# ECOWEEK

N°20-06



14 February 2020

# 2-3

### EDITORIAL

"The coronavirus: putting a number on the economic consequences"



#### MARKETS OVERVIEW

Recent market developments (foreign exchange, stock markets, interest rates, commodities, etc.)

# 6 ECONOMIC PULSE

Analysis of the recent economic data of a country and of the gap versus the consensus



**ECONOMIC SCENARIO** Main economic and financial forecasts.

# 8-9

**CALENDARS** This week's main economic data and key releases for next week 10

#### FURTHER READING

Latest articles, charts, videos and podcasts of Group Economic Research

ECONOMIC RESEARCH DEPARTMENT



# **EDITORIAL**

### THE CORONAVIRUS: PUTTING A NUMBER ON THE ECONOMIC CONSEQUENCES

Putting a number on the consequences of the coronavirus is a huge challenge. On some of the topics we have a satisfactory level of visibility of the order of magnitude: international spillover effects of the demand shock, repercussions of the global increase in uncertainty. The visibility is much lower concerning the effects of the supply disruption. This is even more the case for the impact on China. In the near term, data surprises -the difference between the consensus forecast and the outcome-should be higher than normal. However, provided that the peak of the epidemic is reached quickly, visibility should improve quickly and hence support confidence.

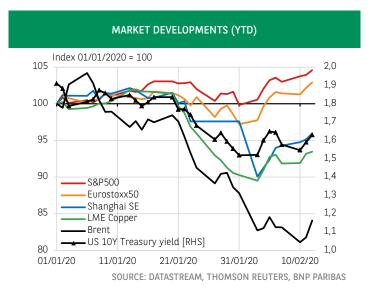
Given the Chinese weight in the global economy, assessing the consequences of the coronavirus for economic growth is of key importance. However, it also a daunting task. Macroeconomic data collected following the outbreak still need to be released. The ripple-effect of the supply chain disruption is an additional source of complexity. Then there is the role of psychological factors: to what extent will the drop in confidence impact spending, in China and abroad? Looking at the signals from financial markets provides little clarity. On Wall Street, the epidemic has merely caused a blip and the S&P500 has made new all-time highs. Indices in Europe have also done well. This probably reflects a view that production and demand should rebound quickly and that the fall-out for US or European companies should, on average, be rather limited. Obviously, the story is different for Chinese companies, which explains why the Shanghai index is still down compared to the level before the crisis hit. The psychology of individual investors will also play a role. The big drop in commodity prices (oil, copper) shows an expectation of a major decline in commodity demand, largely driven by China, but tells us little about what to expect in the rest of the world.US treasury yields have rebounded but have not fully recovered. Bond and equity investors are not exactly aligned in their assessment of the growth outlook, although the expectation that, if necessary, the Federal Reserve will cut rates could also play a role.

As discussed in the previous issue of Ecoweek, the epidemic combines a demand, supply and confidence shock. Assessing the supply shock is particularly difficult because of the lack of data. It depends on the specific organisation of value chains at the individual company level, on the level of inventories, on the (im)possibility to find alternative sources of supply. Anecdotal evidence points towards a considerable impact from supply chain disruption <sup>1</sup>. Concerning the shock to demand in China, the task is hardly easier. The gross regional product of Hubei province, the epicentre of the epidemic, represents 4.2% of the country's total. Under the realistic assumption of a significant contraction in activity, one ends up with a non-negligible impact on the country as a whole, to which spillover effects should be added: a drop in demand in Hubei will entail fewer purchases of goods and services produced in

1. Alibaba chief blames spread of virus for disruption to staffing and deliveries, Financial Times, 14 February 2020.

the rest of the country. Confidence effects should also act as a drag on spending throughout the country.

Turning to the international repercussions, research by the IMF shows that a 1% decline in Chinese growth lowers European growth in the medium run with  $0.2\%^2$ . The number for the US should be even lower <sup>3</sup>.



2. China spillovers. New Evidence from Time-Varying Estimates, Davide Furceri, João Tovar Jalles, and Aleksandra Zdzienicka, IMF Spillover Note 7, 2016

3. The IMF study does not report numbers for the US. However, another study calculates the effect on the export level from a 1 percent demand shock in China. For the US this corresponds to about 0.4%, in line with Germany but more than the EU (source: *Spillover implications of China's Slowdown for International Trade,* Patrick Blagrave and Esteban Vesperoni, IMF Spillover Note 4, 2016).

On some of the consequences we have a satisfactory level of visibility of the order of magnitude: international spillover effects of the demand shock, repercussions of the global increase in uncertainty. The visibility is much lower concerning the effects of the supply disruption and, even more so, the impact on China.



# EDITORIAL

For sub-saharan Africa the impact is -0.7%, for Asia about -0.3% and Latin-America and the Caribbean -0.4%<sup>4</sup>. Then there is the impact from the jump in uncertainty. Analytically this raises two challenges: quantifying the increase in uncertainty and estimating its impact. On the former, a recent analysis by the ECB<sup>5</sup> shows the development of economic uncertainty and trade-related uncertainty since the mid-90s. This allows to gauge the impact of certain events (9/11, Iraq war, eurozone sovereign debt crisis, etc.) on uncertainty. With the exception of the collapse of Lehman Brothers, most shocks correspond to a move of the uncertainty measure of about one standard deviation. Obviously, this does not tell us where the coronavirus ranks but it does allow for a, admittedly very judgmental, comparison.

To conclude, on some of the topics we have a satisfactory level of visibility of the order of magnitude: international spillover effects of the demand shock, repercussions of the global increase in uncertainty. The visibility is much lower concerning the effects of the supply disruption. This is even more the case for the impact on China. This means that in the near term, data surprises -the difference between the consensus forecast and the outcome- should be higher than normal, which should be a source of market volatility. It could even push companies to adopt a wait-and-see attitude until a clearer picture emerges. To the extent that the peak of the epidemic is reached quickly, this should improve visibility of how demand and activity evolve and hence support confidence.

#### William De Vijlder

6. Source: Box I.1: The economic impact of uncertainty assessed with a BVAR model, European Commission, European Economic Forecast, Spring 2017



Clearly, the jump in uncertainty will depend on the economic exposure, hence it will be far bigger in China than in Europe. Assuming a temporary one standard deviation uncertainty shock for the eurozone, the peak impact on growth should be about  $-0.3\%^6$ .

