J.P.Morgan

The J.P. Morgan View – Global Asset Allocation

CPI release is a positive, but recession risks remain high

Cross-Asset Strategy: The October US CPI release delivered the largest downward inflation surprise since the start of the pandemic, raising the likelihood of a soft landing scenario. However, with a Fed Funds rate close to 5%, a recession will be difficult to avoid unless the Fed more meaningfully pivots. As such, our optimism is tempered by the still elevated recession risks, and risk that the October CPI data proves anomalous and/or fails to reduce central bankers' eagerness to push policy into more restrictive territory. While we remain OW equities and long-term positive, we use the sharp rally from last week as an opportunity to moderately reduce our equity OW given the above risks.

With the probability of a soft landing rising but recession risks still uncomfortably high, we adjust our model portfolio by: 1) exiting our long dollar bias; 2) moving our previous EM Sovereigns UW back to neutral; 3) adding exposure to corporate bonds, focused on HY, to close our credit UW; 4) trimming our equity OW given elevated recession risks and the strong market rally last week; and 5) reversing our previous OW in US vs European HG credit as the latter offers a larger risk premium. We also remain OW commodities given potential tailwinds from easing COVID restrictions in China, and as a hedge for geopolitical risks and inflation.

JPM Clients' View: Click here to take this week's survey. This week we poll investors on CPI, crypto markets and USD, in addition to our running sentiment questions. Our last survey results indicated: (1) equity exposure/sentiment is ~44th percentile on average; (2) clients were evenly split on whether to increase/decrease equity exposure, while 73% plan to increase bond duration near term; (3) respondents saw a peak Fed Funds rate of 5.3% on average, and the median expected the last hike of the cycle in 2Q23; (4) the largest number (28%) expected cash to be the best performing asset class over the rest of the year, followed by commodities and equities (22% each); (5) a large majority (83%) aren't increasing their allocation to LatAm despite its recent outperformance.

Asset Allocation

GAA Long-only portfolio allocation

Major Asset Classes	Active Weights	Prior Month	Δ	UW | OW
Equities	6%	8%	↓	
Govt. Bonds	-8%	-8%		
Corp. Bonds	-4%	-6%	↑	
Commodities	8%	8%		
Cash	-2%	-2%		

Source: J.P. Morgan.

Global Markets Strategy

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Cross Asset Strategy

Asset Allocation

Inflation has been the key downside driver for Equities, and the inflation tide turning may offer relief to equity multiples, although 2023 may continue to be challenging, assuming central bank policies remain restrictive. International equities appear more favorable with multiples hovering near recessionary troughs, so we do not see further downside based on P/E multiple dynamics alone. The Q3 earnings delivery was better than expected in US and Europe, with a continued strong showing in Energy stocks and ex-Energy EPS growth much softer. Potential peaking out in bond yields and downbeat sentiment/positioning are supports for equities, but activity momentum is likely to stay weak near-term. Position for easing mobility restrictions in China and re-opening, as the State Council reiterated the "dynamic zero policy", called for precise execution, and named some local governments for over-execution. In SMid, focus on SMid stocks down >40%, with low debt, and strong FCF generation, favoring value and sold-off GARP stories with solid balance sheets. In EM, the sentiment among investors remains cautious, with major concerns being: China disappointing on growth, US inflation slow decline, re-pricing of mortgages in DM to dent confidence, and uncertainty on energy prices and on illiquid assets pricing. International markets are expected to see a relative boost from a strong USD, as weak currencies should contribute to positive EPS revisions in Japan, Eurozone, and UK. As for currency impact in EM stocks, we believe EM FX is tactically oversold but our core view of UW EM FX remains; a rising dollar is a power positive for MENA/GCC equities relative to EM so we OW Saudi/MENA.

In Bonds, the front-end of the US curve has embraced a downshift in the pace of hikes, while the very long end of the curve now looks quite steep, so we entered tactical 10s/30s flatteners. In the Euro area, market pricing for a peak in ECB rates continues to be buffeted by inflation prints and growth expectations, so we take profit on tactical longs in 5Y Germany and Dec23 ESTR. In the UK, fragile gilt markets point to higher intermediate and long-end yields amid heavy issuance and QT sales, and we have a flattening bias on Mar23/Mar24 SONIA vs. USD OIS. In EM, the weaker-than-expected US CPI print reinforces the shift away from the Fed to US recession risk as a key driver for EM, and we remain neutral local bonds overall.

In Credit, we expect a 'Santa Claus Rally' into year-end as cash comes off the sidelines, triggered by the US CPI figure on Thursday. We forecast $1.2tr of HG supply in 2023, near the midpoint of the 2017-2022 average (ex 2020) and down ~6% from this year's expected final tally. In non-bank lending, the residential mortgage market has seen a significant shift to non-bank lenders post-GFC, now a much bigger share of the riskier part of the residential market. Our US HG bond spread target forecast was adjusted to 165bp and reasons to expect tightening include the Fed nearing the end of the rapid part of the tightening cycle by YE, increasingly attractive yields, slowing supply, solid credit fundamentals and the usual seasonal trend. In Euro HG, we see reasons for optimism: value is becoming hard to ignore, gas prices are less of a headwind, and global inflation is beginning to turn.

In Currencies, the durability of a broad USD sell-off is fragile with macro uncertainty near 5-decade highs and the dollar yielding more than half of global FX. US recession odds keep us more cautious on high beta FX, but USD/JPY is likely most affected if US rates have indeed peaked.

In Commodities, we saw a strong week in Metals, as the lower-than-expected October CPI release in the US and China easing zero-Covid rules triggered a combination of a weaker USD, falling yields and strong risk markets. In Agriculture, recent fundamental updates from the USDA, CONAB and MPOB continue to highlight supply side vulnerabilities across agricultural markets along with upside demand revisions where production has improved. In Oil, we believe additional US SPR releases will be needed given the implementation risks around the forthcoming price cap on Russian oil exports. Given Russian tanker shortages, we believe oil price will be strongly influenced by the availability of tankers that are willing to transport Russian oil rather than global supply-demand fundamentals, keeping oil prices elevated. Meanwhile, the Biden administration will also seek to replenish its emergency stockpiles by buying crude oil when WTI is priced at or below $67 to $72 a barrel. Oil markets continue to process OPEC+'s decision to cut supply at a time of surging energy inflation. Storage congestion sends European natural gas physical price to near-term lows while price cap uncertainty remains. In the US, natural gas production is climbing to new record highs, inventories are building at a faster-than-normal pace, and heating demand forecasts have been coming in warmer-than-expected. Metals demand outside of China has clearly downshifted in the last quarter and looks challenged through 1H23, though metals have rallied significantly the past couple of weeks.

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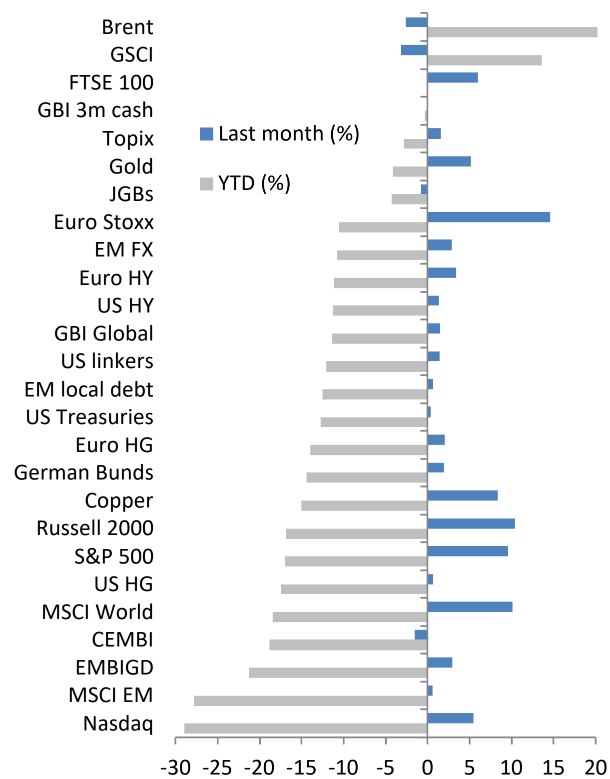
Macroeconomic Outlook

Inflation slide to slow CB tightening and boost consumer spending. Last week's October US CPI downside surprise aligns with a broad range of indicators pointing to a downshift in global inflation that should encourage a moderation in the pace of monetary policy tightening at the Fed and elsewhere. The drop in inflation also signals a fading of 1H22 supply shocks that depressed global consumer spending this year. The coming boost to purchasing power growth will be a key near-term defense against tightening financial conditions. Data releases gain significance when they align. There is now a broad range of indications that global supply chain pressures have moderated. For the US, this is being amplified by a rising dollar and falling import prices, pushing consumer goods inflation down. Combined with the news of an expected turn in medical care costs, CPI inflation is on track to rise at 4%ar this quarter, down from its 10%ar pace in 1H22. Globally, disinflationary forces are being blunted by intense energy price pressures in Europe. But a downward trajectory is in place elsewhere, and global inflation is on track to slow to 5%ar this quarter, roughly half its 1H22 pace.

But CBs are still on the move and threaten an early end to expansion. Confirmation of sliding US inflation will likely be sufficient for the Fed to moderate its tightening pace: we look for the Fed to raise rates 50bp in December following 75bp hikes in the past four meetings. This decision will likely be accompanied by a similar shift from the Bank of England and ECB, where growth concerns play a greater role. While disinflation should produce moderation, the sufficient conditions to consider a Fed pause have not yet been met. In our view, the Fed will likely need to see a string of core inflation readings at 0.3%m/m or lower, signs that US job growth has slowed enough to ensure easing labor market pressures, and evidence that both short- and medium-term inflation expectations align with their objectives. These conditions will not likely be in place until the end of next quarter as policy rates approach 5%.

Growth is rotating: away from China and WE, towards US and Japan. The implication of 500bp of Fed hiking is straightforward—the growth outlook has materially dimmed. But when and whether a still-healthy corporate sector sheds labor remains unclear. Financial markets seem to think recession is imminent. More concerning are signs that credit conditions are tightening. According to the 3Q22 G4 bank lending, a sharp reduction in credit demand and supply may be taking hold. Combined with pricing power also moderating and threatening profit margins, the path to recession will likely run through the business sector. While the risk that the business sector retrenches is elevated, it remains unlikely that this break will occur in the coming months, absent a new shock. Business spending on both capex and hiring remains remarkably resilient. Our latest global capex nowcaster is still tracking a strong 5%ar growth in equipment spending. For consumers, the inflation drop is generating a significant boost to spending (e.g. October auto sales were sharply higher). Taken together, with a material turn away from aggressive 1H22 fiscal tightening, the US economy is expected to be able to generate trend-like growth this quarter and next. Similar to the US, consumption is also bouncing back in Japan—aided by reopening dynamics. Sentiment indicators point to a further boost this quarter, with rises in the October Economy Watchers' survey and the November Reuters' Tankan for non-manufacturers. In contrast to the US, where lower inflation is boosting spending, we expect the recovery in Japanese consumption to generate higher inflation. The better news expected from US and Japan this quarter contrasts with the sharp downshift underway in China (*GDW*, Nov 11th).

Figure 1: Performance across asset classes
Asset class return (%), ranked by YTD return, through Nov 10th



Source: J.P. Morgan, Bloomberg Finance L.P.

Market Recap

Risky assets generally rallied over the past month, with equities outperforming, in particular boosted by a sharp rally after the downside surprise on last Thursday's US CPI release. As a result, our model portfolio delivered positive returns, and outperformed its benchmark over the past month, given our still large equity OW.

Equities

From Inflation to Disinflation? A Primer for Asset Returns. Inflation has been the key downside driver of equity performance YTD. The rapid rise in the cost of capital put significant pressure on equity multiples, especially long duration equities. While forward earnings likely remain under pressure, the inflation tide may finally be turning and providing some relief to equity multiples. We remain of the view that equities continue to squeeze higher into December but do see an increasingly challenging growth backdrop in 2023, assuming central bank policies remain restrictive. On the demand side, tightening US financial conditions, decline in real wages, strengthening US dollar, softening housing market, and knock-on restrictive CB policies across the world are disinflationary. Moreover, supply forces are expected to reinforce the reversal in inflation trend with rising labor participation, reallocation of resources to post-pandemic services recovery and ongoing unclogging of global supply chains. A rollback of tariffs, greater investment in Energy sector including Oil and Gas plus reduced emphasis on ESG in capital allocation and easing of trade sanctions are potential positive supply catalysts, though likelihood of their fruition is uncertain. We expect core CPI inflation to reach 3.9% in 3Q23 from 6.3% in 3Q22; the disinflation wave could be much quicker and stronger if the economic slowdown is deeper, which would result in sharply lower EPS on weaker demand and pricing power / margins. We see a low probability of a "stagflation" scenario in the US, especially with the Fed almost solely focusing on inflation, stronger USD, and recent declines in commodity space. After the strong CPI prints of the last several months, we believe inflation is heading the other way (*Global Equity Strategy*, Nov 11th).

Multiples at market trough – International equities show more favorable tradeoff vs the US. Median forward consensus P/Es in the past 4-5 recessions were 9x for the Eurozone and the UK. A few weeks ago we were very close to these levels; we touched 10.2x for Eurozone, a point away, and as low as 8.7x for UK, outright below. We do not think that European P/E multiples need to move lower than these levels. Potentially, if our call of a relatively modest (10%) EPS fall next year in Europe proves too optimistic, that could imply lower overall market levels, but we do not see further downside based on the P/E multiple dynamics alone. For the US, in the past 4 downturns the forward P/E multiples troughed between 10x and 14x, vs the latest reading of 17x, and the low reached in October of 15.6x. This is somewhat higher than the past lows recorded, and at the same time, the US has seen more aggressive central bank action when compared to the Eurozone and Japan. Having said that, our economists still don't project an outright recession in the US next year, and the P/E contraction of 7 points from cycle peak to recent low in SPX, ranks on par with past recessions. An important consideration for sustainable P/Es is the inflation path. If inflation proves to be much stickier than we think, real yields will need to go higher, pushing P/E multiples lower. In relative terms, we note that International markets continue to trade at a significant discount to the US. Eurozone forward P/E relative to the US is at 0.67x, lower than what was observed during any of the past 4-5 crises, and even like for like, sector neutral, Eurozone trades at only 0.78x P/E of the US. The clear valuation advantage is one of the reasons why we do not believe Europe, and International stocks more broadly, are an easy short vs the US, even if one expects much further overall market downside (*Equity Strategy*, Nov 14th).

Q3 earnings delivery was better than expected in both the US and in Europe. Around 80-90% of companies have now reported in the US, Europe and Japan. EPS growth came in at +4% y/y in the US and at +22% y/y in Europe, which is a positive surprise of 3% and 7%, respectively. However, the bulk of this growth is due to the continued strong showing of Energy stocks, where ex-Energy EPS growth is much softer at -5% y/y in the US and +7% y/y in Europe. 69% of US companies are beating EPS expectations, well below the historical median of 75%. In contrast, European companies have fared much better versus the trend. We also note that S&P 500 Q3 blended EPS has inflected higher, but the magnitude of the move is well below the $3-$4 seen during past reporting seasons. We note there is little respite from the margin compression that was observed during the previous quarter. Sales growth has continued to outpace earnings in both Europe and the US. A higher proportion of companies have raised earnings guidance during the current reporting season, than was the case in previous quarters. However, guidance on capex has been quite disappointing (*Equity Strategy,* Nov 10th).

Potential peaking out in bond yields, very downbeat sentiment/positioning are supports for equities, but activity momentum is likely to stay weak near-term. International equities have derated to a wide discount and will likely trade better than the US in local currency terms. We stay OW the UK given its record discount vs other regions, high dividend yield, and benefit to exporters from weak GBP. EM remains hostage to USD direction, and to China sentiment. The investor bearishness on China is very significant, and structural growth downtrend along with elevated geopolitical uncertainty are significant headwinds, but on the positive side there is likely to be a reopening trade over the next quarter. Eurozone remains in the shadow of geopolitics, but it is attractively priced and earnings downside should be relatively mild partly given FX tailwind. A peak in yields suggests Growth style could stabilize; pure defensives look the most expensive (*Equity Strategy*, Nov 7th).

Position for easing mobility restrictions in China. The MXCN and CSI300 rallied 11%/6% w/w, thanks to telltale signs of re-opening. More investors are positioning for the likelihood of a China re-opening before the March 2023 consensus. On Nov 5, the State Council reiterated the “dynamic zero policy”, called for precise execution and named some local governments for over-execution. Local governments are required to execute at minimum cost/scope of spillover/turnaround time. This is a notable change from relatively frequent/large restrictions earlier in 2022 (*China Equity Strategy*, Nov 6th).

FX impact on markets and sectors. International markets are expected to see a relative boost from a strong USD. In Japan, we are calling for a phase of positive EPS revisions, courtesy of a weak JPY. Eurozone is stuck with geopolitics as a wildcard, but we remain of the view that Eurozone earnings could perform surprisingly well relatively helped in a big way by weak FX, along with a positive fiscal impulse. We remain bullish on UK equities, specifically on FTSE100 as 70% of large cap UK corporate topline is derived abroad. For the S&P500, we assume that every 1% up move in USD is a negative for SPX profits to the tune of 0.5%. At a sector level, we assessed in Europe the FX impact for both the sales and cost implications (*Equity Strategy*, Oct 24th).

Earnings Update and Sentiment Insights Using NLP. 3Q and 4Q earnings should confirm fundamentals remain anchored in resilient labor market and Covid reopening. Equity valuation will likely remain tied to central banks’ rhetoric, which is turning incrementally less negative. As such, we see Equities primed for upside into year-end. Next year, however, we expect a more challenging earnings backdrop relative to current expectations. If there is a recession in 2023, the start, depth, and length of the contraction will determine the magnitude of earnings decline (*US Equity Strategy*, Oct 18th).

EM and EM Markets FAQs and Our Views. The sentiment among investors remains that of caution, with major concerns being: (1) China disappointing on growth; (2) US inflation slow decline; (3) re-pricing of mortgages in DM to dent confidence; and (4) uncertainty on energy prices and on illiquid assets pricing. We deep dive into some of the most frequently discussed questions (*Key Trades and Risks*, Oct 20th).

OW Saudi/MENA v UW South Africa is boosted by the rising USD/weakness in EM FX. We believe our EM FX strategy call to UW FX is tactically oversold but our core view of UW EM FX remains; a rising dollar is a power positive for MENA/GCC equities relative to EM. Saudi/GCC equities remain driven by the oil price. Since the June 8th peak of Brent at $127, MSCI GCC has beaten EM by 14% and MSCI Saudi has beaten EM by 14%. We think investors underestimate the power of Saudi demographics. There isn’t a bigger economy with faster population growth than Saudi. Saudi has demographics like a high-growth frontier market but with sovereign risks like a DM. Our views on Saudi’s uncheap valuation and under-positioning of GEM investors have not changed. Saudi valuations are below long-term averages on current consensus, but are actually expensive when we adjust with our oil-earnings model. In South Africa, we OW off-shore earnings over domestics, with banks as our favorite/least disliked local sector. In South Africa, the rising dollar (rock) and weakening China growth (hard place) are squeezing stocks, both absolute and relative to EM. SA stocks need weak US data/easier Fed plus stronger China growth/better commodity demand, but we are getting the reverse. In months where the DXY is falling, SA stocks’ performance tends to be strong and not correlated to China growth. After the Party Congress, China stocks have rebounded, dragging some key SA stocks higher. We look at big cap SA stocks for low beta to the falling ZAR and falling China GDP Forecast Revision index (*CEEMEA Equity Strategy*, Nov 8th).

We see the macro pointing to deteriorating SMid fundamentals in the coming months. Higher salary and interest rate expenses are likely to erase close to 40% of EBITDA for the most exposed quintile of US SMids, something that we believe is still not factored into consensus estimates. The good news is that ~30% of SMid-Caps in the US are already down >40% YTD, with almost 25% trading below replacement value. We recommend investors continue to look for opportunity in this part of the market, favoring value and sold-off

GARP stories, with solid balance sheets, headcount light operations, and high through-the-cycle free cash flow generation (*US Small/Mid-Cap Strategy*, Nov 10th).

Winners and losers from 2023 headwinds. Wage inflation and rising interest rates will exercise downward pressure on the margins and profits of most companies through at least the end of 2023. We analyzed these two drivers and showed which parts of the SMid universe could be most exposed and most shielded from such forces (*US Small/Mid-Cap Strategy*, Oct 21st).

Bonds

Bonds reversed the previous week's sell-off after a downside surprise in US CPI. The front-end of the US curve has embraced a downshift in the pace of hikes, and valuations now look rich to their drivers. Moreover, volatility looks likely to stay elevated given very weak liquidity conditions, and we stay neutral duration. However, the very long end of the curve now looks quite steep, and we entered tactical 10s/30s flatteners (*US Treasuries*, Nov 10th).

In the **Euro area**, market pricing for a peak in ECB rates continues to be buffeted by inflation prints and growth expectations. We take profit on tactical longs in 5Y Germany and Dec23 ESTR, and stay short 10Y Italy vs. Germany on potential for QT noise, heavy supply, slowing growth and possibility of political noise. In the **UK**, gilt markets remain fragile, and we think that intermediate and long-end yields are biased higher amid heavy issuance and QT sales. We have a flattening bias on Mar23/Mar24 SONIA vs. USD OIS (*Global FI Markets Weekly*, Nov 11th).

In **EM**, the weaker-than-expected US CPI print reinforces the shift away from the Fed to US recession risk as a key driver for EM. Our EM Client Survey shows a reduction in local bond and FX UWs, though retail bond fund outflows remain a headwind. We are neutral local bonds overall, with UWs in Czech, Hungary, Chile, Peru and Thailand offset by OWs in Brazil and Romania as well as a long duration overlay (*EM Fixed Income Focus*, Nov 3rd).

Credit

We expect a 'Santa Claus Rally' into year-end as cash comes off the sidelines, triggered by the US CPI figure on Thursday. While there is still a long way to go before inflation is back to mandate, any funds which are currently UW on either credit risk or duration are likely to feel out-of-position after the sharp moves Thursday afternoon. As a result, we think we could see an illiquid gap tighter in secondary markets over the next few weeks as the market is saturated with buying flows, although this is likely to be partly offset on the other side by opportunistic supply from issuers. We have seen €25bn of issuance over the past four sessions, including €11.2bn on Monday, the highest single-day volume since January. However, new issue premiums have actually been declining, falling to 19bp on average from 34bp last month. Similarly, book coverage ratios have been healthy at 2.7x on average, compared with 2.1x over the second half of last month (*European Credit Weekly*, Nov 11th).

We forecast $1.2tr of HG supply in 2023. This is near the midpoint of the 2017-2022 average (ex 2020). YTD supply is just over $1.1tr and we expect to get to $1.275tr by year-end, so our forecast would represent a 6% drop in gross issuance. Maturities are roughly flat in 2023 vs. 2022, which leads to a net issuance forecast of $491bn, which is down 13% y/y. The biggest swing factor for issuance next year is likely to be Financials once again; we anticipate Financial supply overall will be down moderately in 2023 vs 2022 (-5%). For non-Financials we expect issuance to be down 6% y/y. M&A issuance should rise in 2023 after a relatively light 2022, assuming capital markets stabilize more broadly. Non-USD issuance by US issuers has been depressed given the volatility in the EUR market, but we'd expect this to normalize next year (*2023 High Grade Bond Issuance Forecast*, Nov 10th).

Non-bank lending is something to keep an eye on. FOMC put a bit of a brake on the rally in DM credit, and EM Corporates have been posting new YTD wides given ongoing weakness in Asia. However, we continue to think market conditions have net improved and remain in the process of building a bridge to a better 2023 outcome. The residential mortgage market has seen a significant shift to non-bank lenders post GFC. Now, non-banks have much bigger share of the riskier part of the residential market. We're not sure there's a shoe set to drop, but this is different from previous cycles and certainly something to monitor (*Credit Watch*, Nov 4th).

Credit markets could be in the process of beginning to build a bridge toward a better outcome for investors in 2023. US HG all-in yields recently hit 6%, at spreads a little shy of 200bp. We recently upgraded Euro HG to N from UW, with spreads having hit our 250bp year-end target and all-in yields circa 4.50%. We also upgraded EM Corporates to N from UW given the 50bp widening in CEMBI spreads. We don't think there's as much trouble brewing in the loan market as some investors seem to think and we don't believe a private credit shoe is about to drop (*Building Back Better to Make Credit Great Again in 2023?*, Oct 20th).

US HG bond spread target forecast adjusted to 165bp but we remain constructive. This is 22bp tighter than the current level. Drivers of the expected tightening include the Fed nearing the end of the rapid part of the tightening cycle by YE, increasingly attractive yields, slowing supply, solid credit fundamentals and the usual seasonal trend where spreads typically rally 15bp in November-December when starting from wider than 150bp. HG bond spreads significantly underperformed HY recently. Heavy supply and selling by UK LDI managers contributed to this but both seem to be tentatively behind us now (*CMOS*, Oct 21st).

Three reasons for optimism around Euro HG. The drop in gas prices is very positive for corporates and public finances. A lot is already in the price, and current spreads are providing a comfortable cushion against further volatility. The reasons for optimism: Value is becoming hard to ignore, gas prices are less of a headwind, and global inflation is beginning to turn. We also go long Financials vs Corporates in GBP IG (*European Credit Weekly*, Oct 21st).

Commodities

Metals shined last week. A lower-than-expected October CPI release in the US and China easing zero-Covid rules triggered a combination of a weaker USD, falling yields and strong risk markets. This helped metals become the brightest Commodity segment. Gold rose 5% while Copper increased nearly 7% (as of mid-afternoon Friday). Notably, both rose for a second week in a row and seem to be breaking above their recent trading ranges. The rest of the complex was weaker, however. Brent crude was down 3% while Agri lost 1%.

Supply side vulnerabilities persist in Agriculture. Recent fundamental updates from the USDA, CONAB and MPOB continue to highlight supply side vulnerabilities across agricultural markets along with upside demand revisions where production has improved. We maintain a bullish outlook and continue to see the peak of prices approaching through 4Q22 and 1Q23 as the extent of export dislocations become more apparent. For wheat, geopolitics remain in focus as the Nov 20th Black Sea Grain Initiative renewal is fast approaching. Corn is showing a stable world balance on the month, no change in US export projection despite slow sales, and a notable slowdown in Ukrainian agricultural export flows. South American weather is in focus for corn and soybeans, with a sustained dry forecast across Southern Brazil and Argentina, prompting CONAB to trim production potential. We remain bullish ICE #2 Cotton and see value across the curve (*Agricultural markets update*, Nov 10th).

Raising Russian crude oil production to 10 mbd. Based on recent statements from the US Treasury, we now have more clarity on how the proposed oil price cap will be implemented. The combined Russian, Indian, and Chinese fleets, along with scrap and dark fleets, have sufficient tanker capacity to move most of Russia's oil and oil products. Addressing global shortage of refined fuels, the US and its allies agreed that petroleum products obtained in a third country from Russian crude oil and exported from that country would not be subject to the sanctions as they are not deemed to be of Russian origin. We now estimate only a modest decline in Russian oil production of around 200-500 kbd. Taken together, these developments suggest that Russian crude oil production can stabilize around 10 mbd in 2H23 after a shallow dip in 1Q23. Thus, while we still see global oil market in a deficit in 4Q22, the projected surplus in 2023 is now expanded to be 0.9 mbd. We make no changes to our price forecast from March considering still lingering implementation risks but acknowledge a $3-5/bbl downside risk to our price projections. Our view calls for Brent oil price to re-test $100/bbl in 4Q22 and average $98/bbl in 2023 (*Oil Weekly*, Nov 14th).

