ECOWEEK

No. 19-19, 10 May 2019

Europe: lower CO2 emissions from energy use

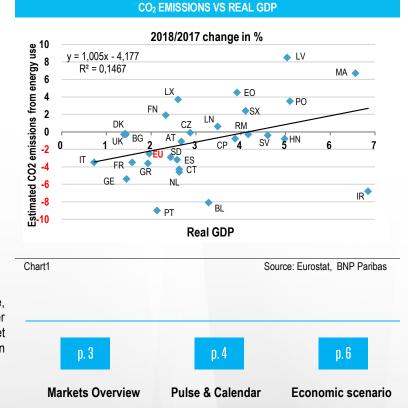
■In the European Union, CO₂ emissions from fossil fuel combustion declined 2.5% in 2018 compared to the year before ■Considering that GDP grew, this implies a reduction in carbon intensity, thereby continuing a long-term trend ■The developments in individual countries vary and quite a number of countries have seen an increase in emissions ■Likewise, the differences are considerable concerning the emissions per capita depending on the level of economic development, although this is just one factor amongst many which influence the emission intensity

Eurostat estimates that in the European Union CO_2 emissions from fossil fuel combustion have declined 2.5% in 2018 compared to the year before. This continues a long-term trend: calculations by the International Energy Agency show for EU28 a decline of 20.7% between 1990 and 2016. Considering that over this period economic activity grew significantly, the carbon intensity declined 48.7%i.

As shown by the first chart, there is however a wide dispersion between countries. Latvia, Malta and Estonia saw big increases, whereas Portugal, Bulgaria, Ireland and Germany experienced considerable declines.

To some degree, differences in real GDP growth play a role (there is a statistically significant relationship between growth and change in emissions) but it should be emphasized that countries which saw a reduction in emissions still had positive growth, implying that the CO₂ emission intensity of economic activity declined further.

The low R^2 of the regression reminds us that many factors influence emissions: weather conditions, domestic production versus imports (an increased share of imported electricity lowers emissions in the importing country), the mix in terms of primary energy source (alternative, fossil, nuclear), population size, transport infrastructure, etc. The level of economic development as measured by GDP per capita also plays a role, as shown in the second chart. As people get richer, the per capita CO_2 emissions from fossil fuel combustion increase.



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ECONOMIC RESEARCH DEPARTMENT





Yet, the dispersion, for a given level of per capita GDP, shows that other factors may be at work as well, such as the use of coal versus nuclear energy as a primary energy source. Moreover, as countries become richer, the sector composition of value added changes and services tend to gain in importance. Considering that industry has a bigger carbon emission footprint than services, this may explain why, as shown in chart 3, there is a negative relationship between per capita GDP and CO₂ emissions per unit of GDP.

The diversity of the drivers of the carbon footprint of a country may be a challenge for policy in coming to grips with global warming and entails finding a balance between the level of energy independence of

a country, security, emissions, the costs of change whilst taking into account issues such as the intermittency of wind and solar energy. The necessity to make significant progress is beyond doubt however as illustrated by the request of eight countries (Belgium, Denmark, France, Luxembourg, the Netherlands, Portugal, Spain and Sweden) to EU members to achieve net-zero emissions by 2050 ii.

William De Vijlder

calculated as the ratio of CO₂ fuel combustion emissions and real GDP. Source: International Energy Agency, CO₂ emissions from fuel combustion highlights (2018 edition)

ii Eight nations push for net-zero emissions in bloc by 2050, Financial Times, 8 May 2019

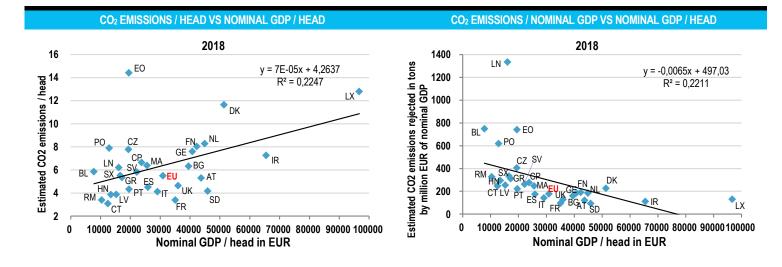


Chart 2 Source: Eurostat, BNP Paribas Chart 3 Source: Eurostat, BNP Paribas

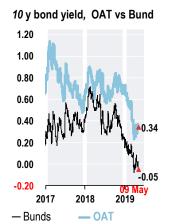
EU EU28, AT Austria, BG Belgium, BL Bulgaria, CT Croatia, CP Cyprus, CZ Czechia, DK Denmark, EO Estonia, FN Finland, FR France, GE Germany, GR Greece, HN Hungary, IR Ireland, IT Italy, LV Latvia, LN Lithuania, LX

