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BNP PARIBAS

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EUROPE: THE REACTION OF UNCERTAINTY TO COVID-19 AND THE WAR IN UKRAINE

Uncertainty matters greatly for households and businesses when taking decisions. It can have many causes: economic, economic policy, political or even geopolitical. Survey data of the European Commission show that the Covid-19 pandemic has caused a huge jump in uncertainty, followed by a gradual decline. The war in Ukraine has triggered another, albeit more limited, increase. It will be important to monitor the development of uncertainty in the coming months at the level of consumers, businesses and individual countries. In the absence of a decline, one should expect that the negative impact shows up in spending and activity data.

Uncertainty matters greatly for households and businesses when taking decisions. Visibility about the future path of earnings, employment, sales volume, profits, etc. declines when uncertainty increases. This may trigger a wait-and-see attitude whereby postponed spending and investment decisions weigh on growth. The assessment of the potential consequences of uncertainty supposes that the latter can be appropriately identified and measured. The former refers to the fact that uncertainty can have many causes: economic, economic policy, political or even geopolitical. Depending on the nature of the uncertainty, the consequences may differ.

Measuring uncertainty is a challenge. A widely used metric is based on media coverage. This offers the advantage that specific sources of uncertainty can be monitored. In this respect, chart 1 shows a geopolitical risk index. The start of the war in Ukraine led to an exceptionally large increase in this index although the attacks on 11 September 2001 had an even bigger impact. Media coverage, after spiking, tends to decline swiftly but this does not mean that the uncertainty confronted by economic agents has disappeared.

This calls for surveys in which people are asked how they feel about the future. Since May 2021, the European Commission has added an uncertainty question to its business and consumer surveys¹. Participants indicate how difficult it is to make predictions about their future business/financial situation. This implies that fluctuations in the answers can have many causes. As shown in chart 2, the spreading of Covid-19 infections in the spring of 2020 caused a huge increase in uncertainty of households and businesses. This was followed by a gradual decline but, one year later, uncertainty was still above its pre-pandemic level. In the summer of last year, it started to rise again and following the war in Ukraine, uncertainty jumped in March but hardly changed in April. Chart 3 provides greater detail. Interestingly, consumers' uncertainty has been on a rising trend since summer last year, which probably reflects the impact of high and rising inflation. Uncertainty in retail trade shows the waves of lockdowns and mobility restrictions and, more recently, probably also the impact of inflation.

Table 1 compares the change in uncertainty triggered by the Covid-19 pandemic and the war in Ukraine². Looking at the cumulative increase

1. The data cover the EU countries as well as key economic sectors (consumers, industry, services, retail trade, construction). Source: https://ec.europa.eu/info/sites/default/files/bcs_user_guide.pdf.

2. The monthly changes are expressed in z-score to take into account possible differences in the mean and standard deviation of the various series.

over two months, Covid-19 caused a far bigger increase of aggregate uncertainty than the war in Ukraine. Whereas the former saw rising uncertainty in March and April 2020, as the pandemic was spreading, the latter led to an increase in uncertainty in March, followed by a small decline in April. The effect of Covid-19 on uncertainty at the aggregate level as well as for consumers and business sectors, was similar for the European Union countries and the euro area. This also applies to uncertainty caused by the war in Ukraine, except for consumers' uncertainty, which increased more in the euro area.

Finally table 2 looks at the change in uncertainty in following the war in Ukraine. All countries except Malta saw an increase in March but the dispersion is considerable. Uncertainty declined in most countries in April except for Denmark, Greece - where there was a big increase -, Spain, France, Hungary, the Netherlands and Slovakia. It was stable in Portugal. It will be important to monitor the development of uncertainty in the coming months at the level of consumers, businesses and individual countries. In the absence of a decline, one should expect that the impact shows up in spending and activity data.

William De Vijlder

The author thanks Elias Krief for the data analysis used in this text.

GEOPOLITICAL RISK INDEX (7-DAY MOVING AVERAGE)

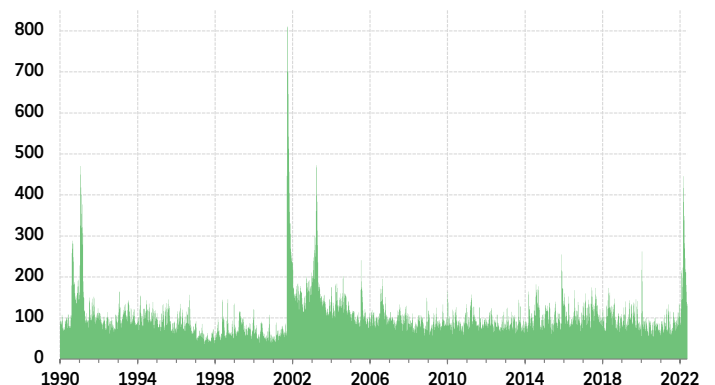


CHART 1

SOURCE: GEOPOLITICAL RISK (GPR) INDEX ([MATTEIOACOVIELLO.COM](https://www.matteioiacoviello.com))

It will be important to monitor the development of uncertainty in the coming months at the level of consumers, businesses and individual countries. In the absence of a decline, one should expect that the negative impact shows up in spending and activity data.



AGGREGATE UNCERTAINTY (LEVEL)

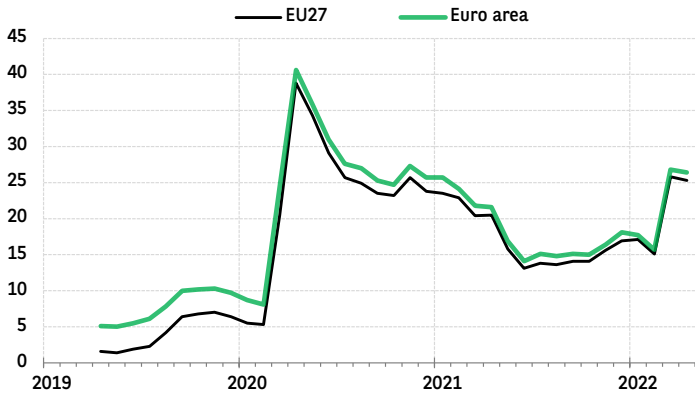


CHART 2

SOURCE: EUROPEAN COMMISSION, BNP PARIBAS

EURO AREA: UNCERTAINTY LEVEL

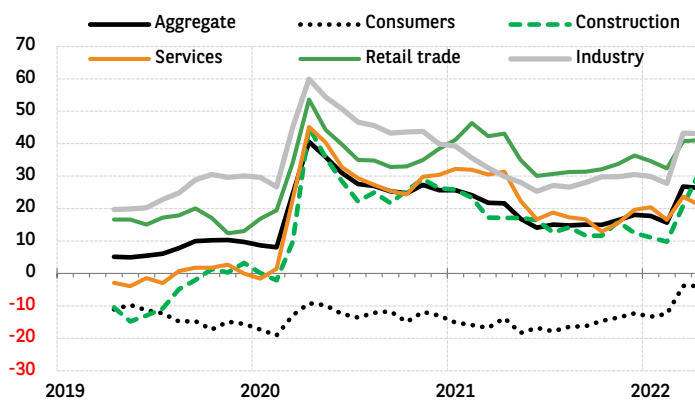


CHART 3

SOURCE: EUROPEAN COMMISSION, BNP PARIBAS

UNCERTAINTY IN THE EUROPEAN UNION AND THE EURO AREA (MONTHLY CHANGE IN Z-SCORE)

	EU27					
	Aggregate	Consumers	Construction	Retail trade	Services	Industry
Covid-19, March 2020	3.1	0.0	1.4	2.6	3.4	3.4
Covid-19, April 2020	3.7	4.4	4.6	3.5	3.5	2.7
Sum	6.8	4.4	6.0	6.1	6.9	6.1
War in Ukraine, March 2022	2.1	2.3	1.3	1.5	1.0	2.8
War in Ukraine, April 2022	-0.2	-0.1	1.1	-0.1	-0.6	-0.2
Sum	1.9	2.2	2.3	1.4	0.5	2.6
	Euro area					
	Aggregate	Consumers	Construction	Retail trade	Services	Industry
Covid-19, March 2020	3.4	2.3	1.4	2.6	3.3	3.4
Covid-19, April 2020	3.3	1.3	4.5	3.5	3.5	2.7
Sum	6.7	3.6	5.9	6.1	6.8	6.1
War in Ukraine, March 2022	2.2	3.3	1.3	1.4	1.0	2.8
War in Ukraine, April 2022	-0.2	-0.1	1.2	-0.1	-0.5	-0.2
Sum	2.0	3.2	2.5	1.4	0.5	2.7

