The Short Road to De-Dollarisation: A New Currency Composition of Brazil's External Liabilities (2002 – 2025)

Renato de Souza Rosa[1]

André Martins Biancarelli[2]

RESUMO

Este artigo analisa a desdolarização do passivo externo brasileiro entre 2002 e 2025. O processo não decorre da redenominação da dívida externa tradicional, que permanece predominantemente denominada em moeda estrangeira, mas de uma mudança na composição dos passivos, associada à expansão do investimento direto, do investimento em ações e dos títulos públicos domésticos. A partir de uma abordagem abdutiva, investigam-se seus determinantes, com ênfase na interação entre fatores globais e domésticos, embora com predomínio dos primeiros. Os resultados indicam que a desdolarização é predominantemente *market-driven*, refletindo decisões de alocação de portfólio em escala global, ao mesmo tempo em que depende das condições institucionais associadas à abertura financeira doméstica. Nesse contexto, a incorporação recorrente de ativos denominados em moeda local nos portfólios internacionais confere à desdolarização um caráter mais estrutural, e não meramente transitório.

PALAVRAS-CHAVE: Denominação monetária; passivo externo; fluxo de capitais; integração financeira; mercados emergentes;

ABSTRACT

This paper examines the de-dollarisation of Brazil's external liabilities from 2002 to 2025. The process does not originate from the redenomination of traditional external debt, which remains largely denominated in foreign currency, but from a shift in the composition of liabilities, linked to the expansion of foreign direct investment, portfolio equity, and domestic sovereign bonds. Employing an abductive approach, the study explores its primary determinants, emphasising the interaction between global and domestic factors, with a clear dominance of the former. The findings suggest that de-dollarisation is primarily driven by market forces, reflecting global portfolio allocation decisions, while also relying on the institutional conditions related to domestic financial liberalisation. In this context, the recurrent inclusion of domestic-currency-denominated assets in international portfolios lends a structural, rather than transient, nature to de-dollarisation.

KEYWORDS: Currency denomination; external liabilities; capital flows; financial integration; emerging markets.

JEL CLASSIFICATION: F32; F34; G15; F21.

[1] Doutor em Economia pelo IE/Unicamp. renato08@unicamp.br; https://orcid.org/0000-0002-8937-4468

[2] Professor Associado do IE/Unicamp. andremb@unicamp.br ; https://orcid.org/0000-0002-2224-3607

1. Introduction

The currency composition of external liabilities has historically been a key factor in external vulnerability within emerging market economies (EMEs). From a balance-sheet perspective, currency mismatches between assets and liabilities serve as a primary transmission mechanism for external shocks. For instance, the "original sin hypothesis" (Eichengreen, Hausmann & Panizza, 2005; Eichengreen, Hausmann & Panizza, 2023) underscores the structural incapacity of these economies to issue external debt denominated in their own currencies, thereby representing a major source of external fragility.

Over the past two decades, however, the Brazilian case presents a notable change in external liabilities. At the beginning of 2002, traditional external debt, composed mainly of external loans and bonds issued in international markets, accounted for 56.6% of total external liabilities. By the end of 2025, this share had declined to just 17.2%. Along with this change, the share of domestic-currency-denominated external liabilities has increased significantly, rising from 32.6% to 69.1% in the same period[3]. This shift did not occur through the redenomination of traditional external debt, which remains largely denominated in foreign currency, but through the expansion of domestic-currency instruments, particularly foreign direct investment, stocks and sovereign bonds held by non-resident investors.

This new reality raises two central questions. First, what are the key determinants of this process, and how do global and domestic factors interact to shape demand for domestic-currency assets? Second, to what extent does the observed transformation reflect a structural change in the composition of external liabilities rather than a transitory outcome? This paper seeks to answer these two questions by analysing the Brazilian de-dollarisation process.

The analysis developed in this paper approaches these questions from an abductive perspective, in which interpretation emerges from the interaction between empirical evidence and theoretical frameworks. The analysis is grounded in a Keynesian-structuralist approach to the international liquidity cycles affecting EMEs. This perspective provides a useful lens for interpreting the dynamics of non-resident demand for domestic-currency assets in the Brazilian economy, while also allowing for the role of domestic conditions in shaping the magnitude and composition of these flows.

The remainder of the paper is organised as follows. Section 2 presents the evolution of Brazil's external liabilities and documents the key features of the de-dollarisation process. Section 3 sets out the theoretical basis for our interpretation of the phenomenon, focusing on the determinants of capital flows to emerging market economies. Section 4 assesses in detail the "short road to de-

[3] According to BCB data. The de-dollarization process was first notices by Rodrigues (2008), Biancarelli (2012), and Noije (2014).

dollarisation" in Brazil, beginning with its cyclical and structural components, then examining the major modalities of flows and stocks involved (foreign direct investment, portfolio equity and sovereign bond markets), and finally discussing the role of exchange-rate and sovereign risks. Section 5 summarises empirical findings and proposes an interpretation of the determinants of de-dollarisation, concluding the article.

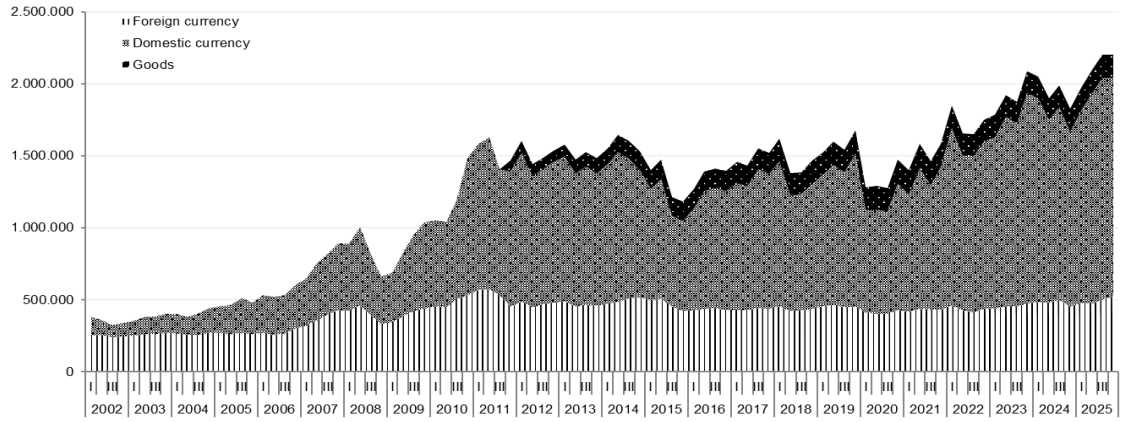
2. The De-Dollarisation of Brazilian External Liabilities

The quarterly International Investment Position (IIP) data, published by the Central Bank of Brazil (BCB), provide a comprehensive basis for analysing the composition of the country's external liabilities. Unlike traditional external debt statistics, which capture only a subset of cross-border obligations, the IIP encompasses the full range of financial positions between residents and non-residents, enabling a more comprehensive assessment of the currency composition of external exposure.

Although available statistics do not provide a complete currency breakdown across all liability categories, it is possible to derive a close approximation of the share of domestic-currency-denominated liabilities. For external debt instruments, detailed information indicates that domestic currency accounts for only a marginal share of both traditional external debt and intercompany lending. By contrast, securities issued in the domestic market and held by non-resident investors are fully denominated in Brazilian reais (BRL). A similar classification applies to equity-type liabilities: both the equity component of foreign direct investment (FDI-equity) and non-resident holdings in the domestic stock market are treated as denominated in domestic currency.

Total external liabilities expanded substantially between 2002 and 2025, rising from approximately USD 379.9 billion to more than USD 2.2 trillion. This expansion was driven mainly by liabilities denominated in domestic currency, which increased from USD 120.9 billion in the early 2000s to around USD 1.5 trillion in 2025. Foreign-currency-denominated liabilities remained relatively stable in absolute terms, fluctuating within a narrower range of approximately USD 300–500 billion. The de-dollarisation process, therefore, appears primarily as a compositional transformation, rather than a reduction in external exposure to foreign-currency debt (see Figure 1).

