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2023 Currency outlook

Inflation dominated the FX markets in 2022, as any stabilization of supply chain disruptions from COVID was swiftly overwhelmed by the Russia-Ukraine crisis, causing energy resource bottlenecks across the world. Building upon its strong legs from 2021, US dollar outperformed all of its G10 counterparts as the hawkish Fed led central bank policy globally. With policy divergence amid rising interest rates, FX volatility rebounded higher through Q3, at which point both US dollar and FX volatility reversed as the market's appetite for risk re-emerged in Q4.

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Inflation contagion

The inflation debate, structural vs. transitory, was emphatically answered, as persistently high CPI numbers spread globally. The lingering effects of the pandemic – disrupted supply chains around the world leading to shortages, backlogs, and delays – ushered in 2022, as the world grappled with the Omicron variant. Any possible lull in rising inflation was unceremoniously dashed when Russia invaded Ukraine, kickstarting a surge in energy prices, as the region's dependency on the Russian gas supply was exposed. Developed market inflation reached multi-decade highs (chart 1) as soaring prices became a global phenomenon.

the debate between structural and transitory inflation has not fully abated with the Fed betting on structural inflation requiring higher terminal rates than the market is pricing in.

CHART 1: DEVELOPED MARKET INFLATION (2000 - 2022)



Source: Bloomberg, OECD. Past performance is not necessarily indicative of future results. Actual results may materially differ.

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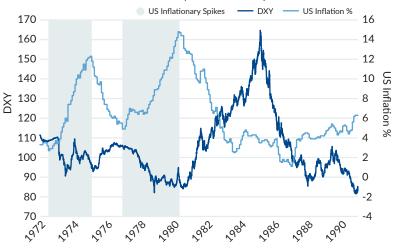
With global economies more interconnected than ever before, the relationship between inflation and currency movements became a focus of FX markets in 2022. Looking back over 50 years, the Great Inflation of the 1970s into the 1980s (chart 2) reached double-digits, peaking multiple times before receding in the mid-1980s. During major inflation spikes in the US, the US Dollar Index (DXY) depreciated until inflation peaked and reversed. This past behavior supports the theory behind relative PPP which suggests a negative correlation between inflation and spot rates, the logical deduction being that when inflation is high, expensive items are less in demand: therefore, the currency required to purchase those items is also less in demand, leading to depreciation.

However, recently excessive inflation has behaved very differently (chart 3). Spiking US CPI has been followed by a soaring US dollar, diverging from the adage, higher inflation leads to currency depreciation. Possible reasonings behind the stark difference in behavior begin with the magnitude of inflation. While inflation is currently high relative to the low inflation environments over the past few decades, the levels are dwarfed by the historical highs in the 1970s and 1980s that approached 15%. The higher magnitudes in the past could have brought higher influence relative to other factors at the time, thus supporting the behavior theorized by relative PPP.

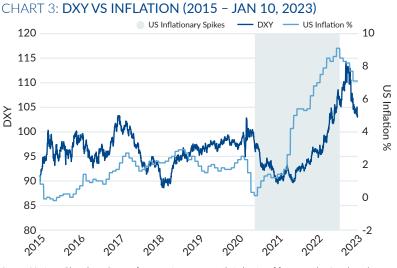
The past year's price action has been heavily influenced by central bank policy in response to inflation. With interest rate hikes as part of the toolbox that central banks employ to maintain price stability and to manage economic fluctuations, raising rates often leads to currency appreciation since investor funds flow into the country in order to take advantage of an attractive interest rate.

The latest episode of rising inflation led to central banks raising interest rates at varying velocities and the compressed interest rate environment of 2021 widened as interest rate differentials grew in 2022. The Fed ran with this hawkish mantle, leading developed nations higher as US rates reached 4.5% which, in turn, led to US dollar appreciation, running counter to relative PPP.

CHART 2: DXY VS INFLATION (1972 - 1990)



Source: Mesirow, Bloomberg. Past performance is not necessarily indicative of future results. Actual results may materially differ.



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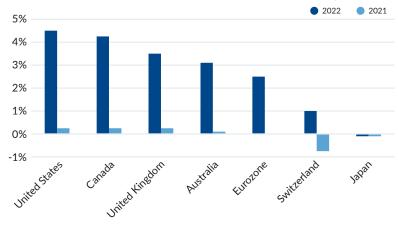


CHART 4: CENTRAL BANK RATES AT YEAR-END (2022, 2021)

Source: Bloomberg. Past performance is not necessarily indicative of future results. Actual results may materially differ.



CHART 5: DXY, 10Y TREASURY YIELDS, RISK AVERSION (JAN 2022 - DEC 2022)

Source: Mesirow, Bloomberg. Past performance is not necessarily indicative of future results. Actual results may materially differ.