TABLE 1

SOURCE: EUROPEAN COMMISSION, BNP PARIBAS

UNCERTAINTY AT THE COUNTRY LEVEL (MONTHLY CHANGE IN Z-SCORE)*

	March 2022	April 2022
EU27	2.1	-0.2
Euro area	2.2	-0.2
Belgium	2.4	-0.6
Bulgaria	1.3	-1.5
Czech Republic	1.4	-0.4
Denmark	1.3	0.7
Germany	2.6	-0.4
Estonia	2.5	-0.7
Ireland	2.1	-0.7
Greece	1.1	1.9
Spain	1.8	0.4
France	1.5	0.9
Croatia	1.4	-0.9
Italy	2.6	-1.0
Cyprus	2.2	-1.5
Latvia	2.5	-0.7
Lithuania	2.5	-0.6
Luxembourg	2.3	-1.0
Hungary	0.7	0.4
Malta	-0.3	-0.5
Netherlands	2.2	0.3
Austria	1.9	-0.1
Poland	2.3	-1.0
Portugal	2.0	0.0
Romania	0.6	-1.7
Slovenia	2.1	-2.0
Slovakia	1.7	0.8
Finland	2.6	-0.8
Sweden	2.6	-0.5

*Cells close to the median of the series are shown in yellow, those well above the median are in red and those far below are in green.

TABLE 2

SOURCE: EUROPEAN COMMISSION, BNP PARIBAS



MARKETS OVERVIEW

OVERVIEW

Week 13-5-22 to 20-5-22

▼ CAC 40	6 363	▶ 6 285	-1.2 %
▼ S&P 500	4 024	▶ 3 901	-3.0 %
▶ Volatility (VIX)	28.9	▶ 29.4	+0.6 pb
▶ Euribor 3M (%)	-0.40	▶ -0.35	+5.5 bp
▶ Libor \$ 3M (%)	1.44	▶ 1.51	+6.3 bp
▶ OAT 10y (%)	1.30	▶ 1.31	+1.1 bp
▼ Bund 10y (%)	0.95	▶ 0.94	-0.9 bp
▼ US Tr. 10y (%)	2.94	▶ 2.80	-14.6 bp
▶ Euro vs dollar	1.04	▶ 1.06	+1.6 %
▶ Gold (ounce, \$)	1 815	▶ 1 844	+1.6 %
▶ Oil (Brent, \$)	111.7	▶ 112.7	+0.9 %

MONEY & BOND MARKETS

Interest Rates

€ ECB	0.00	0.00 at 03/01	0.00 at 03/01
Eonia	-0.51	-0.51 at 03/01	-0.51 at 03/01
Euribor 3M	-0.35	-0.35 at 19/05	-0.58 at 05/01
Euribor 12M	0.35	0.35 at 20/05	-0.50 at 05/01
\$ FED	1.00	1.00 at 05/05	0.25 at 03/01
Libor 3M	1.51	1.51 at 20/05	0.21 at 03/01
Libor 12M	2.73	2.75 at 04/05	0.58 at 03/01
£ BoE	1.00	1.00 at 05/05	0.25 at 03/01
Libor 3M	1.36	1.36 at 20/05	0.26 at 03/01
Libor 12M	0.81	0.81 at 03/01	0.81 at 03/01

highest 22

lowest 22

Yield (%)

highest 22

lowest 22

€ AVG 5-7y	1.28	1.43 at 09/05	-0.04 at 03/01
Bund 2y	0.22	0.33 at 06/05	-0.83 at 04/03
Bund 10y	0.94	1.14 at 06/05	-0.14 at 24/01
OAT 10y	1.31	1.53 at 06/05	0.15 at 04/01
Corp. BBB	2.88	2.97 at 09/05	0.90 at 05/01
\$ Treas. 2y	2.58	2.69 at 05/05	0.70 at 04/01
Treas. 10y	2.80	3.13 at 06/05	1.63 at 03/01
High Yield	7.77	7.80 at 19/05	5.07 at 03/01
£ gilt. 2y	1.55	1.80 at 21/04	0.69 at 03/01
gilt. 10y	1.88	2.01 at 21/04	0.97 at 03/01

At 20-5-22

At 20-5-22

EXCHANGE RATES

1€ =	highest 22	lowest 22	2022	
USD	1.06	1.15 at 10/02	1.04 at 13/05	-7.2%
GBP	0.85	0.86 at 06/05	0.83 at 14/04	+0.9%
CHF	1.03	1.06 at 10/02	1.00 at 04/03	-0.6%
JPY	135.16	139.36 at 21/04	125.37 at 04/03	+3.2%
AUD	1.50	1.62 at 04/02	1.43 at 05/04	-4.0%
CNY	7.05	7.29 at 10/02	6.87 at 14/04	-2.8%
BRL	5.14	6.44 at 06/01	5.01 at 21/04	-18.9%
RUB	64.93	164.76 at 07/03	64.93 at 20/05	-23.9%
INR	81.87	85.96 at 11/02	80.30 at 05/05	-3.1%

At 20-5-22

Change

COMMODITIES

Spot price, \$	highest 22	lowest 22	2022	2022(€)	
Oil, Brent	112.7	128.2 at 08/03	79.0 at 03/01	+43.7%	+54.8%
Gold (ounce)	1 844	2 056 at 08/03	1 785 at 28/01	+1.2%	+9.0%
Metals, LMEX	4 560	5 506 at 07/03	4 369 at 12/05	+1.3%	+9.1%
Copper (ton)	9 451	10 702 at 04/03	9 104 at 12/05	-3.0%	+4.5%
wheat (ton)	431	4.7 at 17/05	281 at 14/01	+81.5%	+95.4%
Corn (ton)	306	3.2 at 16/05	226 at 03/01	+3.4%	+44.1%

At 20-5-22

Change

EQUITY INDICES

Index	highest 22	lowest 22	2022	Year 2022 to 20-5, €
World				
MSCI World	2 656	3 248 at 04/01	2 640 at 12/05	-17.8%
North America				
S&P500	3 901	4 797 at 03/01	3 901 at 19/05	-18.1%
Europe				
EuroStoxx50	3 657	4 392 at 05/01	3 505 at 08/03	-14.9%
CAC 40	6 285	7 376 at 05/01	5 963 at 08/03	-1.2%
DAX 30	13 982	16 272 at 05/01	12 832 at 08/03	-12.0%
IBEX 35	8 485	8 886 at 10/02	7 645 at 07/03	-0.3%
FTSE100	7 390	7 672 at 10/02	6 959 at 07/03	+0.0%
Asia				
MSCI, loc.	1 079	1 165 at 05/01	1 024 at 08/03	-0.6%
Nikkei	26 739	29 332 at 05/01	24 718 at 09/03	-7.1%
Emerging				
MSCI Emerging (\$)	1 035	1 267 at 12/01	988 at 12/05	-1.6%
China	67	86 at 20/01	59 at 15/03	-19.2%
India	752	891 at 13/01	732 at 19/05	-7.1%
Brazil	1 680	2 003 at 04/04	1 372 at 06/01	+2.3%

At 20-5-22

Change

PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)

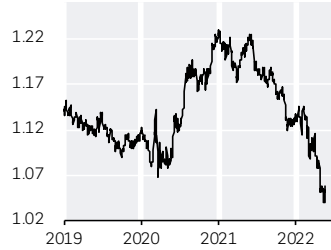
Year 2022 to 20-5, \$	Year 2022 to 20-5, €
Oil & Gas	+57.8%
Commodities	+17.2%
Telecoms	+11.7%
Health	+11.6%
Utilities	+8.1%
Food industry	+7.0%
Insurance	-0.3%
Media	-3.4%
Chemical	-7.5%
Index	-7.7%
Banks	-8.3%
Travel & leisure	-9.4%
Construction	-9.7%
Car	-10.6%
Real Estate	-16.5%
Industry	-16.7%
Technology	-18.7%
Consumption Goods	-19.7%
Retail	-20.7%

