

Current market commentary

The ECB and Fed were more hawkish than expected at their meetings last week, signalling further strong rate hikes - especially ECB President Lagarde. As a result, interest rates rose and risk assets, especially tech stocks, fell sharply. The situation is somewhat reminiscent of the summer, when the market had increasingly priced out interest rate hikes before the central banks made it clear that fighting inflation remains a priority and thus interest rates are likely to remain elevated for longer. Whether the equity markets fall more sharply now depends on two factors. Will corporate earnings fall more than most investors expect anyway? The Q4 reporting season starting in January should provide important insights. Another key factor is whether unemployment rises strongly and quickly. If so, then demand for equities is likely to decline significantly due to (US) pension provision.

Short-term outlook

After a big week for the central banks, the remainder of the year is likely to be quieter due to Christmas. At the beginning of 2023, however, things will get more exciting: on 1 January, Croatia will join the Euro; from 16 to 20 January the Economic Forum will take place in Davos; and on 22 January the Year of the Rabbit will begin in China. Housing data (November) for the US are due tomorrow, and US consumer confidence (Conference Board, December) on Wednesday. Weekly initial jobless claims for the US follow on Thursday. On Friday, inflation rates (November) for Japan, US household income and spending (November) and US durable goods orders (November) will be released. Between years, the Chicago Purchasing Managers' Index (PMI, December) and the PMIs for China (December) will be announced. The first week of 2023 will be busier, with some inflation rates, US labour market data and PMIs for Europe and the US due to be published.

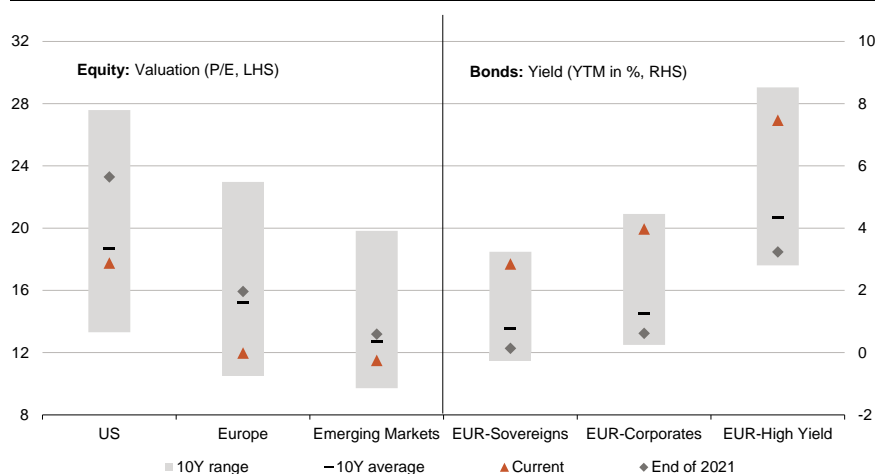
The bi-weekly *Monitor* gives you a structured overview of the current capital market environment and highlights important developments:

- Performance
- Positioning
- Sentiment
- Surprise Indicators
- Economics
- Foreign Exchange
- Equities
- Sovereign Bonds & Central Banks
- Corporate Bonds
- Commodities

Little momentum until the end of the year. 2023 gets off to an exciting start.

Crucial economic data at the beginning of 2023

More favourable base for 2023 for multi-asset investors than last year



- 2022 was a year to forget for multi-asset investors. Equities and bonds lost significant value.
- The good news, however, is that the starting position, based on valuation metrics, has rarely been so favourable for diversified euro investors.
- The valuation of European and emerging market equities is very attractive on a 10-year comparison. Euro bonds offer yields that we have rarely seen in the last 10 years. We therefore expect 2023 to be a better multi-asset year despite the recession.

Source: Bloomberg, Factset based on MSCI and ICE indices, Time period: 16/12/2012 - 16/12/2022



Multi Asset

	4-week & YTD		12-month periods over that last 5 years				
	4W (18/11/22 - 16/12/22)	YTD (31/12/21 - 16/12/22)	16/12/21	16/12/20	16/12/19	16/12/18	15/12/17
MSCI Frontier Markets	-19.1	1.5	-18.5	29.4	-6.8	14.2	-9.0
Industrial Metals		0.7	6.8	30.8	9.1	4.3	-6.6
EUR Coporates	-13.1	0.4	-13.6	-0.4	2.4	6.6	-1.9
Euro overnight deposit		0.1	-0.1	-0.6	-0.5	-0.4	-0.4
Gold		5.3	6.6	3.9	15.4	20.9	2.5
MSCI Emerging Markets		-0.9	-14.1	6.4	8.7	16.5	-7.3
EUR Sovereign Debt		-1.1	-11.3	-1.0	1.8	3.8	-0.4
USDEUR		-2.5	7.0	7.7	-8.6	1.4	3.9
Global Convertibles		-3.3	-12.5	9.8	39.1	18.6	5.0
REITs		-3.9	-19.5	39.4	-14.2	14.8	1.2
MSCI World		-4.4	-10.8	30.1	5.7	24.5	-1.2
Brent		-10.2	45.1	74.0	-36.7	19.6	6.1

MSCI World: MSCI World Net Return; MSCI Emerging Markets: MSCI EM Net Return; MSCI Frontier Markets: MSCI Frontier Markets Net Return; REITs: MSCI World REITs Index; EUR Sovereign Debt: IBOXX Eurozone Sovereign 1-10Y TR; EUR Coporates: IBOXX Euro Corporates Overall TR; Global Convertibles: SPDR Convertible Securities ETF; Gold: Gold US Dollar Spot; Brent Crude: Bloomberg Brent Crude Subindex TR; Industrial Metals: Bloomberg Industrial Metals Subindex TR; Euro overnight deposit: ICE BofA Euro Overnight Deposit Rate Index; USDEUR: Price of 1 USD in EUR.

- The past few weeks have been dominated by the central banks. Both the Fed and the ECB have been more hawkish than markets initially expected. As a result, risk assets gave back their recovery gains in the run-up to the central bank meetings.
- Frontier markets, European corporate bonds and industrial metals were among the winners over the last four weeks. The US dollar, however, maintained its weakness over the last four weeks. Oil brought up the rear amid constant concerns about demand.

Total return for selected asset classes, in euros and in percent, sorted by 4-week performance. Source: Bloomberg, Time period: 15/01/2017 - 16/12/2022

Equities

	4-week & YTD		12-month periods over that last 5 years				
	4W (18/11/22 - 16/12/22)	YTD (31/12/21 - 16/12/22)	16/12/21	16/12/20	16/12/19	16/12/18	15/12/17
MSCI EM Asia	-14.7	0.8	-14.5	4.0	17.2	17.1	-8.7
MSCI EM Eastern Europe	-81.4	0.5	-81.4	25.1	-17.2	29.7	4.6
MSCI UK		-1.1	4.0	23.0	-18.1	22.8	-6.4
MSCI Japan		-10.8	-13.2	14.1	2.9	17.9	-5.4
Stoxx Europe Defensives		-1.2	1.4	19.7	-6.0	17.9	2.4
Stoxx Europe 50		-1.3	0.1	24.2	-6.7	23.9	-7.7
Stoxx Europe Small 200		-1.9	-21.4	21.3	1.7	27.1	-9.5
Stoxx Europe Cyclical		-2.9	-11.7	24.1	-2.2	25.7	-14.0
Euro Stoxx 50		-3.0	-7.2	20.9	-4.2	25.4	-10.8
DAX		-3.7	-11.1	15.3	1.2	23.4	-17.1
S&P 500		-5.2	-10.5	37.6	8.2	27.0	3.1
MSCI USA Small Caps		-6.2	-8.3	24.5	8.4	21.5	-1.8

S&P 500: S&P 500 TR (US-Equity); Stoxx Europe 50: Stoxx Europe 50 TR; Euro Stoxx 50: Euro Stoxx 50 TR; MSCI Japan: MSCI Japan TR; Stoxx Europe Small 200: Stoxx Europe Small 200 TR; MSCI USA Small Caps: MSCI USA Small Caps TR; Stoxx Europe Cyclical: Stoxx Europe Cyclical TR; Stoxx Europe Defensives: Stoxx Europe Defensives TR; DAX: DAX TR; MSCI United Kingdom: MSCI UK TR; MSCI EM Asia: MSCI EM Asia TR; MSCI EM Eastern Europe: MSCI EM Eastern Europe TR.

- Global equity markets headed for a weekly slide after the Fed and ECB confirmed that they would keep interest rates “higher for longer”. This would not only contradict market expectations of earlier rate cuts in 2023, but also mean a gloomier economic outlook. As a result, equities gave back some of the slight gains of the previous weeks. Asian and Eastern European equities still held losses in check. US equities, however, came in last.