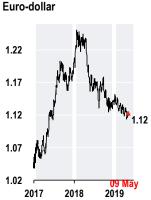


Markets overview

The essentials

Week 3-5 19 > 9-5	-19				
△ CAC 40	5 549	•	5 313	-4.2	%
S&P 500	2 946	•	2 871	-2.5	%
→ Volatility (VIX)	12.9	٠	19.1	+6.2	pb
↗ Euribor 3M (%)	-0.31	•	-0.31	+0.1	bp
Libor \$ 3M (%)	2.56	•	2.55	-1.5	bp
■ OAT 10y (%)	0.37	•	0.34	-2.5	bp
Bund 10y (%)	0.02	•	-0.05	-7.3	bp
US Tr. 10y (%)	2.53	٠	2.46	-7.4	bp
↗ Euro vs dollar	1.12	•	1.12	+0.4	%
7 Gold (ounce, \$)	1 281	•	1 284	+0.2	%
→ Oil (Brent, \$)	71.5	•	70.9	-0.8	%



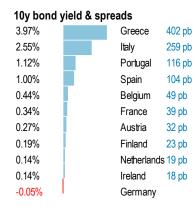




Money & Bond Markets

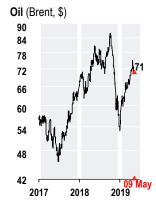
Interes	Interest Rates			highest' 19				' 19
€ ECB		0.00	0.00	at	01/01	0.00	at	01/01
Eonia		-0.36	-0.36	at	01/01	-0.37	at	26/02
Euribo	or 3M	-0.31	-0.31	at	24/01	-0.31	at	24/04
Euribo	or 12M	-0.12	-0.11	at	06/02	-0.12	at	02/01
\$ FED		2.50	2.50	at	01/01	2.50	at	01/01
Libor	3M	2.55	2.81	at	01/01	2.55	at	08/05
Libor	12M	2.71	3.04	at	21/01	2.68	at	27/03
£ BoE		0.75	0.75	at	01/01	0.75	at	01/01
Libor	3M	0.81	0.93	at	29/01	0.81	at	07/05
Libor	12M	1.07	1.19	at	11/01	1.05	at	02/04
At 9-5	-19	="						•





Commodities

Spot price in do	low	est'	19	2019(€)	
Oil, Brent	70.9	53.1	at	01/01	+35.9%
Gold (ounce)	1 284	1 268	at	02/05	+2.0%
Metals, LMEX	2 839	2 730	at	03/01	+3.2%
Copper (ton)	6 089	5 714	at	03/01	+4.2%
CRB Foods	338	324	at	07/03	+6.2%
wheat (ton)	169	168	at	11/03	-12.8%
Corn (ton)	129	128	at	24/04	-3.8%
At 9-5-19				Va	ariations







Exchange Rates

!€=		high	est'	19	low	est'	19	2019
USD	1.12	1.15	at	10/01	1.11	at	25/04	-1.8%
GBP	0.86	0.90	at	03/01	0.85	at	14/03	-3.9%
CHF	1.14	1.14	at	23/04	1.12	at	02/04	+1.0%
JPY	123.04	127.43	at	01/03	122.54	at	03/01	-1.9%
AUD	1.61	1.63	at	03/01	1.57	at	18/04	-0.9%
CNY	7.66	7.87	at	09/01	7.51	at	25/04	-2.4%
BRL	4.46	4.46	at	07/05	4.18	at	31/01	+0.6%
RUB	73.55	79.30	at	01/01	71.51	at	23/04	-7.3%
INR	78.54	82.00	at	04/02	76.84	at	03/04	-1.6%
At 9-5	-19						Var	iations

