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"Labour hoarding: a source of resilience during a recession"

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BNP PARIBAS

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LABOUR HOARDING: A SOURCE OF RESILIENCE DURING A RECESSION

Companies in the United States and the euro area continue to struggle to fill vacancies. This will probably make them reluctant to lay off staff when economic conditions worsen, fearing that during the next upturn they would rapidly face new hiring difficulties. By limiting the increase in unemployment, such labour hoarding would be a source of resilience. However, this would be reflected in a decline in labour productivity, which would weigh on profits and could push companies to increase selling prices, thereby slowing the pace of disinflation.

The labour market in the US and the Eurozone continues to be tight. Companies still struggle to hire staff and unemployment is, based on historical standards, very low. Both factors could be a source of resilience during the now widely expected recession. Although the latter should cause an increase in the unemployment rate, consensus forecasts only expect a limited rise.¹ Consequently, the impact on household income should be limited as well.

A factor that should limit the increase in the unemployment rate is labour hoarding by companies.² *"Firms are said to hoard labour when they choose not to adjust their employment of labour in line with short-run fluctuations in demand for their product and, instead, allow their utilisation of labour to vary over the cycle."*³

Such a behaviour may be caused by different factors: the high cost of laying off people -due to employment protection laws-, the costs associated with recruiting staff, the loss of human capital when people have to leave the company, government incentives when employment levels are being maintained.

At the current juncture, the fact that companies have been struggling for so long to fill vacancies will probably play an important role by making them reluctant to lay off staff when economic conditions worsen, fearing that during the next upturn they would rapidly be confronted with new hiring difficulties. This is the message of the latest Beige Book of the Federal Reserve, which reports that *"scattered layoffs were reported in the technology, finance, and real estate sectors. However, some contacts expressed a reluctance to shed workers in light of hiring difficulties, even though their labor needs were diminishing."*⁴

Such behaviour supposes that companies expect the recession to be shallow and short and that their financial situation is sufficiently robust. This last point is important because labour hoarding causes a decline in the productivity of labour during an economic downturn: headcount and/or hours worked decline less than production

Conversely, productivity will improve when economic growth picks up because staffing levels do not need to be increased until the recovery has gathered sufficient strength. This procyclical nature of productivity growth -which is generally used as an indicator of labour hoarding although other factors also may play a role- is illustrated in charts 1-4.

1. The November survey of professional forecasters of the Federal Reserve Bank of Philadelphia projects an increase in the unemployment rate to 4.2% in 2023 and a stabilization thereafter for the following two years. In November, the US unemployment rate was 3.7%. The ECB's survey of professional forecasters for the fourth quarter of this year projects an unemployment rate for the euro area of 7.1% in 2023 and 7.0% in 2024. In October, the unemployment rate declined to 6.5%.

2. Labour hoarding is hotly debated today, but it has a long history. In the academic macroeconomic literature, it goes back to 1963 and the work of Arthur Okun but before that it had already been covered for years in analyses of corporate management. For a historical analysis, see Jeff E. Biddle, *The Cyclical Behavior of Labor Productivity and the Emergence of the Labor Hoarding Concept*, *Journal of Economic Perspectives*—Volume 28, Number 2—Spring 2014.

3. Assessing the extent of labour hoarding, *Bank of England Quarterly Bulletin*: Summer 2003.

4. Source : Beige book, Federal Reserve, November 2022.

At first glance, it seems that there is a closer relationship between real GDP growth and productivity growth in the euro area than in the US. This impression is confirmed by charts 5 and 6, which show the rolling correlation between the two. On average, the correlation is higher in the euro area than in the US. This means that in the former, fluctuations in productivity growth are more closely associated with slowdowns or accelerations in GDP growth than in the US, which would suggest that labour hoarding plays a bigger role in the euro area.

A number of caveats should be kept in mind however. Firstly, the correlation is lower and fluctuates more when measuring productivity based on output per hour worked. Secondly, other factors than labour hoarding may also play a role in explaining fluctuations in productivity growth. Finally, large shocks, such as the pandemic, can cause a breakdown in the relationship between GDP and productivity.

In conclusion, labour hoarding is expected to be a factor of resilience during the coming economic downturn. However, in the early stage of a recovery, this would reduce the need to hire more people, which could lead to a slower recovery. The decline in labour productivity that is associated with labour hoarding, is expected to put pressure on company profits and this may lead companies to increase their selling prices in order to protect their margins. In such case, labour hoarding would be a source of resilience but it would also slow down the decline in inflation.

William De Vijlder

EUROZONE: REAL GDP VS LABOUR PRODUCTIVITY PER HOUR WORKED

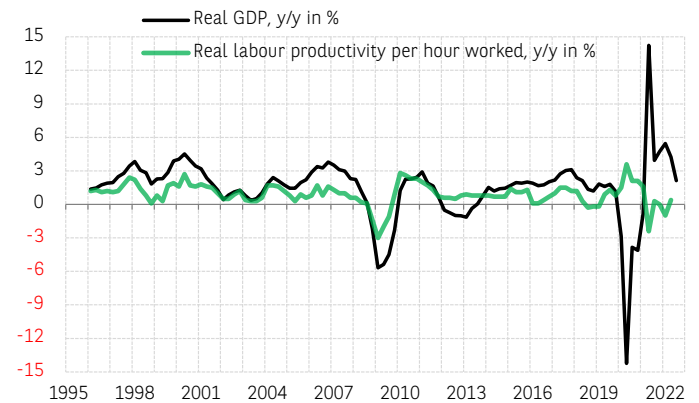


CHART 1

SOURCE: EUROSTAT, BNP PARIBAS



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EUROZONE: REAL GDP VS LABOUR PRODUCTIVITY PER PERSON

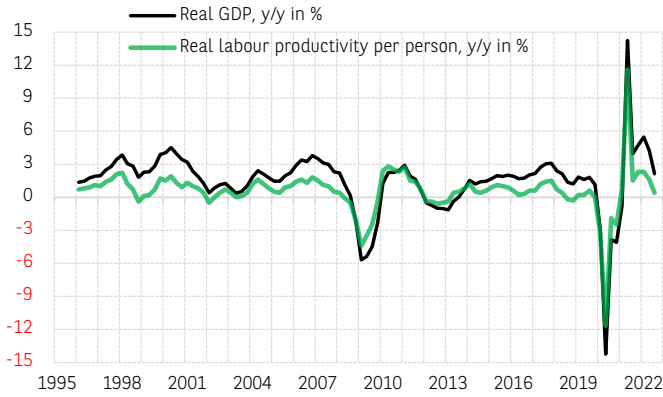


CHART 2

SOURCE: EUROSTAT, BNP PARIBAS

US: REAL GDP VS LABOUR PRODUCTIVITY PER HOUR WORKED

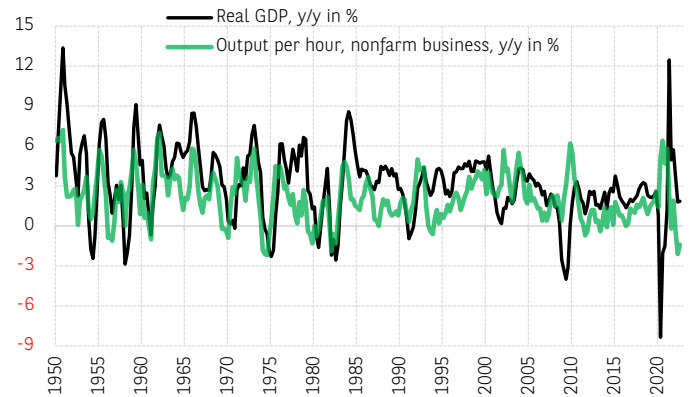


CHART 3

SOURCE: BEA, BLS, BNP PARIBAS

US: REAL GDP VS LABOUR PRODUCTIVITY PER PERSON

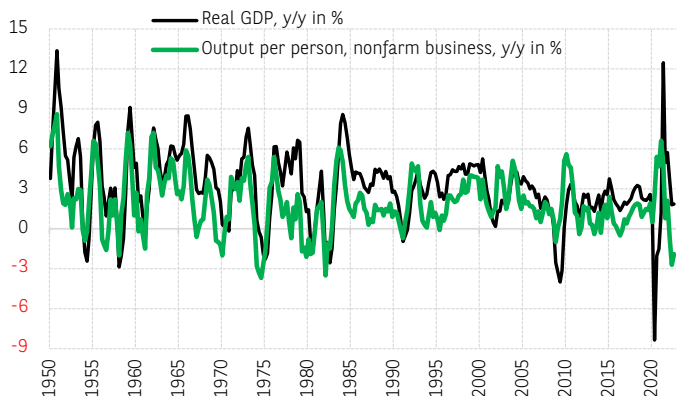


CHART 4

SOURCE: BEA, BLS, BNP PARIBAS

EUROZONE: CORRELATION WITH REAL GDP GROWTH (12-QUARTER MOVING AVERAGE)

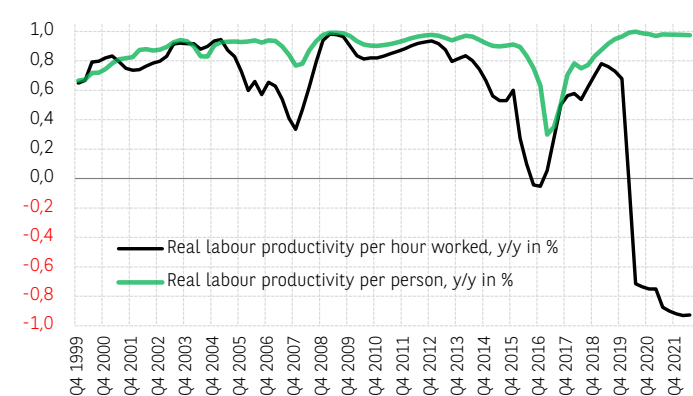


CHART 5

SOURCE: EUROSTAT, BNP PARIBAS CALCULATIONS

US: CORRELATION WITH REAL GDP GROWTH (12-QUARTER MOVING AVERAGE)

