

FX in Focus

The Yen Carry Trade—A Roadblock to BoJ Hikes, Not Fed Cuts (Fishman/Kanter)

- The recent sharp appreciation of the Yen coinciding with a spike in cross-asset volatility has heightened the focus on the "Yen carry trade" and the broader financial market implications from further unwinds. Limited data availability presents a challenge to confidently assessing "how much is left," but substantial holdings among longer-term investors leave room to run. That said, subsequent unwinds should be broadly slower-moving as, based on futures positioning alone, roughly 90% of speculative shorts appears already undone.
- Despite the sharp unwinds, we believe that coincidental timing of disappointing earnings and a "perfect storm" of JPY-positive factors—including softer macro data, Yen supportive intervention, and a surprise BoJ hike—best explains the unusually tight correlation between the sell-offs in USD/JPY and the Nasdaq over the past few weeks, rather than deep leverage from the carry trade.
- Regardless, if Japan sees a renewed sharp tightening in financial conditions, it could complicate the domestic inflation outlook and thus the BoJ's plan to continue hiking rates—but not the Fed's readiness to cut. Deputy Governor Uchida's remarks last week demonstrate the BoJ is willing to adjust policy in response to market volatility to avoid rapid and significant Yen appreciation that would jeopardize progress towards their inflation goal.
- Though we have not flipped to being Yen bulls, the carry unwinds "still left" will probably reinforce any periods of Yen appreciation. Moreover, the marginally higher probability of a US recession (our economists now have it at 25%) increases the attractiveness of the Yen as a portfolio hedge. For that reason, we prefer looking for tactical opportunities in other crosses, including short EUR/USD.

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The Yen Carry Trade—A Roadblock to BoJ Hikes, Not Fed Cuts

The sharp appreciation of the Yen coinciding with a spike in cross-asset volatility has heightened the focus on the "Yen carry trade" and the broader financial market implications from further unwinds. Limited data availability presents a challenge to confidently assessing "how much is left," but substantial holdings among longer-term investors leave room for further flows to reinforce any Yen appreciation (and, in a recession scenario, accelerate a likely Japan equity sell-off). That said, subsequent unwinds seem likely to be slower-moving as the majority of speculative shorts appears already undone. Regardless, any financial market instability looks more likely to be driven by material risk of a US recession or stress in the system rather than deep leverage in the Yen carry trade. Moreover, in such a scenario, the scope for rapid Fed cuts—and fear of carry trade unwinds is not a reason for the Fed to hesitate on cuts—should be supportive for financial stability rather than further fuel concerns, despite the consequences of a stronger Yen (though this could be a reason for the BoJ to pause further hikes).

Why the Yen Carry Seems Scary

The unusually tight correlation between the sell-offs in the Nasdaq and USD/JPY last month sparked suspicions of investors having used cheap borrowing rates in Yen to fund the purchase of US tech stocks (Exhibit 1). While there may have been some related positioning, we think coincidental timing looks like the best explanation. Both long mega-cap tech stocks and long USD/JPY have been among the biggest trades of the year, leaving positioning in each independently vulnerable. Over the past few weeks, both simultaneously faced consequential news: disappointing tech earnings (albeit relative to high expectations) and "a perfect storm" of JPY-positive factors, including softer macro news, Yen-supportive intervention, and a surprise BoJ hike that our economists correctly anticipated. As a result, we see reason to doubt that US equity investors were simply *outright* funding their purchases via borrowed Yen, even without available data to confirm one way or the other. However, while leverage from the carry trade may be low, it could still lead to larger capital flows than otherwise typical, reinforcing any Yen appreciation and broader tightening in Japan financial conditions.

USD/JPY Index Nasdaq USDJPY (RHS)

Exhibit 1: The sell-offs in the Nasdaq and USD/JPY exhibited an unusually tight correlation last month

Source: Bloomberg, Goldman Sachs Global Investment Research

Estimating the Carry Trade

Shorter-term positioning

There is no easy way to estimate "how much is left" in the Yen carry trade with high conviction, but the data we do have suggest there could be more unwinds to come by both domestic and foreign investors. The CFTC weekly report on positioning in futures contracts provides the most direct and high-frequency source. The latest data as of August 6 show that net shorts among non-commercial (speculative) investors have fallen to just \$1bn (or about ¥146bn) from a peak net short of nearly \$15bn (or about ¥2.4tn) just a few weeks ago (Exhibit 2). This alone would suggest that roughly 90% of the carry trade unwind has already occurred. That said, these data are limited to the futures market and exclude the substantial holdings in "stickier" parts of the investor space (e.g., Japan's GPIF), leaving us to believe that the true amount "done" is much lower.

