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“THE LATEST ECB SURVEY OF PROFESSIONAL FORECASTERS SHOWS CONCERN THAT INFLATION MIGHT BE MORE PERSISTENT THAN EXPECTED THUS FAR.”



ECONOMIC RESEARCH



BNP PARIBAS

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EUROZONE: CONCERNS ABOUT INFLATION PERSISTENCE

How much and how quickly inflation will decline in the Eurozone is of key importance for the ECB, households, firms and financial markets. There is concern that disinflation might be slower than expected until now. The latest ECB survey of professional forecasters shows an increase in the number of participants expecting inflation to remain elevated. Inflation persistence can have different sources: a succession of shocks, staggered price adjustment by firms, price and wage increases that try to compensate for the past increase in costs and the loss of purchasing power, evolving inflation expectations. Going forward, the tightness of the labour market, the strength of wage developments and the momentum in service price inflation are key factors to monitor.

Last year's debate on inflation was centered around when the latter would peak. Following the significant and swift increases of central bank policy rates and the decline of headline inflation on the back of lower energy prices, this debate has now shifted to how much and how fast inflation will decline.

For the Eurozone, the ECB's March staff projections showed a drop in headline inflation below 3.0% by the end of 2023 and a stabilization at 2.9% in 2024. The ECB's inflation target of 2% would be reached in the third quarter of 2025. In its spring forecast, the European Commission projects a decline in headline inflation to 3.5% in the fourth quarter of this year and to 2.3% at the end of 2024 bringing the annual average for that year down to 2.8%. However, headline inflation this year and next will be heavily influenced by base effects in terms of energy and food prices, so it's important to look at what may happen to core inflation.

The ECB projections expect it to be higher in 2023 than last year (3.2% versus 2.7%) on the back of lagged indirect effects of high energy prices and the depreciation of the euro¹. In 2024, core inflation would drop to 1.7%. The European Commission forecasts are significantly higher with average core inflation at 6.1% in 2023, followed by a gradual moderation to 3.2% in 2024. This huge difference reminds us of the uncertainty about the path of disinflation and raises concern that inflation might be more persistent than expected thus far.

The ECB's estimate of the overall persistent common component of inflation (PCCI)² has declined recently but excluding food and energy, the improvement is very small (chart 1). Other indicators of underlying inflation do not show a turnaround either³, which recently led Philip Lane of the ECB to conclude that *"In overall terms, the range is not only elevated but also wide, indicating that there is a high level of uncertainty about underlying inflation."*⁴

¹ Source: ECB staff macroeconomic projections for the euro area, March 2023.

² The PCCI is one of the measures of underlying inflation monitored by the ECB. Using quantitative methods, the inflation rate of each item in the price index is decomposed into a component that is common to all series and an idiosyncratic component that is specific to a given series. The PCCI is defined as a weighted average of the common components.

Source: ECB, PCCI – a data-rich measure of underlying inflation in the euro area, Statistics Paper Series, n° 38, October 2020.

³ See BNP Paribas *Inflation tracker*, May 2023, page 9.

⁴ Source: Underlying inflation, Lecture by Philip R. Lane, Member of the Executive Board of the ECB, Trinity College Dublin, 6 March 2023.

⁵ Source: Filippo Altissimo, Michael Ehrmann, and Frank Smets, Inflation persistence and price-setting behaviour in the euro area a summary of the IPN evidence, ECB Occasional paper n° 46, June 2006.

EUROZONE: PERSISTENT COMMON COMPONENT OF INFLATION

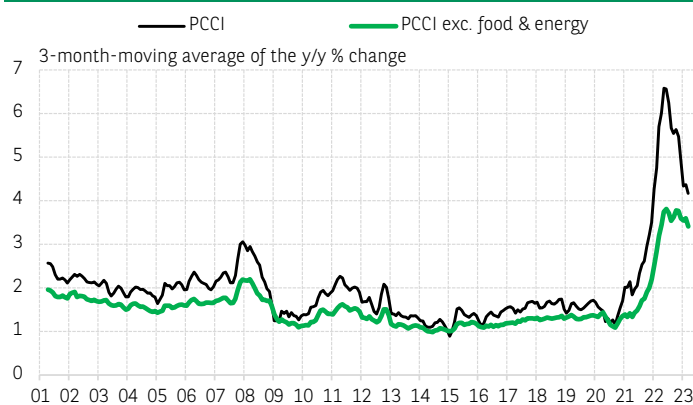


CHART 1

SOURCE: ECB, BNP PARIBAS

Moreover, the latest ECB survey of professional forecasters (Q2 2023) shows an increase in the number of participants expecting inflation to remain elevated. In the fourth quarter of 2022, 48% of survey participants projected inflation higher than 2.4% in 2024. In the latest survey, this number has increased to 60% of the forecasters. For 2025, 61.7% expect inflation of 2.4% or lower, down from 67.7% in the first quarter survey this year.

Inflation persistence can be defined as *"the tendency of inflation to converge slowly towards its long-run value following a shock which has led inflation away from its long-run value."*⁵ It can have different sources. Firstly, a succession of shocks. This is what we have seen in recent years (the Covid-19 pandemic causing a disruption in demand

The latest ECB survey of professional forecasters shows concern that inflation might be more persistent than expected thus far.



and supply, the war in Ukraine, the jump in energy prices followed by a huge increase in food prices). The shocks may be transitory but when they operate in the same direction, they will cause inflation persistence⁶. Secondly, not all firms will be impacted simultaneously by the increase in prices. Some may have long-term supply contracts that, at least temporarily, shield them from the increase in prices. Moreover, not all firms will adjust their prices at the same time. Thirdly, the reaction of households and businesses to an inflationary shock may evolve over time, giving rise to intrinsic inflation persistence. Firms may increasingly set prices in reaction to past price increases to restore their profit margins. They may also raise their prices more often when input costs are rising quickly. Wage demands may rise to make up for the past loss in purchasing power due to higher inflation.