Total return (including reinvested dividends) for selected stock indices, in euros and in percent, sorted by 4-week performance. Source: Bloomberg, Time period: 15/01/2017 - 16/12/2022

Fixed Income

	4-week & YTD		12-month periods over that last 5 years				
	4W (18/11/22 - 16/12/22)	YTD (31/12/21 - 16/12/22)	16/12/21	16/12/20	16/12/19	16/12/18	15/12/17
USD Corporates	-13.6	3.6	-13.6	-0.3	9.4	14.5	-2.8
USD High Yield		1.7	-9.4	5.5	6.1	11.2	0.1
EM Hard Currency Bonds		1.6	-11.2	6.4	-3.7	15.8	-0.1
EUR High Yield		0.8	-11.1	3.4	2.9	10.7	-3.2
EUR Financials		0.6	-12.9	-0.1	2.0	6.4	-2.0
EM Local Currency Bonds		0.4	-6.0	-2.1	-5.1	15.5	-2.2
Treasuries		0.2	-5.1	5.6	-1.5	9.7	3.6
EUR Non-Financials		0.2	-14.1	-0.6	2.7	6.7	-1.8
Chinese Gov Bond		-0.1	3.4	6.1	2.5	4.7	7.6
Bunds		-0.7	-16.6	-1.3	2.2	3.9	1.2
BTPs		-2.3	-16.7	-1.7	7.3	12.6	-3.6
Gilts		-2.4	-27.1	4.9	-0.7	14.8	-1.2

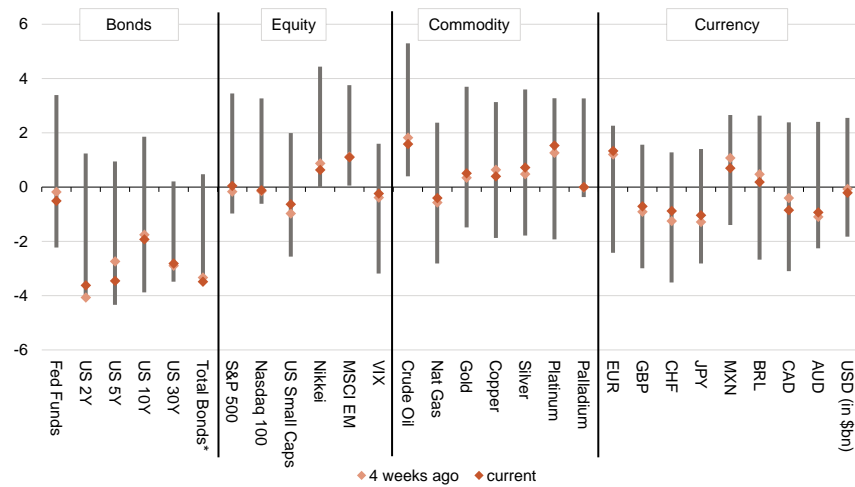
Bunds: IBOXX Euro Germany Sov TR; BTPs: IBOXX Euro Italy Sov TR; Treasuries: ICE BofA US Treasury TR; Gilts: IBOXX Sterling Gilts Overall TR; Chinese Gov Bonds: ICE BofA China Gov; EUR Financials: IBOXX Euro Fin. Overall TR; EUR Non-Financials: IBOXX Euro Non-Fin. Overall TR; EUR High Yield: ICE BofA EUR Liquid HY TR; USD Corporates: ICE BofA USD Corp TR; USD High Yield: ICE BofA USD Liquid HY TR; EM Hard Currency: JPM EMBI Glo Div Unh. EUR TR; EM Local Currency: JPM GBI-EM Glo Div Comp Unh. EUR TR

- The December meetings of the major central banks Fed and ECB led to significant jumps in yields on European government bonds. In the course of this, yields on 10-year German and Italian government bonds rose noticeably. This also puts them in the lower half of the performers of the last four weeks.
- High-yield bonds, on the other hand, remain in demand as an alternative to equities and extended their gains.

Total return (including reinvested coupons) for selected bond indices, in euros and in percent, sorted by 4-week performance. Source: Bloomberg, Time period: 15/01/2017 - 16/12/2022



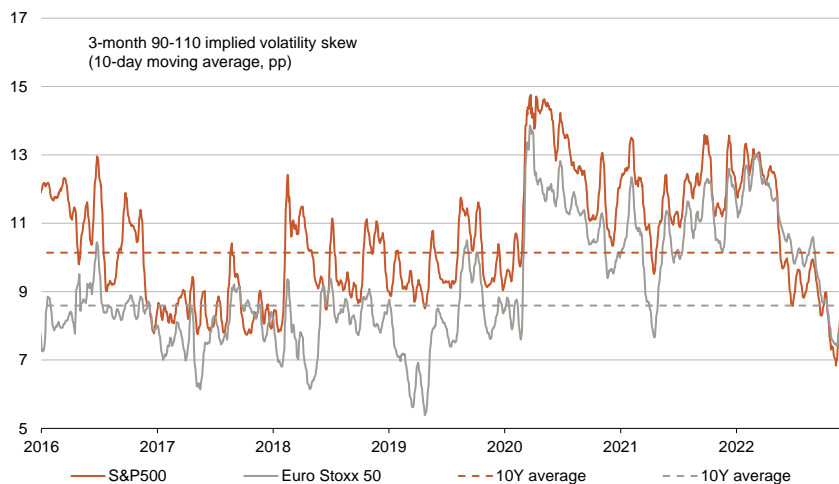
Non-Commercial Positioning



- Hedge funds have reduced their shorts in 2Y Treasuries over the last month and increased their shorts in 5Y and 10Y Treasuries. Some investors have started to bet on a steepening of the yield curve.
- In the case of the euro, speculative investors are now very long and thus susceptible to a depreciation of the euro.

The Commodity Futures Trading Commission (CFTC) publishes the Commitments of Traders report every Friday. The chart shows the historical, normalised distribution in standard deviations and focuses on the net futures position (long positions minus short positions) of "non-commercial traders" (bonds, currencies), "asset managers/institutional" & "leveraged funds" (equities) and "managed money" (commodities) and shows how speculative investors are positioned. *Weighted with the respective duration
Source: Bloomberg, CFTC, Time period: 13/12/2012 - 13/12/2022

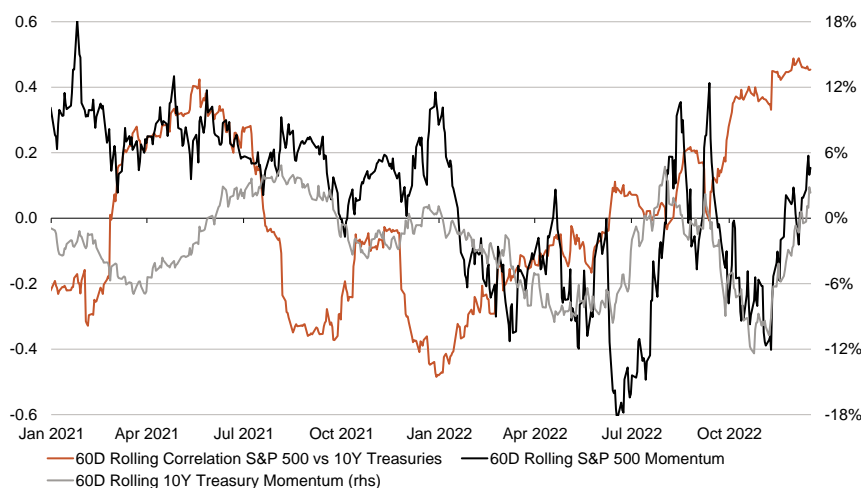
Put-Call-Skew



- The skew is little changed compared with a fortnight ago.
- It is historically untypical that the put skew (90-100) and the call skew (100-110) contribute in roughly equal parts to the put-call skew. Normally, investors show a greater willingness to give up upside participation for hedging.

The put-call skew (90-110) indicates the difference in implied volatility of puts versus calls whose strike is 10% away from the current underlying in each case. It is a measure of how much more investors are willing to pay for hedging (puts) versus upside participation (calls). The higher (lower) the skew, the more cautious (optimistic) market participants are. Moreover, the skew typically increases with the level of implied volatility.
Source: Bloomberg, period: 16/12/2012 - 16/12/2022

60-Day Momentum and Correlation

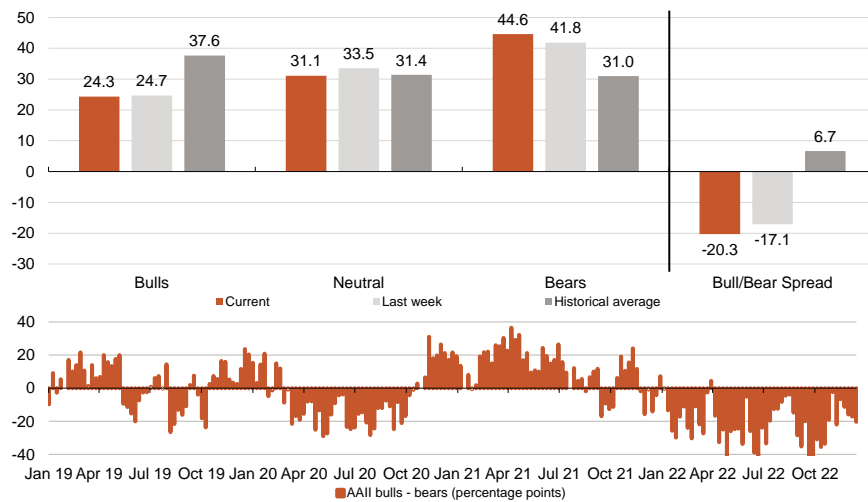


- For the first time since September, momentum is positive for both equities and bonds.
- If the markets hold up and there are no volatility shocks, trend-following strategies should demand more equities over the next few weeks.