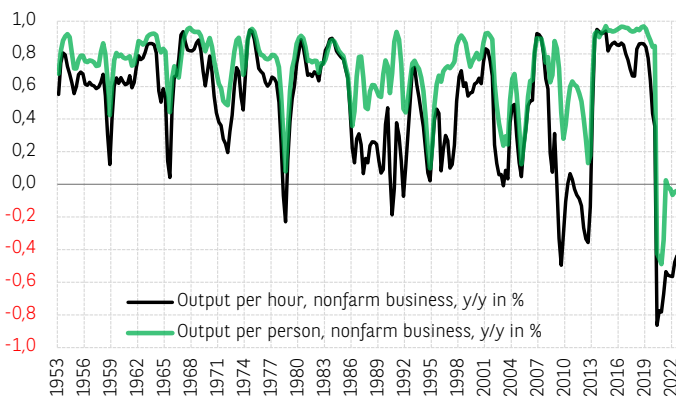


CHART 6

SOURCE: BEA, BLS, BNP PARIBAS



MARKETS OVERVIEW

OVERVIEW

Week 25-11 22 to 2-12-22

➔ CAC 40	6 712	▶ 6 742	+0.4 %
➔ S&P 500	4 026	▶ 4 072	+1.1 %
➔ Volatility (VIX)	20.5	▶ 19.1	-1.4 pb
➔ Euribor 3M (%)	1.92	▶ 1.98	+5.3 bp
➔ Libor \$ 3M (%)	4.73	▶ 4.73	-0.1 bp
➔ OAT 10y (%)	2.43	▶ 2.32	-10.7 bp
➔ Bund 10y (%)	1.97	▶ 1.86	-11.5 bp
➔ US Tr. 10y (%)	3.71	▶ 3.50	-20.4 bp
➔ Euro vs dollar	1.04	▶ 1.05	+0.6 %
➔ Gold (ounce, \$)	1 750	▶ 1 790	+2.3 %
➔ Oil (Brent, \$)	84.1	▶ 85.7	+2.0 %

MONEY & BOND MARKETS

Interest Rates		highest 22	lowest 22	Yield (%)	highest 22	lowest 22
€ ECB	2.00	2.00 at 02/11	0.00 at 03/01	€ AVG 5-7y	2.64	2.79 at 28/09
Eonia	-0.51	-0.51 at 03/01	-0.51 at 03/01	Bund 2y	2.05	2.16 at 08/11
Euribor 3M	1.98	1.98 at 29/11	-0.58 at 05/01	Bund 10y	1.86	2.44 at 21/10
Euribor 12M	2.81	2.89 at 28/11	-0.50 at 05/01	OAT 10y	2.32	3.00 at 21/10
\$ FED	4.00	4.00 at 03/11	0.25 at 03/01	Corp. BBB	4.11	5.14 at 21/10
Libor 3M	4.73	4.78 at 30/11	0.21 at 03/01	\$ Treas. 2y	4.38	4.78 at 07/11
Libor 12M	5.43	5.67 at 04/11	0.58 at 03/01	Treas. 10y	3.50	4.23 at 24/10
£ BoE	3.00	3.00 at 03/11	0.25 at 03/01	High Yield	8.62	9.97 at 13/10
Libor 3M	3.68	3.75 at 26/09	0.26 at 03/01	£ gilt. 2y	3.40	4.59 at 27/09
Libor 12M	0.81	0.81 at 03/01	0.81 at 03/01	gilt. 10y	3.15	4.50 at 27/09

EXCHANGE RATES

1€ =	highest 22	lowest 22	2022
USD	1.05	1.15 at 10/02	0.96 at 27/09
GBP	0.86	0.90 at 28/09	0.83 at 14/04
CHF	0.99	1.06 at 10/02	0.95 at 28/09
JPY	141.89	147.34 at 26/10	125.37 at 04/03
AUD	1.55	1.62 at 04/02	1.43 at 25/08
CNY	7.37	7.49 at 28/11	6.75 at 14/07
BRL	5.48	6.44 at 06/01	4.98 at 03/11
RUB	65.59	164.76 at 07/03	55.60 at 26/09
INR	85.17	85.96 at 11/02	78.49 at 27/09

At 2-12-22 Change

COMMODITIES

Spot price, \$	highest 22	lowest 22	2022	2022(€)
Oil, Brent	85.7	128.2 at 08/03	79.0 at 03/01	+9.4% +18.7%
Gold (ounce)	1 790	2 056 at 08/03	1 628 at 03/11	-1.8% +6.6%
Metals, LME	4 034	5 506 at 07/03	3 453 at 27/09	-10.4% -2.7%
Copper (ton)	8 433	10 702 at 04/03	7 160 at 14/07	-13.4% -6.0%
wheat (ton)	265	4.7 at 17/05	263 at 10/11	+11.6% +21.2%
Corn (ton)	249	3.2 at 28/06	226 at 03/01	+0.9% +18.5%

At 2-12-22 Change

EQUITY INDICES

Index	highest 22	lowest 22	2022	Year 2022 to 2-12, €
World				+28.0%
MSCI World	2 733	3 248 at 04/01	2 368 at 12/10	-15.4%
North America				+8.1%
S&P500	4 072	4 797 at 03/01	3 577 at 12/10	-14.6%
Europe				-4.7%
EuroStoxx50	3 978	4 392 at 05/01	3 279 at 29/09	-7.5%
CAC 40	6 742	7 376 at 05/01	5 677 at 29/09	-0.6%
DAX 30	14 529	16 272 at 05/01	11 976 at 29/09	-8.5%
IBEX 35	8 383	8 934 at 27/05	7 261 at 12/10	-0.4%
FTSE100	7 556	7 672 at 10/02	6 826 at 12/10	+0.2%
Asia				-9.1%
MSCI, loc.	1 099	1 165 at 05/01	1 012 at 30/09	-0.4%
Nikkei	27 778	29 332 at 05/01	24 718 at 09/03	-3.5%
Emerging				-15.7%
MSCI Emerging (\$)	974	1 267 at 12/01	843 at 24/10	-2.1%
China	61	86 at 20/01	47 at 31/10	-25.5%
India	815	891 at 13/01	699 at 17/06	+5.5%
Brazil	1 513	2 003 at 04/04	1 311 at 14/07	-0.9%

At 2-12-22 Change

PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)

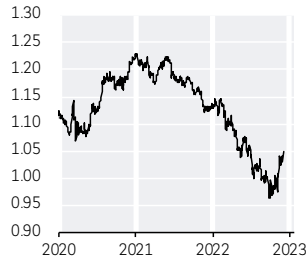
Year 2022 to 2-12, \$	Year 2022 to 2-12, €
Oil & Gas	+74.7%
Commodities	+18.6%
Insurance	+16.8%
Banks	+12.8%
Food industry	+7.2%
Health	+4.9%
Media	+3.1%
Utilities	-0.6%
Travel & leisure	-2.6%
Index	-4.2%
Chemical	-6.7%
Telecoms	-8.5%
Car	-8.6%
Consumption Goods	-8.8%
Industry	-11.6%
Construction	-19.9%
Technology	-22.9%
Retail	-29.5%
Real Estate	-36.4%

SOURCE: REFINITIV, BNP PARIBAS,



MARKETS OVERVIEW

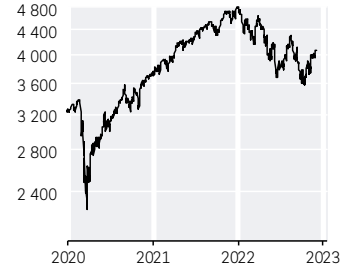
EURO-DOLLAR



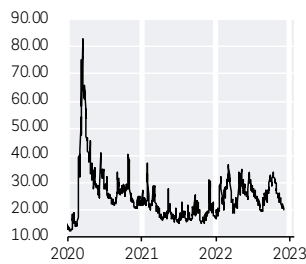
EUROSTOXX50



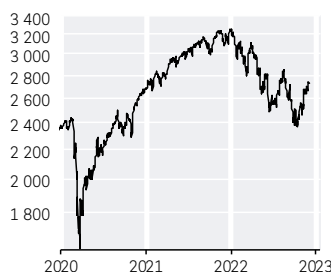
S&P500



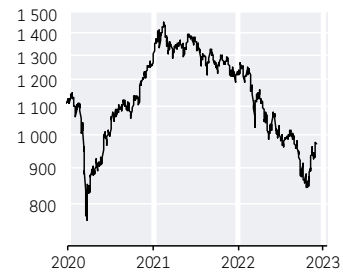
VOLATILITY (VIX, S&P500)



MSCI WORLD (USD)



MSCI EMERGING (USD)



10Y BOND YIELD, TREASURIES VS BUND



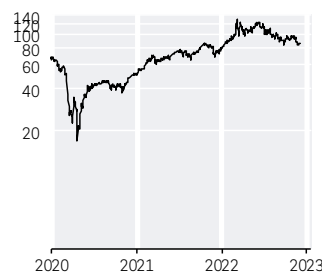
10Y BOND YIELD



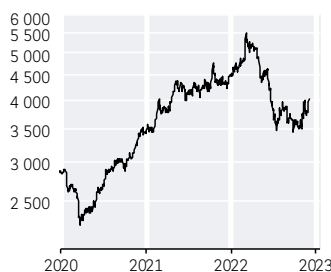
10Y BOND YIELD & SPREADS

Year 2022 to 2-12		
4.34%	Greece	248 bp
3.64%	Italy	178 bp
2.86%	Spain	100 bp
2.65%	Portugal	79 bp
2.44%	Austria	58 bp
2.42%	Finland	56 bp
2.41%	Belgium	55 bp
2.32%	France	46 bp
2.30%	Ireland	44 bp
2.14%	Netherlands	28 bp
1.86%	Germany	

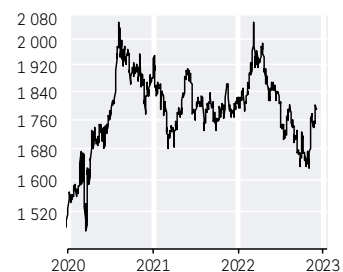
OIL (BRENT, USD)



METALS (LMEX, USD)



GOLD (OUNCE, USD)



SOURCE: REFINITIV, BNP PARIBAS



PMI: UPSTREAM TENSIONS IN THE PRODUCTION CHAIN ARE EASING

The manufacturing PMI shows a contrasting picture in November, with another significant drop in the US and a rebound, from a low level, in the euro area. France, Germany, Greece, Italy and Spain recorded an improvement but the index declined in the Netherlands. Brazil saw an exceptional drop so next month's data will be key to see whether this was a one-off. Also noteworthy is the drop in Vietnam from 50.6 to 47.4.

