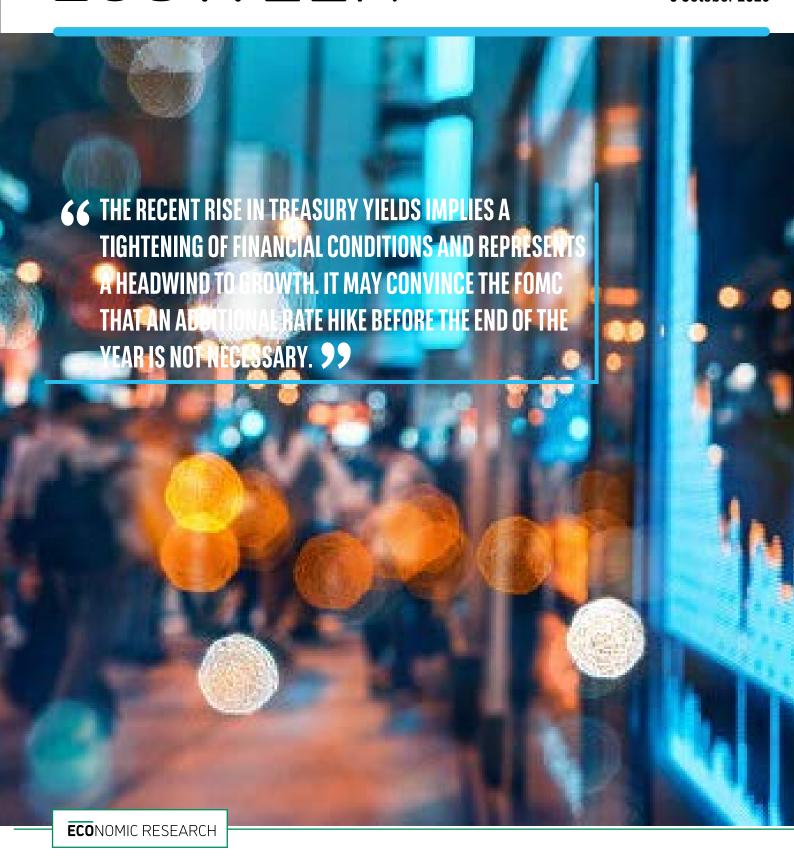
ECOWEEK

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The bank for a changing world

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EDITORIAL

US: THE RISE IN TREASURY YIELDS, A PUZZLE PERHAPS, A CONCERN FOR SURE

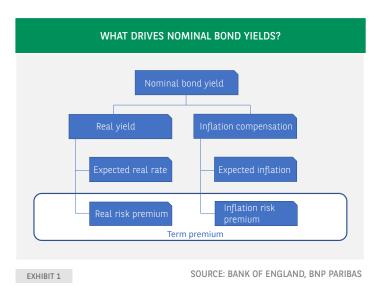
US Treasury yields have increased significantly since the end of July and this movement has accelerated in the past three weeks. It seems that the increase in the term premium has been a key driver although there is ambiguity about the underlying causes. There is no ambiguity however on the economic consequences: they are negative. A key channel of transmission is the housing market. Credit demand in general should suffer and another factor to monitor is the equity market considering that the earnings yield of the S&P500 is now lower than 10-year Treasury yields. All these factors represent a headwind to growth and may convince the FOMC that an additional rate hike before the end of the year is not warranted. A priori, such an outcome should pull investors back into the Treasury market. Perhaps the spike in yields will turn out just to have been a blip.

In a recent interview, Austan Goolsbee, the president of the Federal Reserve Bank of Chicago, called the timing of the recent rise in bond yields a puzzle: why did it happen in the past three weeks and not

Trying to answer the question is indeed challenging. Long-term interest rates are influenced by a wide range of factors that sometimes work in different directions: expectations about the outlook for growth and inflation, surprises when economic data are released that differ from market expectations, monetary policy, central bank communication, public sector borrowing requirements, changes in investor demand, central bank purchases, quantitative tightening, etc.

The list is not exhaustive and illustrates the complex world of bond markets. However, certain factors can be grouped together. In the end, what matters is the expected real interest rate, expected inflation and a term premium (exhibit 1)2. The expected real rate is closely linked to the business cycle and reflects expectations about monetary policy. Expected inflation depends on many factors: recent inflation developments, the stance of monetary policy stance, belief in the effectiveness of monetary policy, central bank credibility, etc. Finally, the term premium corresponds to the sum of a real rate risk premium and an inflation risk premium.

