

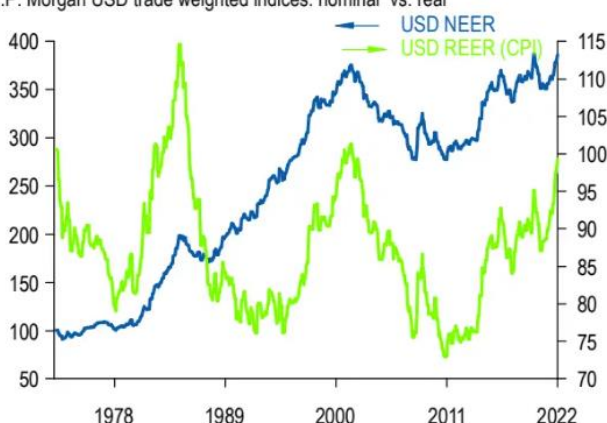
Key Currency Views

Mulling five-decade USD highs (but staying bullish)

- The nominal broad dollar index (JBDNUSD) is 10% stronger year to date and at a five-decade high but we remain bullish ...
- ...as our twin motivations are still intact: expectations of an even more hawkish Fed and ongoing vulnerabilities outside the US which continue to linger. Mean reversion in the near term is unlikely in our view.
- Three developments could be perceived as USD bearish: negative growth surprises are early-stage neutralizing, European energy policy response has been better than expected, and the RoW is pushing back against USD strength...
- ...we consider the first two more meaningful than the third but think it premature to position for. Stay long USD.
- USD targets revised higher against key FX pairs. **USD/CNY** 1y 7.10. **GBP/USD** 1.10 (1.14) on twin deficits. **USD/CAD** terminal forecast 1.36 (1.33). **USD/JPY** year-end revised intra-month 147 (140).
- **G10: EUR/USD** 0.95 unchanged. **EUR/CHF** unchanged 0.90 in 2Q23.
- **EM: USD/KRW** 2Q23 1420 (1340). **USD/INR** 81.50. **USD/ZAR** 2Q'23 18.5 (17.5). **USD/MXN** terminal 20.75; **USD/BRL** 2Q'23 unchg (5.25).

The nominal broad dollar index is at a five decade high

J.P. Morgan USD trade weighted indices: nominal vs. real



Source: J.P. Morgan

The next Key Currency Views publication will be on October 14th.

Global FX Strategy & EM Markets

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Key Currency Drivers

- **The nominal broad dollar index (JBDNUSD) is 10% stronger year to date and at a five decade high ...**
- **...but we remain USD bullish with our twin motivations still intact: expectations of an even more hawkish Fed and ongoing vulnerabilities outside the US which continue to linger. Mean reversion in the near term is unlikely in our view.**
- **Three developments could be perceived as USD bearish: negative growth surprises are neutralizing, European energy policy response has been better than expected and the RoW is pushing back against USD strength...**
- **...among the three, we consider the first two as more meaningful than the third. Stay long USD.**
- **USD revised higher against key FX pairs. New USD/CNY 1y 7.10. GBP/USD 1.10 (1.14) on twin deficits. USD/CAD terminal forecast 1.36 (1.33). USD/JPY year-end revised intra-month 147 (140).**
- **G10: EUR/USD 0.95 unchanged. EUR/CHF unchanged 0.90 in 2Q23**
- **EM: USD/KRW 2Q'23 1420 (1340). USD/INR 81.50. USD/ZAR 2Q'23 18.5 (17.5). USD/MXN terminal 20.75; USD/BRL 2Q'23 unchg (5.25).**

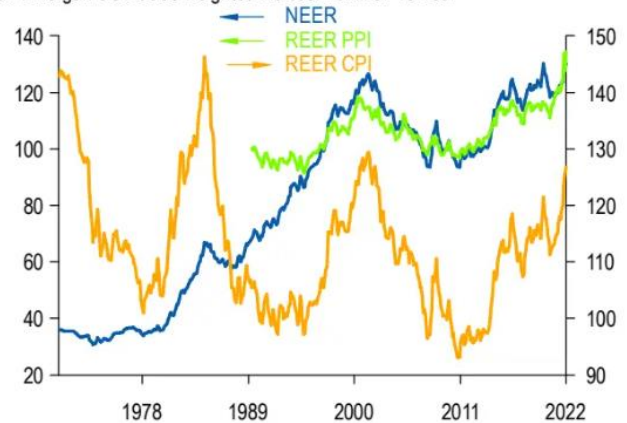
We've come so far...

The dollar has, once again, strengthened since our prior monthly publication ([Resuscitating US exceptionalism-lite](#)), with the trade-weighted index (JBDNUSD) 2.7% stronger, a move that was only exacerbated following the eye-popping US CPI print and pair-wise moves large and broad-based. Looking at the rear-view mirror can be instructive sometimes and sheds light on the magnitude of the moves that FX markets have gone through this year. On a nominal basis, the broad dollar index is 10% stronger year to date, now above its COVID peak and a 7-decade high (Exhibit 1). Broad dollar indices adjusted for inflation are also at local peaks (CPI based index is approaching its highs from 2002, last seen in 1980s). With this magnitude of moves under our belt already, it is worthwhile (and prudent) to reassess if a strong USD view is still warranted.

...but let's keep going

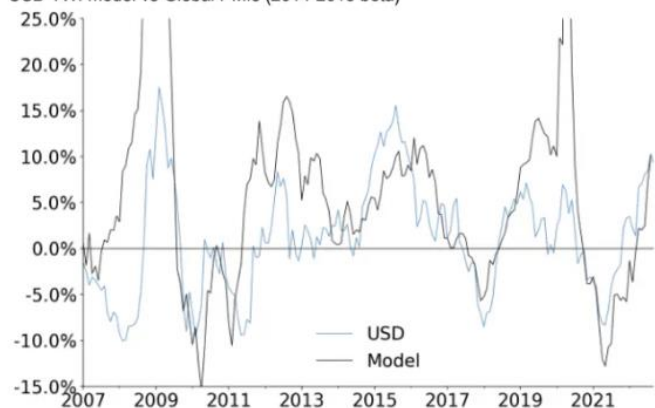
While we are cognizant of dollar valuations, we remain USD bullish as our twin motivations are still intact, indicating that mean reversion in the near term is unlikely.

Exhibit 1: The nominal broad dollar index is at a five-decade high
J.P. Morgan USD trade weighted indices: nominal vs. real



Source: J.P. Morgan

Exhibit 2: USD is also not overshooting global momentum
USD TWI model vs Global PMIs (2014-2018 beta)



Source: J.P. Morgan

Specifically: (1) persistent US inflation and expectations of an even more hawkish Fed, and (b) ongoing vulnerabilities outside the US, which despite some glimmers of hope, are still likely to linger in our view. The hawkish Fed narrative is yet to run out of steam, given the surprisingly firm inflation and employment data in recent weeks, following which our economists have now raised their terminal target rate to 4.25% (50bp higher cumulatively). Meanwhile, growth vulnerabilities outside the US continue unchanged—energy dependence being the key issue in Europe and slumping growth in China (exports, COVID, housing). This twin combination should warrant a dollar premium in our view, and that is not yet evident in the price even with the 10% YTD strengthening (Exhibit 2). **Our targets duly reflect this view—EUR/USD projected to test 0.95, USD/CNY 7.10, GBP/USD 1.10, USD/JPY 147 to highlight a few.**

There is some pushback to USD strength...

We would be remiss, however, if we didn't highlight **three developments that could be perceived as USD bearish** and favorable for high beta FX:

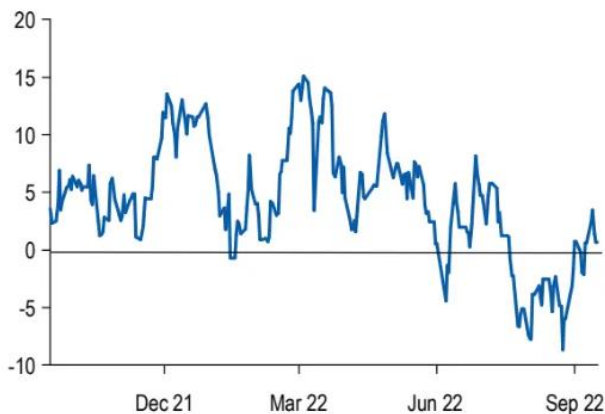
- (1) **negative growth surprises seem to be in the early-stages of running out of steam** (our EASIs have turned closer to neutral from negative across various countries; Exhibit 3),
- (2) **European energy policy response**, which is trimming extreme tail risks both via fiscal supports, filling storage ahead of schedule (now nearly 85% full), reducing demand and redirecting to alternate sources of energy, and

...from outside the US

(3) **a pushback against USD strength from outside the US via policy** (the bias in PBOC fixes limiting CNY weakness; Exhibit 4) **and currency interventions** (for instance in Asia, Exhibit 5; [EM Asia Local Markets](#) by Arindam Sandilya, Abbas Kesvani et al). Even the BoJ/MoF (verbally) stepped into the foray this week, given the unruly ascent in USD/JPY.

Among the three, we consider the first two as more meaningful than the third (interventions will only slow don't reverse the underlying macro trend, which is why we stay long USD/Asia and think USD/JPY will test higher in the absence of YCC elimination). **Growth surprises could meaningfully turn the tide on the dollar if they persist, but high conviction on such a rebound is premature.** And European energy response, in our view, is trimming the tail risks of very extreme scenarios, but not for our baseline, which still sees a test of 0.95 for EUR/USD. Stay USD bullish.

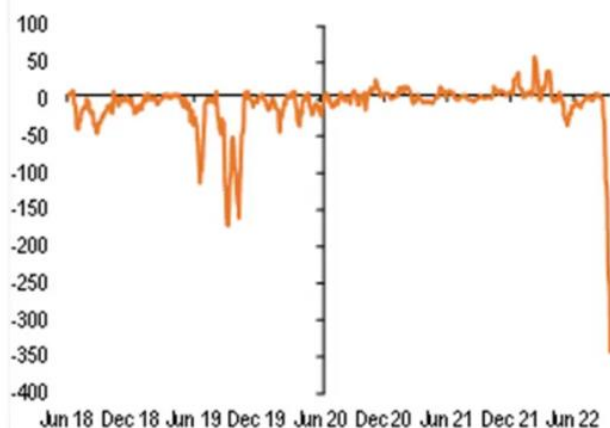
Exhibit 3: Negative data surprises are running out of steam
 Global EASI



Source: J.P. Morgan

Exhibit 4: There is a pushback against USD strength outside the US via policy (PBOC)...

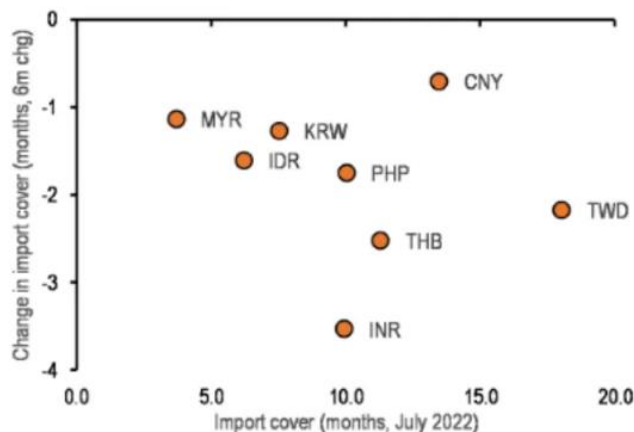
Gap between expected and actual fix for USD/CNY (10d moving average).



Source: J.P. Morgan China Local Markets [Weekly](#)

Exhibit 5: ...and via increased FX interventions which has led to a reduction in FX reserves

Change in import cover (y-axis) versus import cover as of July (x-axis); see [Asia Local Markets](#) by Arindam Sandilya, Abbas Kesvani et al



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

G10 Central Bank Superweek

Central bank super-week: all jumbo hikes, but mixed implications across currencies. Next week will feature no less than six G10 central bank meetings. Exhibit 6 summarizes the expectations from our economists heading into the respective events. Despite all CBs projecting 50bp hikes or greater (excluding BoJ), some screen more currency-positive than others. The **SNB's** emergence from negative rates will continue to widen the real yield gap vs EUR, and remains a firmly-positive currency support. The **Fed** is also likely to prove dollar-positive as US real yields continue to move higher on an absolute and relative basis versus peers. But the hurdle from the **BoE** for sterling is

different – in the GBP chapter below, we explain why a hawkish BoE is important to prevent further idiosyncratic GBP weakness, as opposed to helping to drive broad GBP outperformance. Rate hikes is not expected to move the needle on **NOK and SEK** amid slowing regional (and now domestic growth); stay neutral. At the other end of the spectrum is the **BoJ**; there may be a more neutral tone but our economists view is that Kuroda holds the line that monetary policy is not the proper tool to address currency weakness; sustained policy divergence therefore should continue to widen relative rate differentials and foster more carry trades funded out of JPY. On net, we stay long USD and CHF, short GBP, and neutral NOK, SEK & JPY.

Exhibit 6: G10 Central Bank Superweek

CCY	Policy & Rates Expectations	FX Implications
SEK	75bp hike to 1.50%. 90bps priced. Core inflation 1.1% above Riksbank forecast. Risks skewed to 100bp.	Rate hikes will not move the needle on SEK amid slowing regional growth; neutral.
USD	75bps to 3.25%; added 25bps to Nov (terminal 4.25%). 80bps priced. Fed to hike until slack comes back into labor market. Aug CPI not hot enough to warrant 100bps next wk. Dots refreshed.	Higher US real yields continues to support USD. Long-USD into the meeting
GBP	50bps to 2.25%. 54bps priced. 3Q GDP is weak and Nov mtg will given better assesment of fiscal impact. Retain 4% terminal BoE fcast	BoE hikes increasingly important to help prevent GBP weakness (rather than drive GBP outperf). Short GBP
NOK	50bp hike to 2.25%; no clear guidance on next move	Rate hikes will not move the needle on NOK amid slowing regional growth; neutral.
CHF	SNB could raise rates 75bps or even 100bps and exit negative policy rates. Premature to rule out more hawkish surprises	Large hikes will drive EUR-CHF real rate differentials to multi-decade wides in favor of CHF. Long CHF
JPY	No policy change but moves toward more neutral. Expect Kuroda to maintain that monetary policy adjustments are not the desired response to JPY weakness	Broadening policy divergence leaves JPY as the only major currency where front-end yields are still near zero. Unless the BoJ pivots, we think USDJPY has the potential to rise further

Source: J.P. Morgan

The forecast bottom line: USD forecasts upgraded against major trade partners

Tactical strategy: Remain long-USD and short European currencies. High conviction views remain for CHF (long vs EUR, GBP) and EUR (vs USD). Increased GBP shorts. Remain short-NZD in cash (USD) and options (JPY). Increased shorts in EM; short in EM Asia (PHP, INR, CNY, MYR), EMEA EM (ZAR, HUF, PLN) and Latam (PEN, new CLP). Our only longs are in SGD and THB ([Emerging Markets Outlook and Strategy](#), Goulden, Oganess et al).

USD forecasts are raised this month, reflecting additional upside against several key US trade partners. We now look for **USD/CNY to touch 7.10** by our new 3Q'23 window (prior peak 6.95). We raise our terminal **USD/JPY rate to 147** (prior 140) for year-end intra-month, before falling back towards 140 in one year. **USD/CAD** terminal targets are raised to 1.36, and the trough in **GBP/USD** is 1.10. Only **EUR/USD** targets of 0.95 are unchanged and still bearish (new 1y 1.03).

On net, the broad **USD TWI** index projects +1% higher from spot over the forecast horizon, but with gains concentrated in the near quarters. The forecast index is now +2% above estimates from August.

USD upgraded against G10...

- **JPY: Raised USD/JPY forecasts across horizon; unwound some long-yen exposure.** Rate checks and even actual **intervention** should not change the course of JPY depreciation, which is in line with **fundamentals**. USD/JPY 4Q'22 147 (140), 2Q'23 142 (138). New 1y 140.
- **GBP: Bearish and strategically short; lowering cable forecasts. Fiscal lowers recession risk but external accounts are wide.** Short vs USD and CHF. Targeting 1.10 in GBP/USD (prior 1.15); EUR/GBP expected to remain in a range (0.86-0.89).
- **CAD: Raising USD/CAD forecasts across the horizon. Waning CAD exceptionalism and global backdrop favors USD leg.** USD/CAD 4Q'22 1.34 (1.30) and 1Q'23 1.36 (1.33). New 1y 1.34.

But some European currency forecasts unchanged...

- **EUR: Forecasts unchanged targeting 0.95; retain strategic shorts vs USD and CHF. Growth risks persist due to lingering gas supply concerns, though possible fiscal package alleviates some deeper tail risk.** EUR/USD 4Q'22 0.95 (unchanged); new 3Q'23 1.03.
- **CHF: Forecasts unchanged; strategically long vs EUR and GBP.** Still constructive given SNB hikes and structural **BoP** adjustment. EUR/CHF 2Q'23 0.90 (unchanged); new 1y 0.88.

...as are the antipodeans

- **AUD: Still constructive; took profit on long AUD/NZD but still bullish** (target 1.17). Elevated **commodity prices** remain a fundamental support; ToT reached a new all-time high in 2Q. AUD/USD 2Q'23 0.74 (unchanged) and flat thereafter. AUD/NZD 1y 1.17 (unchanged).

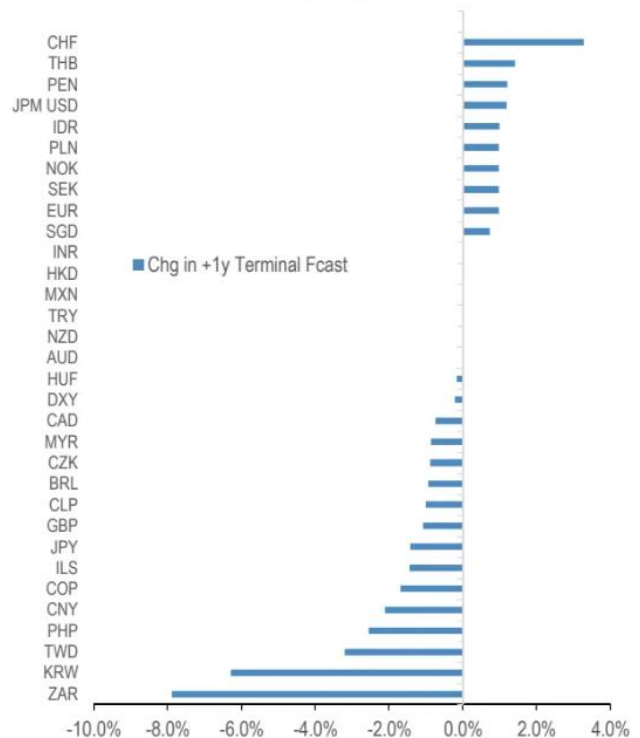
- **NZD: Forecasts unchanged; short vs USD.** Stagflationary dynamics have forced policy into deeply restrictive territory. NZD/USD 2Q'23 0.63 (unchanged); new 1y flat at 0.63.

EM: Increased UW, particularly in EMEA

- **Asia: Stay UW. Remain bearish due to C/A pain, dollarization forces, and loss of the CNY anchor. Add OW in THB.** China's recovery is falling back sooner and swifter on housing, rolling lockdowns and softening global demand; CNY downgraded and we stay short vs USD. USD/CNY 2Q'23 7.05 (6.95); new 1y 7.10. **KRW** downgraded 5.0% on structural C/A changes. USD/KRW 2Q'23 1420 (1340); new 1y 1430. **USD/TWD** 2Q'23 31.00 (30.20); new 1y 31.20. **THB** upgraded prospects for current account to balance. USD/THB 2Q'23 35.75 (36.00); new 1y 35.50. **IDR** upgraded as a reprieve in foreign debt outflows in August helped the country's C/A surplus to shine through. USD/IDR 2Q'23 15100 (15300); new 1y 15150. **INR** downgraded over next two quarters given ongoing C/A pressure and we stay long USD/INR via 12m NDF. USD/INR 4Q'22 81.00 (80.50), 1Q'23 81.50 (81.00) and flat thereafter. USD/SGD 1Q'23 1.400 (1.395); new 1y 1.380.
- **Latam: Stay UW; expecting a downshift back into the pre-pandemic low-growth trend. Add UW CLP to existing UW PEN.** CLP faces idiosyncratic risks from a large C/A deficit and ongoing political uncertainty. No forecast adjustments for **BRL, MXN, COP, CLP, PEN,** or **ARS** through 2Q'23. USD/BRL forecasts unchanged (2Q'23 5.25); new 3Q'23 5.30. USD/MXN 2Q'23 20.75 unchanged and flat into 3Q'23. USD/COP new 2Q'23 4375 (4350); 1y 4425; USD/CLP new 1y flat at 970.
- **EMEA: Increase UW; downside risks to growth more prevalent. Add UW in PLN and HUF; double weight on pre-existing UW in ZAR.** PLN upgraded as BoP remains in stronger shape than CEE peers, given large FDI inflows. EUR/PLN 2Q'23 5.10 (5.20); new 1y 5.20. **HUF** downgraded on continued C/A imbalances. EUR/HUF 2Q'23 440 (426); and flat through 3Q'23. EUR/CZK forecasts unchanged (2Q'23 26.5); new 1y 27.0. **ZAR** downgraded 5.0% on China's deteriorating growth outlook. USD/ZAR 2Q'23 18.50 (17.50); new 1y 19.00. **TRY** upgraded 5.0% on average. USD/TRY 2Q'23 21.00 (22.00); new 1y 22.00. **ILS** downgraded on persistent inflation inertia. USD/ILS 2Q'23 3.45 (3.40); new 1y flat at 3.45.

