GOAL POST

10 Questions on the roundtrip across assets around the Middle East war

1. **How much off the Middle East war 'risk off' shift has reversed?**
2. **Are sentiment and positioning back to bullish levels?**
3. **How have markets repriced growth and rate risks?**
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5. **How much have equity valuations reset and where the most?**
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8. **Do you still see value in allocations to real assets?**
9. **How would you carry on across assets now?**
10. **What are your preferred up- and downside tail hedges?**

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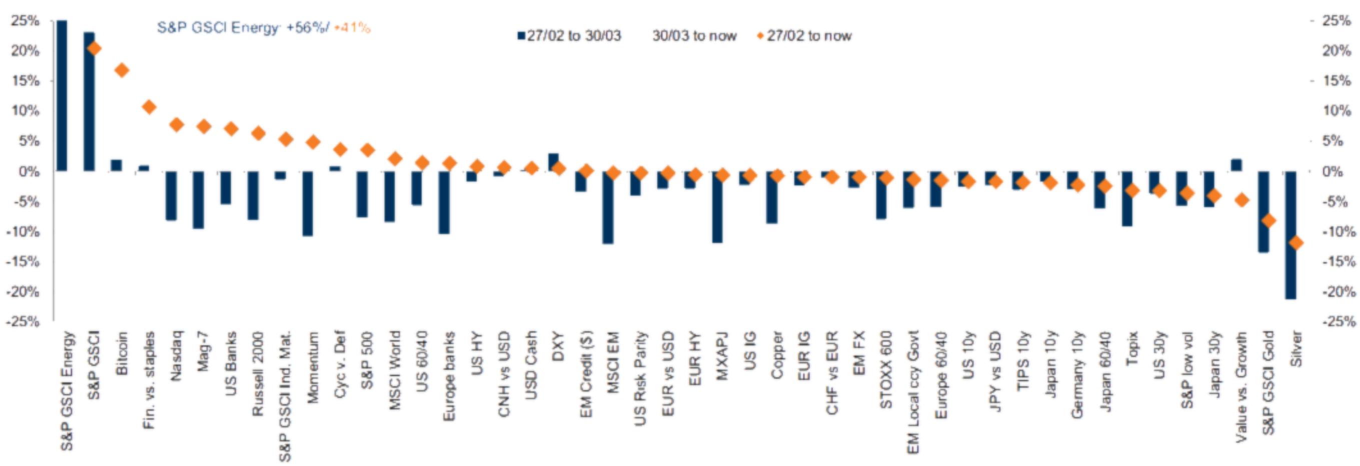
10 Questions on the roundtrip across assets around the Middle East war

(1) How much off the Middle East war ‘risk off’ shift has reversed?

Most of it — global equity indices have recovered particularly sharply since April. Energy prices have declined, yet Brent and TTF gas remain above pre-war levels, and there has been notable variation in relief across assets. Bonds lagged with markets anticipating a lingering rate shock, particularly in Europe — with the announcement of the re-opening of the Strait of Hormuz they retraced more but are trading closely with energy prices. US equities led by Tech have recovered more strongly and are well above pre-war levels — this reflects strong earnings YTD but also the fact that they have underperformed at the start of the year due to AI disruption and being longer duration they suffered more from higher rates. Russell 2000 has also recovered strongly but Asia/EM are still leading based on YTD performance. Both European and US banks have also recovered strongly. Japanese bonds, Gold and Silver have been the worst performing assets in the roundtrip — similarly low vol stocks and value vs. growth have underperformed with less exposure to Tech.

Exhibit 1: With hopes for an end of the Middle East war the performance across assets has broadly reversed since the start of April

Total return performance

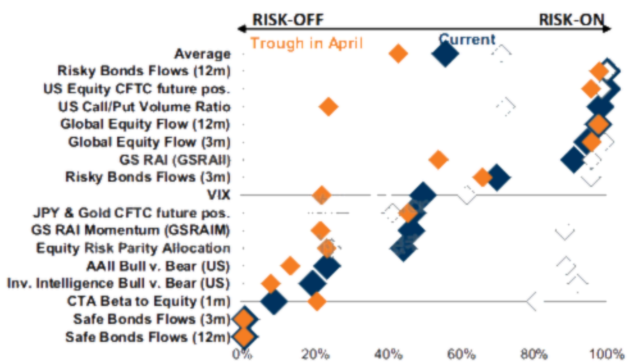


Source: Datastream, Haver Analytics, Goldman Sachs Global Investment Research

(2) Are sentiment and positioning back to bullish levels?

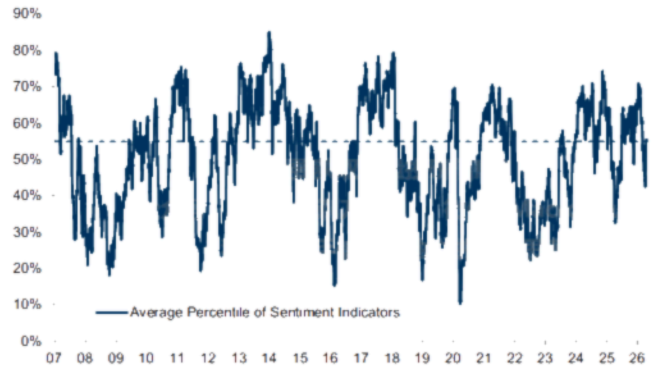
Sentiment and positioning have picked up although it has been a mixed picture across indicators, in part because some of the data is lagging but also as not all investors have de-risked aggressively (Exhibit 2). Our aggregate positioning and sentiment indicator dropped around the Middle East war from the elevated levels at the start of the year (Exhibit 3). The largest positioning reversals have been via option markets with large increases in put/call ratios as investors hedged geopolitical risks and a recent shift to upside hedging. Also re-risking from systematic strategies like risk parity and CTAs and macro short covering helps explain the speed and strength of the recovery despite continued uncertainty on the Middle East war and elevated energy prices. Since April our aggregate positioning and sentiment indicator has picked up driven mostly by our Risk Appetite Indicator (RAI), systematic investors, options positioning and sentiment surveys — fund flows, futures positioning as well as flows into safe bonds remained strong throughout the Middle East war.

