

CURRENCIES



USD vs Developed Markets Currencies

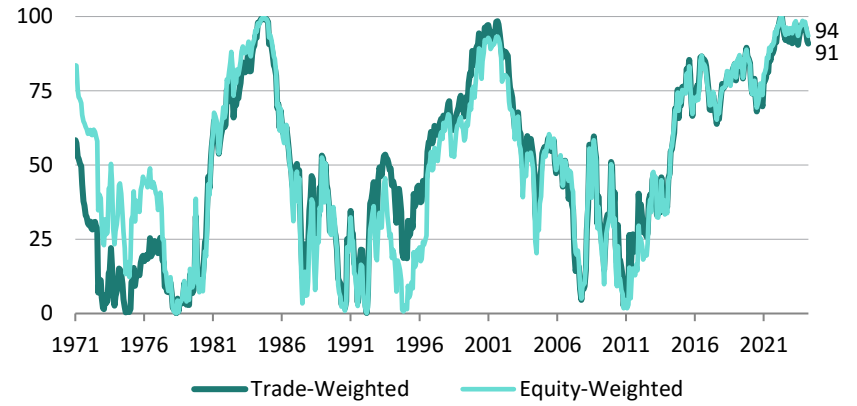
Facts & Figures Third Quarter 2024

The US dollar declined by 4.4% in 3Q 2024 in nominal trade-weighted terms, nudging its YTD performance into negative territory at -0.1%. Interest rate differentials narrowed substantially during the quarter and were the major driver of the dollar's softness. The still-rich real valuation of the dollar suggests the multi-year direction of travel will likely be lower. However, a continuation of growth outperformance or an eventual recessionary environment could yet offer support over shorter horizons.

- A widening in interest-rate differentials between the US and its peers, as a result of an earlier rise in inflation and a more hawkish Fed, was the main plank of dollar strength since this rally began in mid-2021. The bulk of this widening had played out by October 2022 and there has been something of a range trade since. We are back at the bottom of that range currently as softening labor market data in the US saw an increasing number of rate cuts priced in. Further convergence should occur in time, though diverging activity data between the US and Europe in particular could result in some re-widening in the short run as a greater degree of easing gets priced in to the latter.
- Risk aversion has also played a role in the post-COVID dollar rally. This was initially due to factors such as COVID-induced inflation and the war in Ukraine, and at times due to risk market declines. While the cumulative impact of delivered tightening still holds some chance of a more pronounced slowdown eventuating (the dollar has rallied during each of the past seven US recessions, by a median of 4.5%), a soft landing looks like the more likely outcome for now. The signaling of the Fed by delivering a 50-bp rate cut has helped to mitigate the likelihood of the worst left tail economic outcomes occurring. Indications from Chinese authorities that they will ease policy has also helped risk ex US sentiment, somewhat offset by the return of a European deceleration.
- While there has been some retreat in the past quarter, the US dollar remains richly valued on a longer horizon. Its real effective exchange rate stands at the 91st and 94th percentiles for the trade- and equity-weighted series respectively. Further easing of US rate expectations versus peers, but absent any serious global or US recessionary fears, would be the most potent potential catalyst for USD weakness. A hawkish pivot by the Bank of Japan would be an alternative source of dollar selling.

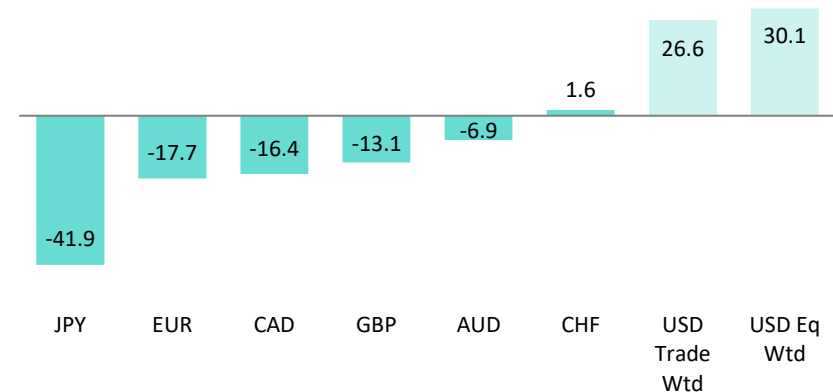
USD BASKET REAL EXCHANGE RATE PERCENTILE