Exhibit 7: Key US trade partners were downgraded vs USD this month

Changes in terminal forecasts vs USD (1Q'23)

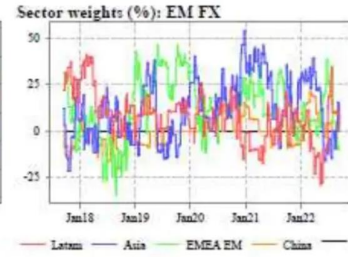
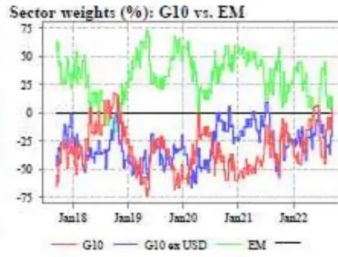
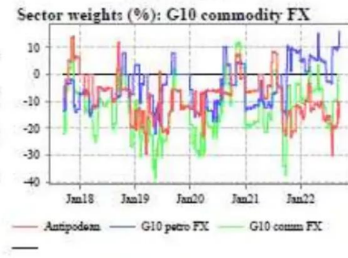
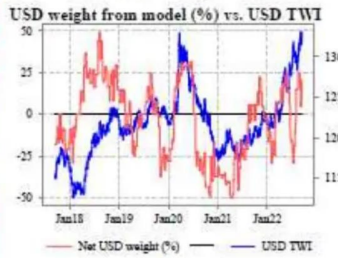
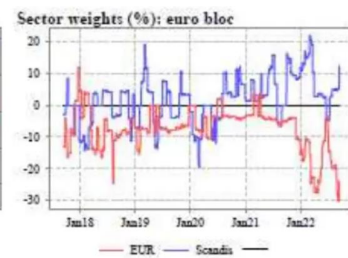


Source: J.P. Morgan

Tracking FX systematic signals on jpm.com [Daily FX Alpha chartpack](#)

Global FX Multi-factor Model (T.E.A.M.*)

Currency	Carry		Value	Growth	External	Balance	Multi-Factor*	
	Vol Adj Carry ¹	Real Carry (%)	REER PPI (%)	FRI (z-score)	Current Account Balance (% GDP)	FDI and Equity (% GDP)	Assigned Weights (%)	Tim Change Assigned Weights (%)
AUD	0.0	-1.7	-2%	-0.3	2.9	-4.9	-5%	-1%
CAD	0.0	-2.6	0%	0.1	0.2	-4.3	-5%	-1%
CHF	-0.3	-1.8	-14%		9.7	-0.6	9%	2%
EUR	-0.2	-3.8	15%	1.0	1.8	-1.3	-18%	-15%
GBP	-0.1	-4.2	-15%	-0.3	-6.2	3.0	1%	0%
JPY	-0.2	-0.2	-20%	0.9	2.3	-1.9	9%	-5%
INR	-0.1	-1.8	-2%	-3.3	19.1	7.7	2%	0%
NZD	0.0	-1.9	-6%	-1.5	-6.5	-1.2	-14%	-3%
SEK	-0.1	-4.4	-13%	-0.9	4.9	0.9	1%	7%
USD	0.0	-3.5	22%	-2.1	-3.9	-1.0	-19%	-4%
BRL	0.5	3.4	17%	0.6	-1.8	1.5	1%	0%
MXN	0.5	1.9	-10%	1.2	-0.2	1.1	18%	11%
CLP	0.2	-2.1	3%	-1.5	-7.5	-1.3	-1%	17%
COP	0.3	1.7	-12%	-0.5	-6.2	0.8	-1%	4%
CNY	-0.1	1.2	2%	-1.0	1.8	1.1	5%	1%
IDR	0.5	4.5	-2%	-0.6	0.4	1.6	0%	0%
INR	0.6	-0.6	-7%	-0.3	-1.2	1.2	5%	1%
KRW	0.0	-2.2	-10%	-0.7	4.7	-6.7	-5%	6%
MYR	0.4	1.7	-12%	-0.5	2.8	2.2	0%	0%
PHP	0.5	3.2	-12%	-1.6	-3.0	2.1	0%	-14%
SGD	0.0	-1.2	10%	-0.8	19.8	0.3	-3%	-6%
THB	-0.2	-1.2	-4%	0.3	-2.3	-4.9	-10%	-2%
TWD	-0.4	-2.4	3%	-0.3	15.2	-6.1	-5%	3%
CZK	0.4	-4.8	3%	1.4	-2.0	0.7	9%	2%
HUF	0.4	1.7	-21%	1.1	-4.2	2.2	23%	5%
ILS	-0.2		9%	-0.7	4.1	3.6	-6%	-2%
PLN	0.3	-2.1	-20%	1.4	-6.0	-4.7	16%	4%
RUB	0.4	3.4	49%	1.0	10.4	-2.9	0%	0%
TRY	1.6	-7.5	-21%	-1.0	-3.1	0.8	0%	0%
ZAR	0.2	2.2	-12%	-1.9	3.1	-1.4	-4%	-6%



* Based on methodology outlined in: T.E.A.M.: Introducing a multi-factor approach to FX on jpm.com
 ** 1m FX implied yield/ 1m ATM implied vol. Real carry is nominal FX implied yield minus latest core CPI

Technicals

- The EUR/USD rebound rejects Feb channel and fails to see the turn from near 0.99 support gain traction despite another weekly momentum diverging buy signal. Key medium-term resistance remains near 1.035. The next support comes in at 0.9544-0.9611.
- GBP/USD scores a new low this week, pressing through the 1.1407 Sep 7 low and tagging longer-term support in the mid-1.13s before reversing intraday. We remain on the lookout for base building, or at minimum high-frequency deceleration to suggest the latest price action has exhausted the trend on a near-term basis. We would need to see a sustained bounce through the 1.1717-1.1920 area to derail some of the immediate bearish momentum.
- USD/JPY consolidates below the 145.647 Apr-Jul trend line after the late-summer rally acceleration. Despite the short-term pause, there is little evidence to suggest the broader advance is exhausted at this point. Look for the pair to find support at 139.395-139.42 or 135.49-136.839. A break below the latter is required to suggest a more significant turn is under way. Next major chart resistance rests at the 147.62 Aug 1998 high.
- USD/CAD breaks out of the summertime trading range. The next key resistance levels sit in the 1.34s. The 1.3208-1.3225 pattern breakout now marks tactical support. The 1.2972 50-day MA marks a key level for the bullish medium-term trend momentum.
- AUD/USD retests important support in the 0.6620-0.6757 area with no signs of deceleration currently present on the charts. We would need to see additional base building develop near support or a sustained rally through resistance at 0.6895-0.6957 to confirm a short-term reversal.
- USD/KRW extends the persistent advance higher and trends toward longer-term resistance at 1421 before reversing intraweek. While the price action is starting to produce daily momentum divergence signals, we do not have much conviction in the short-term outlook at the moment. Next resistance sits at 1470. We believe a sustained drop through 1327-1344 would derail some of the immediate bullish momentum.

EUR/USD rejects medium-term channel resistance and fails to see last week's buy signal gain traction

EUR/USD saw a brief push through short-term resistance at the **1.0098** 50-day moving average and **1.0122** mid-Aug pattern breakdown, but ultimately rejected the Feb 2022 channel trend line (now **1.0138**) and slid on the heels of the hotter-than-expected US CPI report (**Exhibit 1**). The continued bearish pressure on the front end of the US rates curve and broad US dollar price action keeps the EUR/USD bear trend intact despite last week's bullish momentum divergence buy signal. In our view and until a clear base pattern forms, a move through resistance clustered near **1.035** is required to derail the bearish medium-term momentum. On the downside, a sustained break below the **0.9952** Jul low, **0.9949** Apr-May pattern objective and **0.9900** Oct 2000 78.6% retrace would turn our attention to the **0.9611** Feb 1985 61.8% retrace, **0.9595** Jan 2001 base pattern objective, **0.9714** Jan 2022 channel low as the next potential support zone.

Exhibit 1: The EUR/USD rebound rejects Feb channel and fails to see the turn from near 0.99 support gain traction despite another weekly momentum diverging buy signal. Key medium-term resistance remains near 1.035. The next support comes in at 0.9544-0.9611.



Source: J.P. Morgan, CQG

GBP/USD briefly surpasses 1.1407-1.1491 support intraday and scores a new cycle low

GBP/USD struggles to find a bottom, which was exacerbated with this week's stronger-than-anticipated

US inflation print (**Exhibit 2**). Cable briefly surpassed broad range support at the **1.1491/1.1409** Mar 2020 and Oct 2016 troughs and the **1.1407** Sept 7 low and met support in the mid-**1.13s** before reversing intraday. The early-Sep reversal from that area produced a systematic buy signal on our weekly momentum divergence indicator. That signal generally has a multi-week forecast period and increases the probability of mean reversion over that time. We will watch for signs on higher-frequency time frames to suggest that area will hold on a retest. In the meantime, given the persistent trend of lower lows and lower highs and the alarming realized inflation data, we keep a low-conviction short-term view. Support rests at the **1.1391** May-Aug equal swings objective, **1.1325** 2018-2021 equal swings objective, and then **1.0823** 2016-2018 equal swings target. To the upside, there is a key short-term inflection for the market in the mid-**1.17s**. We would need to see a sustained bounce through initial resistance at the **1.1717** Aug 23 low, **1.1760** Jul 14 trough, **1.187** 50-day MA, and **1.1902** Aug 26 pivot to confirm a short-term reversal. Next resistance sits at the **1.211** 100-day MA, the **1.228-1.2294** early-Aug range highs and Jan 38.2% retracement, and the **1.2408** Jun 16 pivot.

Exhibit 2: GBP/USD scores a new low this week, pressing through the 1.1407 Sep 7 low and tagging longer-term support in the mid-1.13s before reversing intraday. We remain on the lookout for base building, or at minimum high-frequency deceleration to suggest the latest price action has exhausted the trend on a near-term basis. We would need to see a sustained bounce through the 1.1717-1.1920 area to derail some of the immediate bearish momentum.

GBP/USD, daily bars



Source: J.P. Morgan, CQG

USD/JPY continues to consolidate after the late-summer rally acceleration

USD/JPY consolidates below the **144.995** Sep 7 new cycle high in a relatively tight trading range. The holding pattern pauses the pair after the late-summer rally re-accelerated the broader bull trend. The move extended to the Apr-Jul trend line, now **145.647** (**Exhibit 3**). The

medium-term rally deceleration pattern into Jul left us thinking the pair could be developing a longer-term top pattern, but the late-summer reacceleration invalidated that view. Despite the pause, the early-Sep peak unfolded without the deceleration pattern that typically develops at a more lasting turn. Given the lack of that setup, we suspect initial setbacks will find material support at the **139.395-139.42** Jul peak and Aug 38.2% retrace, or a second layer that includes the **136.835** 50-day moving average, **135.975** Aug 61.8% retrace, and **135.49** Aug 5 high. A break below the latter is required to suggest a more substantial trend reversal is under way. On the upside, a move through the **145.647** trend line would leave the **147.62** Aug 1998 high as the next notable chart level to focus on.

Exhibit 3: USD/JPY consolidates below the 145.647 Apr-Jul trend line after the late-summer rally acceleration. Despite the short-term pause, there is little evidence to suggest the broader advance is exhausted at this point. Look for the pair to find support at 139.395-139.42 or 135.49-136.839. A break below the latter is required to suggest a more significant turn is under way. Next major chart resistance rests at the 147.62 Aug 1998 high.

USD/JPY, daily bars



Source: J.P. Morgan, CQG

USD/CAD push through summertime range resistance turns our attention to next resistance in the 1.34s

USD/CAD bullishly breaks out of **1.3208-1.13225** summertime range resistance as bearish seasonals and a hot US CPI report weigh on risky markets. The next meaningful medium-term resistance for the pair includes the **1.3421** Sep 2020 high, **1.3425** Jun-Aug equal swings objective, and **1.3446** May 2021 channel trend line (**Exhibit 4**). A sustained breakout would keep our attention fixed on that area as a target. On the downside, the **1.2972** 50-day moving average marks an important level for the medium-term trend after it acted as support in Aug and Sep.

Exhibit 4: USD/CAD breaks out of the summertime trading range. The next key resistance levels sit in the 1.34s. The 1.3208-1.3225 pattern breakout now marks tactical support. The 1.2972 50-day MA marks a key level for the bullish medium-term trend momentum.

USD/CAD, daily bars



Source: J.P. Morgan, CQG

Exhibit 5: AUD/USD retests important support in the 0.6620-0.6757 area with no signs of deceleration currently present on the charts. We would need to see additional base building develop near support or a sustained rally through resistance at 0.6895-0.6957 to confirm a short-term reversal.

AUD/USD, daily bars



Source: J.P. Morgan, CQG

AUD/USD retests important longer-term support at 0.6620-0.6757 with no signs of deceleration currently present

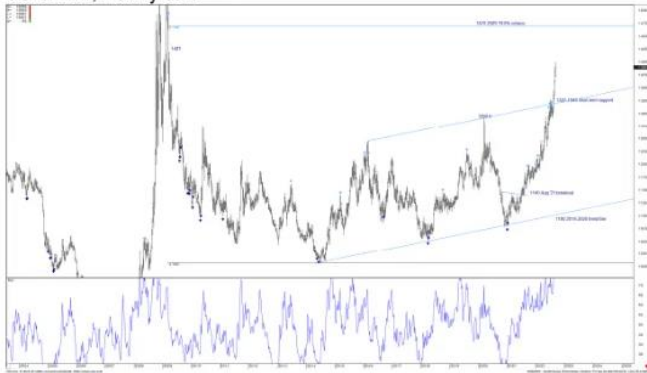
AUD/USD retraces all of the Jul-Aug rally and retests the **0.6681** Jul 14 trough (**Exhibit 5**). The **0.6620-0.6757** area marks a key zone of longer-term support for the market. Prior to the COVID-era breakdowns, that area had provided multi-year support for the market since 2016 and more recently marked the range lows in 2018-2019. Our base case outlook had been for the pair to carve out the lower end of a range near support. We are not yet seeing the same systematic bullish signaling that developed in that area on both the daily and weekly charts in mid-Jul. We will watch for high frequency signs of deceleration to develop on the intraday and daily charts. In the absence of that signaling, we would need to see a sustained rebound through **0.6885-0.6957** to gain conviction in a reversal from support. Resistance parameters in that area includes the 50-day MA and Aug 30 pivot. Through there, next levels are layered at the **0.7010** Aug 28 high and then the more significant confluence at **0.7106-0.7171**, which includes the 200-day MA, Aug 11 peak and early-Apr 50% retrace. In the event our base case proves incorrect, longer-term support through the **0.6634** Apr-May equal swings objective includes the **0.6462** Mar 2020 61.8% retrace and **0.6450** May-Jun equal swings target.

USD/KRW extends the advance toward longer-term resistance at 1421 with only tentative signs of exhaustion starting to develop

USD/KRW accelerates the recent advance and retraces more than two-thirds of the broader 2009-2014 bear trend and extends toward the **1421** Mar 2009 high before staging a late-week reversal (**Exhibit 6**). The intraweek price action produced a pair of systematic momentum diverging sell signals on the daily chart. Given the impulsive nature of the current trend, we cannot give that signaling too much weight, however it could be an initial indication that the trend is attempting to stabilize. Until we see more definitive signs of a reversal pattern developing, we remain focused on overhead resistance at the **1421** Mar 2009 high and then the **1470** 2009 78.6% retrace. To the downside, a drop back through **1327-1344** short-term support would be needed in order to derail the immediate bullish momentum. Note the 50-day MA is rising near that area, now at **1332**. Next support sits at the **1300** 1-month momentum threshold and 100-day MA and the **1293** May 12 peak and Aug 5 pivot. The 3-month CTA momentum trigger level also trends in that area by mid-Sep.

Exhibit 6: USD/KRW extends the persistent advance higher and trends toward longer-term resistance at 1421 before reversing intraweek. While the price action is starting to produce daily momentum divergence signals, we do not have much conviction in the short-term outlook at the moment. Next resistance sits at 1470. We believe a sustained drop through 1327-1344 would derail some of the immediate bullish momentum.

USD/KRW, weekly bars



Source: J.P. Morgan, CQG

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Global Fixed Income Strategy
16 September 2022

J.P.Morgan

JPM USD Index

Table 1: JP Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
USD GDP (% saar)	1.5	1.8	1.3	1.0
Global GDP growth	1.9	1.8	2.0	2.2
USD policy rate (%)	4.00	4.25	4.25	4.25
Global ex-USD policy rate	3.37	3.58	3.53	3.48
DXY	114.3	111.5	108.0	106.6
JPM USD Index	134.8	134.6	133.9	133.6

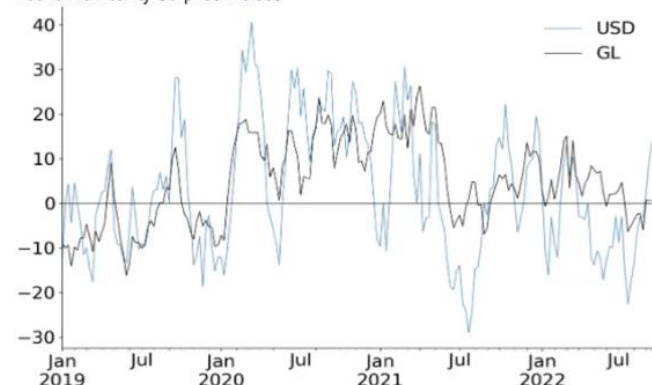
Source: J.P. Morgan

Focusing on the US in USD

- 2H'22 has started where 1H left off – with another leg of USD strength**, with the NEER extending +3.0% since end-July. **Key components of our dollar-positive, US-exceptionalism-lite framework remain intact, and have been abetted by constructive US-specific (RHS-USD smile) developments.** We have been focused primarily on global factors and international developments for the dollar in 2022 (more below), but a recent noteworthy development has been the turn in US activity momentum. Since end-July, economic activity surprises have surged nearly 40pts to near-YTD highs (Exhibit 1), underpinned by beats in some key data releases, including labor market and services. While current quarter US growth still hardly qualifies as hot, this means the pendulum is swinging ever so slightly towards "US exceptionalism proper." **That said, the US-side of the equation took a nasty (dollar-bullish) turn this week following yet another hot CPI print for August**, disappointing expectations for cooler price data backstopping an improved growth outlook. The rates market response to Fed pricing was clear, with terminal rates now reaching new highs (4.4%) with US real yields surging in kind (Exhibits 2, 3). This seemingly pushes back the timeline of any potential Fed pivot, and should continue to buoy the dollar via aggressive Fed expectations and another re-tightening of financial conditions.
- Developments globally were more mixed for the USD in recent weeks but still lean USD-positive on the whole.** We are carefully monitoring developments in the energy space in key regions like the EU and the UK (each contemplating some form of energy price relief; see EUR & GBP chapters). Real yields and potentially-improved growth outlooks take out some deeper downside tail risks for those currencies if enacted, but as

Exhibit 1: US data is beating expectations at swift pace lately, adding a fresh angle to USD strength

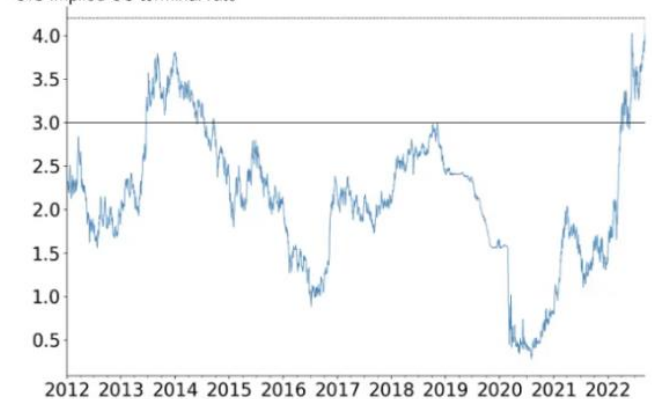
Economic Activity Surprise Indices



Source: J.P. Morgan

Exhibit 2: Stronger USD data, plus a hot Aug CPI, have driven US terminal rate expectations to new decade highs

OIS-implied US terminal rate



Source: J.P. Morgan

Exhibit 3: Higher rates and tighter financial conditions remain consistent with a firm USD

LHS: USD TWI; RHS: 5y US real yields



Source: J.P. Morgan

- yet are not game-changers that should invert broad-USD direction (in fact, we remain short EUR/USD and GBP/USD). Rather, Exhibit 4 indicates that the USD continues behaving in line with global momentum which, for now, is still negative and now showing much arresting of momentum as yet.
- **Not surprisingly, then, dollar correlations at multi-year highs.** Dollar moves – especially dollar strength that is accompanied by risk-off markets – tend to be broad affairs. Q3 has been textbook in this respect, with average pairwise USD/G10 correlations climbing to near two-decade highs as the dollar rally picked up steam in August (Exhibit 5). Two observations are worth making in this respect: First, in general, dollar breadth is more profitable to follow than to fade, and is more informative for the USD index trend than price momentum of the index itself. Second, local peaks in USD correlations do not reliably mark dollar trend reversals. Broad/correlated dollar moves can unfold both in rallies and sell-offs; for the current context, only the former are of relevance. If the past is any guide, the worst case outcome for the dollar from here is loss-of-momentum / flat-lining over the next 6-months. Given myriad tail risks around global growth, monetary policy and geopolitics that are arguably worse than at any point in the past two decades, and given that one is paid to hold dollars via positive carry to wait for one or more of these to fructify, dollar bulls need not fret unduly over such an outcome. See [here](#) for more detail.
- **US politics are back in focus with upcoming midterms, but we think the direct policy impacts on USD should be muted.** Historically, midterms do not provide much signal for the broad-dollar. Looking at midterm elections over the last 30 years shows limited directional consistency in USD spot returns over subsequent meaningful trading periods. Looking forward, should the election deliver a divided government, the read-through is straightforward: major economic initiatives that require two-chamber support have negligible chance of passing. If, on the other hand, Democrats retain complete control of all three chambers - the scope for USD-moving fiscal legislation may still be modest, reflecting that some major priorities have already been completed this year, as well as (likely) still-narrow margins and inflation impacting legislative arithmetic. **Elsewhere, currency-relevant policies like US-China relations and FX/USD policy are unlikely to change as a direct consequence of midterms.** US-China remains one of few US economic policies that enjoy bipartisan support and remains primarily at the discretion of the executive branch, not Congress (and thus not impacted by the election itself). US FX policy is determined unilaterally by the Treasury. One wildcard we would flag is the risk of renewed uncertainty around the debt ceiling. For more detail, see [here](#).