<sup>4.</sup> This is related to the impact on commodity exports (price and volume effect).

<sup>5.</sup> Box 1. *Tracking global economic uncertainty: implications for global investment and trade,* ECB Economic Bulletin, 1 2020. The ECB's measure of economic uncertainty is based on the forecast errors of models for a broad range of economic variables for 16 euro area trading partners, which together account for around 70% of world GDP.

# **MARKETS OVERVIEW**

#### 4

OVERVIEW									Μ	ONE	Y & B	OND MARKE	TS					
Week 7-2 20 to	13-2-2	0			Interest Rates		highog	+ 20	lov	vest	20	Vial d (W)		blab	o et 20	Law		~
7 CAC 40	6 0 3 0	▶ 6 093	+1.1	%	€ ECB	0.00	highes 0.00 at					Yield (%)	0.10		est 20		est 20	
<b>⊅</b> S&P 500	3 328	▶ 3 374	+1.4	%			-0.45 at					€ AVG 5-7y - Bund 2y -			at 02/01 at 14/01			
🔰 Volatility (VIX)	15.5	▶ 14.2	-1.3	pb	Euribor 3M	-0.41	-0.38 at	02/01	-0.41	at	12/02	Bund 10y -						
¥ Euribor 3M (%)	-0.40	▶ -0.41	-1.1	bp	Euribor 12/		-0.24 at					OAT 10y			at 01/01			
↘ Libor \$ 3M (%)	1.73	▶ 1.70	-2.7	bp	\$ FED	1.75 1.70	1.75 at	01/01				Corp. BBB	0.70			0.70		
🔰 OAT 10y (%)	-0.18	▶ -0.19	-1.3	bp	Libor 3M Libor 12M	1.81	1.91 at 2.00 at		1.70			<b>\$</b> Treas. 2y	1.45	1.59	at 08/01	1.34	at 3	1/01
🔰 Bund 10y (%)	-0.38	▶ -0.39	-0.6	bp	£BoE	0.75	0.75 at	01/01				Treas. 10y	1.63	1.91	at 01/01	1.52	at 33	1/01
<b>⊅</b> US Tr. 10y (%)	1.58	▶ 1.63	+4.8	bp	Libor 3M	0.76	0.80 at	08/01	0.69	at	28/01	High Yield	5.48	5.69	at 01/01	5.48	at 13	3/02
🔰 Euro vs dollar	1.10	▶ 1.08	-1.1	%	Libor 12M	0.90	0.98 at	01/01	0.79	at	27/01	<b>£</b> gilt. 2y	0.54	0.61	at 08/01	0.39	at 2 <sup>-</sup>	7/01
🛪 Gold (ounce, \$	)1 567	▶ 1 576	+0.5	%	At 13-2-20							gilt. 10y	0.65	0.83	at 01/01	0.51	at 2	7/01
<b>⊅</b> Oil (Brent, \$)	55.1	▶ 56.2	+2.0	%								At 13-2-20						
<b>7</b> Oil (Brent, \$)	55.1	▶ 56.2	+2.0	%								AL 13-2-20						

#### **EXCHANGE RATES**

1€ =		high	est 20	low	est	20	2020
USD	1.08	1.12	at 01/01	1.08	at	13/02	-3.4%
GBP	0.83	0.86	at 13/01	0.83	at	13/02	-1.9%
CHF	1.06	1.09	at 01/01	1.06	at	13/02	-2.4%
JPY	119.13	122.70	at 16/01	119.13	at	13/02	-2.3%
AUD	1.61	1.66	at 31/01	1.60	at	01/01	+0.9%
CNY	7.57	7.82	at 01/01	7.57	at	13/02	-3.2%
BRL	4.69	4.74	at 31/01	4.51	at	02/01	+4.0%
RUB	68.84	70.83	at 31/01	67.75	at	10/01	-1.3%
INR	77.38	80.49	at 06/01	77.38	at	13/02	-3.4%
At 13-2	2-20					i	Change

#### COMMODITIES

Spot price, \$		higl	nest	: 20	low	/est	: 20	2020	2020(€)
Oil, Brent	56.2	69.1	at	06/01	53.8	at	10/02	-15.2%	-12.2%
Gold (ounce)	1 576	1 587	at	31/01	1 521	at	01/01	+3.6%	+7.2%
Metals, LMEX	2 699	2 894	at	20/01	2 593	at	03/02	-5.1%	-1.8%
Copper (ton)	5 772	6 270	at	14/01	5 504	at	03/02	-6.1%	-2.9%
CRB Foods	333	341.5	at	21/01	333	at	13/02	-1.5%	+1.9%
wheat (ton)	224	2.4	at	21/01	223	at	11/02	-2.2%	+1.1%
Corn (ton)	148	1.5	at	23/01	146	at	16/01	-0.1%	+2.4%
At 13-2-20									Change

#### **EQUITY INDICES**

#### PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)

	Index	highest 20	lowest 20	2020	Year 2020 to 13-2, €		Year 2020 to 13-2, \$	
World					+11.9%	Utilities	+22.7%	Car
MSCI World	2 430	2 435 at 12/02	2 342 at 31/01	+3.0%	+8.2%	Technology	+14.5%	Technology
North America					+6.7%	Financial services	+11.9%	Retail
S&P500	3 374	3 379 at 12/02	3 226 at 31/01	+4.4%	+6.7%	Health	+11.1%	Utilities
Europe					+4.9%	Insurance	+10.9%	Financial services
EuroStoxx50	3 847	3 854 at 12/02	3 641 at 31/01	+2.7%	+4.8%	Real Estate	+8.2%	Index
CAC 40	6 093	6 105 at 12/02	5 806 at 31/01	+0.2%	+4.6%	Consumption Goods	+7.9%	Food industry
DAX 30	13 745	13 750 at 12/02	12 982 at 31/01	+3.7%	+3.9%	Banks	+7.4%	Industry
IBEX 35	9 910	9 940 at 12/02	9 366 at 27/01	+0.4%	+3.3%	Industry	+7.3%	Insurance
FTSE100	7 452	7 675 at 17/01	7 286 at 31/01	-0.1%	+3.1%	Chemical	+5.4%	Health
Asia					+3.1%	Telecoms	+5.3%	Travel & leisure
MSCI, loc.	1 019	1034 at 20/01	993 at 03/02		+3.0%	Construction	+5.2%	Household & Care
Nikkei	23 828	24 084 at 20/01	22 972 at 03/02	+0.7%	+1.7%	Retail	+4.9%	Construction
Emerging					+1.0%	Media	+4.8%	Media
MSCI Emerging (\$		1 147 at 17/01	1 060 at 03/02		+0.7%	Food industry	+1.7%	Telecoms
China	86	90 at 13/01	81 at 31/01		+0.3%	Travel & leisure	+1.5%	
India	601	609 at 17/01	575 at 03/02					Chemical
Brazil	2 205	2 429 at 02/01		-0.0%	-1.7%	Commodities	+0.4%	Banks
Russia	788	857 at 20/01	767 at 10/02	-0.5%	-5.4%	Oil & Gas	-3.6%	Commodities
At 13-2-20	=		C	hange	-5.5%	Car	-6.8%	Oil & Gas