The 60-day momentum indicates the rolling return of the last 60 days. The more the momentum rises (falls), the more systematic momentum strategies build up (reduce) their positions in the corresponding asset class. Changes in the sign of the return mark important turning points. The 60-day correlation indicates how equitably stocks and bonds move. The higher (lower) the correlation, the fewer (more) equities demand risk-based investment strategies.
Source: Bloomberg, Time period: 31/12/2020 - 16/12/2022



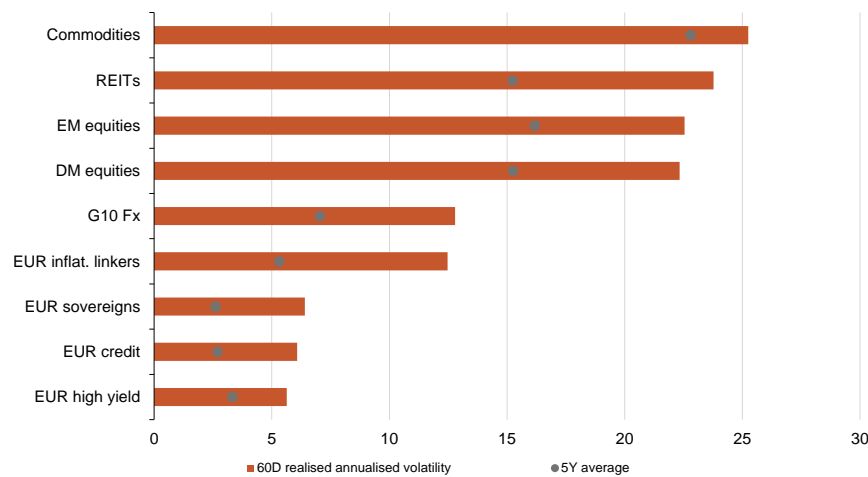
AAII Sentiment Survey (Bulls vs Bears)



- US private investor sentiment has now deteriorated for the fifth week in a row.
- This year there was only one week in which the bull/bear spread was positive. That is an all-time record. The second worst year was 2008, back then, the spread was positive for 14 weeks.

The Sentiment Survey, conducted by the American Association of Individual Investors, determines the percentage of individual investors who are optimistic, pessimistic or neutral about the US stock market over a six-month period. It has been conducted since 1987. The survey is conducted from Thursday to Wednesday and the results are published every Thursday. For the stock market, it tends to be supportive when there is a high proportion of bears and a low proportion of bulls. On the other hand, it tends to be negative when there are significantly more optimists than pessimists.
Source: Bloomberg, AII, Time period: 23/07/87 - 15/12/2022

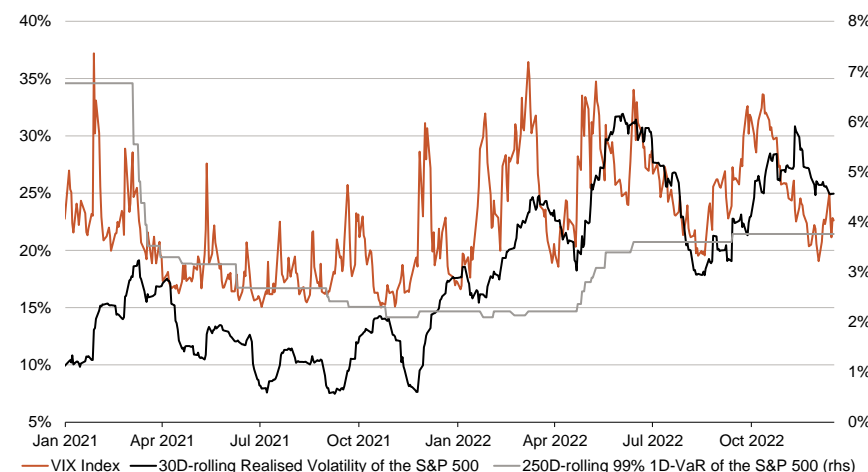
Realised Volatilities



- After REITs were the most volatile asset class a fortnight ago, commodities are now back in first place.
- Relative to history, however, commodities currently exhibit by far the lowest volatility, at 1.1 times the 5-year average.
- Within equities, emerging markets are now the more volatile region again.

The realised volatility (in per cent) measures the fluctuation range of a time series and is defined here as the standard deviation of the daily return over the last 60 trading days. Volatility is often used as a measure of risk.
Source: Bloomberg, period: 16/12/2017 - 16/12/2022

Volatility and Value-at-Risk of the S&P 500

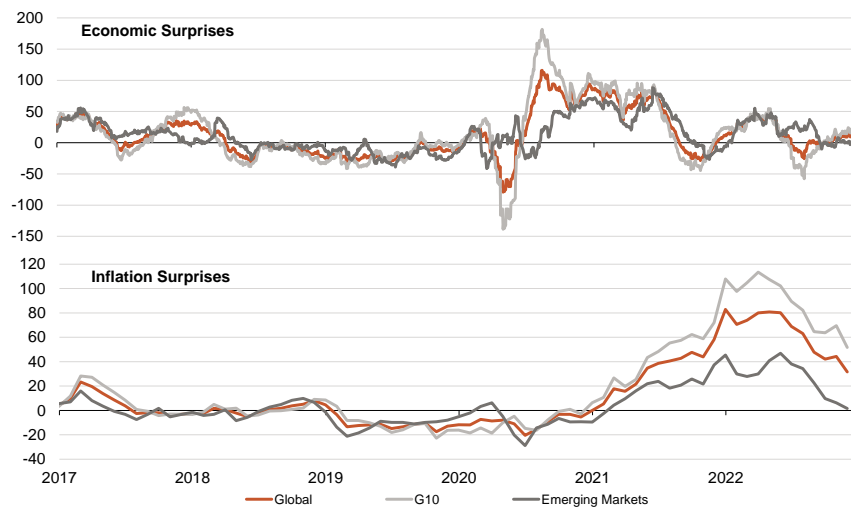


- The VIX quickly gave back the uncertainty premium built up before the inflation data last week and is currently trading around 22.
- Realised 30-day volatility should come down significantly soon as the October CPI day (S&P 500 +5%) drops out of the calculation window.

The VIX index is a measure of the implied volatility of the S&P 500 priced in options over approximately the next 30 days. Realised volatility indicates the range of variation in daily returns. The historical 99% value-at-risk indicates the minimum loss of the days that belong to the worst 1% of the observation period. The higher (lower) the VIX, realised volatility and value-at-risk, the fewer (more) stocks demand risk-based investment strategies.
Source: Bloomberg, period: 31/12/2020 - 16/12/2022



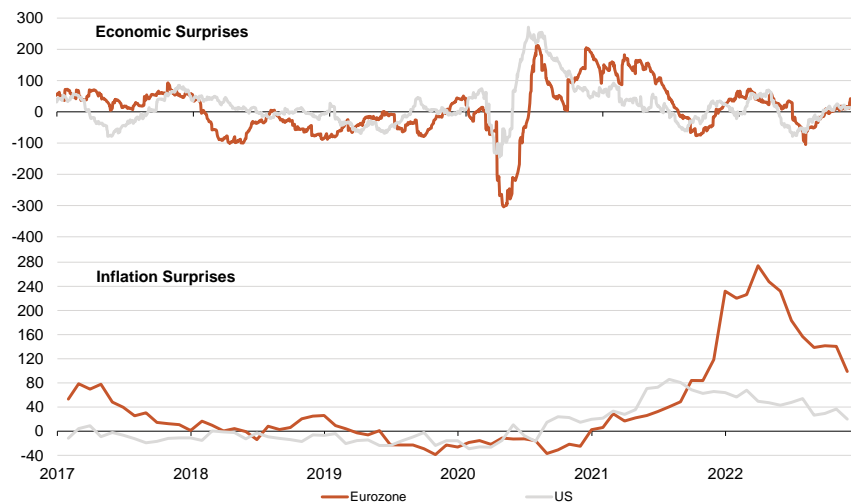
Global



- While positive economic surprises have increasingly prevailed in industrialised nations (G10) as well as at global level over the past two weeks thanks to the Eurozone, US and UK, emerging markets continued to struggle to beat economic expectations. In China, for example, industrial production and also retail sales disappointed year-on-year.

