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INFLATION AND THE SUSTAINABILITY OF PUBLIC SECTOR DEBT

At first glance, higher inflation seems like good news for governments. After all, inflation erodes the real value of debt and lowers the public debt/GDP ratio through a higher nominal GDP. However, the impact of inflation on public finances depends on whether higher inflation was anticipated by financial markets and on its expected persistence. Both factors would influence the borrowing cost and hence the dynamics of the debt ratio through the difference between this cost and nominal GDP growth. Public finances should benefit from having a central bank that is credible in its ability to keep inflation expectations well anchored and is not afraid of tightening policy when inflation has moved well above target. In the euro area, higher Bund yields cause higher sovereign spreads, reflecting a higher risk premium, which in the longer run will worsen the dynamics of the debt ratio. It implies that fiscal policy also has a role to play by keeping the debt ratio under control.

At first glance, higher inflation seems like good news for governments. After all, inflation erodes the real value of debt. Considering that taxes are levied on nominal amounts -income, value added, profits, etc.- tax revenues increase when inflation rises so the burden of servicing the existing debt as a proportion of public revenues declines. Moreover, rising inflation -under the assumption that it is not weighing on real activity and spending- causes an increase in nominal GDP and hence a decline of the public debt/GDP ratio. In this respect, table 1 shows for various euro area countries the public debt ratio level and the inflation forecast for this year¹. If the debt/GDP ratio was stable before the increase in inflation, its decline due to a jump in prices could be considered as an increase in fiscal policy leeway.

However, the impact of inflation on public finances also depends on whether higher inflation was anticipated by financial markets and on its expected persistence. An anticipated rise in inflation would have caused an increase in nominal interest rates even before inflation and nominal growth started to pick up, thereby worsening the dynamics of the debt ratio. As a reminder, these dynamics depend on the primary balance -the budget balance excluding interest charges- and the difference between the average cost of debt (r) and nominal GDP growth (g). This implies that an unanticipated inflation shock will have a bigger impact on the path of the debt ratio. It can be argued that the extent of the jump in inflation since the second half of 2021 has to a large degree been unexpected. The persistence of inflation also plays an important role. If it is expected to remain elevated, it will cause an increase in market-based inflation expectations and hence the level of nominal bond yields. Clearly, given the long average maturity of public debt in most countries (table 1), it would take several years until these developments would be fully reflected in a higher average cost of public debt. However, there is a risk that financial markets would increasingly focus on the marginal difference between r and g -whereby 'marginal' refers to the cost of newly issued debt- rather than the difference between the average cost of outstanding debt and nominal GDP growth.

1. The table shows the more commonly used HICP measure of inflation, rather than the GDP deflator, which from a national accounts perspective, is the more appropriate one.

A key factor in the perceived persistence of inflation is the attitude of the central bank. Should the credibility of monetary policy be declining, markets would price in an inflation risk premium as a hedge against the possibility of future above-target inflation. This worsens the dynamics of the debt ratio because the market-based expected inflation -which influences the borrowing cost r - could be higher than observed inflation², which influences nominal growth g . This implies that public finances should benefit from having a central bank that is credible and is not afraid of tightening policy when inflation has moved well above target, even though this may temporarily worsen $r - g$ by lowering real growth in the short run.

Fiscal policy also has a key role to play, however, by keeping the debt ratio under control. In the euro area, the prospect of an increase in the ECB's policy rates, in combination with rising break-even inflation, has caused a significant increase in German bond yields and a widening in sovereign spreads versus Bunds (chart 1). The latter is a normal phenomenon and reflects the idea that yield-targeting investors need less exposure to higher-yielding euro area sovereigns when German yields have seen a significant increase³. It could also reflect mounting concern about debt sustainability. To explore this further, a regression has been run between the level of the spread and the 10-year Bund yield. Large positive regression residuals would reflect an abnormally high spread given where Bund yields are currently trading.

2. At present this is not the case because inflation in the euro area is exceptionally high and well above market-based inflation expectations. A measure of the latter is the break-even inflation, which corresponds to the difference between the nominal yield on a government bond and the yield on an inflation-linked government bond with the same maturity. In recent weeks, German 10-year break-even inflation has been fluctuating between 2.5 and 3.0%, which is higher than the ECB's inflation target.

3. See in this respect *Eurozone sovereign spreads: haunted by the stylized facts*, *Ecoweek*, 14 February 2022, BNP Paribas.



In order to keep the dynamics of the public debt/GDP ratio under control, both monetary and fiscal policy have a role to play, the former by making sure that inflation expectations remain well anchored, the latter by focusing on the budget deficit.



As shown in chart 2, for Italy, the regression residuals have been close to zero as of late, which suggests that the spread widening has been consistent with the rise in German yields. For Spain and in particular Portugal, the regression residuals are increasingly negative, so the increase in Spanish and Portuguese yields has been more limited than expected, considering the rise in German yields.

William De Vijlder

GROWTH, INFLATION AND PUBLIC FINANCES							
	Public consolidated debt as % of GDP	Interest expenditures as % of previous year gross public debt	Government debt securities, average maturity in years	Nominal GDP, y/y % change		HCPI, y/y % change	
	2021	2021	2021	2021	2022 forecast	2023 forecast	2022 forecast
Germany	69.3	0.82	7.1	6.0	7.0	5.7	5.5
Austria	82.8	1.43	11.1	6.3	6.7	6.6	5.6
Belgium	108.2	1.62	10.7	11.0	6.7	3.5	8.0
Spain	118.4	1.95	7.9	7.4	6.9	4.3	5.3
Finland	65.8	0.79	7.2	6.1	4.5	4.3	3.8
France	112.9	1.09	8.1	7.9	5.0	3.7	4.1
Ireland	56.0	1.48	10.7	13.1	8.6	7.5	5.7
Italy	150.8	2.36	7.0	7.2	4.0	3.9	5.3
Netherlands	52.1	0.92	7.9	7.6	5.7	4.4	5.2
Portugal	127.4	2.04	6.9	5.6	7.0	4.6	4.0
Greece	193.3	1.33	9.5	10.6	9.3	3.9	4.5

TABLE 1

SOURCE: PUBLIC CONSOLIDATED DEBT AS % OF GDP: EUROSTAT, APRIL 2022
 INTEREST EXPENDITURES AS % OF PREVIOUS YEAR GROSS PUBLIC DEBT: EUROPEAN COMMISSION-AMECO, NOVEMBER 2021
 GOVERNMENT DEBT SECURITIES, AVERAGE MATURITY IN YEARS: EUROPEAN CENTRAL BANK, APRIL 2022
 NOMINAL GDP, Y/Y % CHANGE: IMF-WEO, APRIL 2022
 HCPI, Y/Y % CHANGE: IMF-WEO, APRIL 2022