Jun 30, 1971 – Sep 30, 2024



REAL EXCHANGE RATE VS THE USD: % FROM MEDIAN

As of Sep 30, 2024



Sources: MSCI Inc., National Sources, OECD, Refinitiv, Thomson Reuters Datastream, and US Federal Reserve. MSCI data provided "as is" without any express or implied warranties. Notes: Australian inflation data are quarterly and as of June 30, 2024. All other inflation data are as of August 31, 2024.

Emerging Markets Currencies

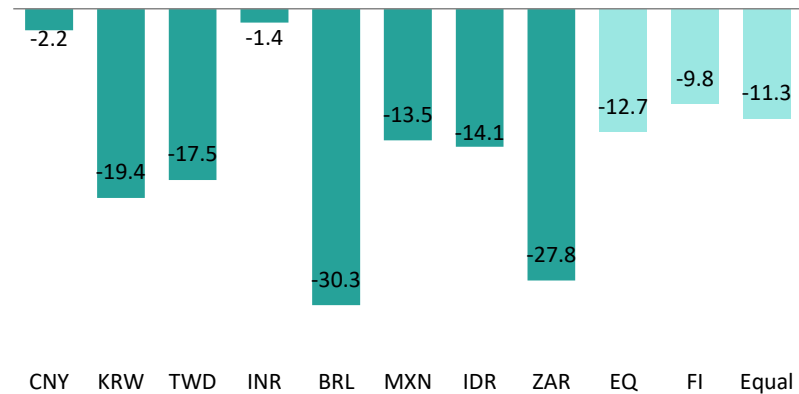
Facts & Figures Third Quarter 2024

EM currencies, as measured by an equal-weighted basket, rose by 3.2% in 3Q 2024, bringing their YTD decline to 1.7%. US labor market data has allowed an increasing number of rate cuts to be priced into the US market, weighing on the dollar and supporting EM currencies. The medium-horizon outlook should be helped by a continued slide in the dollar, though risks around global growth, politics, and interest rate policy introduce some shorter horizon uncertainty.

- EM currencies are highly sensitive to global growth prospects. Therefore, various inter-related factors have proved to be headwinds in the post-COVID era including impaired global supply chains, geopolitical risks and fears of a policy-induced slowdown. More recently, the idiosyncratic slowdown and data deterioration in China has weighed on EM. In the last quarter however, the easing of rates expectations in the US even as growth holds up, in addition to policy easing announcements in China, have supported EM assets.
- EM central banks acted earlier and more aggressively in response to the post-COVID surge in inflation. These actions paid dividends in early 2023 when inflation rolled over and growth-supportive rate cuts were priced into several interest rate markets. However, other factors soon overwhelmed this advantage, particularly political uncertainty in Mexico and Brazil. The two countries saw their currencies pressured by the unwinding of popular carry trades earlier this year and a slight shift toward more hawkish central bank policies.
- Asian inflation has tended to be lower than peers, including post-COVID. As a result, Asian bonds and currencies have traded with a lower beta than their peers during broad risk-on and risk-off periods, including the above-mentioned positioning washout. This, in addition to the Chinese stimulus announcements, has seen the Asian heavy equity-weighted index outperform equal- and debt-weighted comparisons this year, returning 2.8%.
- The carry of EM currencies has declined since the end of 2021 as interest rate differential with DM markets has narrowed; however, the increased easing expected of the Fed has seen some re-widening more recently. The cost of hedging out the FX exposure of EM equities is now essentially 0.0% for a USD-based investor. It costs 2.2% to do likewise for EM local bonds.