See explanations below.
Source: Bloomberg, Time period: 01/01/2017 - 16/12/2022

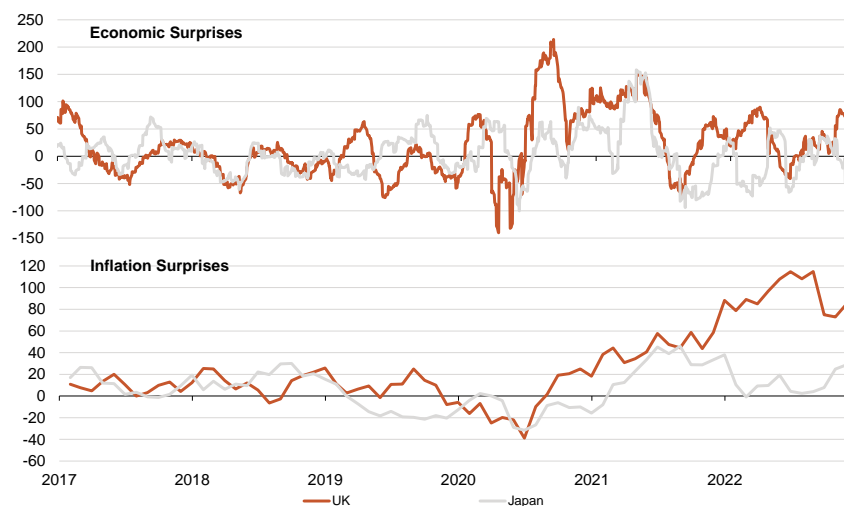
Eurozone and US



- Economic data in the Eurozone have noticeably exceeded expectations over the last few weeks. Quarterly GDP and purchasing managers' data for services were above expectations. In Germany, industrial production was significantly less negative than expected.
- The US economy is also holding up robustly, albeit less encouragingly than in the Eurozone. The labour market remains robust and factory orders were also above expectations.

See explanations below.
Source: Bloomberg, Time period: 01/01/2017 - 16/12/2022

UK and Japan

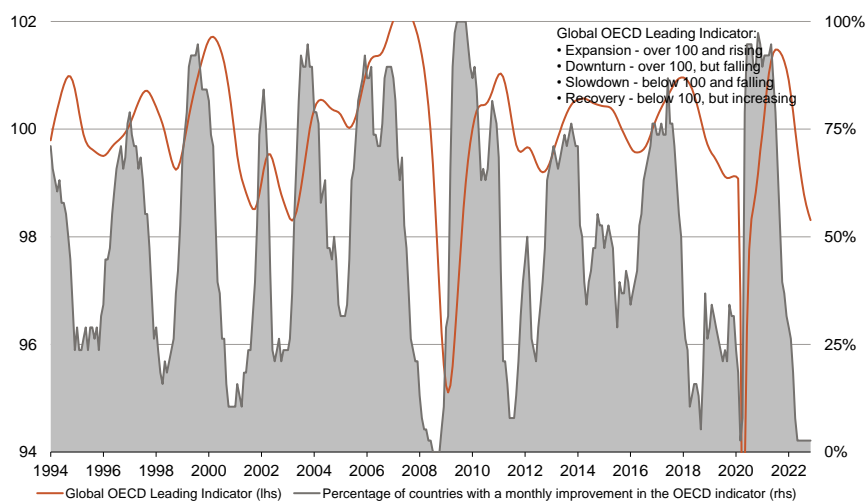


- The gap between British and Japanese economic data remains sharply widened. However, the gap seems to be closing. In the UK, services PMI and industrial production came in above expectations, while in Japan GDP data and machinery orders were more encouraging.

The Citigroup Economic Surprise Indices are defined as weighted historical normalised data surprises (actual releases vs. Bloomberg survey median) over the past three months. A positive value of the index indicates that, on balance, economic data have outperformed consensus. The indices are calculated daily in a rolling three-month window. The indices use a time decay function to replicate the markets' limited memory, i.e. the weight of a data surprise decreases over time.
Source: Bloomberg, period: 01/01/2017 - 16/12/2022



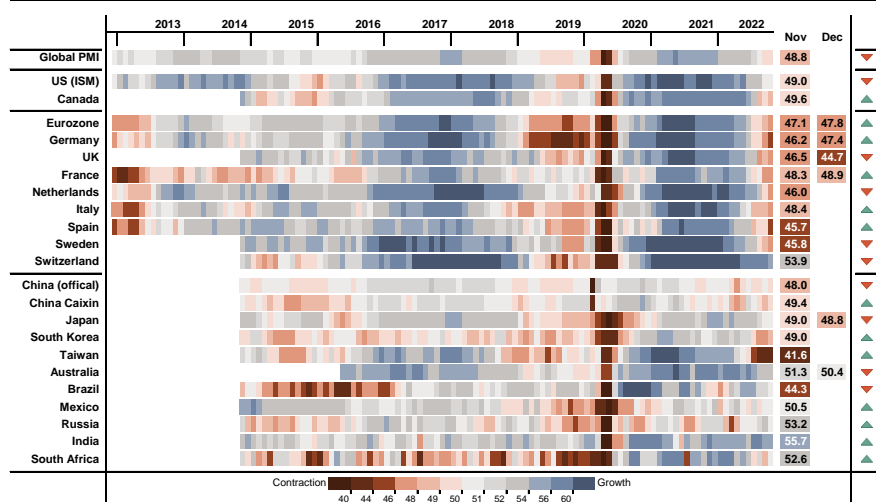
OECD Leading Indicator



- The OECD Global Leading Indicator maintained its downward trend in November, continuing to signal a high probability of a global recession.
- At country level, the OECD Leading Indicator held steady for 97% of the countries showing deterioration compared with the previous month. Only Hungary improved versus the previous month.

The OECD Leading Indicator is composed of a set of selected economic indicators whose composition provides a robust signal of future turning points. A turning point usually signals a turning point in the business cycle in 6-9 months. However, lead times are sometimes outside this range and turning points are not always correctly identified.
Source: Bloomberg, Time period: 31/01/1994 - 16/12/2022

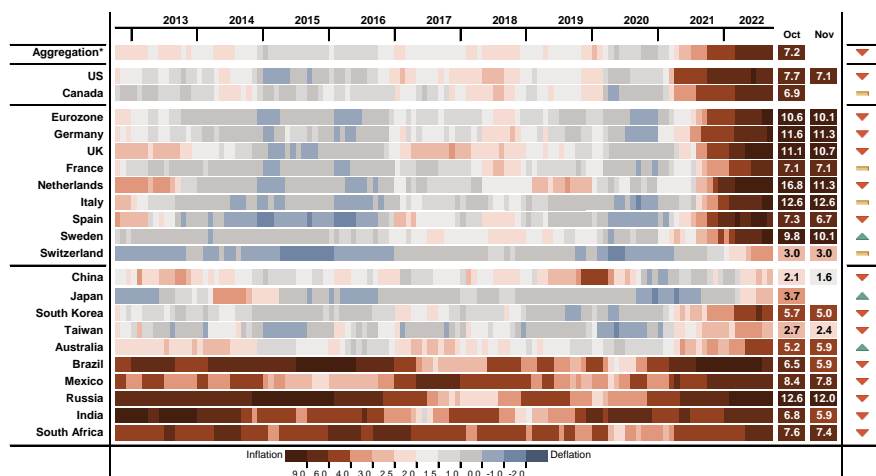
Manufacturing Purchasing Managers Index (Manufacturing PMI)



- Global PMI data for December show a mixed picture. While month-on-month industrial activity picked up in the Eurozone, Germany and France, it declined in the United Kingdom, Japan and Australia.

The PMI is an overall index that provides a general overview of the economic situation in industry. The PMI is derived from a total of eleven sub-indices, which reflect the respective change from the previous month. A value of 50 is regarded as neutral, a value of over 50 points as an indicator of rising and a value of under 50 points as an indicator of declining activity in industry compared to the previous month. On average, the index has a lead time before actual industrial production of three to six months. The PMI is based on a survey of a relevant selection of purchasing managers on the development of key indicators such as new orders.
Source: Bloomberg, Time period: 16/12/2012 - 16/12/2022

Headline Inflation

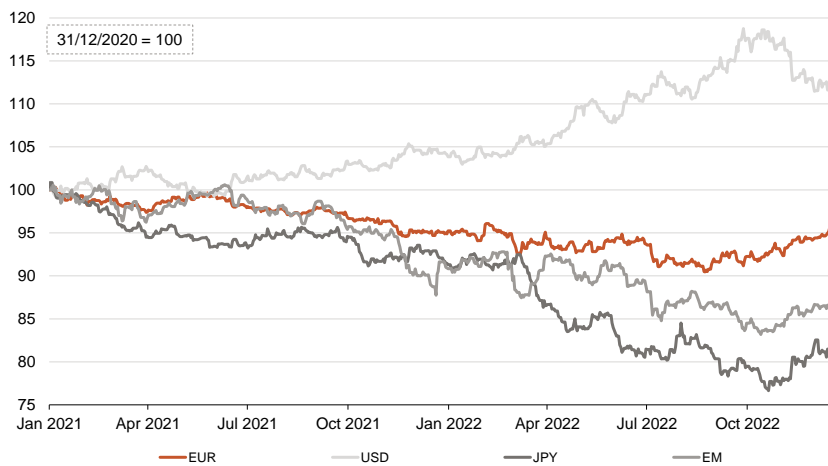


- The inflation picture, on the other hand, is much more uniform. In the US, the Eurozone, Germany, the UK, Italy, Spain, China and India, the inflation rate has fallen compared with the previous month thanks to less sharply rising energy and food costs. In France and Switzerland, inflation remained constant compared with the previous month.