EUROZONE : SOVEREIGN SPREADS VERSUS BUND

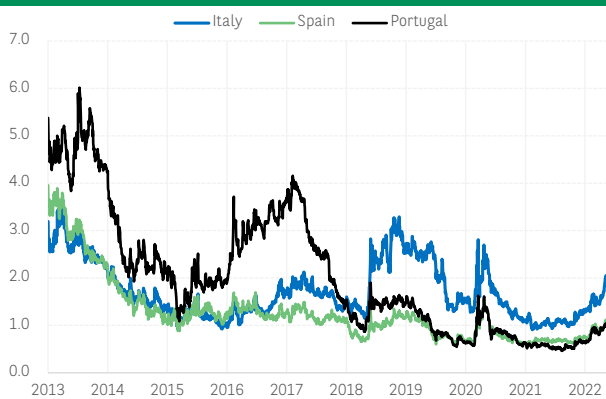


CHART 1

SOURCE: REFINITIV, BNP PARIBAS

EUROZONE : REGRESSION RESIDUAL OF SOVEREIGN SPREADS VS. BUND

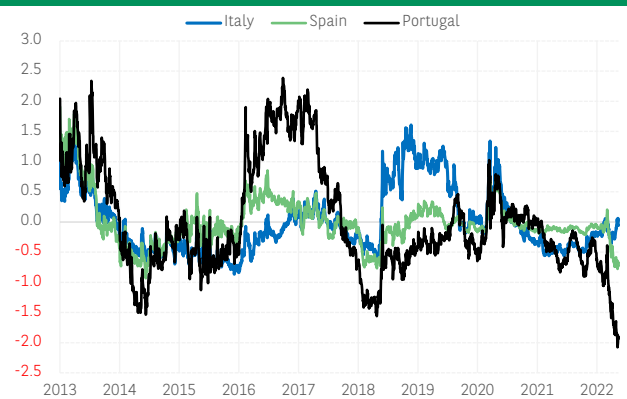


CHART 2

SOURCE: REFINITIV, BNP PARIBAS



MARKETS OVERVIEW

OVERVIEW

Week 6-5-22 to 13-5-22

➔ CAC 40	6 258	➔ 6 363	+1.7 %
➔ S&P 500	4 123	➔ 4 024	-2.4 %
➔ Volatility (VIX)	30.2	➔ 28.9	-1.3 pb
➔ Euribor 3M (%)	-0.43	➔ -0.40	+2.3 bp
➔ Libor 3M (%)	1.40	➔ 1.44	+4.2 bp
➔ OAT 10y (%)	1.53	➔ 1.30	-23.4 bp
➔ Bund 10y (%)	1.14	➔ 0.95	-18.8 bp
➔ US Tr. 10y (%)	3.13	➔ 2.94	-18.1 bp
➔ Euro vs dollar	1.06	➔ 1.04	-1.8 %
➔ Gold (ounce, \$)	1 886	➔ 1 815	-3.7 %
➔ Oil (Brent, \$)	112.6	➔ 111.7	-0.8 %

MONEY & BOND MARKETS

Interest Rates

		highest 22	lowest 22	
€ 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	-0.40	-0.40 at 09/05	-0.58 at 05/01	
Euribor 12M	0.18	0.26 at 09/05	-0.50 at 05/01	
\$ FED	1.00	1.00 at 05/05	0.25 at 03/01	
Libor 3M	1.44	1.44 at 13/05	0.21 at 03/01	
Libor 12M	2.65	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	1.26	1.30 at 04/05	0.26 at 03/01	
Libor 12M	0.81	0.81 at 03/01	0.81 at 03/01	

At 13-5-22

Yield (%)

		highest 22	lowest 22	
€ AVG 5-7y	1.12	1.43 at 09/05	-0.04 at 03/01	
Bund 2y	0.10	0.33 at 06/05	-0.83 at 04/03	
Bund 10y	0.95	1.14 at 06/05	-0.14 at 24/01	
OAT 10y	1.30	1.53 at 06/05	0.15 at 04/01	
Corp. BBB	2.82	2.97 at 09/05	0.90 at 05/01	
\$ Treas. 2y	2.59	2.69 at 05/05	0.70 at 04/01	
Treas. 10y	2.94	3.13 at 06/05	1.63 at 03/01	
High Yield	7.62	7.65 at 12/05	5.07 at 03/01	
£ gilt. 2y	1.28	1.80 at 21/04	0.69 at 03/01	
gilt. 10y	1.72	2.01 at 21/04	0.97 at 03/01	

At 13-5-22

EXCHANGE RATES

1€ =		highest 22	lowest 22	2022
USD	1.04	1.15 at 10/02	1.04 at 13/05	-8.6%
GBP	0.85	0.86 at 06/05	0.83 at 14/04	+1.3%
CHF	1.04	1.06 at 10/02	1.00 at 04/03	+0.5%
JPY	134.48	139.36 at 21/04	125.37 at 04/03	+2.7%
AUD	1.50	1.62 at 04/02	1.43 at 05/04	-3.8%
CNY	7.05	7.29 at 10/02	6.87 at 14/04	-2.7%
BRL	5.29	6.44 at 06/01	5.01 at 21/04	-16.4%
RUB	67.82	164.76 at 07/03	67.42 at 12/05	-20.5%
INR	80.50	85.96 at 11/02	80.30 at 05/05	-4.8%

At 13-5-22

Change

COMMODITIES

Spot price, \$		highest 22	lowest 22	2022	2022(€)
Oil, Brent	111.7	128.2 at 08/03	79.0 at 03/01	+42.5%	+55.9%
Gold (ounce)	1 815	2 056 at 08/03	1 785 at 28/01	-0.4%	+9.0%
Metals, LMEX	4 383	5 506 at 07/03	4 369 at 12/05	-2.7%	+6.5%
Copper (ton)	9 185	10 702 at 04/03	9 104 at 12/05	-5.7%	+3.2%
wheat (ton)	434	4.3 at 12/05	281 at 14/01	+82.5%	+99.7%
Corn (ton)	309	3.1 at 29/04	226 at 03/01	+3.6%	+48.3%

At 13-5-22

Change

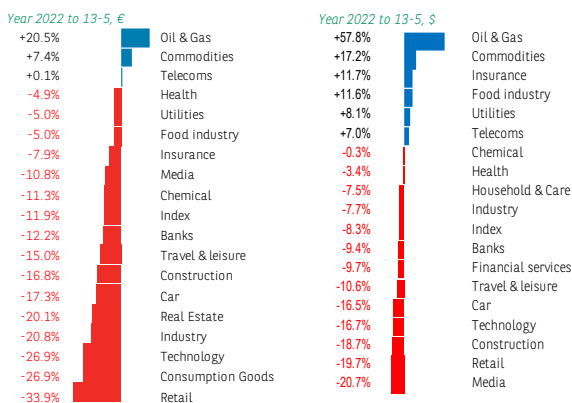
EQUITY INDICES

Index	highest 22	lowest 22	2022	
World				
MSCI World	2 701	3 248 at 04/01	2 640 at 12/05	-16.4%
North America				
S&P500	4 024	4 797 at 03/01	3 930 at 12/05	-15.6%
Europe				
EuroStoxx50	3 703	4 392 at 05/01	3 505 at 08/03	-13.8%
CAC 40	6 363	7 376 at 05/01	5 963 at 08/03	-1.1%
DAX 30	14 028	16 272 at 05/01	12 832 at 08/03	-11.7%
IBEX 35	8 338	8 886 at 10/02	7 645 at 07/03	-0.4%
FTSE100	7 418	7 672 at 10/02	6 959 at 07/03	+0.0%
Asia				
MSCI, loc.	1 067	1 165 at 05/01	1 024 at 08/03	-0.7%
Nikkei	26 428	29 332 at 05/01	24 718 at 09/03	-8.2%
Emerging				
MSCI Emerging (\$)	1 005	1 267 at 12/01	988 at 12/05	-1.8%
China	64	86 at 20/01	59 at 15/03	-22.4%
India	732	891 at 13/01	732 at 13/05	-9.7%
Brazil	1 582	2 003 at 04/04	1 372 at 06/01	+0.8%

At 13-5-22

Change

PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)

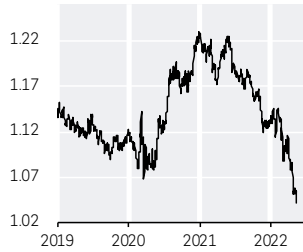


SOURCE: REFINITIV, BNP PARIBAS,



MARKETS OVERVIEW

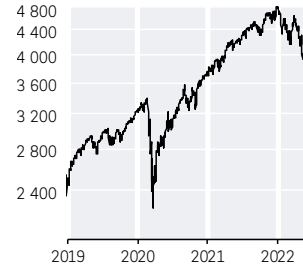
EURO-DOLLAR



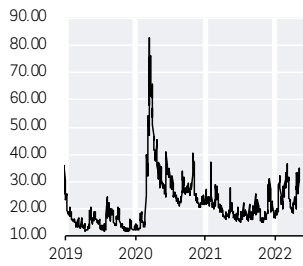
EUROSTOXX50



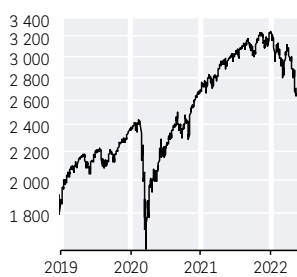
S&P500



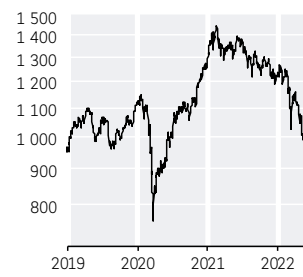
VOLATILITY (VIX, S&P500)



