

# ECOWEEK

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## When environmental, trade and social policies meet

■ The recent “economists’ statement on carbon dividends” offers important policy prescriptions for the US to address global warming ■ It explicitly refers to the need for a border carbon adjustment system so as to maintain competitiveness versus countries that would not have introduced a carbon tax ■ The authors recommend that the carbon tax proceeds be equally distributed to US citizens ■ It could be envisaged to use these proceeds in a way which takes into account the distributional aspects of environmental taxes whilst promoting energy efficiency investments

On 17 January The Wall Street Journal published the “Economists’ statement on carbon dividends”<sup>1</sup>. It managed to grab the attention if only because of the impressive list of co-signatories<sup>2</sup>. They consider that a carbon tax is the most cost-effective instrument to reduce carbon emissions to a sufficient degree and pace, that it should replace less efficient regulations and that it should be increased every year until the emission reduction goals are met.

This gradualist approach should give households and companies time to adjust their behaviour and finance the necessary investments (heating, means of transportation, manufacturing processes). It implies that the cumulative increase in the carbon tax would depend on the price sensitivity of the demand for carbon intensive goods and services. The higher this sensitivity, the lower the required increase in the carbon tax.

Ideally such an approach should be adopted globally but experience has shown the difficulty of coming to a broad-based agreement and stick to it<sup>3</sup>. It implies that single-country measures would weaken the competitiveness of its companies and create an incentive for other countries not to do anything.

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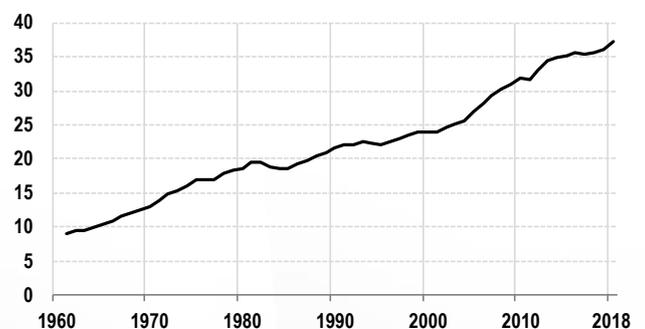
<sup>1</sup> <https://www.clcouncil.org/economists-statement/>

<sup>2</sup> The signatories include 4 former chairs of the Federal Reserve, 27 Nobel laureate economists, 15 chairs of the Council of Economic Advisers and 2 former Secretaries of the US Department of Treasury.

<sup>3</sup> In June 2016, the decision of Donald Trump to pull the US out of the COP21 agreement reached in Paris is just one illustration amongst many of the difficulties to come to a coordinated global approach.

### CLIMATE: CO2 EMISSIONS CONTINUE TO GROW

GtCO2 per year



Source: Global Carbon Project

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To address this coordination problem, the signatories call for the establishment of a border carbon adjustment system in which exports to countries which do not apply a carbon tax would receive a rebate whereas imports from these countries would be taxed when entering the country<sup>4,5</sup>. There is a concern however that other countries would consider a carbon tax on imports as a protectionist measure which has little to do with climate change, triggering retaliation measures.

The signatories also argue that it should be revenue neutral in order to avoid debates over the size of government and for this reason “*all the revenue should be returned directly to U.S. citizens through equal lump-sum rebates*”, the so-called carbon dividend. Considering that, quite likely, the carbon footprint of wealthier households is bigger than that of households at the lower end of the income distribution, an equal lump-sum rebate would imply that the latter would see an increase of their disposable income considering that the lump-sum rebate would be higher than the carbon taxes. This could create an incentive or at least facilitate energy efficiency investments on their behalf.

It can be argued however that the revenue neutrality is a matter of judgment. The government could consider it has an important role to play in fostering energy efficiency so it could use (part of) the carbon tax revenues to finance its own green investments (e.g. increase the energy efficiency of public buildings and schools). Alternatively they could be used to address the income distribution aspects of green taxation by e.g. subsidising energy efficiency investments of financially constrained households.