Inflation (in %, compared to the previous year) is measured using a consumer price index, also called a basket of goods. This basket contains all goods and services that a household purchases on average per year. * = Weighting according to gross domestic product.
Source: Bloomberg, Time period: 16/12/2012 - 16/12/2022



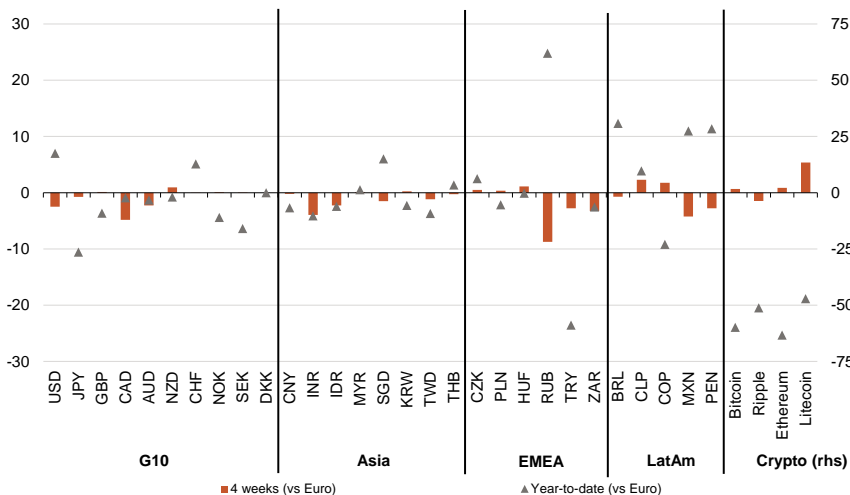
Trade-Weighted Currency Development



- The euro recently continued its upward trend. The US dollar and emerging market currencies moved sideways.
- The Japanese yen, on the other hand, experienced a small setback after its rally in recent weeks. In his speech, BoJ member Nakamura left no doubt about his intention to continue the expansionary monetary policy.

A trade-weighted index is used to measure the effective value of an exchange rate against a basket of currencies. The importance of other currencies depends on the share of trade with the country or currency zone.
Source: Bloomberg, Time period: 01/01/2021 - 16/12/2022

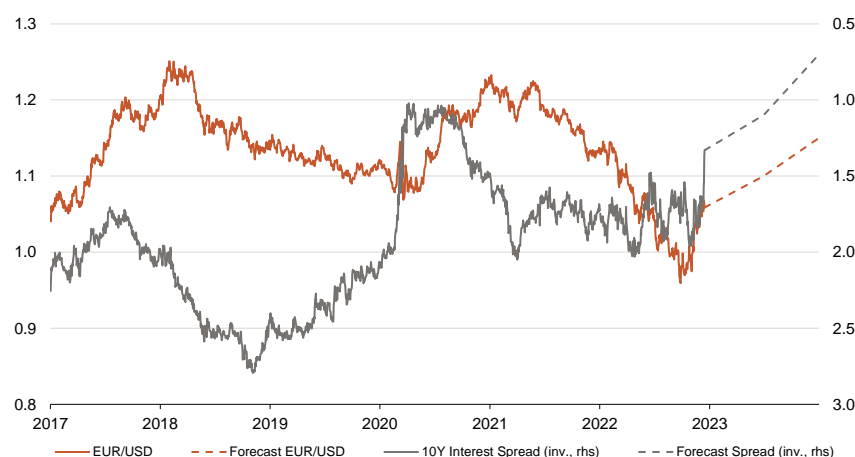
Currency Moves vs Euro



- The euro posted gains against most of the currencies shown here over the last month. In particular, the surprisingly hawkish statements by the ECB president gave the euro a tailwind. Lagarde declared that she would probably raise key interest rates further than the markets are currently pricing in.
- In the last 3 months and in the wake of the dovish messaging from the BoC, the Canadian dollar has completely given up its strong performance since the beginning of the year.

Performance of selected currencies against the euro, in percent.
Source: Bloomberg, Time period: 31/12/2021 - 16/12/2022

EUR/USD Exchange Rate and Interest Rate Differential of 10Y Bonds



- The 50bp rate decisions came as expected on both sides of the Atlantic. However, the ECB's communication was a little more hawkish, allowing the euro to defend its gains following the lower-than-expected US inflation data.
- Since the end of September, the euro has recovered about half of its losses since the beginning of the year.

EUR/USD exchange rate and interest rate differential (in percentage points) of 10-year US government bonds and 10-year Bunds. The forecasts were prepared by Berenberg Economics.
Source: Bloomberg, Time period: 01/01/2017 - 31/12/2022



European Sector & Style Performance

	4-week & YTD		12-month periods over that last 5 years				
	4W (18/11/22 - 16/12/22)	YTD (31/12/21 - 16/12/22)	16/12/21	16/12/20	16/12/19	16/12/18	15/12/17
Health Care	-4.0	-1.1	-2.6	23.8	-1.2	26.3	3.0
Communication Services	-16.3	-1.1	-14.7	21.9	4.5	30.6	-11.8
Utilities	-8.0	-1.3	-5.3	8.0	9.8	25.1	4.6
Consumer Staples	-8.2	-1.5	-6.8	19.6	-4.6	21.0	-5.5
Value	-1.7	-2.2	-0.2	19.0	-13.4	17.4	-9.2
Finance	-4.8	-1.7	-2.5	25.2	-16.4	20.8	-17.3
Growth	-16.8	-2.1	-14.7	26.8	4.4	28.5	-6.4
Industrials	-16.8	-2.6	-13.6	25.4	1.5	33.8	-10.9
Materials	-9.7	-2.7	-8.1	23.6	8.5	25.8	-11.4
Energy	-3.5	33.0	32.7	30.2	-30.2	3.8	4.0
Telecommunications	-12.3	-3.9	-10.1	9.7	-14.4	3.6	-7.5
Information Technology	-25.4	-6.0	-22.8	35.7	9.8	34.3	-4.4

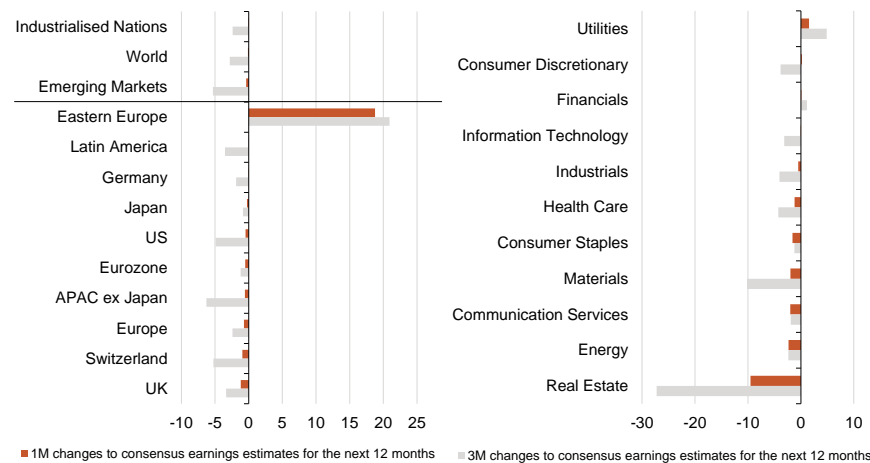
Consumer Discretionary: MSCI Europe Consumer Discretionary NR; Consumer Staples: MSCI Europe Cons. Staples NR; Energy: MSCI Europe Energy NR; Finance: MSCI Europe Financials NR; Health Care: MSCI Europe Health Care NR; Industrials: MSCI Europe Industrials NR; Information Tech.: MSCI Europe Inform. Tech. NR; Materials: MSCI Europe Materials NR; Communication Services: MSCI Europe Communication Services NR; Utilities: MSCI Europe Utilities NR; Value: MSCI Europe Value NR; Growth: MSCI Europe Growth NR.

- Despite falling inflation in the US, the central banks have not yet deviated from their restrictive course. This weighed particularly on growth stocks, eg in the IT sector. Defensive stocks, such as health care companies or utilities, were therefore in demand and were able to increase in value over the past four weeks.

Total return of European equity sectors and European style indies, in euros and in percent, sorted by 4-week performance. The difference between Value and Growth lies in the valuation. A growth stock is highly valued because the company is expected to grow strongly. Value stocks usually have less growth potential and are valued lower.

