

ECOWEEK

No. 19-22, 31 May 2019

Does psychology dominate company fundamentals?

■ In a recent survey of 469 CFOs of US companies, 84% expect that the US will have entered recession by the first quarter of 2021 ■ This raises the concern of self-realising bearish expectations ■ A positive correlation between business confidence and company decisions could reflect (anticipations of) strong fundamentals. It could also be due to animal spirits ■ The role of the latter is confirmed by empirical research by cesifo using data for German companies. In the aggregate, optimistic animal spirits have a bigger impact than pessimistic animal spirits

In a recent survey of 469 CFOs of US companies, 84% expect that the US will have entered recession by the first quarter of 2021¹. This very high percentage is a matter of concern, considering that empirical research in the US shows that CFO earnings expectations for the next 12 months are highly correlated with planned and actual corporate investments². When many CFOs expect a recession, one would assume this will be reflected in lower earnings forecasts and cutbacks in capital expenditures. This could even lead to self-realising bearish expectations: recession fears end up causing recession. For the time being, this is not yet showing up in the numbers: revenues are expected to increase 6.3% and capital expenditures 8.2%³. Moreover, the level of 'own company optimism' increased in March to 70.4 after a brief dip in December. However, the degree of optimism on the economy in general continued to slide. This may create a belief that, eventually, a recession will start and hence influence corporate business plans.

Indicators of business confidence are an important input in economic analysis. Surveys tend to be available more quickly than certain drivers of corporate investments such as company earnings⁴. A positive correlation between business confidence and company decisions in terms of recruitment, marketing, investment could simply reflect the anticipation of company fundamentals (turnover, profitability, financing costs, etc.). This is the signalling role of confidence.

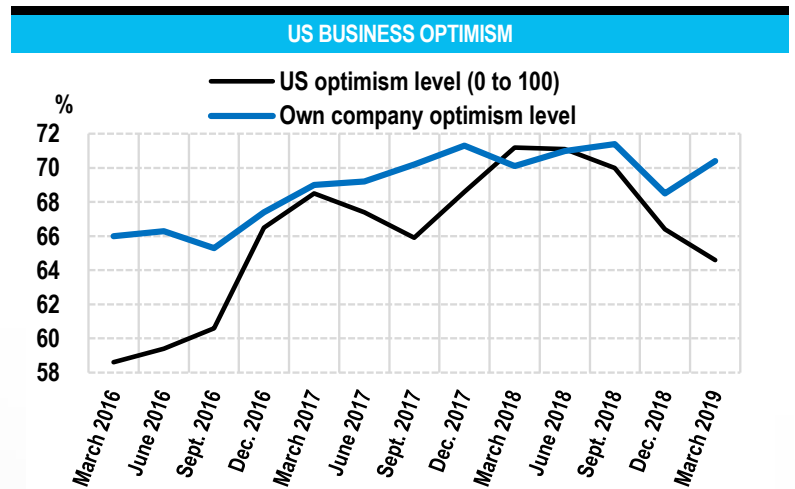
.../...

¹ Source: Duke's Fuqua School of Business / CFO Magazine Global Business Outlook, March 2019.

² Gennaioli Nicola, Ma Yueran, Shleifer Andrei (2015), Expectations and Investment, NBER Working Paper No. 21260.

³ The March survey did not report an earnings forecast.

⁴ For an overview, see: William De Vijlder, What is driving corporate investment, BNP Paribas, Conjoncture, September-October 2016



Source: Duke's Fuqua School of Business / CFO Magazine Global Business Outlook, BNP Paribas

p. 3

Markets Overview

p. 4

Pulse & Calendar

p. 6

Economic scenario

ECONOMIC RESEARCH DEPARTMENT



BNP PARIBAS

The bank
for a changing
world



The relationship between confidence and business decisions can also reflect “animal spirits”. According to John Maynard Keynes, they reflect a spontaneous urge to action. Nowadays, the concept “*refers to our peculiar relationship with ambiguity or uncertainty. Sometimes we are paralyzed by it. Yet at other times it refreshes and energizes us, overcoming our fears and indecisions.*”⁵ The implication is that they can cause a disconnect between company fundamentals and company decisions, depending on whether executives feel optimistic or pessimistic.