It captures the factors not covered by the expectations about shortterm real interest rates and inflation. One such factor is the preference of safe returns when economic growth is weakening³. The inflation risk premium depends on the volatility of inflation and the level of confidence about the expected inflation path. Factors that influence supply or demand -projected budget deficits, QE or QT, portfolio reallocations of investors- will also influence the term premium4.



Against this background, what might explain the significant increase in US Treasury yields since the end of July and the acceleration of this movement in the past three weeks? Data released during the month of August showed a surprisingly strong economy.

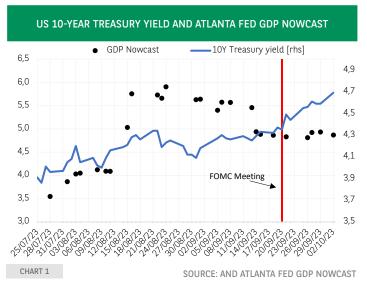
This is reflected in the Federal Reserve Bank of Atlanta's nowcast for third quarter GDP, which in August almost reached 6.0% (seasonally adjusted annual rate) (chart 1). Subsequently it drifted lower -whilst remaining elevated-, so this doesn't explain the latest rise in yields.

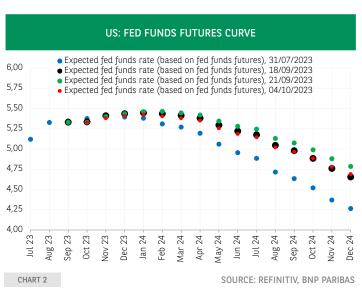
¹ Source: Chicago Fed's Austan Goolsbee Sees 'Puzzle' In Recent Rate Spike, Bloomberg, 5 October 2023.
2 The exhibit is a modified version of that appearing in The yield curve and QE, speech by Gertjan Vlieghe, external monetary policy committee member, Bank of England, 25 September 2018.
3 In such an environment, households will be concerned about rising labour income uncertainty -they fear an increase in the unemployment rate-, but also about the possibility that riskier assets such as equities would drop in value or that dividends would be cut. The ensuing loss in income and wealth could jeopardise their consumption habits, which is why they will invest more in bonds because they provide a certain revenue stream, thereby pushing down bond yields, and less in risky assets. Along the same lines, professional investors will switch from risky to riskless assets when they expect an economic downturn and its negative impact on the corporate profits outlook.
4 An explicit objective of QE is to drive down the term premium, thereby lowering bond yields.



The recent rise in Treasury yields implies a tightening of financial conditions and represents a headwind to growth. It may convince the FOMC that an additional rate hike before the end of the year is not necessary.

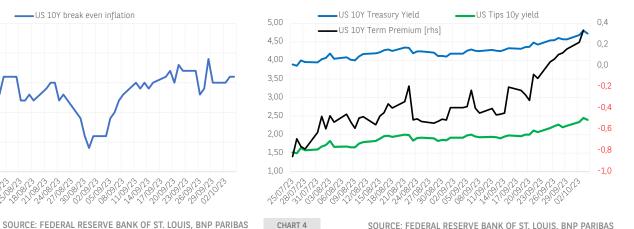






US: BREAK-EVEN INFLATION US 10Y break even inflation 2.45 2,25 2,20

US: 10-YEAR TREASURY YIELD: NOMINAL, REAL AND TERM PREMIUM



The hawkish message coming from the FOMC meeting on 20 September triggered a jump in yields but doesn't explain why yields continue to rise subsequently. Market pricing of the federal funds rate next year increased following the meeting but has remained stable since (chart 2).

Turning to the inflation outlook as a possible cause, chart 3 shows that the break-even rate of inflation⁵ has been stable for the past three weeks. After having declined in August and rebounded early September, it is back to its level at the end of July.

These different observations suggest that the rise in nominal yields essentially reflects an increase in real yields, which in turn is mostly driven by an increase in the term premium (chart 4). Different factors could explain the movement of the latter. One concerns the struggle in Congress to increase the debt ceiling and the risk of a government shutdown.

A second factor is the prospect of important gross borrowing requirements by the US government next year, combined with a reduction in the size of the Fed's balance sheet (QT). Both issues have been wellknown for months but, strange enough, it seems investors only start to pay attention to it now. Finally, the rise in yields may have triggered stop-loss selling, causing an acceleration of the recent movement.

