Box 1: Characterization of recent Carry-Trade Strategy Indicators for Main Investment Currencies in Latin America

1. Introduction

Carry trade is an investment strategy whose returns depend on the interest rate differential between two jurisdictions and on the evolution of their exchange rates. It consists of borrowing in a currency with low interest rates (funding currency) to invest in assets denominated in another currency offering higher returns (investment currency). Its return is mainly determined by *i*) the interest rate differential, insofar as the income generated by the assets exceeds the financing cost, and *ii*) exchange rate dynamics, given that a depreciation of the investment currency against the funding currency may reduce or even reverse the gains.

These strategies are highly sensitive to episodes of increased global risk aversion, during which their returns may deteriorate abruptly. In such scenarios, investors tend to unwind positions in higher-risk assets, including those associated with carry trades, which results in capital outflows from investment currencies and depreciation pressures on these currencies. This performance often coincides with increases in financial volatility indicators, such as the VIX[1].

The returns of these strategies exhibit pronounced asymmetry: gains tend to accumulate gradually, whereas losses, when they materialize, are abrupt and larger in magnitude, a phenomenon summarized by the expression "exchange rates go up by the stairs and down by the elevator" (Brunnermeier et al., 2008). In this context, carry trade is exposed to crash risk insofar as wider interest rate differentials tend to attract speculative positions but also imply a greater likelihood of abrupt depreciations in investment currencies. When risk aversion increases, the simultaneous unwinding of these positions amplifies exchange rate movements.

The unwinding of carry-trade positions may generate simultaneous depreciation pressures on investment currencies and appreciation pressures on funding currencies. During these episodes, investors sell assets denominated in the investment currency to close their positions, increasing the supply of these foreign currencies and exerting depreciation pressures on them; at the same time, they demand the funding currency to repay their obligations, thereby inducing its appreciation. Additionally, currencies with similar interest rate levels tend to move together, suggesting that carry trade is exposed to a global risk

[1] The VIX Volatility Index is a measure of the market's expected volatility for the S&P 500 over the next 30 days, derived from option prices. When investors aggressively purchase options for hedging purposes, the VIX tends to rise, reflecting uncertainty in financial markets.

factor associated with liquidity conditions and risk appetite (K. Brunnermeier, Stefan, & H. Pedersen, 2008).

Despite the widespread use of carry trade globally, there is no information that allows for the direct quantification of the size of these positions or the precise identification of the currencies involved, making it difficult to assess their magnitude and transmission channels. This limitation is compounded by the fact that the strategy is implemented predominantly through over-the-counter (OTC) derivatives, which prevents the direct observation of agents' exposures and their degree of interconnectedness.

Given these limitations, the literature has developed various empirical approaches, none of which fully captures the phenomenon. On the one hand, studies such as those by Gagnon and Chaboud (2007) and Galati et al. (2007) use information on Chicago Mercantile Exchange (CME) futures positions, BIS banking statistics, OTC market volumes, and currency-based sectoral breakdowns, while acknowledging the partial nature of these metrics. On the other hand, more recent approaches use market indicators to approximate both the activity and the risk associated with these strategies: Hutchison and Sushko (2013) use net non-commercial positions in CME futures as a proxy for activity and analyze their relationship with macroeconomic surprises through measures such as risk reversal[2]. Meanwhile, Brunnermeier et al. (2008) characterize carry-trade risk based on the asymmetry in the distribution of returns and its link to exchange rate risk indicators such as risk reversal.

Given these limitations, this box analyzes the evolution of the incentives to implement carry-trade strategies and the reaction of Latin American currencies to recent episodes of shifts in global risk appetite. Particularly, it examines the events of August 2024, during the volatility episode known as "Black Monday," in which a significant unwinding of positions financed in Japanese yen was observed, as well as the period of uncertainty following "Liberation Day." These events illustrate the high sensitivity of these strategies to changes in global risk appetite, in contexts in which investors tend to rapidly rebalance their portfolios.

2. Changes in the incentives to implement these strategies

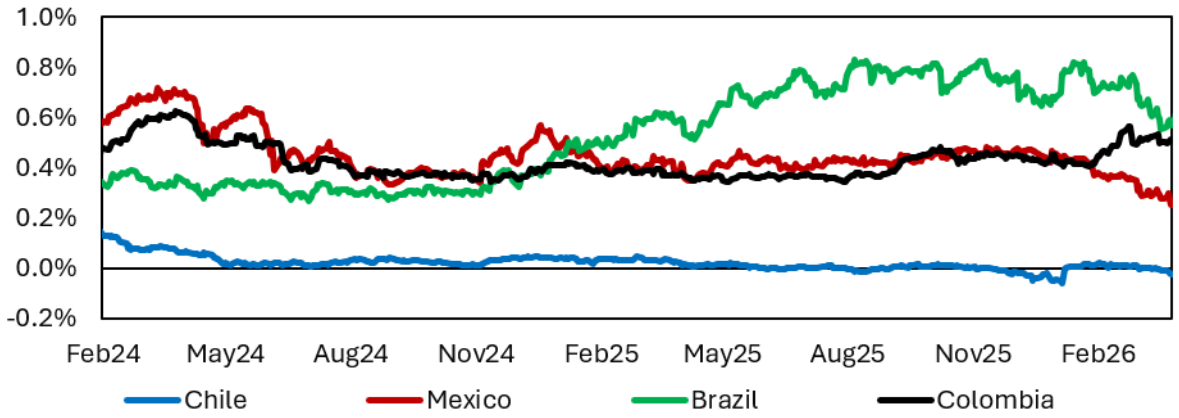
The indicator used measures the incentives used to implement these strategies as the ratio between the interest rate differential and the three-month implied exchange rate volatility. This indicator approximates the expected return adjusted for exchange rate risk: larger interest rate differentials increase the attractiveness of the strategy, while higher implied volatility reduces it. In this context, the indicator approximates a representative strategy in which investors borrow in low-interest-rate currencies, such as the U.S. dollar (USD), the euro (EUR), or the Japanese yen (JPY), to invest in higher-yielding currencies, such as the Brazilian real (BRL), the Mexican peso (MXN), or the Colombian peso (COP), among others, explicitly incorporating the exchange rate risk to which they are exposed, insofar as adverse exchange rate fluctuations may significantly affect the profitability of the position.

