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 N° 093 // December 5, 2022

● Topic of the week: US high yield overview

- The expected slowdown in the United States should lead to an increase in payment defaults. Moody's forecasts a default rate of close to 10% next year in a moderately pessimistic scenario.
- Monetary easing during the pandemic has been used to improve the financial health of high yield issuers. The net leverage is relatively low and the debt maturity profile is not a major financial constraint.
- However, banks are less inclined to lend, which will affect the lower ratings first (below CCC).
- Valuations nevertheless remain attractive as a fair risk premium is priced in by markets.

● Market review: Financial markets ignore markets

- Fed hints at 50 bp hike in December
- After Powell's speech, equity shot up whilst yields, spreads decline
- Breakeven inflation rates move higher
- Bullish run continues on credit

● Chart of the week



For the first time since at least 2000, the global yield curve has inverted. This reflects investors' concerns about global growth following the strong monetary tightening carried out by central banks to fight against far too high inflation.

Short rates, integrating monetary policy expectations, rose stronger and faster than long rates to become higher than the latter.

This is not a good signal for global growth.

● Figure of the week

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Source : Ostrum AM

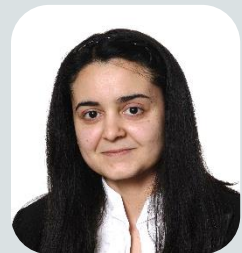
In 2021, 28% of electricity in the G20 was produced with renewable sources. It was only 18% in 2010 (source: Ember).



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● **Topic of the week**

US high yield overview

As the US economy finally slows in 2023 expectations of rising default rates in corporate credit have emerged. Moody's calls for a default rate close to 10% under their moderately pessimistic scenario as pressure on operating margins and funding rates increase.

We dig into the financial health of high yield borrowers and the investment case for US high yield in this piece.

Default as a key determinant of high yield

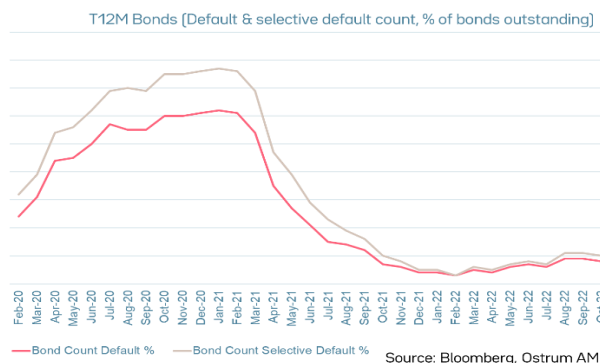
Whilst failure to pay in investment grade markets is extremely rare and often traceable to corporate fraud (e.g. Enron, Parmalat, Wirecard...), default risk is a distinctive feature of speculative-grade ('high yield') bond investing. Indeed, on Moody's rating scale, the average default rate on a one-year horizon is minimal up to Baa3 ratings but then rise exponentially below IG ratings to 5% for B3-Caa1 categories and to more than 35% for Ca ratings or worse. Loose debt covenants (so-called 'cov-lite' bonds and loans), a by-product of easy credit in the late 2010s, may impact historical comparisons. Cov-lite deals provide financial flexibility that may delay and, in some cases, even avert corporate defaults. That said, in the event of a default, recoveries would be lower.

Annual default rates in high yield average 3-4% under normal economic growth conditions. However, default rates rise significantly in recessions as corporate earnings dip and credit rationing pushes the weakest balance sheets in distress. Weak balance sheets are more likely to be denied credit in bad times and are thus more prone to default. Recovery values are also inversely correlated to the default intensity. The asymmetry in default risk is akin to the deterioration in the labor market as unemployment hits lower-skilled individuals hardest in a recession. In the 2001 recession and the 2008 financial crisis, US corporate defaults rose above 10% of debt outstanding as unemployment hit double-digit territory.

Default rates in 2022 and beyond

Default rates are very low at present. The proportion of bonds outstanding in default barely hovers about 1%. Defaulted debt represents an amount outstanding of less than \$ 20 billion over the past 12 months. US high yield debt in default In the 2020 credit cycle, default rates hit 6% with selective default events adding just under 2% to the tally. Swift economic policy easing, on both the monetary and fiscal fronts, mitigated the economic fallout from the pandemic. Loss given default (LGD) still hovers about 70% on unsecured bonds, slightly worse than the long-term norm. Meanwhile, LGD on secured loans was about 20% in the second half of 2022. For the time being, on the small sample of recent credit events, there is no convincing evidence that weakening of covenants lowered recovery for creditors. That's not to say weaker covenants will have no impact.