Despite the number of potential explanations -the list is not exhaustive-, the impression remains that the causes of the latest rise are hard to pin down. Austan Goolsbee has a point when he calls it a puzzle.

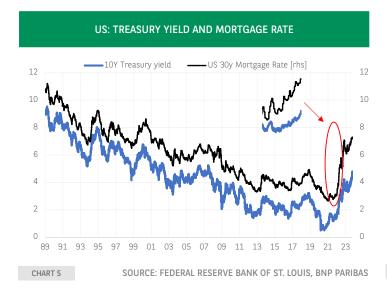
However, an even more important question concerns the economic consequences of the rise in yields. Does it matter? On this question the answer is unambiguously 'yes'. A key channel of transmission is the housing market. The rate on a 30-year mortgage has reached a level not seen since the end of the nineties (chart 5).

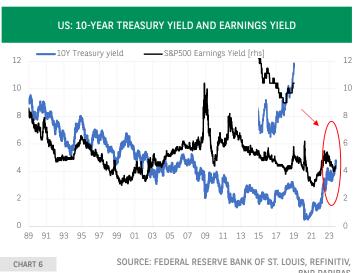
5 This corresponds to the difference between the yield on a nominal Treasury bond and the yield on an inflation-linked security of an equivalent maturity



CHART 3

EDITORIAL





Credit demand in general should suffer. Another factor to monitor is the equity market considering that the earnings yield -the inverse of the price/earnings ratio- of the S&P500 is now lower than 10-year Treasury yields. To conclude, the rise in Treasury yields implies a tightening of financial conditions. Borrowing costs go up, the investors' willingness to take risk may decline and discomfort about potential consequences that still need to manifest themselves increases.

All these factors represent a headwind to growth and may convince the FOMC that an additional rate hike before the end of the year is not necessary. *A priori,* such an outcome should pull investors back into the Treasury market. Perhaps the spike in yields will turn out just to have been a blip.

William De Vijlder



MARKETS OVERVIEW

6

OVERVIEW

Week 29-9 23 to 6-	10-23				
≥ CAC 40	7 135	•	7 060	-1.0	%
⊅ S&P 500	4 288	٠	4 309	+0.5	%
Volatility (VIX)	17.5	•	17.5	-0.1	pt
7 Euribor 3M (%)	3.95	٠	3.98	+3.1	bp
7 Libor \$ 3M (%)	5.66	٠	5.67	+1.1	bp
→ OAT 10y (%)	3.35	٠	3.46	+10.9	bp
Bund 10y (%)	2.81	٠	2.85	+4.3	bp
US Tr. 10y (%)	4.57	٠	4.80	+22.4	bp
Euro vs dollar	1.06	•	1.05	-0.5	%
Gold (ounce, \$)	1 857	٠	1 830	-1.5	%
→ Oil (Brent, \$)	95.4	•	84.7	-11.3	%

MONEY & BOND MARKETS

Interest Rates		hig	hest	23	lov	vest	23
€ECB	4.50	4.50	at	20/09	2.50	at	02/01
Eonia	-0.51	-0.51	at	02/01	-0.51	at	02/01
Euribor 3M	3.98	3.98	at	06/10	2.16	at	02/01
Euribor 12M	4.19	4.23	at	29/09	3.30	at	19/01
\$ FED	5.50	5.50	at	27/07	4.50	at	02/01
Libor 3M	5.67	5.68	at	29/08	4.77	at	02/01
Libor 12M	6.04	6.04	at	30/06	4.70	at	20/03
£ BoE	5.25	5.25	at	03/08	3.50	at	02/01
Libor 3M	5.41	5.60	at	30/08	3.87	at	02/01
Libor 12M	0.81	0.81	at	02/01	0.81	at	02/01

Yield (%)		highest 23	lowest 23
€ AVG 5-7y	2.64	2.64 at 02/01	2.64 at 02/01
Bund 2y	3.22	3.38 at 28/09	2.39 at 20/03
Bund 10y	2.85	2.94 at 28/09	1.98 at 18/01
OAT 10y	3.46	3.50 at 28/09	2.42 at 18/01
Corp. BBB	4.90	4.94 at 04/10	3.95 at 02/02
\$ Treas. 2y	5.15	5.22 at 03/10	3.85 at 04/05
Treas. 10y	4.80	4.80 at 03/10	3.30 at 06/04
High Yield	9.30	9.30 at 06/10	7.94 at 02/02
£ gilt. 2y	4.88	5.51 at 06/07	3.15 at 02/02
gilt. 10y	4.58	4.74 at 17/08	3.00 at 02/02
At 6-10-23			