[2] This indicator makes it possible to predict how optimistic or pessimistic traders are regarding exchange rate movements, and it is calculated as the difference between the implied volatility of an out-of-the-money call option and an out-of-the-money put option with the same delta.

In this regard, changes in expected monetary policy paths of both funding and investment currencies directly affect the expected risk-adjusted return. Increases in the interest rates in investment currencies raise the incentives to take positions in assets denominated in these currencies by widening the interest rate differential. In contrast, increases in the interest rates of funding currencies reduce such expected returns by increasing the financing cost of positions.

In Latin America, incentives to implement these strategies funded in USD have shown mixed performance since 2024 (Graph B1. 1). In Brazil, the relative attractiveness has increased, in line with the monetary policy rate (MPR) hikes cycle in response to inflationary pressures associated, among other factors, with a more expansionary fiscal policy environment. In Mexico, by contrast, these incentives have declined in a context of MPR cuts by *Banco de México* (Banxico), consistent with the moderation of inflation and economic activity. As for Colombia, incentives have increased, particularly following the recent increases in the MPR in response to inflationary pressures. In turn, in Chile, lower interest rate levels have led, in some periods, to negative differentials relative to the United States, reducing the relative attractiveness of the Chilean peso for this type of strategy.

Graph B1. 1. Carry to Risk Ratio for the Region



Source: Bloomberg.
Note: Corresponds to the interest rate differential adjusted for volatility. The interest rate differential is derived from 3-month forward contracts according to the following calculation: (forward rate/spot rate) ^ (365/90). On the other hand, volatility corresponds to the implied volatility in 3-month at-the-money options. In the case of Colombia, the indicator's numerator is adjusted as the geometric difference between the external and domestic interest rates, given that the hedging market has shown distortions in the recent period.

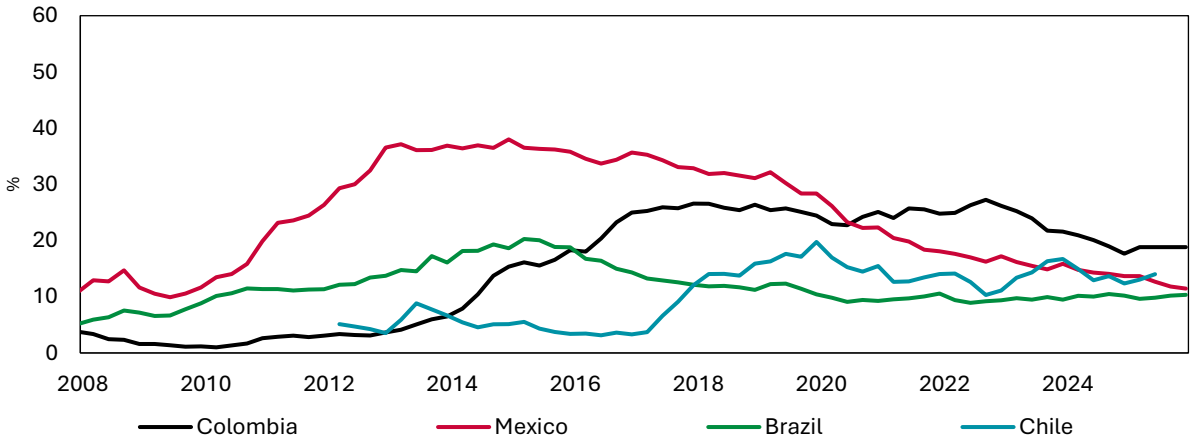
In this context, COP has become relatively attractive vis-a-vis MXN in carry-trade strategies, in line with the widening of its interest rate differentials. However, this result should be interpreted with caution, given the limitations in measuring these positions and the lower depth of the derivatives markets that facilitate their implementation. If a wide differential between the policy rates of Colombia and the United States persists, the COP could continue to be attractive for these strategies, approaching the positioning observed in

economies such as Brazil. It should be noted that, in the case of the COP, the analysis is limited to the USD peer as the funding currency, due to the limited availability of information and the shallow depth of derivatives markets involving other foreign currency pairs.

The most attractive foreign currencies for carry-trade strategies in Latin America are MXN and BRL, given the greater depth and liquidity of their financial markets. According to the BIS Triennial Survey 2025, average daily trading volumes in the OTC derivatives markets of Brazil, Chile, Colombia, and Mexico amount to USD 29,655 million, USD 11,409 million, USD 7,293 million, and USD 27,953 million, respectively.

These investment strategies highlight the interrelationship that may arise between domestic assets in these economies and changes in global financial conditions. Similar dynamics have also been identified in local sovereign bonds in the presence of a significant participation of foreign investors (Botero-Ramírez & Ruiz-Cardozo, 2023)**.** The participation of foreign investors in the region's public debt markets, which averages 14% (Graph B1. 2), could partly reflect the search for higher returns through these types of strategies.