Source: FactSet, Time period: 15/12/2017 - 16/12/2022

Changes in Consensus Earnings Estimates

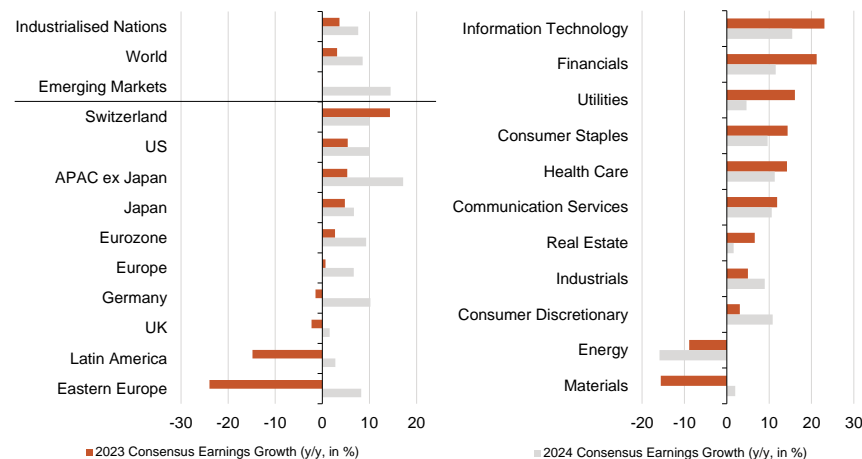


- There have been few positive earnings revisions globally in the past four weeks due to the gloomy economic outlook for 2023.
- Eastern Europe is an exception. Analysts have become more positive about the region again, partly because the Ukraine war has not escalated further.
- In Europe, the majority of sectors saw negative revisions. This was most pronounced in real estate stocks, which are suffering from rising interest rates and economic concerns.

1-month and 3-month changes in consensus earnings estimates for the next 12 months of the regional and Europe sector MSCI indices, in per cent.

Source: FactSet, as of 16/12/2022

Earnings Growth



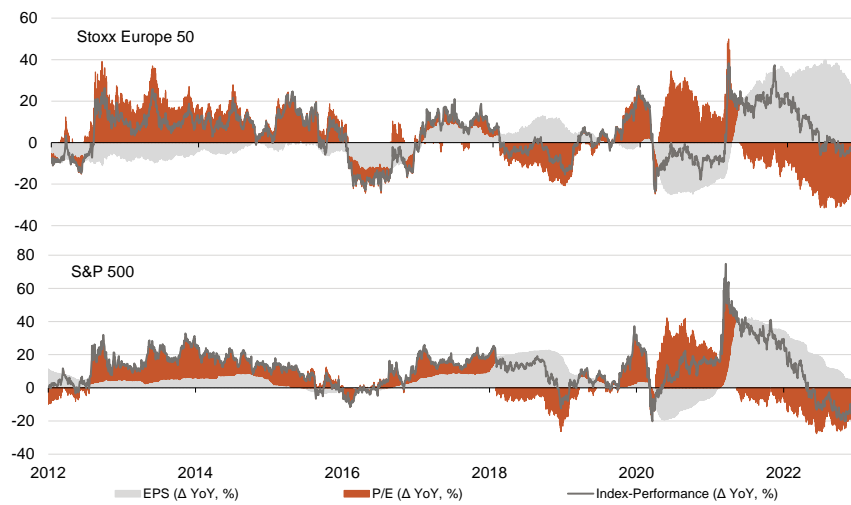
- Consensus expects 2023 earnings growth of around 4% for the developed countries. Emerging markets, on the other hand, are unlikely to record any growth.
- According to analysts, Switzerland and the US are the regions with the strongest profit growth in 2023, while Latin America and Eastern Europe are likely to see significantly declining profits.

Consensus expected calendar year earnings growth for selected equity regions, year-on-year and in percent. The earnings estimates of the individual companies are aggregated upwards using the index weights ("bottom-up"). Regional and Europe Sector MSCI Indices. APAC ex Japan = Asia Pacific excluding Japan

Source: FactSet, as of 16/12/2022



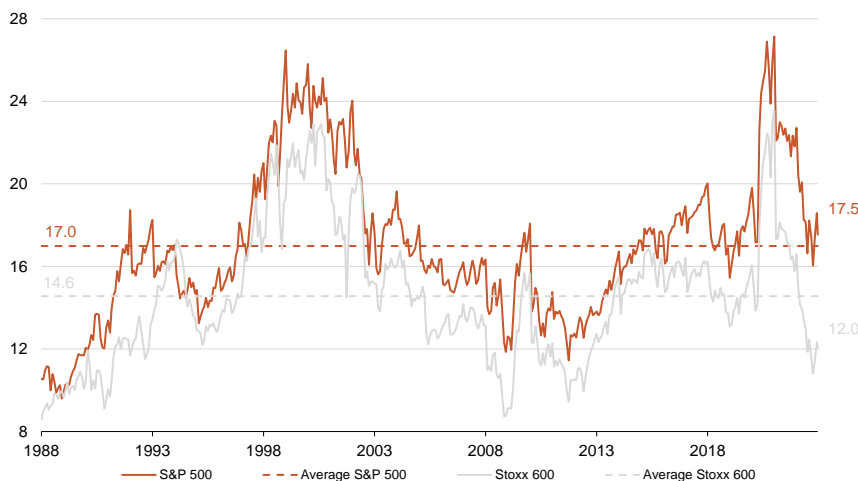
Contribution Analysis



- The equity tailwind from rising valuations that has persisted since the beginning of October has come to a halt. On the other hand, valuations have recently become a burdening factor again.
- For example, the year-on-year performance of the Stoxx Europe 50 has fallen back to near zero.

Analysis of the drivers of stock market development over the last 12 months. The change in earnings estimates and the change in valuation (price-earnings ratio) are taken into account. EPS = earnings per share
Source: Bloomberg, Time period: 01/01/2012 - 16/12/2022

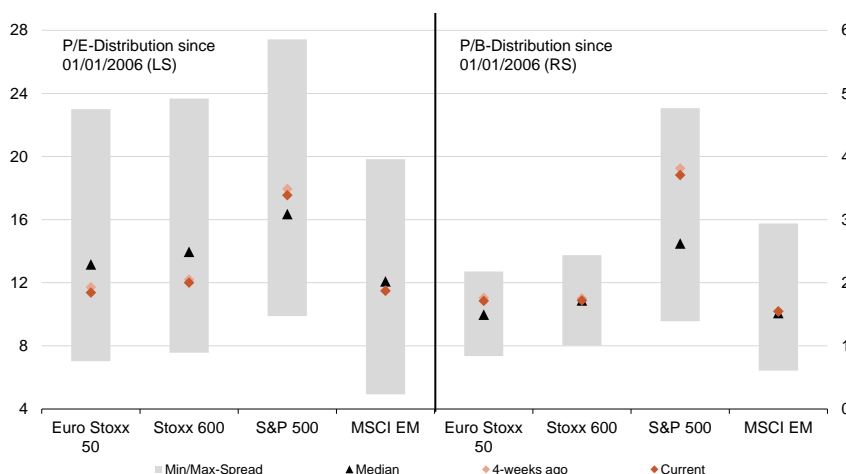
Price-Earnings Ratio (P/E Ratio) of European and US Equities



- With the decline in equity markets and an almost unchanged earnings outlook, the price-earnings ratio for the S&P 500 and the Stoxx 600 has recently fallen again.
- The S&P 500 is still ambitiously valued with a view towards a recession in 2023, while the Stoxx 600 appears significantly less expensive.

P/E valuation based on earnings estimates for the next twelve months of European and US equities as well as the respective P/E average since 1988. *For the Stoxx 600, the history before 2000 was taken from MSCI Europe.
Source: Bloomberg, Factset, Time period: 31/12/1987 - 16/12/2022

Historical Distribution: Price/Earnings and Price/Book Ratio

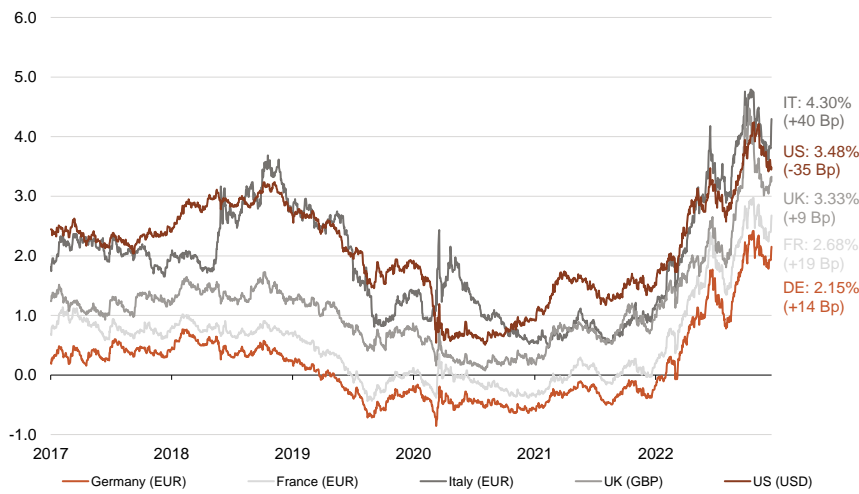


- Compared with four weeks ago, the valuation ratios P/E and P/B ratio have not changed significantly. The valuation expansion in Q4 was thus clearly limited again by the market.

