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The bank for a changing world

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EDITORIAL 3

THE MULTIPLE FACTORS UNDERPINNING THE RENEWED STRENGTH OF THE EURO AGAINST THE DOLLAR

After last year's significant depreciation versus the dollar, the euro has found a new strength. Key factors are the reversal in the current account balance, which after moving into negative territory last year is back into surplus, and, since the autumn of 2022, the narrowing of the 1-year interest rate differential with the US. This reflects the view that the Federal Reserve is approaching the end of its tightening cycle whereas the ECB still has more work to do. We expect that this factor will continue to drive the exchange rate in the coming months. Moreover, there is also a higher likelihood that the Federal Reserve will cut rates before the ECB does. International investors have large unhedged dollar positions, so in case of further dollar depreciation, this may force them to reduce their exposure to the dollar by selling dollar assets, which would exert more downward pressure on the dollar. Finally, the euro is still well below its long-term fair value versus the dollar.

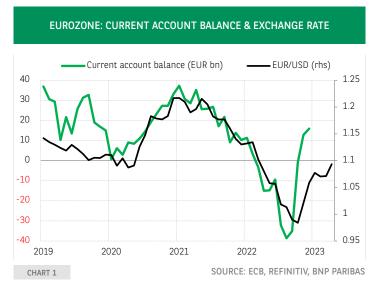
What a difference a few months can make. In 2022, the huge depreciation of the euro was making headlines, particularly when in August the common currency dropped below parity versus the dollar. Since early November, the euro has strengthened significantly and recently the 1.10 hurdle has been crossed. Last year's depreciation, which to a large degree was driven by a monetary policy divergence between the US and the Eurozone¹, was a source of policy concern.

The account of the July meeting of the governing council mentioned that "Members widely noted that the depreciation of the euro constituted an important change in the external environment and implied greater inflationary pressures for the euro area, in particular through higher costs of energy imports invoiced in US dollars." Moreover, "the improvements in competitiveness and support for growth that would normally be associated with a depreciation were being impeded by the prevailing global supply constraints and logistics restrictions."²

The recent appreciation should, through its impact on import prices, help the ECB in its fight against inflation. A model-based simulation shows that a 10% appreciation of the effective exchange rate of the euro should after a year reduce inflation by 0.7 percentage points.³

Several factors are underpinning the newfound strength of the euro. Firstly, the current account balance, which as shown in chart 1, has been closely correlated since 2020 with the euro exchange rate versus the dollar. After moving into negative territory in the spring of last year -mainly driven by a switch from a surplus to a deficit for goods, in large part explained by the jump in the price of energy imports-, the current account has moved back into a surplus.⁴

A current account deficit needs to be financed by net capital inflows and foreign investors are enticed to increase their investments in the Eurozone through a mix of higher interest rates and a weaker currency.



Likewise, a current account surplus should support the currency and/or exert a downward pressure on bond yields.

A second factor is the long-term interest rate differential between the US and the Eurozone. According to a very popular view, when bond yields are rising in country A versus country B, international capital should flow from the latter to the former, causing an appreciation of country A's currency versus that of country B.

^{2022,} ECB, 25 August 2022.
2 Source: Account of the monetary policy meeting of the governing council of the European Central Bank held on 20-21 July 2022, ECB, 25 August 2022.
3 Simulation based on the Oxford Economics Global Economic Model. Since its low point in August 2022, the nominal effective exchange rate of the euro has appreciated 9%.
4 The deterioration was driven by the trade in goods, which moved from a surplus into a deficit, and a decline of the surplus in services. The recent improvement has been driven by goods -again in surplus- and services, where the surplus has increased.



The recent, renewed strength of the euro versus the US dollar has mainly been driven by the view that there is a higher likelihood that the Federal Reserve will stop hiking before the ECB does and also will be quicker in cutting rates.



^{1 &}quot;Around half of the 10% depreciation of the euro vis-à-vis the US dollar since the start of the year could be attributed to the divergence in monetary policies." Source: Isabel Schnabel, member of the executive board of the ECB, as quoted in the account of the monetary policy meeting of the Governing Council of the European Central Bank held on 20-21 July 2022, ECB, 25 August 2022.