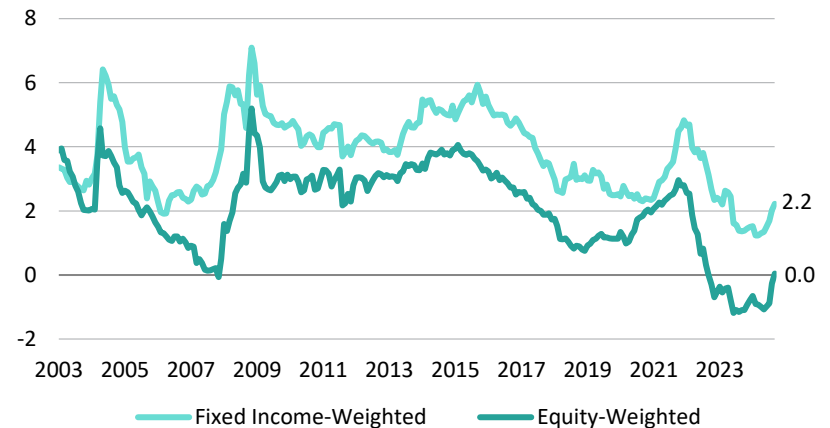
EM REAL EXCHANGE RATE VS USD: % FROM MEDIAN

Jan 31, 1994 – Sep 30, 2024



EMFX IMPLIED CARRY

Jan 31, 2003 – Sep 30, 2024 • Percent (%)



Sources: Directorate-General of Budget, Accounting and Statistics, Executive Yuan, Taiwan; INE - National Institute of Statistics, Chile; International Monetary Fund; J.P. Morgan Securities, Inc.; MSCI Inc.; National Bureau of Statistics of China; Refinitiv; Thomson Reuters Datastream; and US Department of Labor - Bureau of Labor Statistics. MSCI data provided "as is" without any express or implied warranties.

GBP vs Developed Markets Currencies

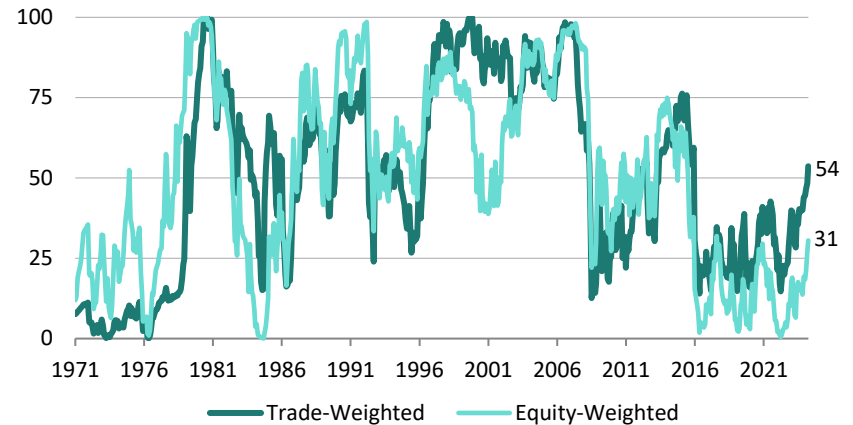
Facts & Figures Third Quarter 2024

The pound rose by 2.8% in trade-weighted terms in 3Q 2024, bringing the YTD rise to 4.7%. A substantially wider rates differential versus its peers, amidst sticky services inflation, helped to lift sterling back to just above its median valuation on a trade-weighted basis. The consensus full-year outlook for the UK economy has improved but it is still expected to lag that of its peers.

