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US dollar's slide in April 2025: the role of FX hedging

Key takeaways

- *Currency hedging by non-US investors holding US dollar securities appears to have made an important contribution to the weakness of the dollar in April and May 2025.*
- *In recent years, the strength of the dollar and high currency hedging costs driven by elevated short-term dollar interest rates had discouraged non-US investors from hedging their US dollar exposures.*
- *Clues as to the location of currency hedging activity can be gleaned from intraday exchange rate movements. In April, the largest declines in the US dollar occurred during Asian trading hours, suggesting an important role for Asian investors.*

In the wake of US tariff announcements in early April 2025, US securities markets experienced a "triple decline" in which equities, bonds and the US dollar fell in unison. The unusual depreciation of the dollar during a risk-off episode initially led to commentary about a broad-based loss of confidence in dollar assets and a diminished role for the dollar in global capital markets. However, available evidence suggests that a more plausible explanation for the slide in the dollar during this period is the hedging activity of non-US investors to mitigate losses on unhedged dollar asset exposures.

Institutional investors from outside the United States with unhedged dollar exposures took steps to reduce their currency risk. Investors retained their holdings of US assets but added to their foreign exchange (FX) swap and forward overlays to reduce their exposure to further declines in the US dollar. In April and May 2025, the largest declines in the US dollar occurred during Asian trading hours, suggesting that the ex post hedging activity of Asian investors played an important role. This Bulletin examines the potential contribution of FX hedging to the dollar's slide in April and May 2025, and provides some clues as to the location of investors behind this hedging activity.

Non-US investors hold a large share of dollar bonds

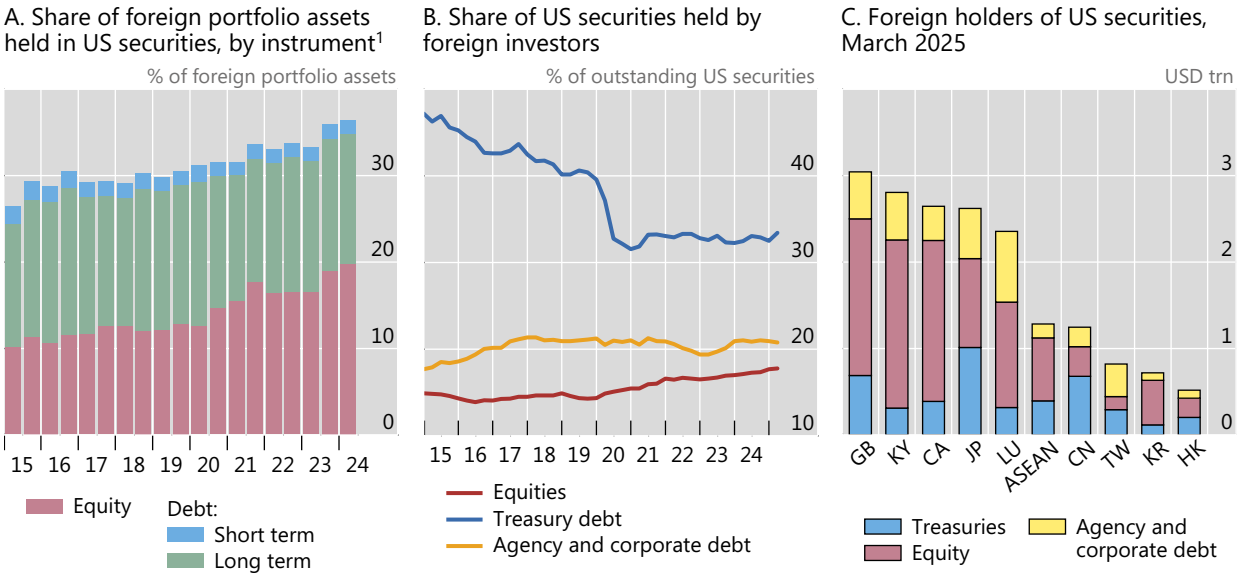
Since the Great Financial Crisis (GFC), portfolio investment by non-US investors has risen as a share of world GDP, as borrowers have turned to institutional investors and other non-bank financial intermediaries for funding (Shin (2025)). A large share of this investment has been in US dollar assets, especially equities listed in the United States and long-term debt securities (Graph 1.A). To some extent these dollar holdings reflect the size and multiyear outperformance of US capital markets. But the preponderance of dollar assets in global portfolios is mainly a counterpart to the dollar's status as the global funding currency of choice. The size and depth of dollar capital markets create network effects that attract both investors and issuers (Shin (2023)).