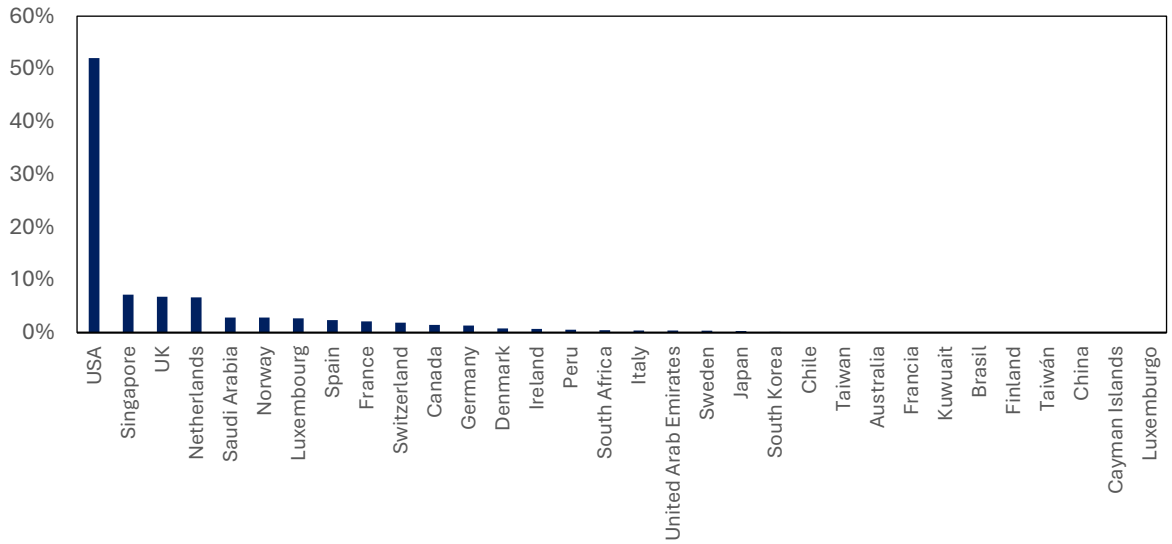
Graph B1. 2. Participation of Foreign Investors in the Region's Public Debt Markets



Source: International Institute of Finance (IIF).

Access to more detailed information for Colombia shows that the base of foreign investors may be quite diverse in terms of geographic origin and, therefore, may be subject to changes in international financial conditions. Particularly, half of investors originate from the United States, followed by shares from Singapore, the United Kingdom, and other European countries (Graph B1. 3). Although this diversity in the origin of investors does not necessarily translate into diversity in the funding currency, it should be noted that more than 99% of transactions in the local foreign-exchange market are conducted in USD, including the foreign exchange hedging market, where the availability of instruments in other currency peers is significantly lower.

Graph B1. 3. Origin of Foreign Investors in the Colombian Public Debt Market

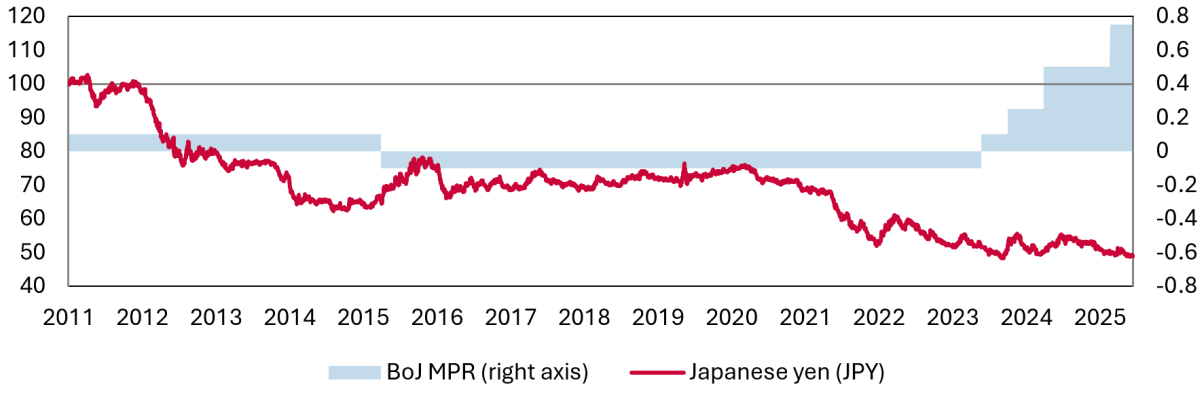


Source: *Banrep* (*Banco de la República*, the Central Bank of Colombia).

3. Scenarios of changes in Global Risk Perception and their impact on carry-trade strategies

The Japanese yen (JPY) became established as one of the main global funding currencies in a prolonged low-interest-rate environment, driven by a highly expansionary monetary policy stance in Japan. This policy stance, adopted to counter weak economic growth and deflationary pressures, gave rise to particularly favorable financing conditions and a depreciation trend in the yen since 2020 (Graph B1. 4), which encouraged its widespread use as a funding currency against both advanced and emerging currencies. In this context, emerging economies with relatively higher interest rates, such as Brazil and Mexico, became recurrent destinations for flows associated with these strategies.

Graph B1. 4. Japanese Yen Performance (Base 100: 31-Oct-11) and the Bank of Japan (BoJ) Monetary Policy Rate (MPR)



Source: Bloomberg. **Note:** the dotted line corresponds to “Black Monday” (5 August 2024).

The August 2024 "Black Monday" episode illustrates how changes in global financial conditions can trigger an abrupt unwinding of carry-trade strategies. This event was preceded by the Bank of Japan's (BoJ) decision to raise its monetary policy rate to 0.25%, which reshaped expectations regarding its future path and increased the cost of using the JPY as a funding currency. This was compounded by the release, on August 5, of weak U.S. labor market data, which heightened uncertainty regarding a possible economic slowdown in that country (Duarte & Tovar, 2024). Following the weak U.S. employment report, Goldman Sachs raised its recession probability forecast to 25%, from the previous 15%. It also noted in a report that the Federal Reserve (Fed) cuts were expected at its next three meetings in 2024 (September, October, and November). The increase in expectations of rate cuts made other developed market currencies relatively more attractive as alternative funding currencies.