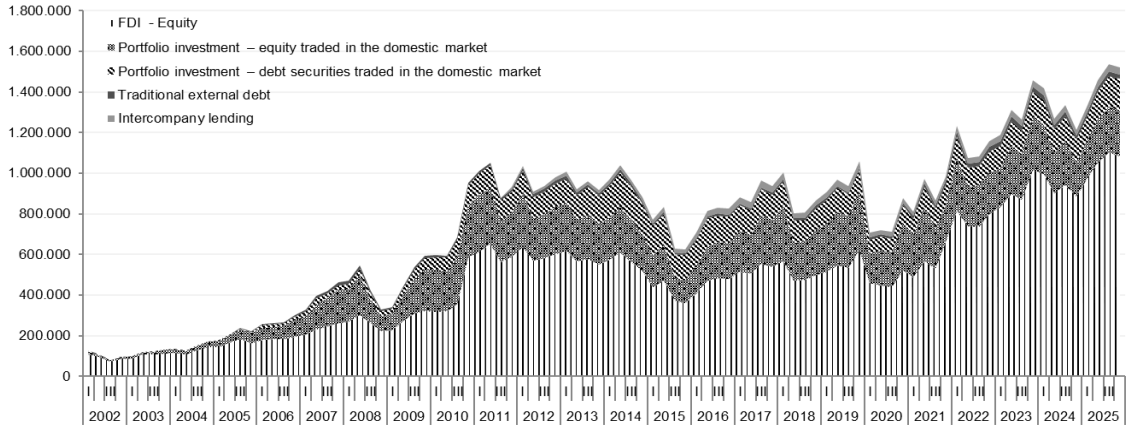
Figure 1 – External liabilities by denomination, US$ million, 2002 - 2025



Source: Authors' elaboration based on data from the BCB.

FDI-equity consistently accounts for the largest share, underscoring its central role in this process. Portfolio investment gains prominence from the mid-2000s onwards, reflecting the growing participation of non-resident investors in both stock markets and sovereign bonds. In turn, traditional external debt remains marginal within the composition of domestic-currency liabilities (see Figure 2).

Figure 2 - External liabilities denominated in domestic currency, US$ million, 2002–2025



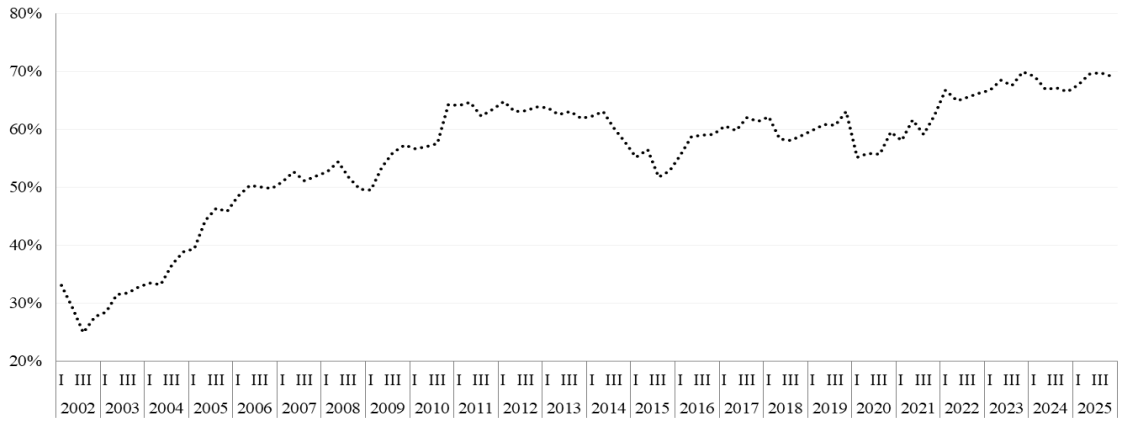
Source: Authors' elaboration based on data from the BCB.

To measure this process, we construct a synthetic de-dollarisation indicator (ELDI – External Liability De-Dollarisation Index), defined as the ratio of domestic-currency liabilities to total external liabilities, both expressed in U.S. dollars. Reported as a percentage, the index provides a direct and consistent measure of the extent of de-dollarisation of the country's external balance sheet, as defined in Equation 1:

$$ELDI = \frac{Liabilities_{USD}^{BRL}}{Liabilities_{USD}^{TOTAL}} \quad (1)$$

The Brazilian ELDI follows a two-phase trajectory (see Figure 3). From the early 2000s to the mid-2010s, it rises sharply from around 30% to approximately 65%, indicating a sustained de-dollarisation process. Thereafter, the process stabilises, with the index fluctuating around a high plateau. Despite some cyclical variation, particularly around 2015 and 2020, there is no evidence of reversal. This pattern suggests a structural shift in the composition of external liabilities, rather than a transitory adjustment driven by short-term fluctuations.

Figure 3 – Brazilian ELDI, %, 2002 – 2025

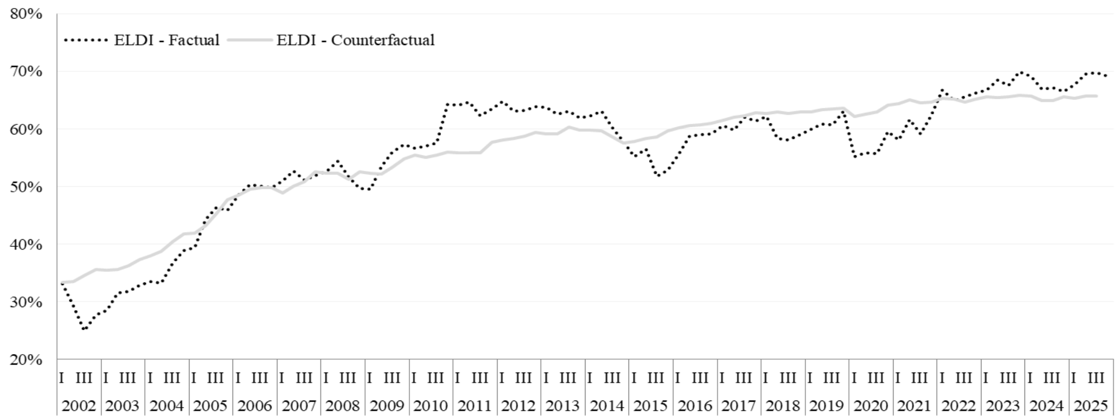


Source: Authors' elaboration based on data from the BCB.

This evidence raises an additional question about the drivers of de-dollarisation: whether the observed pattern reflects net capital inflows or valuation effects arising from exchange-rate movements and asset-price fluctuations. To address this, we construct a counterfactual ELDI based exclusively on net capital inflows. The counterfactual series is obtained by cumulating these flows over time, abstracting from valuation changes in the stock of external liabilities, and is then compared with the observed index.

As illustrated in Figure 4, the factual and counterfactual series demonstrate closely aligned trajectories throughout the observed period, effectively capturing both the upward trend in de-dollarisation and its cyclical fluctuations. This pronounced co-movement suggests that capital flows serve as the primary catalyst for variations in the currency composition of external liabilities. Deviations between the two series are minimal and transient, with disparities typically closing rapidly. Such quick convergence indicates that valuation effects are largely ephemeral and do not significantly influence the overall trajectory of the ELDI. Consequently, de-dollarisation emerges as predominantly a flow-driven process.

Figure 4 – Factual and counterfactual ELDI, %, 2002 - 2025



Source: Authors' elaboration based on data from the BCB.

In summary, Table 1 synthesises the stylised facts on the evolution, composition, and drivers of de-dollarisation in Brazil's external liabilities.