While equities account for a significant and growing share of non-US investors' dollar assets, foreign investors hold a larger share of the US bond market than the US equity market. In March 2025, non-US investors' holdings of US equities exceeded $17.6 trillion, compared with their US bond holdings of $13.6 trillion. However, they held only 18% of US equities, compared with 33% of US Treasury securities and 21%

of US agency and corporate bonds (Graph 1.B). Non-US investors likely hold an even larger share of the $13 trillion in dollar bonds issued by non-US borrowers, mostly in the offshore (eurodollar) bond market.

The largest foreign holders of dollar bonds reside in Asia and Europe (Graph 1.C). Asian holdings are even larger than residency-based data indicate once adjusted for indirect holdings through European custodians as well as funds domiciled in Caribbean and European financial centres. Notably, since the GFC, private investors have replaced official institutions as the largest foreign buyers of US securities.

Dollar assets are a large share of non-US investors' portfolios — Graph 1



[1] Excluding foreign portfolio assets held by US residents.

Sources: Board of Governors of the Federal Reserve System; IMF, *Portfolio Investment Positions by Counterpart Economy*; Macrobond.

High short-term dollar rates and dollar strength discouraged FX hedging

The growth of foreign portfolio investments has gone hand in hand with the growth of FX derivatives to hedge the associated currency risk. Hedging is typically achieved using FX swaps and forwards. BIS statistics on over-the-counter derivatives show that at end-2024 the notional value of FX derivatives was $130 trillion, more than three times larger than outstanding cross-border bond holdings. Almost 90% of contracts referenced the US dollar on one side. Institutional investors and other non-bank financial intermediaries accounted for about 60% of outstanding FX contracts, up from 45% 15 years earlier.

The extent to which currency risk is hedged differs across investors, portfolios and market conditions. For pension funds and life insurance companies, whose obligations to beneficiaries or policyholders are overwhelmingly in local currency, their asset-liability management imperatives entail higher hedging of their bond holdings to mitigate the currency risk that arises from a mismatch between these assets and their local currency liabilities. Accordingly, pension funds and life insurance companies are usually subject to strict regulations on currency exposure. Institutions that are less tightly regulated, such as asset managers and hedge funds, face looser limits on open FX positions.

Equity investments are less commonly hedged than fixed income portfolios due to the dominance of equity return volatility over currency return volatility and equities' attractiveness to investors seeking higher returns. Moreover, historically the US dollar has tended to appreciate during risk-off episodes, thereby dampening losses in local currency terms for US equity portfolios that are left unhedged.

Market factors also influence the extent of FX hedging, primarily through their impact on hedging costs. The key driver of these costs is the spread between the short-term dollar interest rate and the foreign rate, as FX swaps and forwards are typically short-term contracts. Investors often rely on short-term instruments to hedge their investments in long-term securities, and thus hedging becomes more expensive when short-term dollar interest rates rise. This scenario often aligns with a flattening of the US yield curve. As a result, hedging becomes less appealing when the US yield curve flattens or inverts. Indeed, studies find that hedging activity by non-US investors is positively correlated with the slope of the dollar yield curve (a steeper curve increases the attractiveness of investing in long-term dollar bonds) and negatively correlated with the slope of the local currency curve (a flatter curve reduces the attractiveness of investing in local currency bonds) (Nenova et al (2025)).[1]

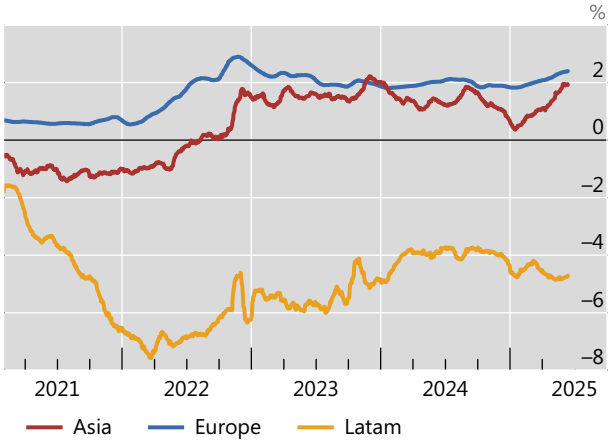
In the case of Asian investors, there are indications that in recent years some have reduced the hedge ratios for their foreign currency portfolios. For instance, the hedge ratio for major Japanese life insurers declined from about 60% in 2021 to 40% in 2024 (Bank of Japan (2025)). As of late 2024, Taiwanese life insurers had hedged about 65% of their holdings, which according to estimates based on insurers' financial reports was near historic lows (Bank of America Global Research (2025)). Some pension funds in Europe have also reportedly reduced their hedge ratios in recent years (Atkins (2025)).