\$bn \$bn Net JPY Positioning 15 15 Non-Commercial Asset Managers 10 10 Leveraged Funds 5 5 -5 -5 -10 -10 -15 -15 -20 -20 2018 2019 2020 2021 2022 2023 2024 2017

Exhibit 2: The CFTC speculative futures positioning data suggest that roughly 90% of the carry trade unwind has already occurred

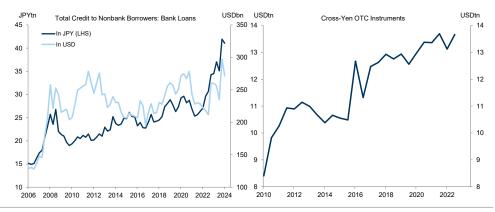
Source: CFTC, Haver Analytics, Goldman Sachs Global Investment Research

Longer-term positioning

Longer-term investors, particularly in Japan, and those not captured in the futures data, together likely represent a bigger share of positioning in the carry trade. Here we explore four common datasets that can help estimate the current scale of exposure to a sharp appreciation in the Yen: i) the BIS' credit to non-bank borrowers, ii) the BoJ's foreign bank transfers from Japan to headquarters, iii) the Japan International Investment Position, and iv) the Japan Flow of Funds.

The BIS measures lending of Yen to those outside of Japan in its locational banking statistics. In contrast to the BIS' data on aggregate cross-border lending by currency, bank loan credit to non-bank borrowers excludes Yen-denominated securities and thus reflects a better metric for the carry trade (albeit an upper bound). The latest available data show that total credit stood at roughly ¥41tn in Q1 2024 (or \$270bn), down slightly from Q4 2023 but up over 60% since Q4 2015, just before the BoJ introduced negative rates and more expansionary balance sheet policy—though part of that increase was driven by Yen depreciation itself (Exhibit 3, left). It is worth noting, however, this figure probably understates the carry trade as it excludes off-balance sheet transactions such as FX swaps. For context, such transactions totaled 13.7tn *US Dollars* as of end-2022 based on the BIS' latest estimates (Exhibit 3, right).

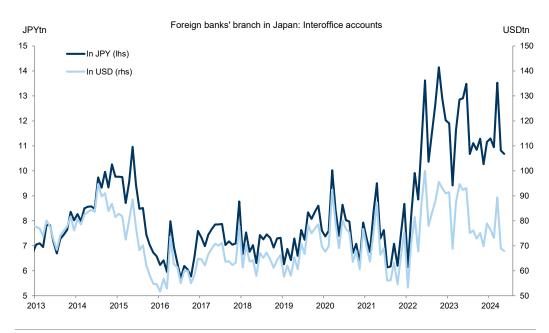
Exhibit 3: On-balance sheet credit to borrowers of Yen outside of Japan increased over 60% from Q4 2015 (pre-NIRP) to Q1 2024, reaching ¥41tn (or \$270bn), and that reflects only a small share of off-balance sheet activities



Source: BIS, Haver Analytics, Goldman Sachs Global Investment Research

BoJ data on transfers from foreign bank branches in Japan to headquarters provides another useful metric for evaluating the carry trade, even though not all activity goes directly through banks. The common understanding is that transferred cash (benefiting from low borrowing rates in Japan) is then used to invest in US Treasuries. While activity has generally picked up in recent years, the data suggest that transfers stood at roughly ¥11tn as of May 2024, off the highs of roughly ¥14tn in 2022-2023 (Exhibit 4).

Exhibit 4: Transfers from foreign bank branches in Japan have generally picked up in recent years



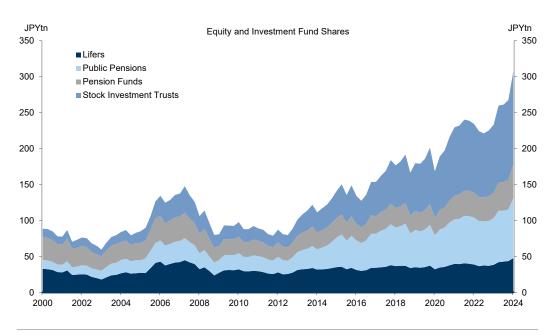
Source: Haver Analytics, Goldman Sachs Global Investment Research, Bank of Japan

Reports on International Investment Position and the Flow of Funds round out the international sources of potential longer-term carry trade exposures; the former provides detail on destination market while the latter records the type of market participant involved in transactions. Now, the International Transactions in Securities report offers the highest-frequency data on Japanese *flows* which show that investment trust managers (which should include NISA accounts) <u>bought foreign equities</u> on net for the

16th straight month in July. But the Balance of Payments data and specifically the International Investment Position can offer context on holdings by destination. Japanese investors had increased their US equity and investment fund share holdings from about ¥55tn in 2018 to over ¥120tn in 2023—or from 30% of total foreign equity holdings in 2018 to over 40% in 2023.