Table 1 - Summary of key empirical findings

Statement	Empirical Evidence	Interpretation
Rising share of domestic-currency-denominated external liabilities	The share rose from 32.6% in 2002 to 69.1% in 2025	Signals a sustained shift in the currency composition of external liabilities
Absence of redenomination in traditional external debt	Only 5% of external debt was denominated in domestic currency in 2025	Indicates that de-dollarisation occurs alongside, rather than through, changes in traditional debt instruments
Expansion of foreign-currency liabilities in absolute terms	Foreign-currency liabilities increased from USD 253.9 billion to USD 520.5 billion (2002–2025)	Confirms that de-dollarisation reflects a compositional shift, not a reduction in foreign-currency exposure
Concentration of domestic-currency liabilities in a few asset classes	FDI (equity), portfolio equity, and sovereign bonds accounted for 96% in 2025	Reveals a selective pattern of integration into global portfolios
Predominance of capital flows over valuation effects	Counterfactual ELDI rises from 33.4% to 65.7% based on flows alone	Establishes de-dollarisation as a flow-driven process
Persistence across cycles and stress episodes	ELDI rose steadily until the mid-2010s and remained elevated despite volatility and rising country risk	Supports the interpretation of a structural, though bounded, transformation

Source: Authors' elaboration.

Building on these initial findings, the analysis now shifts from a description of de-dollarisation to an investigation of the factors influencing capital flows that drive fluctuations in the currency composition of external liabilities. The subsequent section provides the theoretical foundations for examining this issue, addressing the interplay between global (push) and domestic (pull) factors that affect external demand for these assets, and distinguishing between cyclical and structural drivers.

3. Theoretical inputs: drivers of capital flows to emerging markets assets

The topic of capital flows to emerging markets is neither new nor exclusively related to the composition of external assets/liabilities. To better address our specific question, it is possible to organise the theoretical discussion around three interconnected determinants: international liquidity

cycles, portfolio allocation under risk and uncertainty, and the specific conditions governing the demand for emerging market assets by international investors.

The empirical literature documents the cyclical nature of capital flows to Emerging Market Economies (EMEs), characterised by alternating periods of expansion and contraction in the availability of external financing. Since the seminal contribution of Calvo, Leiderman & Reinhart (1993), the literature has framed these dynamics in terms of both external "push factors" and domestic "pull factors." While both sets of factors are recognised as relevant, a substantial body of empirical evidence indicates that global conditions predominate. More recently, Koepke (2019) provides a comprehensive synthesis of the empirical evidence, emphasising the central role of global factors, particularly for portfolio flows, which are more sensitive to changes in risk appetite and international interest rates. These dynamics manifest in recurrent episodes of capital flow surges and sudden stops (Calvo, 1998; Calvo & Reinhart, 2000; Reinhart & Reinhart, 2008; Powell & Tavella, 2015), during which inflows expand or reverse abruptly, often with limited connection to domestic fundamentals.

Within a Keynesian–structuralist framework, these cyclical patterns are interpreted as reflecting structural asymmetries in the international monetary and financial system (Ocampo, 2001; Prates, 2005). These asymmetries have direct implications for capital flows to EMEs, which are best understood as the outcome of portfolio allocation decisions by global investors rather than as the financing needs of recipient economies. Assets issued by EMEs tend to be incorporated into global portfolios primarily during periods of lower global liquidity preference, when investors are willing to move down the liquidity hierarchy in search of higher returns. Conversely, increases in global risk aversion trigger a reallocation toward more liquid assets, reinforcing the cyclical nature of capital flows. In this sense, variations in global liquidity conditions reflect changes in international liquidity preference and investors' portfolio choices (Biancarelli, 2009; De Conti, Biancarelli & Rossi, 2013; Bonizzi, 2017).

The analysis of the international liquidity cycle can be deepened by framing it as a problem of portfolio allocation. Rather than viewing capital flows merely as responses to shifts in global risk appetite, they can be understood as the outcome of systematic allocation decisions by international investors.

In its standard formulation, originating in Markowitz (1952, 1959), portfolio choice is based on a trade-off between expected return and risk, with diversification across assets emerging as the key mechanism through which this trade-off is managed. By combining assets with imperfectly correlated returns, investors can improve the overall risk-return profile of their portfolios, allocating

capital across a broader set of assets in order to enhance returns without a proportional increase in risk.

While the standard asset selection framework provides a useful benchmark, it relies on the assumption that risk can be represented by known probability distributions. The distinction introduced by Knight (1921) between risk and uncertainty highlights that many economic decisions are taken under conditions in which probabilities cannot be objectively determined. Under such conditions of fundamental uncertainty, agents exhibit a preference for flexibility, which elevates the importance of liquidity in portfolio decisions. Building on this insight, Keynes (1936, Chapter 17) formalises liquidity as a defining attribute of assets. Each asset is evaluated according to its own rate of interest, which combines expected yield, carrying costs, expected capital gains, and a liquidity premium.

Portfolio allocation can therefore be understood as reflecting the interaction among various dimensions: expected return, perceived risk – including both market and credit risk – and the liquidity premium. The willingness of investors to hold less-liquid assets depends on the compensation required to relinquish liquidity in uncertain environments.

This perspective shifts the analytical focus from the volume of capital flows to the conditions under which international investors are willing to allocate part of their wealth to assets issued by EMEs. The demand for emerging market assets, therefore, depends on three groups of factors.

First, institutional conditions must allow non-resident investors to access domestic financial markets. This includes both the degree of financial openness and the regulatory frameworks governing international capital movements. Financial integration thus constitutes a necessary, but not sufficient, condition for capital inflows. Second, global financial conditions shape investors' willingness to move along with the international liquidity hierarchy. In periods of lower liquidity preference and abundant global liquidity, investors expand their exposure to assets with lower liquidity premiums, including those issued by EMEs. Conversely, increases in global risk aversion led to a retrenchment toward more liquid and safer assets, thereby contracting capital flows to EMEs. Third, investment decisions ultimately depend on the relative assessment of expected return and perceived risk.

It also implies a logical ordering in the determinants of capital flows, consistent with the empirical literature. The incorporation of EMEs assets into global portfolios depends, first, on the existence of institutional conditions that allow market access; second, on global liquidity conditions that shape investors' willingness to move along the international liquidity hierarchy; and third, on the relative assessment of expected return and perceived risk. Within this structure, the increasing role of

domestic-currency assets in external liabilities can be understood as the outcome of portfolio allocation decisions that operate across these interrelated levels.

4. The Short Road to De-Dollarisation in Brazil

Based on the assumptions outlined above, this section examines Brazil's recent experience in six steps. The first two subsections address structural and cyclical determinants, respectively. The following two deal in detail with the largest components of capital flows: FDI equity and portfolio equity. Finally, the last two discuss the roles played by currency risk and credit risk.

4.1. International financial integration

The first dimension through which the flow-driven de-dollarisation process in Brazil can be understood relates to the structural conditions of international financial integration. At this level, two interrelated forces are at play, though not symmetrically. The first is global and structural, reflecting transformations in the dominant forms of international finance and the broader organisation of the international financial system. The second is domestic and conditional, comprising regulatory and institutional changes that expand non-residents' access to domestic financial assets. While the former shapes the overall configuration of global portfolio allocation, the latter conditions the extent to which these global dynamics translate into effective participation in domestic-currency asset markets.

From a global perspective, financial globalisation has exhibited a new trend over the past two decades, characterised by the increasing importance of market-based intermediation and the growing presence of international investors in the domestic financial markets of emerging economies. As a result, domestic financial assets have become progressively integrated into global portfolios, allowing capital to flow directly into local markets rather than through traditional external debt instruments. This shift has increased the relative importance of foreign direct investment and portfolio flows in the composition of external liabilities in EMEs, as documented by Akyüz (2015, 2017) and Lane & Milesi-Ferretti (2007).