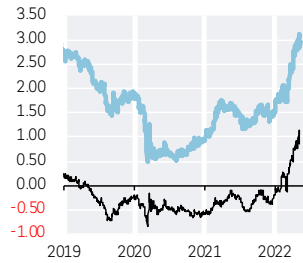
MSCI WORLD (USD)



MSCI EMERGING (USD)

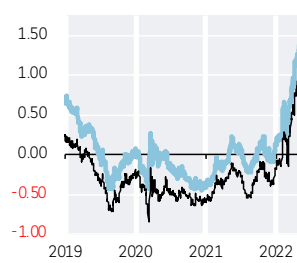


10Y BOND YIELD, TREASURIES VS BUND



-Bunds —US Treasuries

10Y BOND YIELD



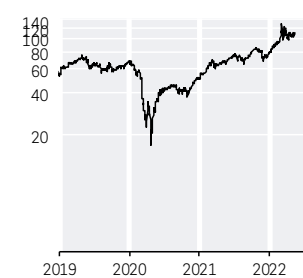
-Bunds —OAT

10Y BOND YIELD & SPREADS

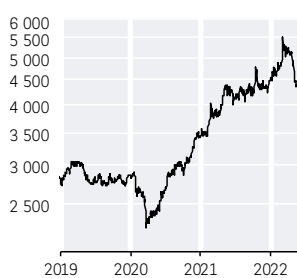
Year 2022 to 13-5

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	

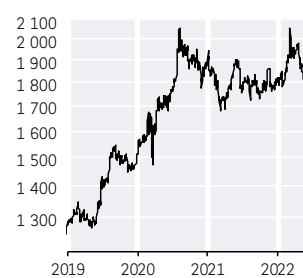
OIL (BRENT, USD)



METALS (LMEX, USD)



GOLD (OUNCE, USD)



SOURCE: REFINITIV, BNP PARIBAS



ECONOMIC PULSE

GERMANY: INDUSTRIAL PRODUCTION DECLINING, TRADE SURPLUS HISTORICALLY LOW

Although Germany returned to positive economic growth in the first quarter of 2022 – with GDP up 0.2 % q/q according to the initial estimate published by the Federal Statistical Office (Destatis) – March figures already showed the impact of the conflict between Russia and Ukraine and strict lockdowns in several regions of China. Industrial production, which accounts for 24 % of German GDP, fell sharply in March (by 4.6 % m/m) after almost zero growth in February. Industrial production remains well below its pre-Covid level: in Q1 2022, it was 5.2 % lower than in Q4 2019. Worse, the rapid decline in March created a sharply negative growth overhang for the second quarter (-3 %). Among the factors seriously hampering output according to the European Commission’s quarterly survey of the manufacturing sector, 90 % of business leaders in Q1 mentioned difficulties sourcing inputs as opposed to fewer than 6 % in normal times¹, and 77 % said that this would remain a problem in the second quarter. The labour market is also tight and a lack of personnel is holding back output for 38 % of businesses.

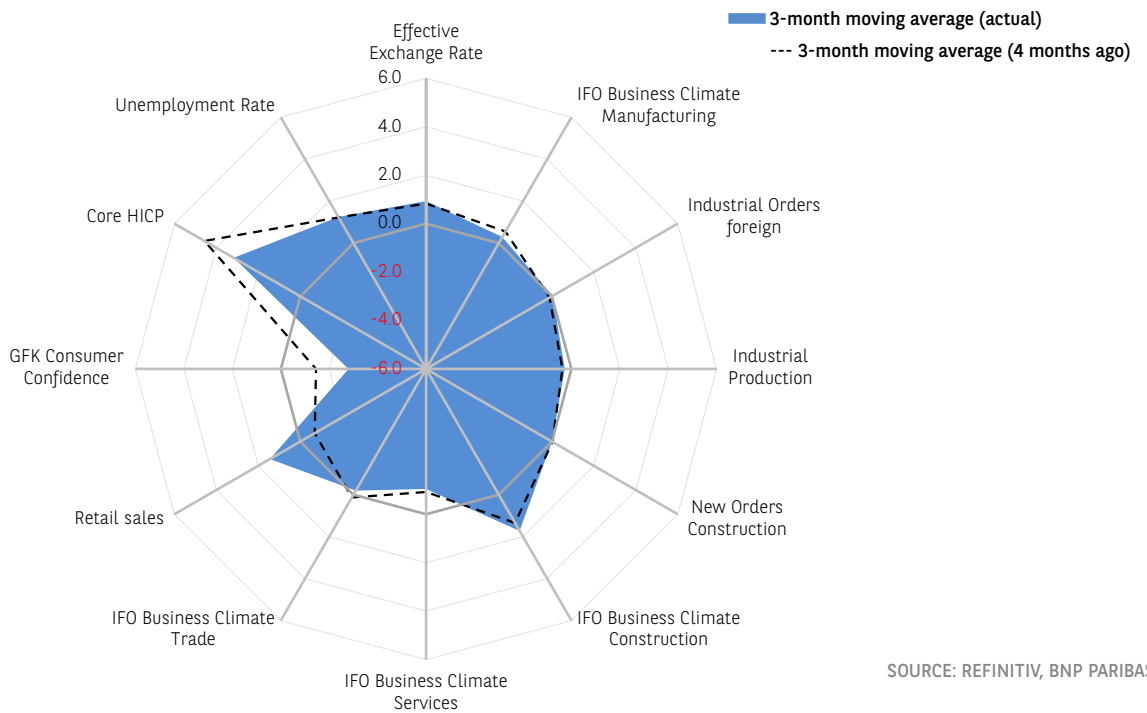
The decline in manufacturing output was accompanied by a fall in exports in March (-3.3 % m/m), while imports continued to rise at a rapid pace (+3.4 % m/m). The result of this “scissor effect” is that Germany’s trade surplus fell very sharply to EUR 3.2 bn (from EUR 11.1 bn previously), back to the lows seen during the first lockdown in April 2020 (EUR 3.5 bn). In March, the geopolitical context caused a slump in exports to Russia (-62.3 % m/m), while imports fell only slightly (-2.4 % m/m), reflecting Germany’s energy dependency. The conflict between Russia and Ukraine, together with highly restrictive anti-Covid measures in China, mean that global demand for German goods has fallen significantly: new foreign orders fell for the second consecutive month in March (-6.7 % m/m) and new orders from non-eurozone countries fell even more (-13.2 % m/m).

Germany’s outlook remains negative for the second quarter of 2022. In April, annual inflation hit 7.4 %, the highest level since Germany reunified in 1990. The last time inflation was this high in West Germany was in October 1981, during the Iran-Iraq War. Analysts surveyed by ZEW institute in May estimate that economic activity has recently deteriorated significantly in Germany, with the current situation indicator falling 5.7 points to -36.5. And although the indicator for the next few months rose by 6.7 points in May, it remains clearly in negative territory (-34.3).