Corporate default rates should increase as the US economy is expected to enter a downturn in 2023. Moody's forecasts that US default rates will rise from below 2% currently to 9.8% by October 2023 under their most pessimistic scenario. In the most severe scenario, defaults could reach 14.6% in 12 months, which would surpass the peak of 13.5% seen during the global financial crisis. The baseline is for an increase to 4.5%. Escalating costs are expected to pressure operating margins. In addition, the issuance drought in 2022 points to tougher market conditions going forward for speculative-grade companies looking to refinance or raise new debt. Likewise, Barclays raised their default forecast for US speculative-grade bonds and loans to a range of 5% to 6% next year. Columbia Threadneedle expects that default rates will creep higher to 4.3% for 2024.



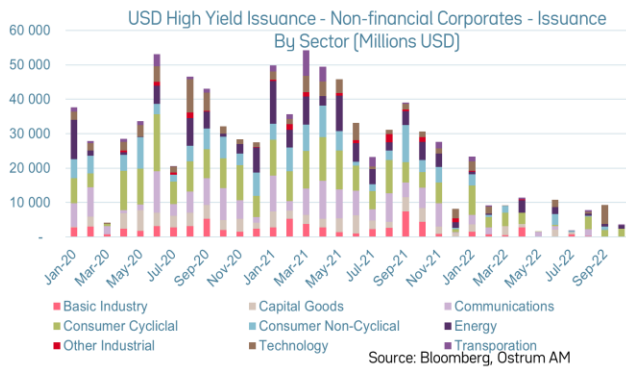
Low bond issuance as a sign of balance sheet strength and financial flexibility

Hence, the last credit 'cycle' in the US occurred just two years ago during the pandemic, so that the remaining high yield universe may fundamentally be in a better shape now. Corporate balance sheets look strong, for now, due in part to low interest rates through the pandemic.

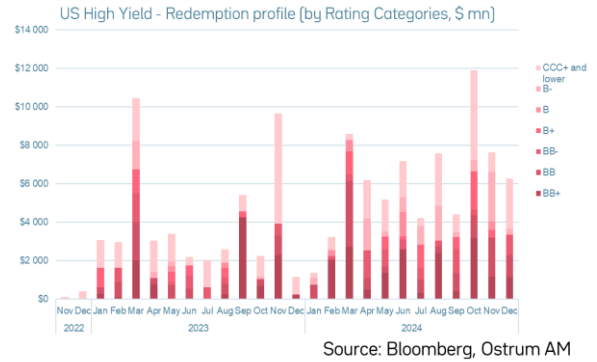
Leverage, measured as gross or net debt to EBITDA, has fallen sharply since 2020 among speculative-grade firms.

Net debt is currently at 3.44x EBITDA in the third quarter of 2022 (shown in the chart below as a 10% trimmed mean) down from a pre-pandemic average above 4x. The improvement in net leverage ratios reflects the accumulation of free-cash flows. Although the lion share of excess free cash-flows is concentrated in resource-producing sectors (base metals, energy), most sectors recorded increases in the past two years. Accordingly, the aggregate ability to pay interest (or interest cover) is very elevated. All sub-sectors but transportation show above-average interest cover.

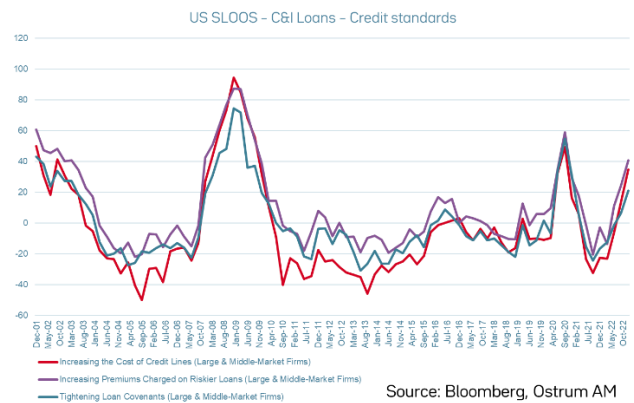
High yield bond issuance has been very low this year. Free cash-flows and little pressure from the debt maturity profile allowed investors to stay off primary markets as financial conditions took a turn for the worse. In the non-financial sectors, issuance between January and October 2022 is less than a quarter of the total for the same period in 2021 and 27% of the 2020 mark. Issuance from high yield technology names came to a standstill. Transportation, which is relatively less cash rich than other sectors still managed to borrow \$ 1.3 billion so far this year. In the financials' group, issuance has also been subpar in 2022.