Exhibit 2: Percentile of sentiment indicators
Data since 2007



Source: Datastream, Haver Analytics, EPFR, Goldman Sachs Global Investment Research

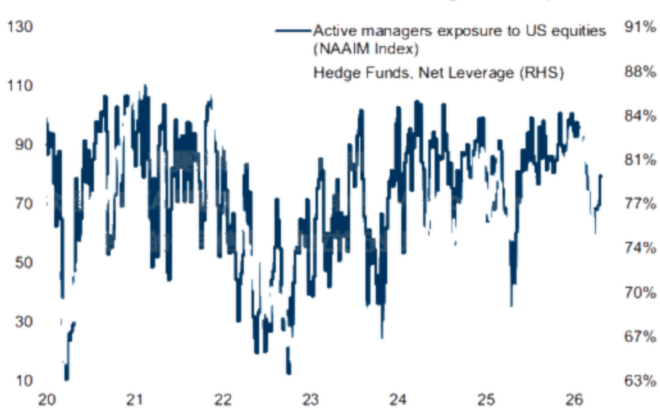
Exhibit 3: Average percentile of sentiment indicators
Data since 2007



Source: Datastream, Haver Analytics, EPFR, Goldman Sachs Global Investment Research

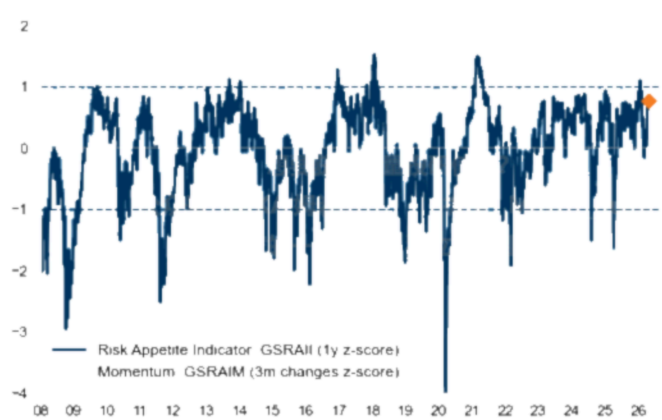
There was also a large de-risking in hedge funds (Exhibit 4) — net leverage declined sharply due to pressure on consensus trades in short-dated rates, the Dollar and carry trades but also significant style and sector rotations within equities. Although hedge fund net leverage has increased since April, it has trailed the broader recovery, suggesting there is further potential for re-risking. On the flipside, after relatively modest declines, our RAI has already rebounded sharply (Exhibit 5). As we wrote before, while very negative RAI levels (near -2) are a contrarian bullish signal the opposite is true at very positive levels, which is more of a momentum signal. RAI levels above 1 often indicate strong macro conditions, which take time to deteriorate and anchor investor positioning. The 'Goldilocks' backdrop coming into the year with tailwinds from AI does at least in part explain the resilience of sentiment and positioning more broadly — but the fast recovery to similar levels limits potential for a continued pick-up of risk appetite.

Exhibit 4: Hedge fund net exposure declined sharply and has started to recover
NAAIM Index for active managers, aggregated data from Goldman Sachs Prime Services for net leverage (excl. options)



Source: Datastream, National Association of Active Investment Managers, Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

Exhibit 5: Our Risk Appetite indicator has rebounded sharply again

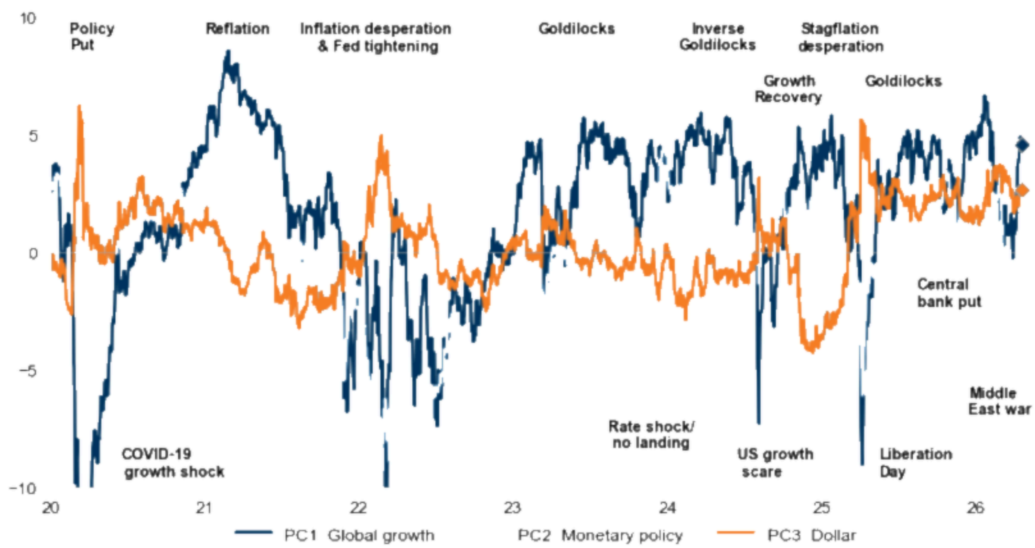


Source: Goldman Sachs Global Investment Research

(3) How have markets repriced growth and rate risks?

Throughout the Middle East war, markets have mostly priced a rate shock but relatively limited growth risks (Exhibit 6). Based on our RAI principal components, which split the RAI into its main drivers, markets have now faded most of their growth concerns but the rate shock has lingered for longer, with some further relief after the announcement of the re-opening of the Strait of Hormuz. Growth pricing has generally been more resilient compared to the energy shock in 2022 — RAI PC1 ('Global growth') has not turned negative and is already back at pre-war levels. Investors appear willing to look through potential near-term weakness on growth due to the energy shock. On the flipside, only roughly half of the rates shock has unwound so far — RAI PC2 ('Monetary policy') remains at negative levels and has been more linked to still elevated energy prices.

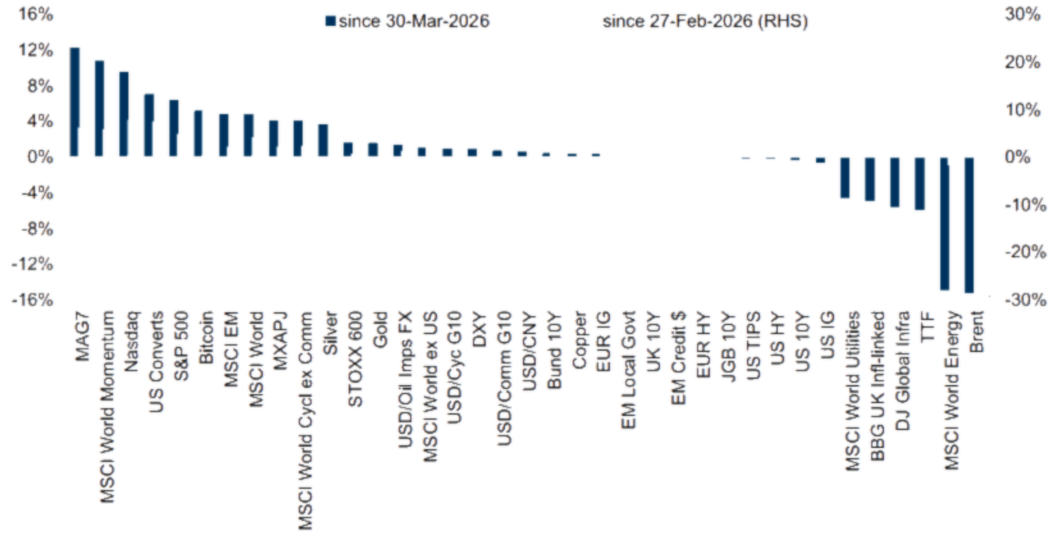
Exhibit 6: While growth pricing has broadly recovered the declines from the Middle East war, rates pricing has not
RAI principal components