Clearly, these alternative approaches are less easy to explain than a lump-sum rebate for every household. The recommendations of the Economists' statement have the merit of replacing often complex existing regulations. In addition they show a direction which would allow to make considerable progress in terms of carbon emission reduction, at the initiative of a single country, thereby avoiding losing considerable time in addressing the international coordination problem, and with the added advantage of being able to take into account the distributional aspects as well.

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<sup>4</sup> Climate Leadership Council, *The conservative case for carbon dividends*, February 2017. The wording is reminiscent of the “destination-based border-adjusted cash flow tax” as proposed by Republican members of the House of Representatives in the US in 2017, which would have acted as the combination of an export subsidy and an import tariff.

<sup>5</sup> This is also discussed in a forthcoming article “Getting to a low carbon economy” of Raymond Van der Putten in *Conjoncture* (BNP Paribas) on January 2019.



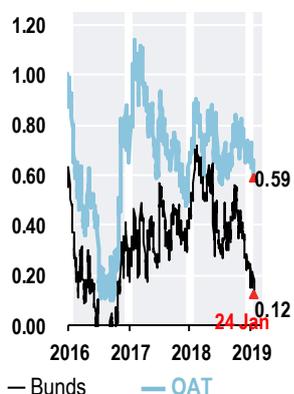
## Markets overview

### The essentials

Week 18-1 19 > 24-1-19

|                    |       |         |         |
|--------------------|-------|---------|---------|
| ↘ CAC 40           | 4 876 | ▶ 4 872 | -0.1 %  |
| ↘ S&P 500          | 2 671 | ▶ 2 642 | -1.1 %  |
| ↗ Volatility (VIX) | 17.8  | ▶ 18.9  | +1.1 pb |
| ↗ Euribor 3M (%)   | -0.31 | ▶ -0.31 | +0.2 bp |
| ↗ Libor \$ 3M (%)  | 2.76  | ▶ 2.77  | +1.0 bp |
| ↘ OAT 10y (%)      | 0.66  | ▶ 0.59  | -6.8 bp |
| ↘ Bund 10y (%)     | 0.21  | ▶ 0.12  | -9.0 bp |
| ↘ US Tr. 10y (%)   | 2.78  | ▶ 2.71  | -7.0 bp |
| ↘ Euro vs dollar   | 1.14  | ▶ 1.14  | -0.1 %  |
| ↘ Gold (ounce, \$) | 1 284 | ▶ 1 283 | -0.1 %  |
| ↘ Oil (Brent, \$)  | 62.7  | ▶ 61.0  | -2.6 %  |

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 18/01 |
| Euribor 3M     | -0.31 at 24/01 | -0.31 at 02/01 |
| Euribor 12M    | -0.12 at 21/01 | -0.12 at 02/01 |
| \$ FED         | 2.50 at 01/01  | 2.50 at 01/01  |
| Libor 3M       | 2.77 at 01/01  | 2.76 at 18/01  |
| Libor 12M      | 3.04 at 21/01  | 2.96 at 04/01  |
| £ BoE          | 0.75 at 01/01  | 0.75 at 01/01  |
| Libor 3M       | 0.92 at 15/01  | 0.90 at 07/01  |
| Libor 12M      | 1.17 at 11/01  | 1.16 at 22/01  |

At 24-1-19

| Yield (%)    | highest' 19    | lowest' 19     |
|--------------|----------------|----------------|
| € AVG 5-7y   | 0.68 at 09/01  | 0.50 at 24/01  |
| Bund 2y      | -0.57 at 08/01 | -0.62 at 03/01 |
| Bund 10y     | 0.12 at 01/01  | 0.12 at 24/01  |
| OAT 10y      | 0.59 at 08/01  | 0.59 at 24/01  |
| Corp. BBB    | 1.95 at 08/01  | 1.95 at 24/01  |
| \$ Treas. 2y | 2.62 at 18/01  | 2.39 at 03/01  |
| Treas. 10y   | 2.78 at 18/01  | 2.55 at 03/01  |
| Corp. BBB    | 4.47 at 01/01  | 4.47 at 24/01  |
| £ Treas. 2y  | 0.82 at 14/01  | 0.68 at 03/01  |
| Treas. 10y   | 1.35 at 18/01  | 1.18 at 03/01  |

