CURRENCIES





USD vs Developed Markets Currencies

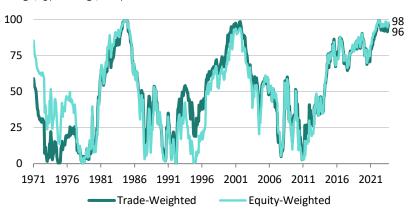
Facts & Figures First Quarter 2024

The US dollar rose by 3.2% in 1Q 2024 in nominal trade-weighted terms. Interest rate differentials widened somewhat during the quarter, while the continued strong economic outperformance and modest risk asset outperformance also supported the currency. 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 and an eventual recessionary environment could yet offer short-term support.

- 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. The market is now pricing in a broadly similar number of cuts across the US, eurozone, and UK during 2024. A weaker growth impulse and softer sequential inflation may see peers of the US require greater easing than in the US itself in the coming quarters.
- 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. The perception of increased odds of a soft landing, as rate cuts got priced in, resulted in some weakness in the dollar toward the end of 2023. That has partially reversed in 1Q, albeit continued strong economic data in the US has maintained hopes for a soft landing even as the number of previously expected rates cuts decline. 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%.
- The US dollar remains richly valued on a longer horizon. Its real effective exchange rate stands at the 96th and 98th percentiles for the trade- and equity-weighted series. 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 - Mar 31, 2024



REAL EXCHANGE RATE VS THE USD: % FROM MEDIAN

As of Mar 31, 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 December 31, 2023. All other inflation data are as of February 29, 2024.

Emerging Markets Currencies

Facts & Figures First Quarter 2024

EM currencies, as measured by an equal-weighted basket, fell by 3.3% in 1Q 2024, reversing the rise of the same magnitude from the prior quarter. US economic data has been firm enough to remove some of the interest rate cuts that has previously been expected, with the resultant dollar strength weighing on EM currencies. The medium horizon outlook should be helped by an eventual weaker dollar, though global growth risks introduce some shorter horizon uncertainty.

- EM currencies are highly sensitive to global growth prospects. Therefore, impairment of global supply chains, fears of a policy-induced economic slowdown and geopolitical risks have all proved headwinds at various times post-COVID. The recent boost in global growth estimates proved beneficial to EM currencies when it was accompanied by an expectation of US rate cuts. Now that firmer data is seeing previously expected cuts removed, the dynamic has reversed for EM currencies.
- EM central banks acted earlier and more aggressively in response to the post-COVID surge in inflation. These actions paid dividends last quarter, with inflation rolling over and growth-supportive rate cuts being priced into several interest rate markets, supporting EM currencies. However, the most recent quarter saw both growth and interest rate differentials move against EMs, weighing on their currencies.
- In general, interest rates in Asia didn't rise as much as elsewhere in EM during the COVID-19 period. As a result, Asian bonds and currencies have traded with a lower beta than their peers during broad risk-on and risk-off periods. This stood to the Asian heavy equity—weighted index in 1Q, as its -2.5% decline saw it outperform both the debt-weighted (-2.8%) and equal-weighted indexes. The valuation of the fixed income and equity-weighted EM currency baskets are, both well below their historical medians.
- The carry of EM currencies has declined since the end of 2021 as the interest rate differential with DM markets has narrowed, due to the increased number of hikes delivered by the latter and some expected cuts in the former. The cost of hedging out the FX exposure of EM equities is now negative 0.9% for a USD-based investor, near its lowest levels. It costs 1.2% to do likewise for EM local bonds, the lowest differential since data began two decades ago.

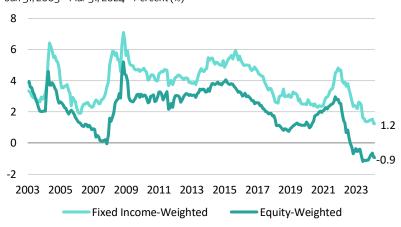
EM REAL EXCHANGE RATE VS USD: % FROM MEDIAN

Jan 31, 1994 - Mar 31, 2024



EMFX IMPLIED CARRY

Jan 31, 2003 - Mar 31, 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

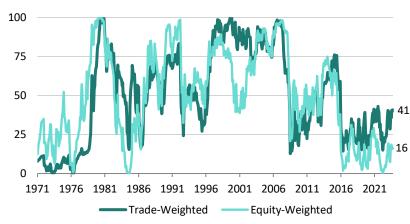
Facts & Figures First Quarter 2024

The pound rose by 1.2% in trade-weighted terms in 1Q 2024, following on from the prior quarter's 1% rise. Despite a narrowing rates differential versus its peers, a softening inflation picture and improving global growth picture helped to lift sterling. The consensus outlook for the United Kingdom remains weak with UK GDP growth expected to lag that of its peers during 2024.