New orders dropped again in the US although the index remains above that in the euro area, where it has rebounded. France, Germany and Italy benefited from a particularly strong increase, but the levels remain very low and well below the 50 mark. The situation worsened in Japan and Vietnam and even more so in Brazil. India saw an improvement from an already high level.

The manufacturing employment PMI edged down in the US and the euro area. Within the latter, the picture is diverse: better data in Italy and Spain versus a weakening in Germany, the Netherlands and, in particular, Ireland. The situation weakened further in China and Vietnam was confronted with a big drop.

The easing trend of input prices continued in the US and in the euro area there was again a big drop. This also is visible in the data of the individual euro area countries. The same applies to many other countries and reflects an easing of tensions upstream in the production chain. China and Vietnam are exceptions however, having recorded an increase for the third month in a row.

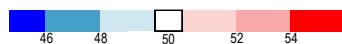
The output prices PMI was stable in the US and was down again in the euro area and its member countries. The score was also lower in the United Kingdom and Japan. There was a considerable drop in Vietnam.

Delivery times continue to improve, with higher numbers, which means shorter delivery times. The US has reached the 50 mark and Germany has crossed it, with the PMI jumping from 47.1 to 53.1. The score dropped in China where longer delivery times are related to measures to control Covid-19.

Finally, the services PMI declined again in the US, though it's still above the August low. In the euro area it was stable whereas in China it was down again, which is related to measures to address a new wave of Covid-19 infections.

William De Vijlder

		MANUFACTURING PMI																																		
		Developed Markets														Emerging countries																				
WD		NA		Europe								Asia-Oceania				LATAM		Eurasia		Middle East & Africa		Asia														
		CANADA	USA	EURO ZONE		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	VIETNAM
Feb-22	53,7	56,6	57,3	58,2	58,4	56,3	57,2	58,4	57,8	57,8	58,3	60,6	56,9	62,6	58,0	53,2	53,4	52,7	50,2	49,6	48,0	56,5	54,7	48,6	50,4	48,1	47,5	56,2	58,2	54,8	50,4	42,9	54,9	51,2	54,3	
Mar-22	52,9	58,9	58,8	56,5	59,3	61,3	54,7	56,9	54,6	59,4	55,8	58,4	54,2	64,0	55,2	55,7	53,0	54,1	50,1	52,3	49,2	54,7	52,7	44,1	49,4	46,5	47,4	56,8	58,6	54,8	48,1	42,0	54,0	51,3	51,7	
Apr-22	52,3	56,2	59,2	55,5	57,9	60,7	55,7	54,6	54,8	59,1	54,5	59,9	53,3	62,5	55,8	58,5	50,9	53,5	50,3	51,8	49,3	54,4	52,4	48,2	49,2	46,9	47,9	55,7	52,3	54,6	46,0	51,7	54,7	51,9	51,7	
May-22	52,3	56,8	57,0	54,6	56,6	58,3	54,6	54,8	53,8	56,4	51,9	57,8	53,8	60,0	54,6	52,4	52,8	53,3	50,4	54,2	50,6	52,3	48,5	50,8	49,2	47,0	48,6	55,7	54,5	55,6	48,1	54,9	54,6	50,8	54,7	
Jun-22	52,2	54,6	52,7	52,1	51,2	69,2	51,4	52,0	51,1	53,1	50,9	55,9	52,6	59,1	52,8	54,0	50,2	52,7	50,3	54,1	52,2	49,0	44,4	50,9	48,1	45,2	49,1	57,0	52,0	54,8	51,7	52,4	53,9	50,2	54,0	
Jul-22	51,1	52,5	52,2	49,8	51,7	38,2	49,5	49,3	49,1	51,8	48,5	54,5	48,7	58,0	52,1	52,5	53,3	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	49,4	50,6	49,1	48,8	51,1	48,0	52,6	49,9	56,4	47,3	49,3	54,7	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	56,2	51,7	52,7	
Sep-22	49,8	49,8	52,0	48,4	48,8	50,0	47,7	47,8	49,7	51,5	48,3	49,0	49,0	57,1	48,4	50,2	51,7	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	54,9	46,2	49,6	49,3	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	55,3	51,8	50,6	
Nov-22	49,6	47,7	47,1	46,6	45,5	48,3	46,2	48,4	48,7	48,4	46,0	45,7	53,9	46,5	44,7	49,0		49,0		44,3		41,6	43,4	53,2	45,7			52,6		49,4		55,7	50,3	47,4		



SOURCE: S&P GLOBAL, BNP PARIBAS



MANUFACTURING PMI - NEW ORDERS

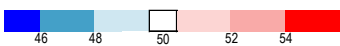
	Developed Markets																			Emerging countries															
	WD	NA		Europe										Asia-Oceania		LATAM	Eurasia			Middle East & Africa			Asia												
	World	CANADA	USA	EURO ZONE	AUSTRIA	DENMARK	FRANCE	GERMANY	GREECE	IRELAND	ITALY	NETHERLANDS	SPAIN	SWITZERLAND	UK	AUSTRALIA	NEW ZEALAND	JAPAN	SINGAPORE	BRAZIL	MEXICO	CZECH REPUBLIC	POLAND	RUSSIA	TURKEY	EGYPT	ISRAEL	LEBANON	SAUDI ARABIA	SOUTH AFRICA	UAE	CHINA	HONG KONG	INDIA	INDONESIA
Feb-22	53.7	54.2	57.0	57.0	54.2		53.8	58.5	53.8	58.7	57.2	58.0	54.1	54.6	59.8		50.5	50.4	47.0	46.3	55.3	53.5	47.0	46.8	47.3	56.6	48.6	61.4	50.7	58.2	51.6	36.6	57.6	52.6	55.3
Mar-22	51.4	57.5	59.1	53.7	53.2		51.1	54.0	50.3	60.9	54.6	53.7	47.5	51.8	65.0		52.0	50.3	52.1	47.4	49.4	48.5	40.2	45.9	45.1	49.9	48.3	61.9	50.6	58.3	45.4	33.3	56.1	51.1	52.8
Apr-22	50.5	54.4	59.0	51.6	53.0		53.0	48.8	50.7	58.7	52.6	56.3	49.6	51.7	64.8		51.5	50.4	51.7	46.7	48.5	48.0	45.9	46.2	45.3	50.7	49.6	59.5	49.3	57.2	42.8	52.2	56.8	52.1	51.9
May-22	50.9	54.7	56.1	48.7	48.1		50.6	47.0	50.2	52.0	47.4	52.6	50.0	51.1	55.0		50.4	50.5	53.3	49.6	45.4	43.2	49.3	46.8	44.6	52.1	49.8	59.9	50.2	58.7	47.5	56.5	56.4	51.6	55.3
Jun-22	50.1	52.8	48.7	45.2	41.2		46.1	43.3	45.7	47.9	43.9	52.5	49.7	48.3	55.7		50.2	50.7	52.9	50.7	43.9	39.1	51.0	44.9	41.9	58.5	49.3	63.3	52.5	56.5	51.2	52.1	55.7	50.9	54.8
Jul-22	48.9	48.9	48.6	42.6	43.6		43.0	40.1	43.5	47.0	42.5	51.1	43.5	46.9	59.9		49.2	50.2	52.4	46.2	42.6	35.6	51.8	43.6	43.1	58.1	49.6	62.0	53.3	57.2	50.3	53.3	60.0	51.6	52.0
Aug-22	48.2	44.5	48.8	43.3	39.8		44.8	40.9	45.6	47.3	42.6	48.7	47.3	43.9	55.8		48.2	50.1	51.4	45.1	42.2	33.4	52.9	42.8	45.1	52.7	49.8	64.1	52.2	59.8	48.9	51.3	60.5	52.4	54.1
Sep-22	47.7	46.9	51.1	41.3	38.6		40.4	39.1	45.8	46.1	43.2	43.0	44.4	44.8	57.8		46.3	49.9	50.3	48.0	38.5	35.4	52.4	43.0	45.9	53.4	48.8	62.3	47.1	59.4	47.1	46.1	58.6	56.3	52.3
Oct-22	46.9	46.0	47.6	37.9	32.9		39.4	34.5	43.1	46.5	39.2	39.7	40.3	39.9	53.8		47.9	49.6	48.3	49.8	34.1	37.7	51.1	43.5	46.4	46.4	48.4	62.9	48.3	59.8	48.7	48.9	57.5	52.8	50.8
Nov-22		46.8	45.2	40.7	36.9		42.2	38.3	44.9	44.7	44.1	39.1	41.2	41.9	47.8		44.6		38.9		35.6	39.8	53.0	42.7						49.5		58.8	50.4	47.3	