Source: Goldman Sachs Global Investment Research

Benchmarking cross-asset performance based on their betas to the RAI principal components shows that equities have recovered somewhat more since March 30th, led by US equities and Tech stocks but also Asia/EM - European stocks have lagged reflecting potential for more lingering headwinds (Exhibit 7). Credit has trailed equities with less exposure to AI — only convertibles, benefiting from their equity-linked upside, have outperformed their betas. Energy stocks have unsurprisingly underperformed their betas due to the sharply decline of oil prices. Infrastructure stocks, utilities and TIPS have also underperformed in the recovery after outperforming before. On a cumulative basis, since the start of the Middle East war on February 27th the main dislocations are Gold and Silver, which have lagged — Bitcoin has also outperformed, in part due to the sharp underperformance at the start of the year. Also, the Dollar has been somewhat stronger, reflecting terms of trade tailwinds from higher energy prices.

Exhibit 7: Actual minus RAI PCs beta-implied return since MSCI World peak and trough
Betas estimated over the last 5 years



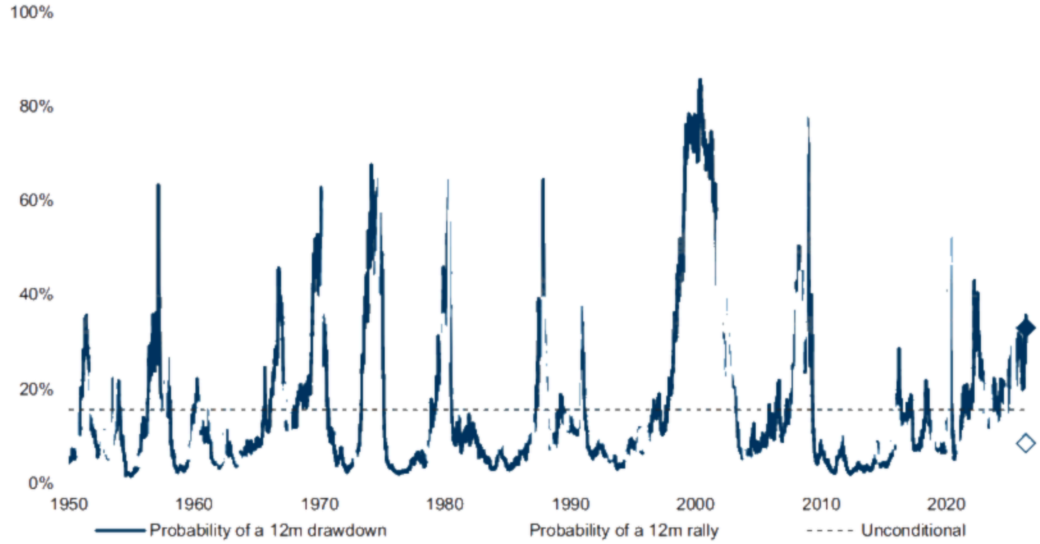
Source: Datastream, Haver Analytics, Bloomberg, Goldman Sachs Global Investment Research

(4) Is there risk of a(nother) equity drawdown or sharp rally?

Based on our equity asymmetry framework the risk of another equity drawdown remains elevated and the potential for a rally remains low, indicating a poor asymmetry to add risk (Exhibit 8). As we highlighted in February, equity drawdown risk was elevated ahead of the Middle East war mostly due to elevated equity valuations, which is typical more late cycle. However, a favorable business cycle backdrop at the time helped anchor equity drawdown risk. Due to the lingering energy shock from the Middle East war, the business cycle outlook has now deteriorated, which makes fading drawdown risk more difficult, especially with valuations rebounding. There are usually three factors that point to better asymmetry after an equity drawdown: (1) a major valuation and positioning reset, (2) a second derivative improvement in macro momentum or (3) tail risks around the primary driver of the crisis are moderating.

Exhibit 8: Equity asymmetry is still relatively poor after the rally

Probability of 12-month S&P 500 >20% drawdown/ >35% rally based on multi-variate logit model (orange/ light grey shading = S&P 500 subsequent drawdown >-20%/ rally >+35%)

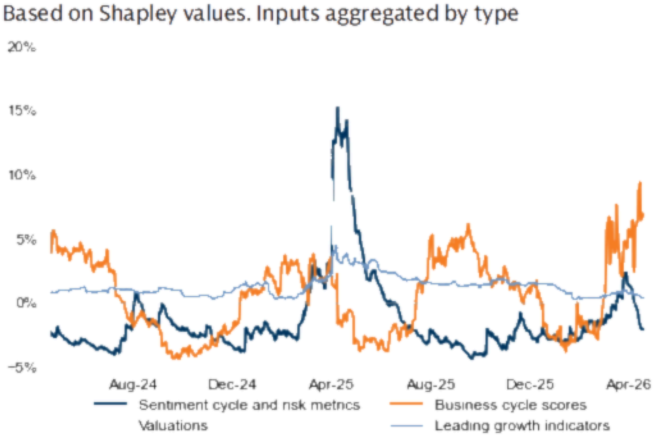


Source: Haver Analytics, Datastream, Goldman Sachs Global Investment Research

The valuation and positioning reset following the start of Middle East war was only moderate - our Risk Appetite Indicator did not turn very negative and the equity drawdown was shallow with valuations mainly declining due to resilient earnings growth. Exhibit 9 shows that the downside risk driven by valuations has picked up again while the business cycle has turned less friendly. It might be too early to expect a second derivative improvement in macro momentum — our economists have shifted to a worse global growth/inflation mix with less monetary policy easing, which will likely show in the data in coming weeks. The clearest driver of relief has been the actual de-escalation in the conflict and the reversal in energy prices, which has driven a material volatility reset (sentiment and risk cycle metrics have improved) — of course this will only provide lasting support for risky assets if the war ends. Exhibit 10 shows that option markets have started to fade both extreme tails for oil but importantly the risk of a sharp increase has peaked.