Anthony Morlet-Lavidalie

1. On average between 1982 and 2019.

GERMANY: 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 -6 and +6. 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

7

FRANCE: FURTHER CONTRACTION IN CONSUMER SPENDING LIKELY IN THE SECOND QUARTER

Inflation is continuing to spread among the various components of the consumer price index (CPI). The energy component fell slightly in April (-2.5% m/m) after the government introduced a fuel rebate, but that decline was more than offset by faster inflation in other components of the CPI. Food prices in particular rose by 1.4% m/m in April, the sharpest increase for 20 years, beating figures seen in previous waves of food price inflation in 2007-08 and 2011. Food was the main contributor (0.2 points) to monthly inflation in April (0.4% m/m). Year-on-year inflation hit 4.8% according to the INSEE index (5.4% according to the harmonised index, an increase of 0.3 points vs. March for both measures). Annual inflation remained mostly driven by the energy component, which contributed 2.3 points to the total.

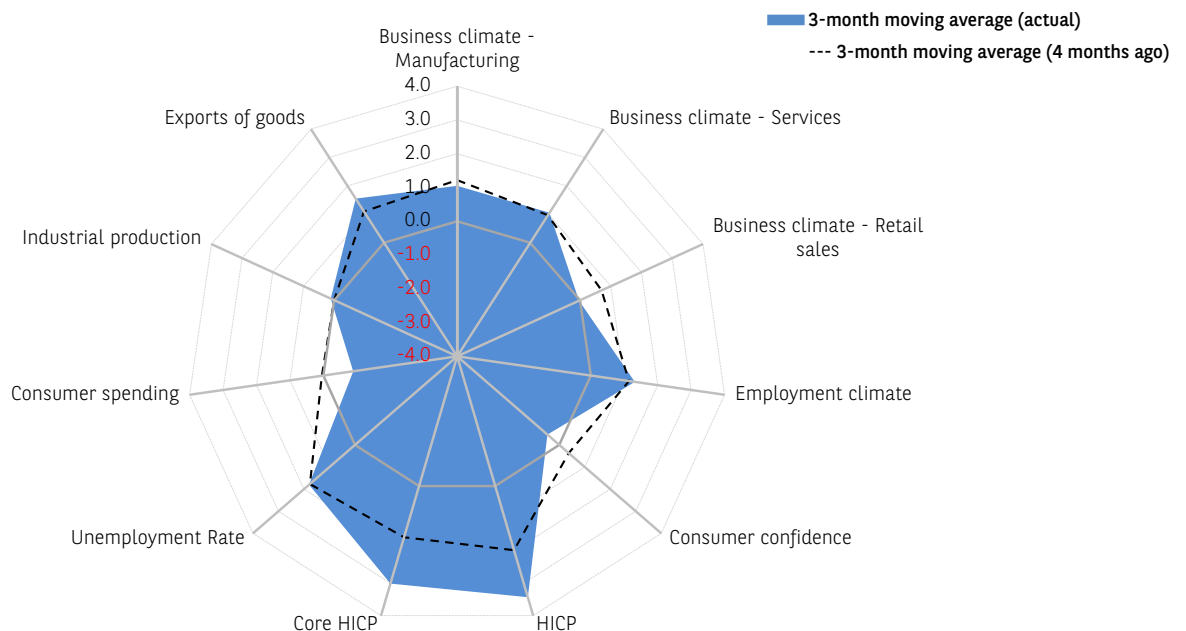
Inflation is likely to continue rising in the coming weeks, with the rate of increase in the INSEE index set to peak at 5.5% y/y in July according to our forecasts. French households are well expecting this judging by the balance of opinion regarding future price movements, which has been very high in the last two months. Rising inflation is significantly eroding purchasing power, a problem which is unlikely to abate soon. The most recently announced policy measures will take effect with a small time lag: the minimum wage has been increased by 2.65% in May, and expected rises in pensions and public-sector wages, along with a food subsidy, should be implemented after France's parliamentary election, i.e., probably in early July.

This means that there is a good chance of household consumption falling again in the second quarter: we expect a 0.7% q/q decline after a 1.3% q/q fall in the first quarter. At the end of March, the carryover for the second quarter was negative for three expenditure components that make up two thirds of consumer spending on goods: -1.7% for food, -1.4% for automobiles and -1.2% for energy. Given high food and energy prices, along with the further drop in car production (-4.5% q/q in Q1, taking it one third below its pre-Covid-19 level), a rebound is unlikely.

With household investment also declining, overall consumer demand is weak. This means that business investment (+0.7% q/q) and inventories (positive contribution of 0.4 points) – which provided strong support for growth in the first quarter – are likely to contribute less in the second. After zero growth in the first quarter, we expect GDP to rise very slightly in the second: we are forecasting growth of 0.1% q/q, slightly less than INSEE (0.25% q/q) and the Banque de France (0.2% q/q).

Stéphane Colliac

FRANCE: 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 -4 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.



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ECONOMIC PULSE

SPAIN: OVERALL INFLATION SLOWS BUT INCREASE OF FOOD PRICES ACCELERATES

Latest inflation figures give the Spanish government a little respite. Having approached 10% in March (9.8%), consumer price inflation fell to 8.4% in April. Measures taken by the authorities to stem the rise in energy prices – mainly through subsidies and tax cuts – had a beneficial effect. However, food price inflation rose to 10.1% y/y in April. In addition, its contribution to overall inflation (1.98 percentage points) is now roughly the same as other energy-related components of expenditure, i.e., transport (1.98 points) and electricity, gas and other fuels (2.30 points). Although food prices have risen less in the last year than transport prices (12.3%) and prices of electricity, gas and other fuels (35.2%), they make up a larger proportion of total household expenditure (19.5% versus 15.4% and 6.5% respectively).

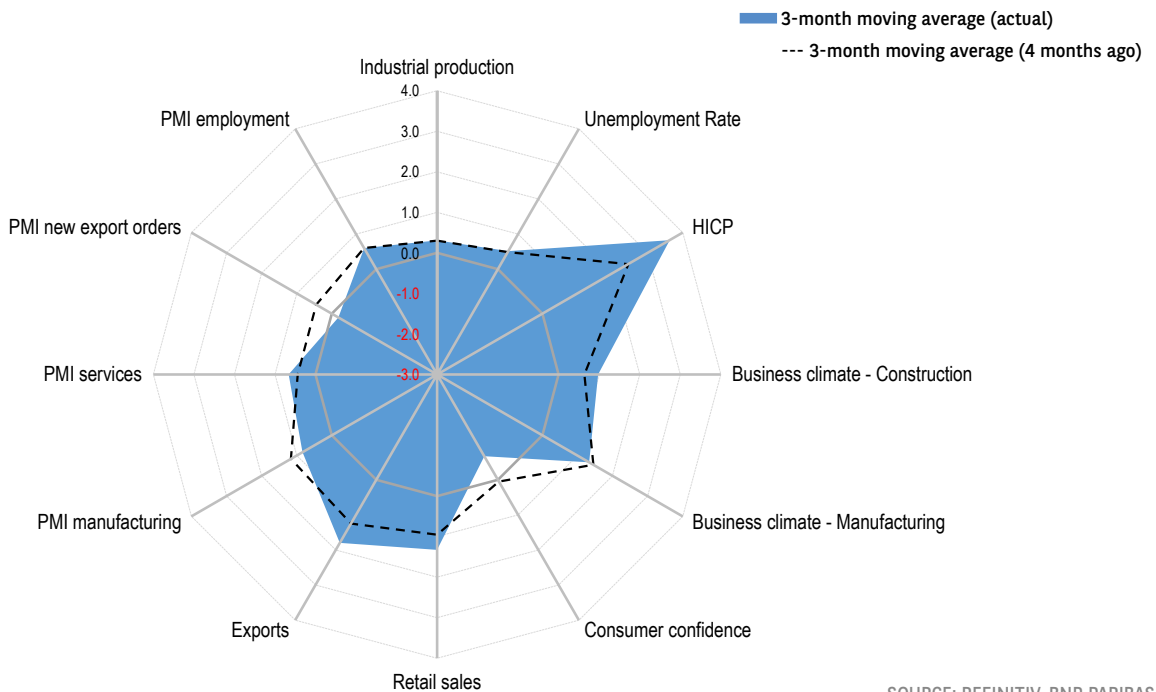
In addition, real GDP growth in Q1 2022 was weaker than expected at 0.3% q/q. This was due to a 2.5% q/q contraction in consumer spending, which has been pulled down by multiple adverse factors (higher inflation, the war in Ukraine and strike action by road hauliers, which led to disruptions in the provisioning of goods into stores). Drawdowns in inventories also had a negative impact on real GDP growth. However, there were significant increases in investment (up 3.4% q/q) and above all service exports (up 10.5% q/q). The rebound in tourist activity (included in service exports) should be a major growth driver this year. Covid restrictions have been eased almost across the board in Europe, and this will support both economic activity and employment during the summer season.