For a central bank, the danger is *“that these second-round effects become embedded in price and wage dynamics creating the threat of a self-sustaining momentum in headline inflation.”*⁷ A tight labour market and strong corporate pricing power will add to the persistence of inflation. Interestingly, the second-round effects may persist although the initial inflation shock may be over. This point has been made by Huw Pill of the Bank of England when explaining the consequences of a jump in energy prices.

The direct inflation effect will disappear over time due to a base effect but to the extent that households and businesses expect the increase in the price level to be permanent, they may continue to try to make up for the past loss in real income and profits even though energy inflation may have vanished. This may lead to a wage-price spiral. Finally, inflation expectations may also contribute to inflation persistence, either because there are doubts about the decisiveness of central banks in addressing elevated inflation - unanchoring of inflation expectations-

or because households and firms have imperfect information about the nature of the shock -temporary or permanent- and how the economy will react to it.

With this overview in mind, what can be said about inflation persistence in the Eurozone? Several factors point towards disinflation. In manufacturing, the Purchasing Managers Indices show that the assessment of input prices has dropped to 44 in April implying that 56% of companies are reporting declining input prices. The assessment of output prices has improved as well but it remains above 50, more precisely at 51.6 in April. Supply bottlenecks have eased, as shown by the normalisation of the PMI delivery times and freight rates. Energy prices have declined. Tighter lending standards and policy rate increases should cool down demand, thereby contributing to a decline in inflation. Inflation expectations -both survey-based and market-based- remain well anchored. However, price pressures in services remain high, both in terms of input and output prices, and the European Commission expects price pressures in (processed) food and goods to fade only slowly. It also expects a strong acceleration in wage growth and a further increase in profit margins in 2023, before a squeeze in 2024.

On balance, the European Commission expects a gradual process of inflation moderation⁸. In assessing whether we are on the right track, we can find inspiration in the key indicators used by the Bank of England to assess the magnitude and evolution of inflation persistence: the tightness of the labour market, the strength of wage developments and the momentum in service price inflation⁹.

William De Vijlder

⁶ This is called extrinsic inflation persistence. Source: Inflation persistence and monetary policy – speech by Huw Pill, Bank of England, 4 April 2023.

⁷ Source : see footnote 5.

⁸ Source : European Commission, Spring forecast, May 2023.

⁹ Source : see footnote 5.

EUROZONE CUMULATIVE EXPECTED PROBABILITY DISTRIBUTION FOR INFLATION

Forecast range	2023			2024			2025	
	Forecast date*			Forecast date*			Forecast date*	
	Q2 2023	Q1 2023	Q4 2022	Q2 2023	Q1 2023	Q4 2022	Q2 2023	Q1 2023
< 0.0	0.0	0.3	0.7	3.4	3.6	1.4	1.9	1.9
0.0 to 0.4	0.0	0.4	0.9	4.4	5.6	3.3	5.5	5.6
0.5 to 0.9	0.0	0.5	1.3	7.0	9.1	7.7	12.7	12.3
1.0 to 1.4	0.1	0.6	1.7	12.1	13.9	16.0	20.8	23.0
1.5 to 1.9	0.2	0.7	2.5	21.4	23.8	33.2	36.4	45.0
2.0 to 2.4	0.5	1.0	5.2	40.4	42.3	51.9	61.7	67.7
2.5 to 2.9	1.2	2.1	8.5	62.8	61.1	68.8	78.2	81.3
3.0 to 3.4	3.4	4.7	12.6	78.6	74.4	80.7	86.9	89.2
3.5 to 3.9	6.5	10.5	18.2	88.6	82.9	87.9	92.5	93.7
4.0 to 4.4	12.9	18.7	28.7	93.5	88.9	92.8	95.4	96.1
4.5 to 4.9	28.5	33.2	45.0	95.9	93.5	95.9	97.0	97.5
≥ 5.0	100	100	100	100	100	100	100	100

TABLE 1

*Quarter in which the forecasts were made

SOURCE: ECB



MARKETS OVERVIEW

5

OVERVIEW

Week 5-5-23 to 12-5-23

↘ CAC 40	7 433	↗ 7 415	-0.2 %
↘ S&P 500	4 136	↗ 4 124	-0.3 %
↑ Volatility (VIX)	#N/A	#N/A	#N/A pb
↗ Euribor 3M (%)	3.28	↗ 3.35	+6.8 bp
↘ Libor \$ 3M (%)	5.34	↘ 5.32	-1.9 bp
↘ OAT 10y (%)	2.82	↘ 2.78	-3.7 bp
↘ Bund 10y (%)	2.30	↘ 2.27	-3.0 bp
↗ US Tr. 10y (%)	3.44	↗ 3.47	+3.0 bp
↘ Euro vs dollar	1.10	↘ 1.09	-1.3 %
↘ Gold (ounce, \$)	2 012	↘ 2 010	-0.1 %
↘ Oil (Brent, \$)	75.4	↘ 74.2	-1.6 %

MONEY & BOND MARKETS

Interest Rates	highest 23	lowest 23	Yield (%)	highest 23	lowest 23		
€ ECB	3.75	3.75 at 10/05	2.50 at 02/01	€ AVG 5-7y	2.64	2.64 at 02/01	2.64 at 02/01
Eonia	-0.51	-0.51 at 02/01	-0.51 at 02/01	Bund 2y	2.71	3.36 at 08/03	2.39 at 20/03
Euribor 3M	3.35	3.35 at 12/05	2.16 at 02/01	Bund 10y	2.27	2.75 at 02/03	1.98 at 18/01
Euribor 12M	3.80	3.98 at 09/03	3.30 at 19/01	OAT 10y	2.78	3.23 at 03/03	2.42 at 18/01
\$ FED	5.25	5.25 at 04/05	4.50 at 02/01	Corp. BBB	4.43	4.75 at 03/03	3.95 at 02/02
Libor 3M	5.32	5.34 at 10/05	4.77 at 02/01	\$ Treas. 2y	4.06	5.12 at 08/03	3.85 at 04/05
Libor 12M	5.26	5.88 at 08/03	4.70 at 20/03	Treas. 10y	3.47	4.06 at 02/03	3.30 at 06/04
£ BoE	4.50	4.50 at 11/05	3.50 at 02/01	High Yield	8.79	9.16 at 20/03	7.94 at 02/02
Libor 3M	4.69	4.69 at 12/05	3.87 at 02/01	£ gilt. 2y	3.79	4.33 at 19/04	3.15 at 02/02
Libor 12M	0.81	0.81 at 02/01	0.81 at 02/01	gilt. 10y	3.78	3.86 at 19/04	3.00 at 02/02