What this concretely implies has been analysed in a recent paper by Enders et al.⁶ The authors compare at the individual company level the responses to business surveys in Germany and the pricing and production decisions. In this comparison, the effect of company fundamentals is filtered out. The authors find that optimistic (pessimistic) companies increase (lower) their production more than companies which feel neutral about the future. They are also more likely to raise (cut) prices. As mentioned before, these results may reflect an anticipation of company fundamentals or a pure animal spirits effect. To disentangle the two, the authors analyse the role of forecast errors: companies that turn out to have been too optimistic/pessimistic display animal spirits. The correlation between sentiment and production and pricing decisions mentioned above, also holds for companies that turned out to be incorrectly optimistic or pessimistic, i.e. which were making forecast errors: animal spirits do play a role. Finally, they construct an indicator of aggregate optimism/pessimism and how it is related to fluctuations in the economy at large. Industrial production and the price level react strongly and significantly to an increase in incorrect optimism. In case of incorrect pessimism, the effects are much weaker and, for industrial production, insignificant. Against this background, we should perhaps be a bit less concerned about the high recession likelihood in the CFO survey of Duke University.

William De Vijlder

⁵ George A. Akerlof and Robert J. Shiller, *Animal spirits – How human psychology drives the economy and why it matters for global capitalism*, Princeton University Press, 2009

⁶ Zeno Enders, Franziska Hünnekes and Gernot J. Müller, *Firm expectations and economic activity*, cesifo working paper 7623, April 2019



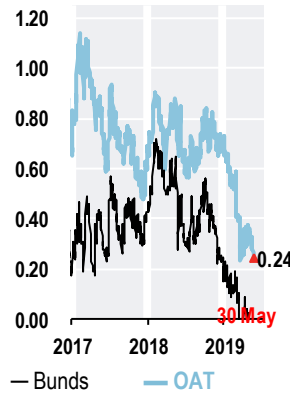
Markets overview

The essentials

Week 24-5 19 > 30-5-19

↘ CAC 40	5 317	▶ 5 249	-1.3 %
↘ S&P 500	2 826	▶ 2 789	-1.3 %
↗ Volatility (VIX)	15.9	▶ 17.3	+1.5 pb
↘ Euribor 3M (%)	-0.31	▶ -0.32	-0.9 bp
↘ Libor \$ 3M (%)	2.52	▶ 2.52	-0.3 bp
↘ OAT 10y (%)	0.28	▶ 0.24	-3.8 bp
↘ Bund 10y (%)	-0.12	▶ -0.17	-5.3 bp
↘ US Tr. 10y (%)	2.33	▶ 2.23	-10.3 bp
↘ Euro vs dollar	1.12	▶ 1.11	-0.7 %
↗ Gold (ounce, \$)	1 284	▶ 1 288	+0.3 %
↘ Oil (Brent, \$)	67.8	▶ 67.6	-0.4 %

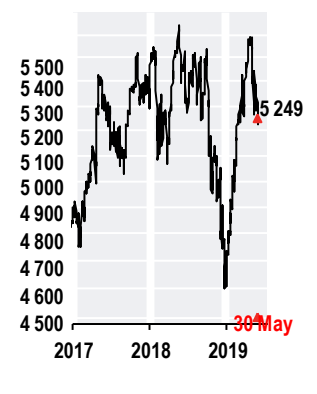
10 y bond yield, OAT vs Bund



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	-0.37 at 01/01	-0.37 at 26/02
Euribor 3M	-0.32 at 24/01	-0.32 at 30/05
Euribor 12M	-0.16 at 06/02	-0.16 at 30/05
\$ FED	2.50 at 01/01	2.50 at 01/01
Libor 3M	2.52 at 01/01	2.52 at 13/05
Libor 12M	2.57 at 21/01	2.57 at 29/05
£ BoE	0.75 at 01/01	0.75 at 01/01
Libor 3M	0.79 at 29/01	0.79 at 29/05
Libor 12M	1.00 at 11/01	1.00 at 29/05