SOURCE: REFINITIV, BNP PARIBAS,



MARKETS OVERVIEW

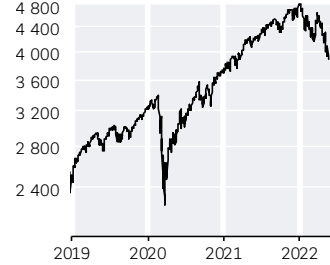
EURO-DOLLAR



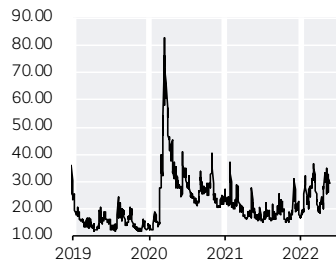
EUROSTOXX50



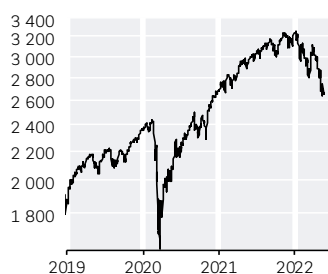
S&P500



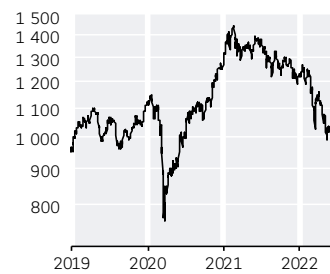
VOLATILITY (VIX, S&P500)



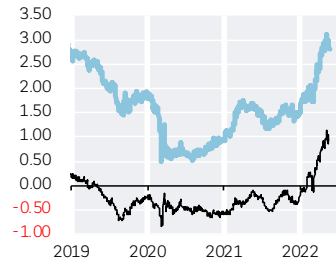
MSCI WORLD (USD)



MSCI EMERGING (USD)

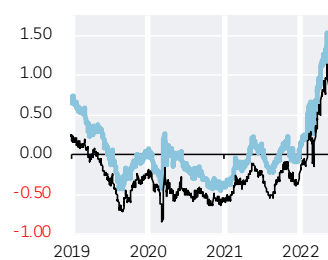


10Y BOND YIELD, TREASURIES VS BUND



—Bunds —US Treasuries

10Y BOND YIELD



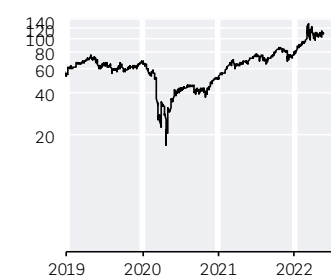
—Bunds —OAT

10Y BOND YIELD & SPREADS

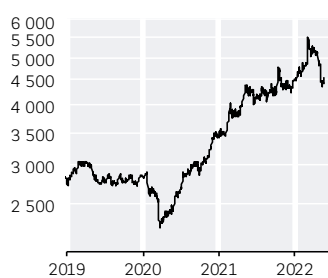
Year 2022 to 20-5

3.49%	Greece	235 bp
3.15%	Italy	201 bp
2.25%	Spain	111 bp
2.17%	Portugal	103 bp
1.72%	Belgium	58 bp
1.53%	France	39 bp
1.48%	Finland	34 bp
1.34%	Austria	20 bp
1.32%	Ireland	18 bp
1.21%	Netherlands	7 bp
1.14%	Germany	

OIL (BRENT, USD)



METALS (LMEX, USD)



GOLD (OUNCE, USD)



SOURCE: REFINITIV, BNP PARIBAS



ECONOMIC PULSE

6

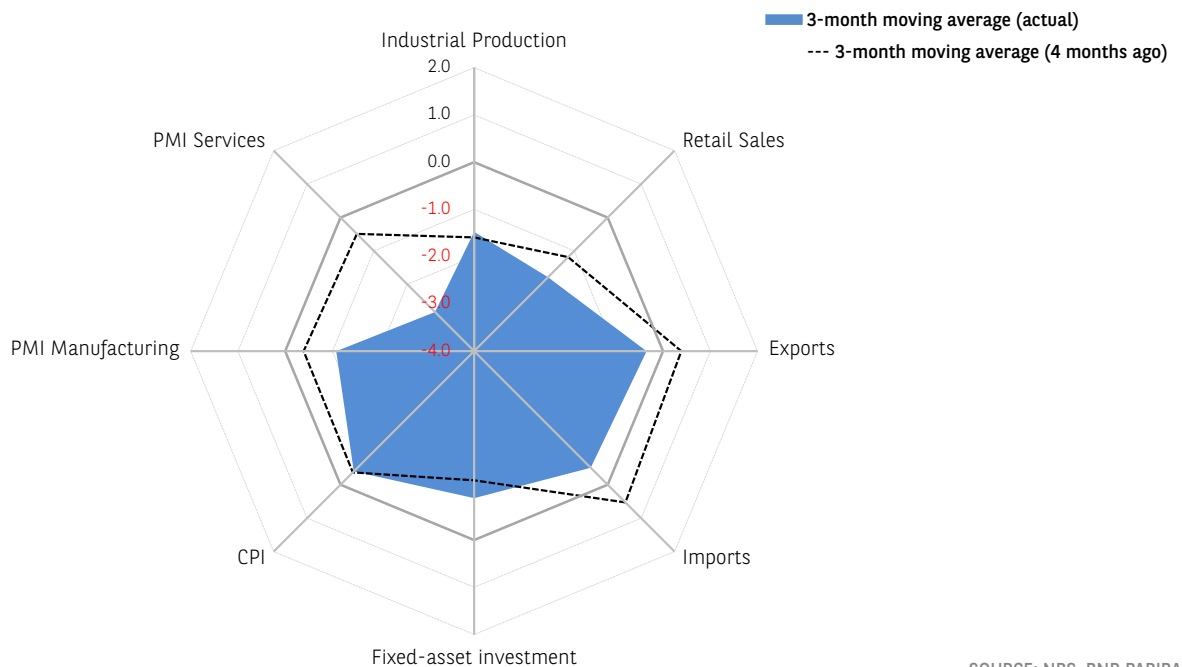
CHINA: ECONOMIC CONTRACTION

China's economic growth started to slow down in March, then activity contracted in April (industrial production: -2.9% year-on-year, services production: -6.1% y/y). This rapid deterioration has principally resulted from mobility restrictions implemented in various provinces of the country in response to the epidemic wave. Most importantly, stringent lockdowns have been imposed in some major industrial and port regions (notably Shanghai), which has dampened activity in manufacturing factories, disturbed transport of goods and leading to supply chain disruptions in many sectors. Overall, the health situation and the level of mobility restrictions in China are improving in May. Local economic activity may therefore be able to recover at least slightly.

However, downside risks are elevated. On the one hand, the manufacturing sector has started to be affected by the effects of the deterioration in the world environment due to the war in Ukraine. World trade growth has slowed, which has contributed to the weaker growth in Chinese exports of goods (which fell to +3.7% y/y in April from +14.9% in Q1 2022). On the other hand, household consumption should struggle to recover in spite of the easing in lockdown measures. Consumer price inflation remains very moderate, but yet it is increasing (+2,1% y/y in April, up from 0.9% in January and February). Above all, the labour market is deteriorating rapidly. The total unemployment rate (based on urban surveys) rose from 5.1% at the end of 2021 to 6.1% in April, and the unemployment rate of young people between 16 and 24 years of age reached a record high point of 18.2%.

Christine Peltier

CHINA: QUARTERLY CHANGES



The indicators in the radar are all transformed into 'z-scores' (deviations from the long-term average, as standard deviations). These z-scores have mean zero and their values are between -4 and +2. In the radar chart, the blue area shows the actual conditions of economic activity. It is compared with the situation four months earlier (dotted-line). An expansion of the blue area compared to the dotted area signals an increase in the variable.