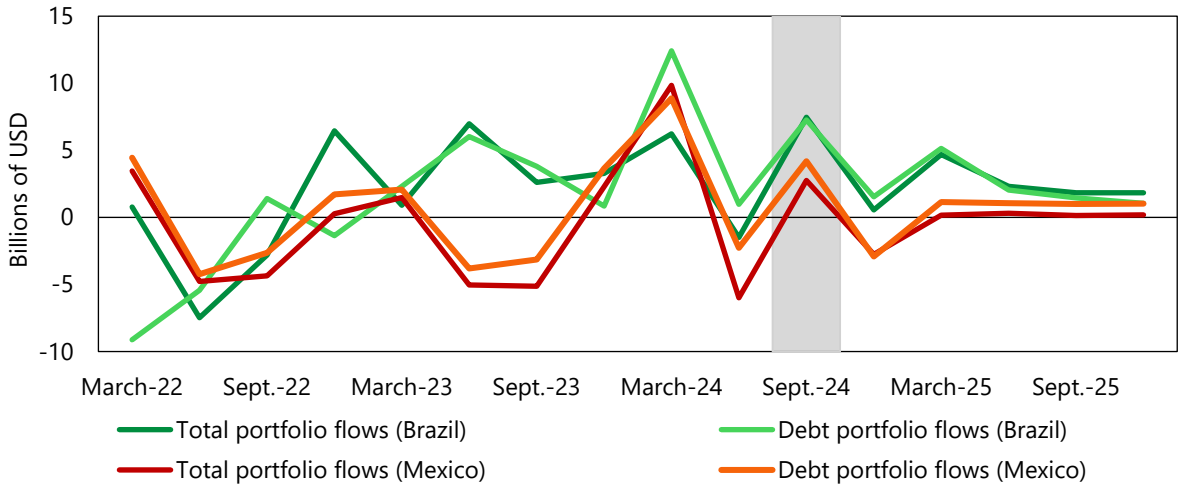
In this context, the appreciation of the JPY and the compression of interest rate differentials significantly reduced the profitability of these strategies. The strengthening of the yen increased the value of debt denominated in this currency, while the narrowing of differentials reduced the expected return on positions. As a result, investors incurred foreign exchange losses that, in some cases, exceeded the expected gains, prompting them to unwind positions to limit those losses.

This adjustment involved the sale of higher-risk assets and the repurchase of JPY, which amplified exchange rate movements and market volatility. The simultaneous liquidation of positions in investment currencies, together with the higher demand for yen to repay obligations, generated depreciation pressures on the former and appreciation pressures on the funding currency, intensifying adjustments in international markets.

In particular, the appreciation of the JPY and the higher cost of yen funding likely prompted the unwinding of carry-trade positions in currencies such as the BRL and the MXN, which are characterized by wide interest rate differentials. The reversal of these strategies coincided with portfolio investment outflows, particularly in debt instruments, as international investors reduced their exposure to assets denominated in these currencies.

In turn, portfolio investment flows to Brazil and Mexico reflect the persistence of the impact associated with the August 2024 shock. The shaded area in Graph B1. 5 identifies this episode, during which a significant reduction in flows is observed, mainly explained by outflows from debt instruments. Previously, these flows had maintained a positive trend in both countries, reaching peaks in the first quarter of 2024. However, following the beginning of the BoJ's rate hiking cycle, they have not returned to the levels observed before the shock.

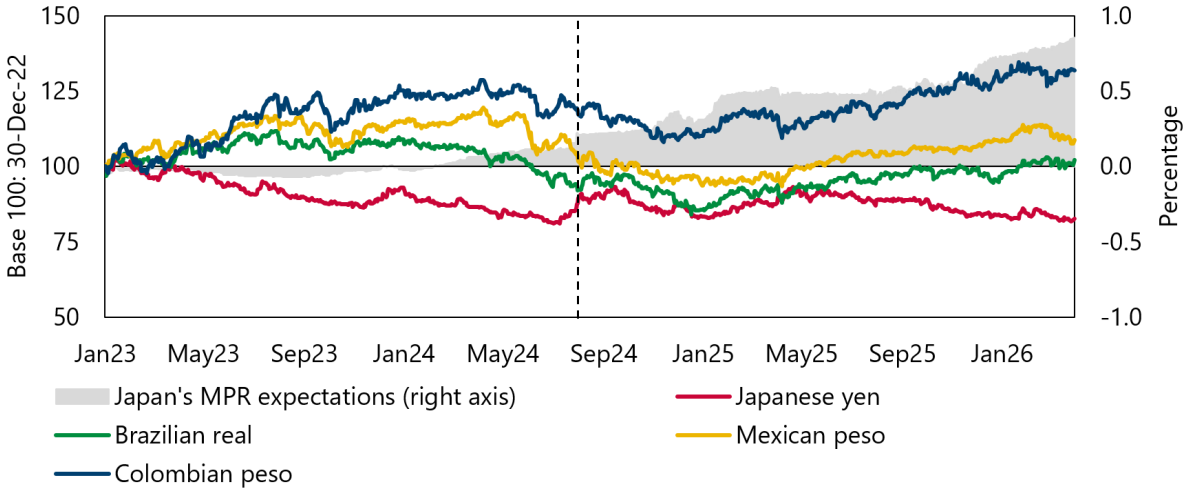
Graph B1. 5. Quarterly Foreign Investment Flows in Mexico and Brazil



Source: International Institute of Finance (IIF).