At 30-5-19

Yield (%)	highest' 19	lowest' 19
€ AVG 5-7y	0.30 at 09/01	0.29 at 27/05
Bund 2y	-0.65 at 05/03	-0.65 at 15/05
Bund 10y	-0.17 at 01/01	-0.17 at 29/05
OAT 10y	0.24 at 08/01	0.24 at 27/03
Corp. BBB	1.37 at 08/01	1.26 at 07/05
\$ Treas. 2y	2.12 at 18/01	2.12 at 30/05
Treas. 10y	2.23 at 18/01	2.23 at 30/05
Corp. BBB	3.88 at 01/01	3.88 at 30/05
£ Treas. 2y	0.61 at 27/02	0.59 at 29/05
Treas. 10y	0.90 at 18/01	0.90 at 29/05

At 30-5-19

10y bond yield & spreads

3.67%	Greece	384 pb
2.51%	Italy	268 pb
0.87%	Portugal	103 pb
0.77%	Spain	93 pb
0.32%	Belgium	49 pb
0.24%	France	41 pb
0.15%	Austria	31 pb
0.07%	Ireland	23 pb
0.07%	Finland	23 pb
0.02%	Netherland	19 pb
-0.17%	Germany	

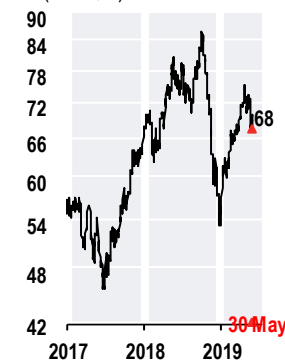
Commodities

Spot price in dollars	lowest' 19	2019(€)
Oil, Brent	53.1 at 01/01	+30.6%
Gold (ounce)	1 268 at 02/05	+3.3%
Metals, LME	2 770 at 03/01	+1.6%
Copper (ton)	5 822 at 03/01	+0.5%
CRB Foods	324 at 07/03	+11.9%
w heat (ton)	167 at 10/05	+5.2%
Corn (ton)	128 at 24/04	+22.6%

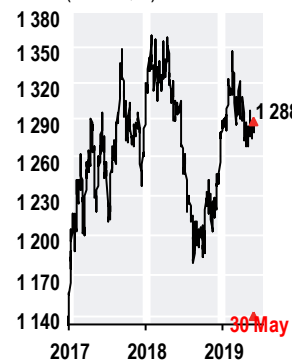
At 30-5-19

Variations

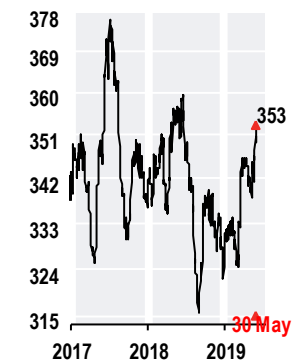
Oil (Brent, \$)



Gold (Ounce, \$)



CRB Foods



Exchange Rates

€ =	highest' 19	lowest' 19	2019
USD	1.15 at 10/01	1.11 at 30/05	-2.7%
GBP	0.90 at 03/01	0.85 at 14/03	-1.5%
CHF	1.14 at 23/04	1.12 at 02/04	-0.4%
JPY	127.43 at 01/03	121.86 at 29/05	-2.6%
AUD	1.63 at 03/01	1.57 at 18/04	-0.7%
CNY	7.87 at 09/01	7.51 at 25/04	-2.1%
BRL	4.59 at 20/05	4.18 at 31/01	-0.5%
RUB	79.30 at 01/01	71.51 at 23/04	-8.7%
INR	82.00 at 04/02	76.84 at 03/04	-2.6%

At 30-5-19

Variations

Equity indices

Index	highest' 19	lowest' 19	2019	2019(€)
CAC 40	5 592 at 23/04	4 611 at 03/01	+11.0%	+11.0%
S&P500	2 946 at 30/04	2 448 at 03/01	+11.2%	+14.3%
DAX	12 413 at 03/05	10 417 at 03/01	+12.7%	+12.7%
Nikkei	22 308 at 25/04	19 562 at 04/01	+4.6%	+7.4%
China*	86 at 09/04	68 at 03/01	+4.5%	+7.2%
India*	597 at 02/04	530 at 19/02	+7.2%	+10.0%
Brazil*	2 076 at 04/02	1 862 at 17/05	+9.2%	+9.7%
Russia*	685 at 22/05	572 at 01/01	+12.9%	+22.6%