EDITORIAL

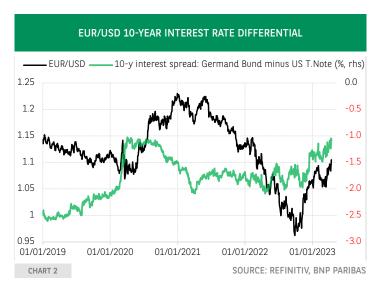
However, the reality is more complex. Due to investor preferences and differences in risk characteristics, a bond yield differential may not cause changes in the exchange rate.⁵ Chart 2 shows that, occasionally, the correlation between the exchange rate of the euro versus the dollar and the difference between 10-year Bunds yields and 10-year US Treasury yields has been positive, meaning that, when US yields increased versus German yields, the dollar was appreciating.

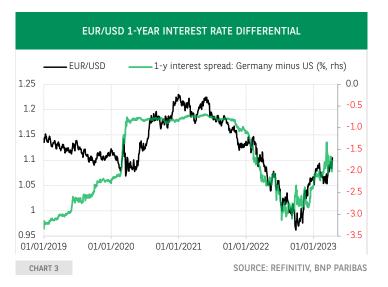
However, for the entire period covered in the chart, the correlation is very low.6 Between the spring of 2021 and the end of 2022, the bond yield differential fluctuated in a narrow range whereas the euro depreciated very significantly versus the dollar, so other factors have played a role. As explained before, there was the worsening of the current account balance, but also the divergence in terms of monetary policy outlook. This can be assessed by looking at the 1-year interest rate, which, to a large degree, reflects expectations of future decisions by the central bank. Chart 3 shows a high correlation since the end of 2021 between the 1-year interest rate differential and the euro versus

Early on, the prospect of a more aggressive stance by the Federal Reserve -reflected in an increase of the 1-year US Treasury yield versus its German equivalent- was accompanied by a significant appreciation of the dollar. Since the autumn of last year, the interest rate differential has narrowed, reflecting a view that the Federal Reserve is approaching the end of its tightening cycle whereas the ECB still has more work to do. This has underpinned the euro. We expect that this factor will continue to drive the exchange rate in coming months given the higher likelihood that the Federal Reserve will stop hiking before the ECB does. Moreover, considering that the former has two objectives -price stability and full employment-, there is also a higher likelihood that the Federal Reserve will cut rates before the ECB does. Both factors imply that the 1-year rate differential might narrow further, which should underpin the euro.

Two additional factors should push in the same direction. International investors have large unhedged dollar positions, so in case of further dollar depreciation, this may force them to reduce their exposure to the dollar by selling dollar assets, which would exert more downward pressure on the dollar. In addition, the euro is still well below its longterm fair value versus the dollar -which we consider to be higher than 1.30-, so this could also act as a magnet, particularly when the cyclical conditions -the monetary policy outlook- push in the same direction. Our year-end target is 1.14 and we expect further appreciation in 2024 to 1 18









the risk profile of country is deteriorating, higher bond yields are necessary to slow down capital outflows. In that case, a rising bond yield differential is associated with a weakening currency.
6 Since the start of 2019, using daily data, there is a positive correlation of 5% between the level of the euro against the US dollar and the 10-year interest rate differential. Using the 1-year (2-year) differential instead gives a 66% (62%) correlation.
7 The consensus established by Bloomberg expects a peak in the policy rate in the US and the Eurozone in the third quarter of this year and a rate cut in the US in the second part with more cuts to follow next year. In the Eurozone, a rate cut is only expected in the second quarter of 2024.