MANUFACTURING PMI - EMPLOYMENT

	Developed Markets																			Emerging countries																
	WD	NA		Europe										Asia-Oceania		LATAM	Eurasia			Middle East & Africa			Asia													
	World	CANADA	USA	EURO ZONE	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	VIETNAM
Feb-22	51.7	54.6	52.2	57.1	62.1	61.5	55.8	58.0	56.5	53.7	57.1	59.3	54.2	63.1	57.9	54.6	51.9	52.8	49.8	46.2	53.3	53.2	47.5	53.0	49.2	50.3	49.5	50.1	48.5	49.8	50.6	50.4	50.1	50.8	51.2	48.3
Mar-22	52.1	53.2	54.0	54.2	60.2	69.1	51.8	54.4	55.0	56.6	53.2	57.5	51.4	62.4	56.7	53.7	52.3	52.6	51.2	49.2	52.8	51.0	44.7	50.7	48.8	49.7	50.0	50.6	50.4	50.1	50.8	51.2	48.8	50.8	48.9	54.0
Apr-22	51.5	54.5	52.7	54.7	57.8	64.5	53.1	55.3	54.9	58.6	52.4	58.5	50.6	60.7	56.7	54.4	49.9	51.4	51.4	51.1	52.7	51.4	45.5	51.5	47.9	51.0	51.4	49.9	49.2	50.5	52.1	52.1	52.1	52.1	52.1	52.1
May-22	51.6	55.3	53.1	56.1	57.7	68.7	54.0	58.0	53.4	59.3	52.7	59.9	50.3	62.8	55.4	51.9	53.0	51.9	53.3	51.7	52.5	51.2	47.1	51.7	48.2	50.9	50.4	50.7	50.7	48.6	51.0	50.3	53.0	53.0	53.0	
Jun-22	51.3	52.9	52.9	54.5	56.4	69.2	52.5	55.4	53.0	55.7	53.0	58.9	51.0	62.0	53.0	52.5	51.4	51.8	53.4	51.2	48.7	47.6	51.2	51.0	48.5	50.7	51.3	51.2	48.8	50.8	50.8	48.9	54.0	54.0	54.0	54.0
Jul-22	50.4	51.9	51.5	53.3	55.7	39.3	50.6	55.2	50.4	52.9	52.0	56.0	48.6	58.4	55.9	53.4	52.6	51.6	55.5	49.6	46.3	47.8	48.4	50.2	50.1	51.3	48.4	51.0	47.8	50.6	52.3	52.3	52.3	52.3	52.3	
Aug-22	50.3	48.8	51.1	52.8	53.9	59.7	52.2	54.5	49.1	52.4	50.5	55.2	48.6	58.3	50.4	54.1	53.5	50.8	53.1	49.8	47.7	45.6	49.2	51.2	50.7	51.2	48.4	51.5	48.3	50.1	51.4	53.4	53.4	53.4	53.4	
Sep-22	50.8	49.5	53.8	52.4	55.7	45.8	51.0	53.4	49.3	53.8	51.0	52.3	49.8	58.5	51.0	53.5	51.6	52.8	52.2	51.6	50.6	45.2	52.2	49.2	50.4	50.5	46.7	51.4	47.7	50.7	51.9	53.3	53.3	53.3	53.3	
Oct-22	50.3	49.0	51.4	52.6	56.2	45.4	51.7	54.5	49.7	52.9	50.8	53.3	45.5	58.2	48.3	53.1	48.9	51.3	52.3	50.3	47.0	43.7	47.0	47.7	49.6	50.2	41.5	52.0	48.7	47.7	50.5	52.3	52.3	52.3	52.3	
Nov-22		51.1	51.1	52.0	54.4	43.1	51.7	53.8	49.6	49.7	51.2	52.0	47.0	61.4	47.8	52.0		51.1	48.6		46.5	44.7	51.5	50.2				45.7		47.6	53.4	50.6	46.8			

PMI MANUFACTURING - INPUT PRICES

	Developed Markets																			Emerging countries															
	WD	NA		Europe										Asia-Oceania		LATAM	Eurasia			Middle East & Africa			Asia												
	World	CANADA	USA	EURO ZONE	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	VIETNAM
Feb-22	68.5	70.1	79.3	82.1	81.3	73.6	80.6	83.9	85.8	83.6	79.9	80.0	79.2	82.4	75.6	74.0	51.7	68.1	65.5	81.3	77.8	72.2	78.8	54.5											
Mar-22	71.5	78.6	79.5	87.0	89.2	75.3	84.6	87.2	87.3	92.7	85.1	87.7	86.8	85.3	82.4	75.2	51.9	75.0	69.8	90.1	83.1	90.0	78.5	58.6											
Apr-22	71.6	75.4	81.9	87.8	90.5	78.2	88.9	88.0	86.7	85.3	87.1	89.2	86.2	86.4	86.5	76.0	52.3	72.4	71.9	84.8	77.4	62.5	69.9	62.1											
May-22	70.3	73.0	84.2	84.2	87.0	76.2	84.1	84.8	85.8	88.0	81.4	84.5	80.3	84.6	89.3	74.6	52.7	71.7	71.7	77.8	68.9	54.9	71.7	72.0											
Jun-22	68.7	74.2	79.5	80.0	81.6	76.3	77.7	83.3	81.8	82.6	74.2	77.6	76.3	84.6	89.3	74.6	52.7	71.7	71.7	77.8	68.9	54.9	71.7	72.0											
Jul-22	65.4	71.4	76.4	74.9	77.2	89.0	71.9	79.1	72.6	82.6	64.4	73.8	70.5	77.5	79.7	75.8	52.6	67.5	70.3	71.1	68.0	55.4	68.9	64.1											
Aug-22	61.1	64.9	68.1	71.7	74.3	72.4	70.1	77.3	61.7	75.7	58.9	73.2	66.1	67.9	81.7	71.9	52.3	59.1	70.3	67.0	67.2	54.1	59.4	58.8											
Sep-22	61.3	62.0	65.2	76.5	79.2	61.5	75.0	79.5	71.6	74.4	73.3	74.4	73.0	74.5	84.8	75.6	51.8	53.0	67.5	67.8	68.4	55.3	64.8	64.6											
Oct-22	61.2	61.7	64.7	72.0	75.3	51.9	72.3	74.0	72.1	72.8	68.4	71.2	66.8	73.7	78.0	74.7	51.5	46.6	69.6	68.8	68.1	58.2	60.6	63.5											
Nov-22		60.9	63.4	64.5	64.5	53.7	65.1	66.4	69.2	69.4	58.0	66.3	59.4	69.7	77.2	69.5		48.1		59.6	62.0	55.9	54.1												



SOURCE: S&P GLOBAL, BNP PARIBAS



PMI MANUFACTURING - OUTPUT PRICES

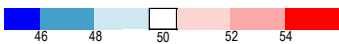
	Developed Markets																	Emerging countries																
	WD	NA		Europe										Asia-Oceania				LATAM		Eurasia			Middle East & Africa			Asia								
	World	CANADA	USA	EURO ZONE	AUSTRIA	DENMARK	FRANCE	GERMANY	GREECE	IRELAND	ITALY	NETHERLANDS	SPAIN	SWITZERLAND	UK	AUSTRALIA	NEW ZEALAND	JAPAN	SINGAPORE	BRAZIL	MEXICO	CZECH REPUBLIC	POLAND	RUSSIA	TURKEY	EGYPT	LEBANON	SAUDI ARABIA	SOUTH AFRICA	UAE	CHINA	HONG KONG	INDIA	INDONESIA
Feb-22	61,3	62,4	70,9	71,8	67,5	63,5	68,0	74,3	73,6	70,3	70,0	73,6	71,4	69,9			58,2		60,7	52,8	70,3	68,8	62,8	66,3	51,2	51,7	50,1		49,5		49,8	51,0	53,5	54,3
Mar-22	62,3	70,8	69,7	74,2	72,5	67,1	71,3	75,6	77,8	72,8	73,5	80,0	71,4	71,3			58,8		68,5	53,1	73,3	78,5	77,8	68,7	51,5	52,5	53,8		49,8		51,5	52,2	56,5	58,2
Apr-22	63,8	69,8	76,3	77,3	79,2	62,2	71,8	79,3	75,8	77,5	77,0	82,5	73,6	78,8			62,5		65,0	54,6	74,9	80,1	72,5	66,8	51,0	53,1	53,4		50,5		54,0	54,1	56,6	58,4
May-22	61,5	68,0	73,9	76,2	76,6	56,3	70,2	79,1	76,2	78,6	72,7	81,4	72,8	76,1			61,4		66,2	54,2	73,7	71,7	51,7	62,6	52,4	54,3	52,8		48,8		51,5	54,4	55,3	56,3
Jun-22	60,4	65,9	71,1	70,9	71,1	76,8	66,9	73,7	68,4	68,4	69,2	73,2	68,6	72,1			62,7		66,7	53,8	69,5	65,6	48,9	62,1	61,8	54,9	53,3		48,2		53,0	53,2	54,7	55,9
Jul-22	58,3	64,1	66,7	67,9	66,3	32,7	67,7	69,1	66,2	71,0	63,9	68,6	66,6	69,6			61,9		61,9	54,5	67,7	62,2	46,4	58,5	56,1	54,2	53,4		49,6		51,3	52,6	53,2	51,6
Aug-22	56,7	60,5	62,9	65,9	65,4	44,9	61,8	69,4	61,3	66,5	60,3	71,3	63,2	64,8			59,5		56,3	54,4	65,6	61,1	50,6	54,8	53,0	57,2	50,8		47,4		52,2	52,7	53,0	50,5
Sep-22	56,6	55,4	64,1	67,4	67,6	60,7	63,3	69,1	62,9	66,9	67,3	71,5	65,3	66,4			61,6		52,6	53,0	65,9	60,7	49,4	59,9	54,8	56,8	51,8		48,5		51,2	51,8	52,9	51,4
Oct-22	56,5	60,8	61,1	66,1	67,0	64,6	61,7	68,5	64,6	68,3	64,1	68,7	61,9	65,0			62,5		47,4	52,0	63,2	61,5	49,8	57,3	53,5	55,9	51,5		49,4		52,0	51,7	52,6	51,1
Nov-22		56,6	61,2	63,6	66,0	59,5	59,8	67,0	62,4	62,7	59,7	64,9	60,2	64,6			59,6		49,7		60,1	61,4	50,2	55,2								51,0	52,7	47,5