- The Bank of England (BOE) commenced its rate cutting cycle during the quarter, lowering its policy rate by 25 bps to 5%. Core inflation has continued to prove somewhat stubborn in the UK, both on an annualized and sequential basis. This, combined with sticky wage growth has caused the BOE to be somewhat more cautious regarding the pace of their expected rate cutting cycle. As a result, UK interest rates rose materially against peers, with fewer cuts priced in for the UK than elsewhere.
- The UK's structural current account deficit and the greater prevalence of cyclical sectors in the country's asset markets, gives sterling a propensity to behave as a risk-on/risk-off currency. Therefore, with risk assets continuing to perform on hopes of an ongoing and globally broadening economic expansion, this contributed toward sterling appreciating against most peers during the quarter.
- The USD dominates the equity-weighted index, with a weight of 76%, given its dominance of the MSCI World index. The dollar could receive support in the near term on US growth outperformance, however, in the medium term, improved global growth, an extended Fed cutting cycle, or further Bank of Japan tightening are all potential catalysts for a continuation of the dollar's recent reversal. The euro dominates the trade-weighted index, at 56%.
- Strong 1H GDP growth underlines some abatement of the headwinds which the UK has contended with. Positive real wage growth and a rate cutting cycle should help foster the UK's recovery. Nonetheless, monthly GDP prints for June and July showed flat growth. Consensus 2024 GDP growth expectations for the UK (1.1%) still lag that of broad DM (1.8%), while a smaller differential is expected in 2025 (1.4% vs 1.7%). A period of political and economic stability may yet help cultivate an improved growth and markets environment. The fact that sentiment toward the UK and its risk assets remains depressed could prove supportive in the event of any improvement in fundamentals.

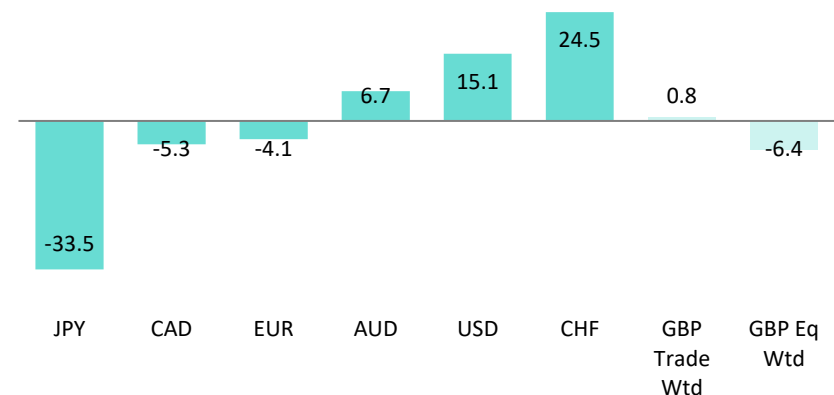
GBP BASKET REAL EXCHANGE RATE PERCENTILE

Jun 30, 1971 – Sep 30, 2024



REAL EXCHANGE RATE VS THE GBP: % FROM MEDIAN

As of Sep 30, 2024



Sources: Bank of England, MSCI Inc., National Sources, OECD, Refinitiv, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Australian inflation data are quarterly and as of June 30, 2024. All other inflation data are as of August 31, 2024.