It's not the demand-supply, but global tanker balances that will drive oil prices. From December 5th, any vessel transporting Russian crude oil that sells above a predetermined price cap would be prohibited from obtaining European shipping, bunkering, insurance, and finance. Russia has made it clear that it will not comply and will try to legally find alternative buyers. Tanker fleet availability suggests that today Russia is at least 1 mbd short of tanker capacity, necessitating production cuts of a similar magnitude this year and next. Only by 2024 Russia will likely be able to source sufficient tanker capacity to deliver its crude oil. Consequently, until 2024 we believe oil price will be strongly influenced by the availability of tankers that are willing to transport Russian oil rather than global supply-demand fundamentals, keeping oil price elevated. We maintain our forecasts of $100/bbl in 4Q22 and $98/bbl in 2023 (*Oil Weekly*, Oct 26th).

The US put. President Biden announced a series of steps to tame energy prices but also support domestic drillers with future demand for their oil. First, 15mn bbls will be delivered from the US SPR in December and the DoE will be ready to move forward with additional significant SPR sales this winter. Our balances suggest more will be needed given the implementation risks around the forthcoming price cap on Russian oil exports. We expect Russian production to decline by 0.6 mbd by year-end. Second, the administration will also seek to replenish its emergency stockpiles by buying crude oil when WTI is priced at or below $67 to $72 a barrel. Third, although no ban on refined oil products was announced, the door to a temporary export cessation on some petroleum products was left open (Global Commodities Oil, Oct 19th).

How low can the US SPR go? More US SPR releases will be needed given the implementation risks around the forthcoming price cap on Russian oil exports. We assume an additional 26 mn bbls will be delivered in 1Q23, leaving the SPR exiting 1Q23 at 348 mn bbls, the lowest since July 1983, and almost half of the stocks a year ago. Congress mandates a minimum SPR inventory of 252 mn bbls, although it can adjust this level, and the President can drain the SPR below this level if he declares a "severe energy supply interruption" (Oil Weekly, Nov 4).

Oil markets continue to process OPEC+'s decision to cut supply at a time of surging energy inflation. The US has decried the move, raising the prospect of a retaliatory action. Engaging Venezuela could serve as a long-term strategy, but the deal would likely have limited benefits in the near term with total supply likely increasing from today's 0.6 mbd to 1.0 mbd in about three months. To raise Venezuela production above 1 mbd will take years. We hold to our price view of $100/bbl in 4Q22 (Oil Weekly, Oct 18th).

European natural gas storage congestion sends physical price to near-term lows while price cap uncertainty remains. European natural gas storage is climbing toward 94% full. Record warmth in October eroded as much as 10% of weather-related demand. We lower our 4Q22 price forecast to 125 EUR/MWh, reflecting the current softness in the balance, but assume normal December weather. The use of a dynamic price cap has been discussed as the likeliest method to avoid high price moves in the TTF market (European Natural Gas, Oct 28th).

The US natural gas market appears to have converged around a bearish narrative for 2023. US Lower 48 dry natural gas production is climbing to new record highs, inventories are building at a faster-than-normal pace, and heating demand forecasts have been coming in warmer-than-expected. Any further cracks in our 2023 production growth narrative could lend upside to prices next year (US Natural Gas, Nov 4th).

This year's LME Week gathering lacks conviction. Demand outside of China has clearly downshifted in the last quarter and looks challenged through 1H23. Copper demand prospects seem to be holding up relatively well considering the falloff in orders in the other metals. Overall, while macro headwinds are expected to remain strong, we sensed that base metals were pricing in a bearish macro scenario already (Base Metals, Nov 4th).

Currencies

The durability of a *broad* USD sell-off is fragile with macro uncertainty near 5-decade highs and the dollar yielding more than half of global FX. Growth momentum outside the US has admittedly neutralized, but not out of the woods yet. USD performance around the last four Fed pauses was not consistent and growth-dependent; more consistent was the decline in US rates regardless of the growth outcome. USD valuations are rich but odds of a US recession have not been so high before the Fed is done hiking since the 1970s. The mix of growth/inflation surprises matters for composition of USD moves. Such high odds of a US recession keep us more cautious on high beta FX, but USD/JPY is likely most affected if US rates have indeed peaked.

Our long USD recommendations are underwater but were primarily via limited downside options. Sell CAD/JPY via options on slower Fed hikes and US recession risks. SNB is still hawkish; re-sell EUR/CHF. Close USD/JPY (spot stopped out at a modest profit; unwind call spread at a loss). Stay short NZD/JPY via digi put and long AUD/NZD in cash. Short CAD, GBP, EUR, NOK vs. USD all via options now worthless. Remain UW EM FX (FXMW, Nov 11th).

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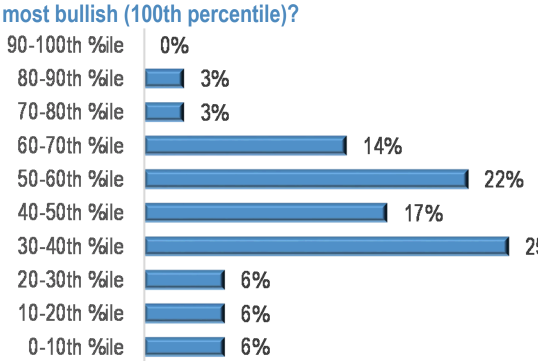
JPM Clients' View

Click here to take this week's survey

This week, we poll investors on CPI, crypto markets and USD, in addition to our running survey questions on equity positioning/sentiment, and intentions for near-term changes to equity allocation and bond duration. The results from the last survey are shown below[1].

Figure 2: What is your current equity positioning or sentiment in historical terms, expressed from most bearish (0th percentile) to most bullish (100th percentile)?

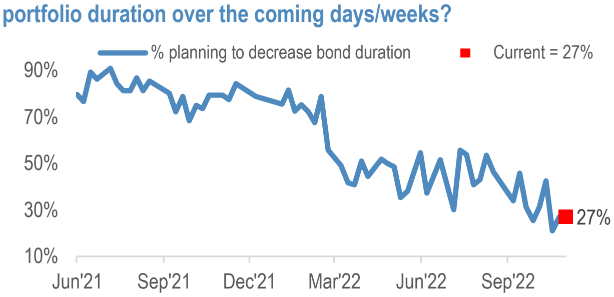


Source: J.P. Morgan.

Figure 3: Are you more likely to increase or decrease equity exposure over the coming days/weeks?

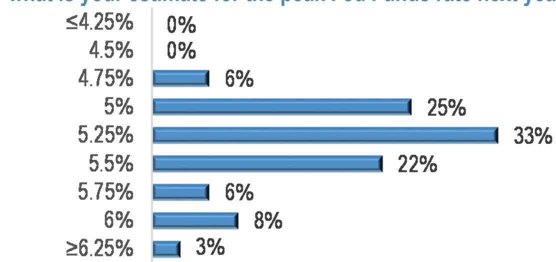
Source: J.P. Morgan.

Figure 4: Are you more likely to increase or decrease bond portfolio duration over the coming days/weeks?



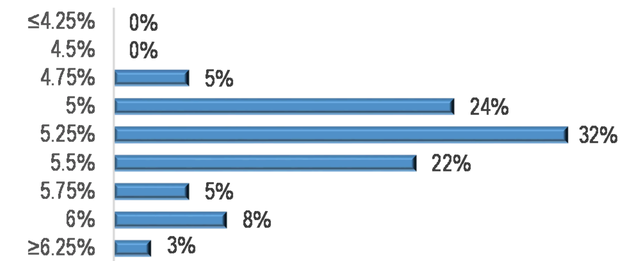
Source: J.P. Morgan.

Figure 5: Following last week's FOMC and labor market report, what is your estimate for the peak Fed Funds rate next year?



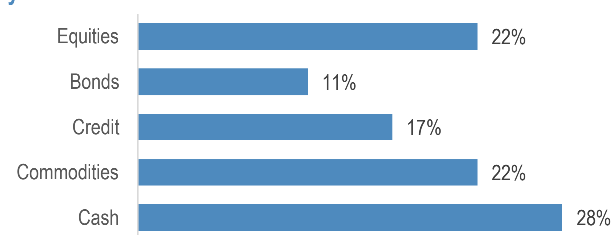
Source: J.P. Morgan.

Figure 6: When will we see the last Fed rate hike of this cycle?



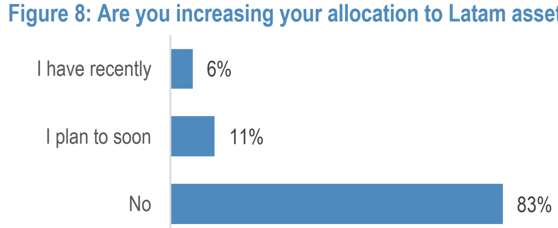
Source: J.P. Morgan.

Figure 7: Which asset class will perform best over the rest of this year?



Source: J.P. Morgan.

Figure 8: Are you increasing your allocation to Latam assets?



Source: J.P. Morgan.

[1] Results are based on 37 responses received from clients in our survey conducted Nov 7-14th. Note most responses were received before Thursday's CPI release.

CPI release is a positive, but recession risks remain high

The October US CPI release delivered the most significant downward inflation surprise since the pandemic and the first downside surprise since early this year. Not only does this release bring an end to the string of upward surprises seen this year but reinforces the idea that US core inflation could be set for material decline without the need of weak labor markets. In turn this raises the probability of a soft landing (where the US economy escapes a labor market contraction) vs. a recession (a scenario where the Fed only pauses when it sees a contracting labor market, at which point the US economy would be already in a recession).

One issue with the October US CPI release mentioned in our client conversations is the unprecedented decline in the medical care component, which fell to -0.5% m/m pace in October from +0.8% m/m in October, the highest swing in the history of the series (Figure 9). This medical care component swing was partly driven by health insurance, which our economists expect to be falling by about 4% per month over the next year (as known part of the BLS's methodology). But health insurance is only one part of the medical care component and does not explain the full swing. This implies that other parts of the medical care component have surprised to the downside. While we believe this downside surprise is genuine, to a significant extent the magnitude of the swing in medical care inflation in Figure 9 raises the risk of some reversal over the coming months. But even if some reversal takes place over the coming months, we believe that with the October CPI release a normalization phase in medical care inflation has begun.

With the probability of a soft landing rising vs. a recession scenario we make several adjustments to our model portfolio: 1) we exit our long dollar bias and we are now neutral overall the dollar and short the dollar vs. the yen, 2) we move our previous EM Sovereigns UW back to neutral, 3) we add exposure to corporate bonds by increasing the allocation to high yield corporate bonds by two percentage points, as global HY corporate bond yields of close to 10% provide a cushion against recession risk on a total yield basis, 4) we trim our equity OW given elevated recession risks and the strong market rally last week, as the substantial post-CPI rally suggests much of the increased soft landing probability is priced in, and 5) we reverse the previous OW in US vs European HG credit as the latter offers more risk premium. Our increase in corporate bond allocation means that we are no longer UW credit.

Beyond the October US CPI release we see another factor that could induce a further rally in risk assets into year-end: investor excess cash balances. As we argued previously in our publications, the stock of money relative to the stock of financial assets remains elevated as shown in Figure 10, which should support both bonds and equities into year end for two reasons. First with still-low cash yields in particular on bank deposits combined with higher bond and equity yields, the opportunity cost of holding cash has increased. Second, investors tend to employ their excess cash balances around the turn of the year, supporting a risk market rally into December/January. And while QT coupled with bond selling by banks is currently causing some mild contraction in US money supply, the liquidity force from the sharp rise in the stock of money supply during 2020/21 continues to have an effect.

As mentioned above we add to our bond exposure via shifting risk from equities to HY corporate bonds. The preference for HY corporate bonds stems from their superior risk-adjusted return, i.e. the expected internal rate of return vs. historical vol. These risk-adjusted internal rates of return vs vol are shown in Figure 11 across major asset classes (readers can find more details about the construction in our sister publication Flows & Liquidity, Oct 27th). We found that the deviations of the Internal Rate of Return of major asset classes from the "risk-return tradeoff line" in Figure 11 can serve as a profitable relative valuation framework between asset classes producing a success ratio of 62% since 1989. The profitability of this relative valuation framework accelerated after the pandemic as value became more important in driving cross asset performance. The trading framework has been recommending a long in equities vs. short HY corporate bonds (vol adjusted) from Q2 2021 to Q2 2022, a relative trade that produced a significant positive return over five quarters. It has been long equities vs. short USTs during Q3 2022, and turned long HY corporate bonds vs. short USTs during Q4 2022.

Within government bonds we see opportunities across markets. Looking through the volatility in front-end rates in recent weeks, there have been signs in recent central bank commentary that the pace of hiking has likely peaked and the pace of hiking would start to slow down. This has already started in some cases, e.g. the RBA and Bank of Canada that slowed down the pace of hiking recently, while in others it is more reflective in rhetoric, e.g., the ECB, which signaled a more data-dependent and meeting-to-meeting phase and the BoE whose forward guidance more explicitly pushed against market pricing of terminal rates. At the last FOMC meeting, Powell also hinted at a slowing pace of hikes, and though he also hinted that the peak might be higher than they previously thought, the weaker-than-expected CPI print has seen markets price in not just a lower peak rate at around 4.9% but also a somewhat faster pace of easing of around 100bp in the year after the peak compared to 80bp in the aftermath of the Nov FOMC meeting (Figure 12).

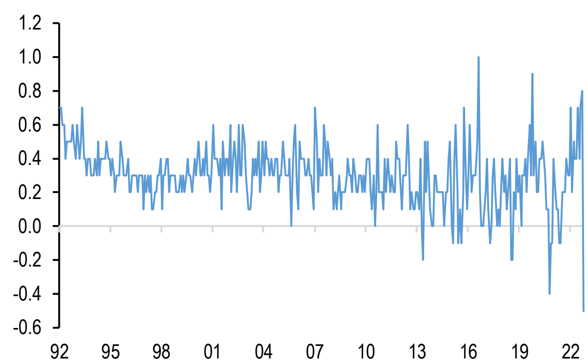
How much is priced in vs. our forecasts after the recent moves? Figure 13 shows the current policy rates, the peak in policy rates during 2023 in JPM economists' forecasts as well as market pricing of the peak in policy rates along with the timing of the peak. The decline in the peak Fed funds rate has brought it closer in-line with our expectations, and repricing of peak policy rates for the BoE following the pushback at the November meeting has also brought pricing closer in line. While the peak ECB rate in OIS and ESTR futures markets has retraced from its prior peak of around 3.1%, the gap between market pricing and our expectations remains elevated, which as a cross-market basis would favor longs in front-end EUR vs. USD rates.

The decline in US yields following the CPI print also has some implications for the yen. USD/JPY has traded very much in line with the spread between UST and JGB yields (Figure 14), and if, as now looks more likely than before the inflation print, the peak Fed pricing is behind us, the peak in USD/JPY is also likely behind us. Moreover, short positions in the yen remain quite extended. This is shown in Figure 15, which depicts the net speculative positions in yen vs. the dollar from the CFTC data as a % of open interest and suggests short positions have been quite extended in the yen. What about sterling? It also saw a significant rally vs. the dollar after the CPI print and positions have similarly been quite short. But while position unwinds could provide some further support for sterling, the macroeconomic backdrop looks more challenging given weak growth and an approaching fiscal contraction.

In credit, market conditions have also improved following the spike higher in spreads amid forced LDI-related asset sales last month. A slowing in the pace of tightening by central banks should help bring down interest rate volatility from very elevated levels recently, which should also be supportive for credit spreads in the investment grade space. And on a relative basis, EUR IG credit looks more attractive as current levels of spreads already price in a significant amount of recession risk. Moreover, gas prices are less of a headwind given high utilisation rates of storage and a warm October and early November that has reduced weather related demand. Indeed, our commodity strategists have revised down their TTF price forecasts to €125/MWh in 4Q22 and €150/MWh in 1Q23, compared to €175/MWh and €165/MWh previously. Given we see a relatively shallow contraction in the Euro area economy in 4Q22 and 1Q22, this means we now see more value in EUR than US IG credit (Figure 16). For EUR high yield, the outlook is more challenging with an approaching pickup in the pace of restructurings, and our credit strategists have revised up their expectations for EUR HY default rates to 3% in 2023 from 2.5% previously.

In all, with the probability of a soft landing rising vs. a recession scenario following the October US CPI release and with excess cash balances that could be deployed by investors into December/January we maintain a pro risk stance in our model portfolio into year-end. We stay OW equities, add risk to corporate bonds to unwind our previous credit underweight and turn more neutral on the dollar and EM Sovereigns. However, we trim our equity OW given elevated recession risks, and risk that the October CPI data proves anomalous and/or fails to temper central bankers' eagerness to push policy into more restrictive territory.

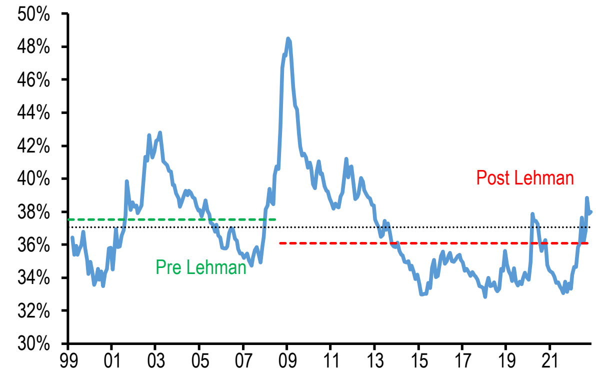
Figure 9: Medical care component of US CPI m/m change, sa



Source: J.P. Morgan, CFTC, Bloomberg Finance L.P.

Figure 10: Implied Cash allocation by non-bank investors globally

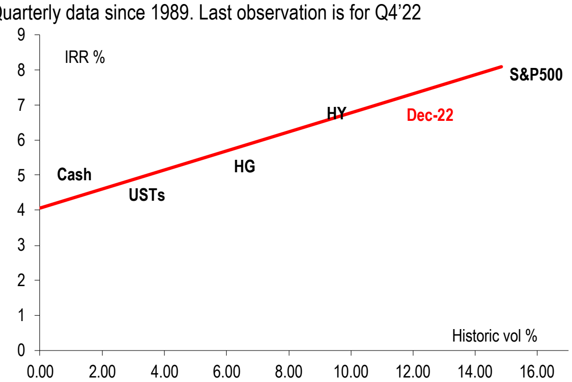
Global cash held by non-bank investors as % total holdings of equities/bonds/M2 by non-bank investors. Dotted lines are averages



Source: J.P. Morgan.

Figure 11: Risk-return trade-off line

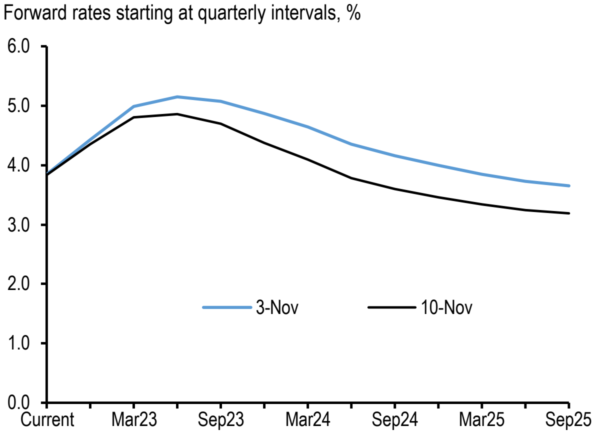
Nominal Internal Rate of Return (IRR) across assets classes as a function of historical return volatility. For a detailed explanation, please see main text. Quarterly data since 1989. Last observation is for Q4'22



Source: J.P. Morgan.

Figure 12: 1-month forward USD OIS rates

Forward rates starting at quarterly intervals, %



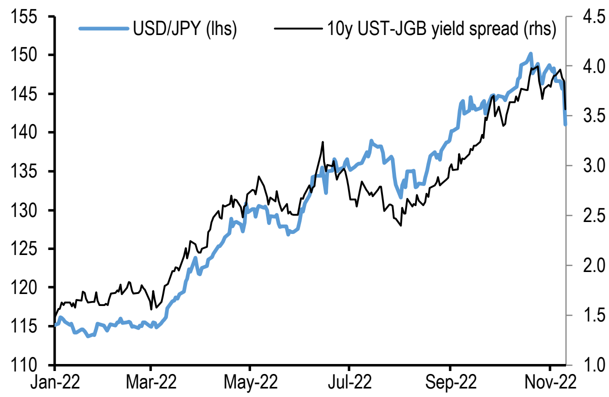
Source: J.P. Morgan.

Figure 13: Market pricing and JPM forecasts for peak policy rates in 2023 (%)

	Current	Forecast peak/2023 high		Market peak	
USD	4	4.75	1Q23	4.9	2Q23
EUR	1.5	2.25	1Q23	2.8	3Q23
GBP	3	4.25	1Q23	4.5	3Q23
AUD	2.85	3.35	4Q23	3.9	4Q23
CAD	3.75	4.25	1Q23	4.3	1Q23
NZD	3.5	4.75	1Q23	5.3	2Q23
JPY	-0.1	-0.1		0.1	4Q23
SEK	1.75	2.5	1Q23	3.1	4Q23

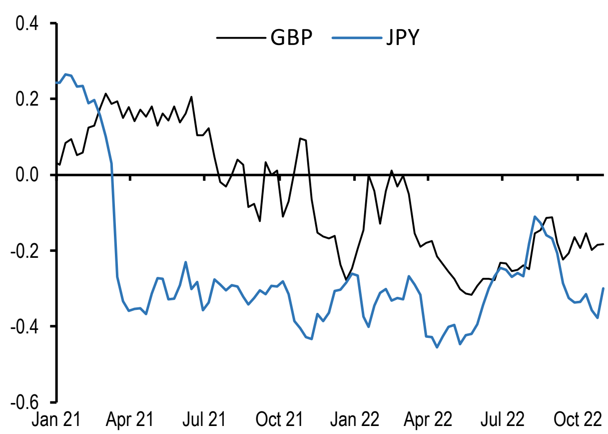
Source: J.P. Morgan.

Figure 14: USD/JPY and 10y UST-JGB yield spreads



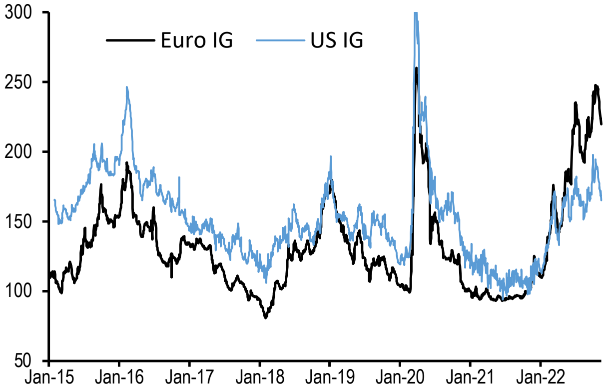
Source: J.P. Morgan, Bloomberg Finance L.P.

Figure 15: Net speculative positions in JPY and GBP futures as a share of open interest



Source: J.P. Morgan, CFTC, Bloomberg Finance L.P.

Figure 16: iBoxx USD and EUR IG credit spreads (OAS in bps)



Source: J.P. Morgan.

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Long-Only Asset Allocation

GAA Long-only portfolio allocation

Major Asset Classes			Active Weights	Prior Month	Δ	UW | OW
Equities			6%	8%	↓	
Govt. Bonds			-8%	-8%		
Corp. Bonds			-4%	-6%	↑	
Commodities			8%	8%		
Cash			-2%	-2%		
Major Sectors within each Asset Class			**Active Weights**	**Prior Month**	**Δ**	**UW | OW**
Equities	Countries	US	-3.0%	-3.0%		
		EMU	-3.0%	-3.0%		
		Japan	0.0%	0.0%		
		UK	1.0%	1.0%		
		EM	5.0%	5.0%		
		Other	0.0%	0.0%		
Govt. Bonds	Countries	US Nominal	-1.0%	-1.0%		
		US TIPs	0.0%	0.0%		
		Europe Core	2.0%	1.0%	↑	
		Europe Periphery	-1.0%	-1.0%		
		Japan	0.0%	1.0%	↓	
		UK	0.0%	0.0%		
		EM Local	0.0%	0.0%		
		Australia	0.0%	0.0%		
		Other	0.0%	0.0%		
Corp. Bonds	HG	US	-4.0%	0.0%	↓	
		Europe	2.0%	-2.0%	↑	
		UK	0.0%	0.0%		
	HY	US	2.0%	2.0%		
		Europe	0.0%	-1.0%	↑	
		US Loans	0.0%	1.0%	↓	
	EM	Sovereigns	0.0%	2.0%	↓	
		Corporates	0.0%	-2.0%	↑	
Commodities		Energy	4.0%	4.0%		
		Industrial metals	1.0%	1.0%		
		Agriculture	1.0%	1.0%		
		Precious metals	-4.0%	-4.0%		
		Livestock	-2.0%	-2.0%		

vs. US Benchmark		
Note	Tracking Error (%)	2.04%
vs. Benchmark		
Note	Yield (bp)	-8.6
	Dur (months)	-0.85
	Tracking Error (%)	0.31%
vs. Benchmark		
Note	Yield (bp)	3.1
	Duration (months)	-1.0
	Tracking Error (%)	2.46%
vs. Benchmark		
Note	Tracking Error (%)	2.29%

Source: J.P. Morgan.

Long-Only Portfolio Performance

Performance for October 2022 GAA Long-only portfolio

In bps.

GAA Long-only portfolio performance

		Benchmark (bps)			GMOS portfolio			Active (bps)		
		1D	**WTD**	**MTD**	**1D**	**WTD**	**MTD**	**1D**	**WTD**	**MTD**
Asset returns	**EQ**	0	469	791	60	429	710	60	-40	-80
	Govt Bonds	-3	16	20	-2	11	13	1	-5	-7
	Corp Bonds	29	252	351	19	227	311	-10	-26	-39
	CO	-5	-221	166	0	-232	176	5	-11	10
	FX				0	0	0	0	0	0
(1)	**Portfolio**	4	244	422	35	227	444	31	-17	22
(2)	**Cross asset class allocation**	1	258	494				-2	14	72
(3)	**Within asset class allocation**	37	214	372				33	-30	-49

Note: (1) the leftmost columns are the absolute returns of the benchmark portfolio. The center columns are the absolute returns of the GMOS portfolio. The rightmost columns are the relative performance of the GMOS portfolio versus the benchmark. If these are positive then the GMOS portfolio outperformed the benchmark. **(2)** The leftmost columns are the absolute returns of the benchmark asset classes with active asset allocation weights. The rightmost columns are the relative performance of the active asset allocation versus the benchmark. If these are positive then active allocation outperformed the passive index. **(3)** The leftmost columns are the absolute returns of the active asset classes with benchmark asset weights. The rightmost columns are the relative performance of this portfolio versus the benchmark. If these are positive then active asset classes with benchmark weights outperformed the passive index.

Source: J.P. Morgan.