PMI MANUFACTURING - DELIVERY TIMES

	Developed Markets																	Emerging countries																
	WD	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	
Feb-22	39,4	26,8	25,0	31,0	29,2	41,6	25,2	34,0	25,3	30,8	31,5	25,1	31,5	31,7	49,0	52,7	38,1	50,5	45,0	43,3	32,0	38,3	44,1	42,1	49,4	53,1	66,5	52,7	48,1	44,2	48,8	50,7	44,8	
Mar-22	38,7	24,8	28,5	25,9	20,2	38,6	24,7	24,9	24,3	32,8	29,9	24,5	22,4	33,4	45,7	51,3	37,5	50,3	44,1	41,1	25,8	32,2	30,5	41,2	48,3	54,1	64,9	52,7	47,1	37,6	49,5	48,2	41,3	
Apr-22	35,8	34,0	26,9	26,3	22,5	34,1	25,4	23,9	24,8	31,5	29,7	24,6	31,2	32,8	60,4	49,6	37,8	50,1	45,2	43,7	26,2	37,2	33,6	43,7	48,9	55,6	63,5	53,5	37,8	38,7	48,9	48,8	46,5	
May-22	38,8	33,3	31,1	29,9	24,2	45,0	30,0	28,2	27,0	33,3	32,6	28,4	33,7	34,1	48,0	55,1	37,1	49,8	44,1	41,9	32,9	41,5	34,3	47,0	48,5	52,2	58,0	52,3	43,3	44,1	49,4	48,3	42,2	
Jun-22	42,2	31,0	33,6	34,2	34,6	43,3	31,2	33,0	30,7	32,4	38,0	36,6	39,8	34,5	51,5	51,8	38,0	50,1	42,1	38,5	37,9	43,2	40,7	46,8	46,1	54,5	63,9	51,4	50,2	44,5	50,3	50,0	45,1	
Jul-22	42,8	33,1	33,7	37,9	38,7	48,9	32,0	38,7	33,4	36,6	40,8	38,5	40,8	37,9	47,4	50,3	39,2	50,3	41,5	41,9	42,4	45,7	39,0	46,2	48,7	55,0	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	46,8	33,1	40,9	36,1	37,7	44,5	39,8	44,9	44,5	47,1	54,2	40,0	50,4	46,6	42,5	46,5	47,3	43,8	46,7	49,5	54,6	69,9	52,8	49,4	49,2	50,8	50,0	50,5	
Sep-22	45,7	41,2	43,1	41,8	39,5	53,8	37,8	44,6	35,4	39,5	40,8	42,6	41,1	42,1	52,8	54,7	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		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		45,0	50,5	47,5	47,4	52,6	39,9	53,1	42,6	42,3	45,7	45,3	44,8	45,3	39,2		43,8		52,2		47,9	49,8	44,8	53,3						45,5		50,3	49,4	49,6

PMI SERVICES

	World	USA	EURO ZONE	FRANCE	GERMANY	IRELAND	ITALY	SPAIN	UK	AUSTRALIA	JAPAN	BRAZIL	RUSSIA	LEBANON	CHINA	HONG KONG	INDIA
Feb-22	54,0	56,5	55,5	55,5	55,8	61,8	52,8	56,6	60,5	60,0	44,2	54,7	52,1	47,5	50,2	42,9	51,8
Mar-22	53,4	58,0	55,6	57,4	56,1	63,4	52,1	53,4	62,6	56,2	49,4	58,1	38,1	47,4	42,0	42,0	53,6
Apr-22	52,2	55,6	57,7	58,9	57,6	61,7	55,7	57,1	58,9	57,8	50,7	60,6	44,5	47,9	36,2	51,7	57,9
May-22	51,9	53,4	56,1	58,3	55,0	60,2	53,7	56,5	53,4	49,2	52,6	58,6	48,5	48,6	41,4	54,9	58,9
Jun-22	53,9	52,7	53,0	53,9	52,4	55,6	51,6	54,0	54,3	48,8	54,0	60,8	51,7	49,1	54,5	52,4	59,2
Jul-22	51,1	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	49,3	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		46,2	48,5	49,3	46,1	50,8	49,5	51,2	48,8		50,3	51,6	48,3	48,1	46,7	48,7	56,4



SOURCE: S&P GLOBAL, BNP PARIBAS



BNP PARIBAS

The bank for a changing world

ECONOMIC PULSE

UNITED STATES: WILL US GDP GROW IN Q4?

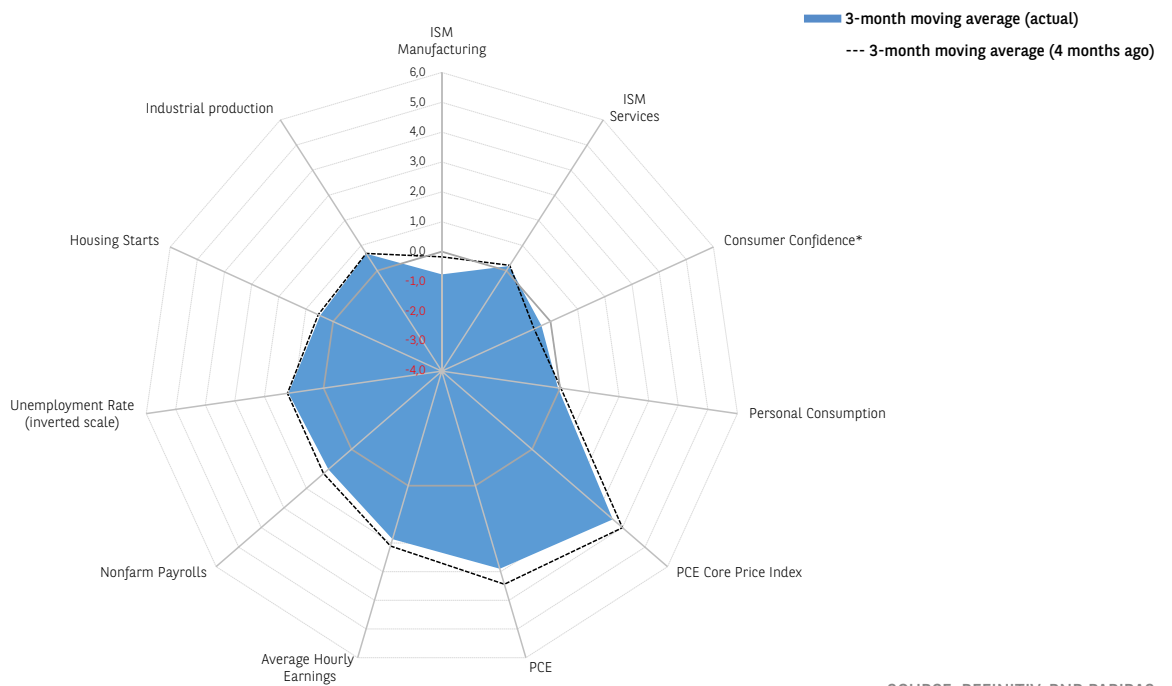
According to the latest estimate by the Atlanta Federal Reserve (GDPnow) on 1st December, quarterly annualised growth in US GDP could be 2.8% in Q4 2022, which would be hardly different from the Q3 performance (+2.9% q/q), but well above the first two quarters (-1.6% in Q1 and -0.6% in Q2). This latest estimate strengthens the idea that the US economy is resilient and is not expected to enter a recession in 2022. Also, according to the Atlanta Federal Reserve, personal consumption expenditures (PCE), non-residential investments and foreign trade would be the main growth drivers in Q4, as in Q3. Residential investment, on the other hand, would continue to fall, with a negative contribution for the seventh consecutive quarter.

However, this very positive estimate masks a slowdown in the economy. While previous estimates have long indicated growth of more than 4% for Q4, the downward revision of the last estimate is particularly pronounced (-1.2 points). In particular, it is attributable to the publication of the ISM manufacturing index and personal income, which significantly reduced estimates of the contribution of household consumption and non-residential investment (with the exception of investment in equipment).

While the US economy is still robust according to GDPnow estimates, the Leading Economic Index (LEI), published by the Conference Board, sends a more negative signal. The LEI continued to contract (-0.8% m/m) in October, for the eighth consecutive month, driven downwards by more negative consumer judgement in a context of high inflation and rising interest rates, as well as by the deterioration of prospects in the residential construction and manufacturing sectors. The LEI's one-month diffusion index, i.e. the proportion of sub-indicators up year-on-year over one month, was only 35% in October, while it was still 50% between July and September.

Félix Berte

UNITED STATES: 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 +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

EUROZONE: NOVEMBER'S PLEASANT SURPRISES

Following in the footsteps of the US inflation figures for October, Eurozone inflation also surprised favourably by coming in below estimates. Eurostat's flash estimate of an annual rate of 10% in November was lower than the consensus figure of 10.4%. This raises hopes that Eurozone inflation has finally peaked, and indeed this looks likely. It is our scenario, but considerable uncertainty remains and caution is required.