The US high yield debt redemption calendar is still light through 2023 but will pick up significantly in 2024. In the chart below, we sum the amount outstanding of US-based issuers by maturity and rating category from BB+ to CCC+ and lower (the darker the red color, the better the rating). The BB+/BB/B- maturities will amount to \$ 22 billion in 2023 before rising to \$ 36 billion in 2024. For Bs, the total will rise from \$ 9 billion to \$ 15 billion. CCC+ and lower have maturities of around 20 billion in each of the next two years.



In sum, there is no immediate pressure for BB-B high yield borrowers, at least in 2023 but CCCs and down could face more headwind. The Fed's Senior Loan Officer Opinion Survey (SLOOS) hints at tighter credit standards for corporate borrowers in the loan market, which could weigh on high yield bond pricing in the markets. Banks are increasingly reluctant to extend credit to commercial and industrial firms. Most US banks reportedly charge higher premiums for riskier loans than last year and have tightened loan covenants whilst reducing the maximum size of credit lines. Bank loan rates have increased and there are signs of incipient credit rationing in parts of the loan markets as CLOs slow buying. As always, weaker borrowers will feel the pinch from Fed monetary tightening first.



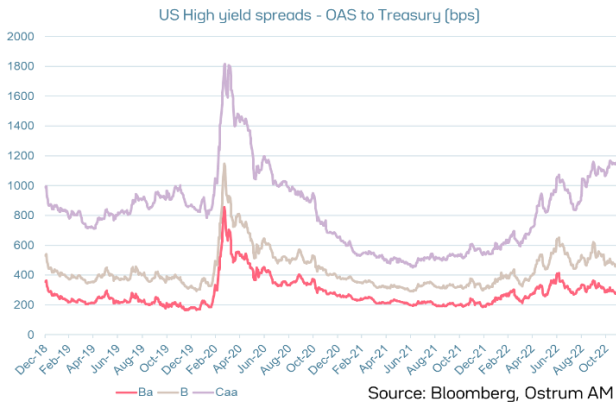
There could be additional supply from higher investment spending and possibly mergers and acquisitions (M&A), but it may be more relevant for the high-grade part of the credit market than high yield.

Poor performance for US high yield in 2022

In 2022, Fed tightening induced a sharp repricing of interest rates, and a homothetic widening in credit spreads across investment grade, mortgage-backed securities and high yield markets.

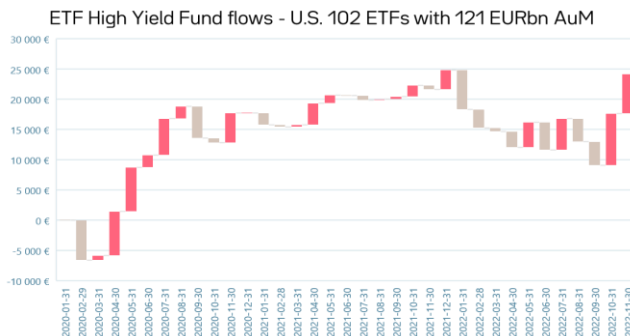
Total return on the broad US high yield index is -10.65% as of November 25th, 2022. YTD performance was even worse

at the end of September down 15%. US high yield spreads over Treasuries have risen more than 150 bps in 2022 to 435 pb at present. However, since the September quarter-end, BBs and Bs high yield bonds have rallied by 77 bps and 161 bps respectively. The highest ratings in the speculative-grade market are thus back in favor. On the contrary, as talk of a recession gained traction, spreads on the CCC-rated securities widened further to more than 1,140 bps. Again, the weaker credit may not pass the Fed tightening test. In any case, it is the role of corporate credit market to screen out bad credit. There has been similar stress on lower-rated loans of late.