At 12-5-23

At 12-5-23

EXCHANGE RATES

1€ =	highest 23	lowest 23	2023	
USD	1.09	1.11 at 03/05	1.05 at 05/01	+1.8%
GBP	0.87	0.90 at 03/02	0.87 at 09/05	-1.8%
CHF	0.97	1.00 at 24/01	0.97 at 15/03	-1.3%
JPY	146.98	150.77 at 01/05	138.02 at 03/01	+4.4%
AUD	1.63	1.67 at 26/04	1.53 at 27/01	+3.8%
CNY	7.55	7.66 at 03/05	7.23 at 05/01	+1.8%
BRL	5.35	5.79 at 04/01	5.35 at 12/05	-5.1%
RUB	84.38	91.39 at 26/04	73.32 at 12/01	+8.3%
INR	89.25	90.45 at 03/05	86.58 at 08/03	+1.1%

At 12-5-23

Change

COMMODITIES

Spot price, \$	highest 23	lowest 23	2023	2023(€)
Oil, Brent	74.2	88.2 at 23/01	72.4 at 03/05	-12.6% -14.2%
Gold (ounce)	2 010	2 047 at 04/05	1 810 at 24/02	+10.7% +8.8%
Metals, LME	3 721	4 404 at 26/01	3 691 at 11/05	-6.6% -8.2%
Copper (ton)	8 223	9 331 at 23/01	8 133 at 11/05	-1.7% -3.4%
wheat (ton)	232	2.9 at 13/02	219 at 02/05	-18.9% -20.3%
Corn (ton)	243	2.7 at 13/02	237 at 27/04	-0.7% -8.4%

At 12-5-23

Change

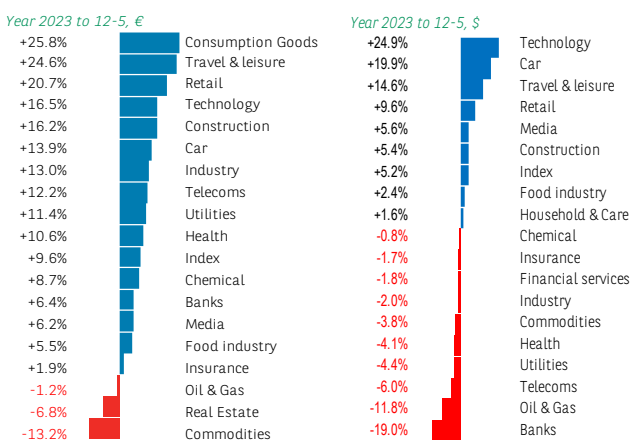
EQUITY INDICES

Index	highest 23	lowest 23	2023	
World				
MSCI World	2 809	2 848 at 02/02	2 595 at 05/01	+7.9%
North America				
S&P500	4 124	4 180 at 02/02	3 808 at 05/01	+7.4%
Europe				
EuroStoxx50	4 318	4 409 at 21/04	3 856 at 02/01	+13.8%
CAC 40	7 415	7 577 at 21/04	6 595 at 02/01	+1.5%
DAX 30	15 914	15 961 at 05/05	14 069 at 02/01	+14.3%
IBEX 35	9 234	9 511 at 06/03	8 370 at 02/01	+1.2%
FTSE100	7 755	8 014 at 20/02	7 335 at 17/03	+0.4%
Asia				
MSCI, loc.	1 146	1 149 at 09/05	1 065 at 04/01	+0.7%
Nikkei	29 388	29 388 at 12/05	25 717 at 04/01	+12.6%
Emerging				
MSCI Emerging (\$)	973	1 052 at 26/01	941 at 16/03	+0.2%
China	62	75 at 27/01	62 at 20/03	-1.8%
India	763	786 at 18/01	703 at 16/03	-1.7%
Brazil	1 494	1 574 at 25/01	1 296 at 23/03	-4.4%

At 12-5-23

Change

PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)



SOURCE: REFINITIV, BNP PARIBAS

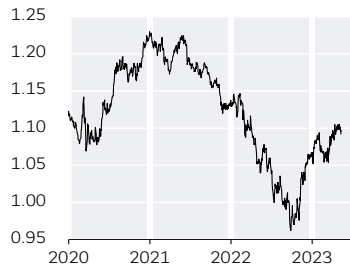


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MARKETS OVERVIEW

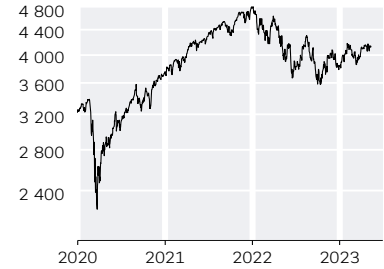
EURO-DOLLAR



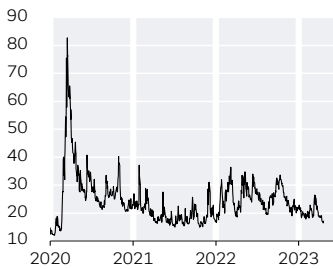
EUROSTOXX50



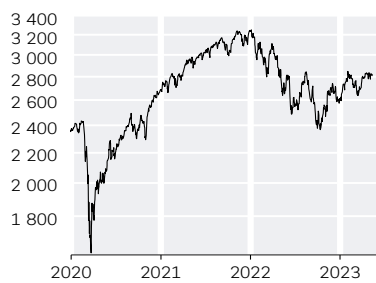
S&P500



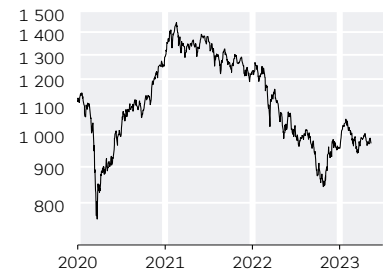
VOLATILITY (VIX, S&P500)