Exhibit 9: Contribution to the probability of a drawdown >20% in 12m

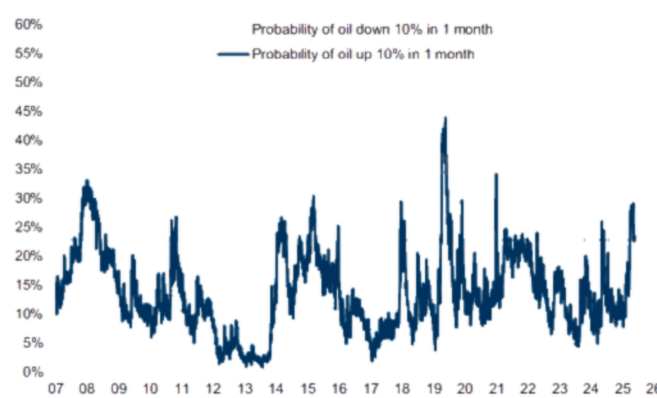
Based on Shapley values. Inputs aggregated by type



Source: Haver Analytics, Datastream, Goldman Sachs Global Investment Research

Exhibit 10: Tail risk around oil prices has moderated with near-term upside risk closely to normal levels

Option-implied probability based on USO ETF option pricing



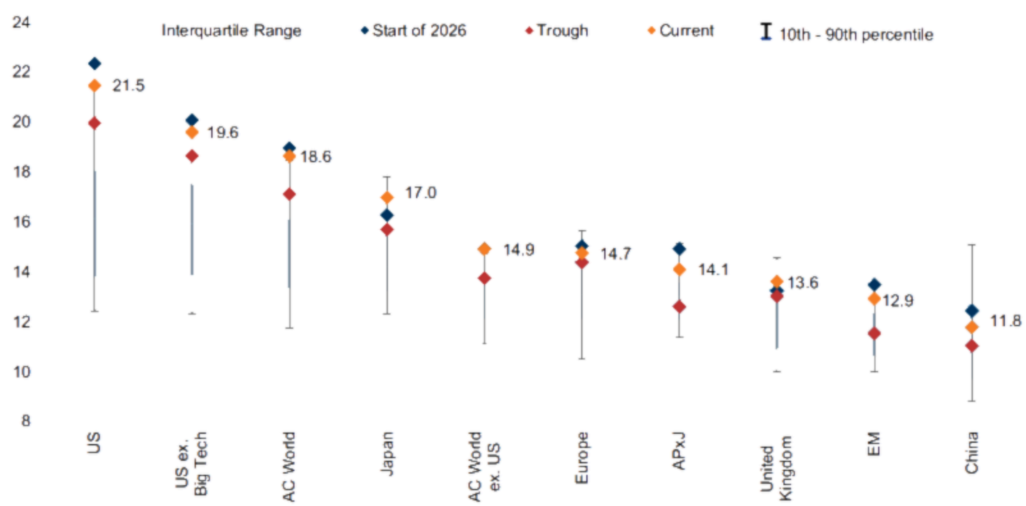
Source: Bloomberg, Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

(5) How much have equity valuations reset and where the most?

Equity valuations have declined for most markets YTD after being near the top decile at the start of the year (Exhibit 11). Elevated valuations are not unusual in a late-cycle backdrop with low unemployment rates and high profit margins and as we wrote they were further supported by the 'Goldilocks' backdrop coming into the year. Equity valuations declined across markets YTD — while the equity drawdown was not particularly deep, the de-rating was larger as earnings growth and revisions were resilient. In stagflation periods, at least as long as a recession is avoided and nominal growth remains strong, earnings tend not to decline much — in 2022 earnings and dividends were nearly flat. While equities are near their all-time highs in most markets, US and Asia/EM valuations are still below levels from the start of the year due to the earnings growth that accrued, boosted by buybacks and AI capex - on the flipside valuations de-rated less in Europe and Japan.

Exhibit 11: Equity valuations have reset but started to recover, especially in Europe and Japan

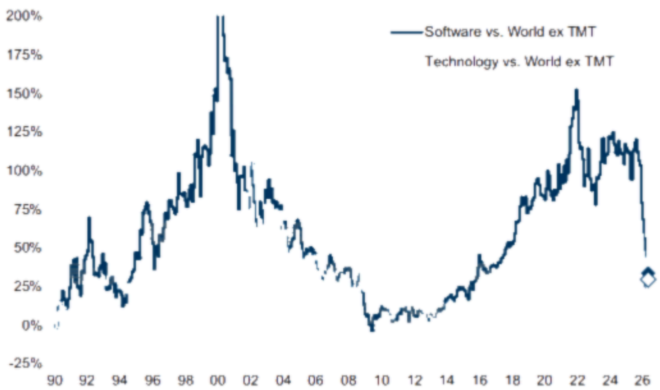
12m fwd P/E multiple. MSCI Regions, STOXX 600 for Europe and S&P 500 for USA. Data since 2003



Source: Factset, Goldman Sachs Global Investment Research

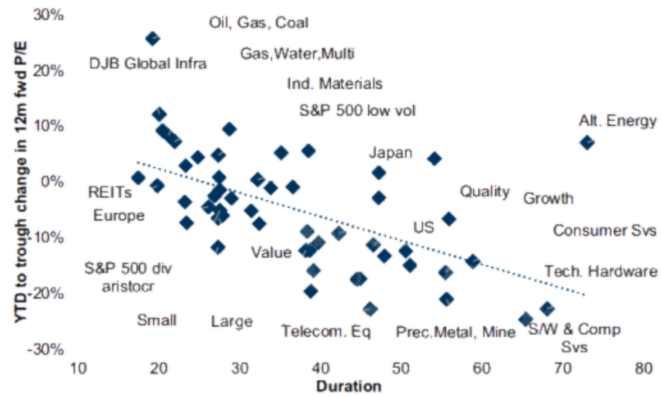
Valuations for software and the broader tech sector have de-rated particularly strongly YTD (Exhibit 12). As our global strategy team highlighted, this created a tactical value opportunity in Tech and US stocks. The energy price shock triggered more of a rate shock than a growth shock. As a result, as we recently wrote, valuations for longer-duration growth stocks that extrapolate growth de-rated materially vs. shorter-duration value and high dividend yield stocks, which are valued on near-term cash flows (Exhibit 13). In addition, the focus on AI disruption YTD has weighed more on capital-light, higher-valued US growth stocks as markets discount their long-term growth prospects more — those often pay very little in dividends. The rates relief coupled with continued tailwinds from AI capex has now boosted the reversal of the Tech sector underperformance.