In addition, in its April report, the Spanish State Employment Service (SEPE) announced a sharp acceleration in recruitment in the hotel industry, one of the sectors that are benefiting most from the lifting of Covid-related constraints. The total number of workers affiliated to the social security system in Spain rose by 33,200 in April compared with March. Spain’s new employment legislation, which has come into force this year, is continuing to have a positive effect: the number of people recruited on permanent contracts rose sharply again in April, by 311,100, taking the year-to-date total to 669,710¹. Conversely, the number of people recruited on fixed-term contracts fell by 322,170. Despite good results on the employment front, the jobless rate edged higher in Q1 – rising 0.3 points to 13.5% – due to an increase in the labour force.

Guillaume Derrien

1. The number of “discontinuous fixed-term contracts” (which are now the preferred solution for seasonal work) and training contracts also increased.

SPAIN: 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

UNITED KINGDOM: WEAK GROWTH AND RECESSION RISK

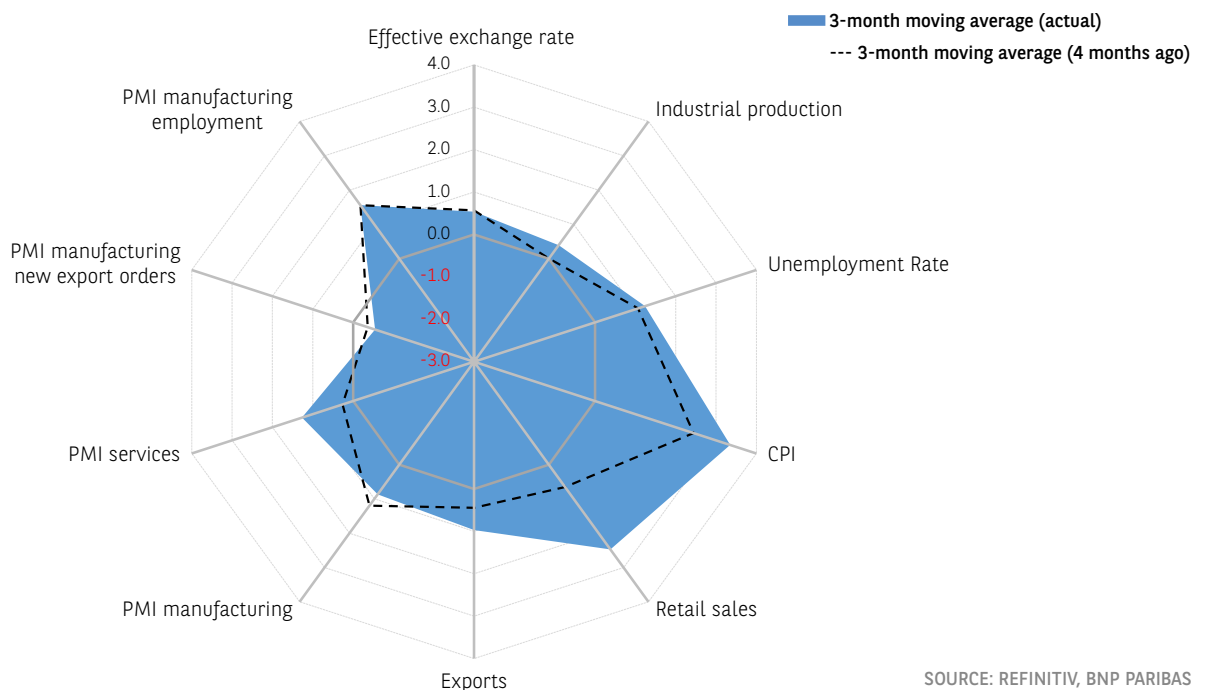
The UK economy grew 0.8% q/q in Q1 2022, taking GDP 0.7% above its pre-Covid level of Q4 2019 but falling short of the 1% expansion expected. Since the ONS also publishes monthly GDP figures, it is possible to see how the economy fared over the course of the quarter. After a positive January (+0.7% m/m), output was flat in February (growth of 0% m/m as opposed to the initial estimate of +0.1%), and GDP even contracted slightly in March (-0.1% m/m). Although Q1 GDP was disappointing, its composition is also worrying looking ahead. Q1 growth was mainly driven by an increase in inventories (positive contribution of 4 points) and investment (0.9 points), offset by a large trade deficit (negative contribution of 4 points). Consumer spending made a limited contribution to growth (+0.3 points), while public spending fell (-0.4 points).

Growth forecasts for Q2 also look limited, for three reasons. Firstly, inventories made a strongly positive contribution in Q1, opening up the possibility of a correction in Q2. Secondly, as regards foreign trade and exports in particular, a PMI reading of 47.7 suggests that manufacturing exports contracted again in April. Thirdly, the fall in real incomes caused by the surge in inflation is likely to continue depressing consumer spending. In April, the rising cost of living caused the GfK consumer confidence index to fall to -38, its lowest level since July 2008.

In addition, the Bank of England is expecting inflation to continue rising, peaking at around 10% in autumn 2022. It also expects growth to slow in Q2 (+0.1% q/q), and has even raised the prospect of a recession this year. In its May meeting, the central bank's Monetary Policy Committee (MPC) decided to continue normalising monetary policy, raising its key interest rate by 25 basis points to 1%, its fourth consecutive rate hike. As regards reducing its balance sheet, the MPC is still hesitating given the current economic and financial uncertainty, and is unlikely to put forward an asset disposal plan until August 2022.

Félix Berte

UNITED KINGDOM: 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 -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

MOBILITY: BACK TO PRE-PANDEMIC LEVELS IN (ALMOST) ALL DEVELOPED ECONOMIES

The downward trend in the weekly number of new cases of Covid-19 continued in most regions of the world. For the first time since mid-November 2021, the number of new cases for the week fell below the symbolic level of 4 million on average for a moving seven-day period. Some 3.6 million new cases were recorded between 5 and 11 May, a fall of 11% on the previous week (chart 1). On a regional basis, case numbers continued to fall drastically in Europe (-20%) and Asia (-17%), but rose in Africa (42%), North America (24%) and South America (10%). The sharp rise in Africa in recent weeks is linked to soaring cases in South Africa. 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 strong in the developed economies. Germany and Japan saw a return to pre-pandemic levels. These two countries thus joined Belgium and the USA, which passed this mark two weeks ago (chart 3). However, visit numbers are still below pre-Covid levels in the other major economies (France, Italy, Spain and the UK) but are gradually getting back to them with France having the smallest gap to fill

Lastly, the trend in the weekly proxy indicator of GDP remained positive in Japan, whilst it stabilised in France, Spain and Belgium. On the other hand, the beginning of a decline is emerging in Italy, whereas Germany, the UK and the USA saw a fairly marked drop (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)

