



July 1st, 2026

Sumitomo Mitsui DS Asset Management
Head of Economic Research Group, Makoto Watanabe

Macro View

Is Risk-Off Yen Appreciation a Thing of the Past?

Changes in the Yen's Safe-Haven Characteristics and Remaining Yen-Appreciation Scenarios

- Looking at the VIX and the yen's return versus the U.S. dollar since 2000, the probability of yen appreciation when the VIX exceeds 25 has been close to 50%. In other words, "risk-off yen appreciation" has not always been clearly observed.
- By decade, the yen-appreciation bias was most evident in the 2010s, both in terms of frequency and magnitude. In the 2020s, however, this relationship has weakened significantly.
- One reason is that the source of risk has shifted from financial and credit concerns to geopolitical risks, commodity-price shocks, and trade-related risks. These types of risks tend to worsen Japan's terms of trade and trade balance, making yen-appreciation expectations less likely to take hold.
- That said, yen-appreciation scenarios could come back into focus if a full-scale correction in U.S. equities, aggressive rate cuts by the FRB, and a slowdown in outward portfolio investment flows— or some repatriation of funds—were to occur at the same time.

Has Risk-Off Yen Appreciation Disappeared?

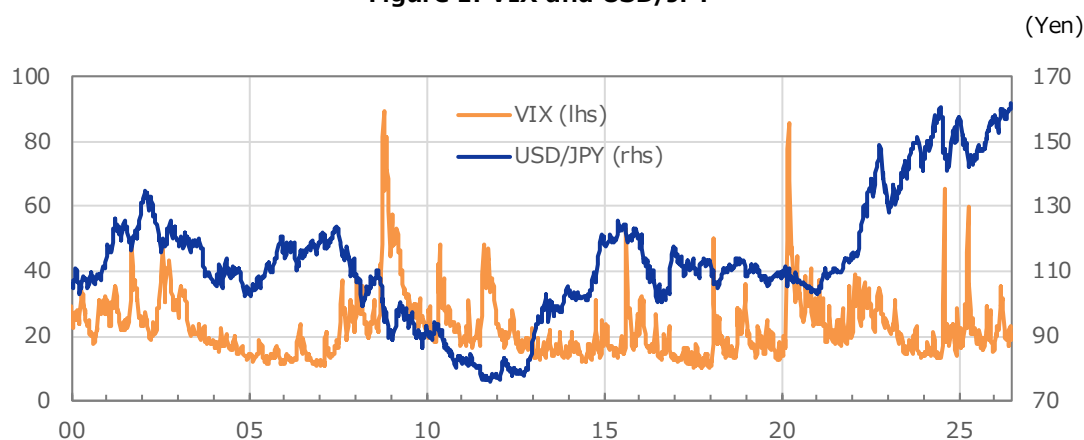
In our previous report, *A New Risk of Yen Depreciation? — Structural Yen-Depreciation Risk Arising From Changes in the Auto Industry Environment*, we discussed the possibility of "structural yen depreciation" driven by structural changes in Japan's trade balance, amid shifts in capital flows such as corporate overseas investment and household investment in foreign securities. In this report, we consider the opposite risk: yen appreciation.

To state the conclusion first, "risk-off yen appreciation" has not disappeared completely. However, in our view, it is no longer something that occurs mechanically in risk-off phases as it once seemed to. What matters is where the risk-off episode originates and how it affects the yen through commodity prices, U.S.-Japan interest rate differentials, and outward portfolio investment flows.

In the mid-2000s, when FX trading, including carry trades, became more widespread, a common view took hold: in a low-volatility "risk-on" environment, investors sold the low-yielding yen and bought higher-yielding currencies; when volatility rose and markets shifted into "risk-off" mode, those trades were unwound, leading to yen buying. Even in the 2010s, financial markets remained alert to "risk-off yen appreciation" whenever market stress increased (Figure 1).



Figure 1: VIX and USD/JPY



Note: Weekly data from January 7, 2000 to June 26, 2026. VIX is based on weekly highs. (Y)

Source: SMDAM and Bloomberg

Recently, the Iran conflict—one of the risk factors markets had been watching—has for now ended in a ceasefire agreement between the U.S. and Iran. Even so, financial markets are unlikely to run out of potential sources of risk. During the recent Iran conflict, markets appeared to take the view that President Trump would ultimately prioritize a deal and follow what some have dubbed “TACO”—backing down after initially taking a hardline stance. As a result, corrections in major equity markets proved short-lived, and stocks resumed rising even as the conflict continued. In the FX market, the yen did not appreciate meaningfully either. This raises the key question of this report: is there no longer any need to prepare for “risk-off yen appreciation”?