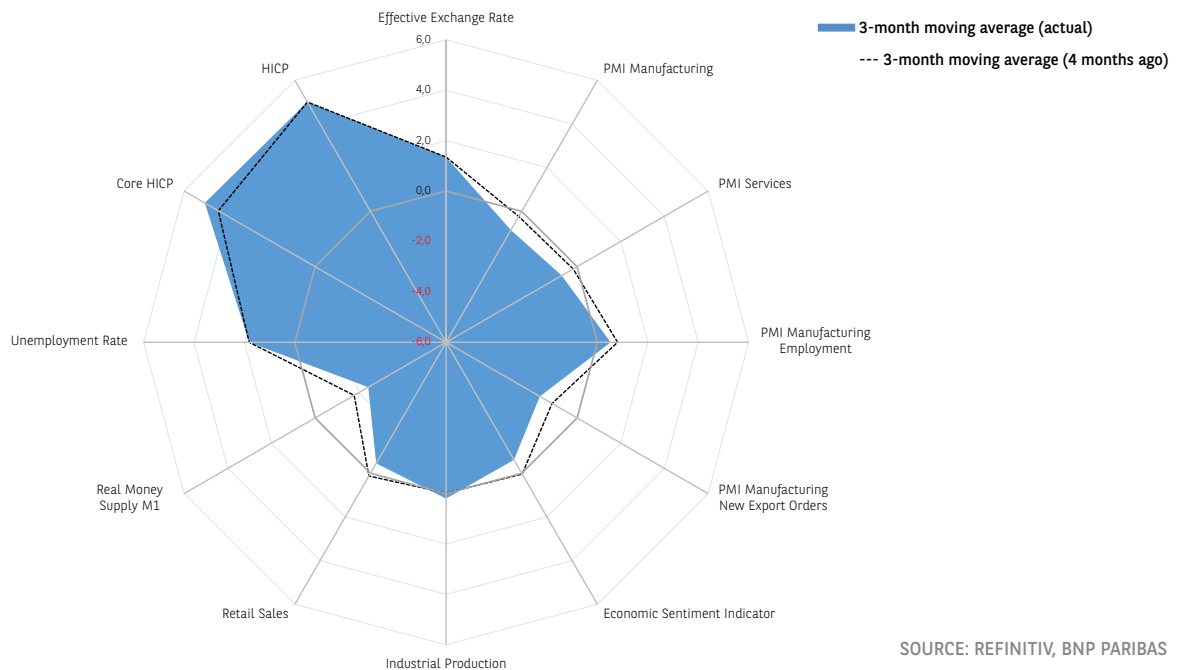
Be that as it may, a number of early warning signs are pointing towards a marked reduction in upstream inflationary pressures (falls in the business climate components relating to input prices, selling prices and delivery times, as well as decelerating production prices). Inflation will also fall – automatically and possibly substantially – due to favourable basis effects, first for energy and then for food. Lastly, the easing of the imbalance between supply (less restricted) and demand (less vigorous) should help ease inflationary pressures in 2023.

However, it is still too early to claim victory; inflation is widespread and the starting point is high. Although the fall in headline inflation might seem rapid, the persistence of core inflation, where falls are likely to be more limited, will hold back the underlying trend. Details from the November figures illustrate this well: the 0.6 of a point drop in headline inflation was entirely dependent on the 0.7 point fall in the energy component contribution, whilst food prices continued to rise (adding 0.1 of a point to the headline) and core inflation remained unchanged at 5%. This time around, France stood out for the stability of its inflation figure, at 7.1%, whilst the Netherlands saw a substantial fall of 5.6 points to 11.2%.

Consumer confidence also saw a positive shift in November. The European Commission survey reported a significant uptick for the second month in a row. Households' confidence remains depressed, but the improvement is noticeable. In particular, consumers appear to be less concerned about inflation prospects, whilst concerns over rising unemployment remain contained. When it comes to business sectors, confidence remained stable in the retail industry. There was a slight improvement in services (interrupting four months of significant falls), an erosion in construction and continued falls in industry (the fifth consecutive negative month). The Commission's aggregated Economic Sentiment Indicator (ESI) thus gained one point: a small and fragile rise admittedly, but the first since February. The Employment Expectations Indicator (EEI) also improved. The slight rise in S&P Global's composite PMI figure, by half a point to 47.8, was due to an improvement in the manufacturing sector (up 2.2 points to 46%), whilst the figure for services was unchanged at 48.6. One other positive point to note is that both the EEI and the composite PMI's employment component remain fairly comfortably in expansionary territory. However, one can also see the glass as half empty. The PMI indices and the ESI remain in the economic contraction zone. Our Pulse indicates a deterioration of the economic situation over the last three months relative to the preceding three months (blue area below the dotted line). And we have yet to see all the negative effects on the economy of the unprecedented combination of the inflationary shock, the energy crisis (higher bills, limits on both supply and demand) and monetary tightening.

Hélène Baudchon

EUROZONE: 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 -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

NEW COVID-19 CASES: THE DISEASE IS STILL ON THE RISE IN ASIA

The number of new Covid-19 cases continues to increase across the world for the third consecutive week. 3.2 million new infections were recorded between 24 and 30 November, up 10% on the previous week. This rise was seen across all regions, with the exception of North America, where the number of cases fell by 12%. Africa (41%) and South America (36%) recorded the largest increases, followed by Europe (12%) and Asia (10%) (Chart 1). Asia alone accounts for 50% of the 3.2 million new cases across the world, with 1.6 million infections.

For this week, the highest number of new cases per country (Chart 4, black curve) was recorded in Japan (682,719, +15% compared to the previous week), South Korea (375,991, +3%) and France (301,900, +36%). This new wave is the ninth to hit France. In the United States (266,348, -12.4%), Taiwan (106,645, -17%) and Italy (100,682, -51%), the number of new cases fell compared to the previous week, but was still high. At the same time, the vaccination coverage is continuing to increase, but more slowly. To date, 13 billion doses of vaccine have been administered worldwide since the start of the vaccination campaigns during Q4 2020, including 2.64 billion booster doses. As a result, approximately 68.5% of the world's population has received at least one dose of a vaccine (Chart 2).

The weekly GDP substitution indicator has noticeably recovered in Germany and Belgium, and has more moderately recovered in France and Italy, while it is falling in the United States, Japan and, particularly sharply, the United Kingdom. The indicator is still relatively stable in Spain (Chart 3). This tracker is produced by the OECD using Google Trends data from searches relating to consumption, the labour market, real estate, industrial activity and uncertainty. The tracker shown here is calculated on a rolling basis over one year.

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)

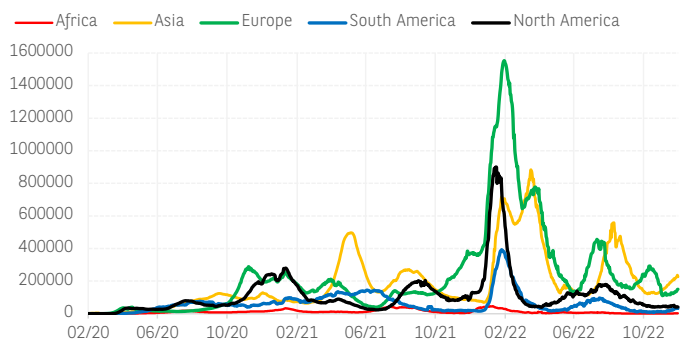


CHART 1

SOURCE: JOHNS-HOPKINS UNIVERSITY (01/12/2022), BNP PARIBAS

SHARE OF PEOPLE WHO RECEIVED AT LEAST ONE DOSE OF VACCINE

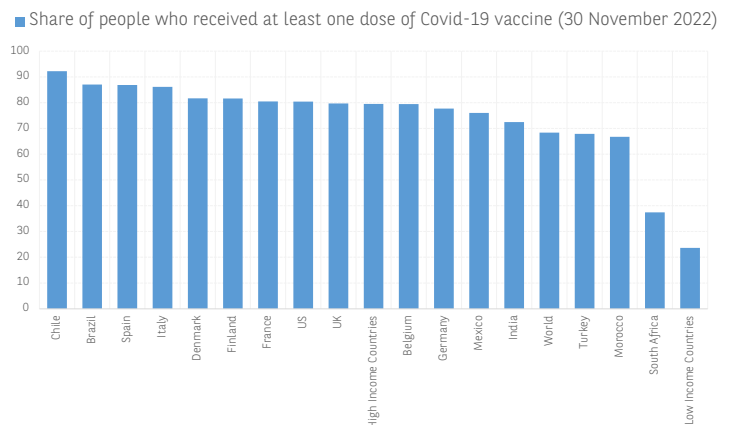
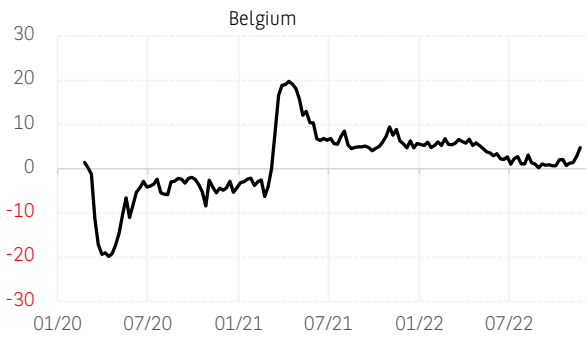
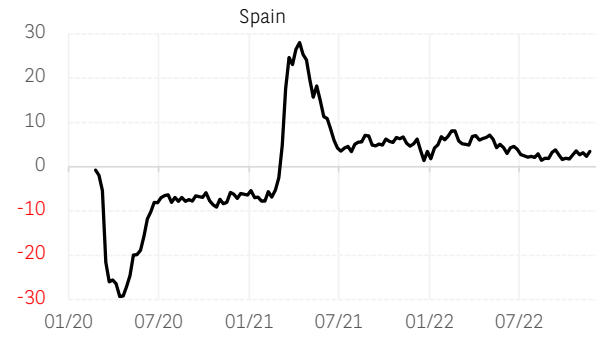
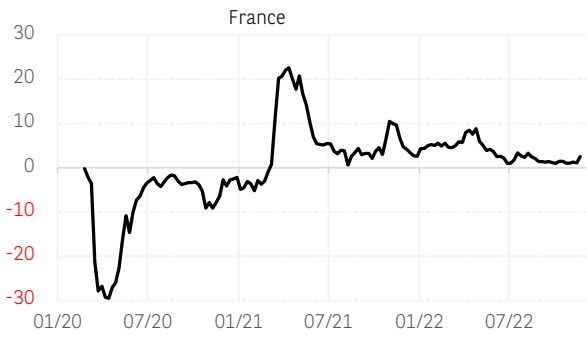
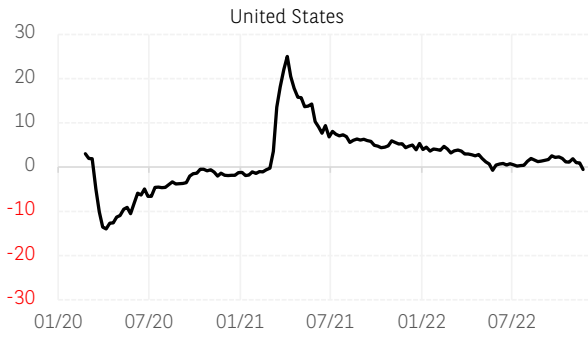