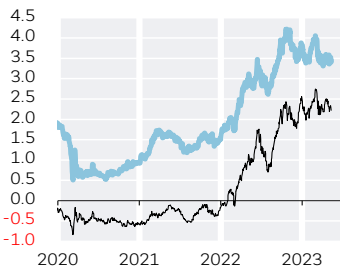
MSCI WORLD (USD)



MSCI EMERGING (USD)

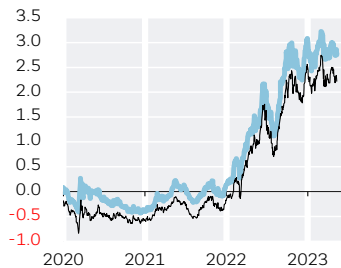


10Y BOND YIELD, TREASURIES VS BUND



—Bunds —US Treasuries

10Y BOND YIELD



—Bunds —OAT

10Y BOND YIELD & SPREADS

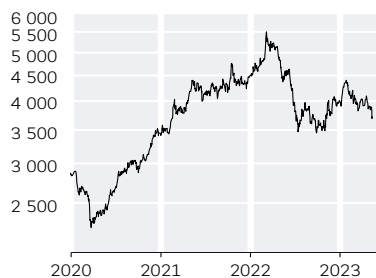
Year 2023 to 12-5

5.08%	Greece	281 bp
4.13%	Italy	186 bp
3.36%	Spain	109 bp
2.99%	Portugal	72 bp
2.97%	Belgium	70 bp
2.95%	Austria	68 bp
2.87%	Finland	60 bp
2.78%	France	51 bp
2.72%	Ireland	45 bp
2.64%	Netherlands	37 bp
2.27%	Germany	

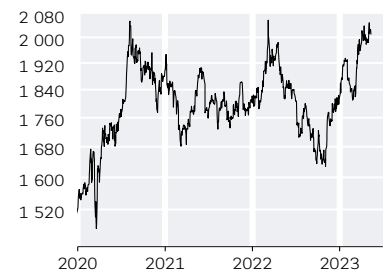
OIL (BRENT, USD)



METALS (LME, USD)



GOLD (OUNCE, USD)



SOURCE: REFINITIV, BNP PARIBAS



ECONOMIC PULSE

PMI: MANUFACTURING ACTIVITY CONTINUED TO DECLINE IN APRIL FOR MOST COUNTRIES

April was marked by the stabilisation of the Purchasing Managers Index (PMI) for the manufacturing sector (*table 1*), after a slight decline in March. The United States and Canada reported a slight increase, with the index rising above 50 (the level separating expansion from contraction), while in the eurozone, the index slipped to 45.8, the lowest level since May 2020. In 7 of the 8 countries followed in the eurozone, the index remained below 50, signalling a contraction. In Asia, PMI continued to decline further in Vietnam, while in China it slipped slightly into contraction territory at 49.5. In Japan, in contrast, PMI continued to rise. Brazil and the United Kingdom also recorded a decline in manufacturing activity.

After March's decline, new export orders (*table 2*) rebounded in April, buoyed by increases in Brazil, India, and South Africa, and to a more limited extent in Japan and China. In the United States, the index rose slightly in April after a 2-month decline. In contrast, the index fell slightly in the eurozone, the Netherlands and Greece, and contracted in France, Austria, Spain and Italy. The index rebounded strongly in Ireland and increased in Germany. In the UK, the index continued to decline slightly.

The figures for manufacturing sector employment (*table 3*) are much better oriented. Hiring intentions have increased in the United States, the United Kingdom and, to a lesser extent, Japan, but the same cannot be said for Vietnam, South Korea and Brazil. Employment figures for China declined slightly for the second consecutive month.

PMI manufacturing input prices (*table 4*) continued to contract at the world level for the third consecutive month, with declines reported for all countries covered by the survey with the exception of the United States, Canada, Brazil, India and Russia. Manufacturing output prices (*table 5*) also declined at the world level for the third consecutive month. This decline is mainly due to the decline in the eurozone index, eurozone member countries, the UK and Canada. Conversely, the index continued to rise in Japan for the third consecutive month, and for the second time in India and Hong Kong. In the United States, the index rebounded strongly in April, following the PMI in input prices.

Delivery times (*table 6*) continued to shorten at the global level, which should help ease inflationary pressures (Note: an increase in the index indicates shorter delivery times). This is also true for the United States, Japan, the eurozone and the eurozone member countries. In contrast, the UK, China, Vietnam and Indonesia reported longer delivery times.

Activity in services is much more dynamic. The services PMI (*table 7*) continued to increase at the world level, rising above 55. It rose in virtually all of the countries in our selection, with the exception of Spain, China, Russia, Lebanon and Hong Kong. It rose sharply in India, Brazil, the UK, Germany, Ireland, and Italy.

