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EDITORIAL

"Synchronous rate hikes: a sum-of-theparts analysis"



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EDITORIAL

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SYNCHRONOUS RATE HIKES: A SUM-OF-THE-PARTS ANALYSIS

A sum-of-the-parts analysis, which is popular in corporate finance, has made its way in the world of central banking, reflecting concern that the multitude of synchronous rate hikes could have a combined tightening effect that is larger than the sum of its parts. To the extent that inflation in a given country is largely a function of global slack, these hikes could cause an unexpectedly large decline in inflation. Rising import prices due to currency depreciation are another factor because they could force countries to tighten monetary policy. Confidence effects may also play a role, especially at the level of export-oriented companies. To address these risks, central banks could insist that synchronous rate hikes should moderate inflation expectations globally. They should also take into account the spillover effects of the actions of foreign central banks when designing their own course of action.

In corporate finance, a sum-of-the-parts analysis tries to answer the question whether breaking up a conglomerate by spinning off certain entities would create shareholder value. The underlying idea is that the sum of the value of the individual units might be worth more than the current valuation of the conglomerate.

The concept has now made its way in the world of central banking. In a recent speech¹, Lael Brainard, vice-chair of the Federal Reserve noted that *"the combined effect of concurrent global tightening is larger than the sum of its parts."* The number of synchronous² rate hikes is indeed exceptionally high (*see chart*). This is not a surprise considering that many countries are suffering from elevated inflation. According to Brainard, it forces the Federal Reserve to take *"into account the spillovers of higher interest rates, a stronger dollar, and weaker demand from foreign economies into the United States, as well as in the reverse direction."*

A similar point was recently made by ECB chief economist Philip Lane: "The deeply integrated nature of the global economy implies that our analysis needs to incorporate international monetary policy spillovers."³

Another warning came from World Bank staff: "the highly synchronous tightening of monetary and fiscal policies could cause more damage to growth than would be expected from a simple summing of the effects of the policy actions of individual countries in a highly integrated global economy."⁴

Why is there a risk that the combined effect of higher interest rates could be greater than the sum of the parts?⁵ Maurice Obstfeld of the Peterson Institute for International Economics sees two reasons⁶.

To the extent that inflation in a given country is largely a function of global slack -i.e. the global output gap determines to a large degree the price developments at the level of individual countries-, synchronous rate hikes by many countries, through their impact on the global output gap, could cause a sudden, unexpectedly large decline in inflation. Rising import prices are another factor. Tighter monetary policy in a given country should, all else remaining the same, cause an

5. A rate hike in a given country should be negative for growth and inflation in that country. Via a reduction in its imports, this country also creates a spillover effect to other countries. In a sum-of-the-parts approach, synchronous rate hikes in various countries have an impact that corresponds to the sum of the individual country effects.

6. Uncoordinated monetary policies risk a historic global slowdown, Maurice Obstfeld, Peterson Institute for International Economics, 12 September 2022.



Synchronous rate hikes by a large number of central banks could have a disproportionate effect on global growth, causing inflation to ease more quickly than anticipated.



^{1.} *Restoring Price Stability in an Uncertain Economic Environment*, Remarks by Lael Brainard, Vice Chair Board of Governors of the Federal Reserve System at "Shocks and Aftershocks: Finding Balance in an Unstable World", 64th National Association for Business Economics Annual Meeting, Chicago, Illinois, 10 October 2022.

^{2. &#}x27;Synchronous' refers to the idea that the rate hikes happen during the same timespan, although not in a coordinated way, in which case 'synchronised' would be used.

The transmission of monetary policy, Speech by Philip R. Lane, Member of the Executive Board of the ECB, at the SUERF, CGEG|Columbia|SIPA, EIB, Société Générale conference on "EU and US Perspectives: New Directions for Economic Policy", New York, 11 October 2022.
Is a global recession imminent?, Justin Damien Guénette, M. Ayhan Kose and Naotaka Sugawara, CEPR Discussion Paper DP17566, 03 October 2022.

appreciation of its currency. The depreciation of the trading partners' currencies could cause an increase of import price inflation that forces the respective central banks to tighten policy as well, thereby contributing to the global growth slowdown. In addition to the points mentioned by Obstfeld, confidence effects may also play a role. This is especially important for export-oriented companies. Demand for their products in a given export market may suffer when the local central bank raises interest rates. When this happens in a synchronous way in several of their export markets, the negative effect in terms of loss of confidence may be disproportionate.