CHART 2

SOURCE: OUR WORLD IN DATA (01/12/2022), BNP PARIBAS

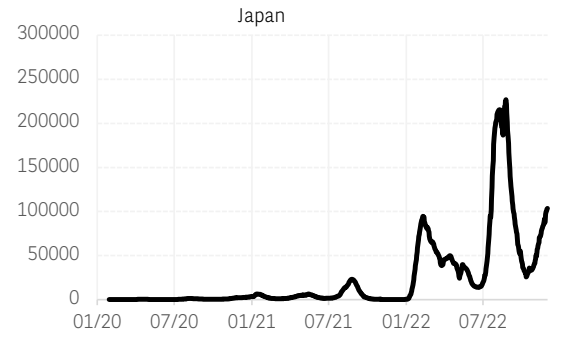
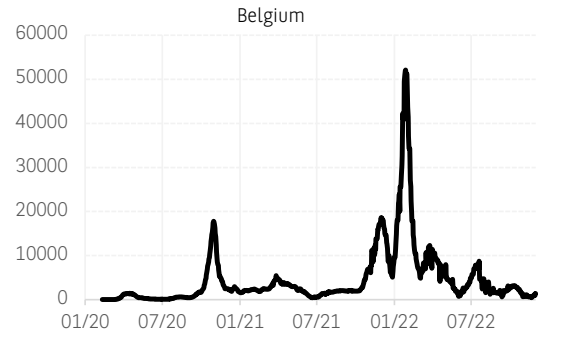
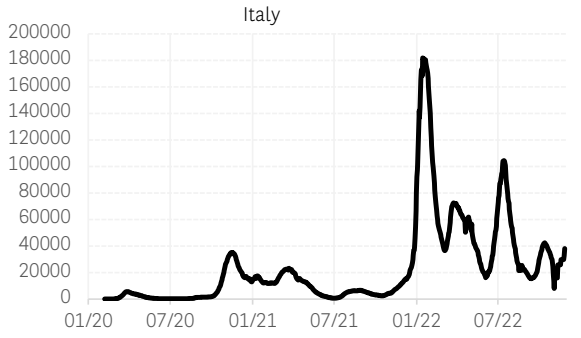
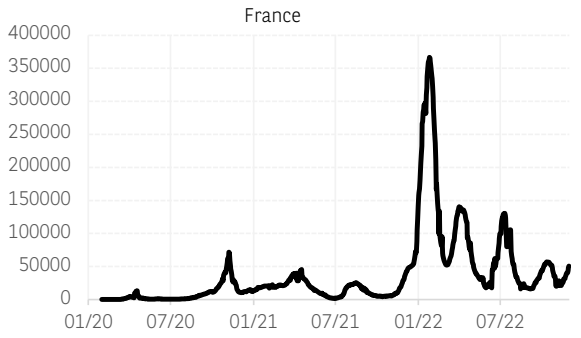
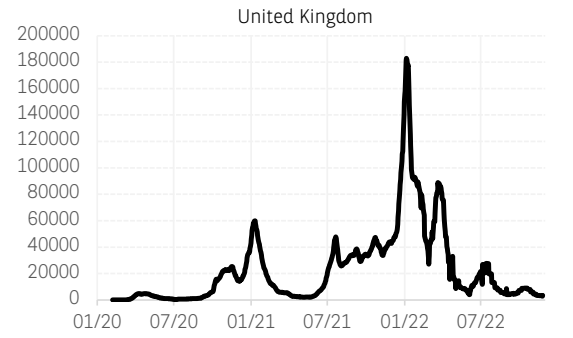
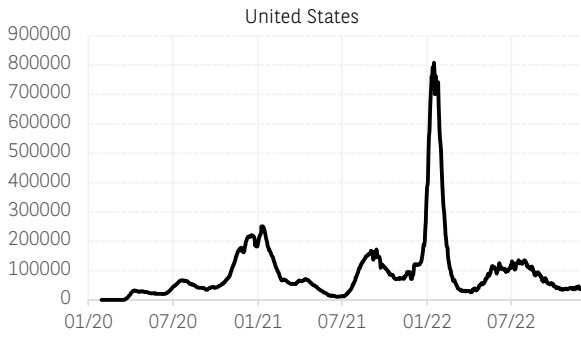


OECD WEEKLY TRACKER (Y/Y GDP GROWTH)



SOURCE: OECD (01/12/2022), BNP PARIBAS

DAILY NEW CASES OF COVID-19 (7-DAY MOVING AVERAGE)



SOURCE: JOHNS-HOPKINS UNIVERSITY (01/12/2022), BNP PARIBAS

ECONOMIC SCENARIO

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UNITED STATES

The US economy rebounded strongly during Q3, following two quarters of negative growth, thanks to healthy performances in corporate investment, household spending and, in particular, exports. The labour market is showing very early signs of a slowdown, but job creation remains high, the unemployment rate is still low and wages are still buoyant. Inflation seems to have peaked in the middle of the year and should continue to fall while remaining significantly above the target of 2% by late 2023. Following the mid-term elections, the Democrats retained a narrow majority in the Senate and the Republicans won a very tiny majority in the House of Representatives. This should limit what President Joe Biden can do over the remainder of his term, but, at the same time, compromises could also be reached.

CHINA

The recovery of the Chinese economy since its Q2 2022 contraction has been sluggish and unbalanced. Industrial production has been the main growth driver, but it is expected to lose steam in the short term, largely due to the weakening in external demand and slower export growth. Meanwhile, activity driven by the domestic market and the services sector still struggle to strengthen. The authorities are enhancing fiscal and monetary easing measures. However, the drags on domestic demand remain powerful: the correction in the property sector continues, and the deterioration in the labour market, the still tight Covid policy in spite of small adjustments, and weak household confidence weigh on private consumption. Consumer price inflation is very moderate.

EUROZONE

Growth in the euro zone in the third quarter was weak, but at least it remained positive, while the survey data (business and consumer confidence) seemed to be clearly pointing to a decline. Although a contraction was avoided in the third quarter, the euro zone is unlikely to avoid recession. The combination of the inflationary shock, the energy crisis and the enforced monetary tightening and their increasingly negative effects are likely to overcome the resistance seen to date. However, the recession should remain shallow (a cumulative fall in GDP of 1.1% between Q4 2022 and Q2 2023) thanks to the fiscal policy cushion and the current tightness of the labour market. In annual average terms, real GDP growth in the euro zone is expected to reach 3.2% in 2022 but then turn negative in 2023 (-0.5%). The subsequent recovery is likely to be weak. Although it should start to decline towards the end of this year or the beginning of next year, inflation is likely to remain elevated, well above the 2% target at the end of next year and only falling back to it at the end of 2024, which will keep monetary policy in restrictive territory.

FRANCE

Real GDP growth has continued during the 3rd quarter (0.2% q/q, after +0.5% during the 2nd quarter), driven by a growth of manufacturing production partly explained by a recovery of sectors exposed to supply-side problems (particularly the car sector) and partly related to growing inventories in order to avoid potential stronger constraints on production during the winter. This element should weigh on Q4 GDP growth, which should also suffer from the ongoing inflation acceleration (6.2% y/y in October) towards a new peak above 7% in February (before a gradual disinflation). These shocks should weigh on GDP growth in 2023 (0% according to our forecasts, after 2.5% in 2022).

RATES AND EXCHANGE RATES

In the US, the Federal Reserve will continue its tightening policy, bringing the federal funds rate to its terminal rate for this cycle at 5.25% (upper end of the target range) in the first quarter of next year. Given the expected slow decline in inflation and despite the economy entering recession, this level should be maintained through 2023 and only be followed by rate cuts in 2024. US Treasuries are largely pricing in the upcoming rate hikes. In the near term there is still some upward potential, but subsequently yields should move lower as the inflation outlook improves and the market starts anticipating policy easing in 2024.

The ECB Governing Council will continue to raise its policy rates at its next meetings. We expect the terminal rate -i.e. the peak rate in this cycle- to be reached by the end of the first quarter of next year. We expect a peak for the deposit rate at 3.00%. We expect quantitative tightening to start in the second quarter of 2023. Early on in 2023, we expect higher government bond yields on the back of important supply but thereafter yields should move lower, driven by a gradual decline in inflation. Lower US yields should also play a role in the decline of eurozone yields.

The Bank of Japan is expected to maintain its current policy stance and we do not envisage 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.

The yen has already weakened significantly versus the dollar, reflecting the increased policy divergence between the Fed and the Bank of Japan. We expect the exchange rate to remain around current levels in the near term. In 2023, the yen should strengthen versus the dollar considering that the federal funds rate should have reached its terminal rate.