Tarik Rharrab

MANUFACTURING PMI

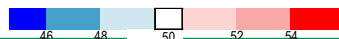
Year	Developed Markets														Emerging countries																			
	WD	NA				Europe						Asia-Oceania				LATAM		Eurasia				Middle East & Africa				Asia								
	World	CANADA	USA	EUROZONE	AUSTRIA	DENMARK	FRANCE	GERMANY	GREECE	IRELAND	ITALY	NETHERLANDS	SPAIN	SWITZERLAND	UK	AUSTRALIA	NEW ZEALAND	JAPAN	SINGAPORE	BRAZIL	MEXICO	CZECH REPUBLIC	POLAND	RUSSIA	TURKEY	EGYPT	LEBANON	SAUDI ARABIA	SOUTH AFRICA	UAE	CHINA	HONG KONG	INDIA	INDONESIA
Jul-22	51.1	52.5	52.2	49.8	51.7	38.0	49.5	49.3	49.1	51.8	48.5	54.5	48.7	58.0	52.1	52.9	52.1	50.1	54.0	48.5	46.8	42.1	50.3	46.9	46.4	49.9	56.3	49.4	55.4	50.4	52.3	56.4	51.3	51.2
Aug-22	50.3	48.7	51.5	49.6	48.8	49.3	50.6	49.1	48.8	51.1	48.0	52.6	49.9	56.7	47.3	54.5	51.5	50.0	51.9	48.5	46.8	40.9	51.7	47.4	47.6	50.1	57.7	51.1	56.7	49.5	51.2	58.2	51.7	52.7
Sep-22	49.8	49.8	52.0	48.4	48.8	49.9	47.7	47.8	49.7	51.5	48.3	49.0	49.0	56.8	48.4	51.3	50.8	49.9	51.1	50.3	44.7	43.0	52.0	46.9	47.6	48.8	56.6	48.2	56.1	48.1	48.0	55.1	53.7	52.5
Oct-22	49.4	48.8	50.4	46.4	46.6	50.8	47.2	45.1	48.1	51.4	46.5	47.9	44.7	55.4	46.2	48.9	50.7	49.7	50.8	50.3	41.7	42.0	50.7	46.4	47.7	49.1	57.2	50.0	56.6	49.2	49.3	59.3	51.8	50.6
Nov-22	48.8	49.6	47.7	47.1	46.6	46.6	48.3	46.2	48.4	48.7	48.4	46.0	45.7	54.4	46.5	47.3	49.0	49.8	44.3	50.6	41.6	43.4	53.2	45.7	45.4	48.1	58.5	52.6	54.4	49.4	48.7	55.7	50.3	47.4
Dec-22	48.7	49.2	46.2	47.8	47.3	50.5	49.2	47.1	47.2	48.7	48.5	48.6	46.4	54.5	45.3	48.0	48.9	49.7	44.2	51.3	42.6	45.6	53.0	48.1	47.2	47.3	56.9	53.1	54.2	49.0	49.6	57.8	50.9	46.4
Jan-23	49.1	51.0	46.9	48.8	48.4	54.0	50.5	47.3	49.2	50.1	50.4	49.6	48.4	49.3	47.0	51.0	48.9	49.8	47.5	48.9	44.6	47.5	52.6	50.1	45.5	47.7	58.2	53.0	54.1	49.2	51.2	55.4	51.3	47.4
Feb-23	49.9	52.4	47.3	48.5	47.1	49.3	47.4	46.3	51.7	51.3	52.0	48.7	50.7	48.9	49.3	51.7	47.7	50.0	49.2	51.0	44.3	48.5	53.6	50.1	46.9	48.8	59.8	48.8	54.3	51.6	53.9	55.3	51.2	51.2
Mar-23	49.6	48.6	49.2	47.3	44.7	43.2	47.3	44.7	52.8	49.7	51.1	46.4	51.3	47.0	47.9	48.1	49.2	49.9	47.0	51.0	44.3	48.3	53.2	50.9	46.7	49.7	58.7	48.1	55.9	50.0	53.5	56.4	51.9	47.7
Apr-23	49.6	50.2	50.2	45.8	42.0	44.2	45.6	44.5	52.4	48.6	46.8	44.9	49.0	45.3	47.8	49.5	49.7	44.3	51.1	42.8	46.6	52.6	51.5	47.3	49.5	59.6	49.8	56.6	49.5	52.4	57.2	52.7	46.7	

TABLE 1

MANUFACTURING PMI - NEW EXPORT ORDERS

Year	Developed Markets														Emerging countries																				
	WD	NA				Europe						Asia-Oceania				LATAM		Eurasia				Middle East & Africa				Asia									
	World	CANADA	USA	EUROZONE	AUSTRIA	DENMARK	FRANCE	GERMANY	GREECE	IRELAND	ITALY	NETHERLANDS	SPAIN	SWITZERLAND	UK	AUSTRALIA	NEW ZEALAND	JAPAN	SINGAPORE	BRAZIL	MEXICO	CZECH REPUBLIC	POLAND	RUSSIA	TURKEY	EGYPT	ISRAEL	LEBANON	SAUDI ARABIA	SOUTH AFRICA	UAE	CHINA	HONG KONG	INDIA	INDONESIA
Jul-22	48.0	47.3	46.3	44.3	43.9	45.0	42.9	46.1	48.4	42.8	50.4	43.6	46.4	51.2	48.8	50.5	46.6	50.6	40.5	38.7	45.1	49.9	52.4	57.1	49.6	55.1	50.2	53.2	50.7	46.2	52.6	43.8	52.9		
Aug-22	47.0	45.4	47.2	44.0	40.7	47.2	41.5	45.1	47.5	45.0	46.0	45.4	42.7	46.8	47.3	50.2	46.5	49.2	39.5	39.2	40.9	48.5	48.2	43.8	49.8	54.3	50.4	51.3	48.6	47.4	53.9	49.6	52.8		
Sep-22	45.9	46.6	47.6	42.5	39.9	44.1	39.8	47.9	47.8	45.5	43.1	41.5	42.2	51.5	47.5	49.9	45.7	48.8	34.7	38.9	40.3	43.7	49.0	45.3	48.4	56.1	50.7	50.8	49.6	47.4	56.6	43.4	50.6		
Oct-22	46.2	45.4	44.9	39.6	33.3	44.8	34.9	44.1	47.1	43.3	40.1	40.0	40.6	49.4	45.4	49.5	37.7	49.5	33.7	40.2	42.4	43.4	45.0	44.3	47.8	59.6	47.7	51.3	49.3	49.2	56.3	42.5	46.3		
Nov-22	46.2	46.2	45.7	41.6	34.8	42.8	39.1	47.2	48.7	45.3	39.7	40.7	39.1	51.7	46.3	49.3	40.4	49.9	35.5	43.9	45.0	45.6	50.6	54.7	48.1	58.3	48.6	49.0	47.5	45.0	53.4	47.9	47.6		
Dec-22	46.2	45.9	46.7	42.8	36.4	41.5	41.5	45.4	49.5	45.3	42.1	42.4	44.1	46.6	49.4	39.4	50.1	41.1	45.1	45.3	47.6	44.7	52.4	48.8	57.8	47.4	47.5	48.7	50.6	51.2	45.5	50.3			
Jan-23	47.5	47.4	48.6	44.7	41.3	41.5	42.8	49.2	48.1	49.2	47.6	46.4	49.0	46.1	49.7	42.5	48.8	41.5	46.3	45.0	52.4	47.2	48.5	49.4	58.4	51.0	50.1	49.0	55.3	51.2	48.5	47.2			
Feb-23	48.3	48.2	47.3	43.3	40.5	40.4	39.8	48.3	46.2	48.9	47.4	49.6	48.2	46.1	49.7	42.5	48.8	41.5	46.3	45.0	52.4	47.2	48.5	49.4	58.4	51.0	50.1	49.0	55.3	51.2	48.5	47.2			
Mar-23	47.7	45.9	46.6	45.5	40.0	41.1	45.0	50.3	48.7	47.2	44.3	48.7	48.2	47.3	49.4	45.5	48.0	42.5	43.1	51.0	54.0	46.8	50.3	49.4	53.4	50.0	50.1	53.3	53.1	48.5	47.9				
Apr-23	48.4	47.7	47.0	45.0	37.4	41.1	45.0	50.3	48.7	47.2	44.3	48.7	48.2	47.3	49.4	45.5	48.0	42.5	43.1	51.0	54.0	46.8	50.3	49.4	53.4	50.0	50.1	53.3	53.1	48.5	47.9				