The reduction in FX hedge ratios in recent years can be attributed to at least two factors. One is high hedging costs, which tend to favour unhedged positions. FX hedging has become more expensive since 2022 (Graph 2.A), when the US Federal Reserve began its most recent hiking cycle, leading to an increase in the short-term dollar interest rates. Hedging costs were particularly high for Asian and European currencies as the short-term interest rates in these countries tended to be lower and the slope of their yield curve tended to steepen (Graph 2.B). A second factor discouraging hedging was a bullish view on the US dollar. The trend appreciation of the US dollar between 2021 and 2024 encouraged non-US investors to leave their dollar portfolios unhedged to benefit from currency gains.

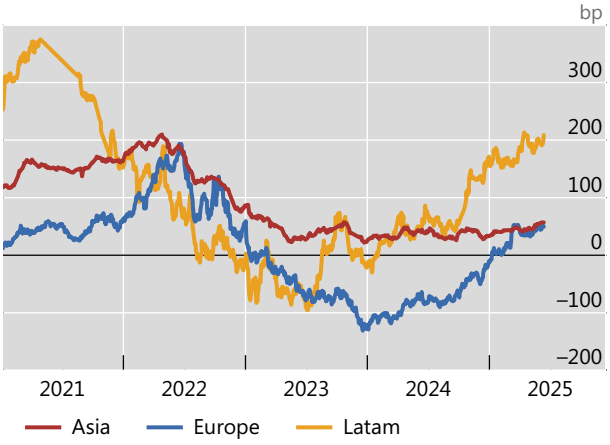
Hedging costs have risen

Graph 2

A. Annualised hedging cost[1]



B. Term spread differential, USD minus other currencies[2]



Asia = CNY, IDR, INR, JPY, KRW, MYR, PHP, SGD, THB, TWD; Europe = CHF, EUR, GBP; Latam = BRL, CLP, COP, MXN, PEN.

[1] The cost of hedging a US dollar asset for a foreign investor using an FX swap or forward is calculated as the percentage difference between the forward and spot exchange rate. This cost equals the differential between dollar and foreign interest rates for the same maturity as the FX derivative, adjusted for the cross-currency basis. The hedging cost shown is for a three-month forward rate; simple average across the currencies. A positive hedging cost indicates a forward discount. [2] Term spread is the difference between 10-year and three-month government bond yields. Simple average of the term spread differential between USD and currencies in each region.

Sources: Bloomberg; BIS.

[1] Hedging activity is also related to the spot exchange rate, cross-currency basis and financial conditions (Nenova et al (2025)).

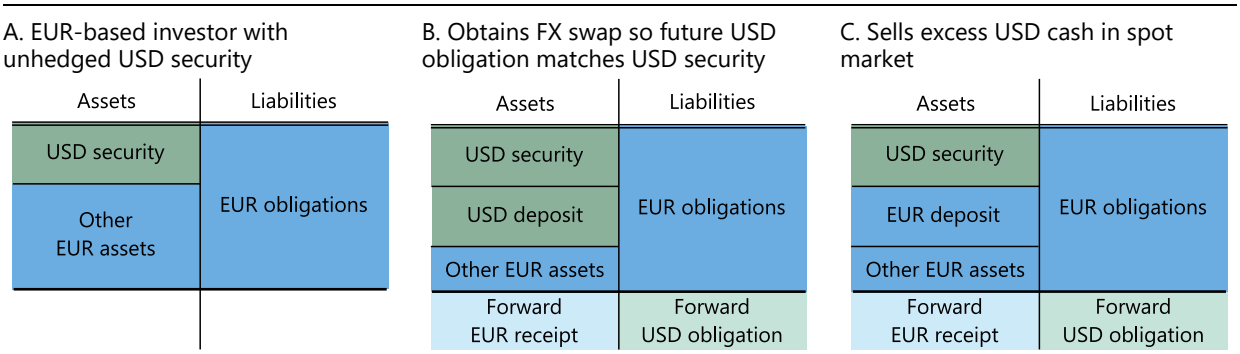
Ex post hedging and downward pressure on the dollar