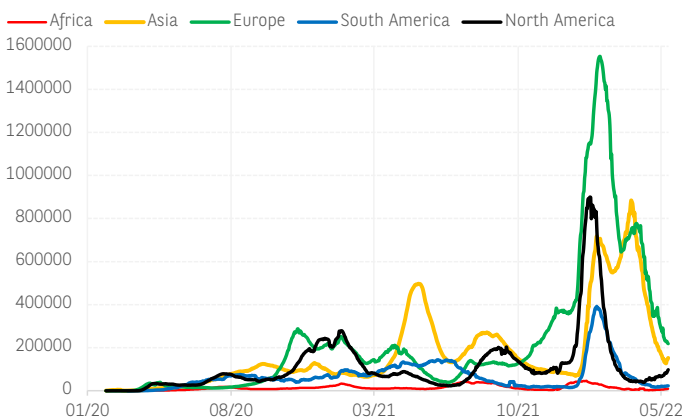


CHART 1

SOURCE: JOHNS-HOPKINS UNIVERSITY (05/12/2022), BNP PARIBAS

SHARE OF PEOPLE WHO RECEIVED AT LEAST ONE DOSE OF VACCINE

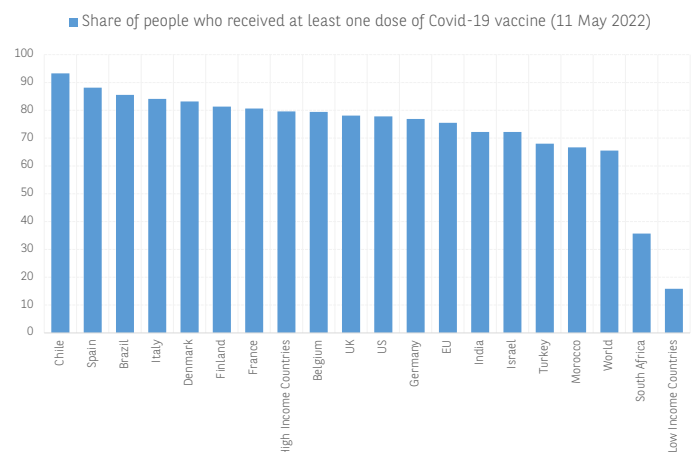


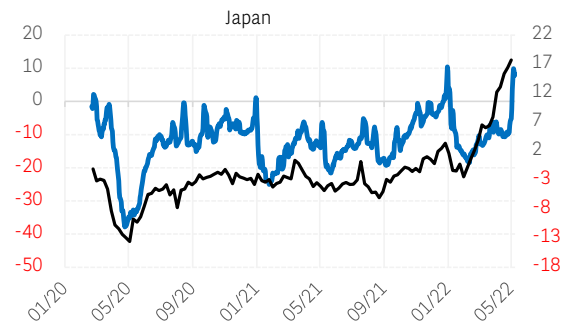
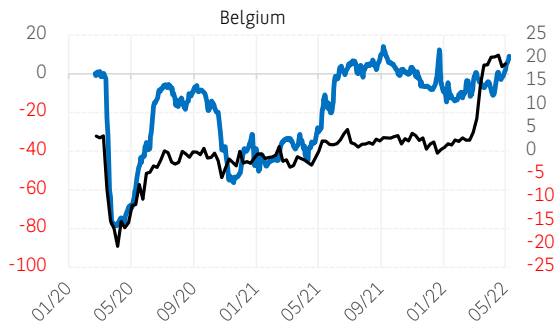
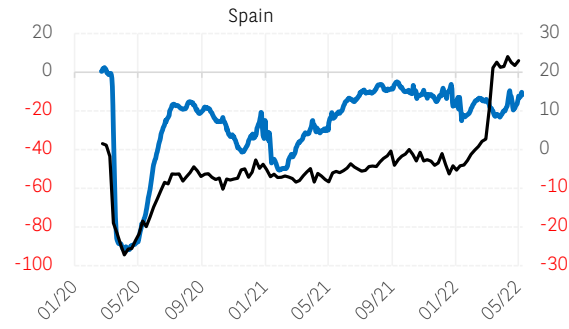
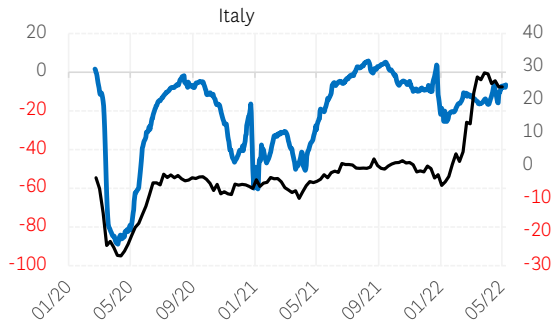
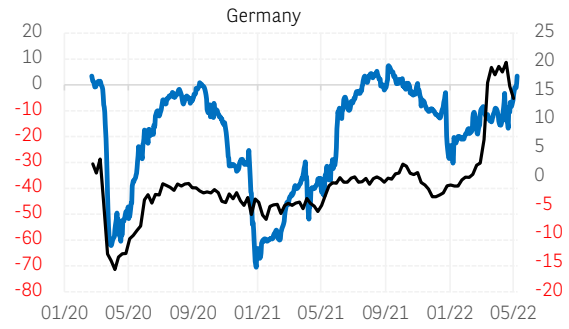
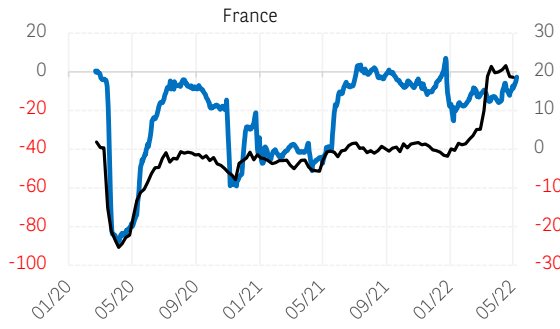
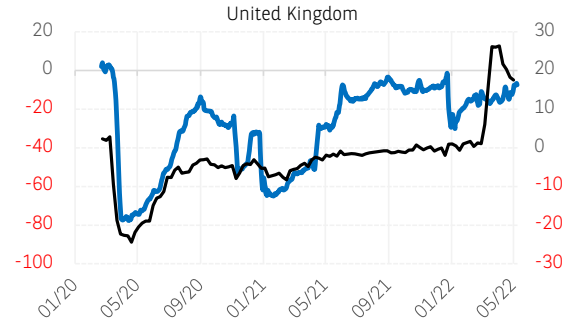
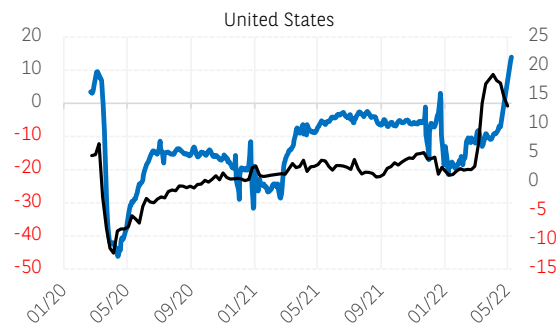
CHART 2

SOURCE: OUR WORLD IN DATA (05/12/2022), 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]