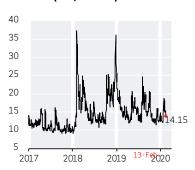
SOURCE: THOMSON REUTERS



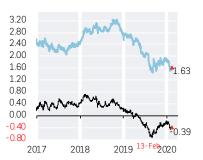




VOLATILITY (VIX, S&P500)



**10Y BOND YIELD, TREASURIES VS BUND** 





2018

2017

**EUROSTOXX50** 

3 900 3 800

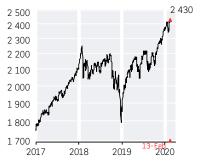
3 700 3 600

3 500

3 400 3 300

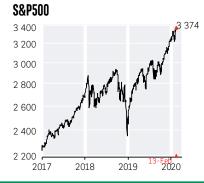
3 200

3 100



#### **10Y BOND YIELD**



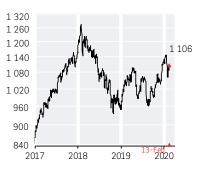


#### MSCI EMERGING (USD)

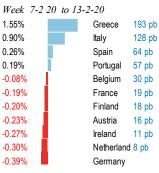
3 847

2020

2019

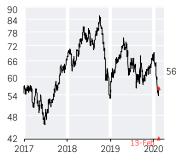


#### **10Y BOND YIELD & SPREADS**



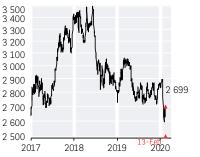
### -Bunds -US Treasuries



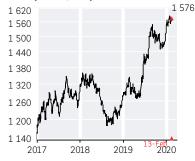


#### -Bunds -OAT





#### GOLD (OUNCE, USD)



SOURCE: THOMSON REUTERS



# **ECONOMIC PULSE**

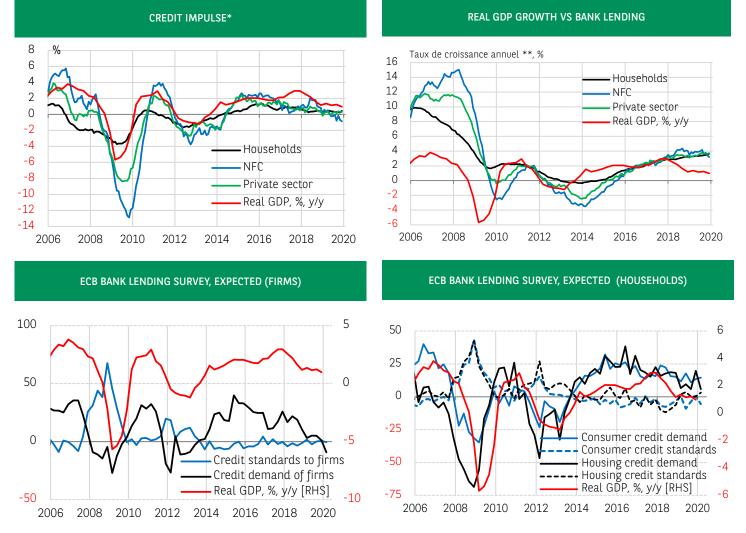
6

# EURO ZONE CREDIT TRENDS: LENDING TO NON-FINANCIAL COMPANIES (NFCS) WEAKER THAN CONSUMER LENDING IN NOVEMBER AND DECEMBER 2019

Credit impulse in the euro zone stabilised in December 2019 (up 0.3%, as in November) against a background of a slight slowing of real GDP growth in the fourth quarter (1.0% from 1.2% in the third quarter). Outstanding bank lending to the private sector maintained its pace of growth in December (up 3.7% year-on-year). For the second month in a row, growth in lending to NFCs was less than that in lending to consumers. The slowdown in growth in lending to NFCs (where the year-on-year figure fell from 3.8% in October to 3.2% in December) was due mainly to

lower investment spending (in France, Germany and most particularly Spain). This was in part offset by strong growth in consumer loans (from 3.5% to 3.7%). For the first time since 2013, more banks are expecting demand for credit from NFCs to slow (first quarter 2020). In contrast, expected demand for consumer mortgages remains strong, driven by low interest rates, particularly in France.

#### Laurent Quignon



SOURCE: ECB, ECB SURVEY ON THE DISTRIBUTION OF CREDIT, BLS, BNP PARIBAS CALCULATIONS

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



# ECONOMIC SCENARIO

### **UNITED STATES**

• Despite the support coming from the Fed rate cuts in 2019, we expect growth to slow in the near term under the influence of corporate investment (slower profits growth). However, trade uncertainty has abated and housing is picking up.

• Consumer spending should be more resilient but could slow on the back of a less dynamic labour market. All in all, this paves the way for somewhat better growth next year. As a consequence, we expect the Fed to keep its policy rate unchanged this year.

### CHINA

 $\bullet$  Economic growth continues to slow. Industrial activity and exports have been hard hit by US tariff hikes. Domestic demand has also decelerated.

• The central bank is easing liquidity and credit conditions, but the reduction in financial-instability risks should remain a priority and banks are prudent. Fiscal policy is expansionary through increased investment in infrastructure projects and household/corporate tax cuts. Tax measures are expected to have some success in supporting consumer spending.

• Consumer price inflation has accelerated due to rising food prices (soaring pork prices), but core inflation remains subdued.

### **EUROZONE**

• The economic slowdown is continuing in the eurozone, especially in Germany, due to the international environment and difficulties in the manufacturing sector. The recent stabilization of business surveys, albeit at a low level as far as the manufacturing sector is concerned, provides some hope but needs to be confirmed.