At 30-5-19

Variations

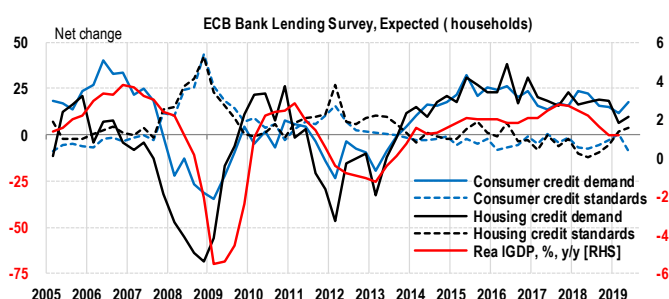
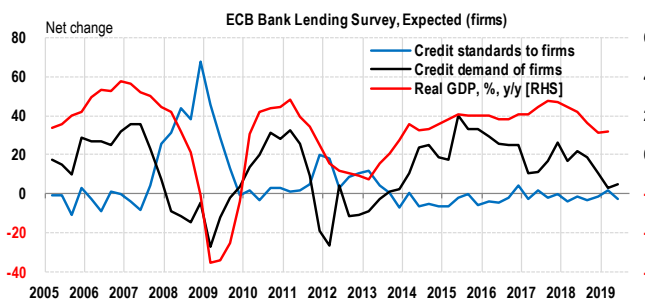
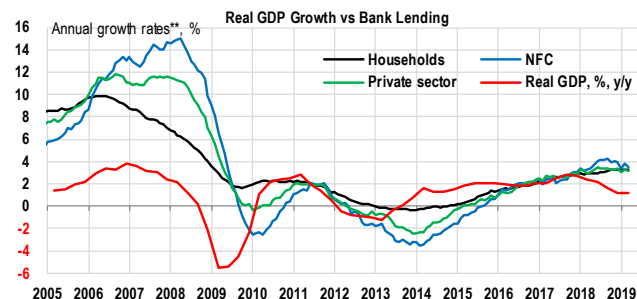
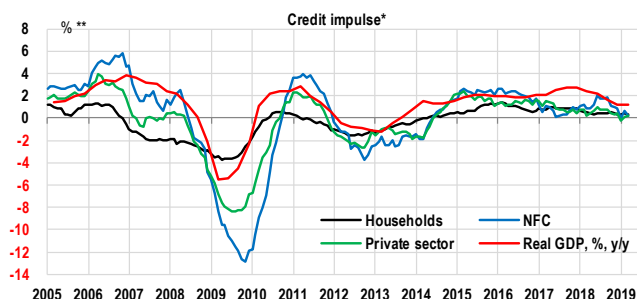
* MSCI index



Pulse

Eurozone: Credit pulse

After strengthening in February, credit impulse in the eurozone was relatively stable in March 2019 for households, but weakened slightly for non-financial companies. Demand for credit is expected to rise in the second quarter of 2019 across all loan categories. Although banks are planning to loosen conditions for consumer loans, they intend to tighten them slightly for home loans and business loans.



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

Source: ECB, ECB survey on the distribution of credit, BLS, BNP Paribas calculations

Indicators preview

A heavy schedule as usual at the start of a new month: purchasing manager indices (manufacturing, services, composite) in several countries, ISM manufacturing and non-manufacturing in the US. The Federal Reserve will publish its beige book with an overview of economic conditions in the different parts of the US. In the eurozone we will have the publication of the unemployment rate, employment numbers and an updated estimate of first quarter growth. Highlights of the week are the ECB Governing Council meeting and the labour market report in the US.