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ECONOMIC PULSE

ITALY: INDUSTRY IS LOSING STEAM

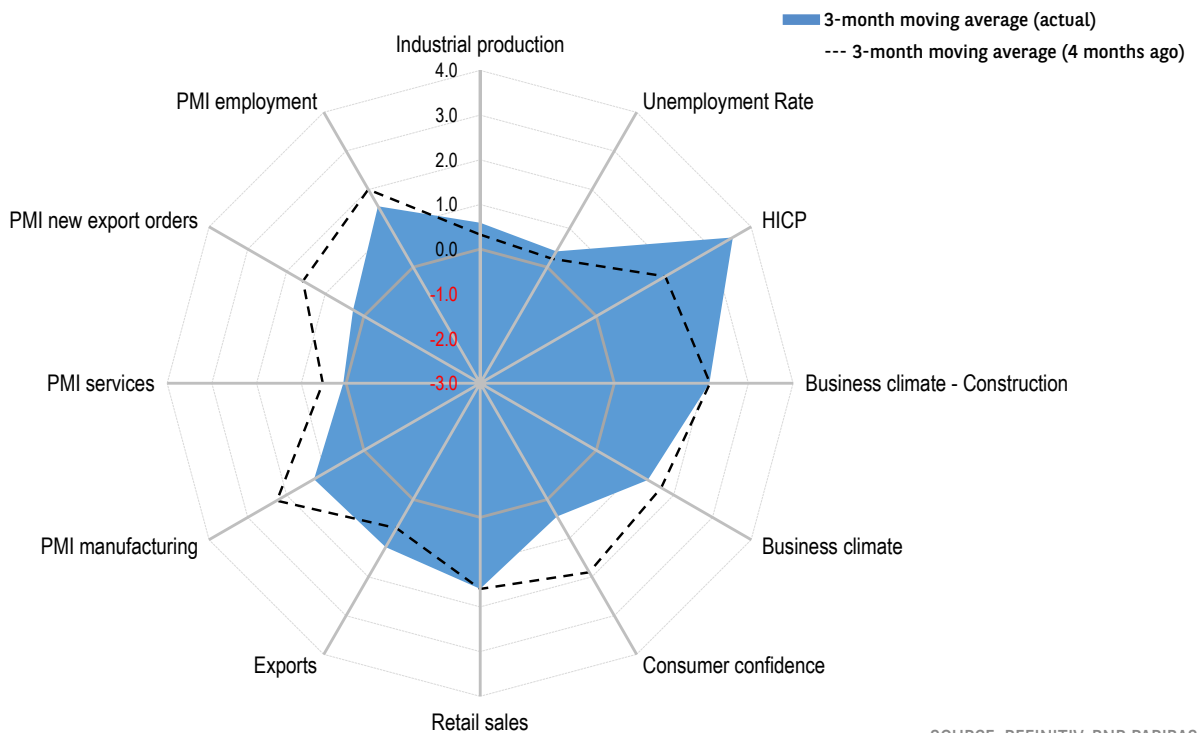
The Italian economy began 2022 on a wrong footing, with a 0.2% q/q contraction in real GDP in the first quarter. The country has been hit hard by the war in Ukraine and by lasting disruption in world trade. These factors are having a particularly strong effect on economies with a large industrial base, as is the case in Italy. Inflation, which was 6.3% y/y in April (down from 6.8% y/y in March), has also had a significant negative effect on household confidence. According to the European Commission, consumer confidence increased very slightly in April (the balance of opinion rose 1.9 points to -22), but March had been the worst month since January 2014.

A loss of dynamism in the industrial sector is also increasingly visible. Industrial production was unchanged in March and dropped by 0.7% q/q in Q1 2022. The PMI for the sector has fallen steadily since December 2021 – although it remained relatively high at 54.5 in April – and the new export orders component is now close to the contraction zone (50.1 in April). Conversely, the services PMI has been trending higher since the beginning of the year (55.7 in April, up 2.7 points since December 2021) thanks to the ending of health protection measures and the stronger recovery in tourism. The PMI component for employment in the service sector has reached its highest level since July 2007. As in other European countries, services are resuming their role as the main engine of growth, in the face of a slowdown in the industrial sector due to substantial constraints on production capacity.

Despite these supply-side constraints and the inflationary shock, the recovery in the labour market has continued this year. The unemployment rate fell to 8.3% in March. Excluding the April 2020 figure (which was “distorted” by the beginning of the lockdown), unemployment is at its lowest since June 2011. Employment increased by 80,660 in March and by 130,000 over the first quarter of 2022. However, it remains nearly 190,000 below the peak reached in June 2019. The employment rate remains low in comparison with other industrialised nations at 59.9%. It has been nevertheless at its highest level since the current data series began in January 2004.

Guillaume Derrien

ITALY: QUARTERLY CHANGES



SOURCE: REFINITIV, BNP PARIBAS

The indicators in the radar are all transformed into 'z-scores' (deviations from the long-term average, as standard deviations). These z-scores have mean zero and their values are between -3 and +4. In the radar chart, the blue area shows the actual conditions of economic activity. It is compared with the situation four months earlier (dotted-line). An expansion of the blue area compared to the dotted area signals an increase in the variable.



ECONOMIC PULSE

COVID-19 PANDEMIC: THE SITUATION IN EUROPE CONTINUES TO IMPROVE RAPIDLY

According to the latest data from Johns Hopkins University, more than 4 million new cases were recorded around the world between 12 and 18 May, an increase of 5% on the previous week (Chart 1). This represents the first weekly increase since the beginning of February. Looked at on a regional level, the situation in Europe improved significantly (-20%), and that in Africa stabilised. However, case numbers continued to climb in North and South America (17%). Asia saw the first increase after two months of virtually continuous falls. Meanwhile, 66% of the world's population has now received at least one dose of a Covid-19 vaccine (Chart 2).

Over the same period, visits to retail and leisure facilities remained at pre-pandemic levels in Belgium and Germany whilst in the USA the figure is significantly higher. Japan stands out for a very abrupt reversal of its position, falling sharply over the past week from 10% above the reference point to 12% below (moving seven-day average). France has seen a return to normal levels in recent days, and other countries, such as Spain, Italy and the UK, are now getting close to normal (Chart 3, blue line).

Lastly, the weekly proxy indicator of GDP was stable in France and Spain but continued to fall fairly markedly in Italy, the USA and the UK. In Germany, Belgium and Japan, the downturn is more recent but is also clearly visible in the latest data (Chart 3, black line). The OECD Tracker is based on Google Trends resulting from queries on consumption, the labour market, housing, industrial activity as well as uncertainty. The OECD calculates the tracker over a 2-year period (y/2y) to avoid the base effect of a comparison with 2020 data.

Tarik Rharrab

* Google Mobility Reports show how visits and length of stay at different places change compared to a baseline. The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020. A figure of negative 30% indicates that traffic was down 30% compared to a baseline. The reports show trends over several weeks with the most recent data representing approximately 2-3 days ago—this is how long it takes to produce the reports. In order to smooth the series, we use a seven-day moving average of the raw data in the Google Mobility Reports. Source: Google.

DAILY CONFIRMED COVID-19 CASES (7-DAY MOVING AVERAGE)