Trade Recommendations

Cross Asset	Trade Inception Date
Stay long Global equities vs. govt bonds	Jul'22
Equities	
EM Equities – OW China and China Suppliers, UW India	Nov'22
Buy CSI 1000 1Y swaps to implement a bullish view on China equities	Nov'22
Trades to position for a return of foreign investors to HK/China	Nov'22
Trade ideas to position for Japan equities outperformance in 4Q22	Oct'22
China solar derivatives strategy	Oct'22
Preferred EMEA trades in Equity Derivatives: maintaining upside exposure but the thrust of the rally is likely behind us	Oct'22
Remain Long Brazil, Short Mexico	Oct'22
Buy Nikkei vs TOPIX var switch and Buy Nikkei 2024 dividends over 2023 dividends	Sep'22
OW GARP vs GAAP – Buy SMID 'Growth Havens' vs SMID 'Growth Shorts'	Feb'22
LONG: US Tariff Reduction Beneficiaries Basket (JPAMUSIM <Index>) vs. SPX	Dec'21
Long UK (UKX Index)	Dec'21
Long Oil Outperformers Basket (JPAMOILO <Index>) vs. SPX	Oct'21
Short Oil Underperformers Basket (JPAMOILU <Index>) vs. SPX	Oct'21
COVID-19 Recovery Domestic (JPAMCRDB <Index>) vs. SPX	Sep'21
Position for Re-opening in Asia	Sep'21
Long China Policy Beneficiaries	Sep'21
Sell S&P 500 Convexity	Aug'21
Long Mining (SXPP Index)	Aug'21
Long EM (MXEF Index)	Aug'21
Long COVID-19 Recovery International Basket (JPAMCRIB <Index>) vs. SPX	May'21
Long Banks vs Asia ex Japan	Mar'21
Russell 2000 up-var vs. S&P 500 variance spread	Dec'20
Long Banks (SX7P Index)	Nov'20
Buy the Russell 2000 Value vs the Russell 2000 Growth	Oct'20
Stay Long S&P 500 Dividend Futures	Jun'20
Long in Euro STOXX 50 dividend futures	Apr'20
Long "5G Thematic" vs. SPX	Dec'19
Fixed Income	
Long 2y Germany vs. USTs	Nov'22
Long 10y GBP and EUR swaps vs. CAD and NOK swaps	Nov'22
Short 10y Italy vs. Germany	Mar'22
Credit	
MBS: Turn neutral on MBS	Nov'22
OW EM Sovereign Credit vs DM corporate Credit	Feb'22
Long US vs. EUR IG credit	Dec'21
FX	
Unwind USD/JPY length; add CAD/JPY downside	Nov'22
Re-sell EUR/CHF in cash	Nov'22
Long USD/NOK in options	Nov'22
Long AUD/NZD in cash	Nov'22
Correlation-cheapened USD topside trade	Oct'22
Long USD/CAD	Oct'22
GBP shorts	Sep'22
Hold NZD/JPY digital put	Sep'22
Buy 4m at-expiry digital EUR put/USD call	Jul'22
Commodities	
Stay long Agriculture commodity complex	Oct'17

Source: J.P. Morgan

Cross-Asset Trading Themes

Stay long Global equities vs. govt bonds

The October US CPI release delivered its first downside surprise since early this year, and the most significant downside surprise since the pandemic. This raises the probability of a scenario where the Fed funds rate peaks close to 5% and the US economy escapes a labor market contraction, vs. a recession scenario where the Fed only pauses when the labor market contracts and the economy would already be in recession. Investor excess cash balances also remain high, which given still-low cash yields in particular on bank deposits should support risk assets. Moreover, as we note in the overview section above, the risk-return trade-off (i.e. the expected internal rate of return vs. historical vol) of equities vs. government bonds remains attractive. Finally, given that credit spreads, particularly in Europe, price in a significant amount of bad news, we turned neutral on credit in our model portfolio and focus the funding of our OW vs. government bonds.

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Equities Trading Themes

Buy CSI 1000 1Y swaps to implement a bullish view on China equities

While hedging cost in CSI 500 futures recently cheapened, the discount in CSI 1000 vs. fair values remains substantial. Our XGBoost regression model forecasts CSI 500 futures implied funding rate to be stable at current levels. While the popularity of CSI 1000 in enhanced indexing strategies suggests the discount in CSI 1000 futures could widen, the outperformance available to long swap investors makes buying CSI 1000 swaps attractive to position for a recovery in China equities from oversold levels. Considering that longer-dated swap pricing is more discounted, we recommend investors buy CSI 1000 1Y swaps to implement a bullish view on China equities. (See Asia Pacific Equity Derivatives Highlights: China onshore index-linked product supply-and-demand dynamics update for more details.)

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Trades to position for a return of foreign investors to HK/China

HK/China equity markets have reacted strongly to the prospects of easing mobility restrictions and positive developments in U.S.-China audit oversight cooperation. Offshore China equities have led the rebound, with H-shares/CSI 300/MSCI China recording month-to-date gains of +11%/7.4%/+12.6%. The dispersion between local and foreign equity flows is a trend we have been highlighting. In Hong Kong, we observe strong southbound buying flows and a notable increase in index call options trading activities. However, we continue to see a significant lag in foreign equity buying flows thus far. This makes the potential follow-through of foreign equity investors a main variable that determines the sustainability of the rebound. The potential return of foreign investors should benefit offshore listed equities more, as we observe higher influence of foreign institutions vs. China Mainland investors in HK SAR. Considering elevated implied volatility, investors can consider buying Mar23 expiry call ladders on H-shares or Hang Seng Tech to position. We recommend structuring the trade for mild long Delta and short Vega exposure at inception. The strategy should gain more Delta exposure (for a moderate rally) by year-end, when the annual Central Economic Work Conference (in early December 2022) provides more clarity on China's policy direction. We also like buying calls on H-shares contingent on USDCNH floored at expiry for a cost-effective implementation of bullish China views. (See Asia Pacific Equity Derivatives Highlights: Trades to position for a return of foreign investors to HK/China for more details.)

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Trade ideas to position for Japan equities outperformance in 4Q22

Following our equity strategists' assessment that Japanese equities have bottomed, we recommend investors position for potential outperformance in the Nikkei vs S&P 500. We expect supply and demand dynamics to become more favourable for Japanese equities in 4Q22. In September 2022, selling of stocks and futures by foreign investors hit the most extreme level on record. The oversold trading conditions have increased the probability of a rebound. Since 2014, the Nikkei delivered positive 3M subsequent returns 5 out of 7 times when foreign equity outflows reached similar extremes over a monthly period. On the other hand, we expect business companies, the largest buyer group of Japanese equities year to date, to step up purchases. As suggested by historical pattern, a fresh wave of buyback announcements could be made in November. Considering low valuations of Japanese equities, we think the execution will likely be more front loaded. With Nikkei implied volatility trading substantially below that of S&P 500, we recommend investors sell capped upside on S&P 500 to finance the purchase of calls on the Nikkei for zero cost. For investors looking to isolate the resilience in Japanese equities but who are more neutral on the direction of the market, we recommend buying conditional Nikkei vs S&P 500 outperformance options, which take advantage of the recent pick-up in correlation. Current derivatives market positioning and flows imply substantial upside risk on Nikkei upside volatility should the index stage a sustained rally. We recommend buying Dec 115% calls on NKY vs SPX for balanced risk/reward. Specifically we recommend: **1) Buying NKY 13Jan23 102.5% call vs Selling SPX 13Jan23 103%-113% call spread, 2) Buying NKY - SPX 13Jan23 2% OTM outperformance option contingent SPX >95% at expiry and, 3) Buying NKY 08Dec23 115% call vs Sell SPX 08Dec23 115% call (delta hedged).** (See Asia Pacific Equity Derivatives Highlights: Position for Japan equities outperformance in 4Q22; Volatility positioning and dynamics for more details.)

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Japan structured products market update: Buy Nikkei vs TOPIX var switch and Buy Nikkei 2024 dividends over 2023 dividends

Japan's Financial Services Agency (FSA) announced its Financial Administrative Policy Guidelines at the end of August 2022 for the business year of 2022 (金融行政方針, see here). The agency said it will monitor whether financial institutions have a system in place to create, sell and manage products in a way that will contribute to clients' wealth creation, taking particular note of the complexity and volatility of structured bonds (仕組債). A number of Japanese banks and securities companies decided to curb or suspend sales of structured products following the announcement. We expect the magnitude of the potential disruption to structured product distribution to be moderate, as light issuance activities before revisions in the FSA guidelines limit the scope of a further slowdown. The potential regulation tightening may have a significant impact on the index derivatives market should the Nikkei rally. Unlike historical episodes in which fresh supply came in after existing products triggered early redemption conditions, the potential regulation tightening could restrict the amount of volatility and dividend supply. With a potential lack of issuance following product knock-out, selling pressure on volatility, skew and dividend could ease notably. We expect the impact to be more notable in longer-dated tenors and expect Nikkei volatility and dividend term structures to steepen as a result. As we expect longer-dated volatility and dividends in Nikkei to be better supported, we reiterate our recommendations of: **1) Buying Nikkei vs. TOPIX Dec22-Dec23 50% var switch; and 2) Buying Nikkei 2024 dividends over 2023 dividends.** (See Asia Pacific Equity Derivatives Highlights: Japan structured products market update, China solar derivatives strategy for more details.)

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China solar derivatives strategy

We leverage QUESTVERSE to analyze how media reports may affect investor behavior in trading China solar stocks. With investor positioning at the highs, the intensity of media coverage suggests rising volatility in China solar stocks in the near term. Investors that agree with analysts' bullish views can consider **buying swaps on the QUEST China solar basket (JPHCNSOL index)**. The QUEST China solar basket (JPHCNSOL index) consists of the top 50 stocks listed in the China A-share markets that specialize in providing solar energy products and services. The stock selection follows the QUEST framework, which leverages quantitative methods and NLP to identify stocks with exposure to themes of interest. The basket is liquidity-weighted with an individual weighting cap at 4%. The basket trades at US$1,570mn per day, assuming 20% of the flows are fully utilized. Due to stock borrow in the A-share market, outperformance is available for long basket investors through swap. Indicatively, 3M swap on the basket is offered at SOFR-200bps. For investors with global solar exposure, we recommend **buying put spread collars on the QUEST global solar index (JPNLPSLR index)** as a hedging overlay. The QUEST global solar index (JPNLPSLR index) tracks globally listed stocks (ex-China onshore markets) that specialize in providing solar energy products and services. The index rallied following the announcement of the Inflation Reduction Act in the U.S. (see here). While our U.S. solar analysts are bullish on the sector, it is prudent to add hedges to protect the gains. We recommend put spread collars, as the structure provides protection in a moderate downside scenario, while allowing upside participation up to the call strike. **Specifically: Buy JPNLPSLR 3M 95% 85% put spread financed by selling 107% call.** (See Asia Pacific Equity Derivatives Highlights:Japan structured products market update, China solar derivatives strategy for more details.)

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EM Equities – FAQs and Our Views

We deep dive into some of the most frequently discussed questions for broader EM equities. The sentiment among investors remains that of caution, with major concerns being: (1) China disappointing on growth (real estate glut and zero-COVID policies); (2) US inflation slow decline (rates will continue to rise); (3) re-pricing of mortgages in DM to dent confidence (lower real estate prices and refinancing risks); and (4) uncertainty on energy prices (geopolitical risk remains) and on illiquid assets pricing.

EM FAQ1: What is the horizon for continued USD strength? J.P. Morgan global FX team forecasts the USD to peak in 1Q23 and decline 0.5% into 3Q23. EM currencies have performed better than feared year to date due to: (1) Commodity exporters supported from elevated commodity prices despite coming off recent highs; (2) EM central banks, mainly LatAm, were among the first to hike policy rates. Real policy rates should turn positive with inflation subsiding faster in EM than the US (no labor-driven pressure); and (3) Emerging markets are less dollar hungry this time around with better current account deficits compared to previous episodes of Fed tightening.

EM FAQ2: Can EM equities surprise to the upside? EM equities are under-owned and under-valued. We think this will provide an opportunity for EM equities to outperform. Global investors are 6.1% allocated to EM equities (20yr avg allocation of 8.9%) while EM is trading at a 14% discount to its historical fwd P/E and at a 27% discount to DM (vs 23% historical avg discount). **What could be the catalysts to turn interest back to EM?** (1) EM FX resilience, as previously discussed; and (2) China GDP growth acceleration. Historically, EM growth differential to DM has been key to attract flows.

EM FAQ3: What to OW within EM equities? We recommend investors to **OW China**. Against the long-term pessimism due to regulatory and geopolitical concerns, tactically there is optimism on valuation, growth acceleration and positioning. Funding for OW China should come from **UW India** (hedge for earnings growth disappointment and increasing risk of valuation de-rating). We remain **OW China suppliers**, mainly **Brazil** (commodity exposure, fading political uncertainty, end of monetary tightening, undemanding valuations) and **Saudi** (domestic economy geared to high oil prices, currency peg).

EM FAQ4: What can go wrong? The global environment for EM assets remains challenging as financial conditions tighten. Cyclical headwinds to our constructive call on EM equities include: (1) a delayed GDP growth rebound in China; (2) sustained high inflation; and (3) relentlessly higher USD.

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Preferred EMEA trades in Equity Derivatives: maintaining upside exposure but the thrust of the rally is likely behind us

Despite an overall bearish stance for most of the year (e.g. Hedging Russian Gas supply risk, What if inflation surprised on the upside; Mounting risk of Russian gas cuts), most recently we warned of potentially strong upside squeezes in our 4Q2022 Outlook. We anticipated and warned that record low investor positioning and sentiment meant that the slightest change in narrative could spark such a rally and recommended to position for such an event. We have now seen a +15% rally in broad European indices. At the same time, volatility (SX5E 3m ATM) has declined again sub 20% for the first time this year since Russia launched its attack on Ukraine. Also, the relative price of puts to calls has declined to record lows as investors scrambled to gain upside exposure. Even though the latest CPI report seriously challenges the future policy path as inflation is starting to surprise on the downside, it is likely that the thrust of this latest rally is behind us. To maintain upside exposure at reduced premium spend, investors can consider call spreads or up&out calls that benefit from selling rich call wings: indicatively, SX5E Jan-23 4050 strike call 4300 KO for 25 (spot percentages of strike and barrier, 104.7% and 111.1%, premium 0.65%, ref 3886) offering a ~40% discount to the equivalent 4050/4300 Call Spread. Alternatively, the macro driven environment that markets are currently trading in means enhanced cross-asset path dependence between asset classes persists. Since early June we see a clear pattern of episodes with SX5E down, rates up, and EURUSD down – and vice versa. We maintained that a sustainable upside move in equities is hard to contemplate without rates trading substantially lower and this is what we are witnessing – EUSA10 is down ~45bps from its peak in mid-October. We think this pattern will persist for now even if a pattern of equities lower accompanied by rates lower is plausible later in the year if or once growth concerns take center-stage as headline inflation numbers subside. The dual contingency embedded in the following hybrid options offers significant leverage. Indicatively, buy Dual-Digital Mar-23 SX5E > 4200 and EUSA10 < 2.50%: 11.5%; alternatively, Buy Dual-Digital Mar-23 SX5E > and EURUSD > 1.10 at 10% (refs: SX5E 3880, ATMF EUSA10 2.89%, EURUSD 1.0304). Note, that the option with opposite barrier directions delivers similarly attractive leverage (we recommended these in early June here). At sector level, we proposed recently here to play a potential, continuing opening of the Chinese economy via SXPP; investors can buy Jan-23 105-115% Call Spreads at 2.6%, indicatively. Beyond that, we continue to believe 2023 dividends offer very attractive risk-reward in SX7E, SX5E and FTSE100. All continue to show substantial risk-premium coupled with good visibility as most of the 2023 dividends are earned during 2022 and the year is drawing to an end. This year's consensus estimates are likely to be met, even if next year's earnings expectations look overly optimistic to us. YTD, both SX7E and SX5E dividends have outperformed their respective cash market by ~13% and ~20%.

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OW GARP (Growth at Reasonable Price) vs GAAP (Growth at Any Price) – Buy SMID "Growth Havens" vs SMID "Growth Shorts"

Our proposed SMid trade looks to profit from the fact that, since the GFC, investors have pushed GARP turned into GAAP (Growth At Any Price), with investors paying too much for what also happens to be very demanding growth expectations – a combination that has, over the last 20+ years (i.e., since 1998), destroyed alpha significantly and consistently in every single region of the world, even during times of sustained low economic growth (i.e., Japan). Instead, based on empirical evidence, we advise investors to focus on actual growth rather than expectations (i.e., trailing growth vs Yr+1 cons estimates). Our "Growth Havens" screen is made up of those SMid-Caps that offer quality and actual growth, trading today below their industry average valuations while screening in the top two quintiles of ROE and trailing EPS growth. We combine this long screen with our short "Growth Shorts" screen, which identifies those SMid-Caps that make up the priciest part of the market – trading at rich multiples (top quintile of P/E 21E) on aggressive growth expectations (top quintile of estimated EPS growth 22). This pair trade has delivered a return of -444 bps since we launched it on Feb 14, 2022 *(see our October 2022 SMid View report)*, but we believe it should start to generate alpha as we get into the thick of downward revisions.

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Long US Tariff Reduction Beneficiaries Basket (JPAMUSIM <Index>) vs. SPX

The basket contains the largest publicly traded U.S. Importers by reported container shipping volume. These companies were adversely affected by the US/China trade restrictions in the past and could benefit from a positive policy shift. *For exhaustive list of US Thematic Trade Ideas, please see "Thematic Trade Opportunities."*

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Long UK (UKX Index)

Last November we upgraded the UK to OW, for the first time in six years, taking advantage of its multi-year underperformance. The UK is trading at a significant discount vs other regions, even with Value sectors taken out. UK equity performance with respect to a number of macro variables appears to be changing, with the correlation to bond yield direction turning positive. Any weakness in GBP should help the investment case for UK equities too, especially exporters. BoE hiking is unlikely to be a problem for the UK market and fiscal credibility should return. The UK offers the highest dividend yield globally, which is, in our view, well covered this time around. The latest fiscal developments in the UK, should help reduce the volatility in UK assets. Within UK, we believe one should be OW FTSE100 vs FTSE250.

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Long Oil Outperformers Basket (JPAMOILO <Index>) vs. SPX

This basket contains high-conviction long ideas if oil goes to and stays at $100/bbl. The basket includes names with market cap >$1bn. Lastly, we applied a $10mm liquidity criteria, excluded names that are M&A targets and are difficult to short. This basket was compiled with input from JPM Stock Analysts. See Reiterate OW on Energy. *For exhaustive list of US Thematic Trade Ideas, please see "Thematic Trade Opportunities."*

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Short Oil Underperformers Basket (JPAMOILU <Index>) vs. SPX

This basket contains high-conviction names that would be negatively impacted by oil reaching and maintaining $100/bbl. This could be from margin impact, rising input costs, or demand hit to consumer wallet. The basket includes names with market cap >$1bn. Lastly, we applied a $10mm liquidity criteria, excluded names that are M&A targets and are difficult to short. This basket was compiled with input from JPM Stock Analysts. See Reiterate OW on Energy. *For exhaustive list of US Thematic Trade Ideas, please see "Thematic Trade Opportunities."*

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Remain Long Brazil, Short Mexico

Maintain long Brazil: Brazil remains one of the best performing markets this year but over the past few days there was some deterioration on the back of lack of definition of the cabinet of President-elect Lula, and also due to strategies to breach the spending cap ceiling. There is a lot of uncertainty and a definition of the government composition should come only after the COP27. Nonetheless, we continue to believe that there is not too much downside risk, given that the market deteriorated a lot, and there is little incentive for Lula to start his government moving sharply in the opposite direction of market expectations. Beyond that, fundamentals remain constructive: growth is better than expected, rates have peaked, inflation is easing, and valuations are attractive

Short Mexico: An eventual deceleration of the US should weigh on Mexico, reducing manufacturing activity in the

North and also curbing the spectacular amount of remittances. Also, the central bank of Mexico is committed to continue hiking interest rates step by step with the Fed, reducing the attractiveness of equities, even though it leaves the peso insulated from dollar strength.

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COVID-19 Recovery Domestic (JPAMCRDB <Index>) vs. SPX

This basket is designed to benefit as the economy reopens and there is progress in containment of the virus. Our screening methodology for COVID-19 Recovery Domestic stocks is based on S&P 500 companies that became considerably cheaper during the pandemic compared to the pre-COVID-19 period (Q2'20 vs Q4'19) based on our Value composite score (sector-neutral equal weight combination of price-to-forward-earnings, price-to-book-value, and price-to-sales). The list is then filtered to select only Domestic candidates based on their Revenue exposure. The list was reviewed and further revised to incorporate fundamental stock analysts' feedback. See State of the Business, Inventory and Capex Cycles. *For exhaustive list of US Thematic Trade Ideas, please see "Thematic Trade Opportunities."*

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Position for Re-opening in Asia

With the spread of the highly contagious Omicron variant in 2022, major countries in Asia (barring China) have shifted toward a "living with COVID" approach. China is also planning a medium-term exit to the zero COVID strategy, with positive news flow (increased uptake of Cansino's new nasal vaccine, approval of the Pfizer anti-viral pill and gradual relaxation of travel restrictions) on this front. Despite a rise in cases recently, investors seem to be positioning for a relaxation of COVID zero policy early next year. Elsewhere, ASEAN is a key beneficiary as a region geared to tourism. We highlight a group of laggards aligned with the re-opening theme in our Quantamental Dashboard (15 Aug 2021) in sectors like leisure, tourism, and offline consumption.

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Long China Policy Beneficiaries

The regulatory tightening in China in 2021 was a combination of catching up on a relatively lax regulatory environment earlier and a renewed focus on common prosperity. The primary beneficiaries of loose regulations and companies with dominant market positions (such as large-cap Internet companies) remain vulnerable. However, areas that are strategically important for China's long-term growth and progress on innovation are likely to enjoy regulatory tailwinds. We highlight a group of stocks aligned with policy initiatives in our Quantamental Dashboard (1 Aug 2021) in sectors such as semiconductors or stocks that are aligned to themes like localization and de-carbonization.

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Stay short S&P 500 Convexity

We continue to favor short convexity structures to monetize this rich risk premium via 1Y ratio variance vs. volatility swap spreads on the S&P 500. We maintain this trade given its attractive risk profile and the still distressed convexity risk premium. The S&P 500 is realizing 24% volatility since we rolled our convexity trade into a new structure ~4 months ago (after the prior trade expired at its maximum possible profit), which is well within the positive P/L range of our trade of 9% to 40% and again very close to the level where the structure delivers its maximum return (25%).

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Long Mining (SXPP Index)

We are OW mining, upgraded in Q4 last year, on a likely improvement in China activity. European miners are typically a good hedge against high inflation and geopolitical risks. Mining has performed well recent on China reopening optimism, but we think there is more to go. We think China stimulus will ramp up and iron ore prices could stabilize into seasonally stronger October-February period. Further, the sector offers strong balance sheets and very high and well-covered dividend yields.

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Long EM (MXEF Index)

In Q2 and Q3 last year we highlighted tactical headwinds to EM, ranging from China credit impulse weakening, and appreciating USD, but also the continued regulatory uncertainty in China. We entered this year looking for convergence between EM and DM as various headwinds are likely to become less problematic, in our view. The investor bearishness on China is very significant, and structural growth downtrend and geopolitical uncertainty are significant headwinds, but the reopening trade over the next quarters should be a positive for China. There is probable further stimulus ahead with accelerating M2, and the activity hurdle rate in the near term is likely exceptionally favorable.

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Long Banks vs Asia ex Japan

The impact of hawkish central banks (led by the Fed), still above-trend growth, higher inflation, and a likely asset class rotation support a further increase in bond yields in 2022. This should be overall positive for a macro-exposed sector like banks and aligns well with our call for continued Value outperformance this year. The fundamental outlook for banks looks attractive on all fronts—with NIMs improving, NPLs falling, and credit growth recovering. Also, banks have underperformed the benchmark significantly in the last decade. The MXASJBK index is outperforming the regional benchmark so far (+20.4% YTD), following up on last year's outperformance.

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Long Banks (SX7P Index)

Banks are seeing improving NIMs, and are likely to close the substantial gap they opened up with yields of late. They still look very cheap, on 0.6x P/B, their balance sheets look resilient this time around, with little need for dilution, even if provisioning increases, and dividends are returning to the sector with a healthy, and well covered, 5.6% yield.

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Stay Long Russell 2000 Up-Var vs. Short S&P 500 Variance

We stay long Russell 2000 Dec'23 50% up-var vs. short S&P 500 Dec'23 vanilla variance, initiated in Dec'20 to generate strong carry and exploit the term structure dislocation between these indices, structured product supply/demand dynamics, and expensive downside wings/convexity. The Russell 2000 less S&P 500 volatility spread was also one of the few popular volatility spread trades that performed well during the pandemic, as the Russell reasserted itself as a higher beta index and its volatility is supported by style and cyclical rotation trades. The trade continued to carry decently over the past month, with the Russell recording a ~4 point realized volatility premium. Since our trade inception, the Russell 2000 realized ~6 points higher volatility than the S&P 500 (vs. the implied/strike entry level of -0.75v), and continues to trade well above the up-var strike, delivering significant gains to our trade. We maintain the trade to continue collecting carry, and given still rich convexity levels.

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Stay Long S&P 500 Dividend Futures

As we discussed in *Volatility Review*, Sep 26th, we maintain a positive outlook for dividends given: 1) positive fundamentals (companies have been announcing better than expected dividend increases, corporate balance sheets are healthy, and the high oil prices are driving upside in Energy company dividends); 2) the dividend curve is significantly inverted for the next few years while a typical US recession results in a couple of years of near-zero growth in dividends, suggesting there could still be upside for 2023/24 dividend futures at current levels, even if a near-term recession were to occur; 3) they could incrementally benefit from a corporate policy shift from buybacks to dividends due to the Inflation Reduction Act that includes a 1% tax on buybacks. We recommend staying long 2023 and 2024 S&P 500 dividend futures. Dividend rallied over the past month, with S&P 500 2023 dividends up ~2% and 2024 dividends up ~4%, giving our trade a cumulative mark-to-market of +8% on the 2023s, and +3% on the 2024 contracts (in addition to capturing +8% profit on the 2020 contracts, +27% P/L on the 2021s, and +27% P/L on the 2022s when we closed longs in each respective contract). See *S&P 500 Dividend Weekly* for the latest dividend developments.

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Keep Long Positions in Euro STOXX 50 2023 Dividend Futures

Euro STOXX 50 2023 dividend futures rallied by 6.3% since the publication of the last GAA, in-line with the positive performance of European equities (SX5E 7.4%). DEDZ3 contracts are up 5.65% year-to-date, strongly outperforming the Euro STOXX 50 index, which is down 13.4%. As the visibility on European companies' current fiscal year performance increases, we expect the DEDZ3 contract to continue performing and to become increasingly uncorrelated to the equity market performance. Upside to the latest consensus bottom-up estimates remains high at ~12.7%, and has been sustained by the positive revision in bottom-up dividend estimates due to the likely removal of Linde from the index. We continue to recommend holding long positions in DEDZ3 contracts, which we think offer a good risk-reward even after adjusting the current estimates for the deteriorated macro environment (see our scenario analysis here). We recommended rolling 2022, which were up ~65% since our initial recommendation in April 2020, into 2023 contracts in June 2021. As of today the DEDZ3 trade is up approximately 5% since inception.