• Inflation is now expected to decrease while core CPI is hardly moving. The activity slowdown also implies that the pick-up in core inflation could be slower than expected until recently.

• The very accommodative monetary policy should be maintained as long as inflation hasn't converged sufficiently, in a convincing and lasting way, towards the ECB's objective.

### FRANCE

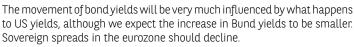
• Growth is slowing although the economy shows resilience. Households' consumption should get a boost from the tax cuts and the jobs recovery. Business investment dynamics remain favourable. The global backdrop is less supportive.

• A slight rise in core inflation is appearing but remains to be confirmed.

### **INTEREST RATES AND FX RATES**

• In the US, we expect the Fed to maintain the official rate at its current level this year. The prospect of some pick-up in growth should lead to a gradual increase in Treasury yields.

• In the eurozone, the ECB's state-dependent forward guidance and the sluggishness of the inflation process imply that the very accommodative environment will remain in place for a long time.



• We expect that the Bank of Japan will refrain from further monetary easing.

• We expect little change in EUR/USD even though euro's fair value is quite higher than current pricing.

#### Our forecasts do not yet take into account the impact of the coronavirus

#### **GROWTH & INFLATION** GDP Growth Inflation 2019 e 2020 e 2021 e 2019 e 2020 e 2021 e Advanced 17 1.2 1.6 1.4 1.6 1.4 United-States 2.3 1.7 1.9 1.8 2.2 1.9 Japan 1.0 0.2 0.7 0.5 0.6 0.3 United-Kingdom 1.3 1.1 1.7 1.8 1.5 1.8 0.8 1.3 1.2 1.0 1.1 Euro Area 1.1 0.6 0.4 1.2 1.4 Germany 1.4 1.2 France 1.3 1.1 1.3 1.3 1.0 1.1 Italy 0.2 0.2 0.6 0.6 0.6 0.5 1.9 1.7 1.6 0.8 0.8 0.9 Spain 0.0 Emerging 6.1 1.5 China 5.7 5.8 2.9 3.5 India\* 4.8 5.5 6.0 4.3 4.5 4.5 Brazil 1.0 2.0 3.0 3.7 3.4 3.7 4.5 1.1 1.6 1.8 3.7 4.0 Russia

SOURCE: BNP PARIBAS GROUP ECONOMIC RESEARCH (E: ESTIMATES & FORECASTS) \*FISCAL YEAR FROM 1<sup>ST</sup> APRIL OF YEAR N TO MARCH 31<sup>ST</sup> OF YEAR N+1

INTEREST & EXCHANGE RATES

			(231)				123			
		,					,			
Interes	st rates, %	2019		2020						
End of	period	Q3	Q4	Q1e	Q2e	Q3e	Q4e	2018	2019	2020e
US	Fed Funds	2.00	1.75	1.75	1.75	1.75	1.75	2.50	1.75	1.75
	T-Notes 10y	1.67	1.92	1.85	2.00	2.10	2.25	2.69	1.92	2.25
Ezone	Deposit rate	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
	Bund 10y	-0.57	-0.19	-0.50	-0.40	-0.30	-0.30	0.25	-0.19	-0.30
	OAT 10y	-0.28	0.08	-0.20	-0.15	-0.10	-0.10	0.71	0.08	-0.10
UK	Base rate	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	Gilts 10y	0.40	0.83	1.00	1.10	1.20	1.20	1.27	0.83	1.20
Japan	BoJ Rate	-0.06	-0.05	-0.10	-0.10	-0.10	-0.10	-0.07	-0.05	-0.10
	JGB 10y	-0.22	-0.02	-0.10	0.00	0.05	0.10	0.00	-0.02	0.10

Excha	nge Rates	2019		2020						
End o	f period	Q3	Q4	Q1e	Q2e	Q3e	Q4e	2018	2019	2020e
USD	EUR / USD	1.09	1.12	1.12	1.13	1.13	1.14	1.14	1.12	1.14
	USD / JPY	108	109	100	98	96	96	110	109	96
	GBP / USD	1.23	1.32	1.35	1.36	1.36	1.39	1.27	1.32	1.39
	USD / CHF	1.00	0.97	0.99	0.99	0.99	1.00	0.99	0.97	1.00
EUR	EUR / GBP	0.89	0.83	0.83	0.83	0.83	0.82	0.90	0.83	0.82
	EUR / CHF	1.09	1.09	1.11	1.12	1.12	1.14	1.13	1.09	1.14
	EUR / JPY	118	122	112	111	108	109	125	122	109

SOURCE: BNP PARIBAS GLOBAL MARKETS (E: ESTIMATES)



# CALENDAR

### LATEST INDICATORS

In Japan, the EcoWatchers survey improved slightly for the current situation but weakened in terms of outlook. The Banque de France industrial sentiment index eased slightly whereas the unemployment rate declined quite significantly. GDP was flat in Q4 of last year versus the previous quarter in the UK, Germany and the eurozone. The quarterly growth in employment accelerated in the eurozone in Q4 of last year.