When the US dollar depreciated in early April 2025, investors faced losses on the unhedged portion of their dollar portfolio. To mitigate these losses, some opted to increase their hedge ratio, ex post. This amplified depreciation pressures on the dollar.[2]

Hedged purchases of dollar bonds have a minimal impact on the exchange rate because they involve the simultaneous purchase and (forward) sale of foreign currency. By contrast, ex post changes in the hedge ratio – to increase (or decrease) the hedged portion of the portfolio – can have a significant impact on the spot rate because purchases and sales of foreign currency are no longer matched.

Consider a euro area investor who initially purchases a dollar bond unhedged and decides at a later date to hedge the currency exposure back into euro (EUR) (Graph 3.A). To increase the hedge ratio, the investor could enter into an FX swap contract.[3] Exchanging EUR for US dollar (USD) in the spot market results in an unhedged USD cash position, while the forward leg of the swap generates a corresponding future off-balance sheet liability in USD and an asset in EUR (Graph 3.B). To hedge the dollar bond, the investor can then sell the USD cash for EUR, leaving a forward USD liability that matches the USD bond (Graph 3.C). The spot sale would cause USD to weaken against EUR.

Ex post hedging with FX swaps — Graph 3



Source: authors' elaboration.

Changes in the cross-currency basis between March and April/May 2025 are consistent with higher demand to hedge dollar investments (Graph 4.A). For several Asian currencies and the euro, the basis against the US dollar declined in April/May (becoming more negative). This indicates that, on the back of high hedging demand, it became more expensive to hedge dollar exposures through the FX swap market.

Intraday movements in the dollar, along with intraday movements in bond prices, suggest that hedging by Asian investors played a role in the weakening of the dollar in April/May. As shown in Graph 4.B, most of the dollar's depreciation in this period occurred during Asian trading hours. During those same hours, US Treasury securities posted gains (Graph 4.C). This suggests that the dollar's depreciation was not correlated with the selling of US assets, at least not at a high frequency and not US government bonds.

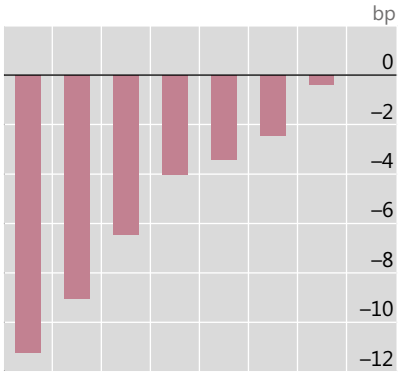
To be sure, hedging was not the sole driver of the dollar's slide in April/May, and based on available data it is difficult to disentangle hedging from speculative positioning or disinvestment. That said, these

[2] See Liao and Zhang (2025) for a model that highlights the currency hedging channel linking countries' external imbalances to their exchange rate behavior.

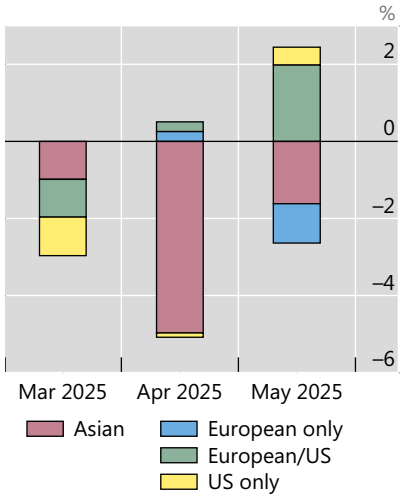
[3] Alternatively, the dollar exposure could be hedged with an FX forward. This would still result in unmatched purchases and sales of foreign currencies. FX market-makers, such as banks and currency dealers who take the opposite side of the forward contract, often use the FX spot market to offset their derivatives exposure. This practice creates spillovers, where hedging pressure in FX forwards influences the spot exchange rate.