Historical distribution of valuation ratios for selected equity regions since 2006. In addition to the current value, the observation four weeks ago and the historical median, the maximum (upper limit of the grey bar) and minimum (lower limit of the grey bar) are shown.
Source: Bloomberg, Time period: 01/01/2006 - 16/12/2022



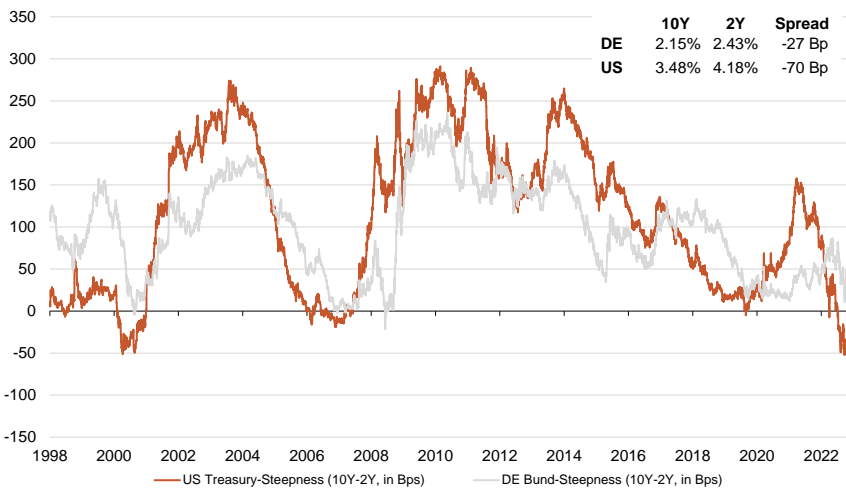
10-Year Government Bond Yields



- The rather hawkish (restrictive) tones of the ECB at its December meeting last week have led to significant jumps in yields in the Eurozone. Yields on 10-year Italian government bonds, for example, have risen by more than 40bp.
- US Treasuries, on the other hand, saw yields fall sharply in the last four weeks after US inflation also surprised to the downside in November.

Effective yield on 10-year government bonds and change over the last four weeks in basis points (in brackets). Source: Bloomberg, Time period: 01/01/2017 - 16/12/2022

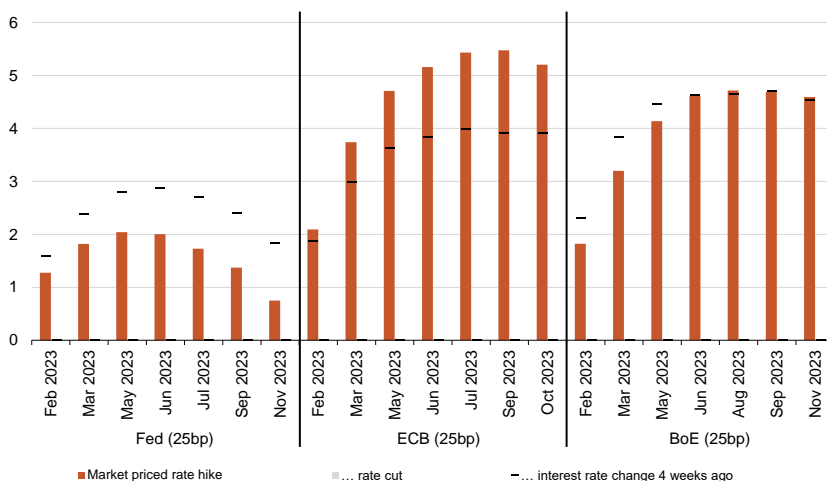
Yield Curve Steepness (10Y - 2Y)



- Both the US and German yield curves are now noticeably inverted. The bond market thus indicates an impending recession for both countries. The bond market expects central bank interest rates to fall again in the medium term.

The yield curve distinguishes between the so-called short end and the long end. The reason for this is the way in which factors influence yields. Central banks control the short end of the curve through their monetary policy and key interest rates. In contrast, the long end is influenced less by central banks and more by inflation expectations, supply, demand and risk premiums. Source: Bloomberg, Time period: 01/01/1998 - 16/12/2022

Implicit Changes in Key Interest Rates

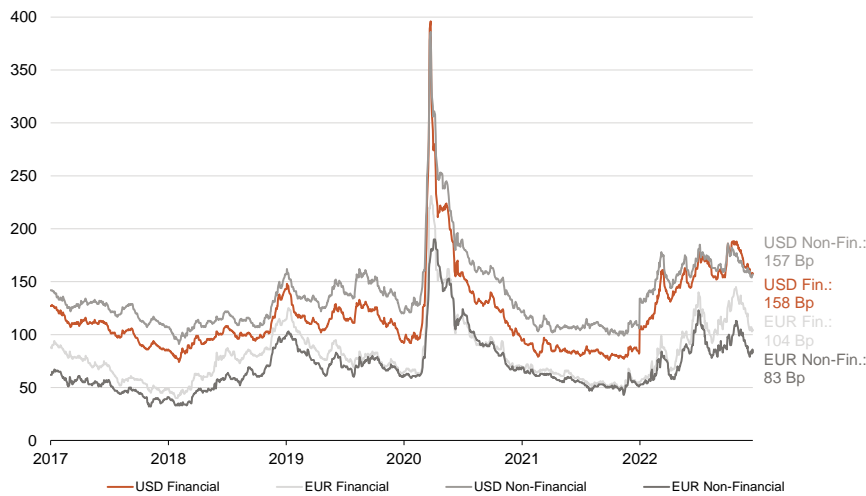


- In December both the Fed, the ECB and the BoE raised key interest rates by 50bp. While less hawkish tones were heard at the Fed, the opposite was the case at the ECB. Here, the market expects a rate hike of 50bp in February as well.
- The BoE has raised key interest rates for the ninth time in a row. At 3.5%, they are now higher than they have been for 14 years.

Derivatives on money market interest rates - such as the fed funds futures - can be used to determine the change (number of steps) in the key interest rate priced by the market. Source: Bloomberg, Time period: 18/11/2022 - 16/12/2022



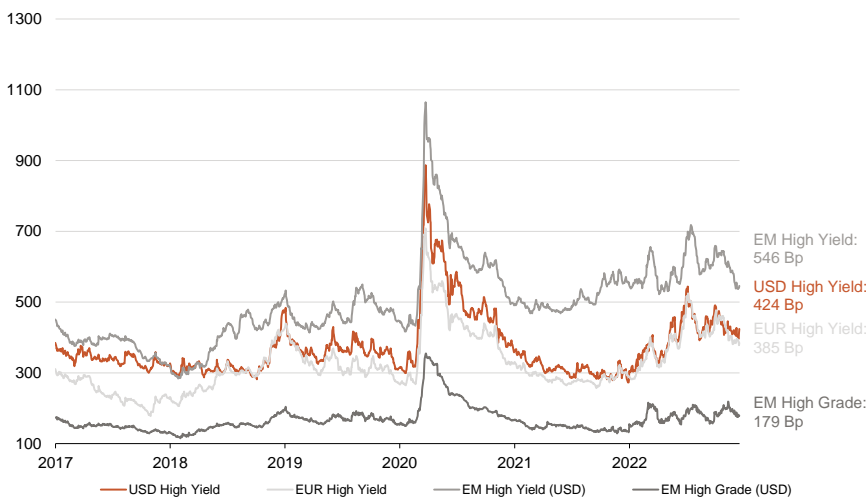
Credit Spreads Financial and Non-Financial Bonds



- Spreads on investment-grade corporate bonds have fallen slightly despite the recent risk-off. For both USD and EUR corporate bonds, spreads have fallen by around 5bp in the last two weeks.

Explanations see middle and lower figure.
Source: FactSet, Time period: 01/01/2017 - 16/12/2022

Credit Spreads High Yield and Emerging Markets Bonds



- High-yield bonds remain in demand as an alternative to equities. In the last two weeks, spreads on Emerging Markets and EUR high-yield bonds fell slightly despite the pessimistic market sentiment.
- USD high-yield bonds on the other hand saw slightly rising spreads.

How high the risk associated with the corporate bond is shown by its asset swap spread (in bp). This indicates the yield that the issuer must pay in addition to the swap rate for the respective term as compensation for its credit risk. See further explanation below.
Source: FactSet, Time period: 01/01/2017 - 16/12/2022