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Long COVID-19 International Basket (JPAMCRIB <Index>) vs. SPX

This basket is designed to benefit as the economy reopens and there is progress in containment of the virus. Our screening methodology for COVID-19 Recovery International stocks is based on S&P 500 companies that became considerably cheaper during the pandemic compared to the pre-COVID-19 period (Q2'20 vs Q4'19) based on our Value composite score (sector-neutral equal weight combination of price-to-forward-earnings, price-to-book-value and price-to-sales). The list is then filtered to select only International candidates based on their revenue exposure. The list is reviewed and further revised to incorporate fundamental stock analysts' feedback. See Market Update, Conditions Increasingly Favor COVID-19 Recovery Candidates, US Equity Outlook and State of the Business, Inventory and Capex Cycles. *For exhaustive list of US Thematic Trade Ideas, please see "Thematic Trade Opportunities."*

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Stay Long 5G Thematic (JPAMFIVG <Index>) vs. SPX

The 5G Thematic basket is composed of stocks that are most closely tied to the ongoing 5G rollout. Using textual analysis of corporate earnings, conferences, and other call transcripts, we identified the top 30 names in the S&P 1500 most strongly associated with the 5G theme based on level and type of discussion. JPM analyst feedback was also incorporated to further refine the list of stocks. *For exhaustive list of US Thematic Trade Ideas, please see "Thematic Trade Opportunities."*

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Buy the Russell 2000 Value vs the Russell 2000 Growth

Historical evidence suggests that, within SMid-Caps, value tends to outperform growth significantly and consistently. The two SMid indices with the longest history are the Russell 2000 value and growth indices, which go back to Dec 1978. Since then, the value index has outperformed the growth index by a sizable 5,315% (total return), with only two periods of sustained underperformance that were the Tech bubble and the most recent equity market cycle (i.e., since 2007). In fact, one can say that the growth index has NEVER outperformed the value index as strongly as it has done since 2007. With this in mind, we feel compelled to turn OW on value for the following reasons: 1) Valuation dispersion has corrected significantly but it remains near highs ex tech-bubble years. We spent the whole of last year warning investors against valuation dispersion having reached tech bubble levels, but that spike has fully corrected now, although valuation dispersion remains near highs ex tech-bubble era; and 2) the stocks commanding high P/E multiples are those with the highest consensus expectations of EPS growth . . . one of the most consistent contrarian indicators of 12-month forward performance we can find. As a result, we stick to our pair trade recommendation (OW the Russell 2000 Value vs the Russell 2000 Growth). This pair trade has delivered a total return of 4547 bps since we launched it on Oct 8, 2020, but we remind investors that the Russell 2000 value still would have to deliver a further +66% relative gain to fully erase the outperformance of the Russell 2000 growth index since 2007.

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Credit Trading Themes

MBS: Turn neutral on MBS

Mortgages tightened sharply in the wake of the CPI release, bringing spreads into the mid-30s OAS range. That level is more consistent with prior periods when the Fed was conducting mortgage QT than the elevated spreads we have seen on production coupons for much of the year. Mortgages may still benefit from declines in vol if we have in fact turned the corner on inflation, but the technical backdrop does leave them vulnerable to unexpected selloffs.

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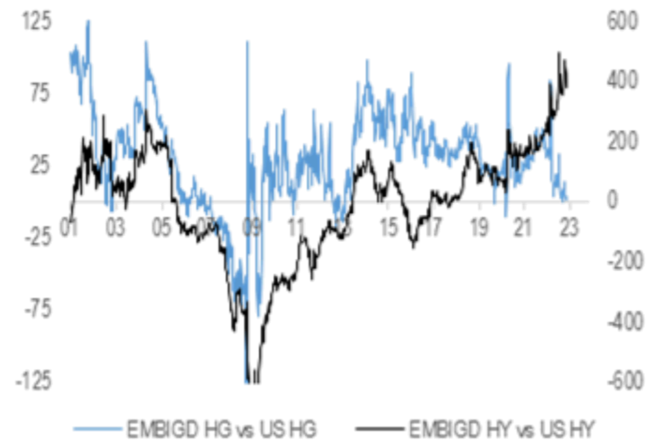
OW EM Sovereign Credit vs DM corporate Credit

Since our last GAA in October, Credit spreads are tighter (JULI -14bp) and EMBIGD (-60bp) has outperformed US HY (-42bp) but not Euro HY (-110bp).

The relative valuation gap between EM sovereigns and US Credit is still attractive but mostly in the High Yield space. Relative to US HG, the EMBIGD HG spread is close to its long-term average and has tightened already more than 80bp from its March peak, 30bp from start of January levels and 10bp from last month's GAA. In HY, the relative differential between EM Sovereigns and US Credit look more attractive. At current level, the spread differential between the two markets correspond to 98.5% percentile reading in the 2001-2022 sample and has already tightened 120bp from its 2022 peak and 65bp from last month's GAA. Notably, this spread is also trading above 4Q18 levels (i.e., at the end of last Fed hiking cycle) and above 1Q16 levels, i.e., at the worst of global EM-led manufacturing slowdown of 2015/2016. In absolute terms, EMBIGD spreads have been higher during the GFC, COVID-19 recession and in 2002.

EMBIGD vs US Credit (HY and HG breakdown)



Source: J.P. Morgan.

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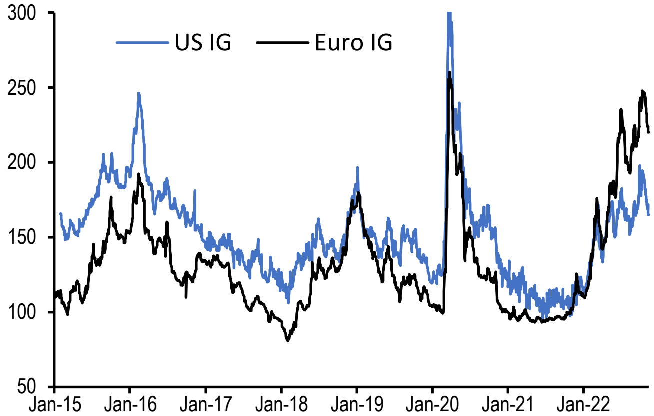
Long EUR vs. US IG credit

Market conditions in Euro credit have improved following the spike higher in spreads amid forced LDI-related asset sales in October. A slowing in the pace of tightening by central banks should help bring down interest rate volatility from very elevated levels recently, which in turn should also be supportive for credit spreads in the investment grade space. And on a relative basis, EUR IG credit looks more attractive as current levels of spreads already price in a significant amount of recession risk. Moreover, European gas prices are less of a headwind given high utilisation rates of storage and a warm October and early November that has reduced weather related demand. Indeed, our commodity strategists have revised down their TTF price forecasts to €125/MWh in 4Q22 and €150/MWh in 1Q23, compared to €175/MWh and €165/MWh previously. Given we see a relatively shallow contraction in the Euro area economy in 4Q22 and 1Q22, this means now see more value in EUR than US IG credit (Figure 1). We take profit on our previous long in US vs EUR IG credit we have held since Dec21, and turn long EUR vs. US IG credit.

iBoxx USD and EUR IG credit spreads

Option-adjusted spreads in bp.



Source: J.P. Morgan.

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Fixed Income Trading Themes

Take profit on 2s/10s Germany flatteners, turn long 2y Germany vs. USTs

The aggressive flattening of the 2s/10s German curve has seen the curve invert, and with the curve looking too flat on valuations we take profit on the trade.

As noted in the overview above, looking through the recent volatility in front-end rates there have been signs in recent central bank commentary that the pace of hiking has likely peaked and would likely start to slow down. This has already started in some cases, while the ECB has signalled a more data-dependent and meeting-to-meeting approach. At the same time, while Fed Chair Powell has hinted at a slowing pace of hikes, he also noted that the peak might be 'higher than previously thought'. Our economists had been looking for a softening in the pace of core inflation in 4Q22, and the weaker-than-expected CPI print is a step in that direction. With market pricing of peak rates for the US close to our forecasts, while the gap between market pricing and our expectations remaining quite wide in the Euro area, we see value in OWs in 2y Germany vs. USTs.

Market pricing and JPM forecasts for peak policy rates in 2023
In %. Market pricing measured from 1-month forward OIS rates

	Current	Forecast peak/2023 high		Market peak	
USD	4	4.75	1Q23	4.9	2Q23
EUR	1.5	2.25	1Q23	2.8	3Q23
GBP	3	4.25	1Q23	4.5	3Q23
AUD	2.85	3.35	4Q23	3.9	4Q23
CAD	3.75	4.25	1Q23	4.3	1Q23
NZD	3.5	4.75	1Q23	5.3	2Q23
JPY	-0.1	-0.1		0.1	4Q23
SEK	1.75	2.5	1Q23	3.1	4Q23

Source: J.P. Morgan.

P&L: +29bp since inception in Oct22 GAA, +40bp since inception in Sep22 GAA.

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Hold short 10y Italy vs. Germany

The October ECB meeting signalled a shift to a more data dependent and meeting-by-meeting approach, but the subsequent upside surprise to inflation has kept subsequent ECB commentary on the hawkish side maintaining a theme of further hikes despite expected weakness in growth due to sticky inflation. And while the pace of hikes looks set to slow in coming meetings, some attention is likely to shift to QT ahead of the December meeting. Moreover, the supply backdrop remains challenging even in the absence of QT. Italian spreads are also pricing little political risk premium, while we see risks of internal tensions within the coalition as well as risks of more heated interactions with EU institutions. As a result, we stay 10y Italy vs. Germany.

P&L: -35bp since Oct22 GAA, +41bp since inception in Mar22 GAA.

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Cross-market rule-based signals: long 10y GBP and EUR swaps vs. CAD and NOK swaps

We update our regular suite of rule-based signals for outright and cross-market fixed income trading in the Appendix.

Bonds were more mixed in October as a continuation of the previous two months of sell-off in the first half gave way to a reversal as more central banks gradually signalled a slowdown in the pace of hiking. This month, there were fewer changes in the relative rankings in our signals, with JPY swaps now ranking as highest by carry-to-risk due to the sharp spike in volatility in other markets.

Given the BoJ's ongoing 10y yield target, and the risk of an adjustment to that target increasing, we exercise discretion by excluding JPY swaps from both the long and short legs of our signals. This month, this means replacing JPY swaps with EUR, GBP and SEK swaps for the carry to risk, change in slope and real yield signals respectively. Overall, this leaves our signals long GBP and EUR swaps vs. CAD and NOK swaps.

P&L: +1.6% since Oct21 GAA; cumulative return since Feb 18: +8.7%.

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FX Trading Themes

This week amplified the tactics-vs-strategy debate that is increasingly at the core our dollar view. A week ago, we added to our USD length on the back of what was a decisively-hawkish Powell, who overtly guided terminal rate pricing higher in his FOMC press conference to above 5%. That work was upended by this week's broadly-softer CPI print, which resulted in the largest USD sell-off in a decade, a wholesale (20bp) collapse in terminal expectations, and renewed market expectations for greater Fed easing in 2H'23 (Exhibit 1). While our perception of risks heading into CPI kept us long dollars, we have at the same time been closely monitoring indicators that suggest some of the dollar's 2022 wide range of support has been neutralizing. We have manifested this by lowering our net USD delta and concentrating our risk in options, which helped to mitigate at least some of the damage done by CPI this week.

But by repricing the terminal rate lower (defying Powell's guidance), the USD is now facing broader tactical headwinds that increasingly factor in both sides of the USD smile. In other words, the one-directional, high-conviction, buy-the-dip USD strategy that we have advocated through most of this year is arguably facing its most rigorous test yet. We are therefore open-minded about a period of tactical USD consolidation, or even weakness, especially considering the rather limited slate of event risk ahead of the Dec FOMC / SEP (PMIs/China data, Fedspeak bear close watching). But to be clear, at this point we are reluctant to turn bearish on the dollar's medium-term prospects. As Exhibit 2 illustrates, a period in which US yields are falling but global PMIs are moving lower simultaneously is not one that is unequivocally dollar-bearish; it is instead rather ambiguous. And some wariness is appropriate in any event given the extraordinary magnitude of the market response this week to a singular data print; the market has of course been bitten by attempts to fade Fed hawkishness frequently this year. So while our USD strength was primarily in options as mentioned, this week we unwind USD length, leaving some residual USD length left over in OTM options which are near-worthless.

Unwind USD/JPY length; add CAD/JPY downside.

In the wake of a sharp fall in UST yields following the October US CPI, we were stopped out of our JPY cash short vs. USD this week at a slight profit. USD/JPY dropped by a whopping 5 yen after the data release, beyond the level suggested by the correlation with OIS pricing of Fed's terminal rates, which was likely exacerbated by positioning adjustments ahead of the US holiday. With OIS pricing of terminal rates still suggesting USD/JPY fair value is in the high 140s, the current level of USD/JPY appears to be somewhat too low against this benchmark (Exhibit 9).

However, if US inflation continues to moderate and/or markets price another downshift in the pace of Fed tightening, USD/JPY's upside will likely be capped, at least in the near-term, and we unwind our call spread accordingly. We would also note heightened concerns around BoJ event risk in December, which could contribute to JPY strength in the event of a surprise tweak to YCC.

This week's developments have shifted the macro landscape such that trades like short CAD/JPY can now work in both risk-on and risk-off states of the world. For USD bulls who hold a negative global cyclical view but want to wait for fresh catalysts and cleaner positioning, CAD/JPY shorts are an attractive alternative from a macro scenario analysis perspective. Given undershooting inflation - not just in the US but globally now with Czech Republic and Chile this week offering other examples – the onus is now on growth to push the dollar stronger. If this were to occur, then the cyclicality of CAD and the yield sensitivity of JPY would offer very similar exposure to a long USD position. At the same time, if the USD were to instead weaken driven by easier financial conditions and lower yields as inflation expectations fall, then CADJ/PY shorts would also work well as the JPY beta to rates would dominate. The risk of course to short CAD/JPY is a reset higher in inflation expectations, which we think is unlikely at least during the tactical window immediately ahead of us.

- **Stopped out of long USD/JPY in cash at a profit. Marked at 0.24%.**
- **Unwind USD/JPY call spread. K = 146/151. Cost 75 bps. Marked at 40bps.**
- **Add 4m CAD/JPY put spread. K = 102/98. Spot ref 105.1. Cost 115bps.**

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Re-sell EUR/CHF in cash

A shift in tone from SNB governor Jordan today has prompted us to reengage a long-favored trade in short EURCHF. Previously Jordan had said further rate hikes can't be excluded, which hints at some non-negligible probability that the end of tightening is getting closer. Today he said policy is not restrictive enough to tame prices and that the SNB is ready to sell foreign exchange. This is a clear divergence from some G10 central banks who are embracing less hawkish language, and shows the SNB is keen to keep pace with the ECB as it continuers to move forward with its broader structural shift in monetary policy and currency policy. EUR/CHF has distanced itself somewhat from the risk rally this week – with the S&P 500 up over 1% on the week and EURCHF down 1% - which tells us that domestic policy tightening is probably still front and center for the market. Given SNB willingness to limit CHF weakness the shift in CHF beta is likely valid. Domestic financial stability risks that hurt CHF in October have receded somewhat in the view of our bank equity analysts (link), and this presents attractive entry levels for this trade.

– **Sell EUR/CHF in cash. Spot ref 0.9772. Stop-loss 1.0016.**

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Hold EUR/USD short via options

Our models pointed to neutralizing negative growth momentum in Europe and that showed up in part this week with a bounce in the Sentix survey, which is the Eurozone survey with the earliest release time each month and so gives an early read on conditions. However, we still take somber reading from the PMI leads such as orders/inventories, which imply a deterioration in growth to come and leave us cautious. There is a tactical window now before the PMIs where a lack of key data and events can allow the soft US CPI print to take hold. This favours the options structure we have chosen instead of a cash position, as we still hold medium term concerns for cyclical currencies such as the Euro. The components of US CPI were particularly weak, with core CPI ex-shelter printing 0.1% y/y, and taking on more significance this month as Powell discussed the lag effects within rent CPI at the FOMC press conference. We'd look to coming speakers next week such as Williams to set the tone in terms of how the Fed merges the latest CPI print with Powell's hawkish press conference.

ECB commentary this week included Schnabel opining that there's no time for ECB monetary policy to pause. Lagarde repeated that rates will rise more. Keeping firm the tighter ECB stance that pressures Eurozone growth. On Friday Chief economist Philip Lane (insert comment after Lane's speech tomorrow). The ECB is still in tightening mode, spurred on by the upside surprise in headline CPI this week, and so the impact of tightening financial conditions will continue to weigh on growth data at a time where the Euro is still a highly cyclical currency. Yesterday arch dove Panetta repeated that there are clear upside risks to inflation and that the direction of policy is clear. Schnabel this week stressed the uncertainty around inflation, saying the ECB needs to get a grip on inflation dynamics and that economic models have limits in the current situation. ECB governor Lagarde yesterday said there's still a way to go on rates and that tools include balance sheet reduction (which may be a focus next year). This ongoing hawkish ECB commentary is encouraging for EUR shorts as we remain convinced that tightening policy is detrimental for the Euro. Next week we hear from ECB chief economist Philip Lane on Friday, who hasn't officially spoken since mid-October, when he said the ECB is trying not to be overly precise on rates. An update on his thoughts there will be particularly relevant given recent dovish shifts by BoE and other G10 central banks.

– **Hold 4m at-expiry digital EUR put/USD call. K=0.95 Spot ref 1.0152, cost 13.6%. Marked at 5.05%.**

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Hold GBP/USD downside structures in options

We see risks of the GBP/USD short running away from us over a tactical horizon given the mix of undershooting US CPI and China reopening news. Risks are on the horizon for GBP however in the form of next weeks Autumn statement and OBR report and the UK CPI report. A large fiscal tightening is set to be announced next week, worth almost 2% of GDP over the coming five years. Fiscal tightening is needed to shore up the gilt market, but of course it doesn't bode well for the growth outlook in the UK, to which GBP is sensitive, and instead compounds the G10-worst stagflation pressure that we have been tracking for a year now. Beyond that, we believe there are risks that the Fed and specifically Powell may use the minutes to push back on dovish market pricing after the CPI print. The PMIs are also a key risk for cyclical GBP. The market has less reason to ignore weak DM PMIs given that China reopening is much more of a domestic services phenomena with few linkages to the DM manufacturing cycle.

– **Hold GBP shorts vs. USD via 3m put spread. Spot ref 1.1183. K = 1.10/1.0750. Cost 67bps. Marked at 28bps.**

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Hold long USD/NOK in options

Similar to the GBP/USD option, we can envision US and China themes dominating the narrative for USDNOK over the short term unfortunately. More locally, the upside surprise on Norwegian CPI this week was broad based with categories outperforming seasonal pattens including alcohol, communications and food. This puts core inflation well above Norges Bank forecasts (5.9% versus 5%) and goes against their dovish 25bps hike last week. Norges has prioritised the housing market and become less data dependent, so the bar is high for a 50bps hike in December, but this print skews the risks to 50bps instead of on hold, with 25bps being the base case.

For NOK, if Norges don't respond more aggressively after the CPI print, there is a real rates angle to consider. Higher spot CPI and lower than otherwise policy rates pushes realised real rates lower. For USD/NOK one needs to monitor Norges Bank's reaction to the inflation print but nonetheless, the central bank is now approaching the late stages of its hiking cycle and November is seasonally the weakest month for NOK, which isn't a great set up for the currency. Next week features Norwegian GDP, but we suspect Fed speakers including Williams will be most relevant for USDNOK.

- **Bought USD/NOK 6w call spread mid-week. Spot ref 10.5730. K = 10.7500/11.2500. Cost 105bps. Marked at 32 bps.**

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Hold long USD/CAD in options

Last week we rolled our USD/CAD exposure in the expectation that the post-FOMC Powell hawkishness would, at the very least, sustain the USD at high levels. That did not come to fruition following the broad-based USD selling on the back of the US CPI reading. There were interesting read-throughs for CAD specifically as well, including the highly-correlated response of CA yields to US yields, and USD/CAD lagging both high-beta and reserve peers through much of the dollar sell-off. This adds to conviction that CAD can be deployed generally as a short, though our call spread of course remains OTM. Moreover, Macklem's comments this week continue to point to some shift in BoC thinking, openly contemplating returning to 'normal' 25bp hikes before long (the Fed may downshift to, but to 50 first).

We hold the trade for now, to keep potential optionality if USD weakness is checked, but conviction on the pair is muted for now.

- **Hold 3m USD/CAD call spread (k=1.36/1.40). Cost = 79bps. Marked at 54bps.**

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Hold long AUD/NZD in cash, short NZD/JPY in options

This week in Q&A RBA Deputy Governor Bullock repeatedly stated that while no one should doubt the board's resolve in dealing with inflation, there are trade-offs regarding the timescale on which this is achieved. This suggests meaningful weight is still being placed on the growth path and on preserving accrued gains in employment. Our AUD long is partly premised on the idea of a more risk friendly growth/inflation mix in Australia. The RBA beginning to prioritise growth certainly favours this in our view.

In NZ, the last CPI result came with extra sting in the tail, due to the well-established feedback loop from delivered inflation, to inflation expectations measures. That was crystallized in this week's RBNZ survey. While not very indicative of broad wage/price setting behavior given its narrow coverage, the stickiness of the survey – coming alongside weaker fuel prices - unhelpfully adds to the perception that expectations are becoming unmoored.

When the RBNZ hiking cycle started, there was a higher than usual policy weighting placed on house prices, given changes to the RBNZ's remit. In managing such risks, there was a re-profiling of mortgages to extend maturities and manage for much higher marginal rates (new loans/refis etc) relative to the average rate on the stock of loans.

The extension of maturities continued unabated from early 2021 to early 2022. The Russia-Ukraine shock, and further implications for inflation, were understandably not anticipated in this plan. The result has been an ongoing widening between marginal and average mortgage rates which redistributes the RBNZ's tightening toward pronounced weakness in housing, with delayed traction on the broader economy. To the extent the committee has scope to wait out the lags, this can be dealt with, though the gap between marginal and average is still technically growing. The resulting, difficult policy choices leave us more downbeat on the outlook for real assets in NZ and therefore NZD.

- **Hold 9m NZD/JPY digital put (k=75; spot ref = 84.95). Cost 17.35%. Marked at 8.03%.**
- **Hold long AUD/NZD in cash. Marked at -0.44%**

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Correlation-cheapened USD topside trade

Last month we had suggested gaining discounts from the correlation space for expressing bullish USD trades via options. We had pinpointed a 2M dual-digi involving 2% OTMS USD calls vs. NOK and JPY. The FX strategy team was keeping bearish views on NOK and JPY on a dovish Norges Bank and given the strong sensitivity of USD/JPY to rising yields. However, the market developments that unravelled this week, with softer than expected CPI and with China relaxing covid rules, led to a major sell-off in the US Dollar. The value of the structure, expiring on 15th December, is now just 1.2% out of the initial 14% USD (bid/ask 12/14%) it was bought at. We decide to keep the structure until expiry given the tiny mark-to-market value in case of an (as of now, unlikely) rebound in the USD over the next month or so.

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Commodities Trading Themes

Stay long the agri commodity complex

(First published in *Trade Ideas for Long Term Investors*, Panigirtzoglou et al, 18 October 2017).

The J.P. Morgan JPMCCI Ex-Front Month Agriculture Excess Return Index declined by -3% MOM, and is tracking 15% below the near-term peak attained in mid-May. Despite a +9% YTD gain, the index is tracking close to pre-conflict levels. Grain prices are consolidating around costs of production, and we flag that fundamental challenges across agri markets are yet to be resolved. **Recent updates from the USDA, CONAB and MPOB continue to highlight supply side vulnerabilities across agricultural markets along with upside demand revisions where production has improved. We maintain a bullish outlook across agricultural markets and continue to see the peak of prices approaching through 4Q22 and 1Q23 as the extent of export dislocations become more apparent** (see *Agricultural Markets Update: November data update – supply side vulnerabilities persist*, Allen & Aggarwal, November 10).

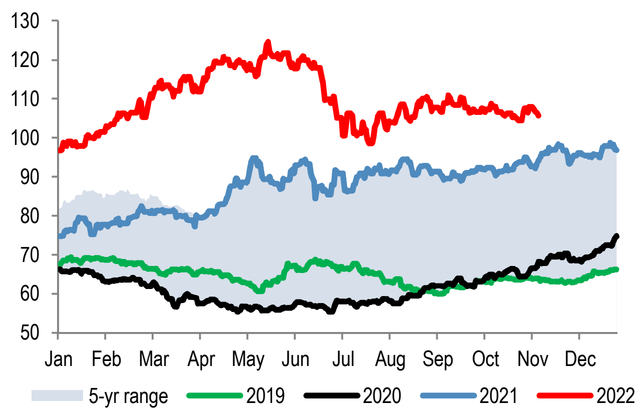
War, pandemic and climate change point to recurring food insecurity and crises with structurally higher food inflation and agricultural commodity prices here to stay (see *Food Insecurity: A New Normal*, Chang et al, Sep 20). Our latest **inventory projections across world grain, and sugar markets for the 2022/23 season are screening tighter since our June Quarterly.** The forecast profile continues to embed a fundamentally driven recovery through 4Q22 – reflecting the physical tightness in exportable supplies, as material supply side downgrades are realized, and consumer demand emerges after a hiatus (see *Agricultural Markets Weekly: Fundamentals v macros – a delicate balance through 4Q22*, Allen & Aggarwal, Oct 7).

Unlike previous episodes, the food price shock of 2021/22 has been driven by a confluence of supply, demand, and structural factors including a multi-year La Niña impacting rainfall patterns across the Pacific. All of which have been exacerbated by the disruptions to Ukrainian exports amid Russian conflict and disruptions to global fertilizer supply chains. Unlike prior food price inflationary episodes, high price alone will in not be sufficient to solve the inventory crunch on this occasion, which is likely to be lasting in our view. **For agri markets, this time is different, and far more complex to overcome** (see *Agricultural Markets Quarterly: Higher for longer – redistributing the heat in agri prices over the medium term*, Allen & Aggarwal, June 2).

– **Went long the agri commodity complex via a proxy index, J.P. Morgan JPMCCI Agriculture Ex-Front Month Excess Return Index at 75.45 points on 18 October 2017. Trade is marked to market at a profit of +30.2 points or +40.0% on November 10.**

The J.P. Morgan JPMCCI Ex-Front Month Agriculture Excess Return Index declined by -3% MOM, and is tracking 15% below the near-term peak attained in mid-May

J.P. Morgan JPMCCI Ex-Front Month Agriculture Excess Return Index



Source: Bloomberg Finance L.P., J.P. Morgan Commodities Research, as of 10 November

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Global Research Digest

Macro & Cross-Asset Views

Global Equity Strategy: From Inflation to Disinflation? A Primer for Asset Returns, Dubravko Lakos-Bujas

While forward earnings likely remain under pressure, the inflation tide may finally be turning and providing some relief to equity multiples. We remain of the view that equities continue to squeeze higher into December, but do see an increasingly challenging growth backdrop in 2023 assuming central bank policies remain restrictive. We also see a low probability of a "stagflation" scenario in the US, especially with the Fed almost solely focusing on inflation, stronger USD, and recent declines in commodity space.