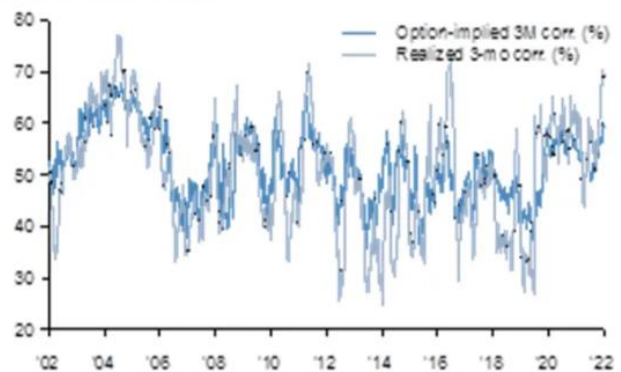
Exhibit 4: USD is also not overshooting global momentum

USD TWI model vs Global PMIs (2014-2018 beta)



Source: J.P. Morgan

Exhibit 5: Average pairwise USD/G10 correlations have climbed to near two-decade highs



Source: J.P. Morgan

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Neutral	<ul style="list-style-type: none"> • Bearish: Global growth vigorously rebounds. Energy crisis in Europe abates • Bullish: Recession concentrated outside the US (EU, China). Continued risk aversion. Worsening of Ukrainian conflict. Further Fed upgrades 	<ul style="list-style-type: none"> • Ukraine, China lockdowns • FOMC (21 Sept) • Sept CPI (13 Oct), Payrolls (7 Oct)

JPY

Table 1: JP Morgan Forecasts

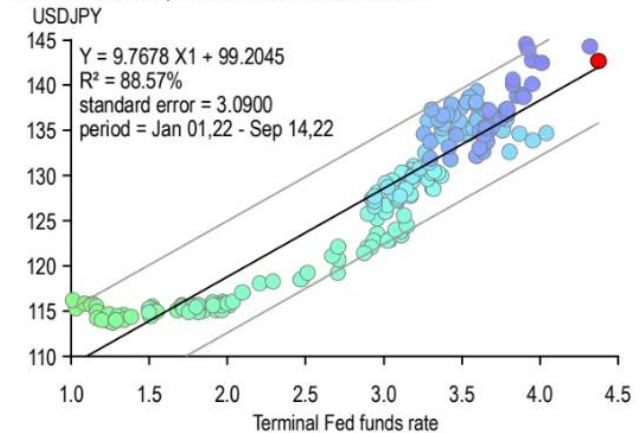
	Dec 22	Mar 23	Jun 23	Sep 23
USD/JPY	147	145	142	140
EUR/JPY	140	142	145	144
AUD/JPY	103	104	105	104
GDP (% saar)	3.0	1.0	1.0	1.0
CPI (% oya)	2.7	2.4	1.8	1.7
Policy rate (%)	-0.10	-0.10	-0.10	-0.10

Source: J.P. Morgan

Intervention won't halt the yen's slide

- USD/JPY has soared alongside higher US yields post-Jackson Hole, climbing toward the 145 level for the first time in 24 years.** While we maintain a downward slope in the USD/JPY profile over the 12-month horizon (4Q22: 147; 3Q23: 140), we continue to see the potential for an extension of yen weakness (USD/JPY higher) in the coming months, with a move toward 150 in sight assuming Fed terminal rate pricing has further to run. The question now becomes how quickly USD/JPY can rise assuming no BoJ policy shifts and/or MoF currency intervention. We do not completely rule out the possibility of limited JPY-purchase currency intervention, say if yen moves become unhinged versus fundamentals. But we doubt intervention will alter the yen's trajectory on any sustained basis, given a confluence of headwinds on JPY, discussed below.
- USD/JPY remains hostage to Fed pricing, with the pair's sensitivity to yield spreads having shifted toward the front-end of the curve.** USD/JPY has regained its beta to market pricing of the trajectory for the Fed funds rate, a relationship that had broken down through the early summer. As Exhibit 1 shows, USD/JPY's move up toward 145 brings the pair back in line with levels implied by terminal rate pricing. This is important because it suggests that even with some levelling off in longer-dated US yields, USD/JPY can follow terminal rate expectations higher (or, equally, can benefit from further de-pricing of cuts). Current betas imply a 2.5 yen move for each additional 25bp hike in the price. A terminal rate rising toward the 5% level would thus imply USD/JPY extending toward 150.
- Policy divergence is no longer a US-centric phenomenon; JPY is fast becoming the world's only zero-yielding currency.** Broadening divergence in policy rate trajectories versus the BoJ leaves JPY as the only major currency where front-end yields are still

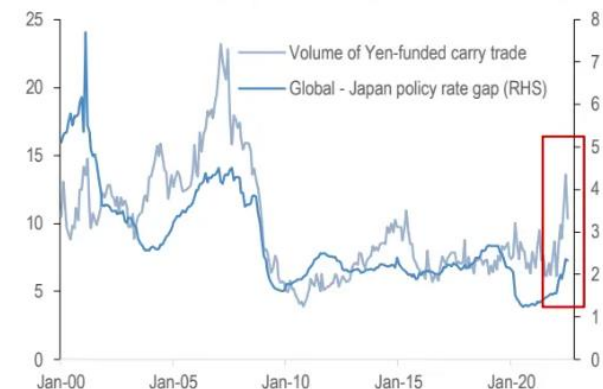
Exhibit 1: USD/JPY continues to look fair to Fed pricing, with each additional 25bp hike worth around 2.5 yen higher in the pair USD/JPY and OIS-priced terminal Fed funds rate, %



Source: J.P. Morgan

Exhibit 2: JPY-funded carry trades look to be surging as the policy divergence widens further

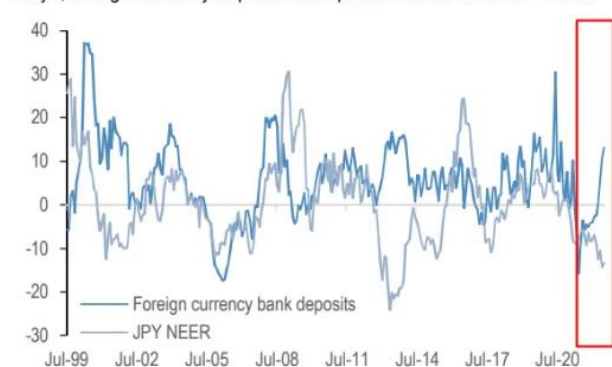
LHS: JPY tn, foreign bank branches' inter-office assets as a proxy of JPY-funded carry trades; RHS: %-pt, policy rate gap between Japan and the rest of the world



Source: BoJ, J.P. Morgan

Exhibit 3: FX deposits at Japanese banks are surging, which could catalyze further JPY depreciation over the medium-term

%oya, foreign currency deposits at Japanese banks and JPY NEER



Source: BoJ, J.P. Morgan

priced closed to zero over the next couple of years, which has left a measure of JPY-funded carry trades at a decade-high (Exhibit 2). Unless the BoJ pivots, we think yen-funded carry trades have the potential to rise further, forming an additional headwind to JPY.

- **Household/corporate FX deposits at Japan banks are rising sharply, which could form another catalyst for further JPY depreciation over the medium-term.** As

Exhibit 3 shows, FX deposits usually follow the yen's trajectory; households tend to buy foreign currency when the yen is strong and sell when it is weak. But there has been a somewhat unusual decoupling in this trend over the past couple of months, with FX deposit growth soaring to cycle highs even as the JPY NEER has tracked multi-year lows. In a similar vein, Nikkei has reported a double-digit year-on-year surge in new retail foreign currency time deposits accounts at several banks. While we do not think this suggests a wholesale loss in confidence in the currency, **if foreign currency deposit growth continues to rise, this could become an additional idiosyncratic headwind for the yen.**

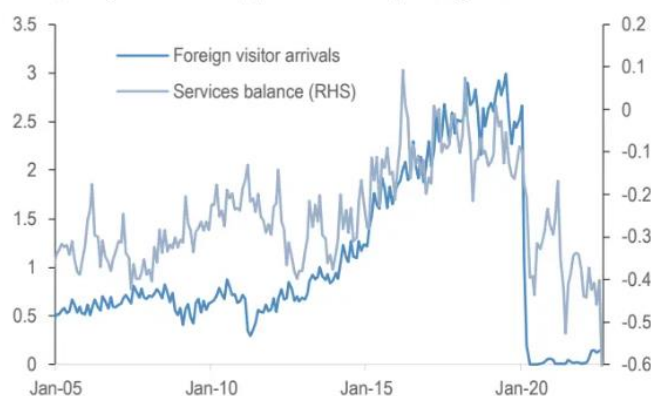
- **Japan posted its biggest single-month trade deficit on record of JPY2.8 trillion in August.** As we have

pointed out frequently, we believe a deteriorating trade balance will continue to exert downward pressure fundamentally on the yen amid higher energy prices. If there is any positive news, it would be the easing of Japan's border controls. The government is looking to drop a ban on individual tourist visits and remove a daily cap on visitors in October. The services balance was still at a very low level as of July compared to pre-pandemic, but if Japan continues to further ease border controls, visitors could take advantage of the weaker yen, improving the services balance (Exhibit 4, see also [here](#)). While energy prices/the trade deficit will continue to be the primary focus, **the recovery of foreign visitor arrivals could eventually take some pressure off the yen.**

- **Given all the factors mentioned above, we highly doubt currency intervention will be sufficient to reverse the yen's fortunes.** While the government's tone against the recent rapid yen weakness has

intensified over the past week, we still do not think the probability of outright FX intervention is high. In the late 1990s, the MoF conducted JPY-purchase intervention multiple times, but it failed to stop the trend of yen weakness (Exhibit 5, see also [here](#)). **A more significant trigger would come from a shift in BoJ policy on the YCC; the baseline remains that the September meetings will be too soon for such a shift.**

Exhibit 4: Japan's trade deficit remains a headwind for the yen, but the recovery of foreign visitors may take some pressure off
JPY tn, foreigners' net weekly purchases of Japan long-term debt



Source: JNTO, MoF, J.P. Morgan

Exhibit 5: MoF's yen-purchase intervention largely failed to prevent further yen depreciation in the past

LHS: USD/JPY spot rate; RHS: JPY tn, amount of MoF's Yen-purchase intervention



Source: MoF, J.P. Morgan

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Bearish	<ul style="list-style-type: none"> • Bullish: USD/JPY to 130 if 1) Global growth stalls and core yields reprice sharply lower; 2) MoF conducts aggressive yen-purchase intervention and/or BoJ capitulates on YCC/negative interest rate policy; 3) Tourism inflows/foreign buying of Japan assets surprise materially to the upside • Bearish: USD/JPY to 160 if 1) Another move higher in US yields and/or higher terminal rate pricing; 2) Acceleration in Japanese investor outflows; 3) China stimulus surprises to the upside and risk assets (and core yields) reprice higher 	<ul style="list-style-type: none"> • MoF's FX intervention • FOMC meeting (Sep 21) • BoJ meeting (Sep 22) • US NFP (Oct 7), CPI (Oct 13) • Further easing of Japan's border controls

EUR

Table 1: JP Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
EUR/USD	0.95	0.98	1.02	1.03
EUR/JPY	140	142	145	144
EUR/GBP	0.86	0.87	0.89	0.89
GDP (% saar)	-2.0	-2.0	1.0	2.0
CPI (% oya)	10.8	8.8	6.6	4.1
Policy rate (%)	1.50	1.50	1.50	1.75

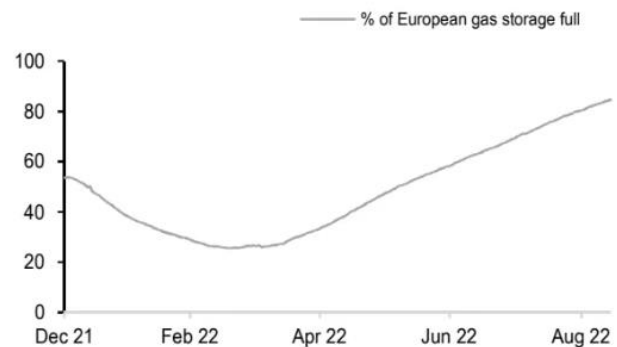
Source: J.P. Morgan

EUR/USD: Still seeking 0.95

- Since our last monthly publication in mid-August, EUR/USD is 2.5% weaker. That the euro has weakened is not surprising given the significant events that have occurred since then—a complete stop to Nord Stream 1 gas supplies and a stonking US inflation print that even got rates markets toying with a 100bp hike next week—what is surprising is that it isn't even weaker and instead has struggled to decisively stay below 0.99. **At play have been a confluence of other EUR-supportive factors—a more hawkish than expected ECB, EC's emergency power plan, a quicker storage build-up by Europe, a 33% decline in gas prices, an early-stage neutralization of negative data as well as more positive news reports from Ukraine/ Russia.**
- **While incrementally positive, not all are durable in our view.** For instance, we don't expect euro to be driven by ECB hikes which are inflation motivated and coming despite our baseline of a recession. The European Commission's emergency energy plan (details below) is not UK-style. **Our initial read is that while this reduces odds of going to our severe case target of 0.90 for EUR/USD, we think our baseline of 0.95 is still within reach.** The gas storage build-up, now at 84% for the region, is indeed running ahead of schedule (exhibit 1). The severity of the winter will still be key to ensure supplies last through this season. Beyond this year, current storage still only comprises 21.5% of prior annual consumption (source: GIE) and on the other side of 1Q23, markets will become pre-occupied with the contingency plan for winter of 2023. [ENTSOG](#) estimates in its yearly outlook that even with a mild winter and demand reductions of 15% as currently planned, further measures would be required to ensure sufficient storage inventory for winter 2023/24. Enforcing reduced demand will need to be part of the program so will still come with economic costs, even if reduced. **The main driver EUR/USD is still**

expected to be energy dependence and beyond that, any major re-thinks on the US/Fed.

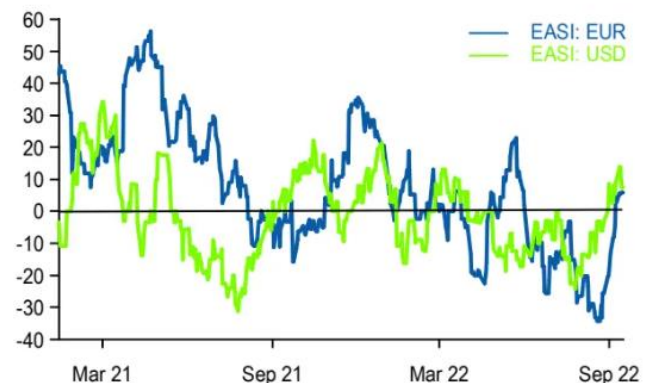
Exhibit 1: European gas storage is now nearly 85% full
Evolution of percentage of GIE Europe gas storage full YTD



Source: J.P. Morgan, Bloomberg

Exhibit 2: There are early-stage signs that negative data surprises in Europe are running out of steam

US and EUR economic activity surprise indices



Source: J.P. Morgan

- **The last two factors—neutralizing growth momentum and positive news reports regarding the war—are worth tracking and could have the potential to turn euro weakness, but our preliminary assessment is that it is premature to do so.** Specifically, there are early-stage signs that economic data is no longer missing expectations in the region, as is evidenced from the Euro area EASI having returned to neutral from highly negative territory. We are characterizing this as early stage since it takes typically 4-6 weeks of persistent surprises before markets react to them. The flash PMIs (Sep 23) should shed more light on economic momentum in the region. Visibility around recent developments in the Russia/ Ukraine conflict is low and a wild card, although our expectation is that

energy supplies will not resume regardless of the outcome.

- **These are nonetheless an interesting confluence of developments for the more tactically minded, but we retain our shorts in EUR/USD** as we expect some insulation from the Fed re-pricing and a more likely outcome in our view is for EUR/USD to consolidate before taking a leg-lower to test 0.95. **We stay short** but with a tight stop (now 1.02). As a hat tip to developments that are trimming some extreme tail risks, we change our risk bias on our 0.95 to mildly bullish.
- Finally, it is worth noting that even with 150bp additional rate hikes by 2H and 200bp by end of 2023, **the euro will remain a funder in the global context unless the ECB is willing to go far more aggressively (beyond 2% peak rates; exhibit 3)**. EUR/USD near-term target remains 0.95 with conviction on bearish direction. 1y ahead trajectory is upwards slowing to 1.02-3 given dollar valuations are rich.
- **The new EC energy plan is not as stimulative as the one in UK.** The avenues of intervention are: (1) demand destruction, (2) An EU-level uniform cap on the price paid to electricity producers worth 0.9% of GDP on a cap of €180/Mwh (vs. €70/Mwh in Norway); and (3) a tax on the revenues of oil, gas and coal companies. Although, on paper, the EC expects the initiative to raise resources amounting to 1.5% of EU GDP, our economists note that the incremental scope of these proposals is limited as most countries have already adopted similar or more substantial measures at a national level. Rather than generating resources, it aims to impose uniformity across member states. Our economists therefore estimate the initiative to raise only an additional 0.5% of GDP for fiscal support in the Euro area with substantial cross-country heterogeneity (see [here](#)). The near-term headline inflation forecast remains unchanged at 10% oya by 4Q22. There has been no progress on the debate around a cap to natural gas prices given the lack of supply from Russia and the shift to LNG, with focus shifting instead towards obtaining better LNG price terms from alternative suppliers and the future creation of an EU LNG index to replace the TTF benchmark.

- **With the Italian general election less than two weeks away, the baseline is a victory for the right wing coalition** consisting of Brothers of Italy, Lega, FI and a smaller centrist group. Our economists highlighted last month the key credibility markers (see [note](#)) to look out for in BoI's manifesto: 1) the Recovery fund reform effort, 2) fiscal discipline in the form of some acknowledgement that fiscal space is limited, 3) the energy diversification plan adopted by the Draghi administration, and 3) a firm and unambiguous pro-NATO stance against Russia. We have since seen consistently reassuring messaging from the party's leaders on the above points, exhibiting more moderate tones. Nevertheless, our rates strategists believe the current political risk premia priced in Italian spreads do not compensate for the risks of potential post-election political noise during the government formation and budget drafting process (see [here](#)). They thus hold a high conviction Italy UW, targeting a widening to levels of 250bp in the 10Y Italy-Germany spread (currently 233bp). We think this will be less relevant for the currency since the issue is idiosyncratic rather than a systemic one and since Italexit is not in play.

Exhibit 3: The euro will remain a funder in the global context unless the ECB is willing to go far more aggressively (beyond 2% peak rates).

Nominal/ real rate forecasts (2Q'23). Real is policy rate less yoy inflation forecast



Source: J.P. Morgan Economics

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Bullish (from neutral)	<ul style="list-style-type: none"> • Bearish: 1) Russia continues to weaponise the supply of oil as well. 2) A deeper European recession. 3) Fears of more aggressive ECB hikes triggered by a further sharp rise in inflation manifesting itself in much-wider peripheral spreads • Bullish: 1) A ceasefire in Ukraine, albeit without a presumption of a rapid unwind of sanctions/relaxation of energy tension. 2) European growth proves resilient allowing the ECB to tighten policy more credibly and constructively for the currency. 	<ul style="list-style-type: none"> • Energy prices and gas supply • ECB (October 27) • Italian elections (September 25th) • Flash PMIs (Sep 23) and CPI (Sep 30) • Financial conditions- relative equity market performance; peripheral bond spreads

GBP

Table 1: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
GBP/USD	1.10	1.13	1.15	1.16
EUR/GBP	0.86	0.87	0.89	0.89
GBP/JPY	162	163	163	162
GDP (% saar)	-1.0	0.5	0.8	0.5
CPI (% oya)	10.3	9.5	6.3	4.8
Policy rate (%)	3.25	4.00	4.00	4.00

Source: J.P. Morgan

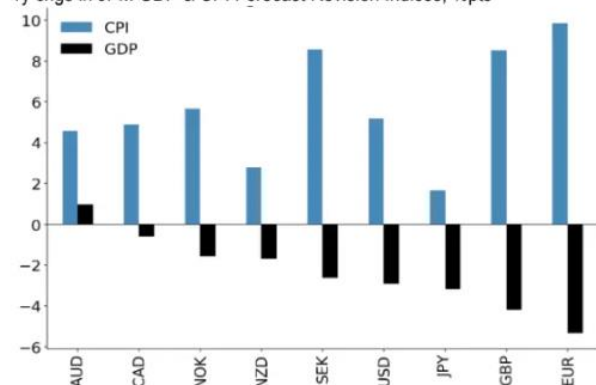
Bearish GBP on twin deficits

- We have been bearish on GBP since 2021**, first identifying its stagflationary prospects in September last year (Exhibit 1). This, combined with poor carry and weaker-than-expected economic data firmly made GBP an attractive funder. The prospects of BoE hikes was not expected to reverse the bearish tide given poor growth prospects. We increased our sterling shorts in mid-August as energy prices spiked and UK CPI data failed to show any meaningful slowing (see [GBP: Growth risks and stubborn inflation](#), 17 Aug). New PM Liz Truss's fiscal plan is designed to alleviate these pressures for the UK, which warrants a reconsideration of cyclical and structural factors impacting GBP. **The Truss plan is larger than had been expected, but does not transform the bearish case for GBP, in our view.** We mark our GBP/USD targets to 1.10 this month. For more detail, see here: [Re-assessing GBP following the Truss plan - stay bearish](#).
- Fiscal stimulus doesn't transform GBP's stagflationary status, and we retain a bearish bias.** The proposed fiscal plan from the Truss administration is large (>£100bn or ~6% of GDP, on par with the COVID-19 response). Accordingly, our economists have marked up 2023 growth projections and have lowered their risk of a recession (see A. Monks, Monks, [UK Forecast Changes](#), 8 Sept and [3Q GDP downgrade, call change for next week's MPC](#), Sept 16). Nevertheless, this does not obviously change the fact that the UK is still trapped within the stagflationary camp in G10; the economy is still forecast to have the highest yoy inflation in DM in 2023, with the lowest 4Q/4Q growth. So while Truss's plan takes out some deeper cyclical tail risks for sterling, stimulus alone does not absolve GBP of the headwinds that have plagued it since late 2021.
- For GBP, we now place greater emphasis on the twin combination of an expanding fiscal deficit against an already-wide current account deficit.** The UK's

current account reached -8% of GDP in 1Q'22, the largest print on record (the 1y rolling average was tamer but a still sizable -4.1% of GDP). Our economists think it would be reasonable to conclude that a widening fiscal deficit will expand the current account deficit as well. Exhibit 2 shows that UK's C/A deficit is already among the largest and that market forecasts of the UK's twin deficits they could remain elevated through next year at least. This matters for sterling, which has shown a reasonable degree of correlation to the current account since the GFC (Exhibit 3). Thus, a twin deficit approaching 10% GDP through next year will be in focus for sterling investors, especially as this level of twin deficit would tend towards the higher end of trends seen in G10 over the last two decades (Exhibit 4).

Exhibit 1: The UK has suffered among the worst cases of inflation upgrades and growth downgrades in G10

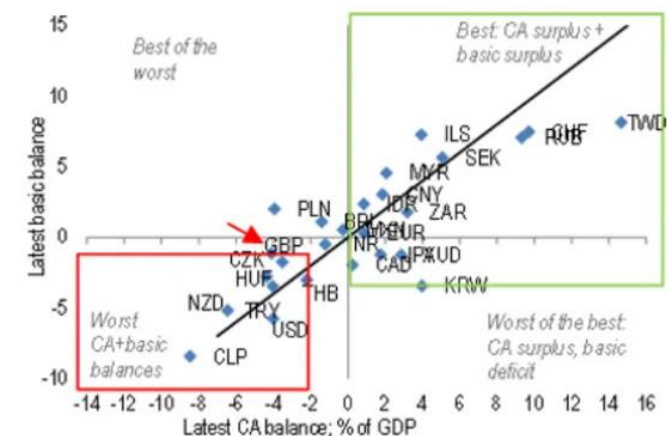
1y chgs in JPM GDP & CPI Forecast Revision Indices; %pts



Source: J.P. Morgan Economics

Exhibit 2: Consensus forecasts show that the market is meaningfully reassessing the UK's future twin deficit problem

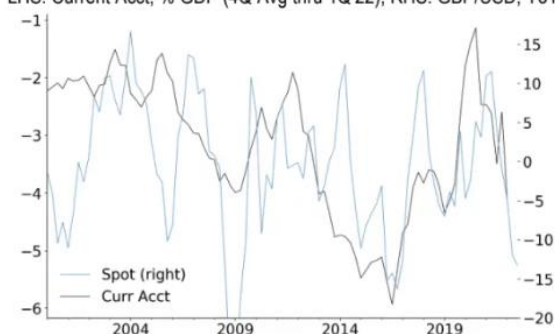
First chart: latest basic balance (y-axis) vs. current account balance (x-axis) by country (% of GDP, 1y rolling average)



Source: J.P. Morgan

Exhibit 3: A sustained-wide current account (and twin deficit) has historically coincided with weaker GBP

LHS: Current Acct, % GDP (4Q Avg thru 1Q'22); RHS: GBP/USD, YoY % Chg



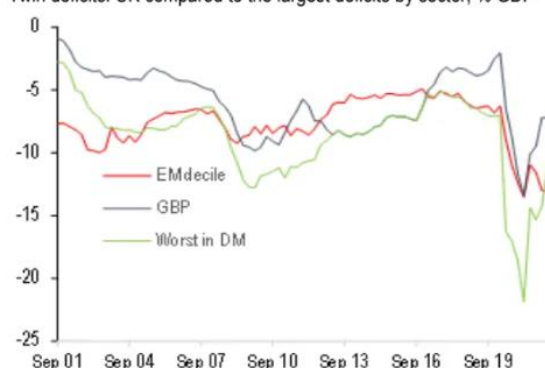
Source: J.P. Morgan

- Against this backdrop, a key driver for GBP will be the BoE response; an inflation-vigilant and hawkish BoE response will be required to limit further GBP-specific weakness.** The BoE is expected to hike more than originally anticipated given the fiscal program's impact on medium-term inflation. Specifically, our economists now expect the BoE policy rate to reach 4.0% (including 50bp next week) (Monks, [UK Forecast Changes](#), 8 Sept and [3Q GDP downgrade, call change for next week's MPC](#), Sept 16). BoE hikes YTD have failed to put a floor under sterling, and we remain skeptical that BoE hikes alone can drive GBP higher on a broad-basis. That said, the BoE hiking path will be key in other respects (longer-dated UK real yields are now close to 0bp). The BoE's now-more-aggressive path will lift GBP out of the basket of funding currencies on a nominal basis. But larger hikes may be needed to make UK assets attractive from an international flow perspective. Exhibit 8 shows that, over time, higher deficits in G10 tend to require higher yields to attract international capital to meet external deficit financing requirements, with current account deficits greater than 6% usually associated with yields of 5% or greater (note the non-linearity for higher deficits). We would view the BoE becoming less vigilant on inflation as decisively currency-negative.