MARKETS OVERVIEW

OVERVIEW

MONEY & BOND MARKETS

| Week 7-423 to 14-4- | -23 | | | Interest Rates | | highest | 23 | lowest | 23 | Yield (%) | | high | nest 23 | lowest 23 |
|-------------------------|---------|-------|---------|----------------|-------|----------|-------|----------|-------|--------------|------|------|----------|---------------|
| ≥ CAC 40 | 7 325 ▶ | 7 325 | +0.0 % | € ECB | 3.50 | 3.50 at | 22/03 | 2.50 at | 02/01 | € AVG 5-7y | 2.64 | 2.64 | | 2.64 at 02/01 |
| | | | | Eonia | -0.51 | -0.51 at | 02/01 | -0.51 at | 02/01 | Bund 2y | 2.62 | 3.36 | at 08/03 | 2.39 at 20/03 |
| ≥ S&P 500 | 4 105 ▶ | 4 105 | +0.0 % | Euribor 3M | 3.08 | 3.08 at | 06/04 | 2.16 at | 02/01 | Bund 10y | 2.19 | 2.75 | at 02/03 | 1.98 at 18/01 |
| Volatility (VIX) | 18.4 ▶ | 18.4 | +0.0 pb | Euribor 12M | 3.58 | 3.98 at | 09/03 | 3.30 at | 19/01 | OAT 10y | 2.69 | 3.23 | at 03/03 | 2.42 at 18/01 |
| ⊅ Euribor 3M (%) | 3.08 ▶ | 3.08 | +0.0 bp | \$ FED | 5.00 | 5.00 at | 23/03 | 4.50 at | 02/01 | Corp. BBB | 4.35 | 4.75 | at 03/03 | 3.95 at 02/02 |
| ≥ Libor \$ 3M (%) | 5.20 ▶ | 5.20 | +0.0 bp | Libor 3M | 5.20 | 5.22 at | 03/04 | 4.77 at | 02/01 | \$ Treas. 2y | 4.12 | 5.12 | at 08/03 | 3.86 at 24/03 |
| , | | | | Libor 12M | 5.13 | 5.88 at | 08/03 | 4.70 at | 20/03 | Treas. 10y | 3.40 | 4.06 | at 02/03 | 3.30 at 06/04 |
| → OAT 10y (%) | 2.69 ▶ | 2.69 | +0.0 bp | £ BoE | 4.25 | 4.25 at | 23/03 | 3.50 at | 02/01 | High Yield | 8.72 | 9.16 | at 20/03 | 7.94 at 02/02 |
| Bund 10y (%) | 2.19 ▶ | 2.19 | +0.0 bp | Libor 3M | 4.44 | 4.44 at | 05/04 | 3.87 at | 02/01 | £ gilt. 2y | 3.88 | 4.10 | at 09/03 | 3.15 at 02/02 |
| ■ US Tr. 10y (%) | 3.40 ▶ | 3.40 | +0.0 bp | Libor 12M | 0.81 | 0.81 at | 02/01 | 0.81 at | 02/01 | gilt. 10y | 3.43 | 3.78 | at 02/03 | 3.00 at 02/02 |
| ≥ Euro vs dollar | 1.09 ▶ | 1.09 | +0.0 % | At 14-4-23 | | | | | | At 14-4-23 | | | | |
| ■ Gold (ounce, \$) | 2 008 ▶ | 2 008 | +0.0 % | | | | | | | | | | | |
| → Oil (Brent. \$) | 85.2 ▶ | 85.2 | +0.0 % | | | | | | | | | | | |

EXCHANGE RATES

| 1€ = | | highest | 23 | low | est | 23 | 2023 |
|-----------|--------|-----------|-------|--------|-----|-------|--------|
| USD | 1.09 | 1.10 at | 04/04 | 1.05 | at | 05/01 | +2.4% |
| GBP | 0.88 | 0.90 at | 03/02 | 0.87 | at | 19/01 | -1.0% |
| CHF | 0.99 | 1.00 at | 24/01 | 0.97 | at | 15/03 | +0.0% |
| JPY | 143.96 | 145.27 at | 01/03 | 138.02 | at | 03/01 | +2.2% |
| AUD | 1.64 | 1.64 at | 06/04 | 1.53 | at | 27/01 | +4.1% |
| CNY | 7.52 | 7.55 at | 04/04 | 7.23 | at | 05/01 | +1.3% |
| BRL | 5.53 | 5.79 at | 04/01 | 5.40 | at | 08/03 | -1.9% |
| RUB | 88.73 | 88.73 at | 06/04 | 73.32 | at | 12/01 | +13.9% |
| INR | 89.46 | 90.31 at | 04/04 | 86.58 | at | 08/03 | +1.3% |
| At 14-4-2 | 23 | | | | | - | Change |

COMMODITIES

| Spot price, \$ | | high | est 2 | :3 | low | est | 23 | 2023 | 2023(€) |
|----------------|-------|-------|-------|-------|-------|-----|-------|--------|---------|
| Oil, Brent | 85.2 | 88.2 | at | 23/01 | 72.6 | at | 17/03 | +0.3% | -2.0% |
| Gold (ounce) | 2 008 | 2 022 | at | 04/04 | 1 810 | at | 24/02 | +10.6% | +8.1% |
| Metals, LMEX | 3 917 | 4 404 | at | 26/01 | 3 824 | at | 15/03 | -1.7% | -3.9% |
| Copper (ton) | 8 807 | 9 331 | at | 23/01 | 8 236 | at | 04/01 | +5.3% | +2.9% |
| vheat (ton) | 247 | 2.9 | at | 13/02 | 241 | at | 09/03 | -13.5% | -15.5% |
| Corn (ton) | 251 | 2.7 | at | 13/02 | 239 | at | 09/03 | -0.3% | -5.7% |
| t 14-4-23 | | | | | | | | | Change |