Falling pandemic savings and US consumer confidence: Excess savings from early stages of pandemic to be depleted by mid-2023, Joyce Chang

US households reaching an inflection point as consumer confidence is on the decline, while year-ahead inflation remains stubbornly high at 7%. The $2.1trn of excess savings relative to the pre-pandemic trend could be used up by the second half of next year. The JPMorgan Chase Institute finds that elevated cash balances during COVID have provided a cushion for spending and that for all income quartiles, real incomes are higher in 2022 than in 2019. More than two-thirds of respondents in our US equity retail cost of living survey expect to see their monthly core cost of living to rise by at least 10% in the coming months relative to costs of living at the start of the year.

The Long-term Strategist: Where are we in Regime Change? Macro volatility, deglobalization, and secular rise in yields, Jan Loeys

We see three major regime changes – Macro Volatility & Inflation, Deglobalization, and Higher Real Bond Yields – that are each considered by investors as serious risk scenarios but also as not yet a done deal for the world. It still makes sense to have both bonds and equities in one's strategic portfolio and not that different from 60/40. At current valuations, the US Agg will produce a 5% return pa over the next decade, compared with 7% on US equities. Strategic implications include reducing holdings of companies and countries heavily dependent on cross border flows of goods, services and capital.

Flows & Liquidity: A new wave of crypto deleveraging underway, Nikolaos Panigirtzoglou

What makes this new phase of crypto deleveraging induced by the apparent collapse of Alameda Research and FTX more problematic is that the number of entities with stronger balance sheets able to rescue those with low capital and high leverage is shrinking within the crypto ecosystem. Investor and regulatory pressure on crypto entities to disclose more information about their balance sheets, to safeguard client assets and to limit asset concentration is likely to increase and crypto market participants are likely to adopt more diligent risk management including management of counterparty risk.

ESG - The Long View: Good Cop, Bad Cop? - What to watch for at COP 27, Jean-Xavier Hecker, Noemie de la Gorce, Hugo Dubourg

We believe that the political signal delivered by COP 27 will be key for the pace of energy transition, and the approach to climate crisis. While in theory, COP 27 should be mostly technical and focused on implementation, the unique set of challenges seen globally YTD makes it a highly strategic one, in our view. As COP 27 will be focused on "implementation", we highlight the findings of the "State of Climate Action" and "World Energy Outlook" 2022 for high stake sectors for the energy transition and put them in perspective with UN climate negotiations.

Global Economics and the Recovery from COVID-19

US: CPI data (finally) below expectations, Daniel Silver

October headline CPI increased 0.4%, with energy prices increasing 1.8%, food prices rising 0.6%, and a 0.3% gain for the core. These figures were not particularly soft by pre-pandemic standards, but the October report supports the idea that we are moving past the firmest period for inflation and that a decent amount of the inflation we have seen over the past year will prove to be temporary or transitory in nature. For the Fed, the latest inflation news should increase the FOMC's comfort with the idea of slowing the pace of tightening at the December meeting, where we continue to look for a 50bp hike.

Asia Focus: Debt service on the rise, Tingting Ge

Rising rates and tighter global financial conditions have raised market concerns around debt servicing capacity. Compared to the 2015-16 Fed hiking cycle, some economies are leaders rather than laggards in the current tightening cycle. Substantial rate increases will significantly push up the cost of servicing both local and external debt, and the burden will be more evident next year if policy rates stay high for longer.

EM outlook presentation: November 2022: The resilient and the vulnerable, Jahangir Aziz

Near-term recession risks are fading, but global growth expected to be sluggish and sub-trend growth in DM and EM ex. China is expected to persist through 2023. EM survived a severe resiliency test in the face of a sharp rise in commodity prices following the Ukraine war, Omicron uncertainty in China, aggressive Fed tightening and a rising dollar. Despite better commodity prices, accumulated monetary tightening will slow EMX commodity exporters. EM manufacturing exporters are slowing more sharply than anticipated, but services turnaround could moderate the downturn. Private savings buffer and macro-risk compensation separate the resilient from the vulnerable in EM.

Global Market Implications

2023 High Grade Bond Issuance Forecast: The more things change, the more they stay the same - we forecast $1.2tr of HG supply in 2023, Eric Beinstein

We expect $1.2tr of HG bond supply in 2023. We see factors that argue for both higher and lighter supply next year, but nothing which suggests a meaningful break from the recent supply trend overall. The largest supply surprise in 2022 has been the amount of bank issuance. YTD Financial supply represents 51% of total supply, the highest percentage in 15 years.

Agricultural markets update: November data update - supply side vulnerabilities persist, JPM Commodities Research

Recent fundamental updates from the USDA, CONAB and MPOB continue to highlight supply side vulnerabilities across agricultural markets along with upside demand revisions where production has improved. We maintain a bullish outlook across agricultural markets and continue to see the peak of prices approaching through 4Q22 and 1Q23 as the extent of export dislocations become more apparent.

The gilt market remains fragile: Gilt yields, near-term supply, BoE QT, unwinding emergency purchases and DMO remit revision thoughts, Francis Diamond

Gilt market functioning is still fragile, in our view. Fiscal and political stress has faded and the significant improvement in pooled LDI cash buffers means a repeat of the deleveraged driven forced selling of long end gilts and linkers is unlikely. Gilt yield volatility has fallen from the October peaks but still remains elevated compared to prior levels. We think intermediate and long end gilt yields are likely biased higher in the short term given the heavy upcoming gilt issuance in 10Y equivalent terms and the first QT sale operation in the 7-20Y sector this week.

Sector Level Views

Broadlines/ Hardlines: Retailing Peak Week 1 Preview & Early 2023 Thoughts on the Group, Christopher Horvers, CFA

In 2023, we believe our housing names should see a greater degree of lagged negative revisions (e.g., FND, HD, LOW, WSM) and our “grocery” stocks are at risk from a performance perspective (e.g., BJ, WMT). We, like many, also continue to see autoparts as the best/safest of the “owned” sectors given cyclical optionality.

China Consumer: Survey suggests Double-11 demand may be better than feared, without drastic shift of market share, Andre Chang, CFA

Our China consumer survey results suggest a resilient consumption outlook in which most respondents aim to increase or at least maintain their spending into Double 11 and in the next 6-12 months, better than many feared, with further upside if the COVID-zero policy is removed. Our preferred stock picks are: Alibaba/PDD (ecommerce), Midea/Ecovacs (home appliance), Chow Tai Fook (gold/jewelry), Li Ning (sportswear) and Botanee/Proya (cosmetics).

Porsche AG: Luxury Performance; Initiating at Overweight, Jose M Asumendi

We believe Porsche offers unique exposure to the luxury automotive segment, enjoying strong pricing power, allowing the firm to face challenges such as higher inflation costs, EV transition, and autonomous driving. In line with company guidance, we forecast Porsche will hit the upper end of the 17-18% margin range in FY22, and we are 7% ahead of avg. FY22/23 Bloomberg consensus estimates. We initiate coverage of Porsche AG with an OW and a Dec-23 PT of €140.

APPENDIX: Forecasts & Strategy

Rates	Current	Dec-22	Mar-23	Jun-23	Sep-23
US (SOFR)	3.78	4.10	4.55	4.55	4.55
10-year yields	3.81	4.20	4.05	3.85	3.80
Euro area (depo)	1.50	2.00	2.25	2.25	2.25
10-year yields	2.16	1.50	1.35	1.25	1.15
Italy-Germany 10Y (bp)	205	240	210	200	200
Spain-Germany 10Y (bp)	104	115	100	90	90
United Kingdom (repo)	3.00	3.50	4.25	4.25	4.25
10-year yields	3.36	3.50	3.25	3.10	3.00
Japan (call rate)	-0.10	-0.10	-0.10	-0.10	-0.10
10-year yields	0.24	0.25	0.40	0.40	0.40
EM Local (GBI-EM yield)	7.11	7.33	6.88		
Currencies	**Current**	**Dec-22**	**Mar-23**	**Jun-23**	**Sep-23**
JPM USD Index	135	138	141	138	135
EUR/USD	1.04	0.95	0.90	0.97	1.03
USD/JPY	139	155	150	145	140
GBP/USD	1.18	1.05	1.08	1.10	1.11
AUD/USD	0.67	0.65	0.69	0.70	0.70
USD/CNY	7.10	7.30	7.40	7.30	7.20
USD/KRW	1319	1440	1460	1470	1470
USD/MXN	19.50	20.25	20.50	20.75	20.75
USD/BRL	5.33	5.30	5.25	5.25	5.30
USD/TRY	18.54	19.00	20.00	21.00	22.00
USD/ZAR	17.25	18.50	19.00	19.50	20.00
Commodities	**Current**	**Dec-22**	**Mar-23**	**Jun-23**	**Sep-23**
Brent ($/bbl, qtr end)	95	101	96	98	97
WTI ($/bbl, qtr end)	88	98	92	94	93
Gold ($/oz, qtr avg)	1,768	1,650	1,670	1,700	1,760
Copper ($/ton, qtr avg)	8,284	6,500	6,500	6,700	7,000
Aluminum ($/ton, qtr avg)	2,310	2,250	2,250	2,350	2,400
Iron ore (US$/dt, qtr avg)	91	140	125		
Wheat ($/bu, qtr avg)	8.2	10.0	10.0	9.0	9.0
Soybeans ($/bu, qtr avg)	14.5	16.5	16.3	16.0	15.0

Source: J.P. Morgan flagship weekly/monthly strategy publications.

Credit		Current	Dec-22
US High Grade (bp over UST)	JPM JULI	174	165
Euro High Grade (bp over Bunds)	iBoxx HG	220	250
US High Yield (bp vs. UST)	JPM HY	510	525
Euro High Yield (bp over Bunds)	iBoxx HY	603	750
EM Sovereigns (bp vs. UST)	JPM EMBIGD	511	575
EM Corporates (bp vs. UST)	JPM CEMBI	443	375
Equities		**Current**	**Dec-22**
S&P 500		3,988	4,800
MSCI Eurozone		238	260
FTSE 100		7,318	8,150
TOPIX		1,978	2,100
MSCI EM ($)		890	1,300
MSCI China		53	116
MSCI Korea		724	980
MSCI Taiwan		540	780
MSCI India		2,080	2,000
Brazil (Ibovespa)		111,860	125,000
Mexico (MEXBOL)		51,518.7	54,400
MSCI South Africa (USD)		413.1	521

Equity sector recommendations & year-to-date returns

	US		Europe		Japan		EM	
Energy	70%	OW	37%	OW	32%	UW	-25%	OW
Materials	-10%	N	-8%	OW	-5%	N	-17%	OW
Industrials	-6%	N	-14%	OW	0%	OW	-14%	N
Discretionary	-32%	N	-16%	N	-4%	N	-33%	OW
Staples	-3%	UW	-7%	UW	4%	UW	-16%	UW
Healthcare	-4%	OW	-2%	UW	7%	N	-28%	UW
Financials	-8%	OW	-4%	OW	15%	OW	-11%	OW
Technology	-26%	N	-22%	N	-12%	OW	-36%	N
Comm Service	-39%	N	-7%	OW	15%	OW	-40%	N
Utilities	-2%	UW	-6%	N	19%	UW	-9%	UW
Real Estate	-23%	UW	-34%	UW	7%	N	-31%	N
Overall	**-17.1%**		**-7.7%**		**1.1%**		**-26%**	

Source: Bloomberg Finance L.P., Datastream, J. P. Morgan

Global Economic Outlook Summary

	Real GDP									Consumer prices			
	% over a year ago									% over a year ago			
	2021	2022	2023	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	2Q22	4Q22	2Q23	4Q23
United States	5.9	1.9 ↑	1.1 ↑	-0.6	2.6 ↑	1.5	1.0	0.8	0.8	8.6	7.3	4.1 ↑	3.0
Canada	4.5	3.3 ↑	1.3 ↓	3.3	1.0 ↑	1.4 ↓	1.2 ↓	1.2 ↓	1.0 ↓	7.5	7.0 ↑	2.5 ↓	2.0
Latin America	6.6	3.4 ↑	0.7 ↑	4.0	2.5 ↑	-0.4	0.2 ↑	0.2 ↓	0.8 ↑	10.1	7.9	5.4	5.3
Argentina	10.4	4.7 ↑	-0.6	4.2	3.4 ↑	-4.0 ↓	1.0	-2.0 ↓	-2.0	61.8	94.0	111.3	111.6
Brazil	4.6	2.8 ↑	0.2 ↑	5.0	2.2 ↑	-0.8 ↑	-1.2 ↑	-0.6 ↓	0.6	11.9	5.8	2.9	5.1
Chile	11.7	2.5	-1.0	0.0	-4.0 ↑	-1.6	-1.0	0.0	0.5 ↓	11.5	12.7 ↓	8.4 ↓	5.2
Colombia	10.7	7.7	1.7	6.0	2.0	1.5	-1.0	3.0	2.0	9.3	12.2 ↑	11.1 ↑	7.4
Ecuador	4.2	2.2	2.3 ↑	0.5	2.5	3.0	1.5	3.0 ↑	2.0	3.5	4.1 ↑	2.6 ↑	2.5
Mexico	4.8	2.8 ↑	1.6 ↑	3.7	4.2 ↑	0.5 ↑	1.6	0.8 ↓	1.5 ↑	7.8	8.5	6.8	5.3
Peru	13.6	2.5	2.5	1.0	3.3	2.0	2.5	2.5	2.0	8.3	7.6	5.2 ↓	3.8
Uruguay	4.4	5.2	2.1	4.3	0.8	1.5	2.5	2.0	2.5	9.3	9.3	7.4	6.5
Asia/Pacific	6.3	3.4 ↑	3.6	-1.6 ↑	5.8 ↓	4.1	4.1 ↓	3.2 ↓	3.0 ↓	3.3	3.9 ↑	2.9 ↑	2.8
Japan	1.7	1.9 ↑	2.0	3.5	2.8 ↑	3.5	2.0	1.2	0.5 ↓	2.4	3.5 ↑	2.9 ↑	2.7
Australia	4.9	4.0	2.6 ↑	3.6	2.5 ↓	2.4 ↓	3.0 ↑	2.7 ↑	1.9 ↓	6.1	7.6 ↑	5.6 ↑	3.5
New Zealand	5.6	2.1	2.3	7.0	0.6	2.3	1.9	1.5 ↓	3.6 ↑	7.3	7.2 ↑	5.6 ↑	3.4
EM Asia	7.4	3.7 ↑	4.0 ↓	-3.1 ↑	6.7 ↓	4.4 ↑	4.7 ↓	3.7 ↓	3.6 ↓	3.4	3.7	2.8	2.8
China	8.1	3.1 ↑	4.5 ↓	-7.3 ↑	9.0 ↓	5.2	5.5	4.0	4.0	2.2	2.7	2.2	2.4
India	8.7	7.1	4.2	8.0	2.5	4.0	4.0	4.0 ↓	4.5	7.3	6.5 ↑	5.0	5.5
Ex China/India	4.5	3.6 ↑	2.4 ↓	3.0 ↑	2.2 ↓	2.2 ↑	2.7 ↓	2.6 ↓	2.2 ↓	4.5	5.0 ↓	3.3 ↓	2.5
Hong Kong	6.3	-2.9 ↓	2.7 ↓	4.1	-10.0 ↓	9.0 ↑	3.0	4.5	3.0 ↑	1.5	2.6 ↑	2.7 ↑	2.1
Indonesia	3.7	4.8	3.1 ↑	7.8 ↑	-0.7 ↓	2.0 ↓	4.0 ↓	3.8 ↓	3.3 ↓	3.8	5.4 ↓	3.6 ↓	2.6
Korea	4.1 ↓	2.7	1.4 ↓	3.0	1.1 ↓	1.3	1.5	1.5	1.0 ↓	5.4	5.1 ↓	3.2 ↓	2.6
Malaysia	3.1	9.2 ↑	3.7 ↓	14.7	7.7 ↑	0.0	3.5 ↓	3.2 ↓	3.0 ↓	2.8	3.7 ↑	2.8 ↑	2.2
Philippines	5.7	7.0 ↑	4.6 ↓	-0.5	12.3 ↑	4.0	4.0 ↓	3.8 ↓	3.8 ↓	5.5	7.7 ↑	5.4 ↑	2.6
Singapore	7.6	3.0	1.4	-1.0	2.0 ↑	1.8 ↑	1.8 ↓	1.3 ↓	1.0 ↓	5.9	6.9 ↑	5.3 ↑	3.0
Taiwan	6.6	3.0 ↑	2.2 ↑	-7.0	6.6 ↑	2.2 ↓	2.3 ↓	2.3 ↓	2.4 ↓	3.5	2.5	1.5	2.0
Thailand	1.5	3.1 ↑	2.7 ↓	2.7	3.5 ↑	1.8 ↑	3.2 ↓	2.7 ↓	2.5 ↓	6.5	6.3 ↓	3.3 ↓	2.2
Western Europe	5.6	3.4 ↑	0.3 ↓	2.9 ↑	0.5 ↑	-1.4 ↑	-1.0 ↓	1.6 ↓	1.5 ↓	8.2	10.6 ↑	6.7 ↑	2.6
Euro area	5.3 ↑	3.3 ↑	0.5 ↑	3.3 ↑	0.7 ↑	-1.3 ↑	-1.0	2.0	1.8 ↓	8.0	10.8 ↑	6.9 ↑	2.4
Germany	3.4 ↑	1.8 ↑	0.2 ↑	0.4 ↓	1.1 ↑	-1.5 ↑	-1.5	2.0	2.0	8.3	11.5 ↑	7.2 ↓	1.9
France	6.8	2.5 ↑	0.3 ↑	2.0 ↓	0.6 ↑	-0.5 ↑	-1.5	1.5	1.8	5.9	7.3 ↑	5.4 ↑	2.9
Italy	6.7 ↑	3.7 ↑	0.3 ↑	4.4 ↓	2.0 ↑	-2.0 ↑	-2.0	1.8 ↑	1.8 ↓	7.4	12.7 ↑	7.0 ↑	0.0
Spain	5.5	4.5 ↓	0.8 ↓	6.0	0.9 ↓	-2.0	-0.5	2.0	3.0	8.9	7.0 ↓	2.4 ↓	1.4
Norway	4.2	3.1	0.3 ↓	2.8	1.8	0.0 ↓	-1.0 ↓	0.3 ↓	1.0	5.8	6.8 ↑	5.3 ↑	2.7
Sweden	4.8	2.9	-0.1 ↓	3.6	0.5	-1.3 ↓	-1.0 ↓	0.0 ↓	0.8 ↓	7.4	11.5 ↑	8.2 ↑	3.4
United Kingdom	7.5	4.3	-0.6 ↓	0.9	-0.7 ↑	-2.2 ↓	-0.8 ↓	0.0 ↓	0.4 ↓	9.2	10.2 ↓	6.0 ↓	3.2
EMEA EM	6.6 ↑	1.8	0.8 ↓	-5.9 ↓	0.4	-0.6	0.6 ↓	2.2 ↑	3.6 ↓	23.8	23.8 ↑	11.0	8.8
Czech Republic	3.3	2.7 ↓	0.9 ↑	1.8	-1.3 ↓	0.5 ↑	-0.3 ↑	1.8	3.5	15.8	18.9	10.9	5.3
Hungary	7.1	5.8	1.2	4.1	0.3	-0.5	-0.3	2.5	3.3	10.6	20.5	16.7	6.1
Israel	8.5	6.0	2.8	6.9 ↑	3.0	2.5	2.0	2.5	2.8 ↓	4.2	5.0	3.7	2.4
Poland	6.8 ↑	4.3	0.8 ↑	-8.1	0.3 ↓	1.5 ↑	-0.5 ↑	2.0	4.0	13.9	17.5 ↑	13.4 ↑	7.9
Romania	6.0	6.5	3.0 ↓	7.5 ↓	-3.2	2.0	4.1 ↓	2.8 ↑	6.1 ↓	14.4	15.7 ↑	10.7 ↓	10.6
Russia	4.7	-3.0	-1.5	-20.7	1.5 ↑	-3.5 ↓	-1.5	2.0	2.0	16.9	12.7 ↓	3.8	5.2
South Africa	4.9	1.9 ↑	0.9 ↓	-2.9	1.8 ↑	0.3 ↓	1.6 ↓	1.2 ↓	1.2 ↓	6.6	7.4 ↑	5.6 ↓	4.7
Turkey	11.4	4.5	3.6	8.5	-2.0	0.0	4.1	2.8	7.4	74.1	75.3	29.4	23.4
Global	6.0	2.9 ↑	1.8 ↓	-0.2 ↑	3.2 ↑	1.7 ↑	1.7 ↓	1.9 ↓	1.9 ↓	7.4	7.6 ↑	4.6 ↑	3.2
Developed markets	5.3	2.6 ↑	1.0	1.4	1.8 ↑	0.7	0.5 ↓	1.2 ↓	1.0 ↓	7.6	8.1 ↑	4.9 ↑	2.8
Emerging markets	7.2	3.4 ↑	3.1 ↓	-2.6 ↑	5.3 ↓	3.1	3.6	3.1 ↓	3.3 ↓	6.9	6.9	4.2	3.9

Source: J.P. Morgan

Central Bank Policy Rate Watch

	Official rate	Current rate (%pa)	4-qrtr change (bp) Last	Next	Last change	Next meeting	Forecast next change	Forecast (%pa) Dec 22	Mar 23	Jun 23	Sep 23	Dec 23
Global		3.50	202	48				3.81	4.01	4.12	4.04	3.98
excluding US		3.30	148	38				3.54	3.72	3.88	3.77	3.68
Developed		2.70	256	68				3.12	3.37	3.37	3.37	3.38
Emerging		4.73	118	17				4.87	4.99	5.29	5.07	4.90
Latin America		11.68	608	-134				11.94	12.03	11.72	11.05	10.33
EMEA EM		7.48	128	181				7.40	7.59	10.27	9.79	9.29
EM Asia		3.21	45	8				3.36	3.48	3.41	3.32	3.29
The Americas		4.95	403	47				5.40	5.63	5.60	5.51	5.42
United States	Fed funds	**4.00**	375	75	2 Nov 22 (+75bp)	14 Dec 22	**Dec 22 (+50bp)**	4.50	4.75	4.75	4.75	4.75
Canada	O/N rate	**3.75**	350	50	26 Oct 22 (+50bp)	7 Dec 22	**7 Dec 22 (+25bp)**	4.00	4.25	4.25	4.25	4.25
Brazil	SELIC O/N	13.75	600	-225	3 Aug 22 (+50bp)	7 Dec 22	Jun 23 (-25bp)	13.75	13.75	13.50	12.50	11.50
Mexico	Repo rate	**10.00**	517	75	10 Nov 22 (+75bp)	15 Dec 22	**15 Dec 22 (+50bp)**	10.50	10.75	10.75	10.75	10.75
Chile	Disc rate	11.25	850	-425	13 Oct 22 (+50bp)	14 Dec 22	**Apr 23 (-75bp)**	11.25	11.25	**9.50**	**8.50**	**7.00**
Colombia	Repo rate	11.00	850	-100	28 Oct 22 (+100bp)	16 Dec 22	16 Dec 22 (+100bp)	12.00	12.50	12.50	11.25	10.00
Peru	Reference	**7.25**	525	-275	10 Nov 22 (+25bp)	7 Dec 22	**7 Dec 22 (+25bp)**	7.50	**7.00**	**6.00**	**5.25**	**4.50**
Europe/Africa		2.92	197	102				3.30	3.60	4.14	4.04	3.95
Euro area	Depo rate	**1.50**	200	75	27 Oct 22 (+75bp)	15 Dec 22	**Dec 22 (+50bp)**	2.00	**2.25**	**2.25**	**2.25**	**2.25**
United Kingdom	Bank rate	**3.00**	290	125	3 Nov 22 (+75bp)	15 Dec 22	**Dec 22 (+50bp)**	3.50	4.25	4.25	4.25	4.25
Norway	Dep rate	**2.50**	225	50	3 Nov 22 (+25bp)	15 Dec 22	**15 Dec 22 (+25bp)**	**2.75**	3.00	3.00	3.00	3.00
Sweden	Repo rate	1.75	175	75	20 Sep 22 (+100bp)	24 Nov 22	24 Nov 22 (+50bp)	2.25	2.50	2.50	2.50	2.50
Czech Republic	2-wk repo	7.00	425	-150	22 Jun 22 (+125bp)	21 Dec 22	Sep 23 (-50bp)	7.00	7.00	7.00	6.50	5.50
Hungary	3-m dep	13.00	1120	0	27 Sep 22 (+125bp)	22 Nov 22	On hold	13.00	13.00	13.00	13.00	13.00
Israel	Base rate	2.75	265	75	3 Oct 22 (+75bp)	21 Nov 22	21 Nov 22 (+50bp)	3.25	3.50	3.50	3.50	3.50
Poland	7-day interv	**6.75**	550	25	7 Sep 22 (+25bp)	7 Dec 22	**Nov 22 (+25bp)**	7.25	8.00	8.00	7.75	7.00
Romania	Base rate	**6.75**	500	100	8 Nov 22 (+50bp)	10 Jan 23	**10 Jan 23 (+25bp)**	**6.75**	7.00	7.25	7.50	**7.75**
Russia	Repo rate	7.50	0	-50	16 Sep 22 (-50bp)	16 Dec 22	**Apr 23 (-25bp)**	7.50	**7.50**	**7.25**	7.00	7.00
South Africa	Repo rate	6.25	275	125	22 Sep 22 (+75bp)	24 Nov 22	Nov 22 (+75bp)	7.00	7.50	7.50	7.50	7.50
Turkey	1-wk repo	**10.50**	-1600	1050	20 Oct 22 (-150bp)	24 Nov 22	**Nov 22 (-150bp)**	**9.00**	**9.00**	25.00	23.00	**21.00**
Asia/Pacific		2.61	49	9				2.75	2.84	2.79	2.72	2.71
Australia	Cash rate	**2.85**	275	50	1 Nov 22 (+25bp)	6 Dec 22	**Dec 22 (+25bp)**	3.10	3.10	3.10	3.10	3.35
New Zealand	Cash rate	3.50	300	100	5 Oct 22 (+50bp)	23 Nov 22	**Nov 22 (+75bp)**	**4.25**	**4.75**	**4.75**	**4.75**	**4.50**
Japan	O/N call rate	-0.10	-5	0	28 Jan 16 (-20bp)	20 Dec 22	On hold	-0.10	-0.10	-0.10	-0.10	-0.10
Hong Kong	Disc. wndw	**4.25**	-50	75	3 Mar 20 (-50bp)	-	**Dec 22 (+50bp)**	4.75	5.00	5.00	5.00	5.00
China	1-yr MLF	2.75	-20	-20	15 Aug 22 (-10bp)	-	2Q 23 (-10bp)	2.75	2.75	2.65	2.55	2.55
Korea	Base rate	3.00	225	75	12 Oct 22 (+50bp)	24 Nov 22	Nov 22 (+25bp)	3.25	3.75	3.75	3.75	3.75
Indonesia	BI RRR	**4.75**	125	100	20 Oct 22 (+50bp)	17 Nov 22	**17 Nov 22 (+50bp)**	**5.50**	**5.75**	**5.75**	**5.75**	**5.75**
India	Rev repo	5.90	190	35	30 Sep 22 (+50bp)	7 Dec 22	Dec 22 (+50bp)	6.40	6.75	6.75	6.50	6.25
Malaysia	O/N rate	**2.75**	-175	50	3 Nov 22 (+25bp)	19 Jan 23	**Jan 23 (+25bp)**	2.75	3.25	3.25	3.25	3.25
Philippines	Rev repo	4.25	225	150	22 Sep 22 (+50bp)	17 Nov 22	**Nov 22 (+75bp)**	**5.50**	**5.75**	**5.75**	**5.75**	**5.75**
Thailand	1-day repo	1.00	50	75	28 Sep 22 (+25bp)	30 Nov 22	Nov 22 (+25bp)	1.25	1.75	1.75	1.75	1.75
Taiwan	Official disc.	1.63	50	25	22 Sep 22 (+12.5bp)	15 Dec 22	15 Dec 22 (+13bp)	1.75	1.88	1.88	1.88	1.88

Source: J.P. Morgan. [1]BoJ targets ¥80tn/year expansion in monetary base and sets the IOER (O/N) as policy guidance.