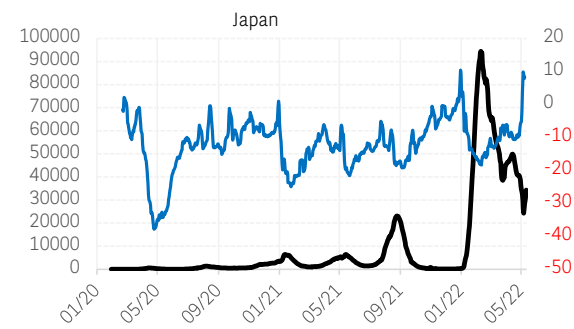
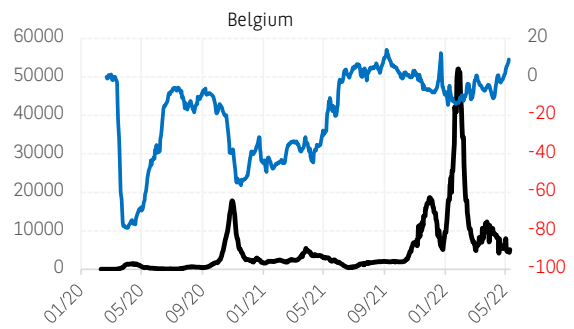
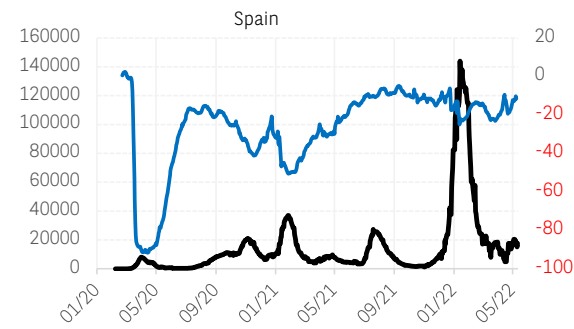
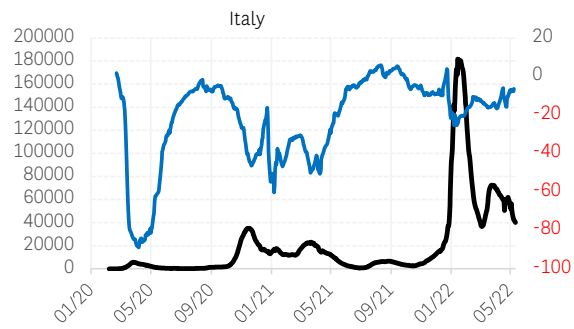
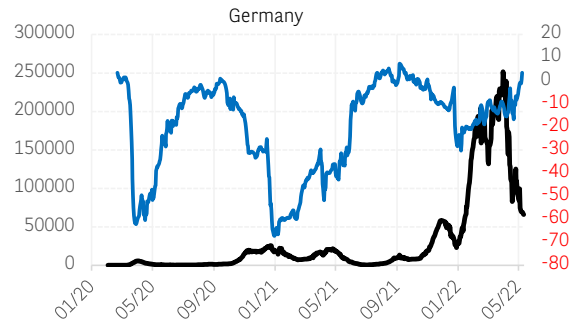
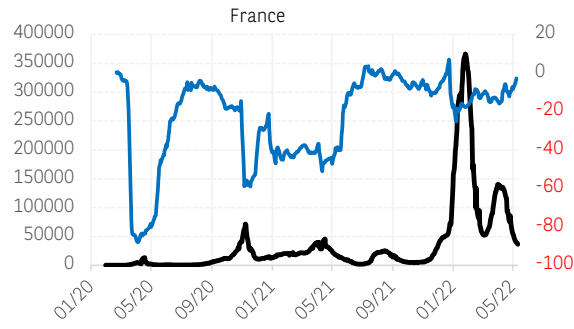
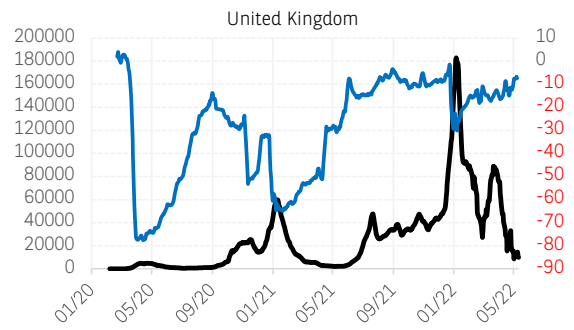
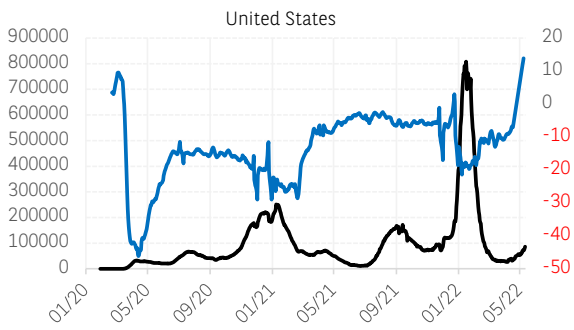


SOURCE: OECD (05/12/2022), GOOGLE (05/12/2022), BNP PARIBAS



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 (05/12/2022), GOOGLE (05/12/2022), 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 & INFLATION

%	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
	Bund 10y	0.51	0.75	0.90	1.00	1.20
Ezone	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
UK	Gilts 10y	1.59	1.75	1.90	2.00	2.00
	Japan	BoJ Rate	-0.02	-0.10	-0.10	-0.10
Japan	JGB 10y	0.21	0.25	0.25	0.25	0.45
Exchange Rates		Q1 2022	Q2 2022 e	Q3 2022 e	Q4 2022 e	Q4 2023 e
End of period						
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		Q1 2022	Q2 2022 e	Q3 2022 e	Q4 2022 e	Q4 2023 e
End of period						
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



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CALENDAR

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LATEST INDICATORS

In Japan, the services and composite PMIs saw a marginal improvement in April and, as a consequence, remained slightly above the 50 mark. The EcoWatchers' Survey recorded a small increase as far as the outlook is concerned but came in below expectations. Chinese exports growth slowed down significantly in April and consumer price inflation accelerated more than expected, whilst remaining low at 2.1%. In Germany, ZEW expectations improved significantly but the assessment of the current situation worsened. The ZEW expectations for the euro area also improved a lot. In the US, small business optimism was stable, monthly core inflation accelerated more than expected although annual inflation as well as core inflation eased somewhat. Monthly producer price inflation declined but annual core producer price inflation declined only slightly. University of Michigan sentiment fell much more than expected by the consensus. Both the assessment of current conditions and the expectations component dropped. Inflation expectations were stable. In the UK, first quarter growth came in at 0.8%, which is a bit below expectations. Private consumption and business investment disappointed.

DATE	COUNTRY	INDICATOR	PERIOD	SURVEY	ACTUAL	PREVIOUS
05/09/2022	Japan	Jibun Bank Japan PMI Services	April	--	50.7	50.5
05/09/2022	Japan	Jibun Bank Japan PMI Composite	April	--	51.1	50.9
05/09/2022	France	Trade Balance	March	-11190m	-12374m	-10360m
05/09/2022	China	Exports YoY	April	2.7%	3.9%	14.7%
05/09/2022	China	Imports YoY	April	-3.0%	0.0%	-0.1%
05/09/2022	China	Exports YoY CNY	April	3.1%	1.9%	12.9%
05/09/2022	China	Imports YoY CNY	April	-3.3%	-2.0%	-1.7%
05/10/2022	Germany	ZEW Survey Expectations	May	-43.5	-34.3	-41.0
05/10/2022	Germany	ZEW Survey Current Situation	May	-35.0	-36.5	-30.8
05/10/2022	Eurozone	ZEW Survey Expectations	May	--	-29.5	-43.0
05/10/2022	United States	NFIB Small Business Optimism	April	92.9	93.2	93.2
05/10/2022	France	Bank of France Ind. Sentiment	April	7.8%	8.0%	8.3%
05/11/2022	China	PPI YoY	April	1.8%	2.1%	1.5%
05/11/2022	China	CPI YoY	April	0.7%	0.7%	0.7%
05/11/2022	Germany	CPI EU Harmonized MoM	April	7.8%	7.8%	7.8%
05/11/2022	Germany	CPI EU Harmonized YoY	April	--	1.5%	2.7%
05/11/2022	United Kingdom	Unit Labor Costs YoY	4Q	--	2.0%	2.5%
05/11/2022	United States	MBA Mortgage Applications	May 6	0.2%	0.3%	1.2%
05/11/2022	United States	CPI MoM	April	0.4%	0.6%	0.3%
05/11/2022	United States	CPI Ex Food and Energy MoM	April	8.1%	8.3%	8.5%
05/11/2022	United States	CPI YoY	April	6.0%	6.2%	6.5%
05/11/2022	United States	CPI Ex Food and Energy YoY	April	51.0	50.4	47.8
05/12/2022	Japan	Eco Watchers Survey Current SA	April	51.0	50.3	50.1
05/12/2022	Japan	Eco Watchers Survey Outlook SA	April	--		50.1



DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	ACTUAL	PREVIOUS
05/12/2022	United Kingdom	GDP QoQ	1Q	1.0%	0.8%	1.3%
05/12/2022	United Kingdom	GDP YoY	1Q	8.9%	8.7%	6.6%
05/12/2022	United Kingdom	Private Consumption QoQ	1Q	0.9%	0.6%	0.5%
05/12/2022	United Kingdom	Government Spending QoQ	1Q	0.5%	-1.7%	1.5%
05/12/2022	United Kingdom	Gross Fixed Capital Formation QoQ	1Q	1.5%	5.4%	1.1%
05/12/2022	United Kingdom	Exports QoQ	1Q	0.0%	-4.9%	6.9%
05/12/2022	United Kingdom	Imports QoQ	1Q	7.2%	9.3%	0.3%
05/12/2022	United Kingdom	Construction Output MoM	March	0.2%	1.7%	0.2%
05/12/2022	United Kingdom	Construction Output YoY	March	2.2%	4.7%	7.0%
05/12/2022	United Kingdom	Total Business Investment QoQ	1Q	1.9%	-0.5%	1.0%
05/12/2022	United Kingdom	Total Business Investment YoY	1Q	9.5%	8.5%	1.0%
05/12/2022	United States	PPI Ex Food and Energy YoY	April	8.9%	8.8%	9.6%
05/12/2022	United States	PPI Final Demand MoM	April	0.5%	0.5%	1.6%
05/12/2022	United States	PPI Ex Food and Energy MoM	April	0.7%	0.4%	1.2%
05/12/2022	United States	PPI Final Demand YoY	April	10.7%	11.0%	11.5%
05/12/2022	United States	Initial Jobless Claims	May 7	193k	203k	202k
05/13/2022	France	CPI EU Harmonized MoM	April	0.5%	0.5%	0.5%
05/13/2022	France	CPI EU Harmonized YoY	April	5.4%	5.4%	5.4%
05/13/2022	France	Wages QoQ	1Q	0.9%	1.1%	0.5%
05/13/2022	United States	U. of Mich. Sentiment	May	64.0	59.1	65.2
05/13/2022	United States	U. of Mich. Current Conditions	May	69.3	63.6	69.4
05/13/2022	United States	U. of Mich. Expectations	May	61.5	56.3	62.5
05/13/2022	United States	U. of Mich. 1 Yr Inflation	May	5.5%	5.4%	5.4%
05/13/2022	United States	U. of Mich. 5-10 Yr Inflation	May	--	3.0%	3.0%

SOURCE: BLOOMBERG



CALENDAR: THE WEEK AHEAD

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COMING INDICATORS

The highlights of the week are the economic data from China – industrial production, retail sales, investments, jobless rate – and the new forecasts from the European Commission. We will have employment data for the euro area and France as well as, for the euro area, an updated estimate of first quarter GDP growth, April inflation data and consumer confidence. Japan will publish first quarter GDP growth numbers. In the US we will have retail sales and several data about the housing market and residential construction activity. The UK will publish data on inflation, retail sales and consumer confidence.

DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	PREVIOUS
05/16/2022	China	Industrial Production YoY	Apr	0.50%	5.00%
05/16/2022	China	Retail Sales YoY	Apr	-6.20%	-3.50%
05/16/2022	China	Fixed Assets Ex Rural YTD YoY	Apr	7.00%	9.30%
05/16/2022	China	Industrial Production YTD YoY	Apr	5.00%	6.50%
05/16/2022	China	Retail Sales YTD YoY	Apr	1.20%	3.30%
05/16/2022	China	Property Investment YTD YoY	Apr	-1.50%	0.70%
05/16/2022	China	Residential Property Sales YTD YoY	Apr	--	-25.60%
05/16/2022	China	Surveyed Jobless Rate	Apr	6.00%	5.80%
05/16/2022	Eurozone	EU Commission Economic Forecasts			
05/17/2022	France	ILO Unemployment Rate	1Q	--	7.40%
05/17/2022	United Kingdom	Weekly Earnings ex Bonus 3M/YoY	Mar	--	4.00%
05/17/2022	United Kingdom	ILO Unemployment Rate 3Mths	Mar	--	3.80%
05/17/2022	United Kingdom	Employment Change 3M/3M	Mar	--	10k
05/17/2022	Eurozone	Employment QoQ	1Q	--	0.50%
05/17/2022	Eurozone	Employment YoY	1Q	--	2.20%
05/17/2022	Eurozone	GDP SA QoQ	1Q	--	0.20%
05/17/2022	Eurozone	GDP SA YoY	1Q	--	5.00%
05/17/2022	United States	Retail Sales Advance MoM	Apr	1.00%	0.50%
05/17/2022	United States	Retail Sales Control Group	Apr	--	-0.10%
05/17/2022	United States	Retail Sales Ex Auto and Gas	Apr	0.80%	0.20%
05/17/2022	United States	Capacity Utilization	Apr	78.50%	78.30%
05/17/2022	United States	NAHB Housing Market Index	May	75	77

SOURCE: BLOOMBERG



DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	PREVIOUS
05/18/2022	Japan	GDP Annualized SA QoQ	1Q	-1.80%	4.60%
05/18/2022	Japan	GDP SA QoQ	1Q	-0.50%	1.10%
05/18/2022	Japan	GDP Private Consumption QoQ	1Q	-0.50%	2.40%
05/18/2022	Japan	GDP Business Spending QoQ	1Q	0.70%	0.30%
05/18/2022	Japan	Inventory Contribution % GDP	1Q	0.10%	-0.10%
05/18/2022	Japan	Net Exports Contribution % GDP	1Q	-0.30%	0.20%
05/18/2022	China	New Home Prices MoM	Apr	--	-0.07%
05/18/2022	United Kingdom	CPI MoM	Apr	--	1.10%
05/18/2022	United Kingdom	CPI YoY	Apr	--	7.00%
05/18/2022	United Kingdom	CPI Core YoY	Apr	--	5.70%
05/18/2022	Eurozone	EU27 New Car Registrations	Apr	--	-20.50%
05/18/2022	Eurozone	CPI YoY	Apr	--	7.40%
05/18/2022	Eurozone	CPI MoM	Apr	--	0.60%
05/18/2022	Eurozone	CPI Core YoY	Apr	--	3.50%
05/18/2022	United States	MBA Mortgage Applications	May	--	2.00%
05/18/2022	United States	Building Permits MoM	Apr	-3.20%	0.40%
05/18/2022	United States	Housing Starts MoM	Apr	-1.70%	0.30%
05/19/2022	United Kingdom	CBI Trends Total Orders	May	--	14
05/19/2022	United Kingdom	CBI Trends Selling Prices	May	--	71
05/19/2022	United States	Philadelphia Fed Business Outlook	May	17.6	17.6
05/19/2022	United States	Initial Jobless Claims	May	--	--
05/20/2022	United Kingdom	GfK Consumer Confidence	May	--	-38
05/20/2022	Japan	Natl CPI Ex Fresh Food, Energy YoY	Apr	0.60%	-0.70%
05/20/2022	United Kingdom	Retail Sales Ex Auto Fuel MoM	Apr	--	-1.10%
05/20/2022	Germany	PPI YoY	Apr	--	30.90%
05/20/2022	Germany	PPI MoM	Apr	--	4.90%
05/20/2022	Eurozone	Consumer Confidence	May	--	-22

SOURCE: BLOOMBERG



FURTHER READING

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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
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ECB: the weaker euro, a blessing or a headache?	EcoWeek	02 May 2022
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United Kingdom : Higher inflation causes decline in real wages	Chart of the Week	27 April 2022
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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
Decoupling, deglobalisation and the inflation outlook	EcoTVWeek	15 April 2022



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