Available evidence suggests that this adjustment had a significant impact on the foreign exchange market dynamics of these economies (Graph B1. 6). In particular, the Mexican Foreign Exchange Market Committee of *Banco de México* (Banxico) noted that the unwinding of carry-trade positions, associated with changes in Japanese monetary policy, had a significant impact on the MXN (Banxico, 2024). Consistent with this, in the days following the BoJ's decision, the BRL depreciated by 3.16% and the MXN by 1.94%, reflecting pressures arising from the reversal of flows and the strengthening of the JPY.

Graph B1. 6. Performance of the Japanese Yen, Brazilian Real, Mexican Peso, Colombian Peso, and MPR expectations in Japan



Source: Bloomberg. **Note:** the dotted line corresponds to 31 July 2024, the date of the BoJ's decision to increase the MPR. Japan's monetary policy expectations are measured at a three-month horizon. Increases in foreign currencies indicate appreciation.

During the fourth quarter of 2024, a negative relationship was observed between monetary policy expectations in Japan and the performance of foreign currencies such as the BRL and the MXN, consistent with the unwinding of carry-trade positions. In particular, the increase

in expectations regarding the BoJ's monetary policy rate following July 31 reduced expected interest rate differentials and, consequently, the incentives to maintain these strategies, resulting in depreciation pressures on investment currencies.

Assessment of the event known as "Black Monday"

To assess the impact of the "Black Monday" episode on carry-trade strategies, an event study is conducted to identify whether, during this period, the analyzed currencies exhibited significant deviations from their usual performance.

Following MacKinlay's methodology (1997), the analysis is conducted in two stages:

1. First, the "normal" returns of carry-trade strategies for BRL, MXN, and COP against USD are estimated using a 130-day estimation window prior to the event. This makes it possible to characterize the dynamics of these strategies in the absence of shocks.
2. Second, these expected returns are compared with those observed during a short event window, defined from the BoJ's monetary policy adjustment until three days after "Black Monday," to identify abnormal returns attributable to the shock.

Formally, returns are modeled using a constant mean model, defined as:

$$R_{\{i,t\}} = \mu_i + \epsilon_{i,t}$$

Where $R_{\{i,t\}} \in \{R_{BRL}, R_{MXN}, R_{COP}\}$ corresponds to the returns of the carry-trade indicators for the foreign currencies analyzed, μ_i is the average return calculated over the estimation window, and $\epsilon_{i,t}$ is an error term with zero mean.

Based on this estimation, abnormal returns ($AR_{\{i,t\}}$) are defined as:

$$AR_{\{i,t\}} = R_{\{i,t\}} - \left(\hat{R}_{\{i,t\}}\right)$$

for t within the event window,$[t_0 - 4, t_0 + 3]$. These returns are aggregated over the event window, and their statistical significance is evaluated using the following statistic:

$$t = \frac{\sum_{\tau=t_0-4}^{t_0+3} AR_{i,\tau}}{\sigma_{AR*}\sqrt{N}}$$

where σ_{AR} corresponds to the standard deviation of abnormal returns and N is the number of observations within the event window. Statistical significance is assessed against a *t-student* distribution with N−1 degrees of freedom. The following results are obtained for each of the foreign currencies analyzed:

$$\mathrm{t}_{BRL} = -2.22^{*}, \mathrm{t}_{MXN} = -1.92^{*}, \mathrm{t}_{COP} = -1.48$$

These results show the presence of statistically significant abnormal returns for carry-trade strategies in BRL and MXN following the "Black Monday" shock, consistent with an abrupt adjustment in these positions. In contrast, no evidence of abnormal returns is found for the COP, suggesting a relatively lower impact during this episode.

Overall, these results are consistent with a reversal of carry-trade strategies concentrated on currencies with greater participation in this type of operation, such as the BRL and the MXN.

Subsequent developments and new risk episodes

Consistent with this episode, the relationship between JPY movements and the performance of foreign currencies such as the BRL and MXN weakened beginning in 2025, suggesting a lower relevance of the carry-trade channel using this funding currency for their exchange rates (Table B1. 1). Since then, the dynamics of these currencies have been driven by a greater extent by other global factors, such as international financial conditions, as well as by idiosyncratic factors specific to each economy, without exhibiting sensitivity comparable to that observed in response to movements in the Japanese yen. This pattern is consistent with a recomposition of funding currencies, in which the JPY has lost relative prominence compared with other alternatives, reducing its influence on the exchange rate dynamics of emerging economies.

Table B1. 1. Quarterly Correlations Between Japan's MPR Expectations and Currencies

Currency	correlation(Monetary policy expectations, currency)								
	2024-I	2024-II	2024-III	2024-IV	2025-I	2025-II	2025-III	2025-IV	2026-I
Brazilian real	-0,7	-0,5	-0,1^	-0,7	0,9	0,1^	0,6	-0,6	0,6
Mexican peso	0,7	-0,4	-0,9	-0,7	0,5	-0,1^	0,6	0,9	-0,2^
Colombian peso	0,4	-0,3	-0,6	-0,6	0,9	0,1^	0,5	0,4	-0,0^

Note: Authors' calculations based on Bloomberg data. Calculations were performed using Pearson correlation with daily data. Correlations marked with ^ were not statistically significant at the 0.05 significance level.

More recently, during April 2025, international financial markets were affected by developments in U.S. trade policy. The so-called "Liberation Day"[3] marked the materialization of a significant change in the level of tariffs imposed by the United States, with the announcement and implementation of more aggressive-than-expected trade measures, which generated significant disruptions in global financial markets[4].