At 24-1-19

10y bond yield & spreads

|       |             |        |
|-------|-------------|--------|
| 4.84% | Greece      | 472 pb |
| 2.66% | Italy       | 254 pb |
| 1.52% | Portugal    | 140 pb |
| 1.25% | Spain       | 112 pb |
| 0.63% | Belgium     | 50 pb  |
| 0.59% | France      | 46 pb  |
| 0.45% | Ireland     | 33 pb  |
| 0.42% | Finland     | 30 pb  |
| 0.39% | Austria     | 27 pb  |
| 0.29% | Netherlands | 16 pb  |
| 0.12% | Germany     |        |

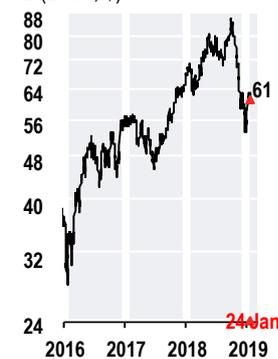
### Commodities

| Spot price in dollars | lowest' 19     | 2019(€) |
|-----------------------|----------------|---------|
| Oil, Brent            | 53.1 at 01/01  | +15.7%  |
| Gold (ounce)          | 1 281 at 21/01 | +0.8%   |
| Metals, LME           | 2 730 at 03/01 | +3.0%   |
| Copper (ton)          | 5 714 at 03/01 | -0.2%   |
| CRB Foods             | 324 at 01/01   | +3.2%   |
| wheat (ton)           | 197 at 01/01   | +3.7%   |
| Corn (ton)            | 136 at 01/01   | +1.9%   |

At 24-1-19

Variations

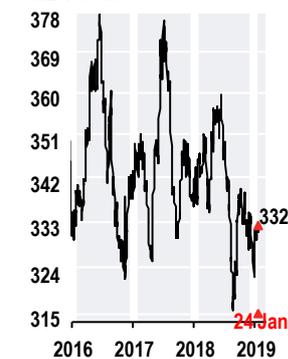
Oil (Brent, \$)



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 | 0.90 at 03/01   | 0.87 at 24/01   | -3.0% |
| CHF | 1.13 at 21/01   | 1.12 at 02/01   | +0.2% |
| JPY | 125.42 at 01/01 | 122.54 at 03/01 | -0.8% |
| AUD | 1.63 at 03/01   | 1.58 at 18/01   | -1.6% |
| CNY | 7.87 at 09/01   | 7.69 at 18/01   | -1.7% |
| BRL | 4.43 at 01/01   | 4.24 at 09/01   | -3.7% |
| RUB | 79.30 at 01/01  | 74.65 at 24/01  | -5.9% |
| INR | 81.21 at 14/01  | 79.57 at 04/01  | +1.2% |

At 24-1-19

Variations

### Equity indices

| Index   | highest' 19     | lowest' 19      | 2019   | 2019(€) |
|---------|-----------------|-----------------|--------|---------|
| CAC 40  | 4 876 at 18/01  | 4 611 at 03/01  | +3.0%  | +3.0%   |
| S&P500  | 2 671 at 18/01  | 2 448 at 03/01  | +5.4%  | +6.1%   |
| DAX     | 11 206 at 18/01 | 10 417 at 03/01 | +5.4%  | +5.4%   |
| Nikkei  | 20 575 at 21/01 | 19 562 at 04/01 | +2.8%  | +3.6%   |
| China*  | 75 at 21/01     | 68 at 03/01     | +6.5%  | +7.1%   |
| India*  | 548 at 01/01    | 543 at 14/01    | +0.2%  | -1.0%   |
| Brazil* | 2 225 at 24/01  | 1 944 at 01/01  | +11.0% | +15.2%  |
| Russia* | 633 at 24/01    | 572 at 01/01    | +5.7%  | +11.5%  |