Bold denotes move since last GDW and forecast changes. Underline denotes policy meeting during upcoming week.

Aggregates are GDP-weighted averages. [2]The BI rate for Indonesia reflects announced recalibration effective August 19, 2016.

[3]The Philippines introduced a recalibrated reverse repo rate effective June 3 at a level of 3.00%.

Rather than the refi rate, we now display the 1-wk dep rate, which better represents CBR policy stance and is closer to interbank market rates.

Global Rates Forecast

		04-Nov	Dec-22	Mar-23	Jun-23	Sep-23	YTD chg. (bp)
US	Fed funds	3.75-4.00	4.25-4.50	4.50-4.75	4.50-4.75	4.50-4.75	-
	SOFR	3.81	4.10	4.55	4.55	4.55	-
	2Y bmk yield	4.72	4.65	4.50	4.25	4.15	399
	5Y bmk yield	4.35	4.50	4.25	3.95	3.90	310
	10Y bmk yield	4.15	4.20	4.05	3.85	3.80	265
	30Y bmk yield	4.21	4.05	3.95	3.80	3.80	233
	2s/10s bmk curve	-57	-45	-45	-40	-35	-133
	10s/30s bmk curve	6	-15	-10	-5	0	-33
	2s/30s bmk curve	-50	-60	-55	-45	-35	-166
Euro area	Refi rate	2.00	2.50	2.75	2.75	2.75	-
	Depo rate	1.50	2.00	2.25	2.25	2.25	-
	3M Euribor	1.73	2.00	2.25	2.25	2.25	231
	2Y bmk yield	2.11	1.45	1.25	1.10	0.95	274
	5Y bmk yield	2.16	1.50	1.30	1.15	1.00	261
	10Y bmk yield	2.27	1.50	1.35	1.25	1.15	245
	30Y bmk yield	2.26	1.50	1.40	1.35	1.30	207
	2s/10s bmk curve	16	5	10	15	20	-29
	10s/30s bmk curve	-2	0	5	10	15	-38
	2s/30s bmk curve	14	5	15	25	35	-67
	2Y swap spread	90	80	75	70	65	58
	5Y swap spread	90	70	65	60	55	44
	10Y swap spread	85	70	65	60	55	39
	30Y swap spread	26	32	32	30	28	-2
10Y spread	Austria	68	45	40	35	35	41
to Germany	Belgium	59	55	50	45	45	24
(curve adj.)	Finland	63	45	40	35	35	37
	France	52	55	50	45	45	15
	Greece	239	225	200	200	190	90
	Ireland	48	55	50	40	40	7
	Italy	231	240	210	200	200	93
	Netherlands	28	25	20	15	15	13
	Portugal	97	110	100	90	85	33
	Spain	106	115	100	90	90	33
	Wtd. peri. spread	181	188	164	154	154	69

		04-Nov	Dec-22	Mar-23	Jun-23	Sep-23	YTD chg. (bp)
UK	Base rate	3.00	3.50	4.25	4.25	4.25	-
	2Y bmk yield	3.06	3.15	3.10	2.95	2.70	257
	5Y bmk yield	3.22	3.45	3.20	3.00	2.80	249
	10Y bmk yield	3.54	3.50	3.25	3.10	3.00	257
	30Y bmk yield	3.78	3.55	3.35	3.25	3.20	266
	2s/10s bmk curve	48	35	15	15	30	0
	10s/30s bmk curve	24	5	10	15	20	9
	2s/30s bmk curve	71	40	25	30	50	9
	2Y swap spread	135	65	60	55	50	91
	5Y swap spread	111	50	45	40	40	78
	10Y swap spread	31	10	5	0	0	32
	30Y swap spread	-28	-50	-55	-55	-55	0
Japan	Policy rate	-0.10	-0.10	-0.10	-0.10	-0.10	-
	10Y yield target	0.00	0.00	0.00	0.00	0.00	-
	2Y bmk yield	-0.04	-0.05	0.00	0.00	0.00	5
	5Y bmk yield	0.08	0.05	0.10	0.10	0.10	16
	10Y bmk yield	0.25	0.25	0.40	0.40	0.40	18
	20Y bmk yield	0.50	1.10	1.20	1.20	1.20	3
	30Y bmk yield	1.54	1.45	1.55	1.55	1.55	85
	2s/10s bmk curve	29	30	40	40	40	13
	10s/30s bmk curve	129	120	115	115	115	67
	2s/30s bmk curve	158	150	155	155	155	80
Australia	Cash rate	2.85	3.10	3.10	3.10	3.10	-
	3Y bmk yield	3.34	3.70	3.70	3.60	3.60	237
	10Y bmk yield	3.42	4.15	4.15	4.00	3.90	176
New Zealand	Cash rate	3.50	4.25	4.75	4.75	4.75	25
	2Y bmk yield	4.39	4.40	4.30	4.20	4.20	262
	10Y bmk yield	4.35	4.60	4.50	4.40	4.40	201
Sweden	Repo rate	1.75	2.25	2.50	2.50	2.50	-
	2-year govt	2.22	2.50	2.35	2.25	2.00	257
	10-year govt	2.28	1.80	1.70	1.60	1.50	210
Norway	Depo rate	2.50	3.00	3.00	3.00	3.00	25
	2-year govt	3.36	3.25	3.15	3.00	2.75	198
	10-year govt	3.47	3.25	3.20	3.10	2.90	179

Source: J.P. Morgan

FX Forecasts vs. Forwards & Consensus

Exchange rates vs. U.S dollar													
		Current					PM forecast gain/loss vs September 23			Actual change in local FX vs USD			
Majors		11-Nov	Dec 22	Mar 23	Jun 23	Sep 23	Spot	Forwards	Consensus**	Past 1mo	Past 3mo	YTD	Past 12mos
	EUR	1.03	0.95	0.90	0.97	1.03	-0.3%	-2.5%	0.0%	6.4%	0.7%	-9.1%	-9.8%
	JPY	139	155	150	145	140	-0.7%	-5.2%	-2.1%	4.9%	-4.0%	-17.2%	-17.9%
	GBP	1.18	1.05	1.08	1.10	1.11	-5.9%	-6.6%	-4.3%	7.3%	-2.8%	-12.8%	-11.8%
	AUD	0.67	0.65	0.69	0.70	0.70	4.6%	3.4%	2.9%	6.7%	-6.0%	-7.8%	-8.2%
	CAD	1.33	1.40	1.42	1.40	1.38	-3.8%	-4.4%	-3.6%	4.0%	-3.7%	-4.8%	-5.2%
	NZD	0.61	0.58	0.60	0.60	0.60	-1.7%	-2.0%	-3.2%	9.2%	-5.4%	-10.5%	-13.0%
JPM USD index		134.6	141.7 ↑	143.9 ↑	141.1 ↑	138.4 ↑	2.9%	3.0%	1.8%	-1.3%	4.5%	10.6%	11.7%
DXY		106.7	116.6 ↑	120.0 ↑	113.1 ↑	107.8 ↑	1.1%	3.2%	0.8%	-5.8%	1.0%	11.5%	12.1%
Europe, Middle East & Africa													
	CHF	0.95	0.99	1.02	0.93	0.85	10.6%	6.6%	12.5%	5.4%	-0.4%	-3.4%	-2.6%
	ILS	3.42	3.55	3.55	3.45	3.45	-0.8%	-3.6%	0.0%	4.6%	-5.8%	-9.3%	-8.9%
	SEK	10.38	11.79	12.44	11.34	10.49	-1.0%	-2.9%	-2.3%	9.5%	-1.7%	-12.8%	-16.1%
	NOK	9.92	11.26	11.56	10.52	9.71	2.2%	0.9%	-2.1%	8.5%	-3.5%	-11.1%	-12.5%
	CZK	23.50	26.3	28.3	27.3	26.2	-10.3%	-9.3%	-7.4%	7.6%	0.9%	-6.9%	-6.3%
	PLN	4.53	5.16	5.56	5.26	5.05	-10.3%	-7.0%	-8.7%	10.2%	0.2%	-10.9%	-10.6%
	HUF	391.8	447	478	454	427	-8.3%	-1.9%	-10.0%	13.0%	-2.3%	-17.2%	-18.6%
	RUB	118.69	60.0	60.0	60.0	60.0	97.8%	28.2%	13.7%	0.0%	0.0%	-37.1%	-39.7%
	TRY	18.54	19.00	20.00	21.00	22.00	-15.7%	5.4%	0.0%	0.3%	-3.2%	-28.2%	-46.6%
	ZAR	17.28	18.50	19.00	19.50	20.00	-13.6%	-11.9%	-13.0%	5.1%	-6.4%	-7.8%	-11.4%
Americas	ARS	160.7	175.0	200.0	230.0	260.0	-38.2%	27.4%	-15.5%	-6.2%	-16.3%	-36.1%	-37.7%
	BRL	5.32	5.30	5.25	5.25	5.30	0.4%	6.8%	-0.6%	-1.0%	-4.7%	4.7%	1.5%
	CLP	890	950	960	970	980	-9.2%	-6.6%	-4.9%	4.3%	-13.4%	-4.2%	-10.7%
	COP	4803	4550	4600	4650	4650	3.3%	10.3%	0.5%	-4.1%	-13.4%	-15.0%	-19.2%
	MXN	19.55	20.25	20.50	20.75	20.75	-5.8%	-0.2%	-2.0%	2.7%	1.5%	5.0%	5.5%
	PEN	3.85	4.00	4.05	4.10	4.15	-7.1%	-5.3%	-4.1%	3.1%	0.0%	3.8%	4.3%
LACI		39.8	38.8	38.1	37.4	36.7	-7.6%	4.6%	-3.2%	0.3%	-4.0%	-2.7%	-4.9%
Asia	CNY	7.10	7.30	7.40	7.30	7.20	-1.4%	-3.5%	-1.4%	1.0%	-5.0%	-10.4%	-9.9%
	HKD	7.84	7.85	7.85	7.84	7.84	0.0%	-0.3%	-0.3%	0.2%	0.0%	-0.5%	-0.6%
	IDR	15494	15250	15350	15350	15350	0.9%	1.8%	-1.0%	-0.9%	-5.3%	-8.0%	-7.9%
	INR	80.82	82.50	83.50	84.50	85.00	-4.9%	-2.7%	-3.5%	1.9%	-1.4%	-8.0%	-7.8%
	KRW	1319	1440	1460	1470	1470	-10.3%	-11.8%	-6.1%	8.8%	-1.2%	-9.8%	-10.5%
	MYR	4.62	4.70	4.75	4.80	4.85	-4.7%	-5.5%	-5.2%	1.1%	-3.9%	-9.9%	-9.8%
	PHP	57.26	59.00	59.50	60.00	60.50	-5.4%	-4.1%	-4.1%	2.8%	-2.9%	-11.0%	-12.4%
	SGD	1.37	1.42	1.42	1.41	1.41	-2.2%	-2.8%	-1.8%	4.7%	-0.2%	-1.8%	-1.4%
	TWD	31.38	32.00	32.50	33.00	33.00	-4.9%	-10.1%	-5.3%	1.5%	-4.4%	-11.8%	-11.3%
	THB	35.95	37.00	36.75	36.50	36.25	-0.8%	-4.1%	0.4%	6.2%	-2.1%	-7.1%	-8.4%
ADXY		99.0	96.2 ↑	95.2 ↑	95.6 ↑	96.1 ↑	-2.9%	-4.7%	-2.6%	2.4%	-4.0%	-8.4%	-8.3%
EMCI		49.68	48.14	47.36	47.20	47.09	-5.2%	0.6%	-2.4%	2.3%	-2.7%	-5.6%	-9.7%
Exchange rates vs Euro										Actual change in local FX vs EUR			
	JPY	143.6	147	135	141	144	-0.4%	-2.8%	-2.1%	-1.4%	-4.7%	-8.9%	-9.1%
	GBP	0.88	0.90	0.83	0.88	0.93	-5.6%	-4.2%	-4.3%	0.8%	-3.5%	-4.0%	-2.3%
	CHF	0.98	0.94	0.92	0.90	0.88	11.0%	9.3%	12.5%	-0.9%	-1.1%	6.3%	8.0%
	SEK	10.72	11.20	11.20	11.00	10.80	-0.7%	-2.2%	-4.1%	2.9%	-2.4%	-4.0%	-7.0%
	NOK	10.25	10.70	10.40	10.20	10.00	2.5%	1.4%	-4.0%	2.0%	-4.2%	-2.2%	-3.1%
	CZK	24.29	25.00	25.50	26.50	27.00	-10.1%	-7.0%	-7.4%	1.1%	0.2%	2.5%	3.9%
	PLN	4.68	4.90	5.00	5.10	5.20	-10.0%	-4.6%	-8.7%	3.6%	-0.4%	-2.0%	-1.0%
	HUF	405	425	430	440	440	-8.0%	0.6%	-10.0%	6.2%	-2.9%	-8.8%	-9.7%
	RON	4.89	5.00	5.10	5.20	5.25	-6.8%	-2.0%	-3.4%	1.0%	-0.2%	1.1%	1.1%
	TRY	19.16	18.05	18.00	20.37	22.66	-15.5%	8.1%	0.0%	-5.8%	-3.9%	-21.3%	-40.8%
	RUB	62.57	57.00	54.00	58.20	61.80	1.2%	31.4%	13.7%	0.0%	0.6%	36.6%	31.0%
	BRL	5.50	5.04	4.73	5.09	5.46	0.8%	9.5%	-0.6%	-7.0%	-5.3%	15.2%	12.5%
	MXN	20.20	19.24	18.45	20.13	21.37	-5.5%	2.3%	-2.0%	-3.5%	0.8%	15.5%	17.0%

↑ indicates a revision resulting in a stronger currency forecast, ↓ indicates a revision resulting in a weaker currency forecast. Source: J.P.Morgan

* Positive indicates JPM more bullish on local currency than spot, consensus or forward rates. ** Bloomberg *FX Consensus Forecasts*. † *SIMADI*

Source: J.P. Morgan

Global Commodities Price Forecasts

Quarterly and annual averages

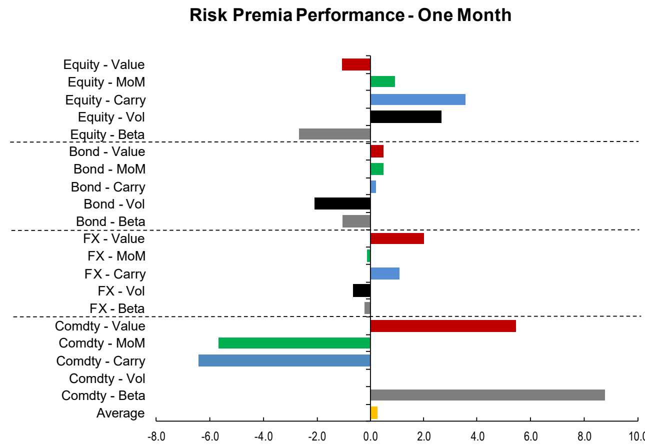
		1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	2022	2023
Energy											
WTI Crude	US$/bbl	95	109	91	98	92	94	93	95	98	94
Brent Crude	US$/bbl	98	112	98	101	96	98	97	99	102	98
US Natural Gas (Henry Hub)	US$/MMBtu	4.19	6.43	7.87	7.00	5.50	4.50	4.25	4.75	6.37	4.75
European Natural Gas (TTF)	Eur/MWh	99	101	204	125	150	130	175	165	132	155
Base Metals											
Aluminum	US$/mt	3,262	2,872	2,354	2,250	2,250	2,350	2,400	2,500	2,685	2,375
Copper	US$/mt	9,997	9,508	7,761	6,500	6,500	6,700	7,000	7,300	8,441	6,875
Nickel	US$/mt	26,388	28,867	22,114	19,000	18,000	19,000	19,000	20,000	24,092	19,000
Zinc	US$/mt	3,738	3,904	3,275	2,800	2,800	2,900	3,000	3,200	3,429	2,975
Precious Metals											
Gold	US$/t oz.	1,879	1,871	1,726	1,650	1,670	1,700	1,760	1,820	1,782	1,738
Silver	US$/t oz.	24.13	22.63	19.13	16.84	17.04	17.71	18.72	19.78	20.68	18.31
Platinum	US$/t oz.	1,030	953	880	950	960	1,000	1,100	1,200	953	1,065
Palladium	US$/t oz.	2,322	2,072	2,075	2,400	2,000	1,900	1,800	1,700	2,217	1,850
Agriculture											
Wheat	USc/bu	913	1,073	815	1,000	1,000	900	900	900	950	925
Corn	USc/bu	673	778	658	850	850	780	750	780	740	790
Soybeans	USc/bu	1,562	1,683	1,528	1,650	1,630	1,600	1,500	1,450	1,606	1,545
Sugar (ICE #11)	Usc/lb	18.6	19.2	18.2	22.0	21.0	21.0	21.0	22.0	19.5	21.3
Cotton (ICE #2)	Usc/lb	123	140	104	125	130	120	120	120	123	123
MDE-Bursa Palm Oil	MYR/tonne	6,183	6,497	3,918	4,000	4,500	4,300	4,500	5,200	5,150	4,625

Source: J.P. Morgan

Cross-Asset Risk Premia

Table A1: Performance

Risk Premia	One Day			Month To Date Performance			Year To Date Performance		
	Long	Short	Total	Long	Short	Total	Long	Short	Total
Equity - Value	0.09	-0.17	-0.09	-2.5	1.5	-1.0	-4.5	5.7	1.3
Equity - MoM	-0.56	-0.09	-0.64	-1.6	2.5	0.9	-5.2	4.5	-0.8
Equity - Carry	0.40	0.32	0.71	-1.0	4.6	3.5	-1.0	4.6	3.5
Equity - Vol			0.00			2.7			3.1
Equity - Beta			-0.07			-2.6			-7.4
Bond - Value	0.63	-0.36	0.26	-0.9	1.3	0.5	-2.4	2.3	-0.2
Bond - MoM	0.43	-0.42	0.01	-0.8	1.3	0.5	-1.7	3.2	1.5
Bond - Carry	0.59	-0.38	0.21	-1.0	1.2	0.2	-2.2	2.1	-0.1
Bond - Vol			-1.33			-2.1			-2.1
Bond - Beta			0.58			-1.0			-2.5
FX - Value	0.48	0.02	0.50	2.0	0.0	2.0	0.1	0.8	0.9
FX - MoM	0.22	-0.02	0.19	0.4	-0.5	-0.1	-0.3	0.9	0.6
FX - Carry	0.26	-0.02	0.25	1.3	-0.2	1.1	-0.4	1.1	0.8
FX - Vol			-0.44			-0.6			-2.1
FX - Beta			-0.10			-0.2			-1.1
Comdty - Value	3.01	-2.10	0.92	10.4	-4.9	5.4	25.8	-7.7	18.1
Comdty - MoM	2.12	-3.86	-1.75	6.1	-11.7	-5.7	30.8	-12.7	18.1
Comdty - Carry	1.90	-3.86	-1.97	5.3	-11.7	-6.4	26.7	-15.5	11.2
Comdty - Vol			0.00			0.0			0.0
Comdty - Beta			3.13			8.7			21.4
Average	0.80	-0.91	0.02	1.5	-1.4	0.3	5.5	-0.9	3.2



Source: J.P. Morgan Quantitative and Derivatives Strategy

Risk Premia Definitions[2]

Equity - Value: Excess return of monthly rolling a long position in top-three equity benchmark indices with lowest aggregate price-to-book ratios and a short position in the bottom-three. Universe includes Canada, France, Germany, Hong Kong, Japan, Netherlands, Spain, Switzerland, United Kingdom and United States.

Bond - Value: Excess return of monthly rolling a long position in top-three 10-year government bonds with most increase in 10-year yields during the past three years and a short position in the bottom-three 10-year government bonds with least increase (or most decrease) in 10-year yields during the past three years. Our universe was comprised of government bonds from Australia, Canada, Denmark, Europe, Japan, New Zealand, Sweden, UK and the US.

FX - Value: Currency value factor is a long/short G10 currency portfolio based on 5-year change of purchasing power parity. The universe covers spot exchange rates of the following G10 currencies: Australia, Canada, Europe, Denmark, Japan, New Zealand, Norway, Sweden, Switzerland, UK and US.

Commodity - Value: Excess return of monthly rolling a long position in top-four commodity futures with lowest valuation and a short position in the bottom-four commodity futures with highest valuation, where the valuation metric is defined as the ratio of current price relative to the average price over the past five years. Commodity futures universe includes Heating oil, Crude Oil, Natural gas, Gold, Silver, Aluminium, Copper, Nickel, Wheat, Corn and Soybeans.

Equity - Momentum: Excess return of monthly rolling a long position in three equity indices with highest past 12 month returns and a short position in the three equities indices with lowest past 12 month returns; Our index universe consisted of country equity benchmarks for Canada, France, Germany, Hong Kong, Japan, Netherlands, Spain, Switzerland, United Kingdom and United States.

Bond - Momentum: Excess return of monthly rolling a long position in three 10-year government bonds with highest past 12 month returns and a short position in the three 10-year government bonds with lowest past 12 month returns. Our universe includes government bonds from Australia, Canada, Denmark, Europe, Japan, New Zealand, Sweden, UK and the US.

FX - Momentum: Excess return of monthly rolling a long position in three G10 currencies with highest past 12 month returns and a short position in the three G10 currencies with lowest past 12 month returns.

Commodity - Momentum: Excess return of monthly rolling a long position in four commodity futures with highest past 12 month returns and a short position in the four commodity futures with lowest past 12 month returns. The commodity futures universe was: Heating oil, Crude Oil, Natural gas, Gold, Silver, Aluminium, Copper, Nickel, Wheat, Corn and Soybeans.

Equity - Carry: Excess return of monthly rolling a long position in three equity indices with highest dividend yield and a short position in the three equities indices with lowest dividend yield. Our index universe consisted of country equity benchmarks for Canada, France, Germany, Hong Kong, Japan, Netherlands, Spain, Switzerland, United Kingdom and United States.

Bond - Carry: Excess return of monthly rolling a long position in three 10-year government bonds with the steepest yield curves and a short position in the three 10-year government bonds with flattest yield curve. Our universe was comprised of government bonds from Australia, Canada, Denmark, Europe, Japan, New Zealand, Sweden, UK and the US.

FX - Carry: Excess return of monthly rolling a long position in top-three yielding currencies and a short position in the bottom-three yielding currencies. For currencies, we use G10 FX and for yields domestic interest rate data.

Commodity - Carry: Excess return of monthly rolling a long position in top-four backwardated commodity futures and a short position in the bottom-four backwardated (steepest contango) commodity futures. The commodity futures universe was: Heating oil, Crude Oil, Natural gas, Gold, Silver, Aluminium, Copper, Nickel, Wheat, Corn and Soybeans.

Equity - Volatility: Equal weighted delta-neutral S&P 500 Buy-write (BXM) and Put-write (PUT) Index.

Bond - Volatility: Excess return of monthly rolling a short position on 3-month At-the-Money Straddle (ATM Call plus ATM Put) on near-month US 10-year Treasury Futures.

FX - Volatility: Excess return of monthly rolling an equal weighted position of volatility swaps on USDJPY, USDAUD and USDCHF (receiving implied vol swap) with unit vega notional.

Commodity - Volatility: Return from short volatility position across WTI, Brent, Heating Oil, Gold, Corn, Soybeans, Wheat, Cocoa, Coffee, Sugar and Live Cattle.

[2] See Systematic Strategies across Asset Classes, Kolanovic, December 2013.

Global Equity Style View

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Table 1: Global Equity Style Recommendation

Region	QMI Cycle	Value	Momentum	Growth	Quality	Low Volatility
US	Contraction	OW	N	N	UW	UW
Europe	Contraction	N	OW	N	OW	OW
EM Asia	Contraction	OW	UW	N	OW	UW

Source: J.P. Morgan Quantitative and Derivatives Strategy

Table B2: View Rationale and Implementation[3]

Region	Equity Style	View	Possible Implementation	View Rationale	Style Definition
US	Value	OW	JPRPULVA, FTUSFLUT, FTUSPLUT, FTUSWLUT	Value expanded it's YTD outperformance last month and continues to dominate all other styles. Inflation is peaking at cusp of rolling over; Value has time to run. We favor Value over expensive stocks for its large risk premium (e.g. P/E spread vs market, ~7%ile). Recession is the key risk but does not appear imminent.	B/P 1Y Fwd. Earnings Yield Sales Yield
	Momentum	N	JPRPULMO, FTUSMLUT, FTUSXLUT, FTUSNLUT	12M Momentum is consolidating in Low Vol and Value stocks. It has rotated out of Growth. Its valuation is middling (~40%ile vs market) and the style appears crowded given its rotation out of beaten down Growth. Given the mixed positioning, it is ideal to have neutral exposure to Momentum.	12M Price Mom
	Growth	N	JPAMSMSG	Growth stocks (screened on actual earnings and sales growth) are showing early signs of reversal from their YTD underperformance (-9.4% L/S). They are trading cheap versus the market (3%ile). We acknowledge that rising rates are a risk to higher beta, long duration Growth stocks. Recommend cheaper sustainable growth stocks (GARP) and those exposed to Cyclical Recovery.	Sales Growth (1Y, 3Y) FCF Growth (1Y, 3Y)
	Quality	UW	JPRPULQU, FTUSELUT, FTUSILUT, FTUSALUT	Bouts of risk aversion should have supported Quality but its performance has been flat recently. P/E spread of high Quality stocks vs market has shrunk from 99%ile begining of the year to 39%ile due to relatively stronger earnings. Cyclical recovery poses a risk to Quality Stocks.	ROE ROA EPS Quality (Piotroski)
	Low Volatility	UW	JPRPULBE, FTUSVLUT	Low Vol stock valuations (PE spread vs market at 84%ile) are less extreme compared to 4Q'21. Performance of Low Vol stocks can be attributed to risk-on/risk-off sentiment. We do not favor Low Vol since recession, if it occurs, is still distant. Also, the Style remains exposed to high inflation and yields.	12-month stock Volatility
Europe	Value	N	JPQTVLEL (L), JPQTVLE1(L/S)	The European QMI, our macro navigational tool continues to recommend the 'Contraction' phase of the cycle. Although, Value stocks typically perform better than Growth stocks during this phase, and both will typically underperform Quality. Today, L/S Value appears to be at risk if Energy stocks' upgrades slow, inflation seems to peaking and bond yields are at risk of edging lower after very sharp rises. Value stocks tend to have more variability in their EPS and DPS forecasts and are now vulnerable as macro and profit forecasts decline sharply.	Earnings Yield Dividend Yield FCF Yield
	Momentum	OW	JPQTMOEL (L), JPQTMOE1(L/S)	Momentum stocks have generally performed well YTD. However, recently Momentum is sufferring an identity crisis as it moves away from Value but is not yet being picked up by Quality. We believe Momentum stocks will perform better as the correlation shifts more decisively towards Quality. The key downside risk for Momentum is when the QMI starts to enter the 'Recovery' phase. We believe this is unlikley to happen before the end of Q1.	Price Mom Seasonality
	Growth	N		Growth stocks have sufferred as rising bond yields have impacted high valuation stocks. Usually, there is greater upside if economic growth becomes scarce, but this may be offset as linear EPS growth projections prove to be too optimistic. The key positive is that we believe bond yields may have peaked and Growth stocks may have hit a relative floor, particularly vs. Value.	Earnings Mom PEG Ratio
	Quality	OW	JPQTQUEL (L), JPQTQUE1(L/S)	Quality has been lagging Value YTD. However, there now seems to be upside potential to Quality stocks as the QMI shifts further into the 'Contraction' phase. High Quality stocks are less expensive on Valuations (at a market P/E), and L/S is now much cheaper. Cheaper Quality stocks may start to perform much better than before. Overall, as both the economic & profit cycle slows - Quality is our preferred exposure.	ROE Net Income Margin Equity Debt Ratio
	Low Volatility	OW	JPQTLVEL (L), JPQTLVE1(L/S)	This year, low Volatility stocks have started to perform very differently to Quality stocks. Low Vols recent gains vs Quality seems to be because they trade on a much lower beta to the market and to high Quality stocks. Low Volatility are OW Health Care, where High Quality stocks are OW Technology.	Low Size Low Beta Low Vol
EM Asia	Value	OW	JPHASST2 (L), QTJPXEYS (L/S)	Value has become the best performing style in the year again and performance is likely to sustain if the business cycle (QMI moves into Recovery) continues to improve.	Fwd Earnings Yield Sales Yield B/P
	Momentum	UW	JPHASSTY (L), QTJPXPMS (L/S)	Momentum saw a sharp reversal recently due to a strong China rally driven by re-opening optimism and it remains vulnerable to further drawdowns	6M, 12M Price Mom 3M EPS Revision
	Growth	N	JPHASSTY (L)	Growth has been flatlining for the past two months as investors continue to adjust to increased Fed hawkishness and expectations of higher terminal rate. Valuations are also quite expensive	EPS Growth Sales Growth Forecast certainty
	Quality	OW	QTJPXRES (L/S)	Quality performance has faded after a brief pick-up in September despite elevated macro uncertainty. Valuations remain attractive	ROE Forecast Certainty
	Low Volatility	UW	QTJPXLVS (L/S)	Low Vol also saw a sharp reversal recently but macro uncertainties (Hawkish Fed, inflation, China COVID zero) still persist. Crowding remain fairly elevated	Low 240D Vol

Source: J.P. Morgan Quantitative and Derivatives Strategy. Highlighted are thematic J.P. Morgan Indices, which are one of the many possible implementations of an equity style view. Other implementations include quantitative ETFs, direct trading of long/short stock portfolios, equity risk factor benchmarks designed by other institutions, etc.