O2/10/2020ChinaCPI YOYJan.5.4%4.5%O2/10/2020JapanEco Watchers Survey Current SAJan.41.999.8O2/10/2020JapanEco Watchers Survey Outlook SAJan.41.845.4O2/10/2020FranceBank of France Ind. SentimentJan.9697O2/11/2020United KingdomGDP QoQQ40.0%0.4%O2/11/2020United StatesNFIB Small Business OptimismJan.104.3102.7O2/12/2020EurozoneIndustrial Production SA MoMDec-2.1%0.2%O2/13/2020FranceLO Mainland Unemployment RateQ47.9%8.3%O2/13/2020GermanyCPI EU Harmonized YOYJan.16.6%1.6%O2/14/2020GermanyGDP SA QoQQ40.0%0.1%1.3%O2/14/2020EurozoneEmployment QQQ40.3%0.1%O2/14/2020EurozoneGDP SA QoQQ40.4%0.3%0.1%O2/14/2020EurozoneGDP SA QoQQ40.4%0.3%0.1%O2/14/2020EurozoneGDP SA YOYQ40.3%0.1%O2/14/2020United StatesRetail Sales Control GroupJan.0.4%0.5%O2/14/2020United StatesIde StatesOtopological States0.5%O2/14/2020United StatesIde StatesOtopological States0.5%O2/14/2020United StatesIde StatesOtopological States0.5%	DATE	COUNTRY	INDICATOR	PERIOD	ACTUAL	PREVIOUS
O2/10/2020JapanEco Watchers Survey Current SAJan.41.999.8O2/10/2020JapanEco Watchers Survey Outlook SAJan.41.845.4O2/10/2020FranceBank of France Ind. SentimentJan.96.097O2/11/2020United KingdomGDP QoQQ40.0%0.4%O2/11/2020United KingdomGDP QoQQ40.0%0.4%O2/11/2020United StatesNFIB Small Business OptimismJan.104.3102.7O2/12/2020EurozoneIndustrial Production SA MoMDec-2.1%0.2%O2/13/2020FranceILO Mainland Unemployment RateQ49.9%8.3%O2/13/2020GermanyCPI EU Harmonized YoYJan.1.6%1.6%O2/14/2020GermanyGDP SA QoQQ40.9%0.1%O2/14/2020EurozoneTade Balance SADec.2.2e+101.9e+10O2/14/2020EurozoneGDP SA QoQQ40.4%0.3%0.1%O2/14/2020EurozoneGDP SA YOYQ40.3%0.1%O2/14/2020EurozoneGDP SA YOYQ40.9%0.3%0.1%O2/14/2020Linted StatesJohn SA YOYQ40.9%0.5%O2/14/2020United StatesU. fMich. SentimentJan.1.6%1.6%O2/14/2020United StatesU. fMich. SentimentFebP.4	02/10/2020	China	PPI YoY	Jan	0.1%	-0.5%
O2/10/2020JapanEco Watchers Survey Outlook SAJan.41.845.4O2/10/2020FranceBank of France Ind. SentimentJan.9697O2/11/2020United KingdomGDP QoQQ40.0%0.4%O2/11/2020United StatesNFIB Small Business OptimismJan.104.3102.7O2/12/2020EurozoneIndustrial Production SA MoMDec-2.1%0.2%O2/13/2020FranceILO Mainland Unemployment RateQ47.9%8.3%O2/13/2020GermanyCPI EU Harmonized YoYJan.1.6%1.6%O2/14/2020GermanyGDP SA QoQQ40.0%0.1%O2/14/2020EurozoneTrade Balance SADec.2.22e+101.92e+10O2/14/2020EurozoneEmployment QoQQ40.3%0.1%O2/14/2020EurozoneGDP SA QoQQ40.3%0.1%O2/14/2020EurozoneGDP SA QoQQ40.3%0.1%O2/14/2020EurozoneGDP SA YoYQ40.3%0.1%O2/14/2020LinozoneGDP SA YoYQ40.3%0.5%O2/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%O2/14/2020United StatesU. Mich. SentimentFebFeb.	02/10/2020	China	CPI YoY	Jan.	5.4%	4.5%
O2/10/2020FranceBank of France Ind. SentimentJan.9697O2/11/2020United KingdomGDP QoQQ40.0%0.4%O2/11/2020United StatesNFIB Small Business OptimismJan.104.3102.7O2/12/2020EurozoneIndustrial Production SA MoMDec-2.1%0.2%O2/13/2020FranceILO Mainland Unemployment RateQ47.9%8.3%O2/13/2020GermanyCPI EU Harmonized YoYJan.1.6%1.6%O2/14/2020GermanyGDP SA QoQQ40.0%0.1%O2/14/2020EurozoneTrade Balance SADec2.22e+101.92e+10O2/14/2020EurozoneGDP SA QoQQ40.0%0.1%O2/14/2020EurozoneGDP SA YoYQ40.0%0.1%O2/14/2020Lince StatesRetail Sales Control GroupJan.0.0%0.5%O2/14/2020United StatesU.of Mich. SentimentFeb9.9.8	02/10/2020	Japan	Eco Watchers Survey Current SA	Jan.	41.9	39.8
O2/11/2020United KingdomGDP QQQ40.0%0.4%O2/11/2020United StatesNFIB Small Business OptimismJan.104.3102.7O2/12/2020EurozoneIndustrial Production SA MoMDec-2.1%0.2%O2/13/2020FranceI.O Mainland Unemployment RateQ47.9%8.3%O2/13/2020GermanyCPI EU Harmonized YoYJan.1.6%1.6%O2/14/2020GermanyGDP SA QQQ40.0%0.1%O2/14/2020EurozoneGDP SA QQDec2.22e+101.92e+10O2/14/2020EurozoneGDP SA QQQ40.3%0.1%O2/14/2020EurozoneGDP SA QQQ40.3%0.1%O2/14/2020EurozoneGDP SA QQQ40.3%0.1%O2/14/2020EurozoneGDP SA YOYQ40.9%1.0%O2/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%O2/14/2020United StatesUnited StatesHail Sales Control GroupJan.0.0%0.5%O2/14/2020United StatesUnited StatesUnited StatesUnited StatesJan.0.0%0.5%O2/14/2020United StatesUnited StatesUnited StatesUnited StatesJan.Jan.1.9%O2/14/2020United StatesUnited StatesUnited StatesUnited StatesJan.Jan.Jan.Jan.O2/14/2020United StatesUnited StatesUnited StatesJan. </td <td>02/10/2020</td> <td>Japan</td> <td>Eco Watchers Survey Outlook SA</td> <td>Jan.</td> <td>41.8</td> <td>45.4</td>	02/10/2020	Japan	Eco Watchers Survey Outlook SA	Jan.	41.8	45.4