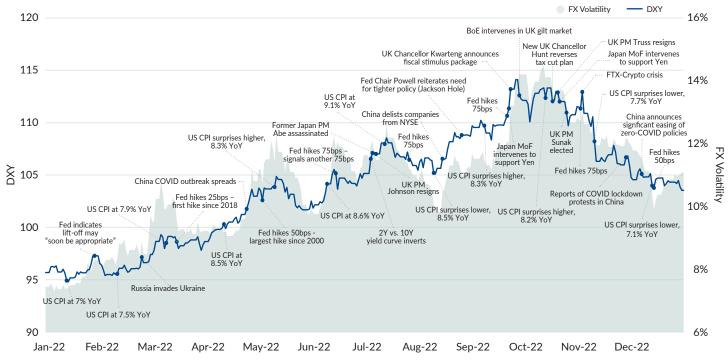
US dollar dominance, resurgent FX volatility

With central banks combatting higher than expected inflation, monetary policies diverged as the Fed's hawkish behavior was in stark contrast to the policies of the ECB and BoJ, which remained dovish to start. Risky assets suffered from deteriorating sentiment as the Russia-Ukraine crisis intensified and signs of slowing global growth brought recession into the conversation. US dollar capitalized on both rising interest rates and its safe-haven qualities, driving DXY higher by over 19% towards the end of September before falling in Q4.

With US dollar capitalizing on rising US yields, DXY and US treasury yields tracked very closely to one another from January 2022 until mid-December (chart 5). Both peaked near the end of Q3 with 10Y yields reaching 4.25%, reversing with the switch in risk appetite and rising equity prices. Risk aversion, represented above as the inverse of the S&P 500, also tracked closely with DXY due to US dollar's safe-haven characteristics. Both yields and equities diverged from its relationship with US dollar in December as 10Y yields increased and S&P 500 fell (risk aversion, or inverse of S&P 500, rose), while DXY continued to cycle lower. A resurgence in FX volatility in 2022 supported the strong directional US dollar environment as widening interest rate differentials and unexpected risk events raised levels up from well-below historical averages. While showing an increase towards the end of 2021 during the discovery and spread of the Omicron variant, FX volatility accelerated in February of 2022 as the implications of the Russia-Ukraine crisis rippled across the globe. Further kindling was provided by COVID outbreaks in China, the UK's tax plan debacle, Japan's Ministry of Finance intervention in the FX markets to support Yen, and the fall of cryptocurrencies.

Chart 6 provides a timeline of inflation, rate hikes, and risk events, in conjunction with US dollar movements superimposed over global FX volatility. US dollar's safehaven qualities were clearly on display as DXY and FX volatility tracked very closely throughout the year, with US dollar appreciating as currency risk was increasing. The rising interest rate environment, as a consequence of surging inflation, also tracked US dollar higher as central bank policy divergence was a major factor in 2022.

CHART 6: DXY, FX VOLATILITY, INFLATION TIMELINE (2022)



Source: Mesirow, Bloomberg. Global currency risk monitor (FX volatility) represents average 3M implied volatility for developed markets (AUD, CAD, CHF, EUR, GBP, JPY, NOK, NZD, SEK) and emerging markets (BRL, CLP, COP, CZK, HUF, IDR, INR, KRW, MXN, MYR, PEN, PHP, PLN, RUB, TRY, ZAR). Past performance is not necessarily indicative of future results. Actual results may be materially different from the results achieved historically. Please refer to the disclaimer page at the end of this presentation for important additional information.

Conclusion

While inflation reached multi-decade highs in 2022, the debate between structural and transitory inflation has not fully abated with the Fed betting on structural inflation, requiring higher terminal rates than the market is pricing in. As the Fed continues to prioritize the fight against inflation, the delicate relationship between tightening and recession hangs in the balance as we enter 2023. Although inflation appears to have peaked across major regions, the levels remain high relative to targets. Market behavior will be dictated by evidence of slowing growth, loosening labor markets, and whether recessionary pressures lead to a soft or hard landing.

Downside forces that pushed the US dollar lower in the fourth quarter continue to press on USD as the new year begins. Though USD retreated in Q4, US dollar remains overvalued against most major currencies. As inflationary pressures ease, the Fed will most likely reduce their hawkish pace of 2022, especially if economic growth slows significantly. With equities in favor to start the year, US dollar's safe-haven qualities further weigh on USD. However, a hard landing could reignite a flight to safety, supporting US dollar. Additionally, while China's reopening has increased risk appetite, another consequence is a possible rise in commodities which can keep inflation higher for longer. We continue to monitor and adapt to the changing landscape as risk events (the COVID pandemic and the Russia-Ukraine crisis as two recent examples) continue to surprise the markets. We recommend that institutions have a currency hedging policy firmly in place prior to unexpected events to responsibly manage currency risk in their international exposures.

We, at Mesirow Currency Management, wish you a healthy and happy 2023.

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https://tradingeconomics.com/united-states/inflation-cpi

https://tradingeconomics.com/united-states/interest-rate

https://www.cnbc.com/2022/07/13/us-bonds-treasury-yields-tick-higher-as-traders-prepare-for-inflation.html

https://www.bankofengland.co.uk/news/2022/september/bank-of-england-announces-gilt-mar-ket-operation

https://www.reuters.com/world/uk/uk-finance-minister-hunt-reverses-most-mini-bud-get-2022-10-17/

https://www.asahi.com/ajw/articles/14751349

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