What could be done given the risk that the combined effect of higher interest rates could be greater than the sum of the parts? Central banks could insist in their communication on the synchronous nature of rate hikes. This could moderate inflation expectations globally⁷, which should help, to some degree, in bringing inflation back to target.

Consequently, the cumulative tightening could be smaller, thereby reducing the risk of a monetary 'overkill'. As mentioned by Brainard and Lane, central banks could also pay particular attention to the spillover effects of the actions of foreign central banks. This could again imply a smaller cumulative tightening. There is a risk however that investors would interpret this as a premature dovish twist, so clear communication will be crucial to avoid a loss of credibility.

William De Vijlder



^{7.} This point is made by Maurice Obstfeld.

MARKETS OVERVIEW

OVERVIEW

| 7-10-22 | | | |
|---------|---|---|---|
| 5 762 | ▶ 5 867 | +1.8 | % |
| 3 586 | ▶ 3 640 | +1.5 | % |
| 31.6 | ▶ 31.4 | -0.3 | pb |
| 1.17 | ▶ 1.29 | +11.5 | bp |
| 3.75 | ▶ 3.91 | +15.4 | bp |
| 2.75 | ▶ 2.80 | +5.3 | bp |
| 2.11 | ▶ 2.20 | +9.1 | bp |
| 3.80 | ▶ 3.88 | +8.1 | bp |
| 0.98 | ▶ 0.98 | -0.1 | % |
| 1 674 | ▶ 1 702 | +1.7 | % |
| 88.2 | ▶ 97.9 | +11.1 | % |
| | 5 762 3 586 31.6 1.17 3.75 2.75 2.11 3.80 0.98 1 674 | 5 762 > 5 867 3 586 > 3 640 31.6 > 31.4 1.17 > 1.29 3.75 > 3.91 2.75 > 2.80 2.11 > 2.20 3.80 > 3.88 0.98 > 0.98 1 674 > 1.702 | 5 762 > 5 867 +1.8 3 586 > 3 640 +1.5 31.6 > 31.4 -0.3 1.17 > 1.29 +11.5 3.75 > 3.91 +15.4 2.75 > 2.80 +5.3 2.11 > 2.20 +9.1 3.80 > 3.88 +8.1 0.98 > 0.98 -0.1 1 674 + 1.702 +1.7 |

| MONEY & BOND MARKETS | | | | | | | | | | | |
|----------------------|-------|----------|-------|----------|---------|--------------|------|------|----------|-------|----------|
| Interest Rates | | highes | t 22 | lowes | st 22 | Yield (%) | | higt | nest 22 | lo | west 22 |
| € ECB | 1.25 | 1.25 at | 14/09 | 0.00 at | : 03/01 | € AVG 5-7y | 2.64 | 2.79 | at 28/09 | -0.04 | at 03/01 |
| Eonia | -0.51 | -0.51 at | 03/01 | -0.51 at | 03/01 | Bund 2y | 1.80 | 1.90 | at 27/09 | -0.83 | at 04/03 |
| Euribor 3M | 1.29 | 1.29 at | 07/10 | -0.58 at | 05/01 | Bund 10y | 2.20 | 2.24 | at 27/09 | -0.14 | at 24/01 |
| Euribor 12M | 2.55 | 2.63 at | 27/09 | -0.50 at | 05/01 | OAT 10y | 2.80 | 2.83 | at 29/09 | 0.15 | at 04/01 |
| \$ FED | 3.25 | 3.25 at | 22/09 | 0.25 at | 03/01 | Corp. BBB | 4.79 | 4.84 | at 29/09 | 0.90 | at 05/01 |
| Libor 3M | 3.91 | 3.91 at | 07/10 | 0.21 at | 03/01 | \$ Treas. 2y | 4.31 | 4.37 | at 27/09 | 0.70 | at 04/01 |
| Libor 12M | 5.00 | 5.00 at | 07/10 | 0.58 at | 03/01 | Treas. 10y | 3.88 | 3.96 | at 27/09 | 1.63 | at 03/01 |
| £ BoE | 2.25 | 2.25 at | 22/09 | 0.25 at | 03/01 | High Yield | 9.63 | 9.91 | at 30/09 | 5.07 | at 03/01 |
| Libor 3M | 3.42 | 3.75 at | 26/09 | 0.26 at | 03/01 | £ gilt. 2y | 4.17 | 4.59 | at 27/09 | 0.69 | at 03/01 |
| Libor 12M | 0.81 | 0.81 at | 03/01 | 0.81 at | 03/01 | gilt. 10y | 4.24 | 4.50 | at 27/09 | 0.97 | at 03/01 |
| At 7-10-22 | | | | | | At 7-10-22 | | | | | |