At 24-1-19

Variations

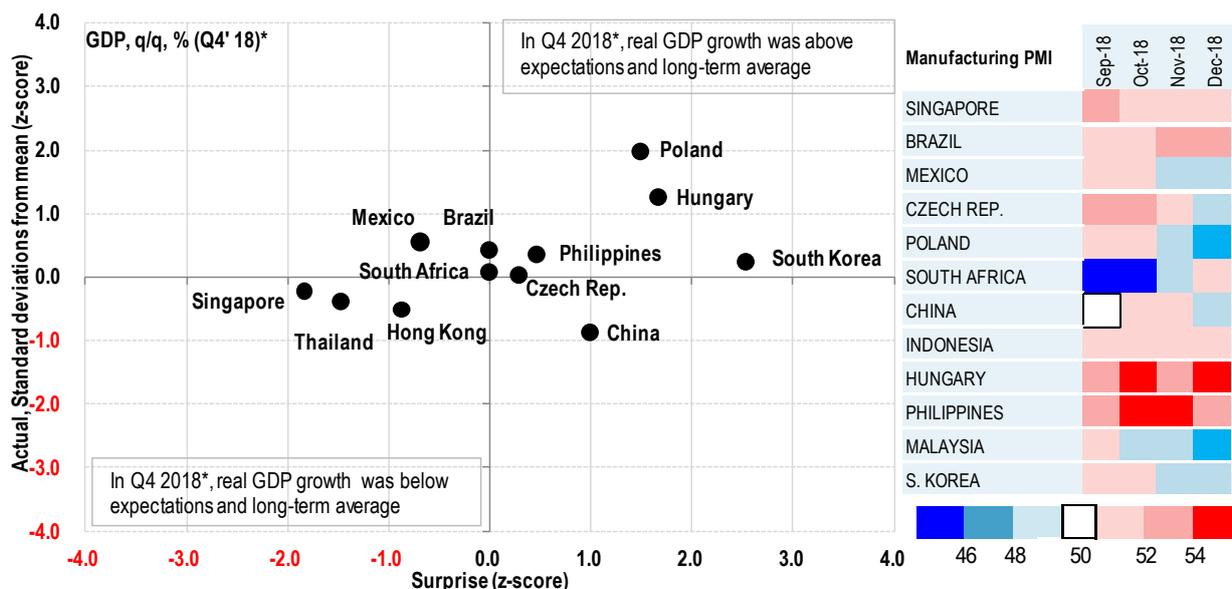
\* MSCI index



## Pulse

### China: Economic growth slowdown worsened in Q4 2018

In China, real GDP growth slowed to 6.4% in Q4 2018 year-on-year from 6.5% in Q3. The slowdown in the industrial sector worsened in Q4 while growth in the services sector remains more dynamic. Regarding demand components, exports have weakened markedly in the two last months of 2018, mostly due to the impact of US tariff hikes on imports of Chinese goods. Growth in household consumption has continued to decelerate (especially in the car market). Meanwhile, investment growth has picked up slightly, mainly in the infrastructure sector, in response to stimulus policy measures. Export growth prospects remain dark in the very short term and then will depend on the possible trade deals that Beijing and Washington will be able to sign in the coming weeks. Domestic demand growth should be increasingly supported by counter-cyclical economic policies. Nonetheless, China's economic growth will continue to slow in 2019 and remain below its long-term average.