- Given the above, we revise our GBP/USD target forecasts down from a trough of 1.14 to a new 1.10.** EUR/GBP, by contrast, is expected to remain more within ranges. We also expand our strategic GBP-short position in light of the news; we sell cable in cash to complement our existing put spread position, and we hold GBP shorts vs CHF as well.

Exhibit 4: The UK's twin deficit will take it to near-DM highs

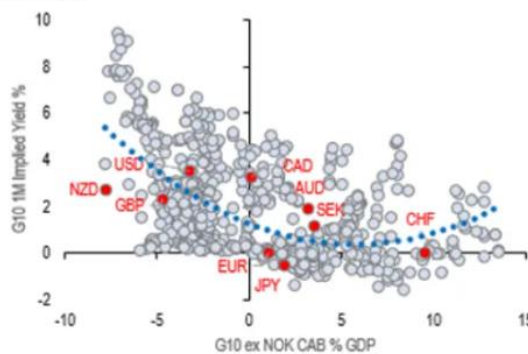
Twin deficits: UK compared to the largest deficits by sector, % GDP



Source: J.P. Morgan

Exhibit 5: Historically, large current account or twin deficits have required higher policy rates in G10 and EM

(X): G10 current account balance, % GDP. All ccys (ex-NOK) since 2000. (Y) 1m implied yield



Source: J.P. Morgan

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Bearish	<ul style="list-style-type: none"> <p>Bullish: 1) De-escalation in Ukrainian-crisis leading to lower gas prices and inflation overall. 2) Fiscal stimulus proves more pro-growth than expected and helps bring debt/GDP levels down.</p> <p>Bearish: 1) Outright disruptions to regional gas supplies and/or a further spike in gas prices. 2) BoE ceases its hiking cycle. 3) The UK suspends the NI protocol, triggering fresh concerns about the UK's continued access to the EU single market.</p> 	<ul style="list-style-type: none"> Ukraine; gas prices and inflation generally Truss's fiscal plans. BoE: 22 Sept NI protocol

CHF

Table 1: JP Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
EUR/CHF	0.94	0.92	0.90	0.88
USD/CHF	0.99	0.94	0.88	0.85

Source: J.P. Morgan

Hold CHF longs into SNB policy meeting

- CHF remains a high-conviction long, with the franc aided by the dual tailwinds of SNB policy and an uncertain global growth backdrop.** The fundamental picture thus looks framed to us in favor of further franc gains and we continue to position for EUR/CHF downside in the trade portfolio. The potential for sustained global growth downside looks broadly consistent with further franc gains on a broad basis (Exhibit 1), while against EUR, the possibility of a 75bp (if not 100bp) hike at the upcoming September 22 SNB meeting could widen out real policy rate spreads to eye-watering levels (Exhibit 2). We continue to think that for the EUR/CHF pair, the most important anchor remains real – rather than nominal – rates spreads. In this context, even with the circa 8% gain in the franc versus the EUR through the year to date, real front-end (policy) rate differentials imply the potential for further downside in EUR/CHF from the simple lens of rate spread valuations.
- The September 22 SNB policy meeting should cement the hawkish backdrop for the franc,** and we would not rule out the possibility of a 100bp hike in the policy rate against consensus expectations of a 75bp move. The latter would bring real policy rate spreads between EUR and CHF to multi-decade wides; put simply, this should be consistent with a much lower level of EUR/CHF over the medium-term. In this context, it will be important to monitor the degree of price pressures in the Swiss economy in informing the SNB's reaction function in coming months. Continued tightening from the SNB should not come as a surprise. But, as we discussed on these pages last month, we think it premature to rule out the possibility of further hawkish surprises.
- First, monetary conditions will need to tighten materially given the breadth of price rises now evident in the Swiss economy.** This implies of course higher policy rates, but it also suggests sustained CHF strength given the explicit role of franc appreciation in dampening imported inflation.

Exhibit 1: Long CHF on a TWI basis remains a reliable expression of downside global growth risks

JPMorgan global GDP FRI and CHF TWI (RHS)



Source: J.P. Morgan

Exhibit 2: A 75bp hike at the upcoming SNB meeting would bring real policy rate spreads vs. EUR to fresh wides, consistent with a much lower level of EUR/CHF

EUR/CHF and real policy rate deflated by ex post %oya CPI, %-pt. spread. September levels assume 75bp hike from SNB.



Source: J.P. Morgan

- As shown in Exhibit 3, a simple count of price categories in the Swiss CPI basket that are rising above the 2%oya target has risen to multi-decade highs.** Cycles of broadening inflationary pressures have typically been quickly met by SNB rate hikes. In this context, the current level of policy rate looks exceptionally low, even assuming another outsized hike in September. This dynamic in turn implies the potential for more forceful rate rises over the immediate horizon. It is not clear to us that this dynamic is yet fully appreciated; we suspect hawkish surprises (whether from larger-than-expected rate hikes, or potentially from intra-meeting hikes) will remain a support for the franc.

Exhibit 3: Monetary conditions will need to tighten substantially given the breadth of price rises evident in the Swiss economy. This implies both higher rates, but also sustained CHF strength...



Source: SNB, J.P. Morgan

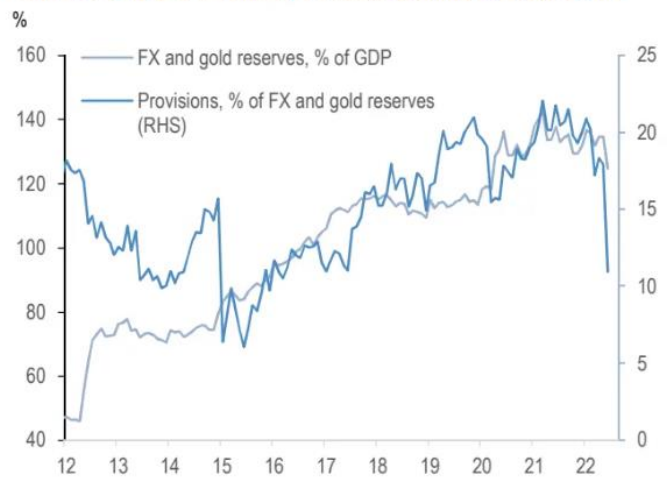
Exhibit 4: ...while the prospect – and now evidence – of inflation expectations rising above the SNB’s definition of “price stability” suggests that policy will remain hawkish for the foreseeable future



Source: SNB (Jackson Hole Economic Policy Symposium, “Reassessing Constraints on the Economy and Policy,” 27 August 2022).

- Second, we continue to see the risk of policy intervention as being one-sided, in the direction of CHF purchases, given the inflation backdrop and policy read-through. This point was reinforced by Chair Jordan in his August Jackson Hole speech, where the emphasis was firmly on the prospect – and now evidence – of inflation expectations rising above the SNB’s range of “price stability”, as shown in Exhibit 4. Jordan’s warning of the risk of “underestimating the persistence of inflation” made this point particularly clearly – and implies that **policy will remain a tailwind for the franc against the risk that inflation expectations become unanchored.**
- Finally, as we have stressed, the growing constraints on perpetuating what has already been a decade worth of foreign asset accumulation on the SNB’s balance sheet should not be overlooked. The SNB’s provisions, measured as a share of its foreign assets holdings, declined materially through mid-year, and on our estimates have settled around the 10% level (Exhibit 5).

Exhibit 5: SNB balance sheet provisions continue to head south



Source: SNB, J.P. Morgan

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Bullish	<ul style="list-style-type: none"> • Bullish: 1) European recession. 2) Further pricing of SNB hikes. 3) Balance sheet losses trigger speculation about SNB QT (reverse intervention). • Bearish: 1) Ukraine de-escalation and soft-landing global economic outcome. 2) ECB prioritizes inflation over growth (accelerated hikes). 	<ul style="list-style-type: none"> • Ukrainian war, impact on European growth and ECB policy, global equity markets and bond yields • SNB September 22 policy meeting and SNB intervention, SNB P&L; CPI

NOK and SEK

Table 1: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
EUR/NOK	10.15	10.00	10.00	10.00
USD/NOK	10.68	10.20	9.80	9.71
NOK/SEK	1.04	1.04	1.02	1.00
GDP (% saar)	0.5	0.8	1.0	1.0
CPI (% oya)	6.2	5.7	4.3	2.8
Policy rate (%)	3.00	3.00	3.00	3.00

	Dec 22	Mar 23	Jun 23	Sep 23
EUR/SEK	10.60	10.40	10.20	10.00
USD/SEK	11.16	10.61	10.00	9.71
NOK/SEK	1.04	1.04	1.02	1.00
GDP (% saar)	-1.0	-0.5	1.0	1.3
CPI (% oya)	10.3	8.5	5.4	3.7
Policy rate (%)	2.00	2.25	2.25	2.25

Source: J.P. Morgan

NOK and SEK: Still stressing regional risks

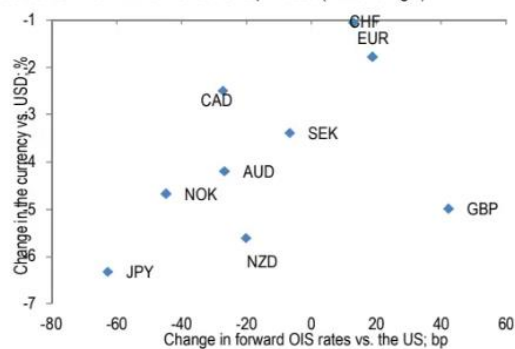
- **Over the past month, the performance of NOK and SEK has been mid-range within G10, but they have weakened vs. EUR.** The underperformance is explained by modestly lower oil prices, risk market weakness, a weaker euro, which has weighed on the regional, higher beta currencies like Scandis and rate differentials that have generally moved in favour of EUR, given a fairly hawkish ECB outcome (Exhibit 1)
- **Macro developments in Norway and Sweden over the past month have been unsupportive.** In Norway, activity data softened— the regional network survey indicated a small contraction and capacity constraints, and mainland GDP fell 0.3% m/m in July, driven by weak retail sales (-2.1% m/m vs cons -1.0%) and services. Inflation also printed softer than expected but this was overshadowed by the softer activity data which is making the prospects for NOK less appealing despite weak valuations. The story was the same in Sweden as business confidence and retail sales have weakened, and GDP surprised to the downside at 3.8% y/y (vs 4.2% cons). Economics note this stems mainly from high inflation and interest rates via lower consumption and investments. Swedish house prices are down 8.5% since March and the economists believe a correction of 15% is a plausible scenario (see full note here). Given the high correlation with household consumption, this creates more downside risk for the latter. Inflation was softer in

Sweden as well and Prospera inflation expectations showed signs of stabilization, but once again, the growth outlook has been disappointing. **Combined with the regional vulnerabilities, this keeps softness in Norway and Sweden relative to the Euro area (exhibit 2) keeps us cautious on Scandi FX.**

- **Against this backdrop, aggressive central bank hikes next week are unlikely to turn the tide on FX performance.** The JPM forecast looks for a 75bp hike from the Riksbank and a 50bp hike from the Norges Bank. The Riksbank hike will be inflation motivated— in light of the continued upward surprise in inflation (6.8% oya) compared to the Riksbank's estimate of 5.7% (see [here](#)). It is worth noting that the rates market pricing in a higher 90bp faced by the Riksbank ahead of the meeting next week. Norges Bank is expected to hike 50bp in our economists' baseline, broadly in line with market pricing (48bp).

Exhibit 1: Rate spreads have widened in favour of EUR last month; all currencies ex-GBP have followed rate spreads

CCY/USD vs. 2Yx3M OIS/ swap rates (1m change)



Source: J.P. Morgan

Exhibit 2: Growth momentum has been disappointing in Norway and Sweden, but is in early stage neutralization for Euro area

Economic activity surprise indices



Source: J.P. Morgan

- In recent publications, we have been outlining a cautiously bullish forecast on NOK and SEK vs EUR but have been neutral in our trade recommendations given low conviction** In the case of NOK, the *bullish* narrative has been based on well documented idiosyncratic factors—a milder stagflationary compared to the rest of the region, improving terms of trade from rising energy prices and a central bank that had the potential to surprise hawkishly which it has. In Sweden, the bullish motivations are lower conviction and the downward trajectory in EUR/SEK has been based on monetary policy divergence between the Riksbank and the ECB. The *cautious* stance meanwhile has been informed by global risks and regional vulnerability, both of which had the potential to deteriorate risk markets and catch lower liquidity currencies like NOK and SEK in the cross-winds, particularly when paired with poor liquidity conditions. We remain neutral in our tactical trade recommendations.
- Other developments include the general elections and a new Riksbank deputy governor in Sweden.** The right-wing coalition came in very closely ahead of the left-wing incumbents in the general election on 11th September, with Ulf Kristersson, the Moderates’ leader, most likely replacing Magdalena Andersson as Prime Minister. It is expected to engender lengthy negotiations on government formation. The FX response has been muted as expected, with the economists noting the traditional consensus on fiscal matters across the political spectrum as a buffer to uncertainty ([note by Morten Lund](#)). Separately, a new deputy governor, Aino Bunge, was appointed to succeed Cecilia Skingsley. Her views on monetary policy are not clear, but the economists (see [here](#)) note the general rule of thumb that members with background from the FSA may have a dovish tilt during tightening cycles, but warn to not give too much attention to the rule given the current inflation situation.
- EUR/SEK terminal targets are unchanged but near-term targets are moved up to reflect a more aggressive ECB.** 4Q22 target is at 10.60 vs. the prior peak of 10.40. At 10.70, EUR/SEK is near fair value (which has been inching up due to a hawkish ECB pricing (Exhibit 3). Eventually, we think that the

Riksbank will be able to deliver more hikes than the ECB and hence the downward sloping trajectory for EUR/SEK towards 10-10.20 area over a 1 year horizon.

- Unlike SEK, which is fair adjusted for short-term drivers, NOK looks to be overshooting,** given the twin combination of rate differentials compressing against it and energy prices declining. Based on these factors, fair value is closer to 10.30. We leave terminal targets for EUR/NOK unchanged as well (at 10.0) but mark up near-term targets to 10.15 to reflect these two factors.

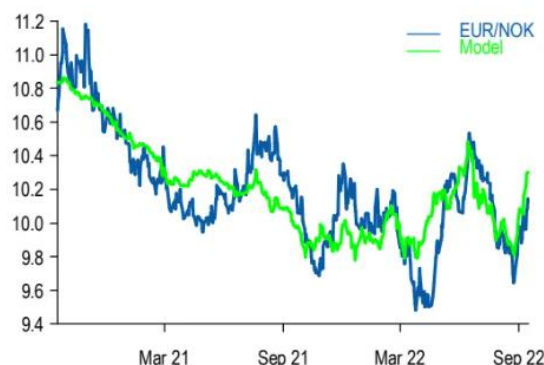
Exhibit 3: EUR/SEK screens fair adjusted for rates and vol (10.70)
 EUR/SEK modeled vs. 5Y swap rate differentials and 2s/10s curve



Source: J.P. Morgan

Exhibit 4: EUR/NOK fair value has moved down from 10.30 on rate spreads and lower energy prices

EUR/NOK: actual vs. fair value based on 5y rate differentials and Brent/ gas weighted average



Source: J.P. Morgan

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Bearish for NOK and SEK	<ul style="list-style-type: none"> Bearish: 1) Natural gas prices fall on Russia supply or Brent falls on a resumption of oil price war or demand shock. 2) Global growth continues to weaken. 3) Norwegian housing rolls over. Bullish: 1) Oil increases to \$150/bbl or gas price increases substantially > EUR200 (TTF), (2) Global growth momentum resumes upward; (3) Norges Bank gets more concerned about an overheating economy. 	<ul style="list-style-type: none"> Russia/ Ukraine conflict. Norges Bank (Sep 22). PMI (Oct 1), CPI (Oct 9). GDP (Sep 8). Monthly house prices. Oil, gas prices.

CAD

Table 1: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
USD/CAD	1.34	1.36	1.36	1.34
GDP (% saar)	1.8	1.8	1.8	1.8
CPI (% oya)	6.6	4.5	2.6	2.1
Policy rate (%)	3.75	3.75	3.75	3.75

Source: J.P. Morgan

Exceptionalism fading. Long USD/CAD

- Cracks are starting to show in the CAD macro outlook. It's too early for broad-based CAD underperformance but USD/CAD can start to make new highs as US-CA similarities start to wane. We raise our terminal forecast from 1.33 to 1.36 and go long USD/CAD in a call spread.** Our 2022 CAD framework has featured two main components: 1) flat-to slightly-bearish CAD vs USD given solid domestic growth and beta to oil offsetting the USD's anti-cyclical strength, and 2) CAD outperformance on crosses given a less-stagflationary cyclical picture in 1H (CAD GDP was upgraded on net through 2Q despite massive downgrades elsewhere), which when coupled with its benefits as an energy exporter, made for a 'good' BoC hiking cycle. This view has largely played out. Riding the USD's coattails has been productive for CAD, but importantly, has in some cases overwhelmed some of the below-described warning signs (for example – CAD significantly outperformed in G10 after US August CPI). That may soon change vs USD. For more, see [CAD FX Strategy: Exceptionalism fading](#).
- There appears to have been a rather sudden downshift in key activity indicators for Canada.** 1H'22 growth was strong for CA, with cumulative growth falling just short of Australia for tops in G10. Recent data is more concerning. The August PMIs stand out – Exhibit 1 illustrates the precipitous drop in sentiment, just as the BoC has shifted into restrictive territory. This was the second-worst m/m slump in August globally. This compounds negative trends in the labor market which, while volatile, has nevertheless contracted for three straight months, despite the US simultaneously adding +1.2m jobs over the same period. CA's +0.5% spike in the u-rate is therefore decidedly less benign than the recent two-tick increase in the US u-rate, which was instead a partial consequence of an improved labor supply. And as ever, housing remains a risk as the sector continues to cool. **In short, it may be that cyclical momentum is slowing down but perhaps even more importantly – the macro divergence vs the**

US may be sufficiently clear now where CAD starts to trade less as a USD proxy. Still, we do not recommend CAD shorts on crosses just yet, as cyclical outlooks elsewhere (EUR, GBP, JPY) remain considerably worse than.

Exhibit 1: The slump in the Aug PMIs is a concern

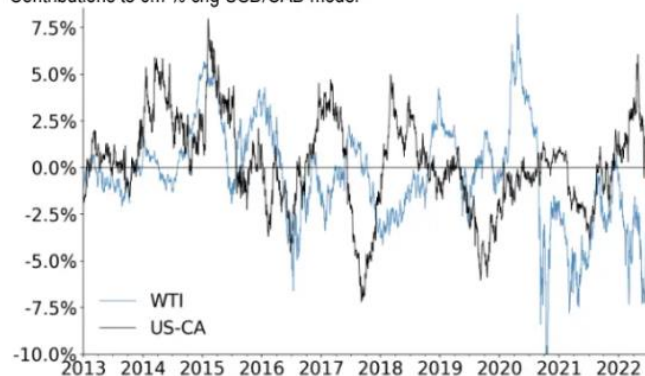
Left: Mfg PMIs, levels. Right: Mfg PMIs, m/m chg (Aug)



Source: J.P. Morgan

Exhibit 2: One reason USD/CAD has been range-bound this year is because of offsetting impulses from oil and relative US-CA rates momentum. That may begin to change

Contributions to 6m % chg USD/CAD model



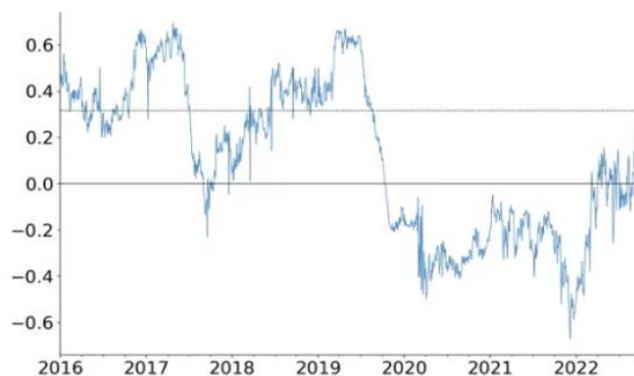
Source: J.P. Morgan

- It's also time to wonder whether the two traditional drivers of USD/CAD momentum (oil and US-CA rates) may finally align in a singular USD/CAD direction.** This year, oil and relative rates have largely offset on each other a model basis, which is consistent with USD/CAD's narrow range. But oil remains under pressure and our commodity colleagues' 1y forecasts are not particularly far from current spot levels, suggesting less downward pressure on USD/CAD than earlier in the year, while the spike in Fed expectations in recent weeks has applied a sudden surge of upward pressure in the pair. If oil remains depressed and Fed expectations

meaningfully outpace further BoC repricing, USD/CAD could spike higher.

Exhibit 3: The market seems to believe that the Fed and BoC could finally diverge, after going toe-to-toe all year

Left: OIS curve (1m rates); Right: Relative US-CA terminal rate



Source: J.P. Morgan

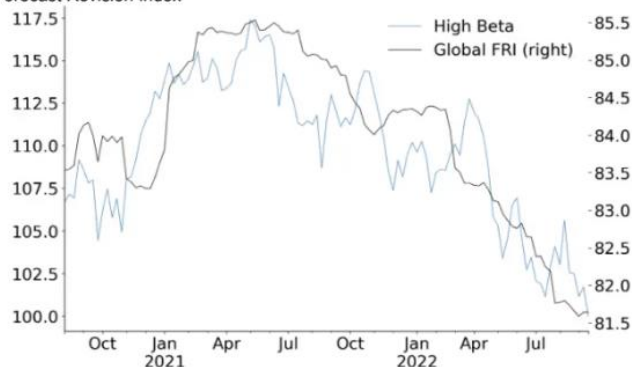
- **This may seem at odds with a BoC that has proven as aggressive as any CB in G10 this year. But there is some daylight showing market pricing between Fed and BoC pricing that suggests the nuances between the US & CA economies are set to become more material before long.** To be absolutely clear – the inflation fight is not over in Canada; CA has a similar trajectory of core measures to that of the US, wage gains jumped last month despite jobs growth continuing to fall, and the surprise jump in US core CPI for August will not have made the BoC any more comfortable in its own mission (CA CPI released 20 Sept). But the downdraft in CA momentum vs the US shown/described above is noteworthy in this respect, as is Canada’s much-higher leverage than the US (general debt/income ratios 2x US; see above mid-year). Exhibit 3 shows how

the market has begun to reconsider the respective near-term paths of policy.