EXCHANGE RATES

| 1€ = | | high | est 22 | low | lowest 22 | | | | |
|---------|--------|--------|----------|--------|-----------|-------|--------|--|--|
| USD | 0.98 | 1.15 | at 10/02 | 0.96 | at | 27/09 | -14.0% | | |
| GBP | 0.88 | 0.90 | at 28/09 | 0.83 | at | 14/04 | +4.7% | | |
| CHF | 0.97 | 1.06 | at 10/02 | 0.95 | at | 28/09 | -6.3% | | |
| JPY | 142.03 | 144.46 | at 13/09 | 125.37 | at | 04/03 | +8.5% | | |
| AUD | 1.53 | 1.62 | at 04/02 | 1.43 | at | 25/08 | -2.3% | | |
| CNY | 6.94 | 7.29 | at 10/02 | 6.75 | at | 14/07 | -4.3% | | |
| BRL | 5.10 | 6.44 | at 06/01 | 5.01 | at | 21/04 | -19.5% | | |
| RUB | 61.06 | 164.76 | at 07/03 | 55.60 | at | 26/09 | -28.4% | | |
| INR | 80.56 | 85.96 | at 11/02 | 78.49 | at | 27/09 | -4.7% | | |
| At 7-10 |)-22 | | | | | | Change | | |

| | | U | | | ILJ | | | | |
|----------------|-------|--------|-----|-------|-------|------|-------|--------|---------|
| Spot price, \$ | | high | est | 22 | lov | vest | : 22 | 2022 | 2022(€) |
| Oil, Brent | 97.9 | 128.2 | at | 08/03 | 79.0 | at | 03/01 | +24.9% | +45.2% |
| Gold (ounce) | 1 702 | 2 056 | at | 08/03 | 1 635 | at | 27/09 | -6.6% | +8.6% |
| Metals, LMEX | 3 577 | 5 506 | at | 07/03 | 3 453 | at | 27/09 | -20.5% | -7.7% |
| Copper (ton) | 7 508 | 10 702 | at | 04/03 | 7 160 | at | 14/07 | -22.9% | -10.4% |
| wheat (ton) | 292 | 4.7 | at | 17/05 | 276 | at | 18/08 | +22.9% | +42.8% |
| Corn (ton) | 259 | 3.2 | at | 28/06 | 226 | at | 03/01 | +1.3% | +31.8% |
| At 7-10-22 | | | | | | • | | | Change |

COMMODITIES

| L | | IDIGLO | | | | | |
|--------------------|--------|-----------|-------|--------|-----|-------|--------|
| | Index | highest | 22 | low | est | 22 | 2022 |
| World | | | | | | | |
| MSCI World | 2 418 | 3 248 at | 04/01 | 2 379 | at | 30/09 | -25.2% |
| North America | | | | | | | |
| S&P500 | 3 640 | 4 797 at | 03/01 | 3 586 | at | 30/09 | -23.6% |
| Europe | | | | | | | |
| EuroStoxx50 | 3 375 | 4 392 at | 05/01 | 3 279 | at | 29/09 | -21.5% |
| CAC 40 | 5 867 | 7 376 at | 05/01 | 5 677 | at | 29/09 | -1.8% |
| DAX 30 | 12 273 | 16 272 at | 05/01 | 11 976 | at | 29/09 | -22.7% |
| IBEX 35 | 7 437 | 8 934 at | 27/05 | 7 300 | at | 29/09 | -1.5% |
| FTSE100 | 6 991 | 7 672 at | 10/02 | 6 882 | at | 29/09 | -0.5% |
| Asia | | | | | | | |
| MSCI, loc. | 1 053 | 1 165 at | 05/01 | 1 012 | at | 30/09 | -0.8% |
| Nikkei | 27 116 | 29 332 at | 05/01 | 24 718 | at | 09/03 | -5.8% |
| Emerging | | | | | | | |
| MSCI Emerging (\$) | 898 | 1 267 at | 12/01 | 873 | at | 29/09 | -2.7% |
| China | 57 | 86 at | 20/01 | 56 | at | 03/10 | -29.9% |
| India | 757 | 891 at | 13/01 | 699 | at | 17/06 | -0.8% |
| Brazil | 1 609 | 2 003 at | 04/04 | 1 311 | at | 14/07 | +5.0% |
| At 7-10-22 | - | | | | | - | Change |

PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)

| Year 2022 to 7-10, € | | Year 2022 to 7-10, \$ | |
|----------------------|-------------------|-----------------------|--------------------|
| +18.0% | Oil & Gas | +71.5% | Oil & Gas |
| -6.5% | Commodities | +9.2% | Insurance |
| -10.7% | Food industry | +8.6% | Food industry |
| -12.7% | Health | +3.3% | Utilities |
| -13.8% | Insurance | -1.0% | Health |
| -16.3% | Telecoms | -5.6% | Telecoms |
| -17.1% | Banks | -6.5% | Commodities |
| -18.3% | Media | -6.8% | Chemical |
| -19.7% | Index | -10.3% | Industry |
| -20.7% | Utilities | -12.2% | Index |
| -22.0% | Chemical | -12.3% | Financial services |
| -24.3% | Travel & leisure | -13.9% | Travel & leisure |
| -27.0% | Car | -13.9% | Banks |
| -27.3% | Consumption Goods | -16.7% | Household & Care |
| -28.3% | Industry | -17.1% | Retail |
| -29.0% | Construction | -18.4% | Construction |
| -34.0% | Technology | -24.0% | Technology |
| -44 7% | Retail | -27.8% | Car |
| -46.0% | Real Estate | -31.0% | Media |

SOURCE: REFINITIV, BNP PARIBAS,



MARKETS OVERVIEW



VOLATILITY (VIX, S&P500)







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

ITALY: NO RESPITE FOR THE NEW GOVERNMENT

The new Italian government, headed by Giorgia Meloni, has come to power in a challenging environment and divisions have already appeared between the various partners of the right-wing alliance. In addition to political dissension, the Italian economic context is also conducive to tension. Most of the barometer's indicators have continued to deteriorate in recent weeks, both in terms of business and household indices. After a slight improvement, the composite PMI fell again in September (-2.0 points to 47.6). The same dynamic was seen in consumer confidence, where the unemployment outlook recorded its sharpest deterioration ever seen over a single month (+28 points, an increase indicating a deterioration in the outlook). The scenario of an upcoming recession in Italy therefore seems increasingly likely, especially as consumer price inflation, as well as producer price inflation, are still not stabilising this autumn.

Indeed, the rise in the harmonised consumer price index accelerated to 9.4% in September, compared with 9.1% the previous month. Although the increase in energy prices slowed somewhat – relatively speaking as it was still substantial in September (+44.5% y/y) – the rise of the underlying index (excluding energy and food products) showed no sign of abating. The opposite is true: the monthly increase of 0.8% m/m was the largest since the start of current statistics (January 1996), while annual growth crossed the threshold of 5% – the 'hotel and catering services' (8.0% y/y) and 'home furniture and equipment' (6.5% y/y) components climbed to a level never seen before. A growing price increase in clothing and footwear (+2.5% y/y) is also of note.

Household consumption continues to shrink under the weight of inflation. In real terms, retail sales fell in August to their lowest level since spring 2021. The majority of the adjustment has been made so far on food spending, which has fallen 4.1% since the beginning of the year.

Guillaume Derrien



The indicators in the radar are all transformed into 'z-scores' (deviations from the long-term average, as standard deviations). These z-scores have mean zero and their values are between -3 and +5. 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

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UNITED KINGDOM: RESIGNATIONS AND INFLATION

Inflation jumped sharply in September, moving into the symbolic territory of double digits (10.1% y/y), slightly above expectations (10%). The rise in inflation is expected to continue as it is widespread in the economy. Furthermore, core inflation rose significantly in September (+0.5 points) to 7.5% y/y.

Nevertheless, inflation continues to weigh on economic activity. Household confidence remained largely negative (-47 points) although it recovered slightly (+2 points) in October, thanks to the first support measures, such as the gas and electricity price caps, coming into force. On the corporate side, surveys show the business climate remains close to a tipping a point. While the manufacturing sector index is already in contraction territory for the second consecutive month (48 points), the services sector remains balanced (50 points) thanks to hopes for a potential recovery in activity. Another area of concern is the rise in the price of imports (+3.1% m/m and +21% y/y in September), partly due to the fall in the pound since the beginning of the year but especially since early September, which could have a negative impact on domestic inflation. However, the UK is not reducing its imports, on the contrary. According to the latest publication by the Office for National Statistics (ONS), the British trade deficit widened to GBP -25.6 billion in for the three months to August, mainly due to the sharp increase in imports (+5.7% m/m) from countries outside the European Union (EU) (+13.3% m/m). Exports grew well, but to a lesser extent (1.2% m/m), mainly destined for countries outside the EU (4.1%). To cope with the widening trade deficit, the UK Government recently accelerated ongoing trade negotiations to encourage its export opportunities and to reduce the cost of its imports, particularly with India and the Gulf countries, but also by joining the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

The recent fall in the value of the British pound and the rise in gilt yields, British sovereign bonds and, more widely, the worrying economic situation of the United Kingdom partly explain Prime Minister Liz Truss' resignation and the withdrawal of many of tax cuts from the growth plan. This withdrawal has restored some confidence in the control of public finances. Although the transition is faster than when Boris Johnson was replaced, the UK now finds itself in a weaker economic environment.