In the context of the carry trade, we need to focus only on Japan's unhedged foreign assets. While explicit data on hedging shares are limited, we can look to the Flow of Funds report that records holdings by Japanese investor category and focus on subsets known to leave some investments unhedged (though there are no details on geographic breakdown). For example, the BoJ's April Financial System Report shows that "Lifers" hedge ratios fell below 50% in 2023 as hedging became costly in recent years. Meanwhile, public pensions (including GPIF), pension funds, and stock investment trusts also typically do less hedging. The sum of foreign equity holdings across these investors stood at roughly ¥300tn (or nearly \$2tn) in Q1 2024 (Exhibit 5). Even if we assume only half is unhedged, that would imply ¥150tn worth of investments from Japan that could be vulnerable to significant losses when foreign equities are selling off and the Yen is appreciating against most currencies—as we saw on August 2—driving some quick repatriation that further reinforces both.1 Outside of Japan, while the data availability is even more limited, the likely rising share of investors hedging their Japan equity holdings (due to the attractive carry and relatively benign economic backdrop) means that any quick move to close out hedges could also cause some additional Yen appreciation pressure.

Exhibit 5: Holdings among key Japanese investors who typically leave at least some foreign assets unhedged stood at roughly ± 300 tn (or nearly ± 2 tn) as of Q1 2024



Source: Haver Analytics, Goldman Sachs Global Investment Research

¹ We focus on equities since unhedged bond holdings should be less of a concern as the gains from lower US yields offset the FX-related losses.

Our Outlook for the Yen

So how are we thinking about USD/JPY from here? First and foremost, we expect performance to be dominated by US rates with the cross once again trading more closely with fundamentals (Exhibit 6). Given our more constructive baseline US economic outlook and the <u>latest overshoot</u> to the downside in USD/JPY versus rates due to sharp carry trade unwinds, we continue to look for a steady grind higher in the cross; our forecasts for higher equities and a weaker CNY add an additional tailwind. But the main risk to that view is a US recession. Our rates strategists <u>recently published</u> a downside scenario for their forecasts, where US nominal rates fall to 3.5-3.75%. All else equal, our standard FX model implies that should correspond with a roughly 5% sell-off in USD/JPY. That estimate likely doubles (at least) once we account for weaker equities and further carry unwinds in that scenario.

USD/JPY pp 170 USD/JPY (left) 3.2 USD-JPY 10y real swap rate differential (right) 28 160 24 2.0 150 1.6 1.2 140 8.0 130 0.4 0.0 120 -0 4 -0.8 110 -1.2 100 -1.6 Jan-19 Jan-20 Jan-21 Jan-22 Jan-23 Jan-24

Exhibit 6: USD/JPY is once again trading more closely with fundamentals

Source: Bloomberg, Goldman Sachs Global Investment Research

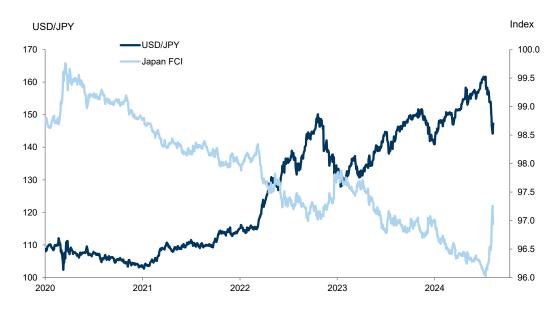
BoJ policy also matters, and if we were to see a renewed sharp tightening in Japan's financial conditions (Exhibit 7), it could complicate the domestic inflation outlook and thus the BoJ's plan to continue hiking rates, as suggested by Deputy Governor Uchida's recent remarks. The BoJ's willingness to adjust policy in response to market volatility helps demonstrate the low likelihood of a rapid and significant Yen strengthening outside of a material risk of a US recession.

In contrast to the implications for the BoJ, we expect the Fed would still be quick to cut rates against a backdrop of an US imminent recession or significant market stress. Some have wondered if aggressive Fed cuts in that scenario could cause greater instability as it also drives further carry unwinds. But we would push back on that narrative in two respects. First, the Fed focuses most on domestic issues and cutting rates is its main tool for softening the blow of recession. Second, it would be unusual to see global markets fare *better* if the Fed keeps policy *tighter* amidst a period of elevated financial stability risks, despite the consequences of a stronger Yen and larger carry

unwinds. It would be more natural for the BoJ to adjust its policy as required to mitigate this source of market instability.

Overall, we expect USD/JPY to be more correlated with real rate differentials than it has been in recent months, though it is still too early to say if the relationship will return to being as tight as it was over the past few years, or if periods of dislocation now become more frequent. But if the US avoids recession and carry remains fairly positive (even with our forecast for additional BoJ hikes), we expect to see renewed upside pressure in USD/JPY. The upcoming US election also <u>likely means</u> that capital flows remain more limited than warranted by fundamentals, leaving the Dollar broadly supported in the months ahead.

Exhibit 7: A renewed sharp tightening in Japan's financial conditions could complicate the BoJ's plan to continue hiking rates



Source: Bloomberg, Goldman Sachs Global Investment Research

Though we have not flipped to being Yen bulls, the carry unwinds "still left" will probably reinforce any periods of Yen appreciation. Moreover, the marginally higher probability of a US recession—our economists now have it at 25%—increases the attractiveness of the Yen as a portfolio hedge. For that reason, we prefer looking for tactical opportunities in other crosses, including short EUR/USD.

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