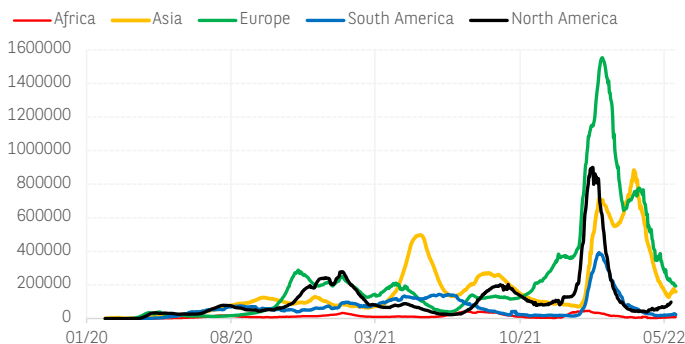


CHART 1

SOURCE: JOHNS-HOPKINS UNIVERSITY (05/19/2022), BNP PARIBAS

SHARE OF PEOPLE WHO RECEIVED AT LEAST ONE DOSE OF VACCINE

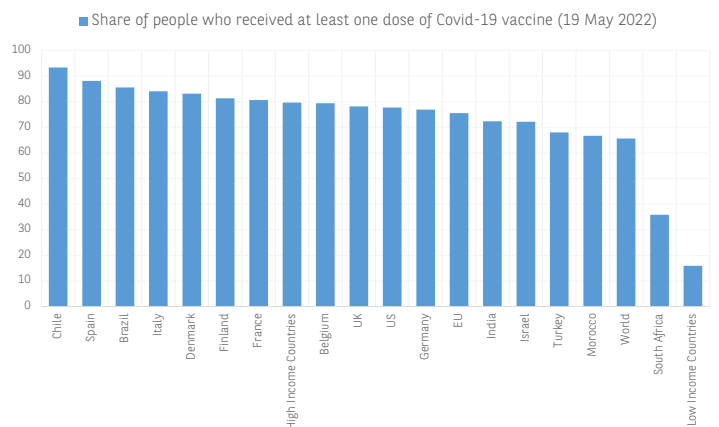


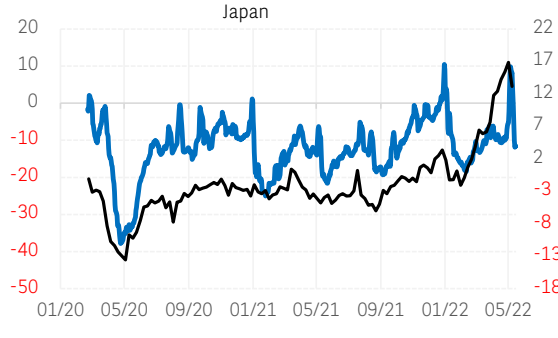
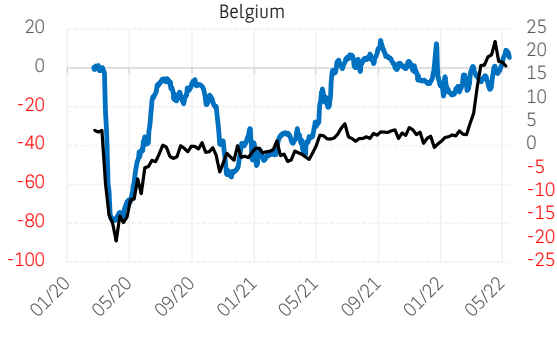
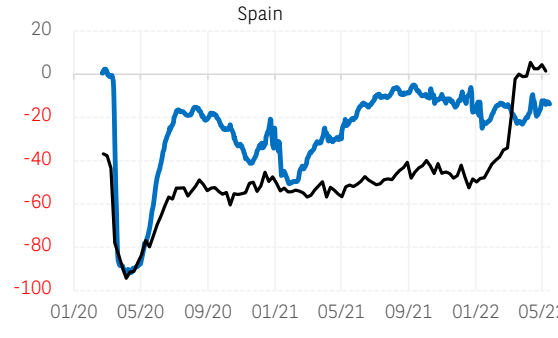
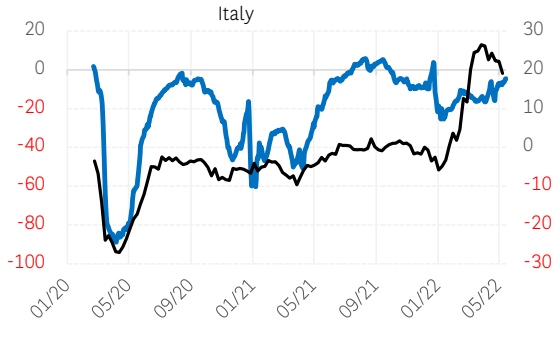
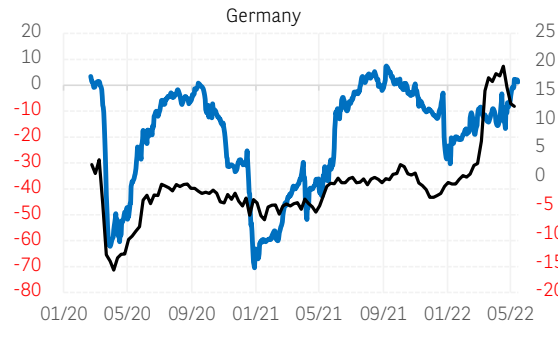
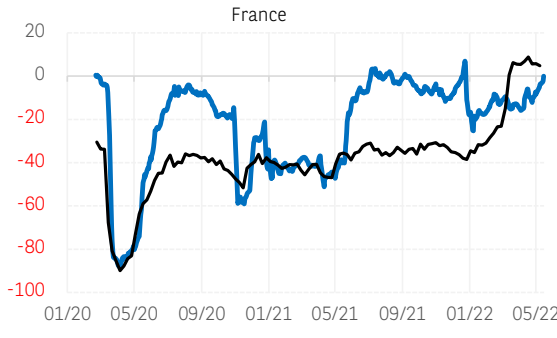
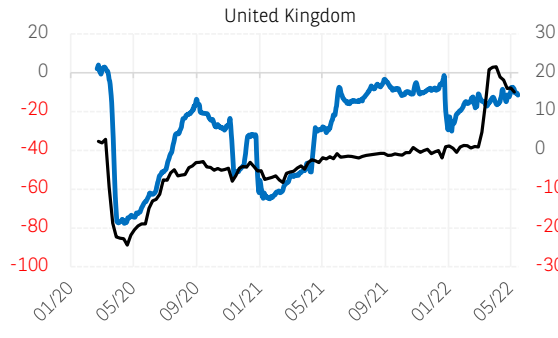
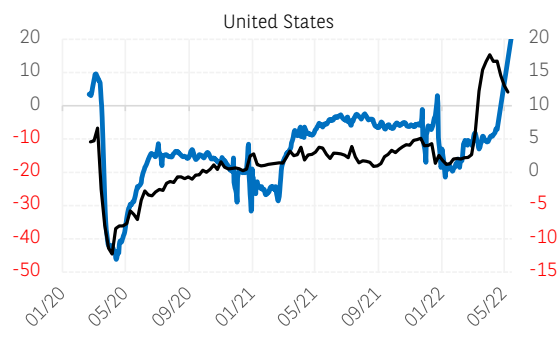
CHART 2

SOURCE: OUR WORLD IN DATA (05/19/2022), BNP PARIBAS



RETAIL AND RECREATION MOBILITY & OECD WEEKLY TRACKER

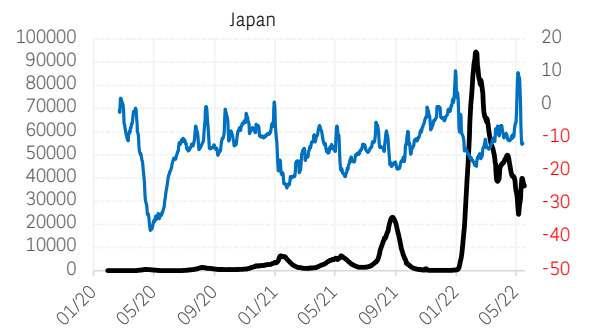
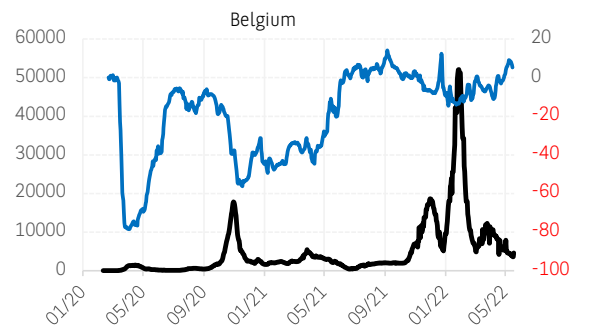
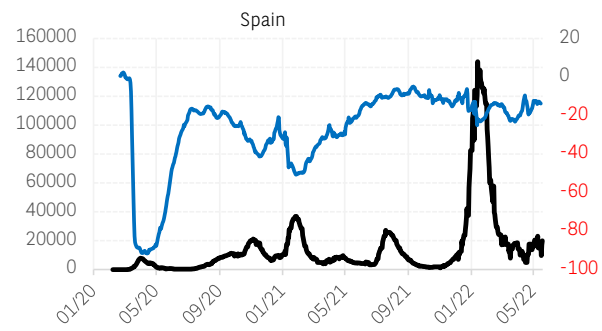
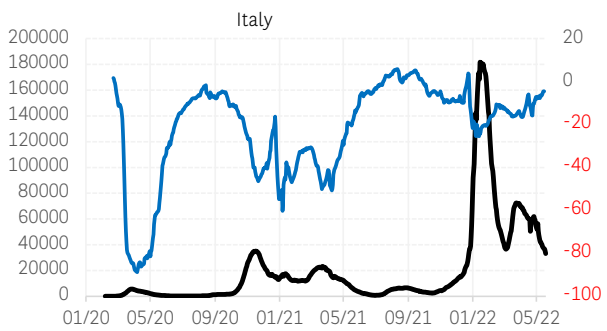
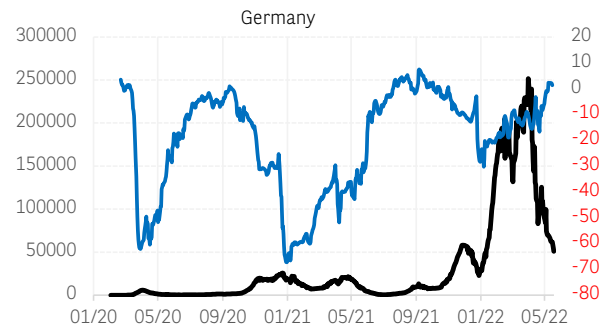
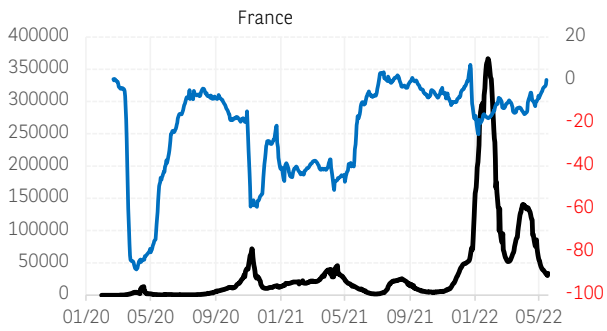
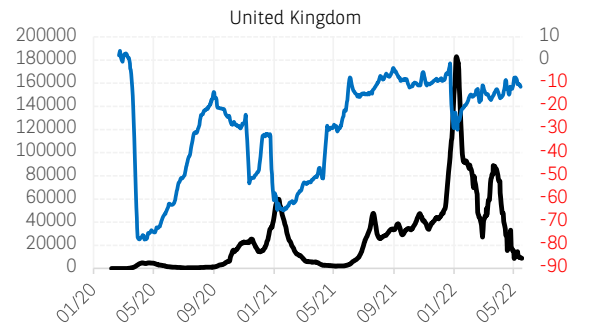
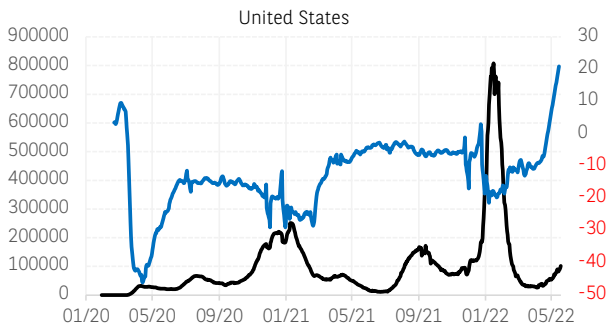
— Retail and recreation mobility (7-day moving average, % from baseline*) — OECD Weekly tracker, y/2y GDP growth [RHS]