Bond Segments Overview

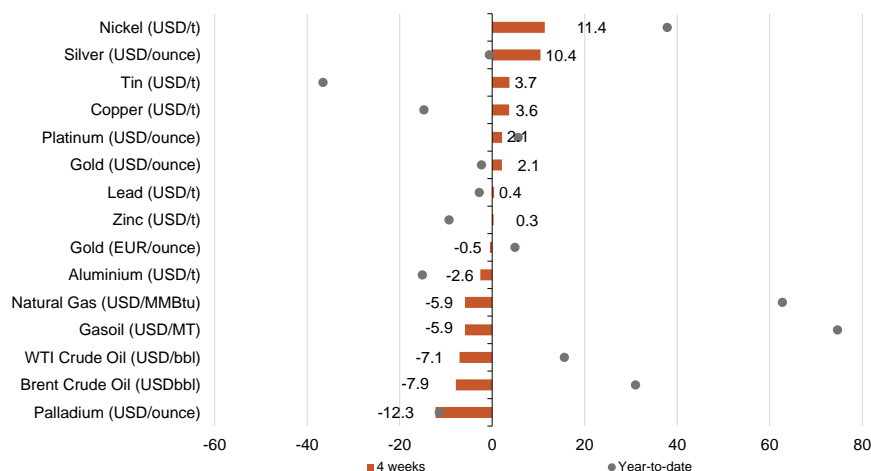
	Key figures			Asset Swap Spread			Total Return (% local)						
	Yield (in %)	Δ-1M	Modified Duration	Spread (Bps)	Δ-1M	10Y-Percentile	1M	YTD	16/12/21 16/12/22	16/12/20 16/12/21	16/12/19 16/12/20	16/12/18 16/12/19	16/12/17 16/12/18
EUR Government	2.85	0.25	7.3	-	-	-	-1.1	-16.3	-17.5	-2.0	4.3	7.9	-0.4
Germany	2.19	0.18	7.3	-	-	-	-0.7	-15.5	-16.6	-1.4	2.3	3.9	1.2
EUR Corporate	3.97	0.02	4.6	91	-19	69	0.4	-13.0	-13.5	-0.4	2.4	6.6	-1.8
Financial	4.12	0.00	3.9	104	-25	72	0.6	-11.1	-11.5	-0.1	1.9	6.0	-1.7
Non-Financial	3.88	0.03	5.1	83	-16	69	0.2	-14.0	-14.6	-0.5	2.6	6.9	-1.8
EUR High Yield	7.47	0.05	3.2	385	-18	69	0.7	-11.2	-11.1	3.4	2.9	10.7	-3.2
US Treasury	3.87	-0.21	6.5	-	-	-	2.0	-11.0	-11.3	-2.0	8.0	8.4	-0.6
USD Corporate	5.21	-0.30	7.1	158	-9	79	3.0	-13.6	-13.6	-0.3	9.4	14.5	-2.8
Financial	5.39	-0.31	5.2	158	-14	86	2.4	-11.3	-11.3	-0.3	8.8	12.8	-2.0
Non-Financial	5.12	-0.30	8.0	157	-8	74	3.3	-14.5	-14.6	-0.3	9.6	15.3	-3.1
USD High Yield	8.57	-0.22	4.3	424	-5	66	1.4	-10.0	-9.4	5.5	6.1	11.2	0.1
EM High Grade	5.57	-0.42	5.4	179	-23	48	3.2	-13.4	-13.5	0.3	5.7	12.2	-1.4
EM High Yield	10.41	-1.06	3.9	546	-51	48	4.5	-15.0	-15.3	-3.2	9.2	12.4	-2.1

- Despite the widening of yields in recent days, the bulk of the bond segments recorded a positive performance over the last four weeks.
- EUR government bonds are an exception, which were burdened by significantly rising yields after the hawkish ECB meeting.

ICE BofA indices in the following sequence: Euro Government; German Government; Euro Corporate; Euro Financial; Euro Non-Financial; Euro High Yield; US Treasury; US Corporate; US Financial; US Non-Financial; US High Yield; High Grade Emerging Markets Corporate Plus; High Yield Emerging Markets Corporate Plus. EM indices are hard currency bonds.
Source: FactSet, Time Period : 16/12/2017 - 16/12/2022



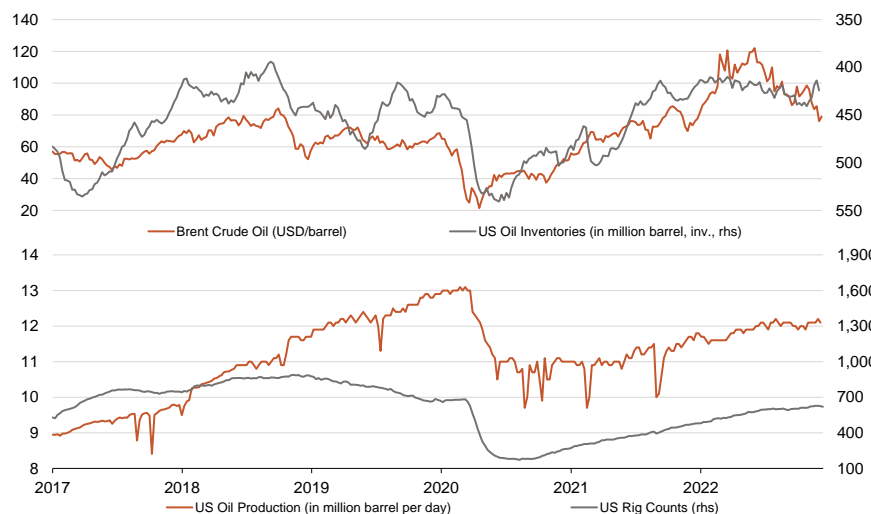
Commodities Performance



- Commodity markets remained caught between growth worries and hopes of a reopening in China over the past four weeks. Metals such as nickel, tin and copper gained. Precious metals such as gold and silver and platinum, which have high industrial applications, also posted slight gains on a weaker US dollar and hopes for a turn in the interest rate cycle.
- Energy commodities, on the other hand, had a tough time. Crude oil and gas oil remained weighed down by economic worries and the milder winter so far, and thus made up the bottom.

Total return of selected commodity indices, in percent, sorted by 4-week performance. Source: Bloomberg, Time period: 31/12/2021 - 16/12/2022

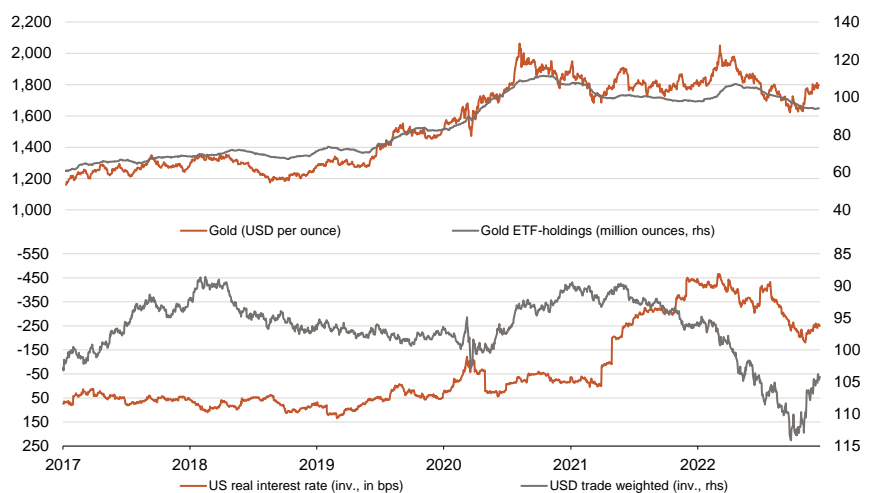
Crude Oil



- Oil had fallen significantly after hopes of a China reopening amid global recession worries and is now trading back at the price level at the turn of last year. Nevertheless, supply remains tight. Reserves are at rock bottom and temporary obstacles due to sanctions are also shortening supply. For example, the backlog of oil tankers in the Turkish Straits continues to increase, as despite negotiations there has been no solution to the insurance problem caused by the sanctions against Russian crude oil.

Higher oil production and higher inventories tend to weigh on oil prices and vice versa. An increase in active oil wells indicates higher oil production in the future. Source: Bloomberg, Time period: 01/01/2017 - 16/12/2022

Gold



- Gold stabilised near its highest level since July as hopes for a less restrictive Fed strengthened after lower-than-expected US inflation data. The metal has gained more than 10% since its low in September. However, Powell's restrictive tones triggered a reversal and gold gave back some of its gains.

The US dollar and the real, i.e. inflation-adjusted, interest rate are among the fundamental price factors of the gold price. Rising real interest rates tend to weigh on the gold price, while falling real interest rates have a supportive effect. The same applies to the US dollar. The development of gold ETF holdings reflects financial investors' demand for gold. Source: Bloomberg, Time period: 01/01/2017 - 16/12/2022

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PUBLISHING INFORMATION

PUBLISHER

Prof Dr Bernd Meyer, CFA | Chief Strategist Wealth and Asset Management

EDITORS



Ulrich Urbahn, CFA | Head Multi Asset Strategy & Research

focuses on the multi-asset investment process, the development of investment ideas and capital market communications

+49 69 91 30 90-501 | ulrich.urbahn@berenberg.de



Karsten Schneider, CFA | Analyst Multi Asset Strategy & Research

analyses financial markets, supports the multi-asset investment process and participates in capital market publications

+49 69 91 30 90-502 | karsten.schneider@berenberg.de



Ludwig Kemper, CFA | Analyst Multi Asset Strategy & Research

analyses financial markets, supports the multi-asset investment process and participates in capital market publications

+49 69 91 30 90-224 | ludwig.kemper@berenberg.de



Philina Kuhzarani | Analyst Multi Asset Strategy & Research

analyses financial markets, supports the multi-asset investment process and participates in capital market publications

+49 69 91 30 90-533 | philina.kuhzarani@berenberg.com

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Joh. Berenberg, Gossler & Co. KG
Neuer Jungfernstieg 20
20354 Hamburg (Germany)
Phone +49 40 350 60-0
Fax +49 40 350 60-900
www.berenberg.com
MultiAssetStrategyResearch@berenberg.de