The Yen’s Reaction When the VIX Is Elevated

How often has “risk-off yen appreciation” actually occurred? We examine the data. There is no clear-cut definition of a risk-off phase, but in this report we use the VIX—the expected volatility of U.S. equities and the most widely watched common gauge of global investors’ risk tolerance—as a proxy for risk-off conditions. We mainly analyze its relationship with the yen’s return versus the U.S. dollar. We also check the Swiss franc, the euro, and DXY as supplementary references, but because the focus of this report is the risk of yen appreciation, the discussion below centers on the yen results (Figure 2).

Figure 2: Probability of Currency Appreciation When VIX Exceeds 25 or 30

	Number of days with VIX > 25 in each period	Probability of currency appreciation when VIX > 25			
		PY appreciation	CHF appreciation	EUR appreciation	DXY increase
Since 2000	1579	49.9%	49.7%	50.6%	49.7%
2000s	851	49.9%	52.4%	53.0%	49.2%
2010s	279	58.8%	50.2%	49.8%	50.5%
2020s	449	44.3%	44.3%	48.3%	49.9%
	Number of days with VIX > 30 in each period	Probability of currency appreciation when VIX > 30			
		PY appreciation	CHF appreciation	EUR appreciation	DXY increase
Since 2000	787	53.4%	47.4%	48.9%	51.8%
2000s	434	55.1%	51.4%	50.7%	50.2%
2010s	137	60.6%	47.4%	48.2%	54.7%
2020s	216	45.4%	39.4%	45.4%	53.2%

Note: Daily data from January 3, 2000 to June 26, 2026. For the yen, Swiss franc, and euro, figures show the probability of each currency appreciating against the U.S. dollar. For DXy, figures show the probability of an increase in the U.S. Dollar Index. Values shown in blue indicate statistically significant currency appreciation or DXy increases at the 5% level in a one-sided binomial test against the null hypothesis that the probability of appreciation/increase is 50%; values shown in red indicate statistically significant currency depreciation or DXy declines.

Source: SMDAM and Bloomberg

Specifically, we mainly treat periods when the VIX exceeds 25 as risk-off phases, while also examining cases where the VIX exceeds 30 as periods of stronger market stress. Of course, the VIX is a measure of expected volatility in the U.S. equity market and does not fully capture every type of risk-off event, especially localized geopolitical risks. The key point, however, is how the transmission channels to the yen have changed depending on the source of risk when global market stress is severe enough to push the VIX to elevated levels.

From January 2000 through June 26, 2026, there were 1,579 days on which the VIX exceeded 25. Of these, the yen's return versus the U.S. dollar was positive on 788 days, or 49.9% of the total. In other words, the probability of yen appreciation was essentially 50-50. In this report, yen returns against the dollar are expressed with yen appreciation shown as positive.

Meanwhile, there were 787 days on which the VIX exceeded 30. Of these, the yen's return was positive on 420 days, or 53.4%. Based on a simple one-sided binomial test, when the VIX is above 30, the probability of yen appreciation is significantly above 50% at the 5% level. Therefore, if 30 is used as the risk-off threshold for the VIX, the "risk-off yen appreciation" hypothesis is supported to some extent.

That said, when the VIX remains elevated, the same event can be included in the sample over multiple days, so the observations are not necessarily fully independent. For this reason, statistical significance should be interpreted with some caution. Even after taking this into account and looking at weekly data, however, the results do not change materially.

Yen-Appreciation Risk Cannot Be Understood from Frequency Alone

Frequency alone does not fully capture the yen's behavior in risk-off phases. Even if the yen appreciates on many days, the risk of yen appreciation may be limited if the magnitude of those moves is small. Conversely, even if yen appreciation occurs less frequently, it cannot be ignored from a risk-management perspective if the moves are large when they do occur.

Looking at the average changes on yen-appreciation and yen-depreciation days when the VIX exceeded 25, the average rise on yen-appreciation days was +0.577% for the period since 2000, while the average decline on yen-depreciation days was -0.519%. Although the frequency of yen appreciation was almost exactly 50-50, the average magnitude of yen appreciation was slightly larger than that of yen depreciation. Overall, this suggests a very mild yen-appreciation bias when the VIX is above 25 (Figure 3).