EQUITY INDICES

PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)

| | Index | highest : | 23 | lowest | 23 | 2023 | Year 2023 to 14-4, | € | Year 2023 to 14-4, \$ | |
|--------------------|--------|-----------|-------|-----------|-------|--------|--------------------|-------------------|-----------------------|--------------------|
| World | | | | | | | +20.2% | Travel & leisure | +29.6% | Car |
| MSCI World | 2 790 | 2 848 at | 02/02 | 2 595 at | 05/01 | +7.2% | +18.8% | Consumption Goods | +20.9% | Technology |
| North America | | | | | | | +18.6% | Retail | +9.3% | Media |
| S&P500 | 4 105 | 4 180 at | 02/02 | 3 808 at | 05/01 | +6.9% | +17.7% | Technology | +9.0% | Travel & leisure |
| Europe | | | | | | | +16.6% | Telecoms | +5.4% | Commodities |
| EuroStoxx50 | 4 309 | 4 315 at | 04/04 | 3 856 at | 02/01 | +13.6% | +14.4% | Car | +5.1% | Retail |
| CAC 40 | 7 325 | 7 373 at | 06/03 | 6 595 at | 02/01 | +1.3% | +11.0% | Media | +4.2% | Index |
| DAX 30 | 15 598 | 15 654 at | 06/03 | 14 069 at | 02/01 | +12.0% | +10.2% | Construction | +1.3% | Telecoms |
| IBEX 35 | 9 312 | 9 511 at | 06/03 | 8 370 at | 02/01 | +1.3% | +9.7% | Utilities | +0.2% | Chemical |
| FTSE100 | 7 742 | 8 014 at | 20/02 | 7 335 at | 17/03 | +0.4% | +8.6% | Industry | +0.1% | Household & Care |
| Asia | | | | | | | +8.0% | Index | -1.9% | Industry |
| MSCI, loc. | 1 105 | 1 143 at | 09/03 | 1 065 at | 04/01 | +0.3% | +7.0% | Chemical | -2.0% | Financial services |
| Nikkei | 27 518 | 28 623 at | 09/03 | 25 717 at | 04/01 | +5.5% | +6.3% | Health | -2.1% | Food industry |
| Emerging | | | | | | | +5.7% | Banks | -3.3% | Utilities |
| MSCI Emerging (\$) | 987 | 1 052 at | 26/01 | 941 at | 16/03 | +0.3% | +5.2% | Food industry | -3.5% | Construction |
| China | 66 | 75 at | 27/01 | 62 at | 20/03 | +3.9% | +3.2% | Insurance | -3.6% | Health |
| India | 731 | 786 at | 18/01 | 703 at | 16/03 | -6.2% | +1.2% | Oil & Gas | -4.1% | Insurance |
| Brazil | 1 385 | 1 574 at | 25/01 | 1 296 at | 23/03 | -9.1% | -4.7% | Real Estate | -5.3% | Oil & Gas |
| At 14-4-23 | _ | | | | _ | Change | -8.2% | Commodities | -16.8% | Banks |

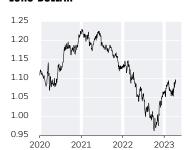
SOURCE: REFINITIV, BNP PARIBAS,



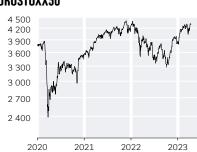
MARKETS OVERVIEW

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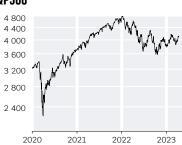
EURO-DOLLAR



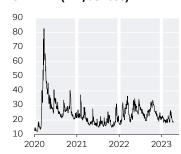
EUROSTOXX50



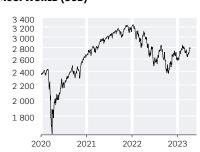
S&P500



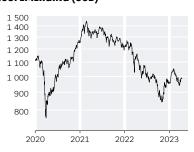
VOLATILITY (VIX, S&P500)