Exhibit 12: Software and tech stocks de-rated materially before valuations stabilised recently
Premium/(Discount) on 12m forward P/E



Source: Datastream, Goldman Sachs Global Investment Research

Exhibit 13: Valuation de-rating YTD-to-trough has been more pronounced among higher-duration sectors, regions and styles



Source: Datastream, Bloomberg, Goldman Sachs Global Investment Research

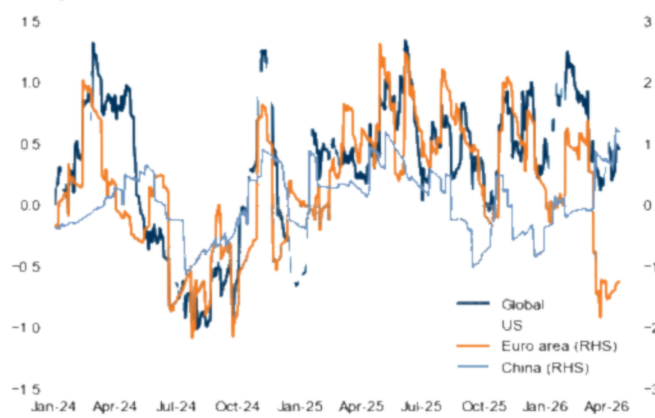
(6) Are growth risks now underpriced across assets?

Markets have started to look beyond negative near-term growth impacts from the Middle East war, which increases the risk of disappointments. Most of this year global growth pricing across assets (RAI PC1) traded closely with macro surprises but in the recent recovery it has shifted ahead of the data (Exhibit 14). Macro surprises have been positive, at least outside of Europe, but might start to turn more negative. The Q1 earnings seasons will also be important — as our US strategy team highlighted, S&P 500 earnings should continue to grow at a solid rate, supported by Tech and AI capex, but outside of tech, the key question this quarter is the degree to which elevated energy prices and supply chain disruption are likely to weigh on corporate profits, especially via margins. Our European strategy team is focused on similar disruptions and exposure to Asia and EM considering high sales exposure to the region and specific negative impacts from the Strait of Hormuz closure.

Exhibit 14: PC1: Global growth factor vs. Global MAP Score

Source: Datastream, Goldman Sachs Global Investment Research

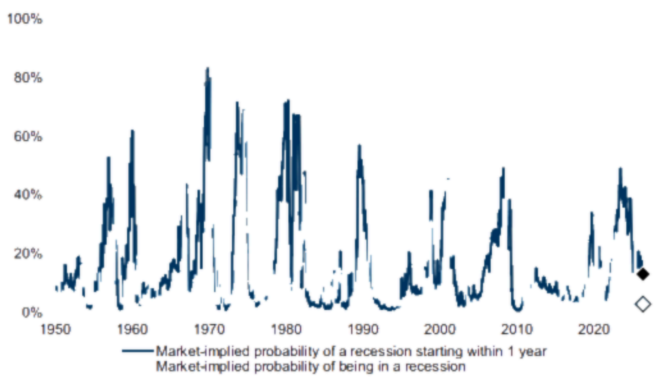
Exhibit 15: Macro surprises have been positive outside of Europe



Source: Bloomberg, Goldman Sachs Global Investment Research

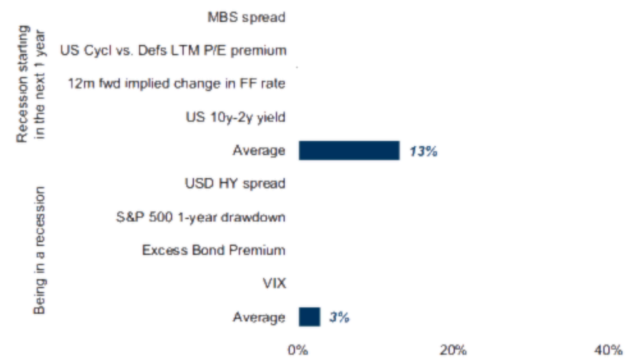
However, while more mixed growth data will likely drive increased dispersion underneath the index level, it might not create a broad 'risk off' across assets. This would likely require concerns of a US recession, for example due to a renewed escalation of the conflict. Markets have faded both latent and imminent recession risk — only a relatively flat yield curve indicates somewhat elevated recession risk due to the lingering rate shock (Exhibit 16). While our economists broadly lowered their GDP growth forecasts while adding to inflation forecasts and expect less dovish central banks, the recent easing of financial conditions coupled with a relatively resilient private sector so far should limit recession risk — and further de-escalation of the conflict with easing energy prices into 2H would further help stabilise growth.

Exhibit 16: Market-implied US recession probability
Average of univariate logit models on the right. Orange shade: NBER recession



Source: Haver Analytics, Datastream, Worldscope, Goldman Sachs Global Investment Research

Exhibit 17: Market-implied US recession probability by indicator
Univariate logit models. Maximum history since 1950

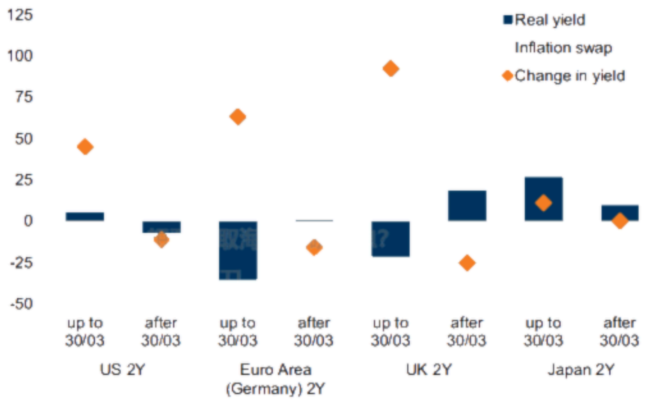


Source: Haver Analytics, Datastream, Worldscope, Goldman Sachs Global Investment Research

(7) Will the relief rally in bonds continue and boost 60/40 portfolios?

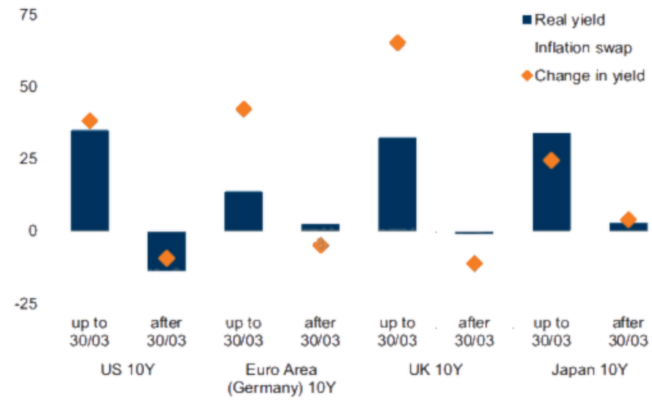
After lagging initially, bonds have joined the relief rally since the news on the reopening of the Strait of Hormuz — a continued normalisation of energy prices could drive more relief. Similar as during the initial rate shock, frontend yields have been in the driver's seat and the curve has shifted from flattening to steepening in the reversal. Especially in Europe, frontend yields declined sharply, led by real yields, as markets faded the prospect of rate hikes following the sharp declines in energy prices — some of this rates rally has unwound early this week (Exhibit 18). The reversal of short-dated inflation swaps has been slower due to lingering inflationary pressures. While 10-year bond yields also declined, real yields have been more sticky, especially in Europe — also European breakeven inflation has not declined as much. This suggests scope for more potential rates relief in the case of further declines in energy prices — our rates strategy team's yield forecasts remain somewhat below forwards.