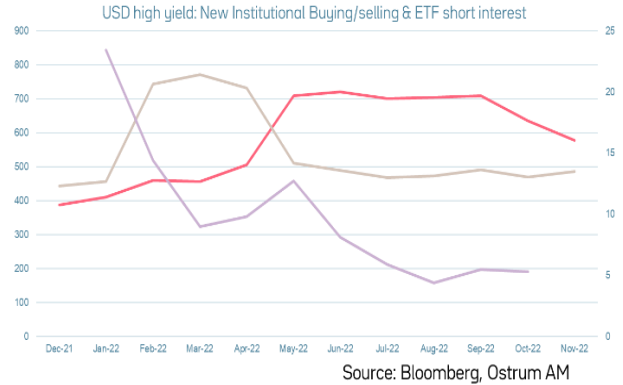


Strong high yield fund inflows in the past two months

Turning to investor demand for US high yield, positioning and flows have improved significantly in the second half of 2022. The Fed has now done much of its heavy lifting, which cleared the path for sentiment-led rally. The policy downshift to smaller rate hikes and fine-tuning has contributed to a reduction in volatility and foster risk-taking and carry investing. The high end of speculative-grade bond markets was well positioned to benefit from the sentiment rally.



The improved backdrop for carry sparked a sharp increase in net inflows of high yield ETF and mutual fund in the two months to November. Positioning measured by the short interest in high yield ETF shares has receded notably.



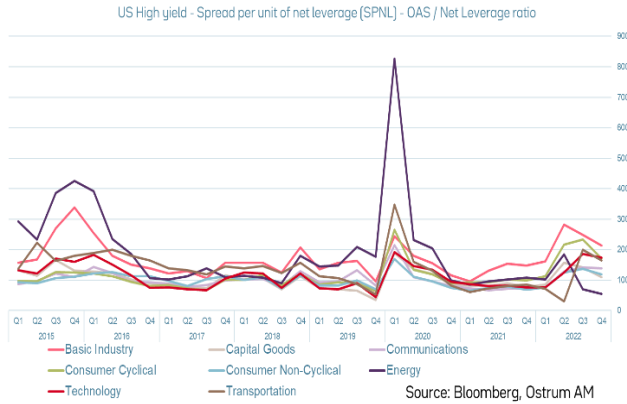
Digging into excess spreads

Besides flows, valuation has fostered inflows and played a key role in the high yield rally.

There are several ways to gauge valuations in high yield. Spreads must remunerate bondholders for a variety of risks. The expected loss from default (or equivalent credit events) is derived from a probability time a loss given default. The recovery rate is generally assumed to hover about 30%. Beyond default, there are other risks to consider. Migration risk will have some bearing on fair value given the exponential probability of default as bonds get downgraded by rating agencies to B, CCC, and lower. Liquidity risk is material and asymmetrical in high yield markets as the ability to sell in a bear market is much worse than in a bull market. Lastly, volatility risk is the main cross-market factor.

Our first approach is to project default rates for the CDX high yield universe of 100 names using Moody’s transition matrix to back out the portion of the spread linked solely to historical default risk. Implicitly, we assume that expected default, five years out, for each rating category is constant. As discussed earlier on, the recent weakening of bond covenants may have lowered the probability of failure to pay at the expense of potentially larger losses given default. Therefore, we could be overstating the probability of default and the recovery upon default over the years to come. Excess spread is a good measure of the ‘true’ risk premium in high yield bonds. For what it is worth, the current pricing of CDX high yield at 483 bps is enough to cover the expected ‘historical default’ conditional to the rating composition of the index. The excess spread or ‘true’ risk premium is about 191 bps assuming a recovery rate of 30%.

Our second simple approach is to consider high yield spread as a ratio of net leverage. Although maturity and interest cover (cost of debt) come into play, the spread to leverage metric should, by and large, remain constant over time. In other words, over the business cycle, spreads should rise as leverage increase to reflect higher financial risks.



Each unit of net leverage (net debt to EBITDA) is above the 2015-2021 average in all sectors but energy (where SPNL stands 146 bps below average). The premium on energy is below average due to the 2015 and 2020 oil crises, which led to very high spreads, depleted cash reserves and resulted in two waves of corporate defaults. The spread per unit leverage for the market is 119 bps at present using 3Q 2022 leverage data. This compares to highs of 360 during the pandemic (1Q 2020) and lows at 81 bps a year after. Hence, high yield valuations are not as stretched as in early 2021 before the Fed opted for a more restrictive stance. On a sector basis, consumer cyclicals (SPNL at 170 bps and 66 bps premium to average), technology (173 bps and 65 bps) and basic industry (213 bps and 49 bps) offer the most attractive spread pickups relative to their 2015-2021 average. Non-cyclical consumer names (119 bps and 22 bps), capital goods (110 bps and 9 bps) are more in line with their average.