\* Q3' 18: Brazil, Czech Rep., Hong Kong, Hungary, Poland, Thailand, South Africa, Mexico

### Indicators preview

A very busy schedule next with the much attended FOMC meeting and in particular Jerome Powell's press conference and the possible change in guidance it may bring. The US, the eurozone and France will publish GDP growth for Q4 2018 and several countries will release the January data on consumer confidence (France, US, Japan, Germany, eurozone, UK). In addition we will also have economic confidence in the eurozone, the Markit PMI and, in the US, the ISM. Most importantly, we will see the publication of the US labour market data for January. By the end of next week we will not only have a good picture of how we finished 2018 but also how we started the new year.

| Date       | Country/Region | Event                             | Period  | Surv(M) | Prior  |
|------------|----------------|-----------------------------------|---------|---------|--------|
| 01/29/19   | France         | Consumer Confidence               | Jan     | --      | 87     |
| 01/29/19   | United States  | Conf. Board Consumer Confidence   | Jan     | 126.3   | 128.1  |
| 01/30/19   | Japan          | Consumer Confidence Index         | Jan     | --      | 42.7   |
| 01/30/19   | France         | GDP QoQ                           | 4Q      | --      | 0.3%   |
| 01/30/19   | Germany        | GfK Consumer Confidence           | Feb     | --      | 10.4   |
| 01/30/19   | Eurozone       | Economic Confidence               | Jan     | --      | 107.3  |
| 01/30/19   | Eurozone       | Consumer Confidence               | Jan     | --      | --     |
| 01/30/19   | Germany        | CPI EU Harmonized MoM             | Jan     | --      | 0.3%   |
| 01/30/19   | United States  | GDP Annualized QoQ                | 4Q      | 2.7%    | 3.4%   |
| 01/30/19   | United States  | FOMC Rate Decision (Upper Bound)  | janv-30 | 2.50%   | 2.50%  |
| 01/31/19   | United Kingdom | GfK Consumer Confidence           | Jan     | --      | -14    |
| 01/31/19   | France         | CPI EU Harmonized MoM             | Jan     | --      | 0.1%   |
| 01/31/19   | Eurozone       | Unemployment Rate                 | Dec     | --      | 7.9%   |
| 01/31/19   | Eurozone       | GDP SA QoQ                        | 4Q      | --      | 0.2%   |
| 02/01/2019 | Japan          | Jobless Rate                      | Dec     | --      | 2.5%   |
| 02/01/2019 | France         | Markit France Manufacturing PMI   | Jan     | --      | --     |
| 02/01/2019 | Eurozone       | Markit Eurozone Manufacturing PMI | Jan     | --      | --     |
| 02/01/2019 | United States  | Change in Nonfarm Payrolls        | Jan     | 163000  | 312000 |
| 02/01/2019 | United States  | ISM Manufacturing                 | Jan     | 54.0    | 54.1   |
| 02/01/2019 | United States  | University of Michigan Sentiment  | Jan     | --      | 90.7   |

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.
- Markets no longer price in rate hikes and the message from Fed governors has indeed become far more dovish

### 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 worsening performance of the export manufacturing sector 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 encounters capacity constraint and suffers from reduce demand coming from the EMEs.
- Inflation is now expected to decelerate with falling oil price, while core CPI trend remains subdued. We do not expect the ECB to move rates before 19Q4 (see below)

### FRANCE

- Growth slows down but remains above potential. 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, ongoing above potential growth, a very low unemployment rate and a pick-up in wage growth point towards more rate hikes. Are forecasts still point towards 2 more in the first half of 2019 after which the Fed will want to see how the economy reacts. However this scenario has become less clearcut considering dovish message from FOMC members and its president. The ECB has ended its net asset purchases at the end of 2018. A first hike of the deposit rate is expected after the summer of 2019. As a consequence, bond yields should increase. No change expected in Japan.
- The narrowing bond yield differential between the US and the eurozone should cause a strengthening of the euro, all the more so considering it is still below its long-term fair value (around 1.34).