[3] See Framework for Style Investing, Lakos-Bujas et al., May 2015.
See Global Equity Style Investing, Chaudhry et al., Nov 2017.

Rule-based fixed income signals

Table D1: Rules: Current duration and cross-country signals

Duration signal positions by country, by signal, and weighted average across signals

Positive numbers signal a duration long, negative numbers a duration short and 0 neutral.

Duration — Current signal by country

	Weight	Euro area	Japan	UK	US	Australia	Canada	Sweden	Switzerland	New Zealand	Norway	Combined
PMI momentum	15%	1	1	1	1	0	0	1	1	0	0	0.6
Revision ratio momentum	15%	1	0	0	1	1	1	0	1	1	0	0.6
Bond price momentum	20%	0	-1	0	-1	-1	0	0	0	-1	0	-0.4
Equity price momentum	15%	1	-1	1	1	1	1	-1	1	1	1	0.6
Carry to Risk	35%	-1.1	1.5	-1.4	-1.8	-1.0	-1.9	-1.3	-1.7	-0.8	-1.1	-1.0
Combined		0.1	0.3	-0.2	-0.4	-0.2	-0.4	-0.5	-0.1	-0.2	-0.2	-0.2
Previous month		*-0.1*	*0.5*	*-0.4*	*-0.6*	*-0.3*	*-0.7*	*-0.2*	*-0.2*	*-0.2*	*0.0*	*-0.2*

NB: Positive numbers signal a duration long, negative numbers a duration short, and 0 neutral. Combined signal can be thought of as a scalar relative to a risk budget, e.g. a coefficient of -0.2 would signal a short of 20% of risk limit.
Source: J.P. Morgan, Bloomberg Finance L.P.

Positions of cross-country signals

Each measure ranks countries from highest to lowest; the highest two per signal indicate long positions in 10Y swaps and lowest to indicate short positions in 10Y swaps.

Cross-market — Current basket

	First pair		Second pair	
	Long	Short	Long	Short
Carry	GBP	NOK	EUR	CAD
Carry to Risk	JPY	NOK	SEK	CAD
Change in slope	JPY	CAD	CHF	USD
Real yield	NZD	JPY	AUD	EUR

Returns on duration signals

%

	Returns*, %								IR since 1998
	1M	3M	6M	YTD	12M	5Y	10Y	Since 1998	
PMI momentum	-1.9	-8.8	-6.8	-12.3	-12.1	-0.1	0.6	1.9	0.47
Revision ratio momentum	1.5	-2.4	-4.6	-8.8	-8.9	-1.9	-0.4	2.0	0.47
Bond price momentum	1.8	4.3	5.7	15.0	13.7	5.5	3.0	3.0	0.68
Equity price momentum	-2.3	-6.6	-3.0	-2.9	-3.2	-0.2	0.0	2.6	0.52
Carry to Risk	2.1	13.0	10.7	8.0	10.1	-1.4	0.3	1.4	0.34
Combined	0.5	1.9	2.0	1.4	1.7	0.1	0.5	1.6	0.91

* Holding period returns for 1M - 6M; annualized for 12M and longer.
Source: J.P. Morgan, Bloomberg Finance L.P.

Manufacturing PMI momentum: Short duration in each country if both local country and global manufacturing PMI increased over past two months, long duration if both fell, and neutral otherwise.

Earnings revision ratio momentum: Short duration in each country if the local and global IBES equity earnings revision ratio increased over the past three months, long duration if both fell, and neutral otherwise.

Bond price momentum: Long duration if our bond total return swap indices are above both 1-month and 12-month average, short if below both 1-month and 12-month average, neutral otherwise.

Equity price momentum: Long duration in each country if local equity market is below its 6-month average, and short if it is above 6-month average (net of cash).

Carry-to-risk: Long duration if carry-to-risk (10Y – 3M slope) is above its 10Y average, short duration if below its 10Y average, with position size proportional to how far carry to risk is above or below average.

Returns on cross-market signals

%

	Returns*, %								IR since 1996**
	1M	3M	6M	YTD	12M	5Y	10Y	Since 1996**	
Carry	4.0	-0.6	-0.3	-5.5	-4.5	-2.1	-1.0	2.0	0.44
Carry to Risk	1.4	-0.5	1.4	-4.4	-2.2	-0.5	-0.3	1.9	0.45
Change in slope	-0.1	0.1	-1.3	-2.1	-2.4	0.8	-1.0	1.6	0.40
Real yield	1.9	1.5	4.9	4.8	6.0	2.2	1.6	1.7	0.47

* Holding period returns for 1M - 6M; annualized for 12M and longer.
** Except for the real yield signal, which starts in 2004.
Source: J.P. Morgan, Bloomberg Finance L.P.

Carry and carry-to-risk: Overweight countries with high carry (10Y swap rate – 1M Libor rate), and overweight countries where carry is high relative to volatility[4].

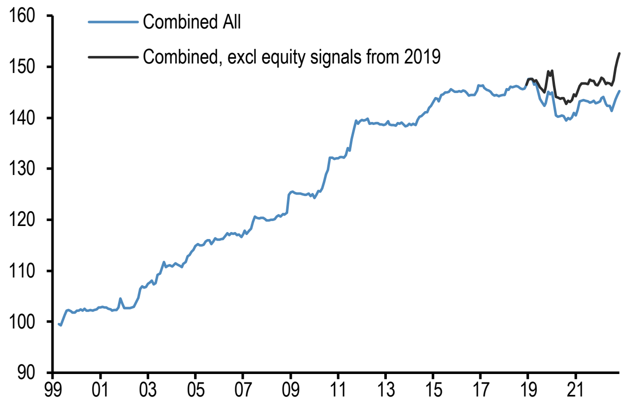
Reversal (change in curve slope): Overweight countries where curve (10Y – 1Y slope) has steepened most, relative to average over past 6M[5].

Real yield: Overweight markets with high real yields, measured as 10Y swap rate less consensus forecasts of inflation over the next 10Y[6].

[4] See *A cross-market bond carry strategy*, N. Panigirtzoglou, March 2006.
[5] See *Exploiting reversals in cross-market yield spreads*, S. Mac Gorain, March 2012.
[6] See *Rule-based Fixed Income Monthly*, S. Mac Gorain, November 2012.

Combined duration signal performance

Index, Jan 1999 = 100



* Black line shows returns excluding the revision ratio and equity price momentum signals and using only the PMI momentum, bond price momentum and carry-to-risk signals.
Source: J.P. Morgan

Combined duration signal performance

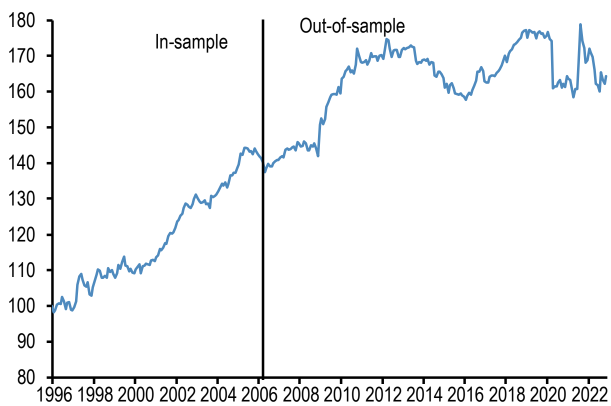
Since 1998; % and IR

	Return	Vol	IR	Max drawdown	Success ratio
PMI momentum	1.9%	4.2%	0.47	-15%	54%
Revision ratio momentum	2.0%	4.7%	0.47	-17%	57%
Bond price momentum	3.0%	4.4%	0.68	-9.7%	53%
Equity price momentum	2.6%	5.1%	0.52	-11%	52%
Carry to Risk	1.4%	5.1%	0.34	-21%	54%
Combined	1.6%	1.8%	0.91	-5.5%	61%

Source: J.P. Morgan

Cross-market carry-to-risk signal performance

Index, Jan 1996 = 100



Source: J.P. Morgan

Cross-market signal performance

Since 1996 (except real yield signal since 2004); % and IR

	Return	Vol	IR	Max drawdown	Success ratio
Carry	2.0%	4.5%	0.44	-16%	57%
Carry-to-risk	1.9%	4.2%	0.45	-12%	57%
Change in slope	1.6%	3.9%	0.40	-19%	54%
Real yield	1.7%	3.6%	0.47	-6.3%	54%

Source: J.P. Morgan

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Cross-Asset Monitor

	Asset	Spot	1W Return (%)	1M Return (%)	YTD Return (%)	1Y Low	1Y High	Percentile	Z-Score
Equity	MSCI AC World (USD)	618.66	5.45	12.19	-16.38	550.4	758.9	31.9%	-0.67
Equity	MSCI AC World (lcy)	748.60	4.28	10.21	-13.56	677.8	886.1	35.0%	-0.61
Equity	MSCI World (USD)	2,674.08	5.59	12.65	-15.66	2367.7	3248.1	35.0%	-0.59
Equity	MSCI World (lcy)	2,104.48	4.51	10.79	-12.38	1895.6	2477.0	36.5%	-0.53
Equity	S&P 500	3,992.93	4.94	11.57	-15.07	3577.0	4796.6	35.0%	-0.60
Equity	Russel 2000	1,882.74	4.08	12.02	-15.18	1649.8	2411.8	41.1%	-0.34
Equity	Nasdaq	11,323.33	7.21	9.79	-27.11	10321.4	16057.4	21.5%	-0.93
Equity	Euro Stoxx	3,868.50	4.31	14.49	-7.10	3279.0	4401.5	65.0%	0.21
Equity	FTSE 100	7,318.04	0.39	6.87	2.36	6826.2	7672.4	45.0%	-0.09
Equity	Topix	1,964.95	1.60	3.52	1.11	1758.9	2050.8	81.1%	0.98
Equity	MSCI EM (USD)	935.73	4.29	8.45	-21.89	842.8	1290.6	14.2%	-1.08
Equity	MSCI EM (lcy)	56,764.49	2.66	6.00	-18.93	52493.1	73162.1	13.8%	-1.09
Bonds	GBI Global (hedged USD	389.57	1.56	1.47	-11.59	380.5	445.9	11.9%	-1.30
Bonds	GBI Global (lcy)	525.82	1.53	1.35	-12.31	514.0	607.0	11.9%	-1.35
Bonds	EM local debt (USD)	321.78	0.81	-0.53	-13.14	329.0	381.8	18.0%	-1.38
Bonds	US Treasuries	580.36	1.94	0.62	-12.72	566.8	672.5	10.0%	-1.37
Bonds	German Bunds	454.37	0.80	0.82	-15.37	445.9	547.0	6.9%	-1.52
Bonds	JGBs	283.26	0.68	0.08	-3.85	279.4	295.7	10.0%	-1.32
Bonds	US linkers	316.51	1.65	1.47	-12.02	310.3	360.9	12.3%	-1.54
Bonds	Euro linkers	246.56	1.15	3.96	-6.63	235.9	277.5	16.1%	-1.16
Credit	US HG	320.66	2.43	1.54	-14.81	309.4	391.6	11.9%	-1.25
Credit	US HY	657.32	1.03	2.41	-9.20	638.1	740.7	23.0%	-1.00
Credit	Euro HG	207.43	1.34	2.07	-12.83	202.0	243.4	12.6%	-1.26
Credit	Euro HY	328.37	2.57	5.36	-8.82	311.0	366.2	33.4%	-0.61
Credit	EMBIGD	769.68	2.92	4.20	-19.02	722.8	982.7	15.0%	-1.00
Credit	CEMBI	304.58	1.42	-0.85	-17.12	299.8	376.2	6.9%	-1.33
FX	USD TWI	134.60	-0.98	-0.76	10.58	121.0	136.9	86.9%	1.50
FX	EUR/USD	1.03	2.99	6.15	-9.23	1.0	1.1	35.7%	-0.53
FX	GBP/USD	1.18	2.33	5.46	-12.93	1.1	1.4	22.6%	-0.87
FX	USD/JPY	139.16	5.37	6.83	-17.30	112.8	150.2	79.6%	0.88
FX	EM FX	335.44	1.48	1.96	-11.33	332.4	390.0	8.8%	-1.55
Comdty	GSCI	646.73	-2.89	2.35	15.24	521.3	822.3	39.6%	-0.31
Comdty	Brent	96.36	-1.59	5.16	23.89	68.9	128.0	46.5%	-0.15
Comdty	Gold	1,765.60	5.06	7.55	-3.45	1623.6	2043.3	32.6%	-0.38
Comdty	Copper	8,502.90	4.41	10.91	-12.77	7162.0	10701.0	38.8%	-0.49
Ca:	GBI 3m cash (lcy)	325.70	0.032	0.06	-0.32	325.4	326.9	37.3%	-0.66

	Asset	Rate (%)	1W Chg (spread)	1M Chg (spread)	YTD Chg (spread)	1Y Low	1Y High	Percentile	Z-Score
Rates	US 10yr	3.89	-0.32	-0.13	2.38	1.3	4.2	88.8%	1.45
Rates	EU 10yr	2.16	-0.14	-0.14	2.34	-0.4	2.4	92.3%	1.57
Rates	UK 10yr	3.36	-0.18	-1.09	2.39	0.7	4.5	86.5%	1.38
Rates	Japan 10yr	0.24	-0.02	-0.01	0.17	0.0	0.3	66.1%	0.66
Rates	GBI-Agg Yield	3.30	-0.18	-0.26	1.71	1.5	3.6	87.3%	1.34
Rates	GBI-DM Yield	2.98	-0.20	-0.14	1.97	0.9	3.3	89.2%	1.48
Rates	GBI-EM Yield	7.30	-0.11	0.01	1.59	5.0	7.4	81.5%	1.06
Rates	US 10yr Breakeven	2.44	-0.09	0.03	-0.15	2.2	3.0	19.6%	-0.79

	Asset	Spread (bps)	1W Chg (spread)	1M Chg (spread)	YTD Chg (spread)	1Y Low	1Y High	Percentile	Z-Score
Credit Spread	US HG	174.37	-2.51	-14.87	44.88	0.6	1.8	35.3%	-0.11
Credit Spread	US HY	509.91	13.03	-54.74	96.89	368.2	636.8	66.5%	0.56
Credit Spread	Euro HG	136.91	-2.94	-1.52	48.91	55.6	160.9	80.0%	0.88
Credit Spread	Euro HY	554.03	-67.12	-138.58	168.34	337.2	729.9	58.4%	0.34
Credit Spread	EMBIGD	510.85	-13.65	-55.96	129.60	347.6	593.6	75.3%	0.73
Credit Spread	CEMBI	443.04	4.60	41.43	152.45	264.8	449.6	98.0%	1.89
CDS Spread	CDX IG 5yr	83.25	-6.23	-19.03	33.75	49.3	111.4	59.6%	0.37
CDS Spread	CDX HY 5yr	485.05	-33.27	-102.46	192.16	289.1	631.3	61.1%	0.49
CDS Spread	iTraxx Main 5yr	97.87	-10.98	-33.28	49.98	47.5	138.2	58.8%	0.36
CDS Spread	iTraxx x-Over 5yr	482.98	-38.86	-141.85	240.59	240.1	662.3	58.8%	0.39

Source: J.P. Morgan Quantitative and Derivatives Strategy

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Cross-Asset Correlation

		Equity												Bonds								Credit						FX					Commodity				Cash
	Asset	MSCI AC World (USD)	MSCI AC World (lcy)	MSCI World (USD)	MSCI World (lcy)	S&P 500	Russel 2000	Nasdaq	Euro Stoxx	FTSE 100	Topix	MSCI EM (USD)	MSCI EM (lcy)	GBI Global (hedged USD)	GBI Global (lcy)	EM local debt (USD)	US Treasuries	German Bunds	JGBs	US linkers	Euro linkers	US HG	US HY	Euro HG	Euro HY	EMBIGD	CEMBI	USD TWI	EUR/USD	GBP/USD	USD/JPY	EM FX	GSCI	Brent	Gold	Copper	GBI 3m cash (lcy)
Equity	MSCI AC World (USD)		100%	100%	99%	97%	92%	94%	82%	76%	73%	71%	67%	28%	28%	1%	21%	24%	22%	34%	36%	48%	78%	52%	70%	69%	48%	-68%	57%	67%	-16%	8%	22%	18%	22%	41%	13%
	MSCI AC World (lcy)	100%		99%	100%	98%	93%	95%	82%	76%	74%	69%	66%	25%	25%	0%	18%	22%	20%	33%	35%	45%	77%	51%	68%	66%	46%	-62%	51%	62%	-10%	6%	22%	18%	18%	38%	11%
	MSCI World (USD)	100%	99%		100%	98%	93%	95%	82%	75%	70%	65%	61%	29%	30%	0%	22%	25%	22%	36%	37%	48%	78%	53%	68%	67%	45%	-66%	57%	67%	-15%	8%	20%	16%	21%	39%	14%
	MSCI World (lcy)	99%	100%	100%		99%	93%	95%	81%	74%	71%	63%	60%	26%	27%	-1%	19%	23%	20%	34%	36%	45%	77%	51%	67%	65%	44%	-60%	51%	62%	-9%	6%	20%	16%	16%	35%	12%
	S&P 500	97%	98%	98%	99%		92%	96%	74%	67%	64%	56%	54%	30%	30%	-3%	23%	27%	20%	37%	39%	46%	77%	52%	63%	61%	41%	-56%	49%	60%	-11%	6%	20%	15%	16%	33%	12%
	Russel 2000	92%	93%	93%	93%	92%		90%	73%	66%	65%	58%	56%	27%	27%	-5%	20%	23%	26%	41%	40%	42%	75%	49%	62%	58%	33%	-59%	48%	61%	-9%	2%	29%	25%	23%	38%	12%
	Nasdaq	94%	95%	95%	95%	96%	90%		69%	60%	61%	57%	55%	26%	26%	-7%	20%	23%	15%	34%	35%	44%	73%	45%	58%	56%	37%	-52%	44%	54%	-10%	0%	14%	10%	12%	28%	8%
	Euro Stoxx	82%	82%	82%	81%	74%	73%	69%		87%	64%	60%	55%	13%	13%	10%	6%	8%	12%	18%	16%	31%	62%	42%	69%	70%	45%	-61%	51%	57%	-8%	11%	2%	2%	10%	30%	20%
	FTSE 100	76%	76%	75%	74%	67%	66%	60%	87%		64%	67%	64%	3%	3%	11%	-3%	1%	13%	10%	16%	24%	55%	34%	62%	60%	41%	-60%	40%	45%	-3%	12%	16%	15%	10%	37%	9%
	Topix	73%	74%	70%	71%	64%	65%	61%	64%	64%		70%	71%	-1%	0%	-3%	-4%	-2%	11%	6%	7%	25%	50%	27%	55%	47%	42%	-45%	31%	36%	17%	-4%	21%	21%	2%	29%	5%
	MSCI EM (USD)	71%	69%	65%	63%	56%	58%	57%	60%	67%	70%		99%	8%	8%	5%	6%	4%	20%	10%	16%	37%	54%	33%	61%	57%	57%	-65%	42%	48%	-14%	8%	31%	29%	29%	47%	-1%
	MSCI EM (lcy)	67%	66%	61%	60%	54%	56%	55%	55%	64%	71%	99%		4%	4%	3%	1%	2%	17%	7%	15%	31%	50%	29%	57%	50%	53%	-57%	34%	42%	-7%	6%	33%	31%	24%	44%	-4%
Bonds	GBI Global (hedged USD)	28%	25%	29%	26%	30%	27%	26%	13%	3%	-1%	8%	4%		100%	11%	95%	91%	64%	70%	71%	87%	49%	82%	39%	41%	32%	-29%	24%	39%	-59%	20%	3%	-2%	22%	7%	4%
	GBI Global (lcy)	28%	25%	30%	27%	30%	27%	26%	13%	3%	0%	8%	4%	100%		11%	95%	91%	64%	70%	71%	87%	49%	82%	39%	42%	32%	-30%	25%	40%	-58%	19%	3%	-1%	22%	7%	4%
	EM local debt (USD)	1%	0%	0%	-1%	-3%	-5%	-7%	10%	11%	-3%	5%	3%	11%	11%		13%	9%	1%	-8%	-10%	9%	-2%	15%	4%	17%	5%	-11%	8%	0%	-8%	69%	-9%	-5%	-7%	-11%	3%
	US Treasuries	21%	18%	22%	19%	23%	20%	20%	6%	-3%	-4%	6%	1%	95%	95%	13%		78%	56%	71%	58%	89%	42%	68%	28%	40%	35%	-30%	28%	35%	-58%	23%	-1%	-5%	21%	4%	4%
	German Bunds	24%	22%	25%	23%	27%	23%	23%	8%	1%	-2%	4%	2%	91%	91%	9%	78%		59%	60%	76%	71%	43%	87%	37%	28%	21%	-17%	6%	31%	-52%	12%	7%	2%	18%	3%	-1%
	JGBs	22%	20%	22%	20%	20%	26%	15%	12%	13%	11%	20%	17%	64%	64%	1%	56%	59%		46%	55%	60%	49%	61%	46%	36%	30%	-23%	6%	24%	-33%	8%	22%	12%	22%	14%	-7%
	US linkers	34%	33%	36%	34%	37%	41%	34%	18%	10%	6%	10%	7%	70%	70%	-8%	71%	60%	46%		72%	66%	52%	57%	40%	31%	21%	-25%	16%	34%	-36%	0%	32%	25%	34%	24%	7%
	Euro linkers	36%	35%	37%	36%	39%	40%	35%	16%	16%	7%	16%	15%	71%	71%	-10%	58%	76%	55%	72%		58%	51%	74%	46%	26%	14%	-22%	1%	28%	-37%	-1%	36%	24%	33%	21%	-1%
Credit	US HG	48%	45%	48%	45%	46%	42%	44%	31%	24%	25%	37%	31%	87%	87%	9%	89%	71%	60%	66%	58%		68%	77%	56%	64%	56%	-47%	37%	45%	-54%	16%	8%	3%	20%	20%	3%
	US HY	78%	77%	78%	77%	77%	75%	73%	62%	55%	50%	54%	50%	49%	49%	-2%	42%	43%	49%	52%	51%	68%		69%	80%	68%	47%	-56%	40%	53%	-27%	-5%	26%	18%	27%	37%	3%
	Euro HG	52%	51%	53%	51%	52%	49%	45%	42%	34%	27%	33%	29%	82%	82%	15%	68%	87%	61%	57%	74%	77%	69%		72%	57%	43%	-40%	19%	45%	-45%	11%	10%	3%	20%	19%	3%
	Euro HY	70%	68%	68%	67%	63%	62%	58%	69%	62%	55%	61%	57%	39%	39%	4%	28%	37%	46%	40%	46%	56%	80%	72%		72%	55%	-52%	33%	47%	-25%	-2%	16%	7%	19%	41%	11%
	EMBIGD	69%	66%	67%	65%	61%	58%	56%	70%	60%	47%	57%	50%	41%	42%	17%	40%	28%	36%	31%	26%	64%	68%	57%	72%		80%	-67%	53%	52%	-37%	28%	-3%	-8%	20%	36%	10%
	CEMBI	48%	46%	45%	44%	41%	33%	37%	45%	41%	42%	57%	53%	32%	32%	5%	35%	21%	30%	21%	14%	56%	47%	43%	55%	80%		-46%	34%	38%	-25%	20%	2%	-1%	18%	28%	11%
FX	USD TWI	-68%	-62%	-66%	-60%	-56%	-59%	-52%	-61%	-60%	-45%	-65%	-57%	-29%	-30%	-11%	-30%	-17%	-23%	-25%	-22%	-47%	-56%	-40%	-52%	-67%	-46%		-82%	-75%	37%	-28%	-17%	-15%	-48%	-52%	-10%
	EUR/USD	57%	51%	57%	51%	49%	48%	44%	51%	40%	31%	42%	34%	24%	25%	8%	28%	6%	6%	16%	1%	37%	40%	19%	33%	53%	34%	-82%		78%	-36%	27%	0%	3%	39%	43%	20%
	GBP/USD	67%	62%	67%	62%	60%	61%	54%	57%	45%	36%	48%	42%	39%	40%	0%	35%	31%	24%	34%	28%	45%	53%	45%	47%	52%	38%	-75%	78%		-34%	10%	21%	19%	46%	49%	17%
	USD/JPY	-16%	-10%	-15%	-9%	-11%	-9%	-10%	-8%	-3%	17%	-14%	-7%	-59%	-58%	-8%	-58%	-52%	-33%	-36%	-37%	-54%	-27%	-45%	-25%	-37%	-25%	37%	-36%	-34%		-15%	-5%	-3%	-37%	-25%	-14%
	EM FX	8%	6%	8%	6%	6%	2%	0%	11%	12%	-4%	8%	6%	20%	19%	69%	23%	12%	8%	0%	-1%	16%	-5%	11%	-2%	28%	20%	-28%	27%	10%	-15%		-9%	-4%	4%	-1%	7%
Comdty	GSCI	22%	22%	20%	20%	20%	29%	14%	2%	16%	21%	31%	33%	3%	3%	-9%	-1%	7%	22%	32%	36%	8%	26%	10%	16%	-3%	2%	-17%	0%	21%	-5%	-9%		94%	45%	55%	-4%
	Brent	18%	18%	16%	16%	15%	25%	10%	2%	15%	21%	29%	31%	-2%	-1%	-5%	-5%	2%	12%	25%	24%	3%	18%	3%	7%	-8%	-1%	-15%	3%	19%	-3%	-4%	94%		38%	44%	9%
	Gold	22%	18%	21%	16%	16%	23%	12%	10%	10%	2%	29%	24%	22%	22%	-7%	21%	18%	22%	34%	33%	20%	27%	20%	19%	20%	18%	-48%	39%	46%	-37%	4%	45%	38%		52%	10%
	Copper	41%	38%	39%	35%	33%	38%	28%	30%	37%	29%	47%	44%	7%	7%	-11%	4%	3%	14%	24%	21%	20%	37%	19%	41%	36%	28%	-52%	43%	49%	-25%	-1%	55%	44%	52%		15%
Cas	GBI 3m cash (lcy)	13%	11%	14%	12%	12%	12%	8%	20%	9%	5%	-1%	-4%	4%	4%	3%	4%	-1%	-7%	7%	-1%	3%	3%	3%	11%	10%	11%	-10%	20%	17%	-14%	7%	-4%	9%	10%	15%	