O2/11/2020United StatesNFIB Small Business OptimismJan.104.3102.7O2/12/2020EurozoneIndustrial Production SA MoMDec-2.1%0.2%O2/13/2020FranceILO Mainland Unemployment RateQ47.9%8.3%O2/13/2020GermanyCPI EU Harmonized YoYJan.1.6%1.6%O2/13/2020United StatesCPI Ex Food and Energy YoYJan.2.3%2.3%O2/14/2020GermanyGDP SA QoQQ40.0%0.1%O2/14/2020EurozoneTrade Balance SADec.2.22e+101.92e+10O2/14/2020EurozoneGDP SA QoQQ40.3%0.1%O2/14/2020EurozoneGDP SA QoQQ40.0%0.1%O2/14/2020EurozoneGDP SA YoYQ40.9%1.0%O2/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%O2/14/2020United StatesU. of Mich. SentimentFeb99.8	02/10/2020	France	Bank of France Ind. Sentiment	Jan.	96	97
D2/12/2020EurozoneIndustrial Production SA MoMDec-2.1%0.2%02/13/2020FranceILO Mainland Unemployment Rate047.9%8.3%02/13/2020GermanyCPI EU Harmonized YoYJan.1.6%1.6%02/13/2020United StatesCPI Ex Food and Energy YoYJan.2.3%2.3%02/14/2020GermanyGDP SA QoQ0.4%0.0%0.1%02/14/2020EurozoneTrade Balance SADec.2.22e+101.92e+1002/14/2020EurozoneGDP SA QoQ0.4%0.3%0.1%02/14/2020EurozoneGDP SA QoQ0.4%0.3%0.1%02/14/2020EurozoneGDP SA YoY0.4%0.9%1.0%02/14/2020United StatesGDP SA YoY0.4%0.9%0.5%02/14/2020United StatesU. of Mich. SentimentJan.0.9%0.5%02/14/2020United StatesU. of Mich. SentimentFeb99.8	02/11/2020	United Kingdom	GDP QoQ	Q4	0.0%	0.4%
D2/13/2020FranceLO Mainland Unemployment RateQ47.9%8.3%D2/13/2020GermanyCPI EU Harmonized YOYJan.1.6%1.6%D2/13/2020United StatesCPI Ex Food and Energy YOYJan.2.3%2.3%D2/14/2020GermanyGDP SA QoQQ40.0%0.1%D2/14/2020EurozoneTrade Balance SADec.2.22e+101.92e+10D2/14/2020EurozoneGDP SA QoQQ40.3%0.1%D2/14/2020EurozoneGDP SA QoQQ40.0%1.0%D2/14/2020EurozoneGDP SA YOYQ40.9%1.0%D2/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%D2/14/2020United StatesU.of Mich. SentimentFeb9.9.8	02/11/2020	United States	NFIB Small Business Optimism	Jan.	104.3	102.7
O2/13/2020GermanyCPI EU Harmonized YoYJan.1.6%1.6%O2/13/2020United StatesCPI Ex Food and Energy YoYJan.2.3%2.3%O2/14/2020GermanyGDP SA QoQQ40.0%0.1%O2/14/2020EurozoneTrade Balance SADec.2.22e+101.92e+10O2/14/2020EurozoneEmployment QoQQ40.3%0.1%O2/14/2020EurozoneGDP SA QoQQ40.0%0.1%O2/14/2020EurozoneGDP SA YoYQ40.9%1.0%O2/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%O2/14/2020United StatesU.of Mich. SentimentFeb9.8	02/12/2020	Eurozone	Industrial Production SA MoM	Dec	-2.1%	0.2%
02/13/2020United StatesCPI Ex Food and Energy YoYJan.2.3%2.3%02/14/2020GermanyGDP SA QoQQ40.0%0.1%02/14/2020EurozoneTrade Balance SADec.2.22e+101.92e+1002/14/2020EurozoneEmployment QoQQ40.3%0.1%02/14/2020EurozoneGDP SA QoQQ40.3%0.1%02/14/2020EurozoneGDP SA QoQQ40.0%0.1%02/14/2020EurozoneGDP SA YoYQ40.9%1.0%02/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%02/14/2020United StatesU. of Mich. SentimentFeb99.8	02/13/2020	France	ILO Mainland Unemployment Rate	Q4	7.9%	8.3%
OZ/14/2020         Germany         GDP SA QoQ         Q4         0.0%         0.1%           02/14/2020         Eurozone         Trade Balance SA         Dec.         2.22e+10         1.92e+10           02/14/2020         Eurozone         Employment QoQ         Q4         0.3%         0.1%           02/14/2020         Eurozone         GDP SA YoY         Q4         0.9%         1.0%           02/14/2020         United States         Retail Sales Control Group         Q4         0.9%         0.5%           02/14/2020         United States         U. of Mich. Sentiment         Feb.          99.8	02/13/2020	Germany	CPI EU Harmonized YoY	Jan.	1.6%	1.6%
D2/14/2020EurozoneTrade Balance SADec.2.22e+101.92e+1002/14/2020EurozoneEmployment QoQQ40.3%0.1%02/14/2020EurozoneGDP SA QoQQ40.0%0.1%02/14/2020EurozoneGDP SA YoYQ40.9%1.0%02/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%02/14/2020United StatesU. of Mich. SentimentFeb99.8	02/13/2020	United States	CPI Ex Food and Energy YoY	Jan.	2.3%	2.3%
02/14/2020EurozoneEmployment QoQQ40.3%0.1%02/14/2020EurozoneGDP SA QoQQ40.0%0.1%02/14/2020EurozoneGDP SA YoYQ40.9%1.0%02/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%02/14/2020United StatesU.of Mich. SentimentFeb99.8	02/14/2020	Germany	GDP SA QoQ	Q4	0.0%	0.1%
02/14/2020EurozoneGDP SA QoQQ40.0%0.1%02/14/2020EurozoneGDP SA YoYQ40.9%1.0%02/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%02/14/2020United StatesU. of Mich. SentimentFeb99.8	02/14/2020	Eurozone	Trade Balance SA	Dec.	2.22e+10	1.92e+10
02/14/2020EurozoneGDP SA YoYQ40.9%1.0%02/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%02/14/2020United StatesU. of Mich. SentimentFeb99.8	02/14/2020	Eurozone	Employment QoQ	Q4	0.3%	0.1%
02/14/2020United StatesRetail Sales Control GroupJan.0.0%0.5%02/14/2020United StatesU. of Mich. SentimentFeb99.8	02/14/2020	Eurozone	GDP SA QoQ	Q4	0.0%	0.1%
02/14/2020 United States U. of Mich. Sentiment Feb 99.8	02/14/2020	Eurozone	GDP SA YoY	Q4	0.9%	1.0%
·	02/14/2020	United States	Retail Sales Control Group	Jan.	0.0%	0.5%
02/14/2020 United States U of Mich 5-10 Yr Inflation Eeb 2.5%	02/14/2020	United States	U. of Mich. Sentiment	Feb.		99.8
	02/14/2020	United States	U. of Mich. 5-10 Yr Inflation	Feb.		2.5%