TABLE 2



SOURCE: S&P GLOBAL, BNP PARIBAS



BNP PARIBAS

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ECONOMIC PULSE

MANUFACTURING PMI - DELIVERY TIMES

	Developed Markets																			Emerging countries													
	NA		Europe										Asia-Oceania				LATAM		Eurasia				Middle East & Africa			Asia							
	World	CANADA	USA	EURO ZONE	AUSTRIA	DENMARK	FRANCE	GERMANY	GREECE	IRELAND	ITALY	NETHERLANDS	SPAIN	UK	AUSTRALIA	NEW ZEALAND	JAPAN	SINGAPORE	BRAZIL	MEXICO	CZECH REPUBLIC	POLAND	RUSSIA	TURKEY	EGYPT	SAUDI ARABIA	SOUTH AFRICA	UAE	CHINA	HONG KONG	INDIA	INDONESIA	VIETNAM
Jul-22	42.8	33.1	33.7	37.9	38.7	49.2	32.0	38.7	33.4	36.6	40.8	38.5	40.8	37.9	47.4	50.0	39.2	50.3	41.5	41.9	42.4	45.7	39.0	46.2	48.7	56.0	60.2	51.0	49.1	46.9	50.2	48.9	48.5
Aug-22	44.8	37.6	38.9	40.2	41.4	47.0	33.1	40.9	36.1	37.7	44.5	39.8	44.9	44.5	47.1	54.0	40.0	50.4	46.6	42.5	46.5	47.3	43.8	46.7	49.5	54.6	59.9	52.8	49.4	49.2	50.8	50.0	50.5
Sep-22	45.7	41.2	43.1	41.8	39.5	53.9	37.8	44.6	35.4	39.5	40.8	42.6	41.1	42.1	52.8	54.3	41.6	50.5	49.1	42.0	47.0	47.7	45.3	46.1	49.4	50.9	61.7	51.7	48.7	49.1	49.4	49.8	50.1
Oct-22	46.5	44.1	44.3	43.4	41.7	57.6	38.5	47.1	36.7	38.9	42.2	42.2	43.9	43.6	48.3	55.0	43.7	50.6	49.7	43.8	46.4	49.3	43.5	51.2	50.2	51.4	61.9	52.1	48.8	49.0	49.6	49.1	50.4
Nov-22	47.3	45.0	50.5	47.5	47.4	51.4	39.9	53.1	42.6	42.3	45.7	45.3	44.8	45.3	39.2	49.7	43.8	50.4	52.2	46.2	47.9	49.8	44.8	53.3	49.2	54.6	61.7	51.7	45.5	50.4	50.3	49.4	49.6
Dec-22	47.8	44.4	49.9	50.0	49.6	57.6	39.1	56.8	47.1	44.7	46.9	49.5	48.4	46.8	48.6	43.9	50.5	53.6	46.2	47.0	48.9	45.0	53.3	49.3	51.5	65.8	50.5	46.7	50.5	50.0	49.2	49.2	
Jan-23	49.0	46.6	50.2	49.8	50.5	68.1	36.5	65.4	46.9	50.7	47.3	52.2	47.8	47.8	52.0	45.6	50.4	51.2	47.8	49.0	48.5	47.4	49.8	48.9	52.7	57.6	51.9	49.3	51.2	50.5	49.3	50.3	
Feb-23	51.0	46.5	53.0	54.8	53.9	68.7	44.7	64.1	44.7	49.1	47.7	55.1	48.6	51.0	52.2	46.8	49.9	51.4	46.4	47.5	50.6	45.7	44.5	48.1	54.2	65.3	55.0	51.2	55.2	50.0	50.8	50.7	
Mar-23	52.6	49.3	55.2	62.2	60.3	67.4	50.4	74.3	49.8	50.9	55.4	61.1	52.8	55.3	53.8	48.4	50.0	51.8	47.3	55.5	48.9	47.6	49.0	49.3	65.5	50.8	51.3	50.6	54.0	50.2	51.4	51.6	
Apr-23	53.2	49.6	56.6	65.0	63.1	65.3	51.9	74.9	52.3	54.3	61.3	67.1	56.7	54.4	49.2	50.4	53.1	46.1	53.1	46.1	59.4	49.9	49.6	48.2	49.0	65.2	53.0	53.1	50.2	54.4	50.8	50.7	51.1