Félix Berte



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 SCENARIO

UNITED STATES

In the US, the Federal Reserve will continue its tightening policy at a swift pace. After the 75bp hike in September, further increases will follow in November, December and January, bringing the federal funds rate to its terminal rate for this cycle at 5.25% (upper end of the target range). This level should be maintained through 2023 and be followed by rate cuts in 2024. The Fed's hawkish stance is motivated by the particularly elevated inflation and a strong labour market. Once the economy has slowed down and inflation is on a downward path, the Federal Reserve should adapt its guidance to achieve a soft landing. US Treasury are largely pricing in the upcoming rate hikes. In the course of next year, we expect somewhat lower yields as growth slows, inflation declines, and the market starts anticipating policy easing in 2024.

CHINA

Economic activity contracted in Q2 2022 due to the lockdowns imposed in large industrial regions such as Shanghai. The economic growth rebound since late spring has proved difficult. The authorities are enhancing fiscal and monetary easing measures. However, factors constraining growth remain significant: the correction in the property sector continues, and the deterioration in the labour market, the still tight zero Covid strategy and weak household confidence weigh on private consumption. Moreover, exports are expected to suffer from the slowdown in global demand. Consumer price inflation is accelerating only moderately.

EUROZONE

The look in the rear-view mirror is fairly favorable. The first half of 2022 was better than expected, leading to a comfortable growth carry-over a bit above 3%. However, the outlook for the coming quarters is negative: according to our forecasts, the Eurozone will not escape a contraction of its GDP. The current unprecedented combination of shocks (inflation, health, geopolitical, energy, climate, monetary) should overcome the resilience observed so far. We already have signs of this in the deterioration in confidence surveys, which has intensified over the support of fiscal measures and as long as the labor market continues to perform well as it is now. In annual average terms, we expect Eurozone growth to reach 2.8% in 2022 but only 0.3% in 2023 (2 points lower than in our previous scenario in June). Regarding inflation, we forecast it will soon reach its peak, nearing 10% y/y, before engaging in a rather slow disinflation process in 2023.

FRANCE

Real GDP growth has surprised on the upside in the 2^{nd} quarter of 2022 (+0.5% q/q after -0.2% in the 1st quarter), mainly as a result of tourism (positive contribution of net exports) and accommodation & catering following the unwinding of the bulk of Covid related restrictions. However, inflation has continued to accelerate (reaching a peak of 6.1% y/y in July) and household purchasing power has reduced for a second quarter in a row (-1.1% q/q during the 2^{nd} quarter). Backlog of orders in the manufacturing have continued to decrease, and GDP growth should follow (we expect 0.5% in 2023 after 2.3% in 2022).

RATES AND EXCHANGE RATES

In the US, the Federal Reserve will continue its tightening policy at a swift pace. After the 75bp hike in September, further increases will follow in November, December and January, bringing the federal funds rate to its terminal rate for this cycle at 5.25% (upper end of the target range). This level should be maintained through 2023 and be followed by rate cuts in 2024. The Fed's hawkish stance is motivated by the particularly elevated inflation and a strong labour market. US Treasury are largely pricing in the upcoming rate hikes. In the course of next year, we expect somewhat lower yields as growth slows, inflation declines, and the market starts anticipating policy easing in 2024.

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After the 50bp rate hike in July and the 75bp increase in September, the ECB Governing Council will continue to raise its policy rates at its next meetings. Policy tightening is

frontloaded, which means that the terminal rate -i.e. the peak rate in this cycle- should be reached by the end of the first quarter of next year. We expect a peak for the deposit rate at 3.00%. This should cause an increase in Bund yields.

The Bank of Japan is expected to maintain its current policy stance, at least until Governor Kuroda's term ends in the spring of 2023. Thereafter, we expect a less dovish policy and a one-off rate hike in the fourth quarter of 2023.