SOURCE: BLOOMBERG



# **CALENDAR: THE WEEK AHEAD**

#### **COMING INDICATORS**

Next week sees the publication of several data releases for February (flash PMIs, ZEW survey, regional Federal Reserve surveys). They will be scrutinised for a possible impact of the coronavirus epidemic. In the US, we also have publication of several series on the housing market (building permits, housing starts, home sales, NAHB index). They will be monitored closely given their improvement in recent months. The Conference Board index of leading indicators on the other hand has been slowly trending down for several months and the consensus expects another decline, which is not boding well for growth in the coming quarters. As usual, the FOMC minutes will be read with a lot of attention.

DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	PREVIOUS
02/17/2020	Japan	GDP SA QoQ	4Q P	-1.0%	0.4%
02/18/2020	United Kingdom	ILO Unemployment Rate 3Mths	Dec		3.8%
02/18/2020	Germany	ZEW Survey Expectations	Feb		26.7
02/18/2020	Eurozone	ZEW Survey Expectations	Feb		25.6
02/18/2020	United States	Empire Manufacturing	Feb		4.8
02/18/2020	United States	NAHB Housing Market Index	Feb		75
02/19/2020	Japan	Core Machine Orders YoY	Dec		5.3%
02/19/2020	United Kingdom	CPI Core YoY	Jan		1.4%
02/19/2020	United States	Housing Starts MoM	Jan		16.9%
02/19/2020	United States	Building Permits MoM	Jan		-3.9%
02/19/2020	United States	PPI Ex Food and Energy YoY	Jan		1.1%
02/19/2020	United States	FOMC Meeting Minutes	Jan		
02/19/2020	United Kingdom	CBI Trends Total Orders	Feb		-22
02/20/2020	Germany	GfK Consumer Confidence	Mar		9.9
02/20/2020	France	CPI EU Harmonized YoY	Jan		1.6%
02/20/2020	United Kingdom	Retail Sales Ex Auto Fuel YoY	Jan		0.7%
02/20/2020	United States	Philadelphia Fed Business Outlook	Feb		17.0
02/20/2020	United States	Leading Index	Jan		-0.3%
02/20/2020	Eurozone	Consumer Confidence	Feb		-8.1
02/21/2020	Japan	Jibun Bank Japan PMI Composite	Feb		
02/21/2020	France	Markit France Composite PMI	Feb		
02/21/2020	Eurozone	Markit Eurozone Composite PMI	Feb		
02/21/2020	Eurozone	CPI Core YoY	Jan		1.1%
02/21/2020	United States	Markit US Composite PMI	Feb		
02/21/2020	United States	Existing Home Sales MoM	Jan		3.6%

SOURCE: BLOOMBERG



# **FURTHER READING**

Pensions: Working longer for lower benefits	Chart of the Week	12 February 2020
ECB, Fed: Central banks redefine their strategies	Eco TV	11 February 2020
The economic consequences of the coronavirus: after the sudden stop, what type of recovery?	EcoTV Week	7 February 2020
The coronavirus and the profile for global growth in 2020: V, U or L	EcoWeek	7 February 2020
<u>Mexico: sluggish growth in 2020</u>	Chart of the Week	5 February 2020
Pension reform proposal in France: where do things stand?	EcoTV Week	31 January 2020
Portugal: Towards a compression of interest margin on outstanding amounts?	Chart of the Week	29 January 2020
Eurozone: macroeconomic outlook for 2020 and potential risks	EcoTV Week	24 January 2020
EcoPerspectives at Q12020	EcoPerspectives	23 January 2020
Spain: The active population is bouncing back but is ageing	Chart of the Week	22 January 2020
The US-China trade deal: few reasons to be cheerful	EcoWeek	17 January 2020
The US-China trade deal: relief, for now	EcoTV Week	17 January 2020
Mozambique: Debt crisis despite Eurobond restructuring	Chart of the Week	15 January 2020
<u>Eco TV - January 2020</u>	Eco TV	10 January 2020
Markets and geopolitical uncertainty: (ir)rational complacency?	EcoWeek	10 January 2020
Home affordability trends in France	Chart of the Week	8 January 2020
Banking in a low interest rate environment: the case of Portugal	Conjonture	23 December 2019
Sustainable and inclusive growth: the role of cities	Conjoncture	23 December 2019
What 2019 tells us about 2020	EcoTV Week	20 December 2019
<u>2019: a difficult year, ending on a hopeful note</u>	EcoWeek	20 December 2019
The UK: heading for the door	EcoFlash	20 December 2019
Looming money market tensions	EcoFlash	19 December 2019
Lebanon: How are structural deficits financed ?	Infographics	19 December 2019
Eurozone economic slowdown: what if employment holds up?	EcoFlash	12 December 2019