Exhibit 18: Inflation pricing was the main driver through the trough and relief in Europe
Change in yields through the MSCI World trough and after



Source: Bloomberg, Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

Exhibit 19: Longer-dated real yields have been more sticky
Change in yields through the MSCI World trough and after



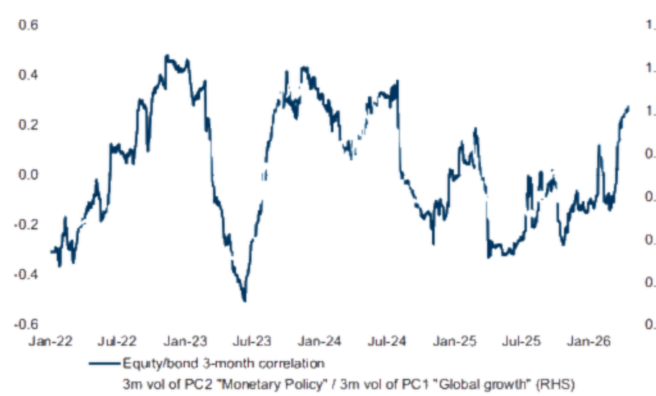
Source: Bloomberg, Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

Benchmarking RAI PC2 ('Monetary policy') to US 10-year real yields points to potential for more relief, in contrast to RAI PC1 ('Global growth'), which is already near YTD highs (Exhibit 20). Similarly as in 2024, there is potential for an 'inverse Goldilocks' backdrop in the coming weeks, where growth optimism is more rangebound but there is continued rates relief in case of normalising energy prices (rather than better growth with anchored inflation like in the traditional 'Goldilocks' backdrop). This would likely result in more positive equity/bond correlations with RAI PC2 being the more important cross-asset driver (Exhibit 21). Similar as in 2024, 60/40 portfolios should do well in with RAI PC2 rising - however, RAI PC2 did not decline as much as in 2022-23, limiting the return potential for 60/40 portfolios compared to then.

Exhibit 20: Monetary policy risks might be faded further with the Middle East war ending
PC2: Monetary policy factor vs. US 10-year TIPS yield

Source: Datastream, Goldman Sachs Global Investment Research

Exhibit 21: Equity/bond correlations might remain positive for longer as rates relief continues

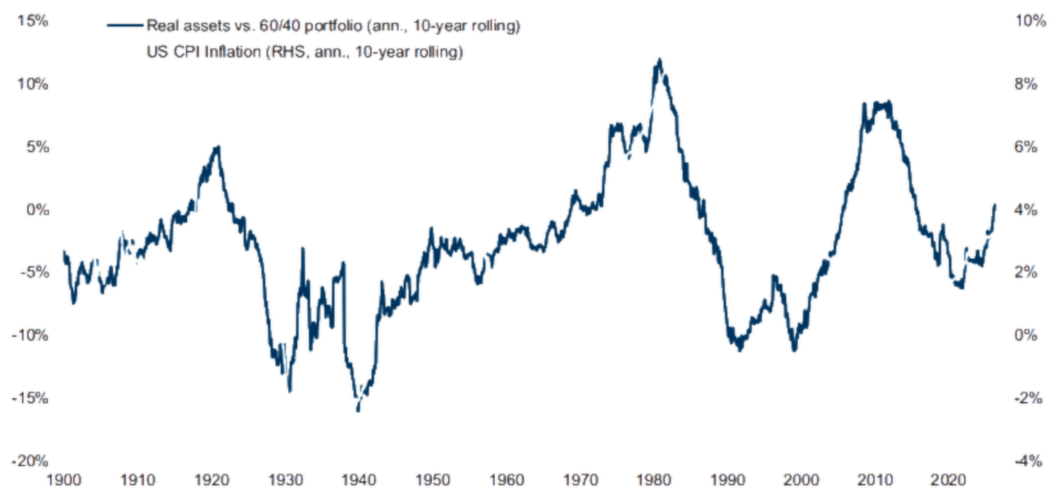


Source: Datastream, Haver Analytics, Goldman Sachs Global Investment Research

(8) Do you still see value in allocations to real assets?

Yes, we like a barbell strategy of structural growth opportunities, including tech, and more capital-heavy, real assets for the rest of the year. This captures a combination of continues tailwinds from AI innovation but also protects both from inflation and AI disruption risks. As we wrote in our Strategic Balanced Bear research, to diversify structural regime risks, we believe investors need to capture tailwinds from innovation while balancing risk from inflation. And global benchmarked investor portfolios, after the strong performance of financial assets post the GFC (boosted by Tech), are more exposed to innovation but do not have enough protection from inflation. Since the COVID-19 crisis real assets have started to outperform vs. a 60/40 portfolio — while we do not expect large increases in inflation like around WW1, WW2 and the 1970s, the recent energy shock is a reminder that inflation volatility might be higher going forward.

Exhibit 22: Real assets outperformed a 60/40 portfolio over longer horizons with higher inflation
Total return performance

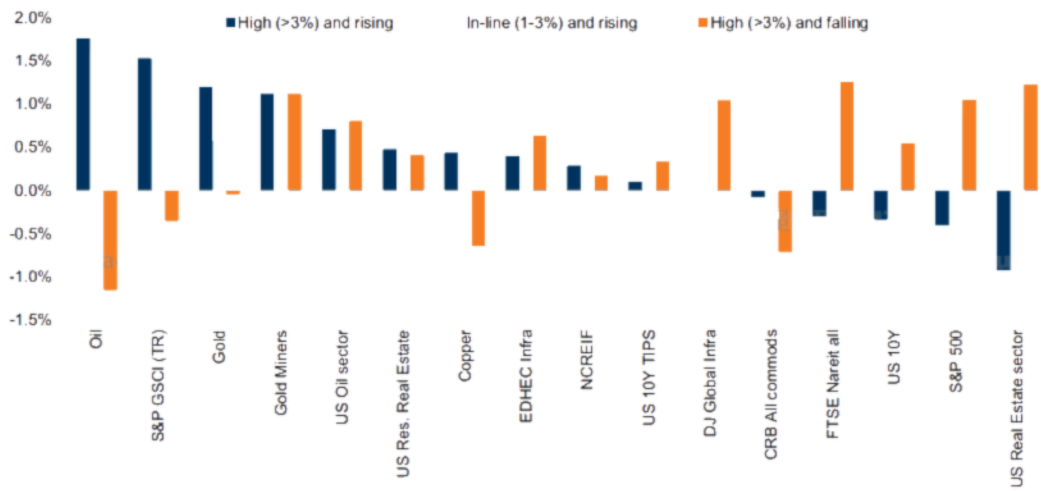


Note: Real assets is an average of S&P GSCI/ broad commodities index (TR) since 1900, Gold since 1939, FTSE NAREIT since 1970, S&P Global Infrastructure since 2000. Kenneth French sector portfolios before.