Figure 3: Probability of Yen Appreciation and Average Change on Yen-Up/Yen-Down Days When VIX Exceeds 25 or 30

When VIX > 25

	Days	Probability of yen appreciation	Average rise on yen-up days	Average decline on yen-down days
Since 2000	1579	49.9%	+0.577%	-0.519%
2000s	851	49.9%	+0.622%	-0.597%
2010s	279	58.8%	+0.532%	-0.431%
2020s	449	44.3%	+0.519%	-0.425%

When VIX > 30

	Days	Probability of yen appreciation	Average rise on yen-up days	Average decline on yen-down days
Since 2000	787	53.4%	+0.604%	-0.569%
2000s	434	55.1%	+0.677%	-0.678%
2010s	137	60.6%	+0.487%	-0.430%
2020s	216	45.4%	+0.526%	-0.452%

Note: Daily data from January 3, 2000 to June 26, 2026. Figures show the probability and rate of yen appreciation against the U.S. dollar. Yen changes are shown as positive for yen appreciation and negative for yen depreciation. Values shown in blue indicate cases where yen appreciation is statistically significant at the 5% level in a one-sided binomial test against the null hypothesis that the probability of appreciation is 50%; values shown in red indicate statistically significant yen depreciation.

Source: SMDAM and Bloomberg

The Yen-Appreciation Bias Was Clearest in the 2010s

That said, many market participants may have expected the yen to appreciate with a much higher probability during risk-off phases. Was “risk-off yen appreciation” merely a kind of market myth? When the data are divided by decade—the 2000s, 2010s, and 2020s—a different picture emerges.

On days when the VIX exceeded 25, the share of days on which the yen appreciated against the dollar was 49.9% in the 2000s, 58.8% in the 2010s, and 44.3% in the 2020s.

For cases in which the VIX exceeded 30, the corresponding figures were 55.1% in the 2000s, 60.6% in the 2010s, and 45.4% in the 2020s. As noted above, if 30 is used as the VIX threshold for risk-off conditions, then a simple one-sided binomial test shows that the probability of yen appreciation was significantly above 50% at the 5% level in both the 2000s and 2010s. In that sense, the “risk-off yen appreciation” hypothesis was supported during those periods.

However, a probability of 55-60% does not mean that the yen always appreciates in risk-off phases. Even in the 2000s and 2010s, “risk-off yen appreciation” should be understood less as a clear rule and more as a bias toward yen appreciation. Still, the existence of such a bias during risk-off phases compared with normal times likely aligns to some extent with investors’ impressions. By contrast, if 25 is used as the VIX risk-off threshold, “risk-off yen depreciation” in the 2020s is statistically significant at the 5% level.

Looking at the magnitude of moves by decade, when the VIX exceeded 25, the average rise on yen-appreciation days in the 2000s was +0.622%, while the average decline on yen-depreciation days was -0.597%. The moves were broadly symmetrical, and the yen-appreciation bias was not particularly clear. In the 2010s, however, the average rise on yen-appreciation days was +0.532%, while the average decline on yen-depreciation days was -0.431%, confirming a yen-appreciation bias in terms of both frequency and magnitude.

In contrast, in the 2020s, the average rise on yen-appreciation days was +0.519%, while the average decline on yen-depreciation days was -0.425%. Although the magnitude of yen appreciation still exceeded that of yen depreciation, the frequency of yen appreciation fell to 44.3%, leaving the average return broadly neutral. Therefore, the change in the 2020s should be viewed not as the yen clearly becoming a risk currency, but rather as the traditional “risk-off yen appreciation” bias weakening substantially and becoming more neutral. Even when focusing on stronger stress phases in which the VIX exceeds 30, the broad pattern is unchanged: the yen-appreciation bias was clearest in the 2010s, while the average response has become largely neutral in the 2020s.

The Nature of Risk-Off Episodes Determines the Yen’s Reaction

“Risk-off yen appreciation” was observed relatively clearly in the 2000s and 2010s, but the relationship has weakened significantly in the 2020s. Why?

The key is what lies behind the risk-off episode. Whether the yen appreciates in a risk-off phase depends not only on the scale of the risk-off move, but also on its source and transmission channels. In the 2000s, as noted earlier, carry trades became widespread. In “risk-on” phases, investors sold the low-yielding yen and bought higher-yielding currencies. In “risk-off” phases, the unwinding of those trades led to yen buying. In addition, the factors that triggered “risk-off” episodes—such as the September 11 attacks in 2001, U.S. corporate accounting scandals in 2002, and the global financial crisis in 2008—were mainly U.S.-originated risks. This likely made the yen a destination for risk-averse flows (Figure 4).