Conclusion

In keeping with the risk-on rally, the US high yield market attracted strong fund inflows in the past two months even as the debate on a possible recession rages on in the US. Default rates always rise in a recession. Moody's calls for 7% default rate under their pessimistic scenario.

However, balance sheet strength (given low net leverage, high interest cover and free cash flows) may cap the increase in corporate defaults in the 12 months to come. Furthermore, attractive valuations should sustain investment flows to the asset class, although lower-rated names will feel the pinch from ongoing Fed tightening and emerging signs of tighter bank credit standards.

Axel Botte

• **Market review**

Financial markets ignore Powell

Hint at small 50bp hike in December sparks stock rally even if job market strength does not justify easier policy stance

Jerome Powell's communication, although without any real surprise, triggered an impressive knee-jerk reaction on US stock markets. The Fed only confirmed the 50 bp hike in December, already implied by the FOMC dot plot in September. The Nasdaq indeed shot up by 4.4% on Wednesday. After a year of sharp equity losses, the hope for a market rebound seems to distort the market narrative. The release of the November employment report, which turned out to be "too" strong poured cold water, at the end of the week, on the investors' fragile optimism built on expectations of Fed monetary easing out of thin air. The sharp bull steepening movement in US Treasury bond market reversed after the employment release. In the euro area, the decline in inflation is fueling demand for long-term bonds. German yields are below 2% for maturities beyond 2 years. The drop in volatility makes carry positions more attractive on credit, peripheral sovereign debt or even high yield. The dollar evolves in keeping with changing expectations on the trajectory of the Fed funds rate. The largely undervalued Japanese yen is benefiting from lower US rates, especially since a review of Japan's monetary policy is scheduled for December or January. The Japanese 10-year cap at 0.25% could be lifted.

The US economy seems to be slowing down as the ISM manufacturing index (49 in November) pointing to a drop in new orders. The labor market, however, remains rock solid. Private job creations stood at 221k last month. Public hirings remain around 40k last month as in October. The decline in the labor participation rate despite 10 million available jobs reflects the lasting constraints on potential output growth. The upward revision to average hourly wages is a surprise and FOMC members will likely pay attention to wage developments. Hourly wages increased by 5.1% over one year. This further confirms the assumption of continued consumer strength after the release, the day before, of robust household income data in October (+0.7% m). Moreover, signals of tightening credit conditions do not yet affect consumer loans. The pandemic has involved involuntary consumer deleveraging, which still offers room for maneuver to sustain growth in household spending.

The jobs report may complicate the task for the Fed, given the persistence of wage pressures and the sluggishness of the labor supply. A 50 bp Fed funds rate hike seems certain, but the Central bank is struggling to convince markets of the need for tighter policy. The easing of financial conditions in the past month seems premature or even counterproductive

in the fight against inflation. Lending conditions are nevertheless tightening in some parts of the credit markets. The limits to withdrawals from a Blackstone commercial real estate fund is a first sign of doubt over real estate valuations and the need to rebalance portfolios towards high-yielding USD cash. The fund outflows seem to be coming from Asia, where investors may have recorded substantial losses on Chinese real estate.

One can be surprised at the violence of the market's reactions to the surprise-less statements of central bankers. The reduction in the size of rate hikes, which had been expected for several months, is interpreted as a first step towards monetary easing. The Nasdaq soared, 2-year yields outperformed on the US yield curve and the dollar adjusted lower. Speculative accounts have clearly continued to reduce their equity underweight exposure. On the fixed income markets, institutional asset managers continue to accumulate long positions in T-note contracts. This trend may seem surprising given the significant negative carry on the US 10-year yields (3.60%) now below the Fed funds rate. Inflation-linked bonds performed well as breakeven inflation rates moved higher at the end of last week (+8 bp). The easing in real bond yields is impressive. Regarding German Bunds (1.87%), downward pressure on long-term yields appears unabated. French Treasury bond auctions were met with strong investor demand for maturities ranging from 2031 to 2052, despite the relatively narrow spreads on OATs. Likewise, Italian bonds remain well bid. The likely announcement of a quantitative tightening program for 2023 is nevertheless likely to curb both trends for lower bond yields and tighter spreads. Projected financing needs next year combined with the, albeit partial, reduction in ECB debt holdings should have an impact. Breakeven inflation rates are rising as in the United States. In Japan, the market is now knocking on the door of the BoJ, pushing the 10-year JGB yields beyond 0.25%. The announcement of a monetary policy review argues for some steepening of the Japanese curve (2-10 years).