EXCHANGE RATES

1€=		high	est 23	low	est/	23	2023
USD	1.05	1.12	at 14/07	1.05	at	03/10	-1.3%
GBP	0.86	0.90	at 03/02	0.85	at	11/07	-2.6%
CHF	0.96	1.00	at 24/01	0.95	at	05/09	-2.5%
JPY	157.41	159.39	at 30/08	138.02	at	03/01	+11.8%
AUD	1.66	1.70	at 21/08	1.53	at	27/01	+5.5%
CNY	7.70	8.08	at 19/07	7.23	at	05/01	+3.7%
BRL	5.47	5.79	at 04/01	5.18	at	18/09	-3.0%
RUB	106.23	110.46	at 14/08	73.32	at	12/01	+36.3%
INR	87.73	92.37	at 14/07	86.58	at	08/03	-0.6%
At 6-1	0-23						Change

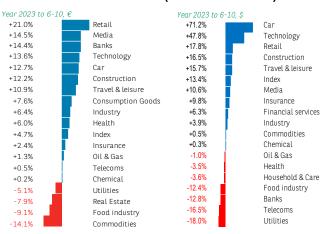
COMMODITIES

Spot price, \$		high		00	Lau		23	0000	2023(€)
									٠,
Oil, Brent	84.7	96.6	at	27/09	71.9	at	12/06	-0.3%	+0.9%
Gold (ounce)	1 830	2 047	at	04/05	1 810	at	24/02	+0.8%	+2.1%
Metals, LMEX	3 599	4 404	at	26/01	3 551	at	05/10	-9.7%	-8.5%
Copper (ton)	7 971	9 331	at	23/01	7 824	at	05/10	-4.7%	-3.5%
wheat (ton)	199	2.9	at	13/02	168	at	29/09	-30.2%	-29.4%
Corn (ton)	181	2.7	at	13/02	161	at	21/08	-3.1%	-29.7%
At 6-10-22	-								Chango

EQUITY INDICES

	Index	highest 23	lowest 23	2023
World		_		
MSCI World	2 845	3 064 at 31/07	2 595 at 05/01	+9.3%
North America				
S&P500	4 309	4 589 at 31/07	3 808 at 05/01	+12.2%
Europe				
EuroStoxx50	4 144	4 471 at 31/07	3 856 at 02/01	+9.2%
CAC 40	7 060	7 577 at 21/04	6 595 at 02/01	+0.9%
DAX 30	15 230	16 470 at 28/07	14 069 at 02/01	+9.4%
IBEX 35	9 236	9 695 at 27/07	8 370 at 02/01	+1.2%
FTSE100	7 495	8 014 at 20/02	7 257 at 07/07	+0.1%
Asla				
MSCI, loc.	1 182	1 256 at 15/09	1 065 at 04/01	+1.1%
Nikkei	30 995	33 753 at 03/07	25 717 at 04/01	+18.8%
Emerging				
MSCI Emerging (\$)	937	1 052 at 26/01	928 at 04/10	-0.2%
China	57	75 at 27/01	56 at 04/10	-9.8%
India	823	843 at 15/09	703 at 16/03	+7.4%
Brazil	1 471	1 733 at 26/07	1 296 at 23/03	-0.9%
At 6-10-23	_			Change

PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)

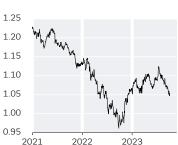


SOURCE: REFINITIV, BNP PARIBAS



MARKETS OVERVIEW

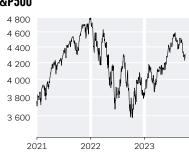
EURO-DOLLAR



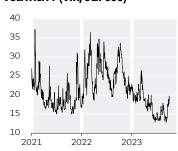
EUROSTOXX50



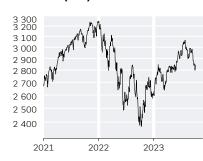
S&P500



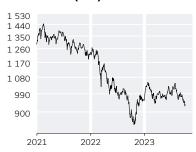
VOLATILITY (VIX, S&P500)