On the domestic side, Brazil's process of financial opening gradually expanded access to domestic financial assets by non-resident investors. While the legal framework for foreign capital dates back to Law No. 4,131/1962, the most significant steps toward liberalisation occurred from the late 1980s onward, as part of broader economic reforms. Over time, regulatory changes reduced restrictions on foreign participation and facilitated direct access to domestic financial markets. The introduction of a modern regulatory framework through CMN Resolution No. 2,689/2000 and its subsequent consolidation in Resolution No. 4,373/2014 enabled non-resident investors to operate directly in Brazilian financial markets, broadening access to equities and domestic debt instruments. In parallel, measures such as Law No. 11,312/2006, which granted tax exemptions on income from

government bonds held by foreign investors, increased the attractiveness of domestic sovereign debt. More recently, Law No. 14,286/2021 simplified the foreign exchange regime, reducing transaction costs and administrative barriers to cross-border financial operations.

This movement can also be visualised through the Chinn–Ito index (KAOPEN), a widely used de jure measure of financial openness based on information from the IMF's AREAER database, that captures statutory restrictions on capital account transactions and related exchange arrangements. For Brazil, the index indicates a clear regime shift starting in the early 2000s. From 2002 onward, KAOPEN shows a marked increase, reflecting the progressive relaxation of formal capital account restrictions and deeper legal integration into international financial markets. This upward movement peaks in the mid-2000s and remains at relatively elevated levels until around 2013, consistent with a period of sustained financial liberalisation and strong capital inflows. After 2014, however, the index declines and stabilises at a lower level, suggesting a partial reversal or tightening of de jure financial openness, potentially associated with regulatory adjustments and macroprudential measures introduced in response to changing external and domestic financial conditions.

In sum, the period in which de-dollarisation takes place coincides with a dual transformation in the structure of international finance and in Brazil's domestic regulatory framework. On the one hand, the growing importance of market-based intermediation and the increasing presence of international investors in local financial markets have expanded the role of emerging-market assets in global portfolios. On the other hand, domestic financial liberalisation has progressively reduced barriers to entry and enabled non-resident investors to operate directly in Brazilian markets. The expansion of liabilities denominated in reais is thus primarily associated with shifts in global portfolio allocation, with domestic factors operating as the institutional channel through which this demand is realised.

4.2. Liquidity preference in international financial markets

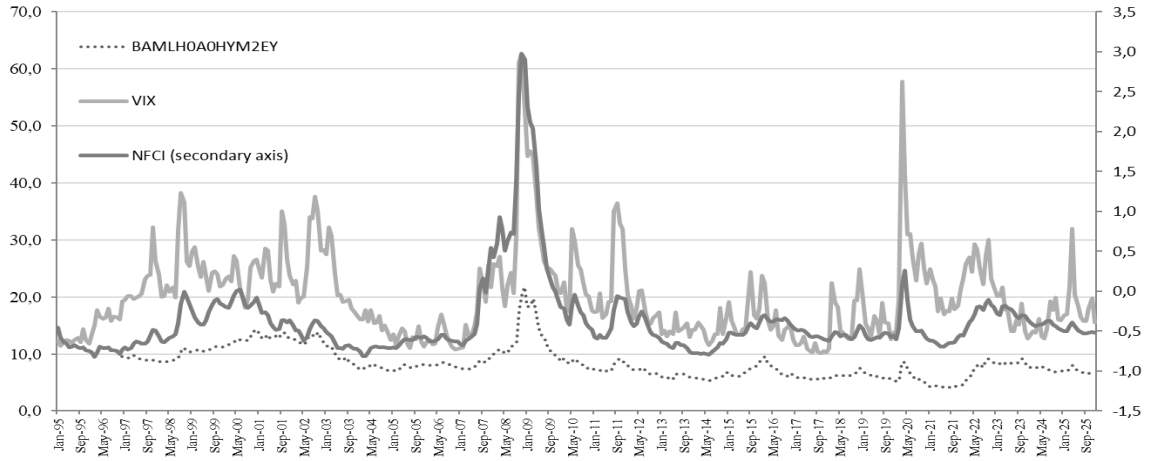
While the structural configuration associated with financial integration establishes the conditions under which capital can flow to EMEs, it does not fully account for the timing, magnitude, or composition of these flows. In this respect, shifts in international investors' liquidity preference play a central role in shaping cross-border portfolio allocation across currencies and jurisdictions. Within the analytical framework developed in the previous section, liquidity preference reflects investors' willingness to move along the international asset hierarchy, thereby defining the international cycle.

Because liquidity preference reflects expectations formed under conditions of uncertainty, it cannot be directly observed. Empirical analyses, therefore, rely on proxy variables that capture changes in global risk appetite. Among the most widely used indicators, the VIX, the fear index, measures market volatility and perceived risk, typically rising in periods of heightened uncertainty. Similarly,

high-yield credit spreads, such as the BAMLH0A0HYM2EY index, tend to widen when investors demand greater compensation for holding riskier assets, signalling a retrenchment from lower-quality securities. More comprehensive indicators, such as the National Financial Conditions Index (NFCI), aggregate information on credit conditions, risk premiums, and market functioning, providing a broader measure of global financial conditions.

As illustrated in Figure 5, the period of most pronounced de-dollarisation, between 2003 and 2010, generally aligns with a phase of relatively favourable global financial conditions, characterised by low volatility, compressed risk spreads, and abundant liquidity. Conversely, episodes of increased uncertainty, most notably the 2008 global financial crisis and the 2020 pandemic, are associated with temporary interruptions in this dynamic, reflecting a retreat toward more liquid positions.

Figure 5 – International liquidity preference proxies, points, 1995 – 2025



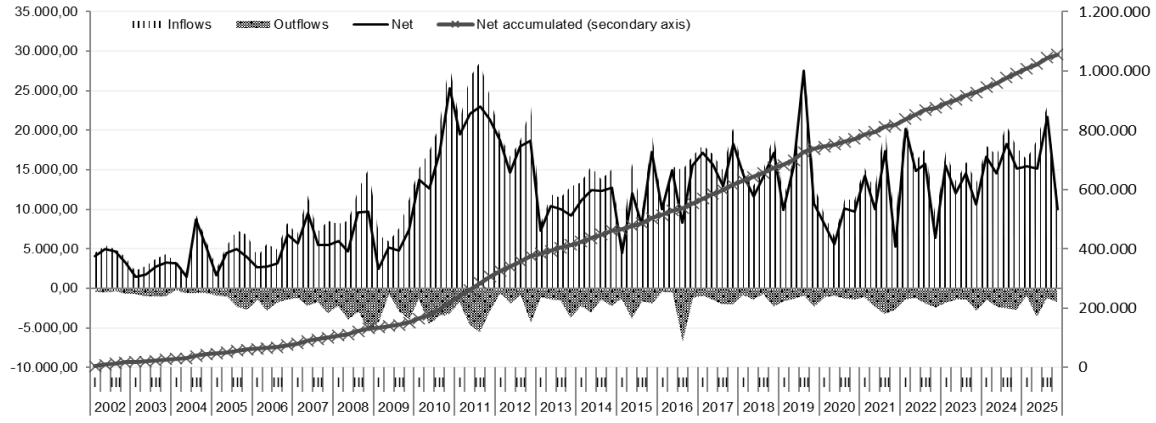
Source: Authors' elaboration based on data from Federal Reserve Economic Data - FRED | St. Louis Fed.

Changes in liquidity preference influence portfolio allocation decisions, thereby amplifying or limiting the demand for domestic-currency assets. Nevertheless, the association between global liquidity conditions and de-dollarisation is not straightforward. During the period prior to 2008, a conjunction of low volatility, narrowed risk spreads, and abundant global liquidity coincided with a rapid increase in liabilities denominated in domestic currency. This trend was temporarily disrupted during the global financial crisis, when a marked rise in liquidity preference prompted a retreat to more liquid assets. The subsequent normalisation of global liquidity conditions did not result in a renewed acceleration of de-dollarisation; rather, the process stabilised at relatively high levels. This indicates that although favourable global conditions are supportive, they are not sufficient on their own to sustain ongoing expansion. Moreover, neither the 2008 financial crisis nor the COVID-19 pandemic triggered a reversal of this trend, demonstrating a persistence that cannot be attributed solely to cyclical fluctuations in global liquidity.