Source: Datastream, Bloomberg, Goldman Sachs Global Investment Research

With higher inflation, real assets can offer both an opportunity for uncorrelated returns and competitive real return potential. However, the impact of inflation on assets depends on its underlying cause (Exhibit 23). When inflation is demand-driven, companies with pricing power tend to benefit, while cost-push inflation usually favours commodities or businesses with lower labour costs. Concerns about currency debasement have led investors to seek stores of value like Gold or Bitcoin — hawkish central banks have eased those concerns during the Middle East war but more rates relief is supportive. Asset performance also hinges on inflation momentum and on the central bank response. Commodities perform best during periods of high and rising inflation, even if central banks turn more hawkish, but fare less well when inflation declines. On the flipside, real estate and infrastructure tend to actually perform best as inflation is falling from elevated levels or if central banks are not shifting more hawkish. With the Middle East war appearing to de-escalate and central bank pricing shifting less hawkish we would expect real estate, infrastructure and Gold to perform better.

Exhibit 23: Commodities have tended to outperform in periods of high and rising inflation but with falling inflation real estate and infrastructure stocks have tended to perform better
Average monthly, real return (data since 1950, inflation based on US CPI)



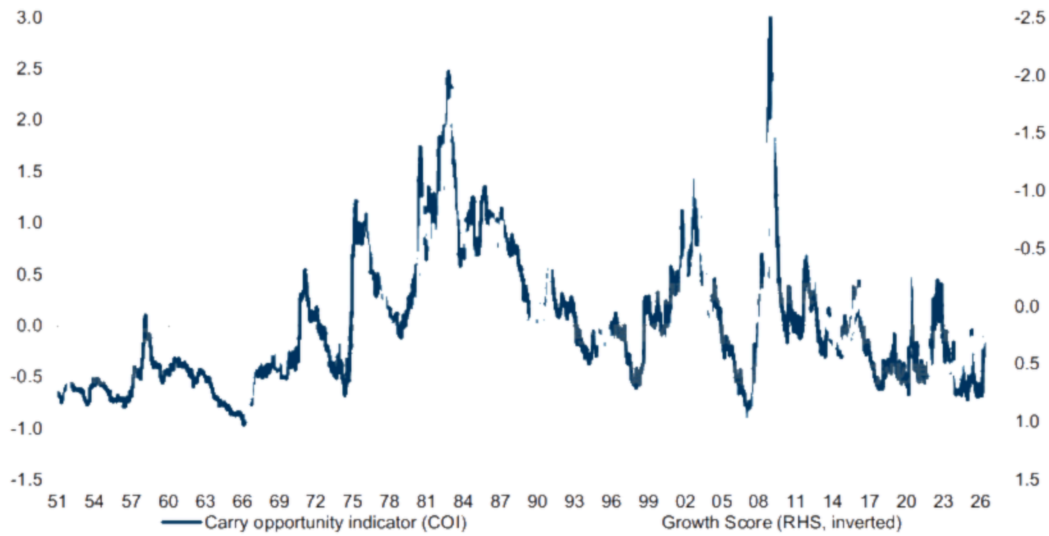
Note: The FTSE NAREIT All index tracks all US REITs since 1972; before that, we use the Kenneth French real estate sector. We construct the Residential Real Estate index using Case/Shiller HPI from 1987 (FHFA before) and an estimate of rental yield before transaction cost (Zillow since 2016, macrohistory database before 2016). The NCREIF index (NPI) is a quarterly, unleveraged total return for private commercial real estate properties held for investment purposes only. The Dow Jones (DJ) Brookfield Infrastructure index tracks listed companies since 2012 - before we aggregate sectors from Worldscope (1973-2012) and Kenneth French (1926-73). The EDHEC Infrastructure 300 index replicates broad market exposure to unlisted infrastructure investments gross of fees or other costs - the index is calculated monthly as total return index and adjusted annually.

Source: Datastream, Haver Analytics, Kenneth French, Goldman Sachs Global Investment Research

(9) How would you carry on across assets now?

While the environment might become more carry-friendly we would remain selective — we like selective vol selling strategies and EM carry but remain somewhat cautious on credit, especially in Europe. As we wrote coming into the year the carry opportunity set has been very constrained. Since the start of the Middle East war, our Carry Opportunity Indicator (COI), which includes EM/sovereign/corporate credit, FX, equity volatility and yield curve, has picked up and is now in-line with the growth score (Exhibit 24). In fact, it nearly increased as much as during Liberation day, which is due to a combination of the volatility spike and the sharp backwardation shift in energy commodity curves. The latter makes commodity carry strategies particularly attractive to fade the Middle East war but also get potentially less correlated to carry returns in the coming months.

Exhibit 24: Carry risk premia have increased and are closer to the business cycle position

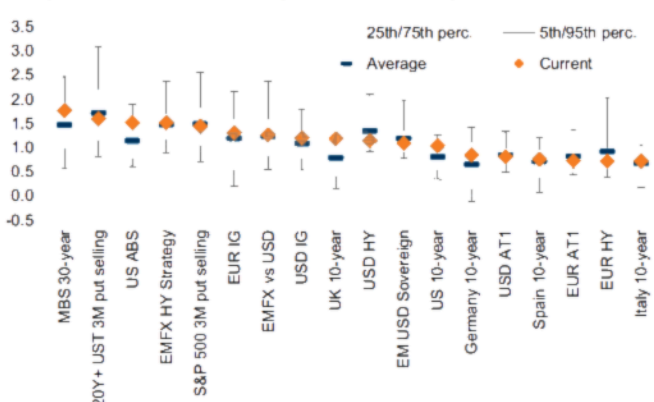


Source: Datastream, Haver Analytics, Goldman Sachs Global Investment Research

Exhibit 25 shows the ex ante carry divided by the left-tail risk for a lot of the traditional carry trades across assets. Adjusted for risk, credit offers little carry pick-up compared with government bonds — tight spreads limit upside but there is material downside in the event of a recession. Credit outperformed on a risk-adjusted basis during the Middle East war, helped by rising yields and illiquidity, but they lagged in the recent reversal — in a continued relief scenario we would expect equities to outperform, helped by the valuation reset. We remain less optimistic on EUR credit with a weaker growth backdrop. EM assets broadly benefit from a combination of rates and energy relief and weaker Dollar — selective EM FX carry strategies appear more attractive but it is important to control for terms of trade shocks; our EM team likes BRL, HUF and ZAR in the event of further de-escalation of the conflict. We also still like EM equity and expect North Asia, EM Europe, and LatAM to continue leading the relief rally while oil-importing pockets of ASEAN and India might lag.