Figure 4: Major Risk-Off Episodes and Their Risk Characteristics

	Main risk-off factors/events	Key risk characteristics
2000s	September 11 attacks, U.S. corporate accounting scandals, Iraq War, global financial crisis	U.S.-driven financial and credit stress; unwinding of carry trades
2010s	European debt crisis, U.S. credit rating downgrade, Great East Japan Earthquake, China market turmoil, Brexit, U.S. political risks	Credit stress and political risks in Europe, China, and the U.S.; expectations of repatriation flows linked to domestic risks in Japan
2020s	COVID-19 shock, war in Ukraine, Middle East tensions, trade tensions centered on the U.S.	Global, geopolitical, and trade-related risks

Source: SMDAM and various materials

As discussed above, however, the yen-appreciation bias in the 2000s was not necessarily clear when the VIX exceeded 25. On the other hand, in stronger stress phases where the VIX exceeded 30, the frequency of yen appreciation rose even in the 2000s, suggesting that the yen did function as a safe-haven currency during severe risk-off episodes.

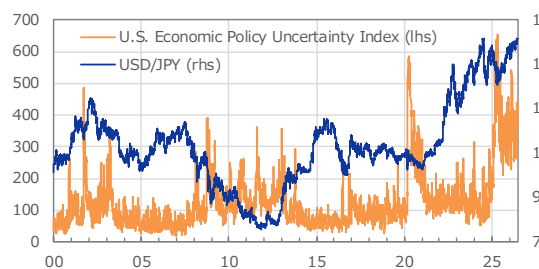
In the 2010s, credit concerns and political risks in Europe, China, and the U.S.—including the European debt crisis in 2010, the U.S. sovereign downgrade shock in 2011, the China shock in 2015, and Brexit in 2016—became sources of market risk. In this environment, the yen became a default safe-haven destination. Donald Trump’s election in 2016 may also have provided an incentive to use the yen as a haven during periods when U.S. political risk was in focus. The Great East Japan Earthquake in 2011 was a Japan-originated risk, but markets expected yen buying on concerns about repatriation, as overseas assets might be brought back to Japan to fund insurance payments and reconstruction costs related to the disaster.

Why the Yen-Appreciation Bias Weakened in the 2020s

In the 2020s, the situation changed. The source of risk shifted markedly away from financial risks such as debt crises and credit concerns in the U.S. and Europe, and toward geopolitical risks such as the war in Ukraine and Middle East tensions, as well as global risks such as COVID-19 and U.S.-led trade tensions.

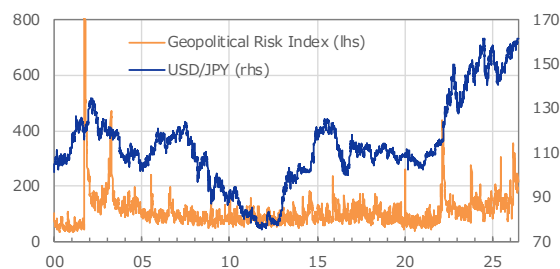
This difference is crucial for the yen. In financial-type risk-off episodes, economic deterioration tends to push commodity prices lower, improving Japan's terms of trade because Japan relies on imports for energy. By contrast, geopolitical risk-off episodes are often accompanied by higher commodity prices. If crude oil and natural gas prices surge, Japan's trade balance deteriorates. Trade issues can also worsen Japan's trade balance. As a result, when risk-off episodes originate from geopolitical or trade issues, expectations of yen appreciation are less likely to take hold (Figures 5 and 6).

Figure 5: U.S. Economic Policy Uncertainty Index and USD/JPY
(Long-term average = 100)



Note: Daily data from January 3, 2000 to June 26, 2026.
Source: SMDAM and Baker, Bloom and Davis

Figure 6: Geopolitical Risk Index and USD/JPY
(1985-2019=100)



Note: Daily data from January 3, 2000 to June 26, 2026.
Source: SMDAM and the Geopolitical Risk Index
(<https://www.matteiacoviello.com/gpr.htm>)

Remaining Yen-Appreciation Scenarios

Does this mean that the yen is unlikely to appreciate in future risk-off episodes? Not necessarily. If a full-scale U.S.-originated risk-off episode occurs, “risk-off yen appreciation” could still take place. Ironically, one factor that may matter in such a scenario is NISA money, which we identified as a yen-depreciation factor in our previous report. In normal times, large flows into foreign equity investment trusts through NISA accounts have been a source of yen selling. However, if U.S. equities undergo a full-scale correction, this massive flow of funds—which has helped drive yen depreciation—could be disrupted and instead become a trigger for a sudden shift in the supply-demand balance of USD/JPY toward yen appreciation.