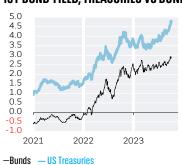
MSCI WORLD (USD)



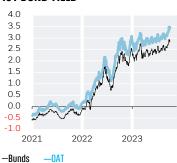
MSCIEMERGING (USD)



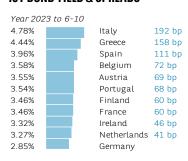
10Y BOND YIELD, TREASURIES VS BUND



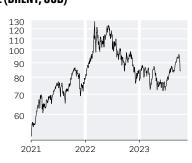
10Y BOND YIELD



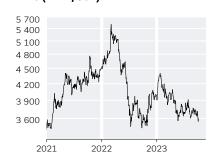
10Y BOND YIELD & SPREADS



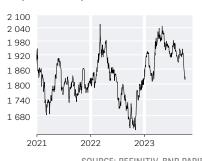
OIL (BRENT, USD)



METALS (LMEX, USD)



GOLD (OUNCE, USD)



SOURCE: REFINITIV, BNP PARIBAS



ECONOMIC PULSE

8

PMI: GLOBAL ECONOMIC ACTIVITY DOWN AT THE END OF THE THIRD QUARTER

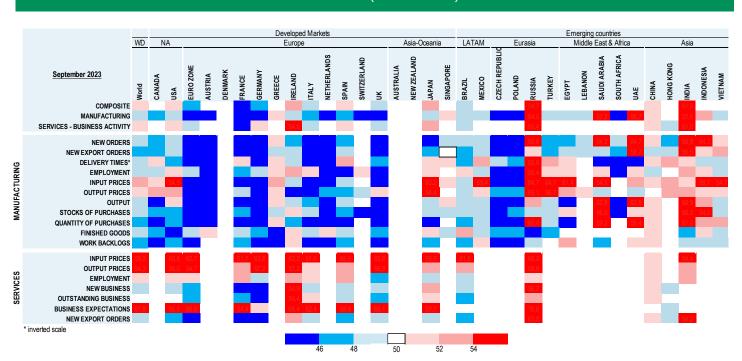
The third quarter 2023 ended with an eighth consecutive decline in the S&P Global composite PMI. This is an increasingly tangible evidence of a slow-down in the world economy and this negative signal is reinforced by the level of the index now close to the 50-point threshold separating the expansion zone from the contraction zone (50.5 compared to 50.6 in August). While the manufacturing PMI picked up slightly to 49.1 (compared to 49.0 in August), but still indicating a contraction, the services PMI continued to deteriorate for the eighth consecutive month.

In the services sector, out of the 16 countries for which September data are available, 10 reported a decline in the index compared to the previous month. The decline is marked in Russia, Brazil, France and, to a lesser extent, the United States, the United Kingdom, and Ireland. In China, the index has reached its lowest level since December 2022 when the country lifted its health restrictions. One of the striking feature of the September survey is the big rise in the German index, by three points, thus returning to the expansion zone (50.3 compared to 47.3 in August). The Spanish index also returned to the expansion zone (50.5 compared to 49.3 in August). Overall, the services sector is driven down by the decline in the new business sub-component, new export orders, business expectations and selling prices.

The picture is very different for the manufacturing PMI index. Thirteen of the 31 countries surveyed reported an increase supported by the rise in the new orders and output sub-components, notably in the United States, Italy, Spain, the United Kingdom, and Russia. In Germany, the manufacturing index has improved thanks to new orders too, but it is still far from the 50 mark. Conversely, the index fell in the Netherlands, Greece, France (the lowest level since May 2020) and, to a lesser extent, in the euro area. In China, the index fell slightly after its August rebound but remains in the expansion zone. News about prices is bad, with input and selling price sub-components picking up in the wake of the oil prices' rise. On the employment side, the news is no better: the index has returned to contraction territory, for the first time since last December, as a result of a sharp decline in Spain, China, the Czech Republic, Austria and the Netherlands.