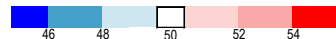
TABLE 6



SERVICES PMI

	World	USA	EURO ZONE	FRANCE	GERMANY	IRELAND	ITALY	SPAIN	UK	AUSTRALIA	JAPAN	BRAZIL	RUSSIA	LEBANON	CHINA	HONG KONG	INDIA
Jul-22	51.0	47.3	51.2	53.2	49.7	56.3	48.4	53.8	52.6	51.7	50.3	55.8	54.7	49.9	55.5	52.3	55.5
Aug-22	49.2	43.7	49.8	51.2	47.7	54.7	50.5	50.6	50.9	53.3	49.5	53.9	49.9	50.1	55.0	51.2	57.2
Sep-22	50.0	49.3	48.8	52.9	45.0	54.1	48.8	48.5	50.0	48.0	52.2	51.9	51.1	48.8	49.3	48.0	54.3
Oct-22	49.2	47.8	48.6	51.7	46.5	53.2	46.4	49.7	48.8	47.7	53.2	54.0	43.7	49.1	48.4	49.3	55.1
Nov-22	48.0	46.2	48.5	49.3	46.1	50.8	49.5	51.2	48.8	45.6	50.3	51.6	48.3	48.1	46.7	48.7	56.4
Dec-22	48.1	44.7	49.8	49.5	49.2	52.7	49.9	51.6	49.9	51.1	51.0	45.9	47.3	48.0	49.6	58.5	
Jan-23	50.1	46.8	50.8	49.4	50.7	54.1	51.2	52.7	48.7	52.3	50.7	48.7	47.7	52.9	51.2	57.2	
Feb-23	52.6	50.6	52.7	53.1	50.9	58.2	51.6	56.7	53.5	54.0	49.8	53.1	48.8	55.0	53.9	59.4	
Mar-23	54.4	52.6	55.0	53.9	53.7	55.7	55.7	59.4	52.9	55.0	51.8	58.1	49.7	57.8	53.5	57.8	
Apr-23	55.4	53.6	56.2	54.6	56.0	58.4	57.6	57.9	55.9	55.4	54.5	55.9	49.5	56.4	52.4	62.0	

TABLE 7



SOURCE: S&P GLOBAL, BNP PARIBAS



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ECONOMIC SCENARIO

10

UNITED STATES

The U.S. economy continued to grow in Q4, although it slowed slightly compared to Q3. However, the main drivers of growth, namely household consumption and private inventories, are fragile, suggesting that the economy should continue to slow. Indeed, growth decelerated in Q1 2023. This slowdown remains progressive however as evidenced by the slow puncture of the labour market, with job creation remaining high, the unemployment rate low and wage growth buoyant. Inflation seems to have peaked in the middle of 2022, but core disinflation remains gradual in such a way that headline inflation should stay significantly above the target of 2% by the end of 2023. Nevertheless, the Federal Reserve may have completed its policy rate hike cycle given the concomitant tightening of credit access conditions. The ongoing monetary tightening is expected to drive the US economy into recession in the second half of 2023 and limit the expected recovery in 2024.

CHINA

Economic growth, which was sluggish and unbalanced in 2022, will strengthen in 2023. The end of the zero Covid policy has led to a rebound in private demand and activity in the services sector since late January, and household consumption will continue to benefit from large catch-up effects in the short term. However, while export and industrial production prospects are darkened by the weakening in global demand, activity driven by the domestic market remains constrained by important drags. In fact, the recovery in the labour market remains uncertain, the improvement in the property and construction sectors is likely to be limited, and the worrying financial situation of local governments should constrain public investment. Fiscal and monetary support is expected to be prudent. Consumer price inflation, which averaged 2% in 2022, should accelerate only mildly in 2023.

EUROZONE

Economic growth in the eurozone was zero in the fourth quarter of 2022, but better than expected for 2022 as a whole, at 3.5%. It continued to surprise favorably in the early months of 2023 judging by the improvement in survey data (business confidence and, to a lesser extent, consumer confidence). However, the combination of the inflationary shock, the energy crisis and forced monetary tightening and the build-up of their negative effects will weaken activity in 2023. Real GDP growth should be weakly positive in 2023 and 2024, at 0.8% and 0.5% respectively. Although it is expected to decline throughout 2023, inflation would remain elevated and well above the 2% target at the end of this year and still a bit above at the end of 2024, forcing monetary policy to remain in restrictive territory.

FRANCE

Real GDP growth has decreased in H2 2022 (0.2% q/q in Q3 and 0.1% in Q4, after +0.5% in Q2). Corporate investment and inventory rebuilding have remained the main growth drivers, whereas household demand has played on the downside: household consumption has decreased by 1.2% q/q in Q4 and their investment by 0.9%. As inflation is still high (and has reached a new peak of 7.3% y/y in February 2023 according to the harmonized measure) and because of rising interest rates, household demand should remain subdued in 2023, weighing on our GDP growth forecast (0.5% in 2023, compared to 2.6% in 2022).

RATES AND EXCHANGE RATES

In the US, following a 25 basis point increase in the Fed Funds rate in May, the Federal Reserve is likely to stop raising interest rates. Inflation remains at an elevated level but steep tightening in lending standards should tilt the balance in favour of the end of the tightening cycle. Given the slow disinflation process, no rate cut may be expected until the beginning of 2024, despite the US economy entering recession in the second semester of 2023. The peak in long-term yields is likely to have been reached too. Bond yields should subsequently move lower as the inflation outlook improves and the market starts anticipating monetary policy easing in 2024.