GDP GROWTH & INFLATION

%	GDP Growth				Inflation			
	2021	2022 e	2023 e	2024 e	2021	2022 e	2023 e	2024 e
United-States	5,7	1,9	-0,1	-0,2	4,7	8,1	4,4	2,4
Japan	1,7	1,5	0,9	0,3	-0,2	2,4	2,1	1,3
United-Kingdom	7,4	4,4	-0,9	0,8	2,6	9,1	6,9	2,1
Euro Area	5,3	3,2	-0,5	1,3	2,6	8,4	5,6	2,3
Germany	2,6	1,8	-1,0	1,1	3,2	8,8	5,7	2,0
France	6,8	2,5	0,0	1,0	2,1	6,0	6,4	2,7
Italy	6,6	3,8	-0,4	1,1	1,9	8,7	7,2	2,0
Spain	5,1	4,6	0,0	1,3	3,0	8,3	2,3	1,5
China	8,1	3,2	4,5	4,8	0,9	2,1	2,7	2,5
India*	9,3	8,3	6,2	6,5	5,4	7,9	5,9	5,5
Brazil	4,6	3,0	0,5	1,3	8,3	9,4	5,4	4,9
Russia	4,5	-7,0	0,8	0,3	7,1	14,0	10,5	7,6

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

INTEREST & EXCHANGE RATES

Interest rates, %		Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q4 2024
End of period						
US	Fed Funds (upper limit)	5.25	5.25	5.25	5.25	3.25
	T-Note 10y	4.30	4.00	3.75	3.50	3.25
Eurozone	Deposit rate	3.00	3.00	3.00	3.00	2.00
	Bund 10y	2.75	2.65	2.50	2.30	2.00
	OAT 10y	3.45	3.30	3.10	2.90	2.50
	BTP 10y	5.25	5.05	4.80	4.60	3.80
UK	BONO 10y	4.05	3.90	3.75	3.55	2.90
	Base rate	4.25	4.25	4.25	4.25	3.50
Japan	Gilts 10y	4.00	3.75	3.60	3.35	3.15
	Bol Rate	-0.10	-0.10	-0.10	-0.10	-0.10
Japan	JGB 10y	0.25	0.25	0.25	0.25	0.25

Exchange Rates		Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q4 2024
End of period						
USD	EUR / USD	1.01	1.00	1.03	1.06	1.10
	USD / JPY	140	138	133	128	120
	GBP / USD	1.09	1.08	1.11	1.14	1.18
EUR	EUR / GBP	0.93	0.93	0.95	0.95	0.95
	EUR / JPY	141	138	137	136	132
End of period						
Brent	USD/bbl	95	93	95	92	95

SOURCES: BNP PARIBAS (E: ESTIMATES & FORECASTS) (MARKET ECONOMICS, INTEREST RATE STRATEGY, FX STRATEGY, COMMODITIES DESK STRATEGY)



CALENDAR

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LATEST INDICATORS

In China the Caixin manufacturing PMI edged higher but the other manufacturing PMI as well as the services PMI disappointed by declining more in November than expected. In the Eurozone, the European Commission's economic confidence survey improved more than anticipated. Industrial confidence however was down but services saw an increase in confidence. Monthly inflation was slightly negative in November and declined to 10.0% versus last year (10.6% in October). Annual core inflation was stable at 5.0%. Producer prices in October declined more than expected versus the previous month. The unemployment rate edged down, reaching 6.5%.

In France, consumer spending contracted significantly more than expected in October versus September. German unemployment increased in November, more than anticipated. In the US, the Conference Board consumer confidence index declined but was basically in line with the consensus. Mortgage applications were weaker. Job openings were down but less than expected. Personal income increased strongly in October. Importantly, the core deflator of personal consumption expenditures showed a slowdown in inflation, more than expected. The ISM manufacturing index declined more than expected, moving below the crucial 50 mark. Nevertheless, the labour market report was again strong with the number of new jobs beating the consensus by a wide margin.

DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	ACTUAL	PREVIOUS
11/29/2022	Eurozone	Economic Confidence	Nov	93.2	93.7	92.7
11/29/2022	Eurozone	Industrial Confidence	Nov	-0.5	-2.0	-1.2
11/29/2022	Eurozone	Services Confidence	Nov	2.0	2.3	2.1
11/29/2022	Eurozone	Consumer Confidence	Nov	--	-23.9	-23.9
11/29/2022	United States	Conf. Board Consumer Confidence	Nov	100.0	100.2	102.2
11/29/2022	United States	Conf. Board Present Situation	Nov	--	137.4	138.7
11/29/2022	United States	Conf. Board Expectations	Nov	--	75.4	77.9
11/30/2022	China	Manufacturing PMI	Nov	49.0	48.0	49.2
11/30/2022	China	Non-manufacturing PMI	Nov	48.0	46.7	48.7
11/30/2022	France	CPI EU Harmonized MoM	Nov	0.4%	0.5%	1.2%
11/30/2022	France	Consumer Spending MoM	Oct	-1.0%	-2.8%	1.3%
11/30/2022	France	GDP QoQ	3Q	0.2%	0.2%	0.2%
11/30/2022	Germany	Unemployment Change (000's)	Nov	13.5k	17.0k	9.0k
11/30/2022	Eurozone	CPI Estimate YoY	Nov	10.4%	10.0%	10.6%
11/30/2022	Eurozone	CPI MoM	Nov	0.2%	-0.1%	1.5%
11/30/2022	Eurozone	CPI Core YoY	Nov	5.0%	5.0%	5.0%
11/30/2022	United States	MBA Mortgage Applications	Nov	--	-0.8%	2.2%
11/30/2022	United States	GDP Annualized QoQ	3Q	2.8%	2.9%	2.6%
11/30/2022	United States	JOLTS Job Openings	Oct	10250k	10334k	10687k
11/30/2022	United States	U.S. Federal Reserve Releases Beige Book				
12/01/2022	Japan	Jibun Bank Japan PMI Mfg	Nov	--	49.0	49.4



DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	ACTUAL	PREVIOUS
12/01/2022	China	Caixin China PMI Mfg	Nov	48.9	49.4	49.2
12/01/2022	France	S&P Global France Manufacturing PMI	Nov	49.1	48.3	49.1
12/01/2022	Germany	S&P Global/BME Germany Manufacturing PMI	Nov	46.7	46.2	46.7
12/01/2022	Eurozone	S&P Global Eurozone Manufacturing PMI	Nov	47.3	47.1	47.3
12/01/2022	United Kingdom	S&P Global/CIPS UK Manufacturing PMI	Nov	46.2	46.5	46.2
12/01/2022	Eurozone	Unemployment Rate	Oct	6.6%	6.5%	6.6%
12/01/2022	United States	Personal Income	Oct	0.4%	0.7%	0.4%
12/01/2022	United States	Personal Spending	Oct	0.8%	0.8%	0.6%
12/01/2022	United States	PCE Core Deflator MoM	Oct	0.3%	0.2%	0.5%
12/01/2022	United States	Initial Jobless Claims	Nov	235k	225k	241k
12/01/2022	United States	S&P Global US Manufacturing PMI	Nov	47.6	47.7	47.6
12/01/2022	United States	ISM Manufacturing	Nov	49.7	49.0	50.2
12/02/2022	Eurozone	PPI MoM	Oct	-2.0%	-2.9%	1.6%
12/02/2022	United States	Change in Nonfarm Payrolls	Nov	200k	263k	284k
12/02/2022	United States	Unemployment Rate	Nov	3.7%	3.7%	3.7%
12/02/2022	United States	Labor Force Participation Rate	Nov	62.3%	62.1%	62.2%

SOURCE: BLOOMBERG



CALENDAR: THE WEEK AHEAD

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COMING INDICATORS

The focus this week will be on the services PMIs in a large number of countries. In the US, we will have the services ISM, producer price inflation, initial jobless claims and University of Michigan sentiment. Retail sales and an updated estimate of third quarter GDP growth will be published for the euro area. In Japan, the results of the EcoWatchers survey for November will be released.

DATE	COUNTRY	INDICATOR	PERIOD	CONSENSUS	PREVIOUS
12/05/2022	Japan	Jibun Bank Japan PMI Services	Nov	--	50.0
12/05/2022	China	Caixin China PMI Services	Nov	48.0	48.4
12/05/2022	France	S&P Global France Services PMI	Nov	--	49.4
12/05/2022	Germany	S&P Global Germany Services PMI	Nov	--	46.4
12/05/2022	Eurozone	S&P Global Eurozone Services PMI	Nov	--	48.6
12/05/2022	United Kingdom	S&P Global/CIPS UK Services PMI	Nov	--	48.8
12/05/2022	Eurozone	Retail Sales MoM	Oct	--	0.4%
12/05/2022	United States	S&P Global US Services PMI	Nov	46.1	46.1
12/05/2022	United States	Cap Goods Orders Nondef Ex Air	Oct	--	0.7%
12/05/2022	United States	ISM Services Index	Nov	53.7	54.4
12/06/2022	Germany	S&P Global Germany Construction PMI	Nov	--	43.8
12/07/2022	Eurozone	GDP SA QoQ	T3	--	0.2%
12/07/2022	United States	MBA Mortgage Applications	Dec	--	-0.8%
12/08/2022	Japan	Eco Watchers Survey Current SA	Nov	--	49.9
12/08/2022	Japan	Eco Watchers Survey Outlook SA	Nov	--	46.4
12/08/2022	United States	Initial Jobless Claims	Dec	--	225k
12/09/2022	China	PPI YoY	Nov	-1.4%	-1.3%
12/09/2022	China	CPI YoY	Nov	1.6%	2.1%
12/09/2022	France	Wages QoQ	T3	--	0.9%
12/09/2022	United States	PPI Ex Food and Energy MoM	Nov	0.2%	0.0%
12/09/2022	United States	U. of Mich. Sentiment	Dec	56.0	56.8
12/09/2022	United States	U. of Mich. Current Conditions	Dec	--	58.8
12/09/2022	United States	U. of Mich. Expectations	Dec	--	55.6
12/09/2022	United States	U. of Mich. 1 Yr Inflation	Dec	--	4.9%
12/09/2022	United States	U. of Mich. 5-10 Yr Inflation	Dec	--	3.0%

SOURCE: BLOOMBERG



FURTHER READING

18

A 2023 budget facing moderate uncertainties	EcoFlash	2 December 2022
United States: Expanding US federal debt will require raising more foreign capital	EcoTVWeek	2 December 2022
UK: Foreign trade declines due to Brexit	EcoFlash	30 November 2022
The end of wage bargaining power?	Chart of the Week	30 November 2022
The sobering record of real gdp forecasts during recessions	EcoWeek	28 November 2022
Can Germany escape the recession?	EcoTVWeek	25 November 2022
US: The end of wage bargaining power?	Chart of the Week	23 November 2022
Eurozone: the surprising resilience of the labour market, will it last?	EcoWeek	21 November 2022
Gone with the wind: the erosion of real household wealth	EcoTVWeek	18 November 2022
Romania: a widening current account deficit in 2022	Chart of the Week	16 November 2022
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