The bullish backdrop persists in the euro credit market with a narrowing of spreads of 7bp last week, or even 9bp including subordinated financial debt. The high yield spread narrowed evenly across the different segments of the speculative-grade market. However, iTraxx crossover spreads continued tightening below 450 bp. The slightly positive balance of fund flows is enough to shrink spreads further in the absence of primary market issuance and amid still defensive positioning of most market participants.

The upside risk in equities remains amplified by short positioning and heightened sensitivity to any "good" news. European indices are up a bit despite falling real estate and banking stocks.

Axel Botte
Global strategist

● Main market indicators

G4 Government Bonds	05-Dec-22	1w k (bp)	1m (bp)	2022 (bp)
EUR Bunds 2y	2.12%	-7	-1	+274
EUR Bunds 10y	1.86%	-13	-44	+204
EUR Bunds 2s10s	-26.9bp	-6	-43	-70
USD Treasuries 2y	4.3%	-14	-36	+357
USD Treasuries 10y	3.54%	-14	-62	+203
USD Treasuries 2s10s	-77bp	-1	-26	-154
GBP Gilt 10y	3.09%	-4	-45	+212
JPY JGB 10y	0.26%	+0	+22	+15
€ Sovereign Spreads (10y)	05-Dec-22	1w k (bp)	1m (bp)	2022 (bp)
France	44.58bp	-3	-3	+7
Italy	186.91bp	-5	-7	+52
Spain	99.83bp	+0	-1	+25
Inflation Break-evens (10y)	05-Dec-22	1w k (bp)	1m (bp)	2022 (bp)
EUR 10y Inflation Swap	2.65%	+6	-5	+59
USD 10y Inflation Swap	2.7%	+17	-8	-7
GBP 10y Inflation Swap	3.84%	-22	-38	-33
EUR Credit Indices	05-Dec-22	1w k (bp)	1m (bp)	2022 (bp)
EUR Corporate Credit OAS	177bp	-5	-42	+82
EUR Agencies OAS	82bp	+3	-9	+33
EUR Securitized - Covered OAS	90bp	+4	-12	+44
EUR Pan-European High Yield OAS	523bp	+3	-78	+205
EUR/USD CDS Indices 5y	05-Dec-22	1w k (bp)	1m (bp)	2022 (bp)
iTraxx IG	89bp	-3	-20	+41
iTraxx Crossover	451bp	-11	-70	+209
CDX IG	78bp	-2	-11	+29
CDX High Yield	467bp	-9	-51	+174
Emerging Markets	05-Dec-22	1w k (bp)	1m (bp)	2022 (bp)
JPM EMBI Global Div. Spread	462bp	-17	-71	+94
Currencies	05-Dec-22	1w k (%)	1m (%)	2022 (%)
EUR/USD	\$1.057	2.253	5.519	-7.0
GBP/USD	\$1.229	2.726	6.696	-9.2
USD/JPY	JPY 135	2.592	8.262	-15.0
Commodity Futures	05-Dec-22	-1w k (\$)	-1m (\$)	2022 (%)
Crude Brent	\$88.1	\$4.3	-\$8.8	21.66
Gold	\$1 793.3	\$51.9	\$117.6	-1.96
Equity Market Indices	05-Dec-22	-1w k (%)	-1m (%)	2022 (%)
S&P 500	4 072	1.13	7.99	-14.6
EuroStoxx 50	3 965	0.75	7.50	-7.8
CAC 40	6 708	0.64	4.54	-6.2
Nikkei 225	27 820	-1.22	2.28	-3.4
Shanghai Composite	3 212	4.33	4.59	-11.8
VIX - Implied Volatility Index	20.10	-9.50	-18.13	16.7

Source: Bloomberg, Ostrum AM

Additional notes

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