Though, for the Fed, the hike in May is expected to be the last one, this should not be the case for the ECB. We expect the ECB to continue to tighten its monetary policy, by raising the deposit rate to 3.75% in Q3. As part of its monetary tightening tools, it also announced a complete halt, starting in July 2023, of its reinvestments under the APP. European long-term rates may also have peaked and should move lower, driven by both a gradual decline in inflation in the eurozone and lower US yields.

The Bank of Japan has increased the upper end of its target range for the 10-year JGB yield to 0.5% and further adjustments to the yield curve control policy cannot be excluded. Nevertheless, we do not expect the BoJ to proceed with a rate hike.

We expect the dollar to weaken somewhat versus the euro. The dollar's valuation is expensive, positioning in the market is very long and the long-term interest rate differential should narrow. We expect the yen to remain around current levels in the near term before strengthening versus the dollar considering that the federal funds rate should have reached its terminal rate.

INFLATION* AND GDP GROWTH**

%	GDP Growth**				Inflation*			
	2021	2022	2023 e	2024 e	2021	2022	2023 e	2024 e
United-States	5,9	2,1	1,4	-0,1	4,7	8,0	4,4	2,6
Japan	2,2	1,0	1,2	0,8	-0,2	2,5	3,3	1,7
United-Kingdom	7,6	4,1	0,3	1,0	2,6	9,1	6,6	2,0
Euro Area	5,3	3,5	0,6	0,5	2,6	8,4	5,4	2,6
Germany	2,6	1,9	0,0	0,5	3,2	8,7	5,8	2,6
France	6,8	2,6	0,5	0,6	2,1	5,9	6,1	3,0
Italy	7,0	3,8	0,9	0,6	1,9	8,7	6,1	2,2
Spain	5,5	5,5	1,8	0,8	3,0	8,3	3,2	2,2
China	8,4	3,0	5,6	5,3	0,9	2,0	2,7	2,5
India***	8,7	7,0	5,7	6,0	5,5	6,7	5,4	4,5
Brazil	5,0	2,9	1,5	0,5	8,3	9,3	5,5	5,5

* LAST UPDATE 28 APRIL 2023: INFLATION JAPAN; 20 APRIL 2023: INFLATION EUROZONE, GERMANY, FRANCE, ITALY, SPAIN AND UK; 31 MARCH 2023: US GDP AND INFLATION

** LAST UPDATE 4 MAY 2023: GDP UK; 21 APRIL 2023: GDP EUROZONE, GERMANY, FRANCE, ITALY AND SPAIN

*** FISCAL YEAR FROM 1ST APRIL OF YEAR N TO MARCH 31ST OF YEAR N+1

SOURCE: BNP PARIBAS (E: ESTIMATES & FORECASTS)

INTEREST AND EXCHANGE RATES

Interest rates, %

End of period		Q2 2023	Q3 2023	Q4 2023	Q4 2024
US	Fed Funds (upper limit)*	5.25	5.25	5.25	3.50
	T-Note 10y **	3.75	3.50	3.40	3.25
Eurozone	deposit rate*	3.50	3.75	3.75	2.75
	Bund 10y **	2.60	2.45	2.20	2.00
	OAT 10y	3.15	3.00	2.72	2.50
	BTP 10y	4.60	4.70	4.45	3.80
	BONO 10y	3.60	3.55	3.30	2.90
UK	Base rate*	4.75	4.75	4.75	3.50
	Gilts 10y **	3.75	3.50	3.35	2.80
Japan	BoJ Rate	-0.10	-0.10	-0.10	0.10
	JGB 10y**	0.45	0.60	0.65	0.80

Exchange Rates

End of period		Q2 2023	Q3 2023	Q4 2023	Q4 2024
USD	EUR / USD	1.10	1.12	1.14	1.18
	USD / JPY	133	130	127	121
	GBP / USD	1.24	1.26	1.28	1.33
EUR	EUR / GBP	0.89	0.89	0.89	0.89
	EUR / JPY	146	146	145	143

Brent

End of period		Q2 2023	Q3 2023	Q4 2023	Q4 2024
Brent	USD/bbl	85	90	90	95

* DEPOSIT RATE: LAST UPDATE AT 27 APRIL 2023, FED FUNDS : 31 MARCH 2023, BOE: 11 MAY 2023

** BUND 10Y: LAST UPDATE AT 3 MAY, GILTS 10Y: 20 APRIL 2023, JGB 10Y: 28 MARCH, US 10Y: 12 APRIL

SOURCES: BNP PARIBAS (MARKET ECONOMICS, INTEREST RATE STRATEGY, FX STRATEGY, COMMODITIES DESK STRATEGY)



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FURTHER READING

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Fed and ECB: similar reaction functions, different guidance	EcoTVWeek	12 May 2023
Southern europe: recovery of the public accounts	EcoFlash	11 May 2023
Japan is not spared from the return of inflation	Chart of the Week	10 May 2023
When will the federal reserve stop tightening? Insights from previous cycles	EcoWeek	9 May 2023
French growth: a tale of three sectors (transport equipment, food and housing)	EcoTVWeek	5 May 2023
Inflation Tracker May 2023	EcoCharts	4 May 2023
Kenya: strong pressure on external solvency	Chart of the Week	3 May 2023
The nexus between price stability, financial stability and fiscal sustainability (part 2): the coordination between monetary and fiscal policy	EcoWeek	2 May 2023
Pricing power: the return, and soon the end?	EcoTVWeek	28 April 2023
United States: money supply slumps	Chart of the Week	26 April 2023
The nexus between price stability, financial stability and fiscal sustainability (part 1)	EcoWeek	24 April 2023
Eurozone: How far can the divergence between industry and services go?	EcoBrief	21 April 2023
OECD: April 2023 Pulse	EcoPulse	21 April 2023
About the impact of the structural decoupling between US and Chine on Emerging Markets	EcoTVWeek	21 April 2023
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Increase in business insolvencies in Europe: should we be worried?	EcoFlash	14 April 2023
The spectre of a structural decoupling of the US and China	EcoEmerging	14 April 2023
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