Source: J.P. Morgan Quantitative and Derivatives Strategy

Marko Kolanovic, PhD; Nikolaos Panigirzoglou; Bram Kaplan, CFA; Thomas Salopek; Federico Manicardi; Mika Inkinen; Amy Ho

Cross-Asset Volatility

	Asset	3M ATM IV	1W Chg (vol pt)	1M Chg (vol pt)	YTD Chg (vol pt)	1Y Low	1Y High	1Y Percentile	Current Percentile Relative to 1Y Low/High and 20th-80th Percentile Range	Z-Score	Implied-Realized	1W Chg (vol pt)
Equity	MSCI World (USD)	20.8%	-0.99	-3.12	5.16	14.7%	28.3%	37.0%		-0.23	-3.20%	-3.80
	S&P 500	22.9%	-0.89	-3.97	7.14	15.4%	28.2%	48.9%		0.13	-4.49%	-3.52
	Russel 2000	27.1%	-0.88	-3.92	5.54	20.8%	32.9%	42.6%		-0.13	-3.54%	-3.49
	Euro Stoxx	19.4%	-1.14	-5.62	2.67	15.9%	34.5%	13.6%		-1.11	-1.35%	-2.03
	FTSE100	15.1%	-0.44	-4.86	1.52	12.6%	28.1%	14.7%		-0.96	0.93%	-0.62
	Topix	17.3%	-0.94	-3.26	-0.03	16.1%	25.8%	14.3%		-1.02	0.06%	-1.11
	MSCI EM (USD)	22.7%	-1.78	-3.82	3.76	17.8%	32.5%	49.5%		-0.10	1.02%	-4.55
Credit	CDX IG 5yr	55.9%	0.09	-3.07	11.71	43.0%	75.8%	34.4%		-0.30	9.50%	-1.54
	CDX HY 5yr	55.1%	0.20	-0.86	10.39	40.4%	67.8%	42.9%		-0.03	6.41%	-1.39
	iTraxx Main 5yr	58.3%	-4.66	-7.29	14.01	38.2%	86.2%	29.5%		-0.26	12.46%	-6.67
	iTraxx x-Over 5yr	53.2%	-4.29	-6.39	4.04	43.1%	84.7%	14.9%		-1.11	9.97%	-5.12
FX	EUR/USD	10.1%	-0.78	-1.26	4.75	5.4%	12.8%	70.1%		0.72	-2.89%	-1.69
	GBP/USD	11.8%	-0.94	-2.54	5.29	6.2%	18.8%	81.2%		0.74	-6.61%	-2.62
	USD/JPY	12.1%	0.20	-0.60	6.26	5.9%	14.3%	80.8%		1.03	-1.06%	-3.05
	EM FX	12.8%	0.11	-0.39	1.46	8.4%	13.9%	84.6%		1.22	6.60%	0.00
Comdty	Brent	46.6%	-0.25	-3.00	9.20	33.7%	72.6%	44.0%		-0.17	7.89%	0.01
	Gold	16.2%	-0.49	-1.62	2.33	13.0%	26.3%	46.3%		-0.08	0.11%	-1.73
	Copper	31.0%	0.80	0.77	3.73	25.3%	33.7%	90.0%		1.36	3.25%	-0.66

	Asset	3M ATM IV (bp vol)	1W Chg (vol pt)	1M Chg (vol pt)	YTD Chg (vol pt)	1Y Low	1Y High	1Y Percentile	Current Percentile Relative to 1Y Low/High and 20th-80th Percentile Range	Z-Score
Rates	US 10yr	125.4	-0.03	-3.76	-16.62	76.0	156.0	77.0%		0.76
	EU 10yr	132.4	0.14	-4.02	-143.58	52.3	170.0	73.9%		0.88
	UK 10yr	167.2	-1.62	-8.49	-23.27	73.2	272.2	78.9%		0.84
	Japan 10yr	50.0	7.51	1.73	-92.62	14.7	60.1	85.0%		1.34

Source: J.P. Morgan Quantitative and Derivatives Strategy

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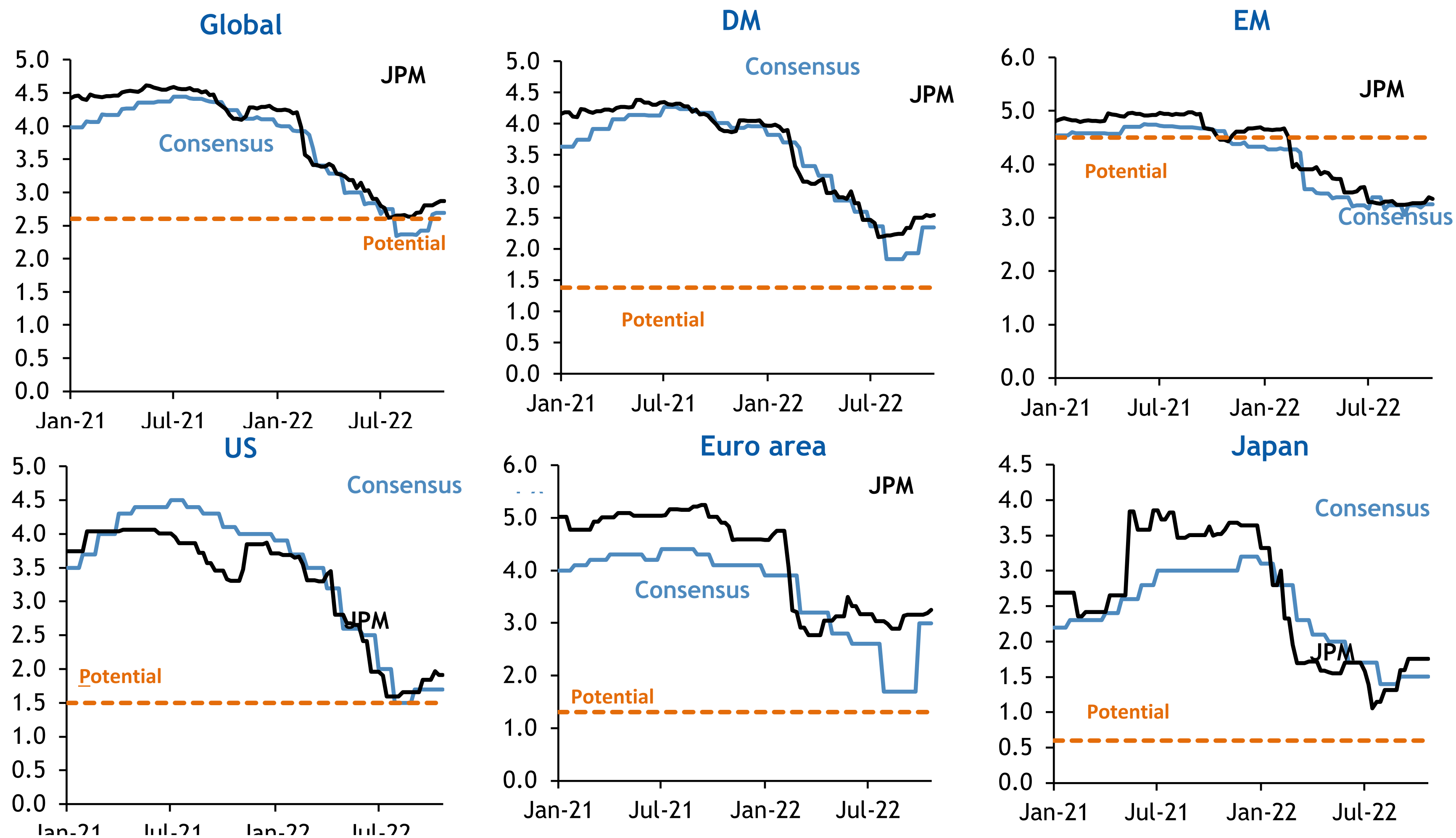
Macro Momentum

2022 GDP Expectations

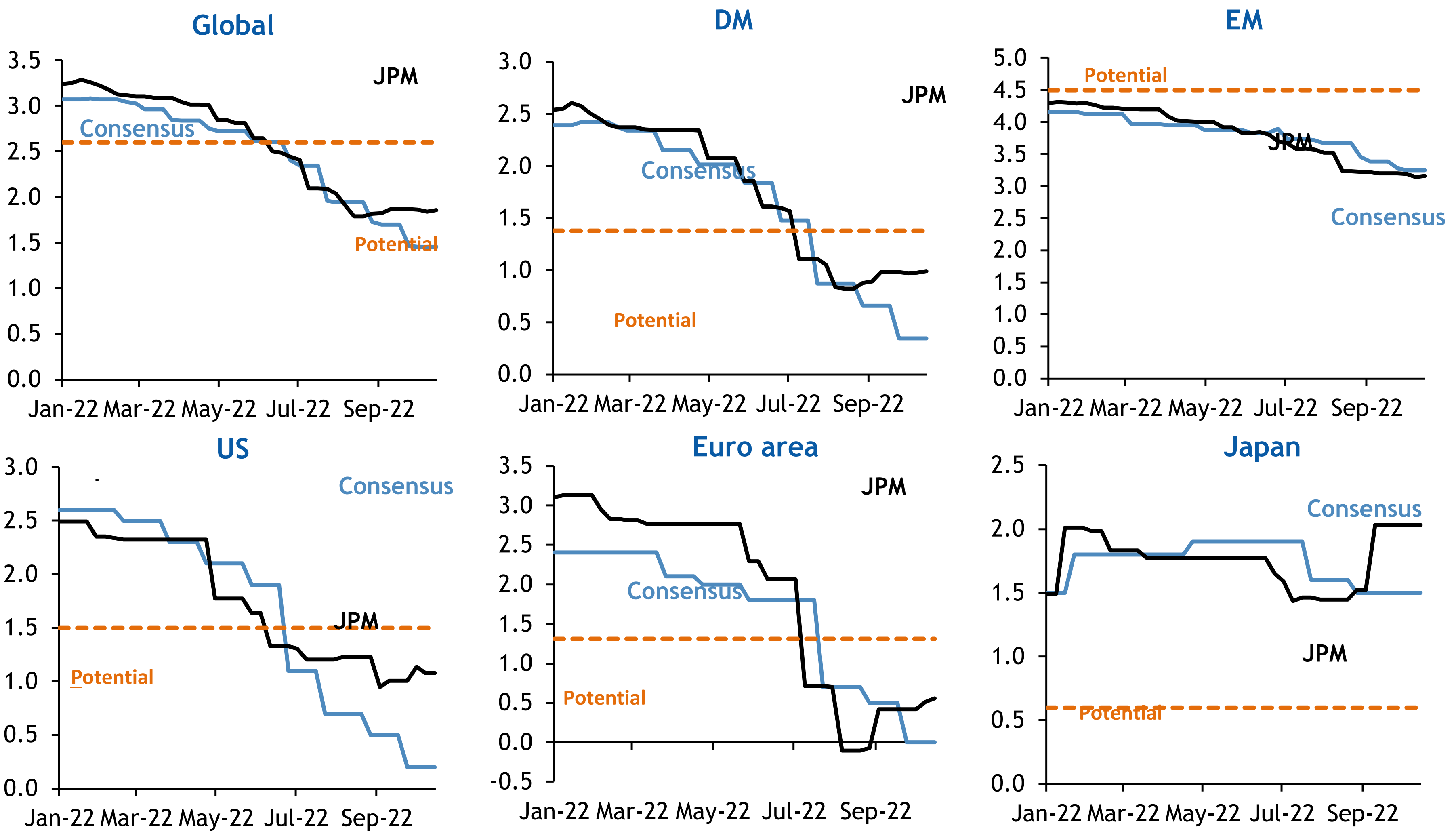
In %, GDP estimates of J.P. Morgan and consensus with current J.P. Morgan estimates of potential growth. Consensus Economics forecasts for global growth are done using the same 5-year rolling USD GDP country/region weights that we use for our own global growth forecast.



Source: J.P. Morgan.

2023 GDP Expectations

In %, GDP estimates of J.P. Morgan and consensus with current J.P. Morgan estimates of potential growth. Consensus Economics forecasts for global growth are done using the same 5-year rolling USD GDP country/region weights that we use for our own global growth forecast.



Source: J.P. Morgan.

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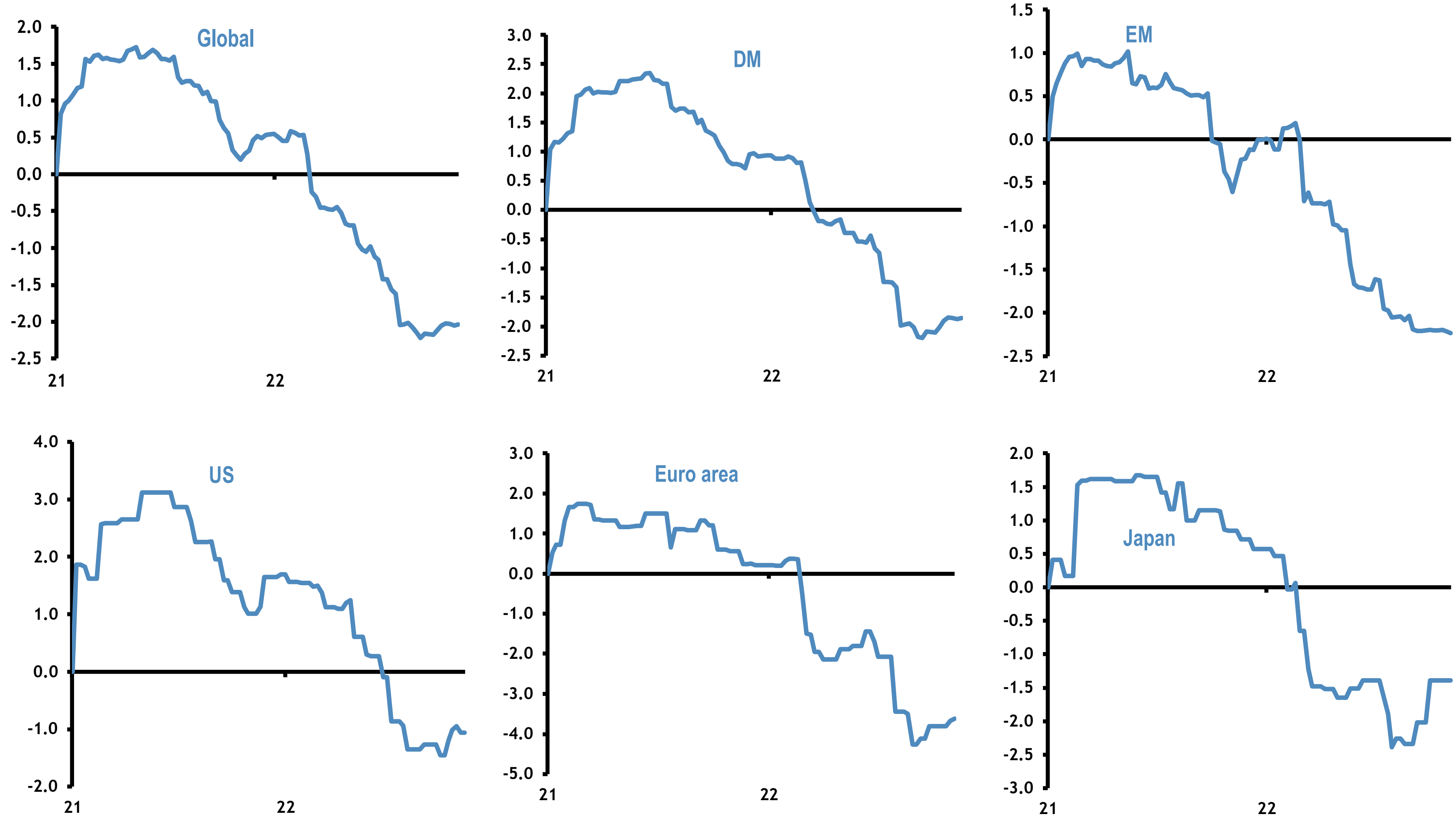
Forecast Revision indices since 2021

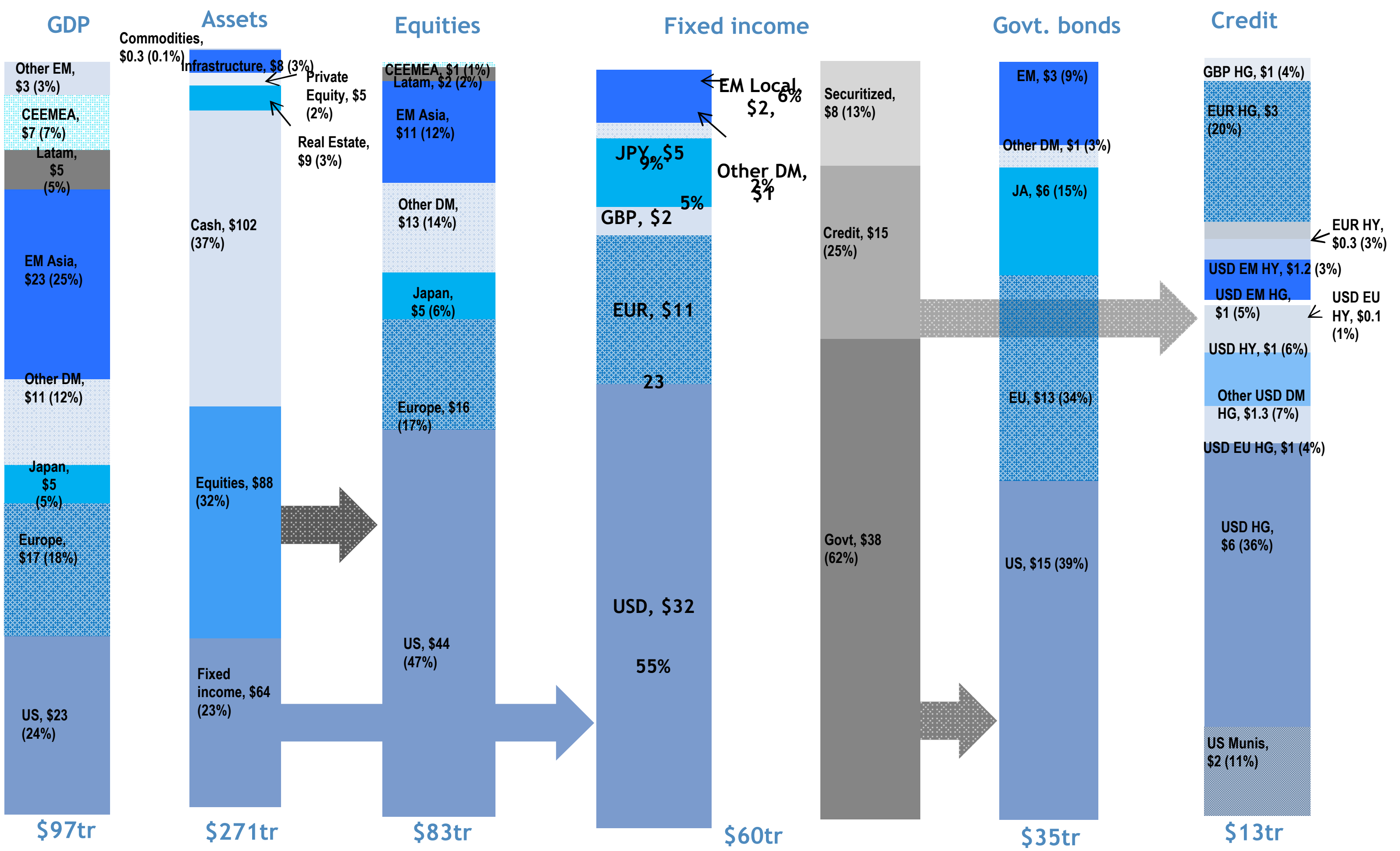
In %, the FRI is cumulative weekly changes in GDP forecasts for the current Quarter (Q), Q-1, Q+1 and Q+2 made by J.P. Morgan economists. The beginning of every series is normalized to begin at zero.



Source: J.P. Morgan.

Marko Kolanovic, PhD; Nikolaos Panigirzoglou; Bram Kaplan, CFA; Thomas Salopek; Federico Manicardi; Mika Inkinen; Amy Ho

Market Panorama



Source: J.P. Morgan, BIS, MSCI, Datastream, Bloomberg Finance L.P. Market size estimates for sub asset class as of Nov'20. GDP estimates are as of end 2019. Global Fixed income is proxied by the sum of the global domestic debt securities reported by BIS and J.P. Morgan's EMBIG index for external debt. For equities, we used the Datastream world equity index. Global cash is an aggregated M2 (or close proxy of M2) of developed and developing countries. Note: There is some difference between breakup of FI total in column 2 and 4. That is because in column 2 we take the total market size from BIS and adjust it for central bank holdings and in column 4 we take the breakup of sub-asset class of FI from J.P. Morgan indices, which are easy to track and trade.

Risks of Common Option Strategies

Risks to Strategies: Not all option strategies are suitable for investors; certain strategies may expose investors to significant potential losses. We have summarized the risks of selected derivative strategies. For additional risk information, please call your sales representative for a copy of "Characteristics and Risks of Standardized Options." We advise investors to consult their tax advisors and legal counsel about the tax implications of these strategies. Please also refer to option risk disclosure documents.

Put Sale: Investors who sell put options will own the underlying asset if the asset's price falls below the strike price of the put option. Investors, therefore, will be exposed to any decline in the underlying asset's price below the strike potentially to zero, and they will not participate in any price appreciation in the underlying asset if the option expires unexercised.

Call Sale: Investors who sell uncovered call options have exposure on the upside that is theoretically unlimited.

Call Overwrite or Buywrite: Investors who sell call options against a long position in the underlying asset give up any appreciation in the underlying asset's price above the strike price of the call option, and they remain exposed to the downside of the underlying asset in the return for the receipt of the option premium.

Booster : In a sell-off, the maximum realized downside potential of a double-up booster is the net premium paid. In a rally, option losses are potentially unlimited as the investor is net short a call. When overlaid onto a long position in the underlying asset, upside losses are capped (as for a covered call), but downside losses are not.

Collar: Locks in the amount that can be realized at maturity to a range defined by the put and call strike. If the collar is not costless, investors risk losing 100% of the premium paid. Since investors are selling a call option, they give up any price appreciation in the underlying asset above the strike price of the call option.

Call Purchase: Options are a decaying asset, and investors risk losing 100% of the premium paid if the underlying asset's price is below the strike price of the call option.

Put Purchase: Options are a decaying asset, and investors risk losing 100% of the premium paid if the underlying asset's price is above the strike price of the put option.

Straddle or Strangle: The seller of a straddle or strangle is exposed to increases in the underlying asset's price above the call strike and declines in the underlying asset's price below the put strike. Since exposure on the upside is theoretically unlimited, investors who also own the underlying asset would have limited losses should the underlying asset rally. Covered writers are exposed to declines in the underlying asset position as well as any additional exposure should the underlying asset decline below the strike price of the put option. Having sold a covered call option, the investor gives up all appreciation in the underlying asset above the strike price of the call option.

Put Spread: The buyer of a put spread risks losing 100% of the premium paid. The buyer of higher-ratio put spread has unlimited downside below the lower strike (down to zero), dependent on the number of lower-struck puts sold. The maximum gain is limited to the spread between the two put strikes, when the underlying is at the lower strike. Investors who own the underlying asset will have downside protection between the higher-strike put and the lower-strike put. However, should the underlying asset's price fall below the strike price of the lower-strike put, investors regain exposure to the underlying asset, and this exposure is multiplied by the number of puts sold.

Call Spread: The buyer risks losing 100% of the premium paid. The gain is limited to the spread between the two strike prices. The seller of a call spread risks losing an amount equal to the spread between the two call strikes less the net premium received. By selling a covered call spread, the investor remains exposed to the downside of the underlying asset and gives up the spread between the two call strikes should the underlying asset rally.

Butterfly Spread: A butterfly spread consists of two spreads established simultaneously – one a bull spread and the other a bear spread. The resulting position is neutral, that is, the investor will profit if the underlying is stable. Butterfly spreads are established at a net debit. The maximum profit will occur at the middle strike price; the maximum loss is the net debit.

Pricing Is Illustrative Only: Prices quoted in the above trade ideas are our estimate of current market levels, and are not indicative trading levels.

Companies Discussed in This Report (all prices in this report as of market close on 14 November 2022)
Alibaba Group Holding Limited (BABA)(BABA/$71.33/OW), BJ's(BJ/$76.16/UW), Botanee(300957.SZ/Rmb139.90/OW), Chow Tai Fook Jewellery (1929)(1929.HK/HK$16.04/OW), Ecovacs Robotics – A(603486.SS/Rmb69.59/OW), Floor & Decor(FND/$77.47/N), Li Ning (2331)(2331.HK/HK$57.70/OW), Lowe's Companies, Inc.(LOW/$204.66/N), Midea Group - A(000333.SZ/Rmb47.80/OW), Pinduoduo Inc.(PDD/$65.39/OW), Porsche AG(P911_p.DE/€100.85/OW), Proya(603605.SS/Rmb164.78/OW), The Home Depot(HD/$306.92/OW), Walmart Inc(WMT/$138.39/N), Williams-Sonoma, Inc.(WSM/$133.60/UW)

Disclosures

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J.P. Morgan Equity Research Ratings Distribution, as of October 01, 2022

	Overweight (buy)	Neutral (hold)	Underweight (sell)
J.P. Morgan Global Equity Research Coverage*	50%	37%	13%
IB clients**	50%	46%	33%
JPMS Equity Research Coverage*	50%	38%	12%
IB clients**	70%	68%	50%

*Please note that the percentages might not add to 100% because of rounding.
**Percentage of subject companies within each of the "buy," "hold" and "sell" categories for which J.P. Morgan has provided investment banking services within the previous 12 months.
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