EUR vs Developed Markets Currencies

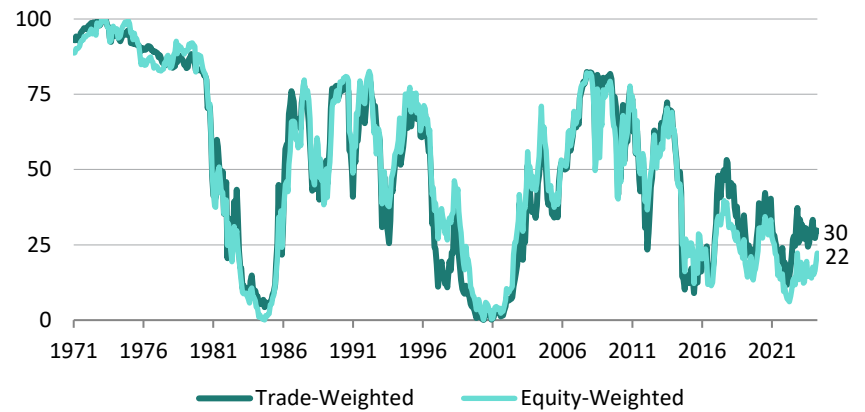
Facts & Figures Third Quarter 2024

The euro rose by 0.2% in trade-weighted terms in 3Q 2024 with its performance now flat on the year. A rise against the dollar was offset by declines against the yen, sterling and the Swiss franc. In the medium term, a weakening dollar may be a tailwind. However, in the short run, growth conditions continue to be challenging with a fresh deceleration in activity.

- The ECB began a rate cutting cycle by reducing rates by 25 bps in June, followed by a second cut in September. Sticky services inflation dissuaded them from cutting at consecutive meetings, preferring a more gradual quarterly pace. Core inflation is slowing but remains above target, while headline inflation has recently dipped below 2%. With economic activity decelerating again recently, the ECB may be inclined to cut rates more aggressively.
- After five quarters of essentially flat GDP growth, the euro area experienced somewhat of a rebound with GDP expanding by 0.3% and 0.2% in 1Q and 2Q, respectively. More recently; however, indicators such as PMIs are indicative of a return to lackluster growth. In a reversal of the typical post-GFC trend, peripheral countries have been holding up well, while Germany is the weak spot. Eurozone wide, growth is expected to come in at 0.7%, underperforming the 1.8% expected of broader DM. Growth is expected to continue to lag in 2025, albeit by a narrower margin (1.3% versus 1.7%).
- On an equity-weighted basis, the REER stands at the 22nd percentile, while it is at the 30th percentile on a trade-weighted basis. These values are 12.3% and 4.1% below median, respectively. The direction of the dollar remains key for the euro outlook, especially for the equity-weighted index which has an 80% weight to the USD. The greenback may stay supported in the near term if the US continues to outperform economically, or if recession fears emerge. However, in the medium term, improved global growth, further BOJ tightening and a continued Fed cutting cycle are likely catalysts for an eventual dollar reversal.
- To see sustained, domestically generated outperformance of the euro we likely need to see increased fiscal and regulatory convergence, particularly between periphery and core, to boost potential growth. This includes delivering on the NextGenerationEU and REPowerEU plans, but also completing the capital markets union, growing issuance of jointly issued bonds and increasing budgetary flexibility.

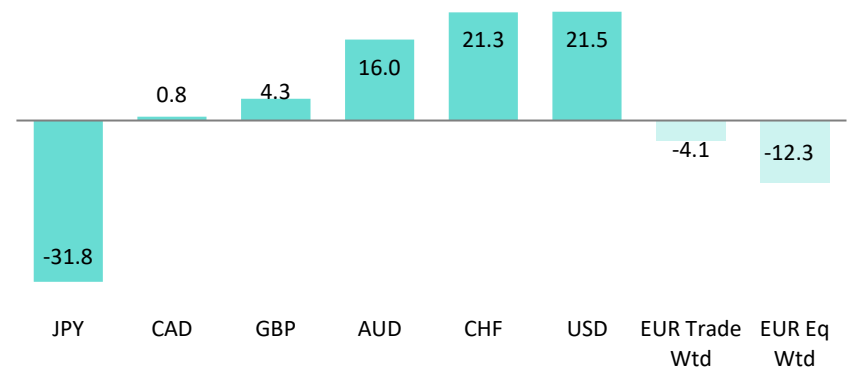
EUR BASKET REAL EXCHANGE RATE PERCENTILE

Jun 30, 1971 – Sep 30, 2024



REAL EXCHANGE RATE VS THE EUR: % FROM MEDIAN

As of Sep 30, 2024



Sources: European Central Bank, MSCI Inc., National Sources, OECD, Refinitiv, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Australian inflation data are quarterly and as of June 30, 2024. All other inflation data are as of August 31, 2024.