Tarik Rharrab

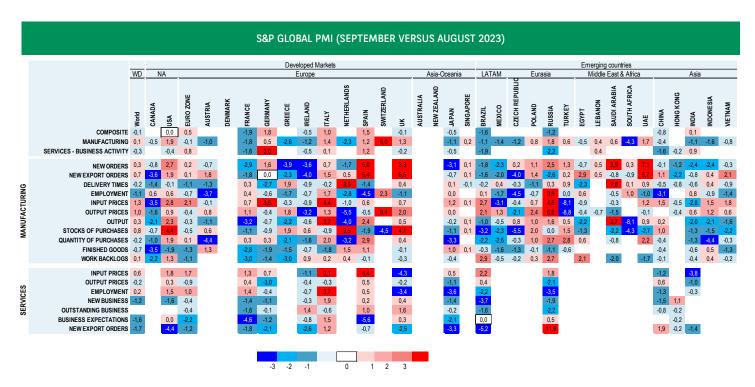
S&P GLOBAL PMI (SEPTEMBER 2023)



SOURCE: S&P GLOBAL, BNP PARIBAS



ECONOMIC PULSE



SOURCE: S&P GLOBAL, BNP PARIBAS



ECONOMIC SCENARIO

10

UNITED STATES

After a strong second half of 2022 (+0.7% q/q on average per quarter), US activity decelerated only slightly in the first half of 2023 (+0.5% q/q on average per quarter), thanks to the resilience of household consumption and the strength of nonresidential investment. The impact of the tighter monetary policy on lending standards is strong but it still limited on activity and employment growth. Q3 GDP growth is expected to be very positive again before a sharp slowdown in Q4 and to slide into recession in the first half of 2024. The peak in inflation was reached in mid-2022 but core disinflation remains gradual. Headline inflation should approach the 2% target in 2024. However, the slow pace of disinflation argues in favor of keeping monetary policy in restrictive territory, despite the expected start of the easing cycle in Q2 2024. This should limit the recovery in 2024.

Economic growth started to accelerate in early 2023 following the end of the zero Covid policy, but the recovery has weakened very rapidly. Export momentum has stalled due to depressed global demand and tensions with the US. Domestic demand has remained held back by a significant loss in consumer and investor confidence. The crisis in the property sector has persisted, with the continued fall in sales, new defaults of developers and growing difficulties of certain financial institutions. The government and the central bank have implemented new policy stimulus measures over the summer, aimed at supporting domestic demand and activity in the property sector. A slight improvement in real GDP growth is thus expected in the short term. However, policy makers remain prudent, notably constrained by the debt excess of the economy and the weak financial situation of local governments.

EUROZONE

After a slight contraction in GDP in Q4 2022, the euro area returned to slightly positive growth in the first half of 2023. According to the latest figures available, Q1 growth was again revised up (from -0.1% to 0.0% and now to +0.1% q/q), while Q2 growth was downwardly revised to +0.1% q/q, erasing the initially reported technical rebound of +0.3% q/q. The disparate performance between Member States weakens the overall result. France and Spain have been doing well, but Germany, Italy and the Netherlands are struggling. The negative effects of monetary tightening should intensify and further slow economic activity, which would stagnate in the second half of 2023, before starting a sluggish recovery. Although it is expected to decline throughout 2023, inflation would remain elevated, slightly exceeding 3% y/y at the end of this year. Illustrating the slowness of the disinflation process, it would still be significantly above the 2% target at the end of 2024 (2.5% y/y), forcing monetary policy to remain in restrictive territory.

FRANCE

French growth significantly surprised on the upside in Q2 2023, with activity accelerating more than expected (+0.5% q/q, after stagnation in Q1 and a modestly positive Q4 2022). While household consumption and investment remain depressed, this rebound has been supported by business investment and, above all, exports. A negative correction is likely in Q3. Inflation rebounded in August (5.7% y/y according to the harmonized measure), driven by energy prices, but this rebound does not call into question the slow disinflation process. Because of rising interest rates, household demand should remain subdued in 2023, weighing on our GDP growth forecast (0.7% in 2023, compared to 2.5% in 2022).

RATES AND EXCHANGE RATES

In the US, after having skipped the June meeting, the Federal Reserve proceeded, as expected, to a further 25bp rate hike in July. This increase should be the last in our view, but uncertainty remains given the still elevated core inflation and the $\,$ resilience of activity and the labour market to date. In any case, these factors argue against a rate cut before mid-2024. The residual uncertainty on the policy rate peak is reflected in long-term rates, which remained on an upward trend during the first half of September. However, as inflation falls further and the prospect of monetary easing in 2024 rises, long-term rates should resume their decline soon.