That said, NISA funds are generally long-term investments, so a U.S. equity correction would not necessarily lead immediately to large-scale redemptions and conversion back into yen. Indeed, investors may instead buy on dips during market declines. However, if a U.S. equity correction is deep and prolonged, the large and previously automatic monthly inflows into new purchases could slow. That alone could change the supply-demand balance in USD/JPY. If some investors gradually begin redeeming investments and converting proceeds back into yen, this could further amplify yen appreciation. If the FRB responds to a U.S.-originated risk-off episode with aggressive rate cuts, the U.S.-Japan interest rate differential channel—which currently appears to have lost some of its influence—could revive and further accelerate yen appreciation.

The question is whether a full-scale U.S.-originated risk-off episode will occur. In this regard, a key issue is whether capital will continue to concentrate in U.S. financial markets. The U.S. is home to many of the world's leading platform-based technology companies, and growth expectations centered on AI and semiconductors continue to attract capital. If AI leads to a structural improvement in productivity and translates into stronger corporate earnings, U.S. equities are likely to remain firm and the yen-depreciation trend may persist. Conversely, if AI-related expectations turn into disappointment, a U.S. equity correction, FRB rate cuts, and a slowdown in outward portfolio investment flows could occur simultaneously, making a yen-appreciation scenario more realistic.

Limits to Yen Appreciation Driven by Intervention

Are there channels other than a U.S.-originated risk-off episode that could lead to yen appreciation? What about yen-buying intervention by the authorities? We are generally positive on the effectiveness of FX intervention by the authorities, but believe that its impact may be limited in the current environment. The reason is that, with yen-selling pressure coming from speculative investors, NISA-related flows, and structural yen depreciation, any temporary yen appreciation caused by intervention may instead be seen as an opportunity to sell the yen. In fact, from late April to early May 2026, the Japanese authorities conducted yen-buying intervention totaling about JPY 11.7 trillion according to MOF data. However, this only slowed the momentum of yen depreciation and did not reverse the yen-depreciation trend.



The Need to Identify the Source of Risk-Off Episodes

Our base case for USD/JPY remains a weaker yen and a stronger dollar. However, if U.S. equity gains become overheated, investors will need to gradually increase their vigilance toward the risk of a yen rebound triggered by a correction in U.S. equities. The key is not to think mechanically that “risk-off means yen appreciation,” but to identify where the risk-off episode originates and how it affects Japan’s terms of trade, U.S.-Japan interest rate differentials, and outward portfolio investment flows. “Risk-off yen appreciation” has not disappeared.

General disclosure: Please read this disclaimer carefully.

Please note that this financial product does not take into account the EU criteria for environmentally sustainable economic activities.

This material is for non-Japanese institutional investors only.

The research and analysis contained in this report, and the opinions and judgments based thereon, are intended to introduce or demonstrate the capabilities and expertise of Sumitomo Mitsui DS Asset Management Company, Limited (hereinafter “SMDAM”), or to provide information on investment strategies and opportunities. Therefore, this material is not intended to constitute an offer or solicitation of any investment, to provide investment advice or services, or to serve as a disclosure document under the Financial Instruments and Exchange Act of Japan.

The expected returns and risks described in this report are calculated based on historical data and/or estimated based on the current economic outlook and should not be construed as a guarantee of future returns or risks.

Past performance is not necessarily indicative of future results.

Simulated data or returns in this report, other than the historical returns of the fund, do not reflect any investment management fees, transaction costs, rebalancing costs or other expenses.

Investment products or strategies do not guarantee future results or the principal amount invested. Investments may incur losses, and any investment gains or losses shall be borne by the client.

The recipients of this report must make their own independent investment decisions.

The opinions, outlook and estimates in this report do not guarantee future trends or results. They constitute SMDAM’s judgment as of the date of this material and are subject to change without notice.

Any awards referenced in this report are based on past achievements and do not guarantee future results.

All intellectual property rights relating to the benchmarks and indices belong to their respective providers and other relevant right holders.

This material has been prepared by obtaining data from sources which are believed to be reliable but SMDAM cannot and does not guarantee its completeness or accuracy.

All rights, title and interest in this material and any content contained herein are the exclusive property of SMDAM, except as otherwise stated. No person may use this material for investment purposes, reproduce or copy this material without SMDAM’s authorization, or disclose this material to any third party.

Registration Number: The Director of Kanto Local Finance Bureau (FIBO) No.399

SEC File No.801-116710

Members of Investment Management Association of Japan and Type II Financial Instruments Firms Association

© Sumitomo Mitsui DS Asset Management Company, Limited