# **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 gouvernance and public finances), Spain, Portugal	+33 1 43 16 95 52	frederique.cerisier@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
Thomas Humblot ECONOMIES EMERGENTES ET RISQUE PAYS	+ 33 1 40 14 30 77	<u>thomas.humblot@bnpparibas.com</u>
	+ 33 1 40 14 30 77 +33 1 42 98 79 82	<u>thomas.humblot@bnpparibas.com</u> <u>francois.faure@bnpparibas.com</u>
ECONOMIES EMERGENTES ET RISQUE PAYS François Faure		
ECONOMIES EMERGENTES ET RISQUE PAYS François Faure Head, Argentina, Turkey, Ukraine, Central European countries Christine Peltier	+33 1 42 98 79 82	francois.faure@bnpparibas.com_
ECONOMIES EMERGENTES ET RISQUE PAYS François Faure Head, Argentina, Turkey, Ukraine, Central European countries Christine Peltier Deputy Head – Greater China, Vietnam, South Africa Stéphane Alby	+33 1 42 98 79 82 +33 1 42 98 56 27	francois.faure@bnpparibas.com_ christine.peltier@bnpparibas.com_
ECONOMIES EMERGENTES ET RISQUE PAYS François Faure Head, Argentina, Turkey, Ukraine, Central European countries Christine Peltier Deputy Head – Greater China, Vietnam, South Africa Stéphane Alby Africa (French-speaking countries) Stéphane Colliac	+33 1 42 98 79 82 +33 1 42 98 56 27 +33 1 42 98 02 04	francois.faure@bnpparibas.com christine.peltier@bnpparibas.com stephane.alby@bnpparibas.com
ECONOMIES EMERGENTES ET RISQUE PAYS François Faure Head, Argentina, Turkey, Ukraine, Central European countries Christine Peltier Deputy Head – Greater China, Vietnam, South Africa Stéphane Alby Africa (French-speaking countries) Stéphane Colliac Turkey, Ukraine, Central European countries Sara Confalonieri	+33 1 42 98 79 82 +33 1 42 98 56 27 +33 1 42 98 02 04 +33 1 42 98 26 77	francois.faure@bnpparibas.com christine.peltier@bnpparibas.com stephane.alby@bnpparibas.com stephane.colliac@bnpparibas.com
<b>ECONOMIES EMERGENTES ET RISQUE PAYS</b> François Faure         Head, Argentina, Turkey, Ukraine, Central European countries         Christine Peltier         Deputy Head - Greater China, Vietnam, South Africa         Stéphane Alby         Africa (French-speaking countries)         Stéphane Colliac         Turkey, Ukraine, Central European countries         Sara Confalonieri         Africa (Portuguese & English-speaking countries)         Pascal Devaux	+33 1 42 98 79 82 +33 1 42 98 56 27 +33 1 42 98 02 04 +33 1 42 98 26 77 +33 1 42 98 43 86	francois.faure@bnpparibas.com. christine.peltier@bnpparibas.com. stephane.alby@bnpparibas.com. stephane.colliac@bnpparibas.com. sara.confalonieri@bnpparibas.com.
ECONOMIES EMERGENTES ET RISQUE PAYS         François Faure         Head, Argentina, Turkey, Ukraine, Central European countries         Christine Peltier         Deputy Head - Greater China, Vietnam, South Africa         Stéphane Alby         Africa (French-speaking countries)         Stéphane Colliac         Turkey, Ukraine, Central European countries         Sara Confalonieri         Africa (Portuguese & English-speaking countries)         Pascal Devaux         Middle East, Balkan countries         Hélène Drouot	+33 1 42 98 79 82 +33 1 42 98 56 27 +33 1 42 98 02 04 +33 1 42 98 26 77 +33 1 42 98 43 86 +33 1 43 16 95 51	francois.faure@bnpparibas.com         christine.peltier@bnpparibas.com         stephane.alby@bnpparibas.com         stephane.colliac@bnpparibas.com         sara.confalonieri@bnpparibas.com         pascal.devaux@bnpparibas.com
ECONOMIES EMERGENTES ET RISQUE PAYS         François Faure         Head, Argentina, Turkey, Ukraine, Central European countries         Christine Peltier         Deputy Head - Greater China, Vietnam, South Africa         Stéphane Alby         Africa (French-speaking countries)         Stéphane Colliac         Turkey, Ukraine, Central European countries         Sara Confalonieri         Africa (Portuguese & English-speaking countries)         Pascal Devaux         Middle East, Balkan countries         Hélène Drouot         Korea, Thailand, Philippines, Mexico, Andean countries         Salim Hammad         Latin America         Johanna Melka	+33 1 42 98 79 82 +33 1 42 98 56 27 +33 1 42 98 02 04 +33 1 42 98 26 77 +33 1 42 98 43 86 +33 1 43 16 95 51 +33 1 42 98 33 00	francois.faure@bnpparibas.com.         christine.peltier@bnpparibas.com.         stephane.alby@bnpparibas.com.         stephane.colliac@bnpparibas.com.         sara.confalonieri@bnpparibas.com.         pascal.devaux@bnpparibas.com.         helene.drouot@bnpparibas.com.
<b>ECONOMIES EMERGENTES ET RISQUE PAYS</b> François Faure         Head, Argentina, Turkey, Ukraine, Central European countries <b>Christine Peltier</b> Deputy Head - Greater China, Vietnam, South Africa <b>Stéphane Alby</b> Africa (French-speaking countries) <b>Stéphane Colliac</b> Turkey, Ukraine, Central European countries <b>Sara Confalonieri</b> Africa (Portuguese & English-speaking countries) <b>Pascal Devaux</b> Middle East, Balkan countries <b>Hélène Drouot</b> Korea, Thailand, Philippines, Mexico, Andean countries <b>Salim Hammad</b> Latin America	+33 1 42 98 79 82 +33 1 42 98 56 27 +33 1 42 98 02 04 +33 1 42 98 26 77 +33 1 42 98 43 86 +33 1 43 16 95 51 +33 1 42 98 33 00 +33 1 42 98 74 26	francois.faure@bnpparibas.com.         christine.peltier@bnpparibas.com.         stephane.alby@bnpparibas.com.         stephane.colliac@bnpparibas.com.         sara.confalonieri@bnpparibas.com.         pascal.devaux@bnpparibas.com.         helene.drouot@bnpparibas.com.         salim.hammad@bnpparibas.com



# **GROUP ECONOMIC RESEARCH**



## 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



## ECOFLASH

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



## ECOWEEK

Weekly economic news and much more ....



### FCOTV

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



### MACROWAVES

The economic podcasts



Siège social : 16 boulevard des Italiens - 75009 PARIS / Tél : +33 (0) 1.42.98.12.34 Internet : www.group.bnpparibas.com - www.economic-research.bnpparibas.com

Directeur de la publication : Jean Lemierre / Rédacteur en chef : William De Vijlder

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 reliad 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 an offer or solicitation to buy or sell any securities or other investment. It does not constitute an offer or solicitation to buy or sell any securities or other investment. It does not constitute an offer or solicitation to buy or sell any securities or other investment. It does not constitute an offer or solicitation to buy or sell any securities or other investment. It does not constitute an offer or solicitation to buy or sell any securities or other investment. It does not constitute an offer or solicitation to buy or sell any securities or other investment. 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. Unless otherwise indicated in this report there is no intention to update this report. BNP Paribas SA and its affliates (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 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 be a party to an agreement with any person relating to the production of this report. BNP Par 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

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 accep-ting this document you agree to be bound by the foregoing limitations.

Certain countries within the European Economic Area

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 whighly form us on request. 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 Pa-ribas Niederlassung Frankfurt am Main, a branch of BNP Paribas S.A. whose head office is in Pa-ris, France. BNP Paribas S.A. – Niederlassung Frankfurt am Main, Europa Allee 12, 60327 Frank-furt 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).

subject to limited regulation by the Bundesanstait Jur Finanzdienstleistungsaugischt (Barin). 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 Autho-rity 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.

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 instru-ments 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

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 ( 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



# **BNP PARIBAS**