Dollar's slide in April occurred mostly during Asian trading hours Graph 4

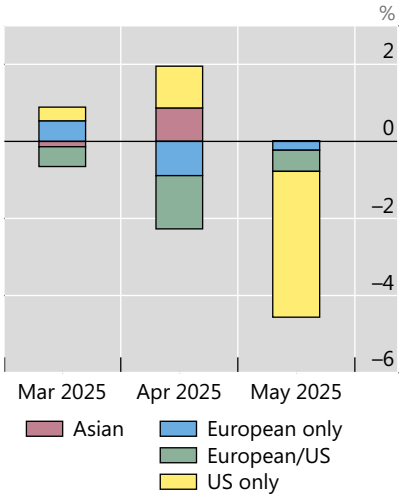
A. Change in cross-currency basis between March and April/May 2025[1]



B. Change in US dollar index (DXY) by regional trading hours[2]



C. Change in US Treasury prices by regional trading hours[2, 3]



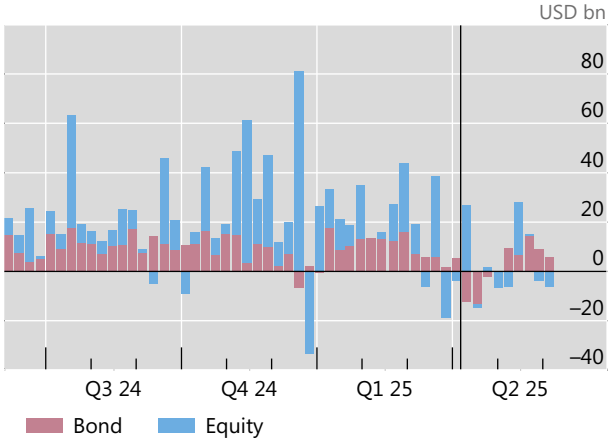
[1] One-year basis against USD. Difference between the March and April/May averages. [2] Asian = 00:00–08:59 UTC; European only = 09:00–13:59 UTC; European/US: 14:00–15:59 UTC; US only: 16:00–23:59 UTC. [3] 10-year US Treasury notes.

Sources: LSEG Workspace; BIS.

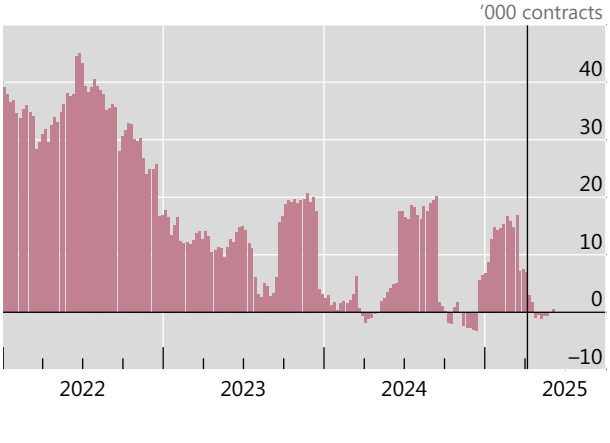
latter drivers appear to have been less important than hedging. Investment fund data for April and May indicate continued inflows into US assets, albeit at a slower pace (Graph 5.A).[4] As regards speculative positioning, while futures markets show a notable decline in long dollar positions in April, the pace and magnitude of the decline were similar to previous periods of dollar weakness and were not exceptional (Graph 5.B).

April sales of US bonds were short lived, while long dollar positions in futures declined Graph 5

A. International portfolio flows to US-focused funds



B. Net long dollar positions of non-commercial traders in US dollar index (DXY) futures



Vertical line indicates first week of April 2025.

Sources: EPFR; Bloomberg.

[4] While Treasury International Capital data for April shows that foreign residents reduced their holdings of long-term U.S. securities by around $50 billion, the size of the outflow is not particularly large by historical standards.

Going forward, the relative importance of hedging may wane as a driver of the dollar exchange rate. The economic outlook for the United States in the wake of higher tariffs is likely to have a greater influence, including in discussions about strategic allocations to US assets.

Even once ex post hedging has run its course, FX hedge ratios and investors' management of their currency exposures bear close monitoring. The over-the-counter nature of FX swap markets and the diversity of their participants make it difficult to track the build-up of vulnerabilities, such as concentrations of unhedged FX positions. Moreover, higher hedge ratios tend to be associated with higher maturity mismatches because the maturity of the hedging instruments is typically shorter than that of the assets being hedged. The consequent rollover risk exposes hedged investors to stress in dollar funding markets (McGuire et al (2021)). On several occasions, most recently during the Covid-19 crisis and most dramatically during the GFC, these markets have turned dysfunctional, requiring central bank intervention to restore their orderly functioning (Shin (2023)).

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