Equity indices

	Index	high	est'	19	lowe	est'	19	2019	2019(€)
CAC 40	5 313	5 592	at	23/04	4 611	at	03/01	+12.3%	+12.3%
S&P500	2 871	2 946	at	30/04	2 448	at	03/01	+14.5%	+16.6%
DAX	11 974	12 413	at	03/05	10 417	at	03/01	+13.4%	+13.4%
Nikkei	21 402	22 308	at	25/04	19 562	at	04/01	+6.9%	+9.0%
China*	80	86	at	09/04	68	at	03/01	+13.4%	+15.3%
India*	569	606	at	02/04	530	at	19/02	+2.3%	+3.9%
Brazil*	2 010	2 304	at	04/02	1 944	at	01/01	+5.9%	+5.3%
Russia*	646	682	at	23/04	572	at	01/01	+7.5%	+15.0%
At 9-5-19								Va	iriations

Variations * MSCI index

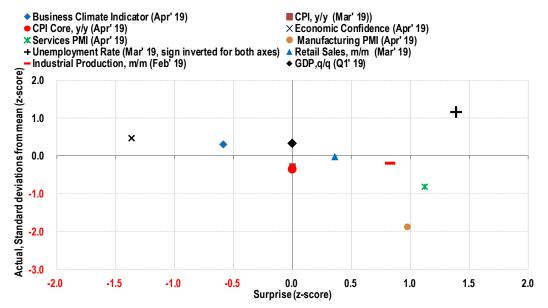




Pulse

Eurozone: pickup in economic activity in Q1 2019

Most leading economic indicators are in line, or even above, expectations. Activity in the manufacturing sector remains subdued, the Purchasing Managers Index (PMI) reaching only 47.9 in April. This poor performance is partially offset by the resilience of the PMI Services Index which is below its long-term average but still well above the 50 threshold (52.8 in April). The low level of unemployement regarding the historical average also sends a positive signal. Globally, economic growth went up in Q1 2019, to 0.4% q/q, after weak performances at the end of 2018 (growth reached respectively 0.1% and 0.2% in Q3 and Q4 2018). One can notice the economic recovery in Italy after the technical recession experienced in the second semester 2018, and the still buoyant Spanish growth.



Sources: INSEE, Markit, Bloomberg, calculs BNP Paribas

Indicators preview

One of the highlights of the week will be the German GDP number for the first quarter. Several releases will enable a better assessment of how the economy is doing in April: in France, we have the Banque de France industrial sentiment, in the US, small business sentiment, retail sales, industrial production, housing starts and building permits. For May we will have in the US the NAHB housing market index, the Philadelphia Fed index and University of Michigan sentiment. We will also have first quarter labour market data for the eurozone and France, as well as inflation for April in France and Germany.

Date	Country/Region	Event	Period	Survey	Prior
05/13/2019	France	Bank of France Ind. Sentiment	April		100
05/14/2019	Germany	CPI EU Harmonized MoM	April	1.0%	1.0%
05/14/2019	Eurozone	Industrial Production SA MoM	Mar		-0.2%
05/14/2019	United States	NFIB Small Business Optimism	April	102.0	101.8
05/15/2019	Germany	GDP SA QoQ	1Q	0.4%	0.0%
05/15/2019	France	CPI EU Harmonized MoM	April		0.3%
05/15/2019	Eurozone	Employment QoQ	1Q		0.3%
05/15/2019	Eurozone	GDP SA QoQ	1Q	0.4%	0.4%
05/15/2019	United States	Retail Sales Advance MoM	April	0.3%	1.6%
05/15/2019	United States	Industrial Production MoM	April	0.1%	-0.1%
05/15/2019	United States	NAHB Housing Market Index	May	64	63
05/16/2019	France	ILO Unemployment Rate	1Q	8.7%	8.8%
05/16/2019	United States	Housing Starts	April	1.228e+06	1.139e+06
05/16/2019	United States	Building Permits	April	1.295e+06	1.269e+06
05/16/2019	United States	Philadelphia Fed Business Outlook	May	10.0	8.5
05/17/2019	Eurozone	EU27 New Car Registrations	April		-3.9%
05/17/2019	United States	University of Michigan Sentiment	May	97.7	97.2
				Source: Bloomh	era RNP Parihas

Source: Bloomberg, BNP Paribas



Economic scenario

UNITED STATES

- Growth is expected to slow to 2.3% this year. Trade war uncertainty acts as a drag, the housing market is softening, corporate investment should slow, as well as exports in reaction to the past strengthening of the dollar against a broad range of currencies.
- Core inflation remains well under control and has eased a bit.
- Following the dovish message from the January FOMC meeting, markets are pricing in a policy easing in the course of 2020.