4.3. FDI equity

FDI equity flows have been structurally positive throughout the period under analysis, with inflows consistently exceeding outflows (see Figure 6). This pattern reflects not only the persistence of net inflows but also the role of reinvested earnings, which drive the ongoing expansion of existing positions over time. Rather than serving as an autonomous source of financing, reinvested earnings signal the underlying profitability of these investments, indicating that foreign firms systematically choose to retain and expand their exposure in the domestic economy. FDI provides a relatively stable base that limits the scope for reversal in the de-dollarisation process, even during episodes of adverse global conditions.

Figure 6 – FDI – Equity, US$ million, 2002–2025



Source: Authors' elaboration based on data from the BCB.

The BCB's special series provides more detailed information on FDI. From a geographical perspective, inflows originate from a limited group of advanced economies, notably the United States, the Netherlands, Luxembourg, Spain, and France, which together accounted for approximately 56% of total inflows between 2002 and 2025. This concentration reflects the central role of multinational corporations headquartered in these economies in global capital allocation, as well as the use of specific financial centres, particularly the Netherlands and Luxembourg, to structure cross-border investments.

Sectorial allocation further clarifies the underlying return and risk profile of these investments. A significant share of FDI is directed to the services sector, which accounts for approximately 51% of total inflows, particularly in trade, financial services, and utilities. These sectors are predominantly oriented towards the domestic market and tend to generate relatively stable and predictable revenue streams, often supported by established regulatory frameworks and long-term demand conditions. The industrial sector, which receives around 33% of inflows, is concentrated in activities such as metallurgy and motor vehicle manufacturing, combining exposure to domestic demand with integration into regional and global value chains. Finally, the primary sector, accounting for

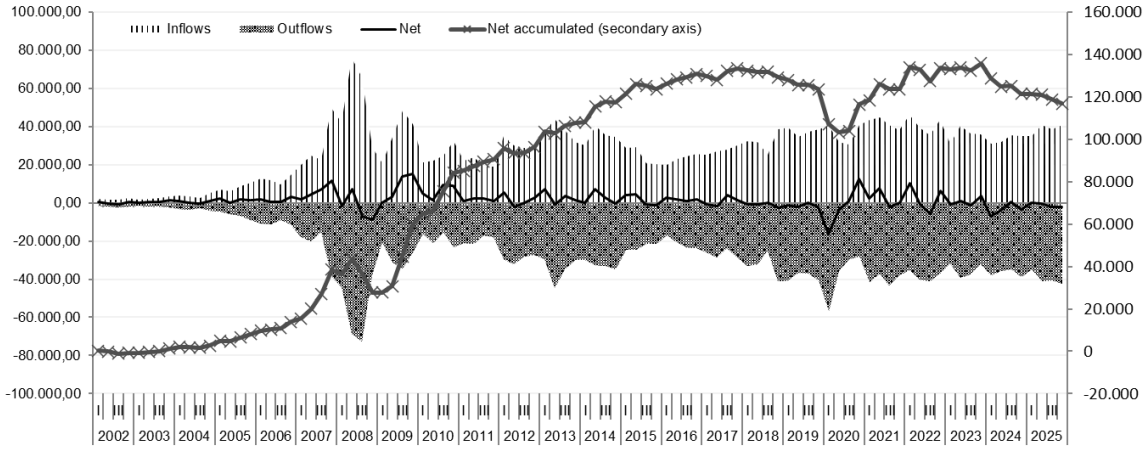
approximately 16% of inflows, is largely centred on oil and natural gas extraction, linking investment decisions to global commodity demand and price dynamics.

In the case of FDI, foreign exposure is anchored in productive activities capable of generating sustained returns, giving rise to a pattern of accumulation driven by profitability and reinvestment rather than by short-term financial conditions. As a result, positions tend to be maintained even in less favourable global environments, with adjustments occurring primarily through a deceleration of new investment rather than through large-scale capital outflows. This dynamic contrasts with the more fluid and reversible nature of portfolio flows and suggests that FDI serves as a structural anchor within the de-dollarisation process. Its contribution lies not only in expanding domestic-currency-denominated liabilities but also in stabilising their evolution over time, linking external financial integration to underlying processes of capital accumulation rather than to cyclical fluctuations in global liquidity.

4.4. Portfolio investment

For portfolio investors, domestic-currency assets have become a recurring component of globally diversified portfolios, even amid cyclical shocks. Their inclusion is sustained by their capacity to deliver relatively high returns for risks that can be managed, rather than eliminated, making them viable instruments in international portfolio allocation under conditions of uncertainty. As such, portfolio investment constitutes a central mechanism of de-dollarisation, insofar as it generates a persistent, albeit fluctuating, external demand for assets denominated in domestic currency. This demand is primarily concentrated in equity and sovereign debt securities, which account for 15% and 10% of domestic-currency liabilities, respectively, corresponding to 10% and 7% of total external liabilities.

Figure 7 – Equity trade in domestic market, US$ million, 2002–2025



Source: Authors' elaboration based on data from the BCB.

In the domestic equity market, cumulative net inflows from 2002 to 2025 are positive, totalling US$116.8 billion, despite substantial fluctuations over time. As illustrated in Figure 7, equity flows exhibit alternating phases of expansion and retrenchment, closely linked to shifts in global financial conditions. This reflects a dual behaviour of portfolio investment in EMEs in recent times: while flows are sensitive to global risk conditions, they are not purely transitory. Periods of stress, such as the 2008 global financial crisis and the pandemic shock, are often followed by *sudden returns* in capital flows.

A significant share of equity transactions is concentrated among a relatively small group of firms, with the ten most traded shares accounting for 36.3% of total volume. As shown in Table 2, these positions are predominantly directed towards large-cap, well-established companies, particularly in the financial and commodity sectors (blue-chip stocks). This configuration reveals a selective approach to risk exposure. Rather than dispersing investments across a broad set of firms, investors allocate resources to assets that combine scale, liquidity, and relatively stable revenue structures. Such allocation does not eliminate risk but allows for its management, particularly in markets characterised by higher volatility. In this sense, equity investment in Brazil reflects a strategy in which return-seeking behaviour is combined with portfolio-level risk control.

Table 2 – Most Ranking of the most traded shares by non-resident investors, R$ billion and %, 2025

Equities	Companies	Economic sectors	Value (R$ billion)		%
VALE3	Vale	Mining	R$	197,70	7,1%
PETR4	Petrobras	Oil, Natural Gas and Energy	R$	154,00	5,5%
ITUB4	Itaú Unibanco	Financial Sector	R$	130,60	4,7%
BBAS3	Banco do Brasil	Financial Sector	R$	89,00	3,2%
B3SA3	B3	Financial Sector	R$	87,60	3,1%
BBDC4	Bradesco	Financial Sector	R$	83,00	3,0%
ABEV3	Ambev	Food & Drink	R$	77,00	2,8%
PETR3	Petrobras	Oil, Natural Gas and Energy	R$	65,20	2,3%
WEGE3	Weg	Electronic Equipment	R$	65,10	2,3%
SBSP3	Sabesp	Water and Sanitation Services	R$	64,00	2,3%

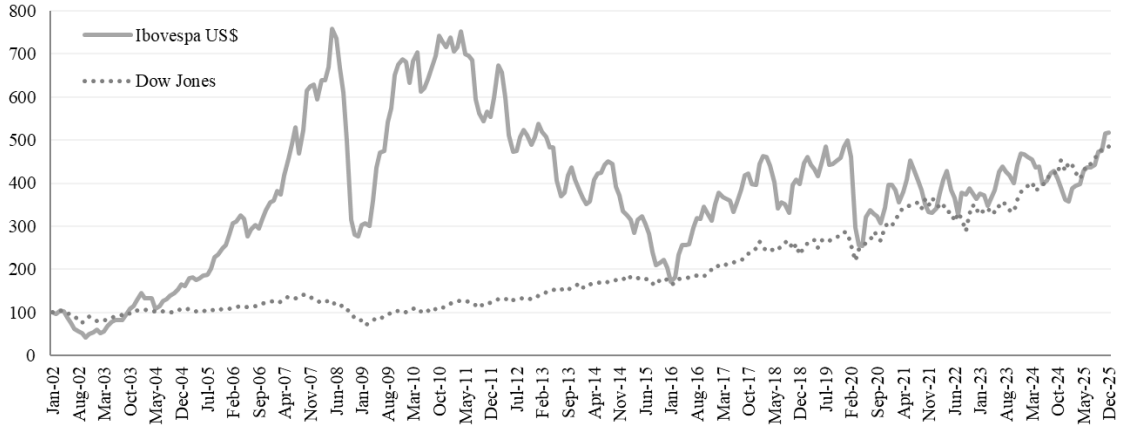
Source: Authors' elaboration based on data from DataWise.