### SUMMARY

| %                | GDP Growth |            |            | Inflation  |            |            |
|------------------|------------|------------|------------|------------|------------|------------|
|                  | 2018 e     | 2019 e     | 2020 e     | 2018 e     | 2019 e     | 2020 e     |
| <b>Advanced</b>  | <b>2.2</b> | <b>1.7</b> | <b>1.3</b> | <b>2.0</b> | <b>1.7</b> | <b>1.8</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>1.9</b> | <b>1.4</b> | <b>1.2</b> | <b>1.7</b> | <b>1.8</b> | <b>1.5</b> |
| Germany          | 1.6        | 1.5        | 1.3        | 1.8        | 2.2        | 1.6        |
| France           | 1.5        | 1.6        | 1.3        | 2.1        | 1.5        | 1.6        |
| Italy            | 1.0        | 0.6        | 0.5        | 1.3        | 1.5        | 1.2        |
| Spain            | 2.5        | 2.2        | 2.0        | 1.7        | 1.7        | 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        |

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

### INTEREST RATES & FX RATES

| Interest rates, % | 2018        | 2019          |       |       |       |       | 2018  | 2019e | 2020e |
|-------------------|-------------|---------------|-------|-------|-------|-------|-------|-------|-------|
|                   |             | End of period | Q4    | Q1e   | Q2e   | Q3e   |       |       |       |
| <b>US</b>         | Fed Funds   | 2.50          | 2.75  | 3.00  | 3.00  | 3.00  | 2.50  | 3.00  | 3.00  |
|                   | Libor 3m \$ | 2.81          | 2.90  | 3.05  | 3.05  | 3.05  | 2.81  | 3.05  | 2.80  |
|                   | T-Notes 10y | 2.69          | 3.30  | 3.40  | 3.45  | 3.50  | 2.69  | 3.50  | 3.25  |
| <b>Ezone</b>      | ECB Ref     | 0.00          | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.20  |
|                   | Euribor 3m  | -0.31         | -0.30 | -0.25 | -0.20 | -0.15 | -0.31 | -0.15 | 0.00  |
|                   | Bund 10y    | 0.25          | 0.55  | 0.60  | 0.80  | 1.00  | 0.25  | 1.00  | 0.90  |
|                   | OAT 10y     | 0.71          | 0.95  | 1.00  | 1.10  | 1.25  | 0.71  | 1.25  | 1.15  |
| <b>UK</b>         | Base rate   | 0.75          | 0.75  | 1.00  | 1.00  | 1.25  | 0.75  | 1.25  | 1.50  |
|                   | Gilts 10y   | 1.27          | 1.70  | 1.85  | 2.00  | 2.10  | 1.27  | 2.10  | 2.10  |
| <b>Japan</b>      | BoJ Rate    | -0.07         | -0.10 | -0.10 | -0.10 | -0.10 | -0.07 | -0.10 | -0.10 |
|                   | JGB 10y     | 0.00          | 0.15  | 0.15  | 0.15  | 0.14  | 0.00  | 0.14  | 0.08  |

Source : BNP Paribas GlobalMarkets (e: Forecasts)

| Exchange Rates | End of period | 2019 |      |      |      |      | 2018 | 2019e | 2020e |
|----------------|---------------|------|------|------|------|------|------|-------|-------|
|                |               | Q4   | Q1e  | Q2e  | Q3e  | Q4e  |      |       |       |
| USD            | EUR / USD     | 1.14 | 1.15 | 1.17 | 1.21 | 1.25 | 1.14 | 1.25  | 1.34  |
|                | USD / JPY     | 110  | 110  | 108  | 105  | 100  | 110  | 100   | 90    |
|                | GBP / USD     | 1.27 | 1.32 | 1.36 | 1.41 | 1.47 | 1.27 | 1.47  | 1.58  |
|                | USD / CHF     | 0.99 | 1.01 | 1.00 | 0.98 | 0.96 | 0.99 | 0.96  | 0.93  |
| EUR            | EUR / GBP     | 0.90 | 0.87 | 0.86 | 0.86 | 0.85 | 0.90 | 0.85  | 0.85  |
|                | EUR / CHF     | 1.13 | 1.16 | 1.17 | 1.18 | 1.20 | 1.13 | 1.20  | 1.25  |
|                | EUR / JPY     | 125  | 127  | 126  | 127  | 125  | 125  | 125   | 121   |

Source : BNP Paribas GlobalMarkets (e: Forecasts)



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