Exhibit 25: Structured products, vol selling and EM FX offer the highest carry

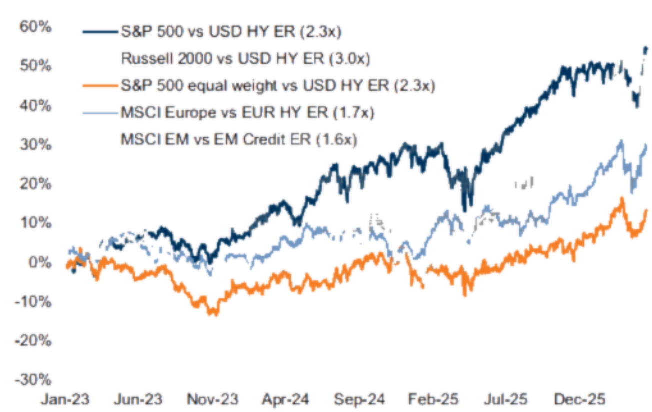
Carry / 5% CVaR. CVaR computed on monthly returns since 2000



Source: Bloomberg, Datastream, Haver Analytics, Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

Exhibit 26: Equity has outperformed credit in the recovery

Beta-adjusted performance for equity vs. credit

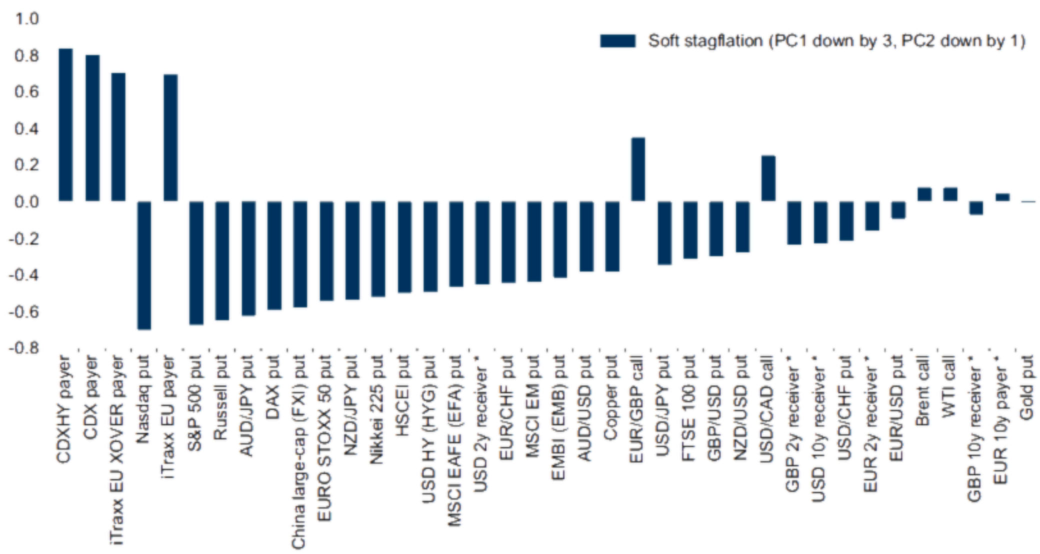


Source: Datastream, Haver Analytics, Goldman Sachs Global Investment Research

(10) What are your preferred up- and downside tail hedges?

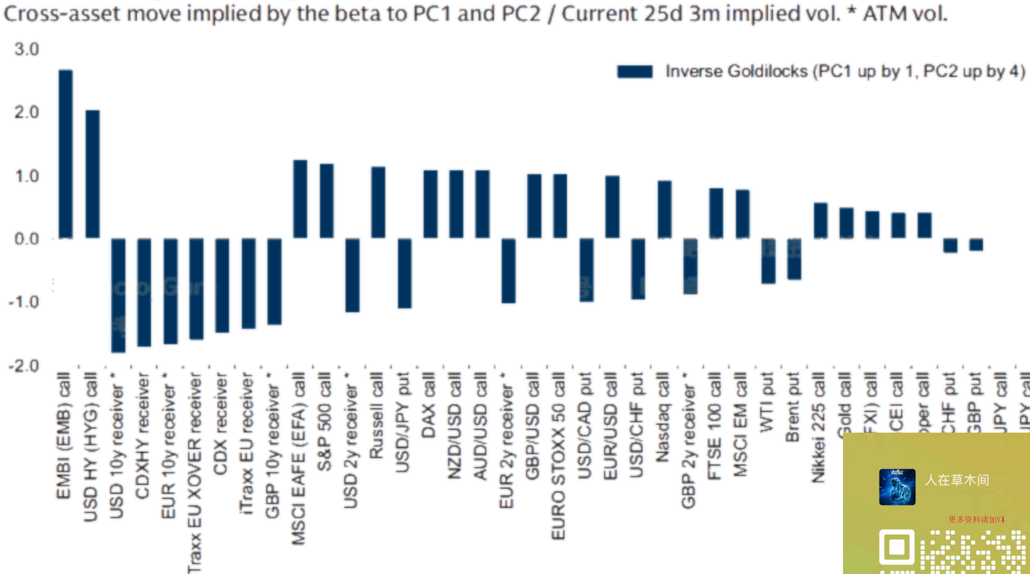
There has been a material vol reset with hopes of a lasting Middle East war deescalation — as a result tail hedges look more attractive. Exhibit 27 shows potential hedges for a period of renewed stagflation concerns with RAI PC1 dropping closer to zero and limited rates relief — in this case credit hedges screen well, and we also like European equity puts (US and China might be supported by Tech tailwinds) as well as puts on selective cyclical FX like AUD/JPY and NZD/JPY. Exhibit 28 shows right tail hedges in case of an 'inverse Goldilocks' scenarios as mentioned earlier — this is in favor of carry trades and receiving rates. We would avoid credit upside trades as credit spreads have not widened much and equity has more potential tailwinds — we like S&P 500 upside and also receiving rates, especially in Europe.

Exhibit 27: Potential hedges for a soft stagflation scenario
Cross-asset move implied by the beta to PC1 and PC2 / Current 25d 3m implied vol. * ATM vol.



Source: Bloomberg, Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

Exhibit 28: Right-tail hedges for potential de-escalation in the Middle East war
Cross-asset move implied by the beta to PC1 and PC2 / Current 25d 3m implied vol. * ATM vol.



Source: Bloomberg, Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

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