Digital Assets

Facts & Figures Third Quarter 2024

The price of bitcoin rallied 5% in 3Q, bringing YTD gains to 50%. Still, bitcoin prices remained 13% off the all-time highs achieved in 1Q 2024. Other cryptocurrency prices remained weak following the 2Q drawdown, with the S&P Cryptocurrency Broad Digital Market Index declining 1.4%.

- Bitcoin recovered some of its 2Q losses (-14%) as the Fed initiated an easing cycle with an outsized rate cut of 50 bps. Lower rates reduce the opportunity cost of holding assets with yield or cash flow. Bitcoin remains below the all-time nominal highs reached in 1Q, which were catalyzed by the spot bitcoin ETF approval and anticipation of Fed policy rate cuts. Futures markets have pared the odds of a deeper rate cutting cycle in recent weeks given ongoing resilience of the US economy, which may have contributed to a relatively mild rebound for the highly volatile cryptocurrency in 3Q.
- There are few reliable options for valuing digital assets. One metric—price-to-transactions per coin (P/TC)—can be viewed as a crude valuation metric for bitcoin. Transactions per coin offers a way to gauge the utility of coins in circulation. Thus, a high P/TC could indicate speculation, with bitcoin being priced expensively for every unit of its transaction volume. But transactions per coin only show bitcoin's utility as a medium of exchange and doesn't inform on how users "stake" bitcoins, which can indicate bitcoin's utility as a store of wealth.
- Digital asset investing carries numerous risks; the most obvious is high price volatility. Indeed, the annualized standard deviation of bitcoin has been nearly 5x that of major equity indexes in the past five years. Other less established digital assets are likely to have even higher volatility. Other pertinent risks for investors include complicated tax considerations and the negative environmental impacts of proof-of-work cryptocurrency mining.
- Bitcoin is just one of thousands of different cryptoassets that utilize blockchain technology. Implementation options have historically been limited, but passive and active options—including dedicated custodians, cryptoasset trusts, and venture capital and hedge funds—continue to be introduced.

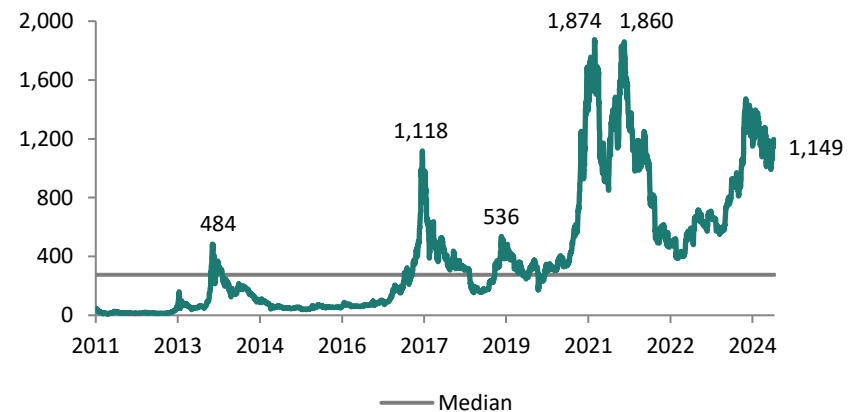
BITCOIN PRICE

Dec 31, 2015 – Sep 30, 2024 • US Dollars



RATIO OF BITCOIN PRICE TO TRANSACTIONS PER COIN

Aug 31, 2011 – Sep 30, 2024



Sources: Blockchair.com and Thomson Reuters Datastream.

Notes: Bottom chart represents the USD price of bitcoin divided by the number of transactions per coin outstanding. All data are daily.