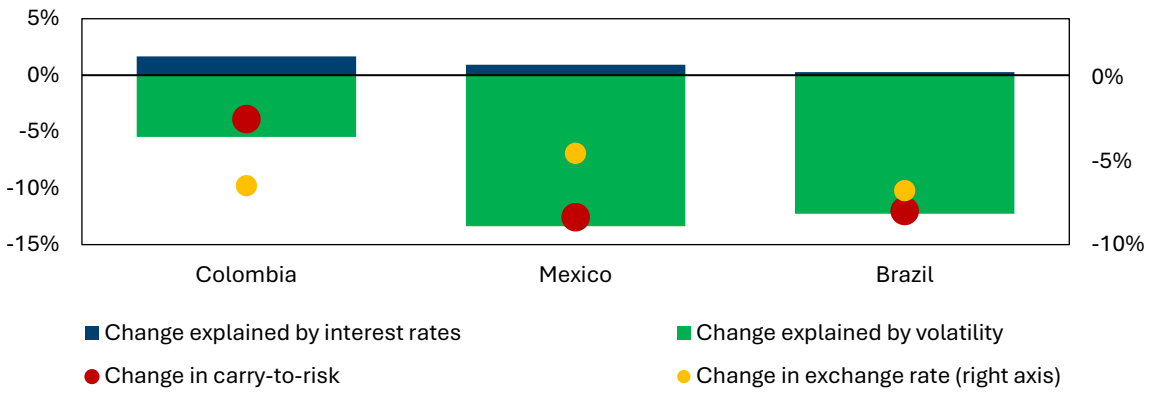
This announcement led to a marked deterioration in the value of the USD and in international equity markets, with the S&P 500 recording one of its worst relative performances since 1988. During this period, a significant increase in financial market volatility was observed, with indicators such as the VIX, VSTOXX[5], and MOVE[6] reaching

[3] Reflected in an increase in the VIX of close to 74% between April 3 and April 8.
[4] Minimum tariffs of 10% were imposed on most trading partners. In other cases, tariffs were higher, notably in the cases of China (34%), India (26%), Japan (24%), and the European Union (20%).
[5] Index reflecting 30-day implied volatility of the European equity market, calculated from options on the Euro Stoxx 50. It is interpreted as a measure of uncertainty in the Euro Zone equity markets.
[6] Index capturing implied volatility in the U.S. Treasury bond market, based on interest rate options. It is a key indicator of uncertainty in fixed income markets and of expectations regarding the monetary policy path.

historically elevated levels, also reflecting a deterioration in global growth expectations and greater demand for safe-haven assets. In this context, risk assets such as commodities and stocks recorded significant declines, partly due to a broad-based liquidation of positions, as investors sought to realize gains to offset losses in other segments of their portfolios.

In this context of heightened uncertainty, the incentives to implement carry-trade strategies in regional foreign currencies declined, while these foreign currencies depreciated. Between April 3 and April 8, risk-adjusted return indicators for these strategies fell by as much as 12.57%, while the currencies depreciated between 4.0% and 7.0%. This performance was mainly explained by an increase in expected volatility, which deteriorated the risk–return profile of these positions. Although markets showed some resilience and partially reversed this performance as trade negotiations progressed, the episode highlighted the high sensitivity of carry-trade strategies to changes in global risk appetite (Graph B1. 7).

Graph B1. 7. Change in Carry-to-Risk Explained by Its Components



Source: Bloomberg. Calculations: *Banrep*. **Note**: The graph shows the decomposition from 3 April to 8 April 2025.

Analyzing the direct effects of this event on the liquidity of the Colombian foreign exchange market (acknowledging the limitations in identifying flows associated with carry trade), a significant deterioration is observed during periods of heightened global risk aversion. Particularly, not only did COP volatility increase, in line with peer currencies, but intraday exchange rate dispersion also reached levels unobserved since 2015. Additionally, an increase was observed in the bid-ask spread for USD transactions and a reduction in market depth, both at COP 5 and COP 10 levels and in aggregate. Overall, these indicators suggest that, during these episodes, the market became more volatile and less liquid.

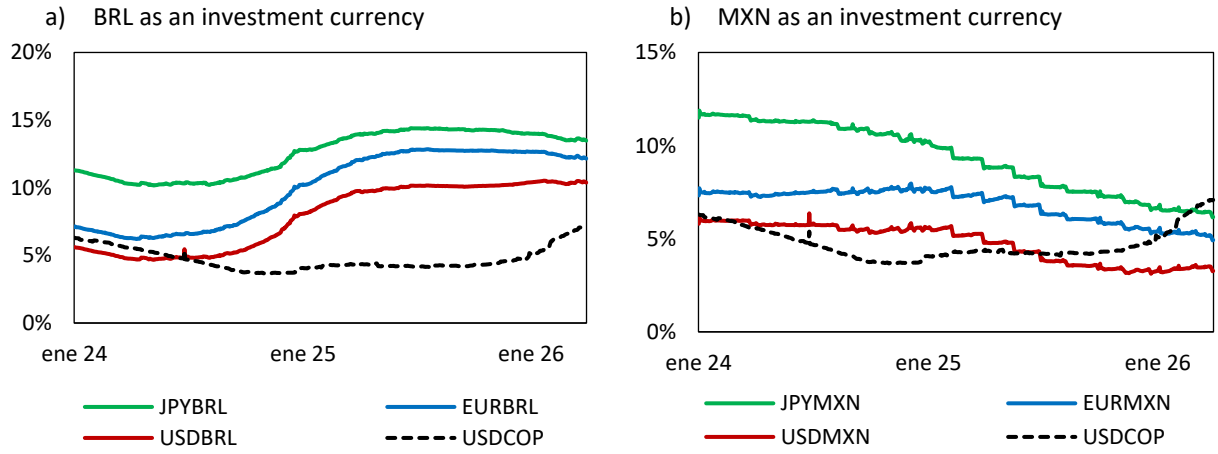
These results highlight the importance of analyzing how episodes of global volatility may affect foreign investors' flows into the country and the region. Particularly, it is essential to identify the currencies in which these strategies are funded and the types of investors that implement them, given that carry-trade-related incentives can affect both exchange rate dynamics and the country's relative positioning against other economies in the region in terms of investment attractiveness.