- The Bank of England kept its policy rate unchanged at 5.25% during the quarter, with its hiking cycle now completed. While inflation continued to slow over the quarter, UK interest rates rose, albeit more modestly than peers, resulting in narrowing rates differentials. Nonetheless, this did not transpire to be a headwind for sterling in the first quarter. A broadly similar number of rate cuts are expected across the UK, US, and euro area during 2024.
- 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 strongly on growing hopes of an economic soft landing, this contributed toward sterling appreciating against most peers during the quarter, with the exception of the US dollar.
- The USD dominates the equity-weighted index, with a weight of 75%, given its dominance of the MSCI World index. The dollar could stay supported in the near term on growth outperformance and global recession fears, however, in the medium term, improved global growth, further Bank of Japan tightening or an eventual Fed cutting cycle are all potential catalysts for a dollar reversal from its rich valuation. The euro dominates the trade-weighted index, at 56%.
- There remain some headwinds for the UK to contend with, for instance the lagged impact of the monetary tightening already delivered, via rising effective mortgage rates. The fact that rates are now well below their peak does offer some mitigation, nonetheless consensus 2024 GDP growth expectations for the UK (0.3%) still lag those of peers (1.5%). An upcoming general election also has the potential to introduce further uncertainty. The fact that sentiment toward the UK and its risk assets remains depressed could prove supportive in the event of any improvement in fundamentals.

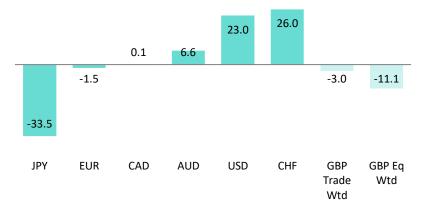
GBP BASKET REAL EXCHANGE RATE PERCENTILE

Jun 30, 1971 - Mar 31, 2024



REAL EXCHANGE RATE VS THE GBP: % FROM MEDIAN

As of Mar 31, 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 December 31, 2023. All other inflation data are as of February 29, 2024.

EUR vs Developed Markets Currencies

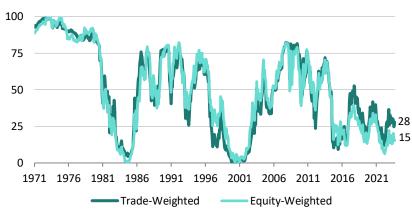
Facts & Figures First Quarter 2024

The euro rose by 0.2% in trade-weighted terms in 1Q 2024, bringing its one-year change to 0.1%. Broad weakness in the yen and the Swiss franc contributed substantially all the euro's strength during the quarter, offsetting the decline against the dollar. In the medium term, a weakening dollar may be a tailwind. However, in the short run, growth conditions continue to be challenging.

- The ECB left rates unchanged during the quarter with its hiking cycle now completed. Meanwhile, both headline and core inflation rates have continued to cool in recent months. When combined with a weak growth backdrop, the market is now looking ahead to the extent of an expected cutting cycle this year. A broadly similar number of cuts is priced in for the euro area and the US, which may be a short-run headwind given its weaker growth and inflation backdrop.
- Growth in the euro area has been anemic in recent quarters, with GDP essentially flat since the end of 3Q 2022. The comparison to the United States has been particularly stark. The economy is likely to have bottomed either in Q4 2023 or Q1 2024, with indicators such as PMIs and credit growth showing some signs of life. Nevertheless, growth is expected to underperform again in 2024, with an expansion of 0.5% expected in the euro area compared to 1.5% for broader DMs.
- On an equity-weighted basis, the REER stands at the 15th percentile, while it is at the 28th percentile on a trade-weighted basis. These values are 14.3% and 4.5% 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 an eventual 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 - Mar 31, 2024



REAL EXCHANGE RATE VS THE EUR: % FROM MEDIAN

As of Mar 31, 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 December 31, 2023. All other inflation data are as of February 29, 2024.

Digital Assets

Facts & Figures First Quarter 2024

The price of bitcoin rose 66% in 1Q, benefiting from the SEC's approval of spot bitcoin ETFs and the anticipation of the upcoming bitcoin halving event. The digital currency reached a new all-time high price in 1Q, adding to its impressive gain from 2023. Other cryptocurrencies had even better performance in 1Q, with the CMC Crypto 200 ex BTC Index up 81%.

- In early January, the SEC approved the trading of spot bitcoin ETFs, roughly ten years after the first application. The decision marked a watershed moment for the crypto industry. As a result, these ETFs are likely to increase bitcoin's liquidity, reduce its volatility, and deepen derivative markets linked to the asset.
- The upcoming bitcoin halving, which effectively halves the rate at which new bitcoins are created, is expected to take place in late April. Historically, bitcoin has experienced three halvings since its inception, occurring roughly every four years. Bitcoin's price has fared well in the near term after those halvings.
- 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-ofwork 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.

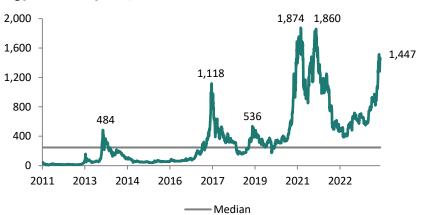
BITCOIN PRICE

Dec 31, 2015 - Mar 31, 2024 • US Dollars



RATIO OF BITCOIN PRICE TO TRANSACTIONS PER COIN

Aug 31, 2011 - March 31, 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.