Within this selective allocation strategy, equity investment is primarily focused on capital gains, with returns ultimately assessed in the key currency. Exchange rate dynamics therefore play a central role, acting as both a source of risk and an additional channel of return. Expressing the Ibovespa in U.S. dollars provides a closer approximation of the returns faced by non-resident investors, as it incorporates both asset price movements and currency fluctuations. As shown in Figure 8, Brazilian equities have offered higher return potential than benchmarks from advanced economies over extended periods, albeit with significantly higher volatility.

This trajectory includes episodes of sharp depreciation, notably during the 2008 global financial crisis and the pandemic, as well as a prolonged period of weak performance between 2011 and 2015, when falling equity prices combined with exchange-rate depreciation to produce negative

returns in dollar terms. These dynamics reinforce the role of Brazilian equities within globally diversified portfolios: assets that enhance expected returns while increasing exposure to risk, thereby requiring active management rather than passive holding.

Figure 8 – Ibovespa US$ and Dow Jones, points, 2002 - 2025

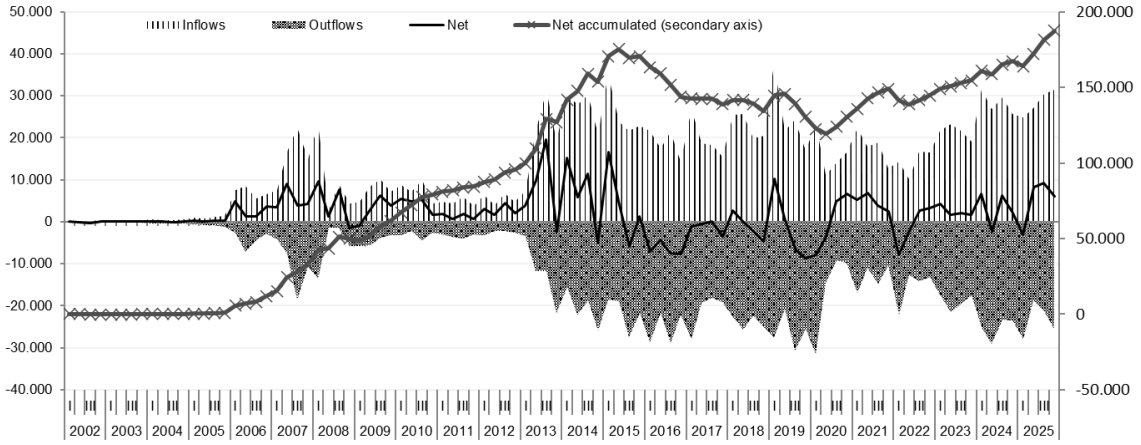


Source: Authors' elaboration based on data from IPEADATA.

The sovereign bond market is an additional, highly relevant channel through which non-resident investors can access domestic-currency-denominated assets. Following institutional changes that facilitated foreign participation, particularly from the mid-2000s onward, this segment saw a substantial rise in foreign investment (see Figure 9). Net inflows between 2002 and 2025 totalled US$ 187.4 billion, and the stock of non-resident holdings increased significantly over the period. The period between the mid-2000s and the early 2010s was characterised by strong inflows, supported by favourable external conditions and the growing integration of domestic debt into global portfolios. This dynamic was temporarily interrupted during the 2008 global financial crisis, when a sharp rise in risk aversion led to an abrupt retrenchment of foreign positions, followed by a relatively rapid, though partial, return of inflows as global liquidity conditions normalised.

From the mid-2010s onwards, however, the pattern has become less favourable. The combination of deteriorating domestic conditions and changes in the external environment led to a decline in foreign participation, without a subsequent recovery of the previous magnitude. In particular, the loss of investment-grade status prompted international investors to reassess risk, triggering a more persistent reduction in exposure to domestic sovereign bonds. Unlike the post-2008 episode, subsequent periods of improved global liquidity did not generate a comparable return of capital, indicating a shift in the relative attractiveness of these assets within global portfolios. As a result, this segment plays a more volatile role in the de-dollarisation process.

Figure 9 – Debt securities trade in domestic market, US$ million, 2002–2025



Source: Authors' elaboration based on data from the BCB.

Portfolio composition shows that investors do not allocate resources indiscriminately across available instruments. Fixed-rate securities, particularly LTN and NTN-F, remain the dominant component (see Table 3). First, government securities denominated in domestic currency largely mitigate credit risk, as the sovereign retains the capacity to service obligations in its own currency. Second, relatively high nominal interest rates provide an important source of return. Third, fixed-rate instruments offer the potential for capital gains in environments of declining interest rates. These features define a risk–return profile that is attractive within internationally diversified portfolios, combining yield with a comparatively well-defined and manageable risk structure.

Table 3 – Foreign holdings of domestic public debt, by instrument, R$ billion and %, 2011 - 2025