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 prospect of increased policy divergence between the Fed and the Bank of Japan. We expect the exchange rate to remain around current levels for the remainder of the year. In 2023, the yen should strengthen versus the dollar considering that the federal funds rate should have reached its terminal rate and that the Bank of Japan is expected to tighten policy.

| | | GDP G | ROWTH | I & INFL | ATIC | N | | | |
|----------------|------------|-----------|--------|----------|------|----------|----------|----------|--------|
| | | GDP (| Growth | | | | Infla | tion | |
| % | 2021 | 2022 e | 2023 e | 2024 e | | 2021 | 2022 e | 2023 e | 2024 e |
| United-States | 5.7 | 1.7 | 1.0 | 0.9 | - | 4.7 | 8.0 | 4.4 | 3.9 |
| Japan | 1.7 | 1.3 | 0.8 | 0.6 | | -0.2 | 2.2 | 1.1 | 0.6 |
| United-Kingdom | 7.4 | 3.4 | -0.1 | 1.4 | | 2.6 | 8.9 | 6.5 | 3.0 |
| Euro Area | 5.3 | 2.8 | 0.3 | 1.5 | | 2.6 | 8.3 | 5.9 | 2.5 |
| Germany | 2.6 | 1.4 | 0.4 | 1.7 | | 3.2 | 8.6 | 5.8 | 2.4 |
| France | 6.8 | 2.3 | 0.5 | 1.5 | | 2.1 | 5.7 | 4.8 | 2.1 |
| Italy | 6.6 | 3.4 | 0.4 | 1.6 | | 1.9 | 8.4 | 6.4 | 2.2 |
| Spain | 5.1 | 4.3 | 0.5 | 1.7 | | 3.0 | 8.8 | 4.1 | 1.6 |
| China | 8.1 | 3.0 | 5.3 | 5.0 | | 0.9 | 2.3 | 3.1 | 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: BN | P PARIBAS | GROUP | соломи | RESE | ARCH (F | - ESTIMA | TES & EC | RECAST |

E: 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, % Q2 2022 Q4 2022 e Q1 2023 e 02 2023 e 04 2023 e End of period US Fed Funds (upper limit) 1 75 4 75 5 2 5 5 2 5 5 2 5 -0.50 2 25 3.00 3.00 3.00 Deposit rate Eurozone 4.50 4.50 UK Base rate 1.25 3.50 4.50 4 75 4 50 4.40 Gilts 10v 2.21 4 85 -0.10 0.00 BoJ Rate -0.04 -0.10 -0.10 Japan 0.23 JGB 10v 0.25 0.25 0.25 0.45 Exchange Rates 02 2022 04 2022 e 01 2023 e 02 2023 e 04 2023 e End of period EUR / USD 1.05 1.00 1.01 1.02 1.06 USD / IPY 136 137 135 133 127 GBP / USD 1.21 1.05 1.12 1.12 1.12 EUR EUR / GBP 0.86 0.95 0.95 0.95 0.95 FUR / IPY 142 137 136 136 135 Brent Q4 2022 e Q1 2023 e 02 2022 02 2023 e 04 2023 e End of period Brent USD/bbl 115 100 102 107 115

Forecasts as of 6 September unless mentioned otherwise. Fed Funds Rate and US 10-Year : forecast as of 19 October. BoE Rate: forecast as of 17 October. Gilt 10-Year, GBP/USD and EUR/GBP : forecast as of 28 September.

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



LATEST INDICATORS

In the euro area, the ZEW expectations survey improved marginally in October, whilst remaining at a very low level. Inflation accelerated further in September, reaching 9.9%. Consumer confidence improved in October, against expectations. French business confidence was stable. In Germany, the ZEW expectations survey improved -following the change in the euro area index- but the assessment of the current situation worsened far more than anticipated. In the UK, consumer confidence improved marginally, which was a positive surprise. Retail sales on the other hand contracted more than expected. In the US, the NAHB housing market index showed a significant decline but building permits moved unexpectedly higher. Housing starts on the other hand declined more than anticipated. Initial jobless claims moved lower, reflecting the ongoing strength of the labour market. The Conference Board index of leading economic indicators continued its downward trend.