CHINA

- Economic growth continues to slow, with an export outlook severely darkened by US tariff hikes.
- 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, private domestic demand should be affected by the knock-on effect of weakening exports and the continued moderation in the property market. Fiscal measures should support consumer spending.

EUROZONE

- The slowdown is becoming increasingly evident, especially in the German economy, which has suffered from one-off factors but also from a slowdown of exports to China. Capacity constraints also play a role. Business climate in the manufacturing sector continues to decline. Italy has now entered a technical recession with quarterly growth negative in the third and fourth quarter of 2018.
- Inflation is now expected to decrease following the past drop in the oil price, 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. We do not expect the ECB to move rates this year (see below).

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. We have changed the forecast for 10 year treasury yields and now expect a yield of 2.80% by mid-year and 2.70% at the end of the year.
- As the ECB confirmed that key rates won't change this year, the forecast for 10 year Bund yields and now expect a yield of 0.30% by mid-year and Source: BNP Paribas GlobalMarkets (e: Forecasts) 0.40% at the end of the year.
- No change expected in Japan.
- The prospect of a narrowing bond yield differential between the US and the eurozone should cause a strengthening of the euro, all the more so considering it is still below its long-term fair value (around 1.34).

	GI	GDP Growth					
%	2018	2019 e	2020 e		2018	2019 e	2020 e
Advanced	2.2	1.5	1.3		2.0	1.4	1.6
United-States	2.9	2.3	1.8		2.4	1.7	2.0
Japan	0.8	0.2	0.3		1.0	0.5	0.5
United-Kingdom	1.4	1.1	1.5		2.5	2.0	1.9
Euro Area	1.8	0.9	1.0		1.8	1.2	1.4
Germany	1.4	0.7	0.9		1.9	1.4	1.7
France	1.6	1.2	1.2		2.1	1.2	1.7
Italy	0.8	0.0	0.5		1.3	0.9	1.2
Spain	2.6	2.1	1.7		1.7	1.0	1.4
Emerging	4.5	4.4	4.7		4.8	4.6	4.2
China	6.6	6.2	6.0		2.1	1.6	2.0
India*	7.4	7.6	7.8		3.4	3.3	4.1
Brazil	1.1	2.0	3.0		3.7	3.8	3.6
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

Intere	est rates, %	2019						
End of	period	Q1	Q2e	Q3e	Q4e	2018	2019e	2020e
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	2.80	2.75	2.70	2.69	2.70	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	0.30	0.30	0.30	0.25	0.30	0.40
	OAT 10y	0.26	0.65	0.65	0.60	0.71	0.60	0.70
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	-0.20
	JGB 10y	-0.09	-0.03	-0.05	-0.05	0.00	-0.05	-0.20

Source: BNP Paribas GlobalMarkets (e: Forecasts)

Exch	ange Rates	2019						
End of	period	Q1	Q2e	Q3e	Q4e	2018	2019e	2020e
USD	EUR / USD	1.12	1.17	1.18	1.20	1.14	1.20	1.25
	USD / JPY	111.0	108.0	105.0	100.0	110.0	100.0	90.0
	GBP / USD	1.30	1.38	1.40	1.45	1.27	1.45	1.51
	USD / CHF	1.00	0.97	0.97	0.97	0.99	0.97	0.93
EUR	EUR / GBP	0.85	0.85	0.84	0.83	0.90	0.83	0.83
	EUR / CHF	1.12	1.14	1.15	1.16	1.13	1.16	1.16
	EUR / JPY	124.0	126.0	124.0	120.0	125.0	120.0	113.0



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ECOTY WEEK

What is the main event this week? The answer is in your two minutes of economy

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