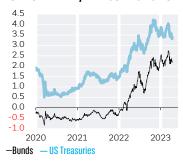
MSCI WORLD (USD)



MSCI EMERGING (USD)



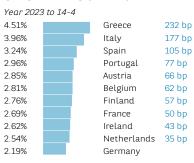
10Y BOND YIELD, TREASURIES VS BUND



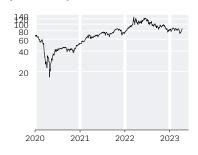
10Y BOND YIELD



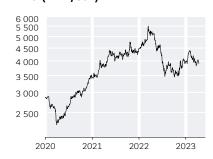
10Y BOND YIELD & SPREADS



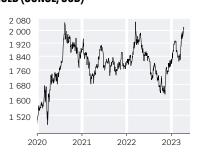
OIL (BRENT, USD)



METALS (LMEX, USD)



GOLD (OUNCE, USD)



SOURCE: REFINITIV, BNP PARIBAS,



ECONOMIC PULSE

7

INTERNATIONAL TRADE: THE WTO OUTLOOK IS REVISED UPWARDS

On 5 April, the World Trade Organisation (WTO) released its revised outlook for 2023 and its first forecasts for 2024. It is now projecting world exports in volume to grow by 1.7% this year, up from its October 2022 forecast of 1%. Although this is still a mild increase, the WTO is expecting a rebound in 2024 to 3.2%. That said, there are major divergences between regions in 2023: Asian exports are expected to accelerate (from +0.6% in 2022 to +2.5% in 2023), a slowdown is foreseen in North America (from +4.2% to +3.3%) and Europe (+2.7% to +1.8%), exports from the Middle East should stall (+9.9% to +0.9%), while African exports will contract (+0.7% to -1.4%).

According to CPB¹ data to January 2023, world exports have already contracted by more than 5% from the September 2022 peak (chart 1). China's lifting of health restrictions in December did not trigger an immediate rebound in exports in January, which were hampered by the Chinese New Year holiday. Yet it was only a matter of time, since the rebound did occur in February and March. According to the National Bureau of Statistics of China (NBS), exports of goods (in nominal terms, seasonally adjusted) increased a cumulative 26% in February and March compared to January, reaching a new record high.

Yet China's economic rebound did not spark a notable improvement in the world PMI index for new export orders (chart 2), which are pulled down by the widespread slowdown in global activity: at 46.6 in March, the index is still below the 50-threshold separating expansion from contraction for the 10th consecutive month.

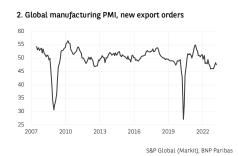
Maritime freight is approaching a floor level. The Freightos index (chart 5) declined again during the first half of April (-5.8% compared to the end of March) and is now only 1% above the 2018-2020 average, a period that preceded the surge in maritime transport costs. There has been a remarkable reversal of supply chain trends. In the span of about a year, supply-chain pressures have totally dissipated, and the slowdown in world trade recently facilitated this rapid easing trend. In March, the New York Federal Reserve index (chart 3) dropped to its lowest level since summer 2009, a decline reflecting the easing of pressures. The PMI delivery times indicator (chart 6) also shows a similar dynamic.

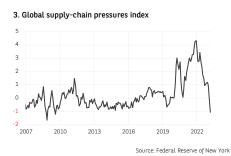
Guillaume Derrien

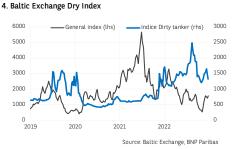
1Netherlands Bureau for Economic Policy Analysis.