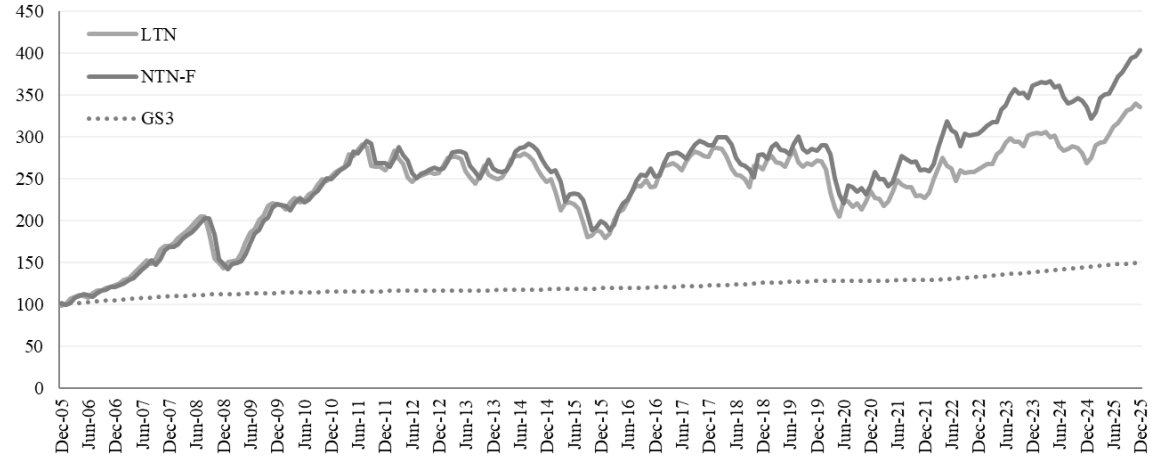
Year	Total	LFT		LTN		NTN-B		NTN-F		Others	
2011	R$ 202,3	R$ 8,6	4,2%	R$ 77,7	38,4%	R$ 28,8	14,2%	R$ 86,1	42,5%	R$ 1,2	0,6%
2012	R$ 263,0	R$ 10,4	3,9%	R$ 95,6	36,3%	R$ 56,0	21,3%	R$ 99,8	38,0%	R$ 1,2	0,5%
2013	R$ 326,6	R$ 7,4	2,3%	R$ 134,5	41,2%	R$ 46,5	14,2%	R$ 135,8	41,6%	R$ 2,4	0,7%
2014	R$ 407,0	R$ 8,7	2,1%	R$ 169,7	41,7%	R$ 72,7	17,9%	R$ 153,1	37,6%	R$ 2,7	0,7%
2015	R$ 497,8	R$ 7,6	1,5%	R$ 246,4	49,5%	R$ 58,3	11,7%	R$ 181,7	36,5%	R$ 3,8	0,8%
2016	R$ 427,8	R$ 11,6	2,7%	R$ 202,5	47,3%	R$ 38,9	9,1%	R$ 172,3	40,3%	R$ 2,5	0,6%
2017	R$ 416,3	R$ 11,0	2,6%	R$ 178,8	42,9%	R$ 32,4	7,8%	R$ 191,3	46,0%	R$ 2,8	0,7%
2018	R$ 418,4	R$ 17,8	4,2%	R$ 171,9	41,1%	R$ 15,7	3,8%	R$ 209,7	50,1%	R$ 3,3	0,8%
2019	R$ 425,8	R$ 18,0	4,2%	R$ 173,5	40,8%	R$ 17,4	4,1%	R$ 213,7	50,2%	R$ 3,3	0,8%
2020	R$ 440,5	R$ 15,3	3,5%	R$ 212,6	48,3%	R$ 20,1	4,6%	R$ 188,6	42,8%	R$ 4,0	0,9%
2021	R$ 565,0	R$ 27,5	4,9%	R$ 267,3	47,3%	R$ 50,8	9,0%	R$ 215,9	38,2%	R$ 3,4	0,6%
2022	R$ 533,5	R$ 22,9	4,3%	R$ 241,9	45,3%	R$ 54,4	10,2%	R$ 212,6	39,8%	R$ 1,7	0,3%
2023	R$ 594,2	R$ 46,0	7,7%	R$ 286,6	48,2%	R$ 50,9	8,6%	R$ 209,2	35,2%	R$ 1,6	0,3%
2024	R$ 710,9	R$ 110,3	15,5%	R$ 337,9	47,5%	R$ 40,1	5,6%	R$ 220,8	31,1%	R$ 1,7	0,2%
2025	R$ 859,6	R$ 166,9	19,4%	R$ 375,4	43,7%	R$ 66,6	7,8%	R$ 249,1	29,0%	R$ 1,6	0,2%

Source: Authors' elaboration based on data from Tesouro Direto.

To further assess return opportunities in this segment, a synthetic measure of investment performance in U.S. dollars can be constructed for the main instruments held by foreign investors. This measure captures the joint effect of domestic interest rates and exchange-rate fluctuations,

using the average cost of government debt as a proxy for returns. For comparability, a U.S. Treasury security (GS3) with a similar maturity (three years) is used as a benchmark, enabling a direct comparison of risk-adjusted returns across currencies (see Figure 10). It reveals a markedly different return profile between Brazilian and U.S. sovereign bonds, with the former offering significantly higher return potential, particularly during periods of exchange-rate appreciation, when high domestic yields are reinforced by currency gains. However, this advantage is not uniform over time. Episodes of exchange-rate depreciation, such as in 2008, between 2012 and 2015, and during the pandemic shock, generate negative returns in dollar terms despite positive domestic yields.

Figure 10 – LTN, NTN-F and GS3, points, 2005 - 2025



Source: Authors' elaboration based on data from Tesouro Direto and FRED.

The contribution of portfolio investment to de-dollarisation lies not in stabilising capital flows, but in establishing a recurring pattern of inclusion within global portfolios. Brazilian local-currency assets, particularly equities and sovereign bonds, have been consistently incorporated into international investment strategies because they offer relatively high yields with manageable risks. This dynamic is influenced by global portfolio allocation decisions, while the depth of domestic financial markets and the availability of hedging instruments facilitate access and participation by non-resident investors. As a result, foreign demand does not disappear during periods of stress but tends to re-emerge under more favourable conditions, reinforcing the continued presence of these assets in global portfolios. While capital flows are inherently volatile, their role within global portfolios is more persistent. De-dollarisation, in this context, reflects the sustained integration of domestic-currency assets into international investment strategies, rather than a temporary outcome driven by cyclical fluctuations in global financial conditions.

4.5. Currency risk

Rather than acting as a binding constraint, exchange-rate exposure becomes a dimension that can be priced, hedged, and actively managed. This shift is key to understanding the sustained inclusion of

domestic-currency assets in global portfolios: it is not the absence of risk, but its manageability, that underpins the continuity of foreign investment and, ultimately, the de-dollarisation process.

Two factors are particularly relevant in this regard: the development of hedging instruments and the accumulation of international reserves. The deepening of foreign exchange derivatives markets has broadened the range of strategies available to investors, enabling more effective management of currency exposure. This process intensified after the 1999 currency crisis, with the consolidation of instruments such as U.S. dollar futures contracts traded on B3, exchange rate swaps, and related derivatives (Marins & Prates, 2020). In parallel, the accumulation of international reserves has strengthened confidence in the country's external position, mitigating liquidity risks and supporting the functioning of foreign exchange markets during periods of stress. Between 2006 and 2011, reserves increased from approximately US$ 50 billion to US$ 350 billion, reinforcing perceptions of external resilience, and have remained at elevated levels since then.

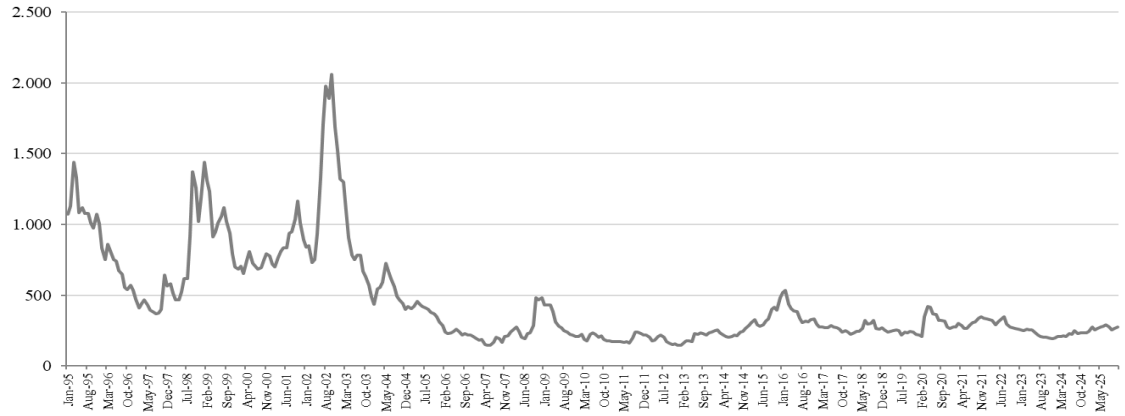
Furthermore, currency exposure is not merely a source of risk, but also a component of expected return that can be selectively incorporated into investment strategies. For international investors, exchange rate movements directly affect returns in the key currency, so phases of currency appreciation can enhance returns on domestic-currency assets through valuation effects.

4.6. Country risk

Country risk also shapes the attractiveness of domestic-currency-denominated assets to non-resident investors. By influencing perceptions of creditworthiness, it sets the conditions under which such assets become investable in global portfolios, acting as a threshold rather than a direct determinant of capital allocation.

As illustrated in Figure 11, Brazil's sovereign risk, measured by the EMBI, declined sharply after peaking at over 2,000 points in mid-2002. This was followed by relative stability until the mid-2010s, when an economic recession and political tensions led to a marked increase in risk premium during 2015–2016. Although levels moderated thereafter, they remained sensitive to domestic developments and shifts in the global financial environment.