- **The Fed hiking deeply into restrictive territory while global growth shows little sign of stabilization also warrants a higher USD/CAD bias.** While CAD has outperformed cyclical peers like AUD and NOK, strong USD correlations mean that they generally move together and, as we have detailed extensively in past research the USD remains highly anti-cyclical. It is not surprising then to see the commodity-bloc of G10 conform to the ongoing downdraft in global momentum (Exhibit 4); so long as this persists, USD/CAD downside will face headwinds. We maintain as well that, should the US go into a recession in the next year (not the JPM base case), that would be broadly CAD-negative given Canada’s gearing to the US, as well as implications for similar BoC policy to the Fed in that case (ie limited US-CA yield shift if the BoC also cuts).

Exhibit 4: USD/CAD will also continue to be guided by global and US momentum

LHS Commodity FX index (CAD, AUD, NOK, NZD) vs USD; RHS JPM Global GDP Forecast Revision Index



Source: J.P. Morgan

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Neutral	<ul style="list-style-type: none"> • Bearish: Further escalation of the conflict in Europe damages global growth more significantly; China activity worsens significantly; global growth concerns drive further weakness in oil • Bullish: Quick resolution to the conflict in Europe allows global growth to resume above-trend growth. BoC continues hiking while the Fed pauses. Inflation (CA & global) collapses. 	<ul style="list-style-type: none"> • Ukraine, commodity prices • BoC mtg (26 Oct); Fed FOMC (21 Sept) • CA CPI data (20 Sept, 19 Oct); labor data (7 Oct)

AUD

Table 1: J.P. Morgan forecasts

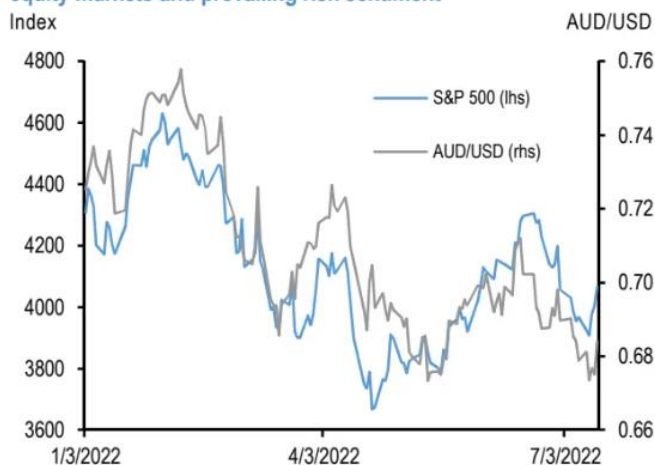
	Dec 22	Mar 23	Jun 23	Sep 23
AUD/USD	0.70	0.72	0.74	0.74
GDP (% saar)	2.6	2.4	2.4	2.3
CPI (% oya)	7.3	5.8	4.5	3.3
Policy rate (%)	3.10	3.10	3.10	3.10

Source: JP Morgan

AUD still biased higher vs. NZD

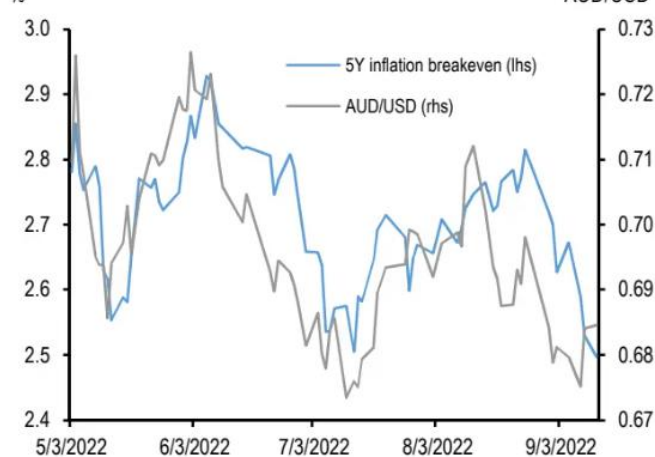
- AUD/USD has depreciated in the past month, consistent with rising global recession fears and increased risk aversion. **This dynamic is evident in the broad dollar index which climbed a further 5% since mid-August, in line with our view, with the DXY now up 14% year-to-date.** AUD's recent performance as a risk proxy is evident in its close correlation with global equities with the three month correlation tracking at 0.8 (YTD correlation: 0.71, **Exhibit 1**). Risk off sentiment continues to overwhelm other more local currency drivers, most notably commodity prices which remain elevated and saw the AUD terms of trade reach a new all-time high in 2Q. J.P. Morgan equity analysts forecast the S&P 500 to move higher into year-end, which based on prevailing relationships is consistent with higher exchange rate. **We expect the AUD/USD to reach 0.70 by year-end, and our year-ahead target (Sep-23) is 0.74.** Our higher conviction view remains to express the bullish AUD stance vs. NZD.
- 5Y inflation breakevens and AUD/USD have maintained a decent correlation (0.7) since the RBA delivered the first rate hike back in May.** In our view this partly reflects the Bank's laser focus on the inflation outlook, with recent communication and guidance indicating the Board is committed to doing what is necessary to ensure that inflation returns to target. While the inflation outlook remains uncertain and closely tethered to the more volatile parts of the CPI basket (namely energy, gas and electricity prices), 5Y breakevens are low in the range and, in our view, biased higher from current levels. This is also consistent with the economy displaying resilience to hikes and conversely, the interplay between how restrictive policy needs to go need term (in our view, less restrictive than in say NZ), supporting medium-term inflation expectations and curve shape.

Exhibit 1: AUD/USD continues to display positive directionality with equity markets and prevailing risk sentiment



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

Exhibit 2: Australian inflation breakevens and the spot exchange rate have been closely correlated since the RBA began hiking rates



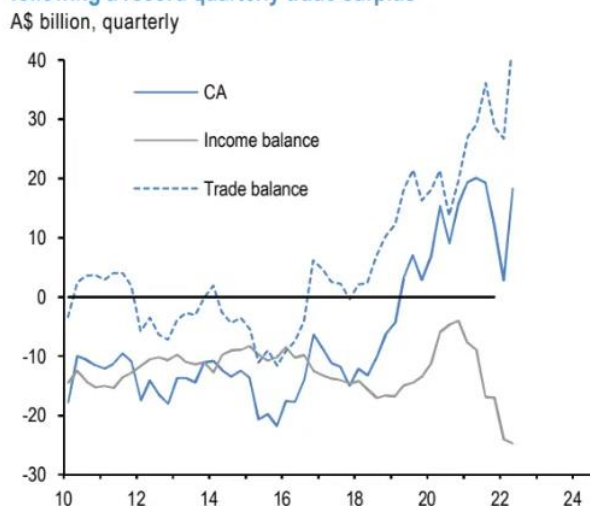
Source: Bloomberg Finance L.P., J.P. Morgan.

- In the past month we have incorporated more tightening into our RBA rates profile, with the cash rate now expected to reach 3.1% by year-end (prior for 4Q22: 2.60%).** This forecast change was partly owing to hawkish sentiment among global central banks, but also strong domestic data, particularly the labour and household spending numbers which remain robust. With the cash rate now closer to neutral, the size of future moves becomes less certain, **but with inflation yet to peak and the activity data still strong we anticipate a further 50bp hike at the October meeting, followed by a 25bp move in November.**
- Australia's current account surplus widened again in 2Q to AS\$18 billion, underpinned by another record**

quarterly trade surplus (Exhibit 3). This was slightly weaker than forecast, with the surprise owing to a surge in income debits, particularly a spike in dividend payments to non-residents. The income deficit is now the largest on record and, in our view, biased to narrow from current levels given the medium-term outlook for commodity prices (lower) alongside structural dividend inflows (higher) associated with [the superannuation sector's asset allocation to offshore equities](#).

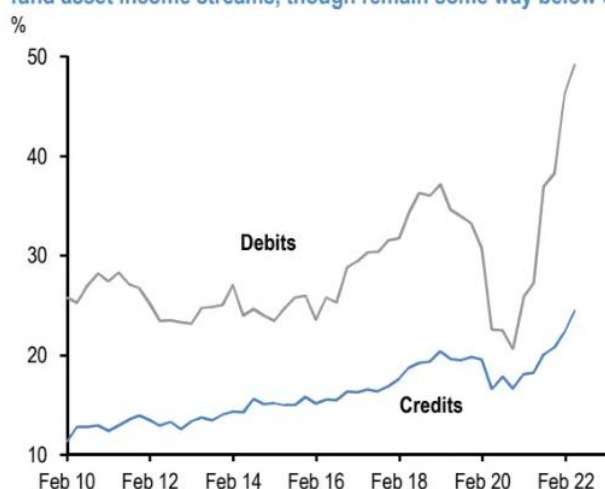
- Australia's pension system's FUM (~A\$3 trillion) is large relative to the size of the local equity market (~A\$2.3 trillion), with one-third of assets now invested offshore. **This has already led to a structural increase in income credits (Exhibit 4),** with flows expected to increase over time as the [compulsory superannuation contribution rate increases](#). Elevated debits flows associated with ACGBs/Semis held offshore means the income account will remain in deficit, but as the government's fiscal position improves our expectation is for the deficit to narrow and support the external sector.
- **In terms of the pension systems offshore assets, the most recent data from APRA show that asset managers hedge approximately ~40% of their FX exposure, which in nominal terms equates to A\$350 billion.** Specifics surrounding the day to day management of FX hedging programs of Australia's major asset managers are not disclosed, though we suspect recent equity market weakness has resulted in a degree of over-hedging across the sector which has required the sale of AUD/USD. **Aside from risk sentiment this dynamic helps to explain the correlation between AUD/USD and equities markets in 2022.**

Exhibit 3: Australia's current account surplus rebounded in 2Q22 following a record quarterly trade surplus



Source: ABS, J.P. Morgan.

Exhibit 4: Income credits have drifted higher on the back of pension fund asset income streams, though remain some way below debits



Source: ABS, J.P. Morgan.

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Bullish	<ul style="list-style-type: none"> • Bearish: AUD/USD below 0.65 if (1) Weakness in China industry cascades into a faster unwind in industrial commodity prices; (2) Structural issues in Chinese real estate become a broader shock to inducing stress in the financial system. • Bullish: AUD/USD above 0.75 if (1) Mining/energy investment is rejuvenated by strength in commodity prices and medium-term outlook for changes in European energy demand; (2) the Australian government commits to replenish cost savings with another large fiscal easing, shoring up growth prospects and raising the RBA's terminal rate. 	<ul style="list-style-type: none"> • RBA minutes (Sep): 20 Sep • Retail (Aug): 28 Sep • RBA rate decision (Oct): 4 Oct • Labor force survey (Sep): 20 Oct

NZD

Table 1: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
NZD/USD	0.62	0.63	0.63	0.63
GDP (% saar)	2.3	1.9	2.2	2.6
CPI (% oya)	4.9	3.5	2.3	1.8
Policy rate (%)	4.00	4.00	4.00	4.00

Source: J.P. Morgan

NZD: Concluding a pre-emptively-ignored hiking cycle

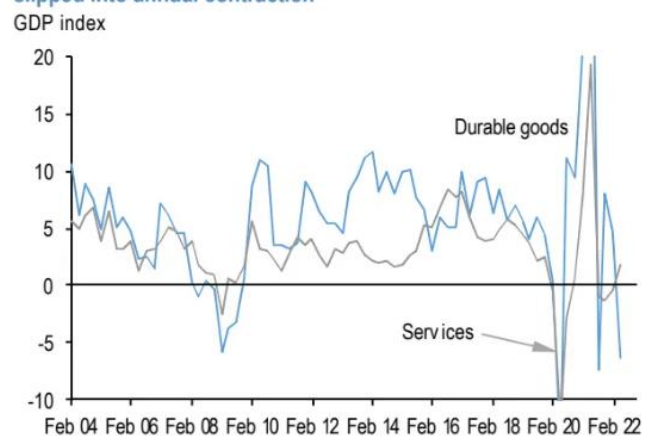
- NZD/USD continues to suffer headwinds from both its high-beta status, and domestic growth/policy constraints.** Despite leading the policy normalization process along with NOK, and delivering the highest/steepest money market curve in DM, FX market participants have presciently looked through NZD's policy rate supports, to the growth-negative implications. Stagflationary dynamics and the RBNZ's housing remit have forced policy into deeply restrictive terrain, inverting the curve significantly (Exhibit 1). After more downbeat news on housing and consumption, and expecting further depricing in the OIS curve, we remain bearish on NZD/USD near-term, holding a short in the cash portfolio. However, as the hiking cycle reaches its crescendo in 4Q22, we see modest upside in 2023 as FX has pre-empted the rate path, leading to somewhat easier financial conditions than policy rates imply. **Our Sep-23 forecast is 0.63.**
- Despite the weakness of NZ housing being a well-established theme, this week's readings for August suggest stabilization is some way off yet. House prices fell another 1.3%/m/m to be down 12% from the peak less than a year ago, and down 16% in Auckland. **The accumulated change in house prices this year has taken 8c off our NZD/USD fair value model estimate.**
- Compared to housing, the downshift in consumption has been a more slow-moving affair, but nonetheless significant. GDP contracted in 1Q, and fell well short of expectations for a bounce-back in 2Q. The implications of technical recession in the US are debatable, whereas **NZ consumption has contracted over four quarters since the Delta lockdowns.** This conveys a very entrenched tightening of policy, evident also in the breakdown of most interest-rate-sensitive components (Exhibit 2). This should be feeding back into RBNZ assessments of the neutral OCR.

Exhibit 1: NZD/USD has consistently looked through NZ's high terminal rate to price deeper curve inversion and growth risks



Source: J.P. Morgan.

Exhibit 2: Over the last two GDP reports, household spending has slipped into annual contraction



Source: RBNZ, J.P. Morgan.

- Domestic policy tightening has been motivated by two objectives. First, the committee has sought to demonstrate action (i.e. keep hiking) until actual inflation, and so inflation expectations, come down, even if tradable/external factors will drive much of that timing. Some signs of moderation in inflation expectations were evident in the last survey, following the fall in fuel prices. We forecast a more significant drop in inflation annual rates in October's 3Q CPI report. Second, and more fundamentally, **the OCR reins in non-tradables inflation by slowing housing (Exhibit 3), and consumption.** Both elements of the latter, domestic transmission have been evident for a few quarters. So, despite the cycle nearing its assumed completion - 90% of the hikes priced from here are allocated to the next 3 meetings - **there remain downside risks to OIS pricing.** NZD 1Yx1Y IRS is at early-May levels, so does not reflect the accumulated

weakness in consumption since then, nor the much more imminent downshift in annual inflation. This keeps us bearish NZD/USD near-term.

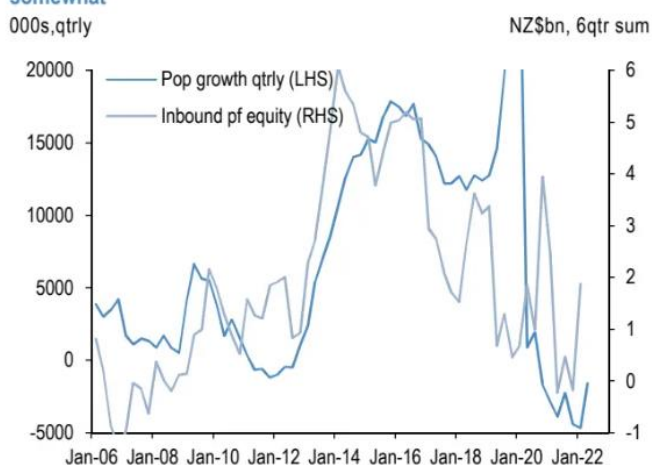
- Looking further out, there are mitigating factors which should arrest downward momentum in NZD/USD into 2023. First, the exchange rate has ignored the hiking cycle, and we can't have it both ways: we approach peak rates with a lower than usual level of the exchange rate, meaning **financial conditions are not as tight as the OCR suggests**. This leaves scope for the curve to steepen again as the RBNZ concludes the cycle, and inflation pulls back.
- Also, the outlook for capital flows is more balanced at this configuration of rates/FX, particularly with the economy reopening. NZ's structural vulnerabilities (current account deficit, housing debt, sharp rate cycles) mean portfolio inflows are highly sensitive to growth. **The sudden-stop in population growth in 2020, compared to the prior robust baseline, was a particular headwind to equity inflows (Exhibit 4). This is now abating**, so helps remove a structural drag on real money inflows. We still remain upbeat on AUD/NZD however, as the above supports **pale in comparison to the lift in Australia's industrial commodity base**. Our Sep-23 forecast for AUD/NZD is 1.17.

Exhibit 3: Housing has been the most reliable leading indicator of non-tradables inflation



Source: Stats NZ, J.P. Morgan.

Exhibit 4: Portfolio equity inflows are strongly related to GDP/population growth; this was big drag in 2020 but is now abating somewhat



Source: Stats NZ, J.P. Morgan.

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Bearish	<ul style="list-style-type: none"> Bearish: NZD/USD below 0.58 if (1) Agricultural prices continue to unwind following the move in oil; (2) Housing weakness starts to become disorderly and drag consumption and the labour market into faster moderation. 	<ul style="list-style-type: none"> ANZ business survey (Sep): Sep 30th RBNZ OCR announcement (Oct): Oct 5th REINZ house prices (Sep): Oct 14th CPI (3Q): Oct 18th GDT dairy auctions: Sep 20th, Oct 4th
	<ul style="list-style-type: none"> Bullish: Above 0.66 if (1) Plans to allow the fiscal policy stance to normalize are shelved in favour of more household support; (2) Global commodity price strength begins a new cycle upswing in agricultural sector credit growth and investment. 	

MXN

Table 1: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
USD/MXN	20.25	20.50	20.75	20.75
GDP (% saar)	0.3	1.6	1.2	0.6
CPI (% oya)	8.5	8.2	6.8	5.8
Policy rate (%)	10.00	10.25	10.25	10.25

Source: J.P. Morgan

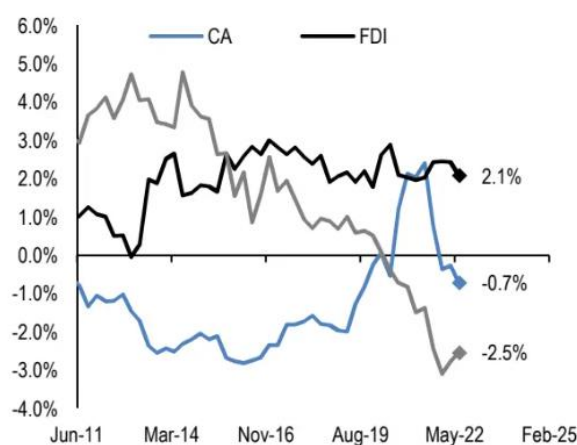
MXN: A few concerns are starting to take shape

- The latest US CPI print triggered a new risk-off round across global assets, with EM FX being no exception.** Latam currencies had already been weakening after a small summer rally as US Treasuries resumed their move higher, and the double than expected monthly core CPI print dealt them the final blow. We believe continued dollar strength and a hawkish Fed will make for a challenging backdrop for FX in Latin America, and we are staying UW in the Model Portfolio via those countries with larger vulnerabilities, i.e. Chile and Peru.
- Mexico has been one of the few positive stories in Latin America for some time, but warning signs are starting to emerge.** Mexico's fiscal and external accounts stand out in the region, whereas there have been no major political events when comparing Mexico's situation to its peers'. This has been underpinned by a relatively conservative fiscal policy, with the government maintaining a reasonable fiscal deficit during the pandemic, and prudent monetary policy, as Banxico steered clear of policy rates at all-time lows. However, the trade balance is starting to show important signs of deterioration, as imports have been growing at a faster pace than exports. Moreover, a scenario of lower growth in the US could take a toll on exports and remittances, which so far have remained strong.
- Inflation momentum remains high, keeping us on the sidelines in the rates space for the time being.** Inflation data for August was in line with expectations, with headline printing 0.7% mom and 8.7% yoy. While Mexico has generally seen lower inflation than its Latam peers this year, sequential core inflation is on the rise and the trend in services inflation points to inflation persistence, at a time when other countries are actually seeing more clear signs of a peak. Since 1 August, the US rates bottom of the past few months, the curve has re-priced a policy rate 50bp

higher in two years' time (currently at 8.16%), and 2s10s have flattened by 37bp.

- MXN has been very resilient this year, partly due to appealing real carry, but weaker external accounts might dent its performance in coming months.** Since 2021 MXN has been trading relatively range-bound around the 20 handle. MXN has among the best carry-to-vol metrics in EM, thanks to appealing real rates and low volatility. However, external accounts are deteriorating even if they look better than peers, and our economists now expect a 2% current account deficit for 2022 and 3% for 2023.
- MXN is currently at fair value, while positions are relatively light.** Our short term valuation models indicate fair value is around 20, and the currency looks neither cheap nor expensive after trading range-bound for a long time. Meanwhile, international positions in the FX look light, with some recent unwinding of longs.
- Political uncertainty is less of a concern than elsewhere in Latam, but USMCA headlines could add some noise.** Recent USMCA noise could have a negative impact on the currency. Mexico is facing legal actions from USMCA partners given new energy policies, with this being the first case against Mexico since USMCA was enacted. However, government members remain positive they will avoid escalating the discussions to an international panel according to press reports.