Date	Region	Event	Period	Survey	Prior
06/03/2019	China	Caixin China PMI Manufacturing	May	50.0	50.2
06/03/2019	France	Markit France Manufacturing PMI	May	--	--
06/03/2019	Eurozone	Markit Eurozone Manufacturing PMI	May	--	--
06/03/2019	United States	ISM Manufacturing	May	53.9	52.8
06/04/2019	Eurozone	Unemployment Rate	April	--	7.7%
06/04/2019	United States	Cap Goods Orders Nondef Ex Air	April	--	--
06/05/2019	China	Caixin China PMI Composite	May	--	52.7
06/05/2019	France	Markit France Composite PMI	May	--	--
06/05/2019	Eurozone	Markit Eurozone Composite PMI	May	--	--
06/05/2019	Eurozone	Retail Sales MoM	April	--	0.0%
06/05/2019	United States	ISM Non-Manufacturing Index	May	56.5	55.5
06/05/2019	United States	U.S. Federal Reserve Releases Beige Book			
06/06/2019	Eurozone	Employment QoQ	1Q	--	0.3%
06/06/2019	Eurozone	GDP SA QoQ	1Q	--	0.4%
06/06/2019	Eurozone	ECB Main Refinancing Rate	June-06	--	0.000%
06/07/2019	France	Industrial Production MoM	April	--	-0.9%
06/07/2019	United States	Change in Nonfarm Payrolls	May	195000	263000

Source: Bloomberg, BNP Paribas



Economic scenario

UNITED STATES

- Growth picked-up by early 19 but this was partly due to one-off factors (inventory building...). The underlying trend in private domestic demand is more subdued. The housing market is softening, corporate investment should slow, as well as exports in reaction to the past strengthening of the dollar and trade tensions. Core inflation remains well under control and has eased a bit.
- Following the neutral message from the May FOMC meeting, we believe the Fed Funds target rate as well as the IOER will keep unchanged.

CHINA

- Economic growth continues to slow. Activity rebounded in March 2019 but weakened again afterwards. The recent flare-up in trade tensions with the US has again darkened export prospects.
- The central bank is easing liquidity and credit conditions, though the reduction in financial-instability risks via regulatory tightening should remain a priority. Fiscal policy has also turned expansionary through increased infrastructure spending and a rising number of household/corporate tax cuts.
- In the short term, exports and private domestic investment should continue to decelerate. Tax measures should support consumer spending.

EUROZONE

- Despite a stronger than expected growth in the 1st quarter of 2019, the economic slowdown is continuing in the eurozone, especially in Germany, due to international environment uncertainties and a slowdown of exports to China. Capacity constraints also play a role and activity in the manufacturing sector continues to decline.
- Inflation is now expected to decrease while core CPI is hardly moving. The activity slowdown also implies that the pick-up in core inflation should be slower than expected until recently.
- Monetary policy remains cautious and proactive, the ECB announcing the launch of another round of longer-term refinancing operations (TLTRO) for eurozone banks.

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 key rates to stay on hold this year and next. We expect 10 year treasury yields to rise moderately, reaching 2.60% by the end of this year on the back of a somewhat higher term premium.
- The combination of slower growth and subdued core inflation leads us to expect that ECB official rates will remain unchanged this year and next. 10 year Bund yields are expected to rise only marginally to 0.00% by the end of this year. We forecast a yield of 0.15% by the end of 2020.
- No change expected in Japan.
- We expect the euro to strengthen versus the dollar considering that the latter is expensive on valuation grounds.

%	GDP Growth			Inflation		
	2018	2019 e	2020 e	2018	2019 e	2020 e
Advanced	2.2	1.8	1.3	2.0	1.6	1.6
United-States	2.9	2.7	1.8	2.4	2.1	2.0
Japan	0.8	0.6	0.2	1.0	0.6	0.5
United-Kingdom	1.4	1.3	1.4	2.5	1.9	1.9
Euro Area	1.8	1.1	1.0	1.8	1.3	1.3
Germany	1.4	0.6	1.0	1.9	1.5	1.5
France	1.6	1.3	1.2	2.1	1.4	1.5
Italy	0.7	0.3	0.2	1.3	0.9	0.9
Spain	2.6	2.2	1.9	1.7	1.0	1.2
Emerging	4.5	4.2	4.7	4.7	4.8	4.3
China	6.6	6.2	6.0	2.1	2.2	2.6
India*	7.0	7.4	7.6	3.4	3.5	4.2
Brazil	1.1	0.8	2.5	3.7	3.9	3.9
Russia	2.3	1.5	1.7	2.9	5.1	4.1