| DATE | COUNTRY | INDICATOR | PERIOD | ACTUAL | SURVEY | PREVIOUS |
|------------|----------------|--|--------|--------|--------|----------|
| 10/18/2022 | Germany | ZEW Survey Expectations | Oct | -59.2 | -66.5 | -61.9 |
| 10/18/2022 | Germany | ZEW Survey Current Situation | Oct | -72.2 | -68.5 | -60.5 |
| 10/18/2022 | Eurozone | ZEW Survey Expectations | Oct | -59.7 | | -60.7 |
| 10/18/2022 | United States | NAHB Housing Market Index | Oct | 38.0 | 43.0 | 46.0 |
| 10/19/2022 | United Kingdom | CPIH YoY | Sep | 8.8% | 8.8% | 8.6% |
| 10/19/2022 | Eurozone | CPI YoY | Sep | 9.9% | 10.0% | 9.1% |
| 10/19/2022 | Eurozone | CPI Core YoY | Sep | 4.8% | 4.8% | 4.8% |
| 10/19/2022 | United States | Building Permits MoM | Sep | 1.4% | -0.8% | -10.0% |
| 10/19/2022 | United States | Housing Starts MoM | Sep | -8.1% | -7.2% | 12.2% |
| 10/19/2022 | United States | U.S. Federal Reserve Releases Beige Book | | | | |
| 10/20/2022 | France | Business Confidence | Oct | 102.0 | 101.0 | 102.0 |
| 10/20/2022 | United States | Initial Jobless Claims | Oct | 214k | 233k | 228k |
| 10/20/2022 | United States | Leading Index | Sep | -0.4% | -0.3% | -0.3% |
| 10/21/2022 | United Kingdom | GfK Consumer Confidence | Oct | -47.0 | -52.0 | -49.0 |
| 10/21/2022 | United Kingdom | Retail Sales Ex Auto Fuel MoM | Sep | -1.5% | -0.4% | -1.6% |
| 10/21/2022 | Eurozone | Consumer Confidence | Oct | -27.0 | -30.0 | -28.8 |

SOURCE: BLOOMBERG



CALENDAR: THE WEEK AHEAD

COMING INDICATORS

The week will be very busy with two central bank meetings -ECB and Bank of Japan- and important survey data (flash PMIs in several countires, the European Commission's surveys, the IFO survey in Germany, consumer confidence in France and Germany, University of Michigan sentiment, the Conference Board consumer confidence, etc.). Finally, we will have an estimate of third quarter GDP growth in the US, Germany and France. Recently, the release of several Chinese data (GDP, retail sales, unemployment rate) has been postponed. They may be published this week.

| DATE | COUNTRY | INDICATOR | PERIOD | CONSENSUS | PREVIOUS |
|----------------|---------------|--|--------|-----------|----------|
| 10/20-10/31/22 | China | Property Investment YTD YoY | Sep. | -7.50% | -7.40% |
| 10/20-10/31/22 | China | Fixed Assets Ex Rural YTD YoY | Sep. | 6.00% | 5.80% |
| 10/20-10/31/22 | China | GDP SA QoQ | 3Q | 2.80% | -2.60% |
| 10/20-10/31/22 | China | Retail Sales YoY | Sep. | 3.00% | 5.40% |
| 10/20-10/31/22 | China | Surveyed Jobless Rate | Sep. | 5.20% | 5.30% |
| 10/24/22 | Japan | Jibun Bank Japan PMI Services | Oct. | | 52.2 |
| 10/24/22 | Japan | Jibun Bank Japan PMI Mfg | Oct. | | 50.8 |
| 10/24/22 | France | S&P Global France Manufacturing PMI | Oct. | | 47.7 |
| 10/24/22 | France | S&P Global France Services PMI | Oct. | | 52.9 |
| 10/24/22 | Germany | S&P Global/BME Germany Manufacturing PMI | Oct. | | 47.8 |
| 10/24/22 | Germany | S&P Global Germany Services PMI | Oct. | | 45 |
| 10/24/22 | Eurozone | S&P Global Eurozone Manufacturing PMI | Oct. | | 48.4 |
| 10/24/22 | Eurozone | S&P Global Eurozone Services PMI | Oct. | | 48.8 |
| 10/24/22 | UK | S&P Global/CIPS UK Manufacturing PMI | Oct. | | 48.4 |
| 10/24/22 | UK | S&P Global/CIPS UK Composite PMI | Oct. | | 49.1 |
| 10/24/22 | United States | S&P Global US Manufacturing PMI | Oct. | | 52 |
| 10/24/22 | United States | S&P Global US Services PMI | Oct. | | 49.3 |
| 10/25/22 | Germany | IFO Business Climate | Oct. | | 84.3 |
| 10/25/22 | Germany | IFO Current Assessment | Oct. | | 94.5 |
| 10/25/22 | Germany | IFO Expectations | Oct. | | 75.2 |
| 10/25/22 12:00 | UK | CBI Trends Selling Prices | Oct. | | 59 |
| 10/25/22 | UK | CBI Business Optimism | Oct. | | -21 |
| 10/25/22 | United States | Conf. Board Consumer Confidence | Oct | 105 | 108 |
| 10/25/22 | United States | Conf. Board Present Situation | Oct | | 149.6 |