4. Possible recomposition of funding currencies used for carry-trade strategies since 2024 in Latin America

Relative conditions among the main funding currencies have changed since 2024, favoring alternatives to the JPY. In contrast to the tightening of monetary policy in Japan, both the European Central Bank and the Federal Reserve have begun cycles of interest rate reductions, which has widened interest rate differentials in strategies funded in euros (EUR) and, to a lesser extent, in USD. In this context, this box is limited to analyzing these three funding currencies (USD, EUR, and JPY), given that they concentrate the highest liquidity in the region's[7] markets and provide sufficient data availability for the methodological approach employed.

In Graph B1. 8, using the USD–COP peer as the local benchmark to compare interest rate differentials for MXN and BRL vis-a-vis different funding currencies, it is observed that the USD-funded carry-trade strategy investing in COP has become more attractive than strategies investing in MXN (regardless of the funding currency), while it has lost attractiveness relative to those investing in BRL. These differences have been dynamic and reflect changes in monetary policy stances and macroeconomic conditions across countries.

Graph B1. 8. Expected Interest Rate Differentials Between Funding Currencies and Investment Currencies



Source: London Stock Exchange Group (LSEG) Workspace. Note: Interest rate differentials are calculated as a geometric difference between three-month expectations of the investment currency rate and three-month expectations of the funding currency rate. This is done to extract the expected three-month interest rate differential. Implied volatility, in turn, is derived from three-month options.

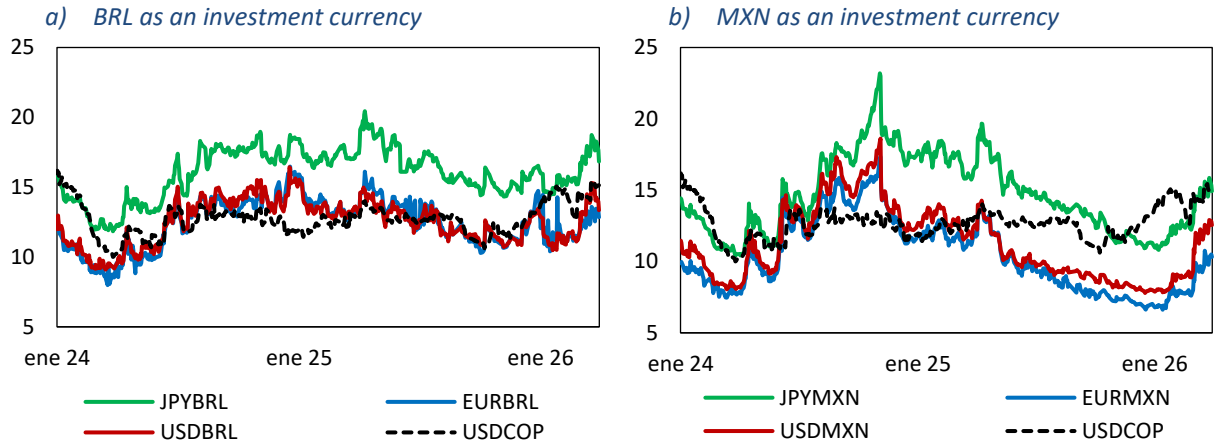
The higher level of exchange rate volatility has reduced the attractiveness of these strategies, particularly those funded in JPY. As shown in Graph B1. 9, these positions have exhibited episodes of high volatility, particularly in contexts global uncertainty, increasing the likelihood that gains derived from interest rate differentials may be reduced or even

[7] According to the 2025 BIS Triennial Survey, the USD, EUR, and JPY account for the largest shares of the foreign exchange market, representing 89.21%, 28.9%, and 16.77% of transactions, respectively.

reversed by adverse exchange rate movements. During the second half of 2024, rising global uncertainty deteriorated the risk–return profile of these strategies. Factors such as fiscal concerns in advanced economies contributed to this environment, affecting JPY-funded positions to a greater extent. Consistently, subsequent episodes such as "Liberation Day" also reduced risk appetite, lowering incentives to implement these strategies in emerging economies.

More recently, during the first quarter of 2026 (1Q26), rising geopolitical tensions have led to a broad-based increase in volatility, affecting incentives to implement carry-trade strategies across different currency pairs (Graph B1. 9). In particular, the intensification of conflicts in the Middle East and tensions between the United States and Europe have contributed to a more uncertain environment, increasing volatility in both funding and investment currencies and deteriorating the risk–return profile of these strategies. In this context, the COP has maintained elevated volatility levels, driven by both global uncertainty and other idiosyncratic factors, which has reduced its attractiveness for carry-trade strategies.