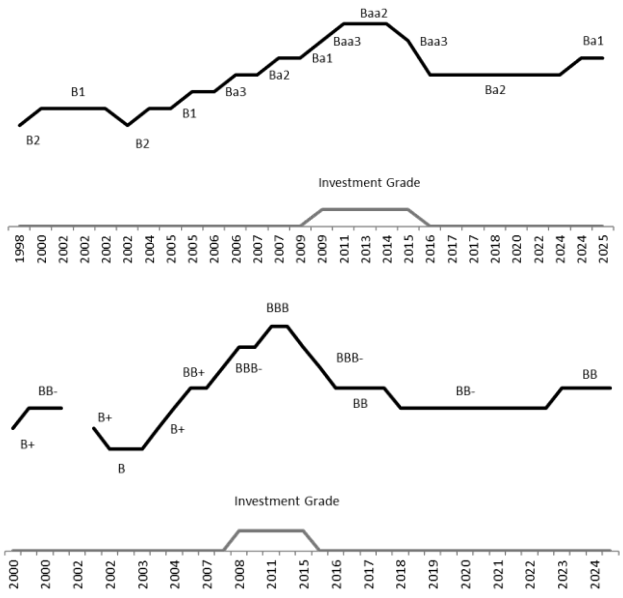
Figure 11 - Embi-BR, points, 1995 - 2025

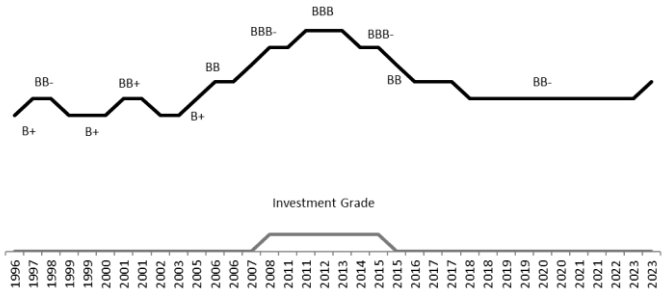


Source: Authors' elaboration based on data from IPEADATA.

Sovereign credit ratings offer a complementary and more discrete measure of risk perception. As shown in Figure 12, Brazil attained investment-grade status between 2008 and 2015 (2016 for Moody's). Beyond signalling improved creditworthiness, this classification expanded access to a broader pool of international investors, particularly those subject to mandate restrictions. This threshold effect is reflected in the behaviour of foreign investment in domestic sovereign bonds, which expanded significantly during the investment-grade period and contracted following its loss.

Figure 12 - Sovereign credit rating classification by Moody's, Fitch, and Standard & Poor's





Source: Authors' elaboration based on data from Tesouro Nacional.

From the perspective of de-dollarisation, sovereign risk affects the scale and composition of external liabilities without altering their underlying trajectory. Periods of lower risk facilitate the expansion of domestic-currency-denominated public debt in external portfolios, while adverse conditions constrain or temporarily reverse inflows. However, sustained demand for these assets must be understood within a broader risk–return framework: institutional thresholds, such as investment-grade status, shape access and investor composition, but do not override the structural drivers of international portfolio allocation.

5. Concluding Remarks

Previous sections have characterised the de-dollarisation of Brazilian external liabilities as a significant transformation in the country's external financial integration. More than that, it was described as a substantial, persistent, flow-driven and market-based phenomenon, supported by the incorporation of domestic-currency assets into global portfolios through a combination of differentiated investment dynamics involving foreign direct investment, portfolio equity and sovereign debt.

At the core of the movement is a distinct pattern of international investor behaviour: domestic-currency assets appear to have been incorporated into international portfolios as a marginal yet persistent component. This pattern is driven primarily by the gradual integration of Brazilian assets into global portfolio allocation strategies, reflecting their embedding in broader international processes of capital valorisation, rather than by mere cyclical fluctuations in global liquidity conditions. Domestic factors, in turn, play a subordinate yet necessary role. Financial openness enables access to local markets, relatively high returns support investor demand, and institutional and financial mechanisms help mitigate market and credit risks. These elements do not independently drive the process but condition the extent to which global portfolio allocation translates into sustained participation in domestic-currency assets.

While capital flows to these assets remain sensitive to global financial conditions, this sensitivity does not translate into generalised and persistent liquidation during periods of stress. Instead, positions are adjusted at the margin within a stable pattern of participation. An important feature of

this dynamic is the high turnover of positions in key asset classes, particularly in portfolio equity and sovereign debt markets. These segments are characterised by recurrent short-term inflows and outflows, indicating that investor exposure is actively managed and frequently rebalanced. At the same time, these positions are not episodic: despite their short-term nature, they are continuously reestablished, contributing to a more stable presence of non-resident investors in domestic-currency assets. This configuration may be described as a form of *persistent high-turnover integration*, in which domestic-currency assets are incorporated into global portfolios through recurrent but non-transient positions.

In contrast to the standard characterisation of capital flows in emerging markets, typically associated with sudden stops and prolonged retrenchment, the Brazilian case is better described as a "sudden return," in which episodes of retrenchment are followed by relatively rapid re-engagement by non-resident investors. This distinction between cyclical flows and persistent positions is central to understanding the process and reflects how global portfolio strategies shape demand for domestic-currency assets.

This behavioural pattern is reflected in the evolving composition of external liabilities. Over roughly a decade, domestic-currency-denominated instruments have come to represent the majority of Brazil's external liability position. This shift has been driven primarily by the growing importance of equity-like instruments, with foreign direct investment (FDI) equity playing a leading role, followed by portfolio equity in domestic stock markets, and, in a complementary manner, by non-resident participation in local-currency sovereign debt markets. What emerges is not a wholesale substitution of foreign-currency instruments, but a gradual reconfiguration at the margin.

At the same time, this process of incorporation is neither broad-based nor indiscriminate. A relatively narrow set of assets accounts for a large share of the observed transformation: foreign direct investment is concentrated in a limited number of sectors, portfolio equity holdings are directed towards a subset of large, liquid firms, and participation in sovereign debt markets is largely focused on specific instruments, particularly fixed-rate bonds. This pattern indicates that the inclusion of domestic-currency assets in global portfolios reflects a process of asset selection guided by risk-return considerations, rather than a generalised shift in portfolio composition.

This selective integration helps explain both the persistence and the resilience of the process. Because exposure is concentrated in assets that meet specific liquidity, return, and risk criteria, domestic-currency positions are not fully unwound during periods of stress. The experience of the 2008 global financial crisis, the 2015–2016 Brazilian recession, and the pandemic shock suggests that, although flows adjust to changing conditions, these assets are not systematically abandoned.

This reinforces the interpretation of a "sudden return" dynamic, in which retrenchment is followed by relatively rapid re-engagement.

In this sense, Brazilian de-dollarisation reflects a dual pattern of integration, combining differentiated flow dynamics: foreign direct investment, with a more continuous profile and no pronounced reversals, and portfolio equity and sovereign debt, with persistent high-turnover exposure. Together, they underpin the sustained incorporation of domestic-currency assets into global portfolios.

These transformations, however, do not imply a complete departure from traditional constraints. Despite their structural character, the process does not appear irreversible. Its continuity depends on the evolution of international financial conditions and on the position of Brazilian assets within global portfolio allocation strategies. Changes or disruptions in global financial integration may alter the extent and composition of foreign participation in domestic-currency markets.

Furthermore, the de-dollarisation process coexists with the persistent inconvertibility of the Brazilian real, which continues to constrain its role in international finance. As a result, the observed transformation does not amount to a redefinition of Brazil's position in the international monetary system. Rather, it reflects an adjustment in the form of external integration within a broader framework still characterised by structural asymmetries.

Brazil's external insertion remains peripheral, though more complex. De-dollarisation marks a meaningful shift in the composition of external liabilities, but it unfolds within the constraints imposed by the international monetary and financial system. Its significance lies less in overcoming these constraints than in revealing new, more complex ways in which they are accommodated.

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