SOURCE: BLOOMBERG



| DATE | COUNTRY | INDICATOR | PERIOD | CONSENSUS | PREVIOUS |
|----------------|---------------|--|--------|-----------|----------|
| 10/25/22 | United States | Conf. Board Expectations | Oct | | 80.3 |
| 10/26/22 | France | Consumer Confidence | Oct | | 79 |
| 10/26/22 | United States | MBA Mortgage Applications | 21-oct | | -4.50% |
| 10/26/22 | United States | New Home Sales MoM | Sep | -12.40% | 28.80% |
| 10/27/22 | Germany | GfK Consumer Confidence | Nov | | -42.5 |
| 10/27/22 | Eurozone | ECB Deposit Facility Rate | 27-oct | | 0.75% |
| 10/27/22 | United States | Initial Jobless Claims | 22-oct | | |
| 10/28/22 | France | GDP QoQ | 3Q P | | 0.50% |
| 10/28/22 | France | CPI EU Harmonized MoM | Oct P | | -0.50% |
| 10/28/22 | Eurozone | ECB Survey of Professional Forecasters | | | |
| 10/28/22 | Germany | GDP SA QoQ | 3Q P | | 0.10% |
| 10/28/22 | Eurozone | Economic Confidence | Oct | | 93.7 |
| 10/28/22 | Eurozone | Industrial Confidence | Oct | | -0.4 |
| 10/28/22 | Eurozone | Services Confidence | Oct | | 4.9 |
| 10/28/22 | Eurozone | Consumer Confidence | Oct F | | |
| 10/28/22 | Germany | CPI EU Harmonized MoM | Oct P | | 2.20% |
| 10/28/22 | United States | U. of Mich. Sentiment | Oct F | 59.7 | 59.8 |
| 10/28/22 | United States | U. of Mich. Current Conditions | Oct F | | 65.3 |
| 10/28/22 | United States | U. of Mich. Expectations | Oct F | | 56.2 |
| 10/28/22 16:00 | United States | U. of Mich. 1 Yr Inflation | Oct F | | 5.10% |
| 10/28/22 16:00 | United States | U. of Mich. 5-10 Yr Inflation | Oct F | | 2.90% |
| 10/28/22 | Japan | BOJ Policy Balance Rate | 28-oct | -0.10% | -0.10% |



FURTHER READING

| Hungarian Forint: under selling pressure | EcoTVWeek | 21 October 2022 |
|---|-------------------|-------------------|
| Germany : Revising the PMI to better understand shocks affecting industry | EcoFlash | 19 October 2022 |
| US : Foreign investors in US Treasuries: official and private sectors now neck and neck | Chart of the Week | 19 October 2022 |
| <u>Global growth at risk</u> | EcoWeek | 17 October 2022 |
| Qatar: favorable prospects thanks to the gas rent | EcoTVWeek | 14 October 2022 |
| Emerging Countries: Double whammy | EcoEmerging | 12 October 2022 |
| Eurozone: the contribution of supply-side issues to food price inflation | Chart of the Week | 12 October 2022 |
| Eurozone: Rising interest rates and public debt sustainability | EcoWeek | 10 October 2022 |
| United Kingdom: "God save the Gilt" | EcoTVWeek | 7 October 2022 |
| Kenya: Focus on fiscal consolidation | Chart of the Week | 5 October 2022 |
| United Kingdom: The 'dash for cash', leverage and the need for economic policy coordination | EcoWeek | 3 October 2022 |
| Key figures of the French economy | Pocket Atlas | 3 October 2022 |
| EcoPerspectives: The recession narrative | EcoPerspectives | 30 September 2022 |
| Spain: Complete reversal of real estate financing model in 12 years | Chart of the Week | 28 September 2022 |
| United States: vacancies, job turnover and disinflation | EcoWeek | 26 September 2022 |
| France: After inflation comes recession? | EcoTVWeek | 23 September 2022 |
| Developed economies: housing prices and bubble risk | Chart of the Week | 21 September 2022 |
| The monetary cycle: from panic to perseverance to patience | EcoWeek | 19 September 2022 |
| Latin America: the mechanisms of inflation | EcoTVWeek | 17 September 2022 |
| 2022, towards a likely new record in CO2 emissions | Chart of the Week | 15 September 2022 |



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