Graph B1. 9. Implied Volatility of Options Across Foreign Currencies



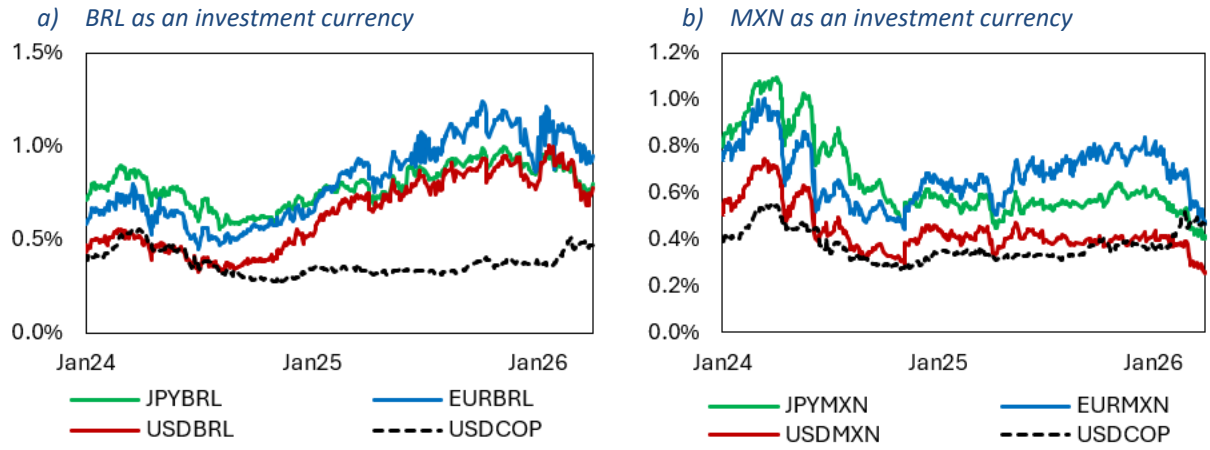
Source: LSEG Workspace. Note: Interest rate differentials are calculated as a geometric difference between three-month expectations of the investment currency rate and three-month expectations of the funding currency rate. This is done to extract the expected three-month interest rate differential. Implied volatility, in turn, is derived from three-month options.

When jointly considering interest rate differentials and expected exchange rate volatility, a change in the relative attractiveness of carry-trade strategies since 2024 is observed. Particularly, using volatility-adjusted metrics, it is evident that strategies such as JPY–MXN have lost attractiveness, while the EUR has gained relevance as a funding currency, especially in positions against the BRL and the MXN.

In contrast, the USD has shown a more limited performance as a funding currency globally, as its risk-adjusted differential does not necessarily offset the observed levels of volatility. This has reduced its relative attractiveness compared to alternatives such as the

EUR in carry-trade strategies toward emerging economies. In the case of the COP, USD-funded strategies have gained relative attractiveness, in line with the widening of interest rate differentials. Particularly, these strategies have shown better risk-adjusted performance compared to those involving the MXN (Graph B1. 10).

Graph B1. 10. Evolution of Incentives to Take Carry-Trade Positions



Source: LSEG Workspace. Calculations: *Banrep*.

From a forward-looking perspective, several factors suggest that the JPY could maintain a less relevant role as a funding currency in the medium term. These include higher fiscal financing needs in Japan, uncertainty regarding debt sustainability, and the ongoing monetary normalization process, all of which have reduced its relative attractiveness as a funding source for carry-trade strategies.

In this context, a recomposition of funding currencies is observed, in which the EUR and, to a lesser extent, the USD, have gained relative relevance. In particular, interest-rate reduction cycles in advanced economies other than Japan have contributed to widening the interest rate differentials underlying these strategies against emerging market currencies, thereby favoring their use as alternative funding currencies.

As a result, the sensitivity of regional currencies to JPY movements could be lower than in previous episodes, consistent with the reduced relevance of flows associated with yen-funded strategies, which have not returned to levels observed prior to the August 2024 shock. This shift suggests a weaker direct transmission of Japanese financial conditions to emerging market currencies, although this relationship continues to depend on global liquidity conditions and risk appetite.

In the case of the USD, its attractiveness as a funding currency could be supported by expectations of relative weakening of the foreign currency. However, this effect is conditioned on the evolution of global volatility and the path of monetary policy in the United States, factors that directly affect the risk-adjusted interest rate differential and, therefore, the attractiveness of implementing such strategies.

5. Conclusions

Carry-trade strategies are based on interest rate differentials but are subject to significant risks associated with exchange rate volatility and episodes of global uncertainty. Particularly, their profitability depends positively on interest rate differentials and negatively on adverse exchange rate movements, making them highly sensitive to changes in international financial conditions.

Episodes of higher risk aversion may trigger abrupt unwinding of these strategies, with relevant effects on emerging market currencies. The August 2024 "Black Monday" episode is an illustrative example: foreign currencies such as the BRL and the MXN were affected amid flow reversals, changes in monetary policy expectations in Japan, and portfolio investment outflows that have not yet returned to pre-shock levels.

Subsequently, a lower sensitivity of emerging-market foreign currencies to JPY movements has been observed, consistent with a recomposition of funding currencies. Changes in expected global monetary policy paths have reduced the relative attractiveness of the Japanese yen, favoring the use of other currencies such as the EUR and, to a lesser extent, the USD in these strategies.

In this context, evidence suggests changes in the relative attractiveness of different combinations of funding and investment currencies, driven by the interaction between interest rate differentials, exchange rate volatility, and liquidity conditions. However, these patterns are not static and respond dynamically to the evolution of the global macroeconomic and financial environment.

From a forward-looking perspective, the JPY is likely to maintain a less relevant role as a funding currency, while other currencies such as the EUR may continue gaining participation as financing alternatives. However, the consolidation of these trends will depend on the evolution of global monetary policy, financial market volatility, and international liquidity conditions.

This analysis has limitations related to data availability. Therefore, the results should be interpreted cautiously. Given the nature of these strategies and their predominant implementation in OTC markets, it is not possible to directly observe the magnitude of positions or their distribution across agents. In this context, the analysis is based on proxies for incentives, complemented by qualitative evidence from discussions with market participants, rather than direct measurements.

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