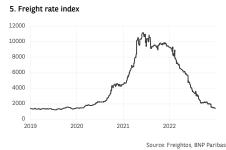
GLOBAL TRADE INDICATORS

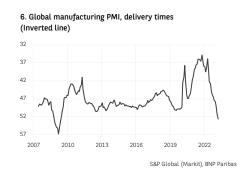












ECONOMIC SCENARIO

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. The labour market is still very tight, with job creation remaining high, the unemployment rate low and wage growth buoyant. Inflation seems to have peaked in the middle of 2022, but disinflation remains gradual and the inflation rate should remain significantly above the target of 2% by the end of 2023. From this point of view, the Fed is probably not quite done with raising its policy rates yet. 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, is projected to 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 0.7% and 0.5% respectively. Although it is expected to decline throughout 2023, inflation will 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 has reached a new peak in February 2023 (7.2% y/y 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, the Federal Reserve should continue its tightening policy, but the terminal rate of the federal funds seems to have moved closer given the ongoing tightening of monetary and financial conditions and lending standards. Our forecasts now see it sooner and 50 basis points lower, at 5.25% (upper end of the target range) in May of this 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. In the near-term, there is still some upward potential for long term rates, in view of the Fed's bias, albeit somewhat less pronounced, to continue hiking, but subsequently yields should move lower as the inflation outlook improves and the market starts anticipating policy easing in 2024.

The ECB Governing Council is also expected to continue to raise its policy rates at its next two meetings, in May and June. However, the same uncertainty as for the Fed weighs on the terminal rate -i.e. the peak rate in this cycle. Our forecasts, updated on March 21, put the deposit rate at 3.50% in June (vs. 4% in July previously). In the near term, government bond yields could resume rising if the ECB continues to tighten 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 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.

| GDP GROWTH** AND INFLATION* | | | | | | | | | | | |
|-----------------------------|------|-------|---------|--------|--|------------|------|--------|--------|--|--|
| | | GDP G | rowth** | | | 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 | 2.6 | 1.4 | | |
| United-Kingdom | 7.6 | 4.0 | -0.4 | 1.0 | | 2.6 | 9.1 | 6.2 | 1.9 | | |
| Euro Area | 5.3 | 3.5 | 0.7 | 0.5 | | 2.6 | 8.4 | 5.4 | 2.6 | | |
| Germany | 2.6 | 1.9 | -0.1 | 0.5 | | 3.2 | 8.7 | 5.8 | 2.3 | | |
| France | 6.8 | 2.6 | 0.5 | 0.6 | | 2.1 | 5.9 | 5.9 | 2.9 | | |
| Italy | 7.0 | 3.8 | 0.9 | 0.7 | | 1.9 | 8.7 | 6.6 | 2.3 | | |
| Spain | 5.5 | 5.5 | 1.4 | 8.0 | | 3.0 | 8.3 | 3.3 | 2.1 | | |
| 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 | 4.6 | 2.9 | 1.5 | 0.5 | | 8.3 | 9.3 | 5.5 | 5.5 | | |

* LAST UPDATE 31 MARCH 2023: INFLATION EUROZONE, GERMANY, FRANCE, ITALY, SPAIN;
GDP AND INFLATION OF THE UNITED STATES

** LAST UPDATE 28 MARCH: GDP EUROZONE, GERMANY, FRANCE, TIALY, SPAIN

*** FISCAL YEAR FROM 1³¹ APRIL OF YEAR N TO MARCH 31³¹ 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 | 3.50 | 3.50 | 2.75 |
| | Bund 10y | 3.10 | 2.90 | 2.50 | 2.00 |
| | OAT 10y | 3.65 | 3.45 | 3.02 | 2.50 |
| | BTP 10y | 5.10 | 5.15 | 4.75 | 3.80 |
| | BONO 10y | 4.10 | 4.00 | 3.60 | 2.90 |
| UK | Base rate | 4.25 | 4.25 | 4.25 | 3.50 |
| | Gilts 10y | 3.70 | 3.50 | 3.25 | 2.85 |
| 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 | | • | | | |

 Brent
 Q2 2023
 Q3 2023
 Q4 2023
 Q4 2023
 Q4 2023
 Q4 2024

 Brent
 USD/bbl
 85
 90
 90
 95

* DEPOSIT RATE: LAST UPDATE AT 21 MARCH 2023, FED FUNDS: 31 MARCH 2023 ** J@B 10Y: LAST UPDATE AT 28 MARCH *** US 10Y: LAST UPDATE AT 12 APRIL

**** US 10Y: LAST UPDATE AT 12 APRIL SOURCES: BNP PARIBAS (MARKET ECONOMICS, INTEREST RATE STRATEGY, FX STRATEGY, COMMODITIES DESK STRATEGY)



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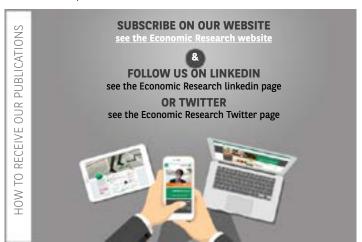
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