SOURCE: OECD (05/19/2022), GOOGLE (05/19/2022), BNP PARIBAS

DAILY NEW CASES & RETAIL AND RECREATION MOBILITY

— Daily new confirmed cases of Covid-19 (7-day moving average)
 — Retail and recreation mobility (7-day moving average, % from baseline*)[RHS]



SOURCE: JOHNS-HOPKINS UNIVERSITY (05/19/2022), GOOGLE (05/19/2022), BNP PARIBAS

ECONOMIC SCENARIO

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UNITED STATES

Despite a surprising contraction in Q1 2022, the US economy remains dynamic and well supported by household consumption and business investment. The robustness of the labour market, which is at full employment, bolsters wages and household consumption. However, inflation, at its highest for four decades, weighs on purchasing power. As inflation is far beyond the Federal Reserve's objective and also more persistent than anticipated, monetary policy is being tightened sharply. The scaling back of the government's fiscal ambitions, especially its social welfare and environmental plans, may also contribute to moderate growth. Against this background, whilst avoiding a recession, the U.S. economy is expected to slow down clearly.

CHINA

Economic growth has slowed again markedly since March, after two months of improvement. Lockdown measures imposed in many regions in order to contain the Covid-19 epidemic, the continued correction in the real estate sector, the persisting weakness of private consumption and the effects of the war in Ukraine on commodity prices and world demand are major negative factors that will continue to constrain economic growth in the short-term. Consequently, the government increases fiscal policy support and the central bank enhances monetary easing measures..

EUROZONE

Following on from Q4 2021, the eurozone again saw positive but weak growth in Q1 2022. The surge in inflation that began in early 2021 has morphed into an inflationary shock. Inflation continues to be driven primarily by energy prices, but has climbed to new record levels nonetheless. In addition, it is now becoming more widespread and thus more persistent. Although the deterioration of business climate surveys remained limited up until April, consumer confidence has worsened more noticeably. The risk of a recession in the short term is increasing but, should there be one, it would only be technical (limited in duration and extent). The labour market remains robust and the economy still benefits from the cyclical momentum that existed prior to the war in Ukraine, fiscal measures that seek to cushion the impact of inflation on purchasing power, excess savings which are still available and the need to invest. In our scenario (no recession), we expect eurozone growth to reach 2.8% on average over 2022 and something similar (2.7%) in 2023. This scenario is in line with the April consensus for 2022 but is more optimistic for 2023. The risks are on the downside.

FRANCE

GDP growth has slowed markedly in the 1st quarter of 2022 (0% q/q after +0.8% in the 4th quarter of 2021), as a result of a decrease in household consumption (-1.3% q/q). Higher inflation has pressured households' purchasing power and should also weigh on Q2 expectations. In parallel, corporate investment maintained its growth (+0.7% q/q), as corporates have to cope with output capacity constraints. Overall, in 2022, GDP growth should ease to 3.2% (7% in 2021), against a background of higher inflation (4.8% expected in 2022 after 1.6% in 2021).

RATES AND EXCHANGE RATES

In the US, the Federal Reserve will continue its tightening policy at a swift pace. We expect 50bp hikes at the June, July and September meetings, followed by an increase of 25bp in November and December. The terminal rate of 3.00-3.25% to be reached in 2023 Q1. In addition, the reduction of the size of the balance sheet (quantitative tightening) will influence the level of interest rates. The Fed's hawkish stance is motivated by particularly elevated inflation, a strong economy and very low policy rates. These policy changes should only put limited upward pressure on long-term Treasury yields considering that the market has anticipated to a large degree the policy tightening. In addition, as the rate hike cycle continues, bond investors will start to price the prospect of slower growth and the decline of inflation.

In the euro area, the jump in uncertainty and commodity prices are weighing on the sentiment of companies and households. Confronted with high and widespread inflation, the ECB has changed its tone. We expect a first hike of the deposit rate in September although an earlier move, on the occasion of the July meeting, is becoming

increasingly likely. A further rate hike will follow bringing the deposit rate to 0.00% at the end of this year. 2023 should see several rate increase, with a deposit rate at 1.25% at the end of the year. This should push bond yields higher but also lead to a widening of certain sovereign spreads.

The Bank of Japan is expected to maintain its current policy stance in the near term but raise its short-term policy rate from -0.10% to the 0-0.10% range in the latter part of 2023, whilst allowing the 10-year JGB yield to drift higher. These decisions would be based on an increased emphasis on the side effects of the negative interest rate policy and concern about the risk of further yen weakening and its impact on households via higher import prices.

We expect the dollar to weaken versus the euro, considering that both the Federal Reserve and the ECB will tighten policy, that the long-term interest rate differential should narrow and that the euro is undervalued versus the dollar. The increased policy divergence between the Fed and the Bank of Japan should cause an appreciation of the dollar versus the yen but in the latter part of 2023, we expect the yen to appreciate following the change in monetary policy of the Bank of Japan.

GDP GROWTH

%	GDP Growth			Inflation*		
	2021	2022 e	2023 e	2021	2022 e	2023 e
United-States*	5.7	3.7	2.5	4.7	6.5	2.8
Japan	1.7	1.6	2.0	-0.2	1.5	1.1
United-Kingdom*	7.5	3.6	1.7	2.5	7.4	3.3
Euro Area*	5.3	2.8	2.7	2.6	7.3	4.0
Germany	2.9	2.1	3.4	3.2	6.6	3.6
France	7.0	3.2	2.5	2.1	5.3	2.5
Italy	6.6	2.8	2.2	2.0	6.4	2.6
Spain	5.0	4.8	2.7	3.0	8.1	3.5
China	7.7	4.8	5.1	0.9	2.4	2.7
India**	8.1	9.5	7.3	5.1	6.3	5.2
Brazil	5.0	-0.5	0.0	8.3	9.0	5.7
Russia	4.5	-8.5	3.1	7.0	18.2	5.0

SOURCE: BNP PARIBAS GROUP ECONOMIC RESEARCH (E: ESTIMATES & FORECASTS)
*FISCAL YEAR FROM 1ST APRIL OF YEAR N TO MARCH 31ST OF YEAR N+1
** LAST UPDATE 05/06/2022