Unlike the Fed, the ECB did not pause in June but, like the Fed, it increased its key rates by 25bp in July. It did not stop there and hiked again by 25 bp in September (deposit rate at 4.00%, refinancing rate at 4.50%). We are of the view that this increase should mark, this time, the end of the ECB's tightening cycle, considering the

effects of the monetary tightening already underway. But it is not yet certain that it will really be the last, given the absence of a tangible fall at this stage of core inflation. As part of its monetary tightening, the ECB also announced a complete halt, starting in July 2023, of its reinvestments under the APP. European long-term rates remain on a uptrend, moving in line with US rates, but in a more muted way. They are expected to ease gradually as the fall in core inflation should become more visible, dissipating uncertainty over the continuation of monetary tightening.

On 27 July, the Bank of Japan (BoJ) adjusted its yield curve control policy (YCC) by allowing a wider fluctuation in 10-year sovereign interest rates around the target of 0.5%Further adjustments to the YCC cannot be excluded, given that the country currently faces the fastest rate of inflation since the early 1990s. Nevertheless, the BoJ is unlikely to increase its policy rates this year, but a rise is expected in 2024.

We remain structurally bearish regarding the US dollar versus the euro. The dollar's valuation is expensive and next year the Federal Reserve should ease more than the ECB. We expect the yen to remain around current levels in the near term before strengthening versus the dollar based on the expected monetary divergence between the Fed and the BoJ in 2024.

	GDP GROWTH AND INFLATION								
		GDP	Growth				Infla	itlon	
%	2021	2022	2023 e	2024 e		2021	2022	2023 e	2024 e
United-States	5.9	1.9	2.2	0.4		4.7	8.0	4.1	2.3
Japan	2.3	1.0	2.0	1.0		-0.2	2.5	3.2	2.6
United-Kingdom	8.7	4.3	0.6	0.0		2.6	9.1	7.4	2.9
Euro Area	5.6	3.4	0.5	0.9		2.6	8.4	5.6	2.8
Germany	3.1	1.9	-0.3	0.3		3.2	8.6	6.2	3.0
France	6.4	2.5	0.7	0.5		2.1	5.9	5.8	2.7
Italy	7.0	3.8	0.9	1.1		1.9	8.7	6.2	2.2
Spain	5.5	5.5	2.2	1.5		3.0	8.3	3.5	2.8
China	8.4	3.0	5.1	4.5		0.9	2.0	0.5	2.0
India*	9.1	7.2	6.1	6.0		5.5	6.7	5.9	5.0
Brazil	5.0	2.9	3.1	1.8		8.3	9.3	4.7	4.2

Source: BNP Paribas (e: Estimates & forecasts)

Last update: 9 October 2023

INTEREST AND EXCHANGE RATES

End of period		Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024
US	Fed Funds (upper limit)	5.50	5.50	5.25	4.75	4.25
	T-Note 10y	4.20	4.05	3.95	3.90	3.90
Eurozone	deposit rate	4.00	4.00	3.75	3.50	3.25
	Bund 10y	2.60	2.45	2.40	2.30	2.35
	OAT 10y	3.17	2.99	2.93	2.85	2.92
	BTP 10y	4.50	4.25	4.10	4.10	4.25
	BONO 10y	3.70	3.45	3.35	3.30	3.40
UK	Base rate	5.25	5.25	5.00	4.50	4.00
	Gilts 10y	4.00	3.80	3.60	3.65	3.70
Japan	BoJ Rate	-0.10	-0.10	0.10	0.10	0.25
	JGB 10y	0.75	0.85	0.90	0.90	1.00

Exchange Rates						
End of period		Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024
USD	EUR / USD	1.10	1.11	1.12	1.13	1.15
	USD / JPY	145	145	140	138	135
	GBP / USD	1.29	1.29	1.29	1.30	1.32
EUR	EUR / GBP	0.85	0.86	0.87	0.87	0.87
	EUR / JPY	160	161	157	156	155
Brent						
End of period		Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Brent	USD/bbl	81	82	86	88	86

Sources: BNP Paribas (Market Economics, Interest Rate Strategy, FX

Strategy, Commodities Desk Strategy)

Last update: 25 September 2023



^{*} Fiscal year from 1st April of year n to March 31st of year n+1

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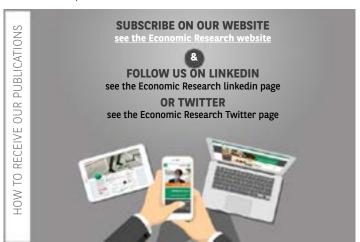
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