto:raymond.vanderputten@bnpparibas.com)

**Tarik Rharrab**

Statistics

+33 1 43 16 95 56 [tarik.rharrab@bnpparibas.com](mailto:tarik.rharrab@bnpparibas.com)

## BANKING ECONOMICS

**Laurent Quignon**

Head

+33 1 42 98 56 54 [laurent.quignon@bnpparibas.com](mailto:laurent.quignon@bnpparibas.com)

**Laure Baquero**

+ 33 1 43 16 95 50 [laure.baquero@bnpparibas.com](mailto:laure.baquero@bnpparibas.com)

**Céline Choulet**

+33 1 43 16 95 54 [celine.choulet@bnpparibas.com](mailto:celine.choulet@bnpparibas.com)

**Thomas Humblot**

+ 33 1 40 14 30 77 [thomas.humblot@bnpparibas.com](mailto:thomas.humblot@bnpparibas.com)

## EMERGING ECONOMIES AND COUNTRY RISK

**François Faure**

Head

+33 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 1 42 98 56 27 [christine.peltier@bnpparibas.com](mailto:christine.peltier@bnpparibas.com)

**Stéphane Alby**

Africa (French-speaking countries)

+33 1 42 98 02 04 [stephane.alby@bnpparibas.com](mailto:stephane.alby@bnpparibas.com)

**Sylvain Bellefontaine**

Turkey, Ukraine, Central European countries

+33 1 42 98 26 77 [sylvain.bellefontaine@bnpparibas.com](mailto:sylvain.bellefontaine@bnpparibas.com)

**Sara Confalonieri**

Africa (Portuguese & English-speaking countries)

+33 1 42 98 43 86 [sara.confalonieri@bnpparibas.com](mailto:sara.confalonieri@bnpparibas.com)

**Pascal Devaux**

Middle East, Balkan countries

+33 1 43 16 95 51 [pascal.devaux@bnpparibas.com](mailto:pascal.devaux@bnpparibas.com)

**Hélène Drouot**

Korea, Thailand, Philippines, Mexico, Andean countries

+33 1 42 98 33 00 [helene.drouot@bnpparibas.com](mailto:helene.drouot@bnpparibas.com)

**Salim Hammad**

Latin America

+33 1 42 98 74 26 [salim.hammad@bnpparibas.com](mailto:salim.hammad@bnpparibas.com)

**Johanna Melka**

India, South Asia, Russia, Kazakhstan, CIS

+33 1 58 16 05 84 [johanna.melka@bnpparibas.com](mailto:johanna.melka@bnpparibas.com)

## CONTACT MEDIA

**Michel Bernardini**

+33 1 42 98 05 71 [michel.bernardini@bnpparibas.com](mailto:michel.bernardini@bnpparibas.com)



**BNP PARIBAS**

The bank  
for a changing  
world



# OUR PUBLICATIONS



## CONJONCTURE

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 acted 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](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](http://www.group.bnpparibas.com)

Publisher: Jean Lemierre. Editor: William De Vijlder



# BNP PARIBAS

The bank  
for a changing  
world