INTEREST & EXCHANGE RATES

Interest rates, %		Q1 2022	Q2 2022 e	Q3 2022 e	Q4 2022 e	Q4 2023 e
End of period						
US	Fed Funds (upper limit)**	0.50	1.50	2.50	3.00	3.25
	T-Note 10y	2.33	2.50	2.60	2.70	2.60
	Deposit rate**	-0.50	-0.50	-0.25	0.00	1.25
Ezone	Bund 10y	0.51	0.75	0.90	1.00	1.20
	OAT 10y	0.84	1.20	1.40	1.50	1.70
	BTP 10y	1.97	2.45	2.75	3.00	3.20
	BONO 10y	1.37	1.75	2.00	2.15	2.35
UK	Base rate	0.75	1.00	1.25	1.25	1.75
	Gilts 10y	1.59	1.75	1.90	2.00	2.00
Japan	BoJ Rate	-0.02	-0.10	-0.10	-0.10	0.10
	JGB 10y	0.21	0.25	0.25	0.25	0.45
Exchange Rates						
End of period		Q1 2022	Q2 2022 e	Q3 2022 e	Q4 2022 e	Q4 2023 e
USD	EUR / USD	1.11	1.11	1.13	1.14	1.20
	USD / JPY	121	125	124	123	115
	GBP / USD	1.32	1.29	1.31	1.33	1.40
EUR	EUR / GBP	0.85	0.86	0.86	0.86	0.86
	EUR / JPY	135	139	140	140	138
Brent						
End of period		Q1 2022	Q2 2022 e	Q3 2022 e	Q4 2022 e	Q4 2023 e
Brent*	USD/bbl	107	113	115	110	105

FORECASTS PRODUCED ON 2 MAY 2022. SOURCE: BNP PARIBAS (E: ESTIMATES & FORECASTS)
(MARKET ECONOMICS, INTEREST RATE STRATEGY, FX STRATEGY, COMMODITIES DESK STRATEGY)
* BASE CASE ** LAST UPDATE 06/05/2022



BNP PARIBAS

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CALENDAR

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LATEST INDICATORS

In China, the data for April show the impact of the Covid-19 infections. Industrial production is down compared to last year and for retail sales, the contraction is huge (-11.1% versus -3.5% in March). Fixed assets growth is slowing and property investment is contracting. Residential property sales have dropped. In the euro area, in the first quarter, quarterly growth of employment was stable but compared to last year, growth picked up. There was a slight upward revision of first quarter GDP growth. April new car registrations continued to decline at the same annual pace as the previous month. Annual inflation has reached 7.4% with core inflation at 3.5%. In France, the first quarter unemployment rate declined slightly to 7.3%. German annual producer price inflation accelerated further but on a monthly basis, inflation declined. In Japan, first quarter GDP declined less than expected by the consensus. Consumer spending also created a positive surprise by remaining stable. In the UK, the unemployment rate edged down and job creation was a lot stronger than expected. Elevated inflation at 9.0% caused another decline in consumer confidence, yet retail sales improved versus March and created a positive surprise. The assessment of order book levels also picked up. In the US, retail sales and capacity utilisation did better than in March and also compared to the consensus. The housing market index (NAHB) declined and mortgage applications were down a lot, reflecting the impact of higher interest rates. Building permits and housing starts were also down versus March and the Philadelphia Fed business outlook recorded a big drop. Initial unemployment claims increased.

DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	ACTUAL	PREVIOUS
05/16/2022	China	Industrial Production YoY	Apr	0.5%	-2.9%	5.0%
05/16/2022	China	Retail Sales YoY	Apr	-6.6%	-11.1%	-3.5%
05/16/2022	China	Fixed Assets Ex Rural YTD YoY	Apr	7.0%	6.8%	9.3%
05/16/2022	China	Industrial Production YTD YoY	Apr	5.0%	4.0%	6.5%
05/16/2022	China	Retail Sales YTD YoY	Apr	1.2%	-0.2%	3.3%
05/16/2022	China	Property Investment YTD YoY	Apr	-1.5%	-2.7%	0.7%
05/16/2022	China	Residential Property Sales YTD YoY	Apr	--	-32.2%	-25.6%
05/16/2022	China	Surveyed Jobless Rate	Apr	0.1	0.1	0.1
05/16/2022	Eurozone	EU Commission Economic Forecasts				
05/17/2022	France	ILO Unemployment Rate	1Q	7.4%	7.3%	7.4%
05/17/2022	United Kingdom	Weekly Earnings ex Bonus 3M/YoY	Mar	4.1%	4.2%	4.1%
05/17/2022	United Kingdom	ILO Unemployment Rate 3Mths	Mar	3.8%	3.7%	3.8%
05/17/2022	United Kingdom	Employment Change 3M/3M	Mar	4k	83k	10k
05/17/2022	Eurozone	Employment QoQ	1Q	--	0.5%	0.4%
05/17/2022	Eurozone	Employment YoY	1Q	--	2.6%	2.1%
05/17/2022	Eurozone	GDP SA QoQ	1Q	0.2%	0.3%	0.3%
05/17/2022	Eurozone	GDP SA YoY	1Q	5.0%	5.1%	5.1%
05/17/2022	United States	Retail Sales Advance MoM	Apr	1.0%	0.9%	1.4%
05/17/2022	United States	Retail Sales Control Group	Apr	0.7%	1.0%	1.1%
05/17/2022	United States	Retail Sales Ex Auto and Gas	Apr	0.7%	1.0%	1.2%
05/17/2022	United States	Capacity Utilization	Apr	78.6%	79.0%	78.2%
05/17/2022	United States	NAHB Housing Market Index	May	75.0	69.0	77.0



DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	ACTUAL	PREVIOUS
05/18/2022	Japan	GDP Annualized SA QoQ	1Q	-1.8%	-1.0%	3.8%
05/18/2022	Japan	GDP SA QoQ	1Q	-0.4%	-0.2%	0.9%
05/18/2022	Japan	GDP Private Consumption QoQ	1Q	-0.5%	0.0%	2.5%
05/18/2022	Japan	GDP Business Spending QoQ	1Q	0.7%	0.5%	0.4%
05/18/2022	Japan	Inventory Contribution % GDP	1Q	0.1%	0.2%	-0.2%
05/18/2022	Japan	Net Exports Contribution % GDP	1Q	-0.3%	-0.4%	0.1%
05/18/2022	China	New Home Prices MoM	Apr	--	-0.3%	-0.1%
05/18/2022	United Kingdom	CPI MoM	Apr	2.6%	2.5%	1.1%
05/18/2022	United Kingdom	CPI YoY	Apr	9.1%	9.0%	7.0%
05/18/2022	United Kingdom	CPI Core YoY	Apr	6.2%	6.2%	5.7%
05/18/2022	Eurozone	EU27 New Car Registrations	Apr	--	-20.6%	-20.5%
05/18/2022	Eurozone	CPI YoY	Apr	7.5%	7.4%	7.4%
05/18/2022	Eurozone	CPI MoM	Apr	0.6%	0.6%	0.6%
05/18/2022	Eurozone	CPI Core YoY	Apr	3.5%	3.5%	3.5%
05/18/2022	United States	MBA Mortgage Applications	May	--	-11.0%	2.0%
05/18/2022	United States	Building Permits MoM	Apr	-3.0%	-3.2%	0.3%
05/18/2022	United States	Housing Starts MoM	Apr	-2.1%	-0.2%	-2.8%
05/19/2022	United Kingdom	CBI Trends Total Orders	May	12.0	26.0	14.0
05/19/2022	United Kingdom	CBI Trends Selling Prices	May	70.0	75.0	71.0
05/19/2022	United States	Philadelphia Fed Business Outlook	May	15.0	2.6	17.6
05/19/2022	United States	Initial Jobless Claims	May	200k	218k	197k
05/20/2022	United Kingdom	GfK Consumer Confidence	May	-39.0	-40.0	-38.0
05/20/2022	Japan	Natl CPI Ex Fresh Food, Energy YoY	Apr	0.7%	0.8%	-0.7%
05/20/2022	United Kingdom	Retail Sales Ex Auto Fuel MoM	Apr	-0.2%	1.4%	-0.9%
05/20/2022	Germany	PPI YoY	Apr	31.3%	33.5%	30.9%
05/20/2022	Germany	PPI MoM	Apr	1.2%	2.8%	4.9%
05/20/2022	Eurozone	Consumer Confidence	May	-21.5	--	-22.0

SOURCE: BLOOMBERG



CALENDAR: THE WEEK AHEAD

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COMING INDICATORS

This week several survey data will be published, providing a picture of how different economies are doing in May: flash PMIs in several countries, IFO business climate in Germany, French business confidence, consumer confidence in Germany and France, University of Michigan sentiment. Germany and the US will release updated estimates of first quarter GDP growth. A lot of attention will also go to the minutes of the FOMC.

DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	PREVIOUS
05/23/2022	Germany	IFO Business Climate	May	91.4	91.8
05/23/2022	Germany	IFO Current Assessment	May	97.3	97.2
05/23/2022	Germany	IFO Expectations	May	85.5	86.7
05/24/2022	Japan	Jibun Bank Japan PMI Services	May	--	50.7
05/24/2022	Japan	Jibun Bank Japan PMI Composite	May	--	51.1
05/24/2022	Japan	Jibun Bank Japan PMI Mfg	May	--	53.5
05/24/2022	Japan	Nationwide Dept Sales YoY	Apr	--	4.60%
05/24/2022	France	Business Confidence	May	--	106
05/24/2022	France	S&P Global France Manufacturing PMI	May	--	55.7
05/24/2022	France	S&P Global France Services PMI	May	--	58.9
05/24/2022	France	S&P Global France Composite PMI	May	--	57.6
05/24/2022	Germany	S&P Global/BME Germany Manufacturing PMI	May	54	54.6
05/24/2022	Germany	S&P Global Germany Services PMI	May	58	57.6
05/24/2022	Germany	S&P Global Germany Composite PMI	May	54.4	54.3
05/24/2022	Eurozone	S&P Global Eurozone Manufacturing PMI	May	--	55.5
05/24/2022	Eurozone	S&P Global Eurozone Services PMI	May	--	57.7
05/24/2022	Eurozone	S&P Global Eurozone Composite PMI	May	--	55.8
05/24/2022	United Kingdom	S&P Global/CIPS UK Manufacturing PMI	May	--	55.8
05/24/2022	United Kingdom	S&P Global/CIPS UK Services PMI	May	--	58.9
05/24/2022	United Kingdom	S&P Global/CIPS UK Composite PMI	May	--	58.2
05/24/2022	United States	S&P Global US Manufacturing PMI	May	57.9	59.2
05/24/2022	United States	S&P Global US Services PMI	May	56	55.6
05/24/2022	United States	S&P Global US Composite PMI	May	--	56
05/24/2022	United States	New Home Sales MoM	Apr	-1.10%	-8.60%



DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	PREVIOUS
05/25/2022	Germany	GfK Consumer Confidence	Jun	--	-26.5
05/25/2022	Germany	GDP SA QoQ	1Q	0.20%	0.20%
05/25/2022	France	Consumer Confidence	May	--	88
05/25/2022	United States	MBA Mortgage Applications	May	--	-11.00%
05/25/2022	United States	Cap Goods Orders Nondef Ex Air	Apr	--	1.30%
05/25/2022	United States	Cap Goods Ship Nondef Ex Air	Apr	--	0.40%
05/25/2022	United States	FOMC Meeting Minutes	May	--	--
05/26/2022	United States	GDP Annualized QoQ	1Q	-1.30%	-1.40%
05/26/2022	United States	Initial Jobless Claims	May	--	218k
05/27/2022	United States	Personal Income	Apr	0.50%	0.50%
05/27/2022	United States	Personal Spending	Apr	0.60%	1.10%
05/27/2022	United States	Real Personal Spending	Apr	--	0.20%
05/27/2022	United States	PCE Core Deflator MoM	Apr	0.30%	0.30%
05/27/2022	United States	PCE Core Deflator YoY	Apr	4.90%	5.20%
05/27/2022	United States	U. of Mich. Sentiment	May	59.1	59.1
05/27/2022	United States	U. of Mich. Current Conditions	May	--	63.6
05/27/2022	United States	U. of Mich. Expectations	May	--	56.3
05/27/2022	United States	U. of Mich. 1 Yr Inflation	May	--	5.40%
05/27/2022	United States	U. of Mich. 5-10 Yr Inflation	May	--	3.00%
05/27-06/02/22	Germany	Retail Sales MoM	Apr	--	-0.10%
05/27-06/02/22	Germany	Retail Sales NSA YoY	Apr	--	-5.40%

SOURCE: BLOOMBERG



FURTHER READING

16

China: new economic slowdown, new rise in credit risks	EcoTV Week	20 May 2022
Energy price inflation in the Eurozone: government responses and impact on household purchasing power	EcoFlash	20 May 2022
On the need to restate Manufacturing PMI in order to understand the shock to German industry	Chart of the Week	18 May 2022
Eurozone : Inflation and the sustainability of public sector debt	EcoWeek	16 May 2022
Eurozone : Wage-price loop: low risk but one to watch	EcoTV Week	13 May 2022
United States: money supply losing steam	Chart of the Week	11 May 2022
Central banks: the need and courage to act	EcoWeek	9 May 2022
The complex relationship between financial conditions, nominal and real interest rates	EcoTVWeek	06 May 2022
ECB: the weaker euro, a blessing or a headache?	EcoWeek	02 May 2022
Chinese exports: a major growth slowdown is expected	Chart of the Week	29 April 2022
France: Supply-side constraints and inflation are weighing on growth	EcoTVWeek	29 April 2022
Spanish housing market: cautious optimism	EcoFlash	29 April 2022
France: Supply-side constraints and inflation are weighing on growth	EcoTVWeek	29 April 2022
United Kingdom : Higher inflation causes decline in real wages	Chart of the Week	27 April 2022
Global : Inflation persistence and why it matters	EcoWeek	25 April 2022
From one crisis to another, how does Europe respond?	EcoTVWeek	22 April 2022
Emerging countries will bend but not break	EcoEmerging	22 April 2022
Eurozone : The lifting of moratoria has not significantly affected the quality of bank loan books	Chart of the Week	20 April 2022
US : Should we worry about the flattening of the yield curve? Not yet	EcoWeek	19 April 2022
OECD countries economic outlook - 2nd Quarter	EcoPerspectives	15 April 2022



GROUP ECONOMIC RESEARCH

William De Vijlder
Chief Economist

+33 1 55 77 47 31

william.devijlder@bnpparibas.com

OECD ECONOMIES AND STATISTICS

Hélène Baudchon

Head - Eurozone - Climate

+33 1 58 16 03 63

helene.baudchon@bnpparibas.com

Felix Berte

United States, United Kingdom

+33 1 40 14 01 42

felix.berte@bnpparibas.com

Stéphane Colliac

France

+33 1 42 98 43 86

stephane.colliac@bnpparibas.com

Guillaume Derrien

Southern Europe, Japan - International trade

+33 1 55 77 71 89

guillaume.a.derrien@bnpparibas.com

Anthony Morlet-Lavidalie

Germany, Northern Europe

+33 1 53 31 59 14

anthony.morletlavidalie@bnpparibas.com

Veary Bou, Patrick Capeillère, Tarik Rharrab
Statistics

ECONOMIC PROJECTIONS, RELATIONSHIP WITH THE FRENCH NETWORK

Jean-Luc Proutat

Head

+33 1 58 16 73 32

jean-luc.proutat@bnpparibas.com

BANKING ECONOMICS

Laurent Quignon

Head

+33 1 42 98 56 54

laurent.quignon@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 - Argentina, Turkey - Methodology, Modelling

+33 1 42 98 79 82

francois.faure@bnpparibas.com

Christine Peltier

Deputy Head - Greater China, Vietnam - Methodology

+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

Pascal Devaux

Middle East, Balkan countries

+33 1 43 16 95 51

pascal.devaux@bnpparibas.com

Hélène Drouot

South Korea, Philippines, Thailand, Andean countries

+33 1 42 98 33 00

helene.drouot@bnpparibas.com

Perrine Guérin

South Africa & English/Portuguese-speaking African countries

+33 1 42 98 43 86

perrine.guerin@bnpparibas.com

Salim Hammad

Latin America

+33 1 42 98 74 26

salim.hammad@bnpparibas.com

Cynthia Kalasopatan Antoine

Ukraine, Central European countries

+33 1 53 31 59 32

cynthia.kalasopatan@bnpparibas.com

Johanna Melka

India, South Asia, Russia, Kazakhstan

+33 1 58 16 05 84

johanna.melka@bnpparibas.com

CONTACT MEDIA

Mickaëlle Fils Marie-Luce

+33 1 42 98 48 59

mickaëlle.filsmarie-luce@bnpparibas.com



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