Exhibit 1: Mexico's external accounts have started to deteriorate
 Mexico BOP; %GDP



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

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Bullish	<ul style="list-style-type: none"> Bearish: Less hikes than forecast, hawkish Fed, high inflation momentum Bullish: Lower inflation, better growth 	<ul style="list-style-type: none"> Banxico hikes, US/MX macro data, Fed, USMCA headlines CPI prints

BRL

Table 1: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
USD/BRL	5.30	5.25	5.25	5.30
GDP (% saar)	-1.0	-1.4	-0.4	0.6
CPI (% oya)	6.0	5.2	3.1	4.5
Policy rate (%)	14.00	14.00	13.75	12.75

Source: J.P. Morgan

BRL: All about the elections

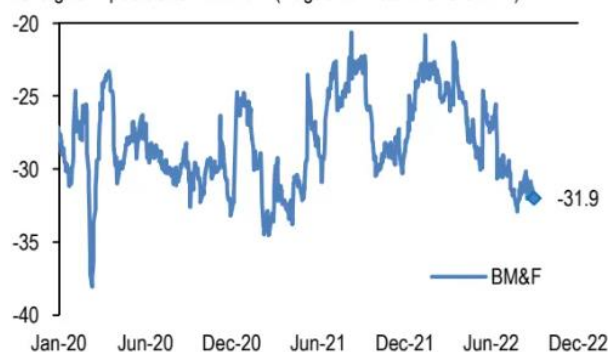
- **The global backdrop has again turned sour for Latam currencies.** Despite BRL's strong fundamentals, its high beta to global risk is a concern in the current environment. Commodities exporters are likely to see a deterioration in their external accounts as prices start to incorporate larger risks of a global recession, although the outlook for agricultural commodities might be more bullish than for energy or metals. Brazil's high real rates and stronger external account should act as a buffer in this context, and we think the Real is likely to outperform other commodities exporters.
- **However, elections are adding some unavoidable noise to local assets.** With first round elections in a little over two weeks, most polls indicate a Second Round on 30 October is the most likely scenario. Polls have been showing a shrinking gap between Bolsonaro and Lula, with a more than 20%-pt second round difference at the beginning of the year now down to single digits. Unlike other recent elections in the region, we are of the view that the Brazilian case does not offer binary scenarios, and rather seems to offer positive optionality given current light positioning. A Lula's victory appears to have been fairly priced-in over the past few months, and markets have only recently seen some limited upside whenever Bolsonaro-favoring polls came out. On the other hand, if Bolsonaro were to surprise with a victory, there is space for the market to rally in our view as investors have room to add risk.
- **Meanwhile, while BCB is approaching the end of the hiking cycle, Brazil will continue to have the highest expected real rates in EM.** Our economists expect one final 25bp hike taking the policy rate to 14%, while the

market is assigning a one third chance to that event. Around 350bp of cuts are priced in the next two years, which implies a policy rate of around 10.25% in that period's time.

- **BRL's fair value according to our preferred short term valuation model is around 5.** This implies a more than 4% deviation, and the model has triggered a short USD/BRL signal already. Foreign positioning in BM&F is around the lows of the past two years as well, suggesting positioning is light ahead of the elections.

Exhibit 1: There is space for risk to be added after the elections

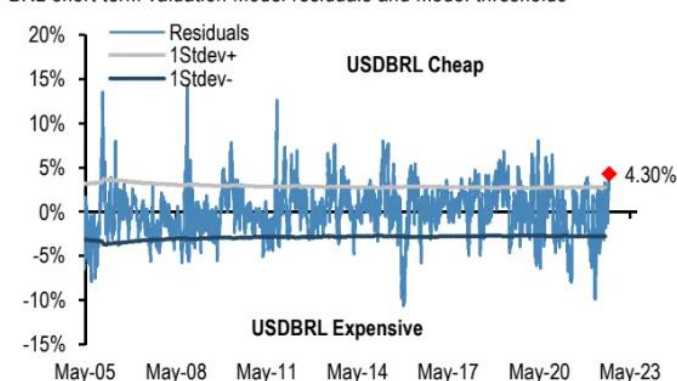
Foreigners positions in BM&F (negative means short BRL)



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

Exhibit 1: Our preferred short term valuation model has triggered a short USD/BRL signal

BRL short term valuation model residuals and model thresholds



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

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Neutral	<ul style="list-style-type: none"> • Bearish: upside inflation surprises, radical Lula economic plan, rates markets disorderly sell off, fiscal deterioration driven by populist measures from Bolsonaro • Bullish: Inflation declines, Lula reveals a pragmatic economic plan, hawkish BCB 	<ul style="list-style-type: none"> • Political polls, protests, economic plans, fiscal measures • CPI dynamics; BCB policy changes

ZAR

Table 1: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
USD/ZAR	17.75	18.25	18.50	19.00
GDP (% saar)	0.9	1.8	2.0	2.5
CPI (% oya)	7.2	6.9	5.7	4.7
Policy rate (%)	6.75	7.25	7.25	7.25

Source: J.P. Morgan

Key drivers of our ZAR view

- **UW ZAR in the GBI-EM Model Portfolio.** We have recently increased the size of our bearish ZAR positions (see [here](#)). Exposure to China, relatively low carry costs and little FX intervention support leaves ZAR as our preferred EM FX short. We expect the pace of ZAR depreciation to be gradual though, with technical indicators like our EM FX Risk Appetite Index and IMM positioning not particularly stretched, and valuations around fair to ToT.
- **Weak Chinese growth a key concern.** The persistent property market drag and renewed COVID concerns have led our economists to downgrade China's growth to 3.0%yoy this year (from 3.2%yoy, see [here](#)). While our terms of trade index has been flat over recent weeks, these growth concerns will remain a direct downside risk for the commodity complex and therefore commodity exporters (primarily South Africa in the EMEA EM region).
- **Interbank liquidity in South Africa has now shifted to a surplus, which should see downside pressure on FX implieds.** ZAR remains a relatively cheap EM currency to short. The SARB's policy rate is lower than peers and the continued shift to an interbank liquidity surplus has compressed front-end ZAR implied yields to the policy rate. We think this leaves ZAR exposed as a cheap EM hedge, particularly with no FX intervention support.
- **That said, the somewhat favorable technical backdrop is likely to limit the pace of selloff, in our view.** Technical indicators like our EM FX Risk Appetite Index (which with a score of -1.82 is close to oversold territory), and IMM and our EM Client survey currently show ZAR positioning is likely net bearish already. As such, with valuations around fair to ToT, we expect the extent of any further ZAR weakness will be gradual.

TRY

Table 2: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
USD/TRY	19.00	20.00	21.00	22.00
Policy rate (%)	13.00	25.00	25.00	23.00

Source: J.P. Morgan

Key drivers of our TRY view

- **MW in the GBI-EM Model Portfolio.** We took profits on our bearish lira exposure on August 11 (we were previously UW TRY and long USDTRY). While fundamentals remain challenging (negative real yields, CA deficit), we expect the pace of depreciation to be relatively slow in the next several weeks. This is as tourism revenue remains strong until November, and the central bank FX reserves received a boost from foreign transfers.
- **CBRT's gross FX assets are up over \$15bn since 01 July.** The fast pace of recovery in FX reserves has been primarily driven by an increase in FX deposits of banks at CBRT and a rise of FX swaps with local banks, having received a boost from foreign transfers.
- **Seasonal tourist revenue should help support the current account until October.** Preliminary trade balance data for July showed the seasonally adjusted trade balance in a large deficit of \$10.1bn deficit. However, with a strong tourism year and the tourism seasonality at play, current account prints may now prove quite mild until October (in non-seasonally adjusted terms).
- **Monetary policy remains excessively loose.** Despite headline inflation currently at 80.2%yoy, the CBRT elected to cut its policy rate by 100bp to 13% at the August MPC. The transmission from the policy rate to lending rates has become less clear with some pressure emerging on lending rates to fall. Additionally, regulatory measures have led to a substantial slowdown of credit growth over the summer. We currently monitor run rates of lira credit growth of 70% in monthly terms annualized, compared to the 160% rates earlier this summer. Recent comments suggest some desire to improve credit growth, although data show only a tentative pick-up so far.

CE4

Table 1: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
EUR/PLN	4.90	5.00	5.10	5.20
USD/PLN	5.16	5.10	5.00	5.05
EUR/HUF	420	430	440	440
USD/HUF	442	439	431	427
EUR/CZK	24.8	25.5	26.5	27.0
USD/CZK	26.1	26.0	26.0	26.2
EUR/RON	4.95	5.00	5.10	5.20

Source: J.P. Morgan

Key drivers of our CE4 FX view

- HUF: UW in the GBI-EM Model Portfolio.** HUF remains the cleanest bearish CEE expression, in our view. Recent data suggest that policy steps have so far not been sufficient to contain imbalances. The current account deficit widened to 12% of GDP in July in saar terms, with strong services imports suggesting domestic demand remained strong. Meanwhile, uncertainty surrounding EU funds will continue to weigh on the currency, in our view.
- PLN: UW in the GBI-EM Model Portfolio.** With drags on growth intensifying and NBP signaling little appetite for further rate hikes, FX should come under more pressure. Polish fundamentals do not particularly stand out in the CEE context. Yet, from a trading perspective, the Zloty could prove an underperformer. FX intervention policy should be less aggressive than for CZK or RON, carry costs are lower than for HUF and market is long Zloty according to our client survey.
- CZK: MW in the GBI-EM Model Portfolio.** Our bias has been koruna bearish, given risks of a less hawkish CNB, real yields substantially lagging peers and current account deterioration. That said, FX intervention has kept EUR/CZK spot contained, and we prefer to express our bearish CEE FX bias elsewhere. If there was to be some relaxation of the intervention policy we would expect EURCZK to rise to the 26.00 level.
- RON: MW RON in the GBI-EM Model Portfolio.** We are neutral RON in the near term, but hold a modestly bearish medium-term bias. The current account pressure reflects too-strong domestic demand as well as higher energy prices. Yet, the central bank intervenes actively in EUR/RON and its FX reserve scope remains substantial with meaningful EU transfers providing a source of funding

ILS

Table 2: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
USD/ILS	3.40	3.40	3.45	3.45
GDP (% saar)	2.5	2.0	2.5	3.0
CPI (% oya)	5.0	4.4	3.7	2.7
Policy rate (%)	3.25	3.25	3.25	3.25

Source: J.P. Morgan

Key drivers of our ILS view

- Neutral ILS, but with a bearish bias.** After the stellar performance through end-Aug, the shekel has come under renewed depreciation pressures in recent weeks, given its strong link to US financial conditions. Our bias is be for continued ILS weakness, given the need for tighter global financial conditions. That said, the scale of depreciation pressure is likely to be limited by a hawkish BoI in combination with the structural BoP support. We stay neutral, albeit with a bearish bias.
- ILS remains highly correlated to financial conditions.** Given the size of the local institutional investor asset base, movements in the shekel and US financial conditions are closely tied (see [here](#)). The latest data on local institutional investor hedging flows shows further FX purchases in June, taking YTD net FX purchases over \$12bn. With financial conditions expected to remain tight, this trend of FX purchases is likely to continue, in our view.
- BoI has turned increasingly hawkish.** At its latest MPC meeting the BoI surprised with a 75bp hike (vs the 50bp expected) taking the policy rate up to 2%. Despite yesterday's headline CPI print surprising to the downside (4.6%yoy vs 4.8% expected) our economist still expects the central bank to deliver a 75bp hike in October (see [here](#)). While the print reduces the immediate pressure on the BoI, with headline still well above target, an economy that is seeing solid growth, and the backdrop of a weaker currency, the MPC is likely to stick to its strategy of accelerated tightening, rather than return to a more moderate pace.
- Finally, structural BoP support should provide an anchor for ILS.** Over the medium term we do not expect the currency to become unanchored. Shekel is well supported on a fundamental basis by a very strong basic balance of 5.2% GDP (on a 4Q rolling basis). As such, while we see scope for a near term move higher in USD/ILS, we doubt a sustained depreciation trend will emerge.

KRW

Table 1: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
USD/KRW	1380	1400	1420	1430
GDP (% saar)	1.3	1.5	1.5	1.8
CPI (% oya)	6.1	5.3	3.6	2.7
Policy rate (%)	3.00	3.25	3.25	3.25

Source: J.P. Morgan

Neutral

- KRW appears to be undergoing a structural shift this year, with the BOP turning unfavorable on all fronts.
- Trade balance has tipped into a notable deficit (Aug was almost \$10bn). The impact of this on KRW has been exacerbated by exporters' hesitance to convert proceeds.
- Local dollar demand via buying of foreign securities is adding to pressure. Against an average current account surplus of ~\$70bn in recent years, local buying of foreign securities is estimated to be \$61bn this year.
- Net outbound FDI is also elevated at \$33bn (\$57bn annualized). In the years before 2021, FDI had run at less than half of this pace.
- Foreigner equity flows are especially impactful for KRW price action and these have returned to outflows (\$1.4bn) after a brief reprieve in July and August.
- Aside from the BOP, the currency is particularly prone to speculative interest, displaying a high beta to the DXY, CNY, JPY, and global equities. Currently, market is positioned only slightly bearish KRW, according to our EM Client Survey.
- Authorities are increasingly vocal about sharp KRW weakness. In recent months, they have also encouraged NPS to (at least tactically) FX-hedge their portfolio and placed FX activity under greater scrutiny.
- We have closed our long JPY/KRW trade via options at a small loss, in a nod to JPY's selloff.
- **Bearish KRW risk scenarios:** (1) Intensifying economic headwinds result in continued equity outflows by foreigners and (2) Worsening in exports
- **Bullish KRW risk scenarios:** (1) FPI equity outflows reverse, which occurred in 2016 after Fed hiking cycle started; (2) Unwind of exporter dollars; and (3) Lower oil prices

INR

Table 2: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
USD/INR	81.00	81.50	81.50	81.50
GDP (% saar)	4.0	4.0	4.5	4.5
CPI (% oya)	6.1	6.2	4.8	5.4
Policy rate (%)	5.75	5.75	5.75	5.75

Source: J.P. Morgan

Bearish

- We remain [long USDINR](#) via 12m NDF as BOP pressure is expected to remain protracted.
- Even if we account for lower oil prices and a higher tax on gold imports, the non-energy non-gold trade deficit is historically wide: it averaged \$5.3bn in recent months, versus \$1.5bn in previous years.
- Foreign equity flows have turned more friendly: thus far, 2H22 has seen \$8.7bn of inflows after \$28.6bn of outflows in 1H22. But late-cycle conditions and lofty valuations should see outflows resume.
- If India is included in the [GBI-EM](#) index, we estimate this would imply \$2.5bn of inflows per month over 10 months.
- The main reason for INR resilience has been the RBI, which has the reserves to continue intervening. However, import cover slid to less than 10 months recently, from around 21 months in February 2021.
- Recent measures to alleviate BOP pressure indicate a desire towards greater preservation of reserve firepower. We think RBI will turn to a more dynamic strategy going forward. If they were to stop intervening, USDINR would likely reach 85 by June 2023.
- INR is no longer as rich: our modified balance – which tracks INR against the trade deficit, portfolio flows, FDI and other flows – implies that USDINR should be trading around 80 currently (from 81-82 previously).
- Bearish positioning in INR has been pared significantly according to our latest EM Client Survey.
- **Bearish INR risk scenarios:** (1) RBI stops intervening (2) Outflows from Indian equities given high valuations; and (3) Failure to include India in GBI-EM
- **Bullish INR risk scenarios:** (1) Oil prices move lower

CNY

Table 1: J.P. Morgan Forecasts

	Dec 22	Mar 23	Jun 23	Sep 23
USD/CNY	6.95	7.00	7.05	7.10
GDP (% saar)	5.2	5.5	4.0	4.0
CPI (% oya)	2.7	3.1	2.2	2.2
Policy rate (%)	2.75	2.75	2.65	2.55

Source: J.P. Morgan

An orderly breach of 7

- The market bias will likely be to push USD/CNH higher against weak cyclicals and DXY strength.** The unfriendly cyclical backdrop that has kept CNY FX under pressure is now well-telegraphed, and is reinforced as the tightening of Covid-19 management ahead of the Party Congress feeds growth angst. Although the August data came in broadly better than expected, durability of the data optimism remains in question as the property slump drags on; also, broader mobility restrictions and wider disruption to economic activity this month challenges the recovery momentum in September. More worryingly, the loss of momentum of external demand threatens China's export sector strength which has acted as an important BoP buffer for CNY FX. August export growth fell sharply ([note](#)) and the export orders component of the Caixin PMI fell below 50 recently. A further decline in the latter to previous recession extremes will likely translate into further CNY weakness; for instance a drop to 2020/GFC lows would correspond with a USD/CNY fair value well above 7.
- A more orderly breach of 7.0 is supported by less hostile technicals given already stretched bearish positioning and less acute portfolio flow pressures.** The latest move above 7.0 in USD/CNY came about in a more orderly fashion compared to 2019: the CFETS TWI declined by 0.3% in the past two days, rather marginal relative to the outsized 1.5% daily drop in Aug 2019 when the PBoC let go of 7. Stretched positioning may have likely helped: investors are likely adding

CNY shorts at a more moderate pace after having extended the overall bearish positioning to 2016 extremes during the 2Q selloff. Speculative flows have also stabilized, evidenced by less explosive widening of the CNH-CNY basis amid latest CNY weakness. Positioning aside, portfolio outflow pressures have become less acute after the large drawdown in 2Q. Bond outflows, in particular, have moderated despite the recent re-widening of yield differentials between the US and China. Unlike 2Q, outflows from non-China focused EM bond funds are now running at a faster pace than outflows from China focused funds. Slower outflows from China are largely due to lighter positioning: our tracking of the GBI-EM bond funds suggest that investment managers have already turned UW China bonds ([note](#)), and on our calculation, active asset managers have also sold \$70-120bn China bonds in 1H22, suggesting that investors have almost fully unwound all active bond inflows in the past two to three years (totaling \$90-130bn based on our estimate

- Stronger resistance from the PBoC might not be able to end the uptrend in USD/CNY but smoothing measures help support less volatile currency weakness.** The PBoC has fixed the daily CNY reference on the stronger side consistently since late August, with the strengthening bias accumulating towards 2019 extremes. This marks the strongest intervention since the onset of the Covid outbreak, a sign that Chinese authorities want to preserve FX stability following one-sided currency depreciation in previous months. Although USD/CNY has managed and will likely continue to trade higher in the absence of stealth intervention from state banks, stronger fixings as a forceful FX smoothing measures help to anchor short-term expectations: without the strengthening bias of late, USD/CNY could have traded close to 7.4 by now. On balance, a combination of stronger fixings, improved technicals but cyclically unfavorable BoP/macro dynamics is likely to risk continuation of CNY weakness, though likely in a more measured fashion compared to 2Q22

Table 2: Alternative scenarios to base-case view

Risk bias	Scenarios	Potential trigger events
Neutral	<ul style="list-style-type: none"> CNY bearish: (1) Covid risk intensifies (2) export growth decelerates further CNY bullish: (1) downside fixing surprises; (2) growth stabilization on stimulus policies 	<ul style="list-style-type: none"> Trade tensions with US; USD/CNY fixing and spot moves; Chinese PMI, exports and trade, IP each month; Moves of USD/JPY, EUR, KRW

Long-term fair value estimates

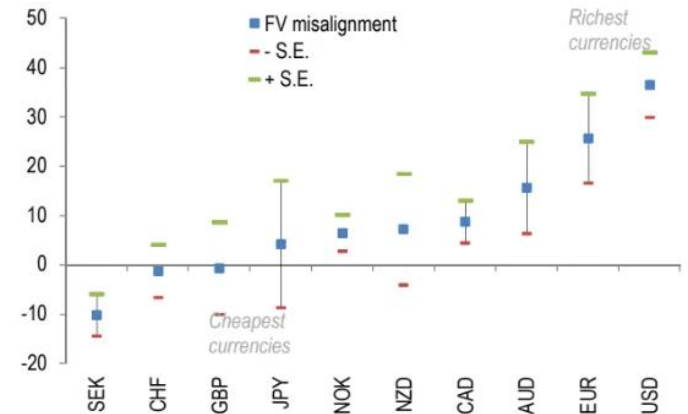
- **EUR richness has become more exacerbated and adjusted for volatility, it is just as rich as USD...**
- **...we are inclined to fade the EUR overshoot given regional vulnerabilities (energy dependence) but think it is premature for USD richness to fade given the global macro landscape and a more aggressive Fed.**
- **CHF remains the cheapest reserve FX.**
- **G10 commodity FX all appear modestly rich on TWI terms. Our preferred long, AUD, is rich but not approaching limits. NZD is also rich this metric, and we continue to find value in being underweight.**

EUR is rich, commodity FX fair to modestly rich and SEK, CHF cheap

- FX rankings have changed a fair bit since the start of the year given the substantial moves in FX markets and also the terms of trade which has been in flux, moving in favour of exporters relative to importers. The net takeaways are:
- Among reserve currencies, the richness in dollar has become even more pronounced and it continues to screen as the richest currency in G10 adjusted for its drivers. Notably, EUR richness has also become more exacerbated and adjusted for volatility, it is as rich as USD (exhibit 2) since (a) terms of trade has worsened against it materially and (b) even though EUR/USD has weakened, the TWI has not similarly depreciated particularly when deflated by PPI. Between the two currencies, we are inclined to fade the EUR overshoot given regional vulnerabilities (energy dependence) but think it is premature for USD richness to fade given the global macro landscape and a more aggressive Fed. CHF continues to screen cheap however and we continue to recommend longs given a pivoting SNB.
- The commodity currencies all appear modestly rich on TWI terms. Our preferred long, AUD, is rich but not approaching limits that are unsustainable and we see room for more upside. NZD is also rich this metric, and we continue to find value in being underweight. NOK is the cheapest G10 commodity FX on this metric but continues to be weighed down by regional stresses.

Exhibit 1: Mispricing on the long-term fair value model

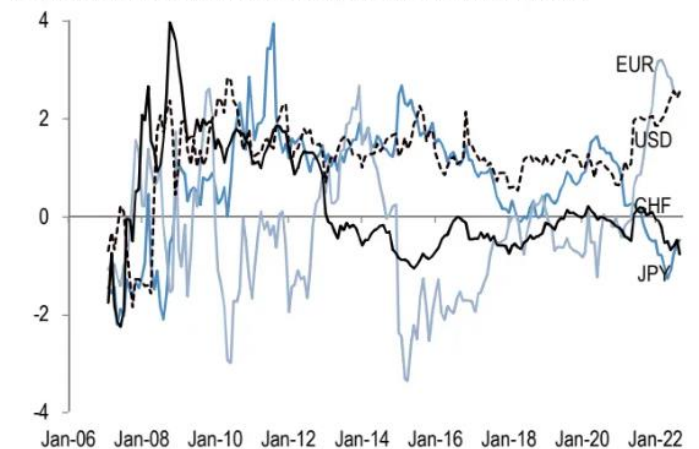
Deviations from long-term real trade-weighted fair value (%); A positive value indicates over valuation. S.E. is the standard error.



Source: J.P. Morgan

Exhibit 2: EUR and USD are similarly rich adjusted for volatility; CHF and JPY are cheap

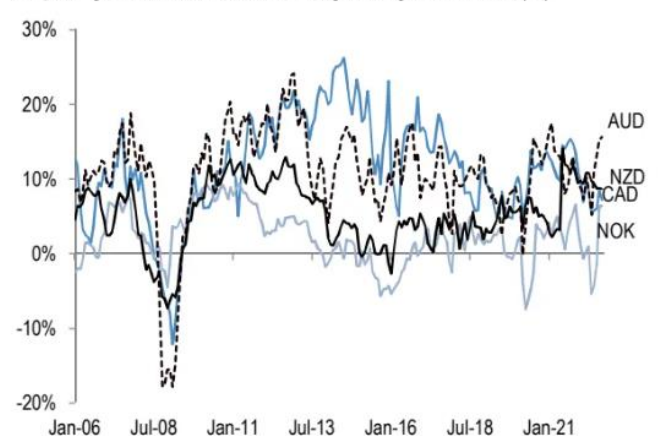
Mispricing of REERs in the J.P. Morgan long-term model (sigma)



Source: J.P. Morgan.

Exhibit 3: AUD is rich among commodity FX but not at an extreme yet

Mispricing of REERs in the J.P. Morgan long-term model (%)



Source: J.P. Morgan.