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

* Fiscal year from April 1st of year n to March 31st of year n+1

Interest rates, %		2019				2018	2019e	2020e
End of period		Q1	Q2e	Q3e	Q4e			
US	Fed Funds	2.50	2.50	2.50	2.50	2.50	2.50	2.50
	Libor 3m \$	2.60	2.60	2.60	2.60	2.81	2.60	2.50
	T-Notes 10y	2.42	2.50	2.50	2.60	2.69	2.60	2.50
Ezone	ECB Refi	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Euribor 3m	-0.31	-0.30	-0.30	-0.30	-0.31	-0.30	-0.30
	Bund 10y	-0.07	-0.05	-0.05	0.00	0.25	0.00	0.15
	OAT 10y	0.26	0.30	0.30	0.30	0.71	0.30	0.45
UK	Base rate	0.75	1.00	1.00	1.25	0.75	1.25	1.25
	Gilts 10y	1.00	1.85	2.00	2.10	1.27	2.10	2.10
Japan	BoJ Rate	-0.06	-0.10	-0.10	-0.10	-0.07	-0.10	-0.10
	JGB 10y	-0.09	-0.03	-0.02	-0.02	0.00	-0.02	-0.05

Source : BNP Paribas GlobalMarkets (e: Forecasts)

Exchange Rates		2019				2018	2019e	2020e
End of period		Q1	Q2e	Q3e	Q4e			
USD	EUR / USD	1.12	1.13	1.16	1.20	1.14	1.20	1.25
	USD / JPY	111.0	108.0	105.0	102.0	110.0	102.0	95.0
	GBP / USD	1.30	1.27	1.32	1.38	1.27	1.38	1.49
	USD / CHF	1.00	1.01	0.99	0.97	0.99	0.97	0.94
EUR	EUR / GBP	0.85	0.89	0.88	0.87	0.90	0.87	0.84
	EUR / CHF	1.12	1.14	1.15	1.16	1.13	1.16	1.18
	EUR / JPY	124.0	122.0	122.0	122.0	125.0	122.0	119.0

Source : BNP Paribas GlobalMarkets (e: Forecasts)



GROUP ECONOMIC RESEARCH

William De Vijlder
Chief Economist

+33 1 55 77 47 31 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

Hélène Baudchon

France – Labour markets

+33 1 58 16 03 63 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

Frédérique Cerisier

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

+33 1 43 16 95 52 frederique.cerisier@bnpparibas.com

Catherine Stephan

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

+33 1 55 77 71 89 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

Tarik Rharrab

Statistics

+33 1 43 16 95 56 tarik.rharrab@bnpparibas.com

BANKING ECONOMICS

Laurent Quignon

Head

+33 1 42 98 56 54 laurent.quignon@bnpparibas.com

Laure Baquero

+ 33 1 43 16 95 50 laure.baquero@bnpparibas.com

Céline Choulet

+33 1 43 16 95 54 celine.choulet@bnpparibas.com

Thomas Humblot

+ 33 1 40 14 30 77 thomas.humblot@bnpparibas.com

EMERGING ECONOMIES AND COUNTRY RISK

François Faure

Head

+33 1 42 98 79 82 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

Stéphane Alby

Africa (French-speaking countries)

+33 1 42 98 02 04 stephane.alby@bnpparibas.com

Sylvain Bellefontaine

Turkey, Ukraine, Central European countries

+33 1 42 98 26 77 sylvain.bellefontaine@bnpparibas.com

Sara Confalonieri

Africa (Portuguese & English-speaking countries)

+33 1 42 98 43 86 sara.confalonieri@bnpparibas.com

Pascal Devaux

Middle East, Balkan countries

+33 1 43 16 95 51 pascal.devaux@bnpparibas.com

Hélène Drouot

Korea, Thailand, Philippines, Mexico, Andean countries

+33 1 42 98 33 00 helene.drouot@bnpparibas.com

Salim Hammad

Latin America

+33 1 42 98 74 26 salim.hammad@bnpparibas.com

Johanna Melka

India, South Asia, Russia, Kazakhstan, CIS

+33 1 58 16 05 84 johanna.melka@bnpparibas.com

CONTACT MEDIA

Michel Bernardini

+33 1 42 98 05 71 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

© 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