Exhibit 4: Summary long-term fair value (FV) results

(1) Dark (light) shaded misalignments represent overvalued (undervalued) currencies based on the real broad effective exchange rate. S.E. shows the standard error as a measure of confidence in the estimate. Remaining columns show how each factor contributed to the REER misalignment the past 2 years.
(2) Dark (light) shaded misalignments represent overvalued (undervalued) currencies versus the USD based on 3-year forward rates. S.E. shows the standard error as a measure of confidence in the estimate. **Bolded values are current nominal fair value estimates versus the USD.**

(3) As another measure of confidence in the fair value signal, results can be compared to current account (%GDP) and the change to current account (%GDP). Dark shaded cells represent a current account deficit or a deterioration in the current account the past two years.

NOK and CAD still cheaper than the Antipodeans within the G10 commodity spectrum.

	(1) Real broad effective exchange rate (REER)								(2) Nominal exchange rate (vs USD)			(3) Other metrics		
	Misalignment	S.E.	REER	Variable contribution since 2020					FV	3yr fwd	Misalignment	CA (%GDP)	Chg to CA past 2 yrs	
			FV	ToT	Prod	Debt	NII							
G10														
USD	36.4%	6.6%	17.4%	0.2%	3.4%	-1.0%	-2.3%	0.1%					-3.9	-1.5
JPY	4.2%	12.9%	-35.2%	-15.5%	-12.6%	-0.5%	-2.3%	-0.1%	USD/JPY	105	126	-16.8%	1.8	-1.0
EUR	25.6%	9.1%	10.4%	-6.9%	-5.2%	-0.4%	-1.6%	0.3%	EUR/USD	1.13	1.05	-6.8%	0.9	-0.7
GBP	-0.8%	9.3%	-9.0%	0.4%	0.5%	1.8%	-2.7%	0.8%	GBP/USD	1.57	1.16	-26.4%	-4.2	-2.8
CHF	-1.3%	5.4%	-19.0%	-7.0%	-4.6%	-1.4%	-0.3%	-0.7%	USD/CHF	0.71	0.89	-20.0%	9.8	3.3
NOK	6.4%	3.7%	14.9%	11.5%	12.1%	-1.0%	-0.3%	0.8%	USD/NOK	7.65	9.96	-23.2%	21.5	20.3
SEK	-10.3%	4.3%	-6.3%	-3.4%	-1.5%	-1.2%	-0.7%	0.0%	USD/SEK	7.15	10.45	-31.6%	3.8	-1.9
CAD	8.7%	4.3%	3.6%	5.7%	6.9%	0.2%	-1.4%	0.0%	USD/CAD	1.14	1.31	-13.2%	0.2	2.3
AUD	15.6%	9.3%	5.1%	6.4%	9.6%	-1.2%	-2.0%	0.1%	AUD/USD	0.83	0.67	-18.3%	2.3	0.6
NZD	7.1%	11.3%	-8.1%	2.0%	4.9%	0.1%	-2.9%	0.0%	NZD/USD	0.79	0.59	-24.7%	-7.7	-6.2

Source: J.P. Morgan and Bloomberg.

- **About the model:** Our long-term fair value model¹ employs four explanatory variables: terms of trade (+ impact on ccy), productivity growth (+), international investment income balance (+), and government debt (-).
- **Caveats:** First, misalignments from fair value are meaningful if extreme and should be viewed in the context of model error. Second, misalignments can persist for extended periods of time. Consequently this model is only appropriate for long-term investors concerned with risks or profit opportunities from grossly misaligned currencies. Third, the trigger for mean reversion in a currency is typically some change in macroeconomic performance. Thus, the mere cheapness or expensiveness of a currency is rarely sufficient reason to hedge or invest absent a macroeconomic view.

J.P. Morgan FX forecasts through 2026

G10 long-term projections

Exchange rates vs. U.S dollar

	Sep-24	Sep-25	Sep-26
EUR	1.06	1.10	1.13
JPY	127	116	105
GBP	1.28	1.42	1.57
AUD	0.77	0.80	0.83
CAD	1.27	1.20	1.14
NZD	0.68	0.73	0.79
CHF	0.80	0.76	0.71
SEK	8.77	7.92	7.15
NOK	8.97	8.28	7.65

Exchange rates vs. Euro

JPY	135	127	119
GBP	0.83	0.77	0.72
CHF	0.85	0.83	0.80
SEK	9.31	8.67	8.08
NOK	9.53	9.07	8.64

¹ A detailed note explaining the model can be found on [jpmorganmarkets.com](https://www.jpmorganmarkets.com) - [Re-estimating JPM Long-term fair value model](#).

J.P. Morgan FX forecasts

Exchange rates vs. U.S dollar

Majors	Current						JPM forecast gain/loss vs September 23*			Actual change in local FX vs USD			
	16-Sep	Dec 22	Mar 23	Jun 23	Sep 23		Spot	Forwards	Consensus**	Past 1mo	Past 3mo	YTD	Past 12mos
EUR	1.00	0.95	0.98	1.02	1.03		3.0%	0.6%	-1.0%	-1.8%	-4.8%	-12.0%	-15.0%
JPY	143	147	↓ 145	↓ 142	↓ 140		2.1%	-2.5%	-7.1%	-5.5%	-5.5%	-19.5%	-23.2%
GBP	1.16	1.10	↓ 1.13	↓ 1.15	↓ 1.16		0.0%	0.5%	-2.7%	-4.0%	-5.5%	-14.5%	-16.1%
AUD	0.68	0.70	0.72	0.74	0.74		9.5%	9.6%	2.8%	-2.6%	-2.5%	-7.0%	-7.4%
CAD	1.32	1.34	↓ 1.36	↓ 1.36	↓ 1.34		-1.9%	-1.5%	-5.2%	-1.8%	-0.9%	-3.9%	-3.6%
NZD	0.60	0.62	0.63	0.63	0.63		4.7%	5.1%	-1.6%	-4.2%	-4.7%	-11.8%	-14.9%
JPM USD index	132.4	134.8	↑ 134.6	↑ 133.9	↑ 133.6		0.9%	0.1%	3.1%	2.0%	2.7%	8.8%	10.5%
DXY	109.5	114.3	↑ 111.5	↑ 108.0	↑ 106.6		-2.6%	-0.6%	1.8%	2.7%	4.5%	14.4%	17.8%
Europe, Middle East & Africa													
CHF	0.96	0.99	0.94	0.88	0.85		12.5%	9.1%	11.4%	-0.9%	0.9%	-5.0%	-3.5%
ILS	3.42	3.40	↓ 3.40	↓ 3.45	↓ 3.45		-0.8%	-2.4%	-5.2%	-5.0%	0.9%	-9.3%	-6.3%
SEK	10.68	11.16	↓ 10.61	↓ 10.00	↓ 9.71		10.0%	9.0%	2.0%	-2.8%	-4.7%	-15.2%	-19.3%
NOK	10.08	10.68	↓ 10.20	9.80	9.71		3.8%	3.9%	-3.9%	-3.7%	-0.7%	-12.5%	-14.4%
CZK	24.5	26.1	↓ 26.0	26.0	26.2		-6.6%	-4.5%	-8.3%	-1.6%	-3.9%	-10.7%	-12.2%
PLN	4.72	5.16	↑ 5.10	↑ 5.00	↑ 5.05		-6.5%	-2.1%	-10.9%	-2.2%	-5.6%	-14.5%	-17.7%
HUF	405	442	↑ 439	431	↓ 427		-5.2%	5.0%	-10.0%	-2.1%	-6.0%	-19.9%	-26.4%
TRY	18.25	19.0	↑ 20.0	↑ 21.0	↑ 22.0		-17.1%	17.1%	-3.2%	-1.6%	-5.0%	-27.1%	-53.2%
ZAR	17.45	17.75	↓ 18.25	↓ 18.50	↓ 19.00		-8.2%	-4.2%	-10.5%	-4.6%	-8.2%	-8.6%	-16.3%
Americas													
ARS	142.9	175.0	↓ 200.0	↓ 230.0	↓ 260.0		-45.0%	19.2%	-25.0%	-5.1%	-14.0%	-28.1%	-31.2%
BRL	5.18	5.30	5.25	5.25	5.30		-2.3%	7.0%	-1.1%	-0.2%	-0.5%	7.7%	1.5%
CLP	920	950	960	970	980		-6.1%	0.5%	-5.6%	-2.4%	-10.7%	-7.4%	-14.9%
COP	4371	4275	↓ 4325	↓ 4375	↓ 4425		-1.2%	7.8%	-2.8%	-0.6%	-10.7%	-6.6%	-12.7%
MXN	19.93	20.25	20.50	20.75	20.75		-4.0%	3.5%	-1.4%	0.3%	2.1%	3.0%	0.1%
PEN	3.87	4.00	↑ 4.05	↑ 4.10	↑ 4.15		-6.7%	-3.6%	-5.3%	-0.9%	-3.9%	3.3%	6.0%
LACI	40.4	39.0	↓ 38.3	↓ 37.5	↓ 36.9		-8.9%	5.8%	-4.5%	-0.9%	-1.5%	-1.1%	-5.3%
Asia													
CNY	6.96	6.95	↓ 7.00	↓ 7.05	↓ 7.10		-1.9%	-2.4%	-3.5%	-2.6%	-3.5%	-8.7%	-7.2%
HKD	7.85	7.85	7.85	↓ 7.84	↓ 7.83		0.2%	-0.2%	0.0%	-0.1%	0.0%	-0.7%	-0.8%
IDR	14908	14900	↑ 15000	↑ 15100	↑ 15150		-1.6%	-0.1%	-2.6%	-0.9%	-0.6%	-4.4%	-4.4%
INR	79.44	81.00	↓ 81.50	↓ 81.50	81.50		-2.5%	1.0%	-2.5%	0.0%	-1.7%	-6.4%	-7.5%
KRW	1391	1380	↓ 1400	↓ 1420	↓ 1430		-2.7%	-3.9%	-7.0%	-5.8%	-7.4%	-14.5%	-15.8%
MYR	4.53	4.55	4.60	4.62	↓ 4.64		-2.4%	-2.9%	-5.6%	-1.3%	-2.8%	-8.0%	-8.2%
PHP	57.10	57.0	↓ 57.5	↓ 58.0	↓ 58.5		-2.4%	0.3%	-5.6%	-2.1%	-5.9%	-10.7%	-12.5%
SGD	1.40	1.40	1.40	↓ 1.39	1.38		1.8%	1.3%	-0.7%	-1.7%	-1.0%	-4.0%	-4.3%
TWD	31.1	30.60	↓ 30.80	↓ 31.00	↓ 31.20		-0.3%	-2.2%	-4.5%	-3.6%	-4.4%	-11.0%	-10.9%
THB	36.6	36.25	↑ 36.00	↑ 35.75	↑ 35.50		3.1%	1.5%	-1.4%	-3.3%	-3.8%	-8.8%	-9.8%
ADXY	99.3	99.5	↓ 98.8	↓ 98.4	↓ 98.0		-1.3%	-1.4%	-3.4%	-2.4%	-1.5%	-8.1%	-7.8%
EMCI	50.1	48.8	↑ 48.3	↑ 48.0	↑ 47.7		-4.9%	4.0%	-2.7%	-0.8%	-2.7%	-4.8%	-11.5%

Exchange rates vs Euro

Majors	Current						JPM forecast gain/loss vs September 23*			Actual change in local FX vs EUR			
	16-Sep	Dec 22	Mar 23	Jun 23	Sep 23		Spot	Forwards	Consensus**	Past 1mo	Past 3mo	YTD	Past 12mos
JPY	142.9	140	↓ 142	↓ 145	↓ 144		-0.9%	-3.1%	-6.2%	-3.8%	-0.8%	-8.4%	-9.6%
GBP	0.86	0.86	↓ 0.87	↓ 0.89	↓ 0.89		-2.9%	-0.1%	-1.8%	-2.2%	-0.7%	-2.6%	-1.3%
CHF	0.96	0.94	0.92	0.90	0.88		9.2%	8.5%	12.5%	0.8%	6.0%	8.0%	13.6%
SEK	10.68	10.60	↓ 10.40	↓ 10.20	↓ 10.00		6.8%	6.2%	1.0%	-1.0%	-0.1%	-3.6%	-5.0%
NOK	10.08	10.15	↓ 10.00	10.00	10.00		0.8%	3.2%	-3.0%	-1.9%	4.2%	-0.6%	0.7%
CZK	24.50	24.75	25.50	26.50	27.00		-9.3%	-5.1%	-7.4%	0.1%	1.0%	1.6%	3.3%
PLN	4.72	4.90	↑ 5.00	↑ 5.10	↑ 5.20		-9.2%	-2.7%	-10.0%	-0.4%	-0.8%	-2.8%	-3.1%
HUF	405	420	↑ 430	440	↓ 440		-7.9%	4.3%	-9.1%	-0.4%	-1.3%	-8.9%	-13.4%
RON	4.93	4.95	↑ 5.00	↑ 5.10	↑ 5.20		-5.3%	1.8%	-2.9%	-0.9%	0.4%	0.4%	0.4%
TRY	18.28	18.1	↑ 19.60	↑ 21.42	↑ 22.66		-19.3%	16.4%	-2.3%	0.0%	-0.5%	-17.5%	-45.0%
RUB	60.27	57.0	↑ 58.80	↑ 61.20	↑ 61.80		-2.5%	15.5%	12.8%	4.7%	0.2%	41.8%	41.3%
BRL	5.18	5.04	5.15	5.36	5.46		-5.2%	6.3%	-0.2%	1.6%	4.5%	22.4%	19.5%
MXN	19.93	19.24	20.09	21.17	21.37		-6.8%	2.9%	-0.5%	2.1%	7.2%	17.1%	17.7%

↑ 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 compares 4Q'22

J.P. Morgan forecasts: rates, credit, equities & commodities

Rates	Current	Dec-22	Mar-23	Jun-23	Sep-23
US (SOFR)	2.28	3.70	4.30	4.30	4.30
10-year yields	3.45	3.60	3.55	3.50	3.45
Euro area (depo)	0.75	1.50	1.50	1.50	1.75
10-year yields	1.76	1.25	1.25	1.15	1.15
Italy-Germany 10Y (bp)	228	240	210	200	200
Spain-Germany 10Y (bp)	116	115	100	90	90
United Kingdom (repo)	1.75	3.25	4.00	4.00	4.00
10-year yields	3.14	3.00	3.00	2.80	2.65
Japan (call rate)	-0.10	-0.10	-0.10	-0.10	-0.10
10-year yields	0.25	0.25	0.25	0.25	0.25
EM Local (GBI-EM yield)	6.97		6.88		
Currencies	Current	Dec-22	Mar-23	Jun-23	Sep-23
JPM USD Index	133	135	135	134	134
EUR/USD	1.00	0.95	0.98	1.02	1.03
USD/JPY	143	147	145	142	140
GBP/USD	1.14	1.10	1.13	1.15	1.16
AUD/USD	0.67	0.7	0.72	0.74	0.74
USD/CNY	6.99	6.95	7.00	7.05	7.10
USD/KRW	1389	1380	1400	1420	1430
USD/MXN	20.05	20.25	20.50	20.75	20.75
USD/BRL	5.26	5.30	5.25	5.25	5.30
USD/TRY	18.26	19.00	20.00	21.00	22.00
USD/ZAR	17.63	17.75	18.25	18.50	19.00
Commodities	Current	Sep-22	Dec-22	Mar-23	Jun-23
Brent (\$/bbl, qtr end)	92	102	101	96	98
WTI (\$/bbl, qtr end)	85	99	98	92	94
Gold (\$/oz, qtr avg)	1,674	1,720	1,650	1,670	1,700
Copper (\$/ton, qtr avg)	7,852	7,700	6,500	6,500	6,700
Aluminum (\$/ton, qtr avg)	2,300	2,500	2,250	2,250	2,350
Iron ore (US\$/dt, qtr avg)	99	140	125		
Wheat (\$/bu, qtr avg)	8.6	9.0	10.0	10.0	9.0
Soybeans (\$/bu, qtr avg)	14.5	17.0	16.5	16.3	16.0

Credit		Current	Dec-22
US High Grade (bp over UST)	JPM JULI	166	150
Euro High Grade (bp over Bunds)	iBoxx HG	213	250
US High Yield (bp vs. UST)	JPM HY	522	525
Euro High Yield (bp over Bunds)	iBoxx HY	596	750
EM Sovereigns (bp vs. UST)	JPM EMBIGD	493	575
EM Corporates (bp vs. UST)	JPM CEMBI	350	375
Equities		Current	Dec-22
S&P 500		3,859	4,800
MSCI Eurozone		224	260
FTSE 100		7,237	8,150
TOPIX		1,939	2,100
MSCI EM (\$)		959	1,300
MSCI China		64	116
MSCI Korea		716	980
MSCI Taiwan		559	780
MSCI India		2,096	2,000
Brazil (Ibovespa)		108,935	125,000
Mexico (MEXBOL)		46,769.8	54,400
MSCI South Africa (USD)		388.6	521

Equity sector recommendations & year-to-date returns

	US	Europe	Japan	EM
Energy	49%	OW	29%	OW
Materials	-17%	N	-15%	OW
Industrials	-13%	N	-21%	OW
Discretionary	-23%	N	-20%	N
Staples	-7%	UW	-6%	UW
Healthcare	-9%	OW	-6%	UW
Financials	-15%	OW	-5%	OW
Technology	-27%	N	-30%	N
Comm Services	-34%	N	-5%	OW
Utilities	6%	UW	-7%	N
Real Estate	-21%	UW	-34%	UW
Overall	-18.1%	-11.4%	-2.4%	-20%

Global economic outlook

	Real GDP			Real GDP						Consumer prices			
	% over a year ago			% over previous period, saar						% over a year ago			
	2021	2022	2023	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	4Q21	2Q22	4Q22	2Q23
United States	5.7	1.7	1.2	-1.6	-0.6	<u>1.0</u>	1.5	1.8	1.3	6.7	8.6	6.5 ↑	3.3 ↑
Canada	4.5	3.4	1.9	3.1	3.3	<u>2.0</u>	1.8	1.8	1.8	4.7	7.5	6.6	2.6
Latin America	6.6	2.9	0.5	3.6	<u>3.6</u>	0.0	-0.2	0.0	0.7	8.3	10.1	7.8	5.3
Argentina	10.4	3.3	-0.4	3.5	<u>2.9</u>	-3.5	-1.4	0.0	0.5	51.4	60.8	88.5	100.9
Brazil	4.6	2.6	-0.1	4.6	5.0	<u>0.4</u>	-1.0	-1.4	-0.4	10.5	11.9	6.0	3.1
Chile	11.7	2.5	-1.0	-2.2	0.0	<u>-5.0</u>	-1.8	-1.0	0.0	6.6	11.5	12.5	8.2
Colombia	10.7	7.7	1.7	5.6	6.0	<u>2.0</u>	1.5	-1.0	3.0	5.2	9.3	10.8	8.2
Ecuador	4.2	1.6	1.9	1.6	<u>-4.2</u>	3.5	3.0	1.5	2.5	1.8	3.5	4.0	2.5
Mexico	4.8	2.0	1.2	4.6	3.7	<u>0.5</u>	0.3	1.6	1.2	7.0	7.8	8.5	6.8
Peru	13.6	2.5	2.5	-2.0	1.0	<u>3.0</u>	2.0	2.5	2.5	6.0	8.3	7.5	5.1
Uruguay	4.4	4.5	2.1	2.5	<u>0.0</u>	1.0	2.4	2.4	2.0	7.9	9.3	8.9	7.1
Asia/Pacific	6.3	3.2	3.6	5.3	<u>-2.4</u>	5.8	4.0	4.0	3.3	2.1	3.3	3.7	2.6
Japan	1.7	1.6	1.5	0.2	3.5	<u>1.0</u>	3.0	1.0	1.0	0.5	2.4	2.7	1.8
Australia	4.9	4.0	2.5	2.9	3.6	<u>2.6</u>	2.6	2.4	2.4	3.5	6.1	7.3	4.5
New Zealand	5.6 ↓	2.1 ↑	2.3 ↑	-0.9 ↓	7.0 ↑	<u>0.6 ↓</u>	2.3	1.9	2.2 ↑	5.9	7.3	4.9	2.3
EM Asia	7.4	3.6	4.1	6.7	<u>-4.1</u>	7.1	4.3	4.8	3.9	2.4	3.4	3.6	2.7
China	8.1	3.0	4.6	7.4	<u>-8.7</u>	<u>9.5</u>	5.2	5.5	4.0	1.8	2.2	2.7	2.2
India	8.7	7.1	4.2	7.9	8.0	<u>2.5</u>	4.0	4.0	4.5	5.0	7.3	6.1	4.8
Ex China/India	4.5	3.5	2.6	4.1	<u>2.7</u>	2.6	1.8	3.1	3.1	2.9	4.5	5.1	3.1
Hong Kong	6.3	-0.6	4.4	-11.1	4.1	<u>9.7</u>	6.0	2.4	2.4	2.0	1.5	2.2	2.3
Indonesia	3.7	4.8	3.0	5.6	6.4	<u>3.0</u>	3.0	4.4	4.0	1.8	3.8	4.7	3.1
Korea	4.2	2.7	1.6	2.6	3.0	<u>1.3</u>	1.3	1.5	1.5	3.5	5.4	6.1	3.6
Malaysia	3.1	7.7	3.8	16.3	14.7	<u>0.0</u>	-5.0	6.0	6.0	3.2	2.8	3.6	2.7
Philippines	5.7	6.2	5.5	6.0	-0.5	<u>4.0</u>	4.0	6.0	6.0	3.6	5.5	6.1	3.9
Singapore	7.6	3.0	1.4	2.8	<u>-1.0</u>	1.0	1.3	2.0	1.8	3.7	5.7	5.3	2.7
Taiwan	6.6	2.6	1.9	6.5	-7.0	<u>2.7</u>	2.5	2.5	2.5	2.7	3.5	2.5	1.4
Thailand	1.5	3.0	3.3	5.0	2.7	<u>2.9</u>	0.6	3.8	4.9	2.4	6.5	8.0	4.3
Western Europe	5.6	3.2	0.0	2.6	2.6	<u>0.4 ↓</u>	-1.8	-1.5	1.0	4.6	8.2	10.6 ↑	6.4 ↑
Euro area	5.2	3.1	-0.1	2.7	3.1	<u>0.5 ↓</u>	-2.0	-2.0	1.0	4.6	8.0	10.8 ↑	6.6 ↑
Germany	2.6	1.7	-0.5	3.2	0.6	<u>0.5 ↓</u>	-2.5	-2.5	1.0	5.4	8.3	11.5 ↑	7.0 ↑
France	6.8	2.4	-0.4	-1.0	2.2	<u>0.5 ↓</u>	-2.5	-2.5	1.3	3.3	5.9	7.3 ↓	4.7 ↓
Italy	6.6	3.3	-0.5	0.4	4.6	<u>0.0 ↓</u>	-3.0	-3.0	0.5	3.7	7.4	10.6	6.8 ↓
Spain	5.1	4.5	0.5	0.8	4.6	<u>2.0 ↓</u>	-2.0	-1.5	1.3	5.8	8.9	11.2 ↑	7.1 ↑
Norway	4.2	3.1	1.0	-1.7	2.8	<u>1.8 ↓</u>	0.5	0.8	1.0	4.6	5.8	6.2	4.3
Sweden	4.8	2.9	0.4	0.7	3.6	<u>0.5 ↓</u>	-1.0	-0.5	1.0	3.3	7.4	10.3	5.4
United Kingdom	7.4	3.4 ↓	0.0 ↓	3.1	-0.3	<u>-0.5 ↓</u>	-1.0	0.5	0.8	4.9	9.2	10.3	6.3
EMEA EM	6.5	1.8	1.0	3.4	-5.8	<u>-0.3 ↓</u>	0.3	1.2	2.0	10.3	23.8	23.3 ↓	10.7 ↓
Czech Republic	3.3	2.9	0.8	2.5	1.9	<u>1.0 ↓</u>	-1.0	-1.0	1.8	6.1	15.8	18.9	10.9
Hungary	7.1	5.8	1.2	8.6	4.1	<u>0.3 ↓</u>	-0.5	-0.3	2.5	7.1	10.6	20.9	17.0
Israel	8.5	6.0	2.8	-2.7	6.8	<u>3.0 ↓</u>	2.5	2.0	2.5	2.5	4.2	5.0 ↓	3.7 ↓
Poland	5.9	4.3	0.7	10.4	-8.1	<u>1.5 ↓</u>	0.5	-0.8	2.0	7.7	13.9	14.6	12.4
Romania	6.0	6.5	3.6	22.0	8.6	<u>-3.2 ↓</u>	2.0	6.1	0.0	8.0	14.4	14.0	11.4
Russia	4.7	-3.0	-1.0	-1.9	-20.7	<u>-1.0 ↓</u>	-0.5	0.0	1.8	8.3	16.9	12.3 ↓	3.0 ↓
South Africa	4.9	1.7	1.2	7.2	-2.9	<u>0.0 ↓</u>	0.9	1.8	2.0	5.4	6.6	7.2	5.7
Turkey	11.4	4.5	3.6	2.7	8.5	<u>-2.0 ↓</u>	0.0	4.1	2.8	25.8	74.1	75.9	29.4
Global	5.9	2.7	1.8	2.6	<u>-0.6 ↓</u>	2.6	1.6	1.8	2.0	4.7	7.4	7.3 ↑	4.2 ↑
Developed markets	5.1	2.3	0.9	0.4	<u>1.3 ↓</u>	0.8 ↓	0.5	0.5	1.2	5.1	7.6	7.6 ↑	4.3 ↑
Emerging markets	7.2	3.2	3.2	5.9	<u>-3.4 ↓</u>	5.2	3.2	3.7	3.2	4.1	6.9	6.8	4.1
Emerging ex China	6.2	3.5	2.0	4.4	<u>1.6 ↓</u>	1.2	1.3	2.0	2.5	6.4	11.4	10.8	5.9 ↓
Global — PPP weighted	6.3	3.2	2.2	3.6	-1.1	2.8 ↓	1.8	2.1	2.3	5.0	8.3	8.2 ↑	4.6 ↑

Source: Government agencies and J.P. Morgan Global Economics. Details on request. Note: For some emerging economies seasonally adjusted GDP data are estimated by J.P. Morgan. Bold denotes changes from last edition of *Global Data Watch*, with arrows showing the direction of changes. Underline indicates beginning of J.P. Morgan forecasts. Unless noted, concurrent nominal GDP weights calculated with current FX rates are used in computing our global and regional aggregates. Regional CPI aggregates exclude Argentina and Ecuador. Source: J.P. Morgan. Any long-form nomenclature for references to China; Hong Kong; and Taiwan within this research material is Mainland China; Hong Kong SAR (China) and Taiwan (China).

Central bank announcement dates in 2022

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Australia		1	1	5	3	7	5	2	6	4	1	6
Brazil		2	16		4	15		3	21	26		7
Canada	26		2	13		1	13		7	26		7
Chile	26		29		5	7	13		6	12		6
Colombia	28		31	29		30	29		30	28		16
Czech Republic		3	31		5	22		4	29		3	21
Euro area		3	10	14		9	21		8	27		15
Hungary	25	22	22	26	31	28	26	30	27	25	22	20
India		9		8		8		4	30			7
Indonesia	20	10	17	19	24	23	21	23	22	20	17	22
Israel	3	21		11	23		4	22		3	21	
Japan	18		18	28		17	21		22	28		20
Korea	14	24		14	26		14	25		14	24	
Malaysia	20		3		11		6		8		3	
Mexico		10	24		12	23		11	29		10	15
New Zealand		23		13	25		13	17		5	23	
Norway	20		24		5	23		18	22		3	15
Philippines		17	24		19	23		18	22		17	15
Poland	4	8	8	6	5	8	7		7	5	9	7
South Africa	27		24		19		21		22		24	
Sweden		10		28		30			20		24	
Switzerland			24			16			22			15
Thailand		9	30			8		10	28		30	
Turkey	20	17	17	14	26	23	21	18	22	20	24	22
United Kingdom		3	17		5	16		4	22		3	15
United States	26		16		4	15	27		21		2	14

Global central bank forecasts

	Official rate	Current rate (%pa)	4-qrtr change (bp)		Last change	Next mtg	Forecast next change	Forecast (%pa)				
			Last	Next				Sep 22	Dec 22	Mar 23	Jun 23	Sep 23
Global		2.80	139	90				3.07	3.54	3.76	3.73	3.70
excluding US		2.91	118	57				3.00	3.37	3.58	3.53	3.49
Developed		1.67	154	129				2.06	2.73	2.89	2.89	2.96
Emerging		4.54	117	30				4.63	4.80	5.12	5.02	4.84
Latin America		10.94	678	-6				11.38	11.75	11.82	11.54	10.88
EMEA EM		7.66	162	189				7.75	8.06	10.11	10.03	9.55
EM Asia		3.02	26	5				3.06	3.17	3.20	3.13	3.07
The Americas		3.61	287	144				4.27	4.96	5.17	5.14	5.05
United States	Fed funds	2.50	225	175	27 Jul 22 (+75bp)	<u>21 Sep 22</u>	Sep 22 (+75bp)	3.25	4.00	4.25	4.25	4.25
Canada	O/N rate	3.25	300	50	7 Sep 22 (+75bp)	26 Oct 22	26 Oct 22 (+50bp)	3.25	3.75	3.75	3.75	3.75
Brazil	SELIC O/N	13.75	850	-100	3 Aug 22 (+50bp)	<u>21 Sep 22</u>	Sep 22 (+25bp)	14.00	14.00	14.00	13.75	12.75
Mexico	Repo rate	8.50	397	175	11 Aug 22 (+75bp)	29 Sep 22	29 Sept 22 (+75bp)	9.25	10.00	10.25	10.25	10.25
Chile	Disc rate	10.75	925	-125	6 Sep 22 (+100bp)	12 Oct 22	12 Oct 22 (+50bp)	10.75	11.50	11.50	10.50	9.50
Colombia	Repo rate	9.00	725	0	29 Jul 22 (+150bp)	29 Sep 22	29 Sep 22 (+100bp)	10.00	10.50	10.50	10.00	9.00
Peru	Reference	6.75	575	-150	8 Sep 22 (+25bp)	6 Oct 22	6 Oct 22 (+25bp)	6.75	7.00	6.75	6.00	5.25
Europe/Africa		2.28	137	136				2.40	3.09	3.60	3.59	3.65
Euro area	Depo rate	0.75	125	100	8 Sep 22 (+75bp)	27 Oct 22	Oct 22 (+50bp)	0.75	1.50	1.50	1.50	1.75
United Kingdom	Bank rate	1.75	165	225	4 Aug 22 (+50bp)	<u>22 Sep 22</u>	Sep 22 (+50bp)	2.25	3.25	4.00	4.00	4.00
Norway	Dep rate	1.75	175	125	18 Aug 22 (+50bp)	<u>22 Sep 22</u>	22 Sep 22 (+50bp)	2.25	3.00	3.00	3.00	3.00
Sweden	Repo rate	0.75	75	150	30 Jun 22 (+50bp)	<u>20 Sep 22</u>	20 Sep 22 (+75bp)	1.50	2.00	2.25	2.25	2.25
Czech Republic	2-wk repo	7.00	625	-50	22 Jun 22 (+125bp)	29 Sep 22	Sep 23 (-50bp)	7.00	7.00	7.00	7.00	6.50
Hungary	Base rate	11.75	1025	175	30 Aug 22 (+100bp)	27 Sep 22	Sep 22 (+100bp)	12.75	14.50	14.50	14.50	13.50
Israel	Base rate	2.00	190	125	22 Aug 22 (+75bp)	3 Oct 22	03 Oct 22 (+75bp)	2.00	3.25	3.25	3.25	3.25
Poland	7-day interv	6.75	665	-25	7 Sep 22 (+25bp)	5 Oct 22	Oct 22 (+25bp)	6.75	7.00	7.00	7.00	6.50
Romania	Base rate	5.50	425	150	5 Aug 22 (+75bp)	5 Oct 22	5 Oct 22 (+50bp)	5.50	6.25	6.75	7.00	7.00
Russia	Key pol rate	7.50	100	-50	16 Sep 22 (-50bp)	28 Oct 22	Feb 23 (-25bp)	7.50	7.50	7.25	7.00	7.00
South Africa	Repo rate	5.50	200	175	21 Jul 22 (+75bp)	<u>22 Sep 22</u>	Sep 22 (+75bp)	6.25	6.75	7.25	7.25	7.25
Turkey	1-wk repo	13.00	-1900	1000	18 Aug 22 (-100bp)	<u>22 Sep 22</u>	1Q 23 (+1200bp)	13.00	13.00	25.00	25.00	23.00
Asia/Pacific		2.44	31	8				2.47	2.60	2.62	2.57	2.52
Australia	Cash rate	2.35	225	75	6 Sep 22 (+50bp)	4 Oct 22	Oct 22 (+50bp)	2.35	3.10	3.10	3.10	3.10
New Zealand	Cash rate	3.00	275	100	17 Aug 22 (+50bp)	5 Oct 22	Oct 22 (+50bp)	3.00	4.00	4.00	4.00	4.00
Japan	Pol rate IOER ¹	-0.10	-9	0	28 Jan 16 (-20bp)	<u>22 Sep 22</u>	On hold	-0.10	-0.10	-0.10	-0.10	-0.10
Hong Kong	Disc. wndw	2.75	-50	175	3 Mar 20 (-50bp)	-	Sep 22 (+75bp)	3.50	4.25	4.50	4.50	4.50
China	1-yr MLF	2.75	-20	-20	15 Aug 22 (-10bp)	-	2Q 23 (-10bp)	2.75	2.75	2.75	2.65	2.55
Korea	Base rate	2.50	175	75	25 Aug 22 (+25bp)	12 Oct 22	Oct 22 (+25bp)	2.50	3.00	3.25	3.25	3.25
Indonesia	BI RRR	3.75	25	50	23 Aug 22 (+25bp)	<u>22 Sep 22</u>	Sep 22 (+25bp)	4.00	4.25	4.25	4.25	4.25
India	Repo rate ²	5.40	140	35	5 Aug 22 (+50bp)	30 Sep 22	Oct 22 (+35bp)	5.40	5.75	5.75	5.75	5.75
Malaysia	O/N rate	2.50	-175	25	8 Sep 22 (+25bp)	3 Nov 22	Nov 22 (+25bp)	2.50	2.75	2.75	2.75	2.75
Philippines	Rev repo	3.75	175	50	18 Aug 22 (+50bp)	<u>22 Sep 22</u>	22 Sep 22 (+25bp)	4.00	4.25	4.25	4.25	4.25
Thailand	1-day repo	0.75	25	50	10 Aug 22 (+25bp)	28 Sep 22	Sep 22 (+25bp)	1.00	1.25	1.25	1.25	1.25
Taiwan	Official disc.	1.50	38	38	16 Jun 22 (+12.5bp)	<u>22 Sep 22</u>	3Q 22 (+13bp)	1.63	1.75	1.88	1.88	1.88

Source: J.P. Morgan. ¹ BoJ sets the policy rate on IOER (O/N) and targets 10-year JGB yields as policy guidance

Bold denotes move since last GDW and forecast changes. Underline denotes policy meeting during upcoming week. Aggregates are GDP-weighted averages.

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Hong Kong SAR (China) and Taiwan (China).

Event risk calendar

Month	Date	Country	Event
Sep 22	20	Sweden	Riksbank rate announcement
	21	United States	FOMC rate announcement
	21	Brazil	BCB rate announcement
	22	Japan	BoJ rate announcement
	22	Taiwan	CBC rate announcement
	22	Philippines	BSP rate announcement
	22	Indonesia	BI rate announcement
	22	Switzerland	SNB rate announcement
	22	Norway	Norges Bank rate announcement
	22	United Kingdom	BoE rate announcement
	22	Turkey	CBRT rate announcement
	22	South Africa	SARB rate announcement
	25	Italy	General election
	27	Hungary	NBH rate announcement
	28	Thailand	BoT rate announcement
	29	Mexico	Banxico rate announcement
	Oct 22	2	Brazil
3		Israel	Bol rate announcement
4		Australia	RBA rate announcement
5		New Zealand	RBNZ rate announcement
5		Poland	NBP rate announcement
10-16		Global	World Bank/IMF Annual Meetings
14		South Korea	BoK rate announcement
16-		China	20th Communist party congress
20		Turkey	CBRT rate announcement
25		Hungary	NBH rate announcement
26		Canada	BoC rate announcement
26		Brazil	BCB rate announcement
27		Euro area	ECB rate announcement
28		Japan	BoJ rate announcement
30-31		Global	G20 summit
Nov 22	1	Australia	RBA rate announcement
	2	United States	FOMC rate announcement
	3	Malaysia	BNM rate announcement
	3	Norway	Norges Bank rate announcement
	3	United Kingdom	BoE rate announcement
	8	United States	Federal elections
	9	Poland	NBP rate announcement
	10	Mexico	Banxico rate announcement
	21	Israel	Bol rate announcement
	22	Hungary	NBH rate announcement
	23	New Zealand	RBNZ rate announcement
	24	South Korea	BoK rate announcement
	24	Turkey	CBRT rate announcement
	24	Sweden	Riksbank rate announcement
	24	South Africa	SARB rate announcement
	30	Thailand	BoT rate announcement
	Dec 22	6	Australia
7		Poland	NBP rate announcement
7		Canada	BoC rate announcement
7		Brazil	BCB rate announcement
14		United States	FOMC rate announcement
15		Switzerland	SNB rate announcement
15		Norway	Norges Bank rate announcement
15		United Kingdom	BoE rate announcement
15		Euro area	ECB rate announcement
15		Mexico	Banxico rate announcement
20		Japan	BoJ rate announcement
20	Hungary	NBH rate announcement	
22	Turkey	CBRT rate announcement	

Sovereign credit ratings and actions

	S&P		Moody's		Fitch		Recent S&P Action		Recent Moody's Action		Recent Fitch Action	
	Rating	View	Rating	View	Rating	View	Rating	Outlook	Rating	Outlook	Rating	Outlook
Argentina	CCC+		Ca		CCC		7-Sep-20	7-Sep-20	3-Apr-20	28-Sep-20	10-Sep-20	
Australia	AAA		Aaa		AAA		25-Feb-11	6-Jun-21	21-Oct-02	13-Nov-03	28-Nov-11	13-Oct-21
Austria	AA+		Aa1		AA+		13-Jan-12	26-Aug-22	24-Jun-16	24-Jun-16	13-Feb-15	15-May-20
Belgium	AA		Aa3		AA-		13-Jan-12	28-Feb-14	16-Dec-11	16-Dec-11	23-Dec-16	24-Sep-21
Brazil	BB-		Ba2		BB-		11-Jan-18	6-Apr-20	24-Feb-16	9-Apr-18	23-Feb-18	14-Jul-22
Canada	AAA		Aaa		AA+		29-Jul-02	18-May-07	3-May-02	24-May-06	24-Jun-20	24-Jun-20
Chile	A		A2		A-		24-Mar-21	24-Mar-21	15-Sep-22	15-Sep-22	15-Oct-20	15-Oct-20
China	A+		A1		A+		21-Sep-17	21-Sep-17	24-May-17	24-May-17	6-Nov-07	15-Oct-13
Colombia	BB+		Baa2		BB+		19-May-21	19-May-21	28-Jul-14	6-Oct-21	1-Jul-21	1-Jul-21
Cyprus	BBB		Ba1	(+)	BBB-		2-Sep-22	2-Sep-22	23-Jul-21	19-Aug-22	19-Oct-18	3-Apr-20
Czech Republic	AA-		Aa3	(-)	AA-	(-)	24-Aug-11	24-Aug-11	4-Oct-19	5-Aug-22	3-Aug-18	6-May-22
Denmark	AAA		Aaa		AAA		27-Feb-01	26-Sep-07	23-Aug-99	24-May-06	10-Nov-03	18-Dec-07
Finland	AA+		Aa1		AA+		10-Oct-14	16-Sep-16	3-Jun-16	3-Jun-16	11-Mar-16	24-Jan-20
France	AA		Aa2		AA	(-)	8-Nov-13	21-Oct-16	18-Sep-15	21-Feb-20	12-Dec-14	15-May-20
Germany	AAA		Aaa		AAA		13-Jan-12	13-Jan-12	5-Jul-00	28-Feb-14	10-Aug-94	6-Nov-07
Greece	BB+		Ba3		BB	(+)	22-Apr-22	22-Apr-22	6-Nov-20	6-Nov-20	24-Jan-20	14-Jan-22
Hong Kong	AA+		Aa3		AA-		21-Sep-17	21-Sep-17	20-Jan-20	20-Jan-20	20-Apr-20	20-Apr-20
Hungary	BBB	(-)	Baa2		BBB		15-Feb-19	12-Aug-22	24-Sep-21	24-Sep-21	22-Feb-19	22-Feb-19
India	BBB-		Baa3		BBB-		25-Feb-11	26-Sep-14	1-Jun-20	5-Oct-21	1-Aug-06	10-Jun-22
Indonesia	BBB		Baa2		BBB		31-May-19	27-Apr-22	13-Apr-18	13-Apr-18	20-Dec-17	20-Dec-17
Ireland	AA-		A1	(+)	AA-		29-Nov-19	29-Nov-19	6-May-22	6-May-22	28-Jan-22	28-Jan-22
Israel	AA-		A1	(+)	A+		3-Aug-18	3-Aug-18	17-Apr-08	8-Apr-22	11-Nov-16	11-Nov-16
Italy	BBB		Baa3	(-)	BBB		27-Oct-17	26-Jul-22	19-Oct-18	5-Aug-22	3-Dec-21	3-Dec-21
Japan	A+		A1		A		16-Sep-15	9-Jun-20	1-Dec-14	1-Dec-14	27-Apr-15	25-Mar-22
Malaysia	A-		A3		BBB+		8-Oct-03	27-Jun-22	16-Dec-04	11-Jan-16	4-Dec-20	4-Dec-20
Mexico	BBB		Baa2		BBB-		26-Mar-20	6-Jul-22	8-Jul-22	8-Jul-22	15-Apr-20	15-Apr-20
Netherlands	AAA		Aaa		AAA		20-Nov-15	20-Nov-15	20-Jul-99	7-Mar-14	10-Aug-94	11-Jul-14
New Zealand	AA+		Aaa		AA+		21-Feb-21	21-Feb-21	20-Oct-02	13-May-99	9-Sep-22	
Norway	AAA		Aaa		AAA		9-Jul-75	28-May-09	30-Sep-97	13-May-99	13-Mar-95	18-Dec-07
Peru	BBB		Baa1		BBB		18-Mar-22	18-Mar-22	1-Sep-21	1-Sep-21	15-Oct-21	15-Oct-21
Poland	A-		A2		A-		12-Oct-18	12-Oct-18	12-Nov-02	12-May-17	18-Jan-07	22-Jul-16
Portugal	BBB+		Baa2		BBB	(+)	9-Sep-22	9-Sep-22	17-Sep-21	17-Sep-21	15-Dec-17	6-May-22
Romania	BBB-		Baa3	(-)	BBB-	(-)	16-May-14	16-Apr-21	6-Oct-06	15-Oct-21	4-Jul-11	17-Apr-20
Russia	NR		WR		WD		8-Apr-22		31-Mar-22		25-Mar-22	
Singapore	AAA		Aaa		AAA		25-Feb-11	2-May-08	14-Jun-02	22-Feb-10	14-May-03	7-Mar-08
Slovakia	A+	(-)	A2	(-)	A	(-)	31-Jul-15	20-May-22	13-Feb-12	5-Aug-22	8-May-20	19-Aug-22
Slovenia	AA-		A3		A		14-Jun-19	14-Jun-19	2-Oct-20	2-Oct-20	19-Jul-19	19-Jul-19
South Africa	BB-	(+)	Ba2		BB-		29-Apr-20	20-May-22	20-Nov-20	1-Apr-22	20-Nov-20	15-Dec-21
South Korea	AA		Aa2		AA-		7-Aug-16	7-Aug-16	18-Dec-15	18-Dec-15	6-Sep-12	25-Jul-16
Spain	A		Baa1		A-		20-Sep-19	18-Mar-22	13-Apr-18	13-Apr-18	19-Jan-18	19-Jan-18
Sweden	AAA		Aaa		AAA		23-Jan-14	23-Jan-14	4-Apr-02	15-Nov-03	8-Mar-04	18-Dec-07
Switzerland	AAA		Aaa		AAA		17-Feb-11	1-Dec-03	29-Jan-82	15-Nov-03	14-Dec-05	11-Jun-07
Taiwan	AA+		Aa3	(+)	AA		29-Apr-22	29-Apr-22	20-Jul-99	24-Feb-21	10-Sep-21	10-Sep-21
Thailand	BBB+		Baa1		BBB+		31-Oct-06	13-Apr-20	26-Nov-03	21-Apr-20	8-Mar-13	17-Mar-20
Turkey	B+	(-)	B3		B	(-)	17-Aug-18	1-Apr-22	12-Aug-22	12-Aug-22	8-Jul-22	8-Jul-22
United Kingdom	AA		Aa3		AA-		27-Jun-16	17-Dec-19	16-Oct-20	16-Oct-20	27-Mar-20	18-Jun-21
United States	AA+		Aaa		AAA		5-Aug-11	10-Jun-13	2-Aug-11	18-Jul-13	21-Mar-14	8-Jul-22
Venezuela	NR		WR		WD		20-Sep-21		14-Aug-19	9-Mar-18	27-Jun-19	

Source: Ratings agencies via Bloomberg

RATING SCALE	S&P	MOODY's	Fitch
Upper Investment Grade	AAA	Aaa	AAA
	AA+	Aa1	AA+
	AA	Aa2	AA
	AA-	Aa3	AA-
	A+	A1	A+
	A	A2	A
	A-	A3	A-
Lower Investment Grade	BBB+	Baa1	BBB+
	BBB	Baa2	BBB
	BBB-	Baa3	BBB-
Non-Investment Grade	BB+	Ba1	BB+
	BB	Ba2	BB
	BB-	Ba3	BB-

RATING SCALE	S&P	MOODY's	Fitch
Lower Non-Investment Grade	B+	B1	B+
	B	B2	B
	B-	B3	B-
	CCC+	Caa1	CCC+
	CCC	Caa2	CCC
	CCC-	Caa3	CCC-
	CC	Ca	CC
	C	C	C
Default	SD		RD
	D		D