India's Inclusion in the JP Morgan GBI-EM Indices
A Path to Eden or Just Another Sin?

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The concept of "original sin" was introduced by Eichengreen and Hausmann (1999), defining it as "a situation in which the domestic currency cannot be used to borrow abroad or to borrow long term, even domestically." Subsequently, Eichengreen et al (2003) redefined the concept as a country's inability to borrow abroad in its own currency, suggesting the term "domestic original sin" for the country's inability to borrow in its own currency long-term domestically. We adopt the Eichengreen et al (2003) definition of original sin.

Armed with this information, let us now delve into India's inclusion in JP Morgan's Government Bond Index-Emerging Markets (GBI-EM) of local currency government bonds (LCGBs) and note that JP Morgan offers six distinct related indices. They are GBI-EM, GBI-EM Broad, GBI-EM Global, and their diversified counterparts, each varying in the countries included and the assigned weights.

On 23 September 2023, JP Morgan announced its decision to include Indian LCGBs in its GBI-EM suite of indices. India is scheduled to be included in the GBI-EM Global Index suite starting 28 June 2024, and is expected to reach the maximum weight of 10% in the GBI-EM Global Diversified Index, according to JP Morgan. Presently, 23 Indian government bonds, with a combined notional value of $330 billion, meet the index eligibility criteria. The inclusion of these bonds will be phased in over 10 months, concluding on 31 March 2025, with an incremental addition of 1% weight each month. Given that the total size of foreign funds benchmarked to JP Morgan GBI-EM indices is nearly $240 billion, analysts estimate that this decision could potentially attract around $24 billion into the country.

India initiated the process of including its government bonds in global indices in 2019. As part of these efforts, in 2020, a portion of government bonds was deemed investable by foreigners without restrictions under the newly introduced "fully accessible route." Despite delays attributed to the government's stance on capital gains taxes and local settlement, the government's core policy remained unchanged. Although JP Morgan's decision heightened expectations regarding other index providers, such as Bloomberg-Barclays and FTSE Russell, the latter announced that India would be retained on its watchlist for a potential upgrade, signalling the need for reforms in the government bond market as expected by international investors. While negotiations will likely persist, the precedent set by JP Morgan suggests that more benchmark indices may include Indian local currency government and corporate bonds, potentially attracting a substantial influx of funds into the country.

Great Expectations

Several commentators have noted that this development is poised to assist in financing current account and fiscal deficits. This expectation is based on the anticipation of a lower cost of borrowing and the engagement of a "sticky" institutional investor base with a long-term investment horizon. Moreover, there is an anticipation that this development will catalyse increased investments through private lending, facilitated by the relieved balance sheets of domestic financial institutions holding LCGBs.

V Anantha Nageswaran, the chief economic advisor to the government, highlighted the widening investor base and the relief of balance sheets for domestic financial institutions as the main benefits of the move. He emphasised that

> naturally the financing of the current account deficit becomes that much easier because it is by-and-large believed that these investors are long term and patient investors and they are not fickle or hot-money flows.1

In October 2022, the Reserve Bank of India (RBI) published a document outlining the internationalisation efforts for the rupee. In a section titled "Inclusion of Indian Government Bonds in Global Bond Indices" (RBI 2022: 35), the document highlights key benefits and emphasises the reduction of reliance on domestic financial institutions for public finance needs by tapping into large international resources. Echoing Nageswaran, the RBI also notes a growing trend in passive investment philosophy that tracks benchmarks, stating that "funds following the indices are generally stable flows and tend to be more stable than other FPI flows" (RBI 2022: 36), where FPI stands for foreign portfolio investments.

While underscoring these advantages, the document also addresses potential risks, including the

> increased sensitivity of domestic policy to external spillovers; fiscal and monetary policies need to be more cognizant of global perception and sensitivities, and the potential cost for sterilisation and associated market operations owing to large inflows.(RBI 2022: 36)

Despite these concerns, however, Indian monetary authorities appear to believe that the potential benefits will far outweigh the risks. In the following sections, we critically examine the validity of this stance.

Some Conceptual Issues

Let us correct some misconceptions regarding current account financing. India has consistently maintained a current account deficit since the 1980s, with only two brief episodes in 2001–04 and 2020. Historically, with the exception of the 1991 balance-of-payments crisis, India has successfully financed its deficits without relying on foreign inflows to LCGBs, and it is entirely capable of continuing to do so without additional funding. Furthermore, there is no "domestic

original sin" in India, as former RBI Governor Y V Reddy (2023) attests in his recent article.

According to the balance of payments accounting, any potential additional portfolio inflows will be matched by a combination of increased current account deficits and/or additional reserve accumulation, and/or heightened financial outflows by residents in India. Consequently, these additional funds will not directly finance "the current account deficit" but will instead contribute to a potential increase in it. It is also highly likely that they will become part of the accumulated reserves of the country, which will, in turn, be reinvested in hard currency reserve assets.

Various factors will determine the ultimate fate of these funds. On the one hand, they may catalyse infrastructure development and stimulate productive investments with significant multiplier effects, as expected. On the other, they could lead to increased local consumption of imported goods, potentially crowding out local investments. These funds have the potential to bolster economic growth through various channels—reducing overall borrowing costs, appreciating the currency (thus triggering more imports), and freeing up the balance sheets of domestic financial institutions, enhancing their capacity to lend. However, whether these inflows will contribute to long-term growth prospects or exacerbate business cycles remains uncertain. If the latter effect dominates, it is crucial to acknowledge the downside of portfolio flows and the potential pain they might bring.

The Sad Story of Türkiye

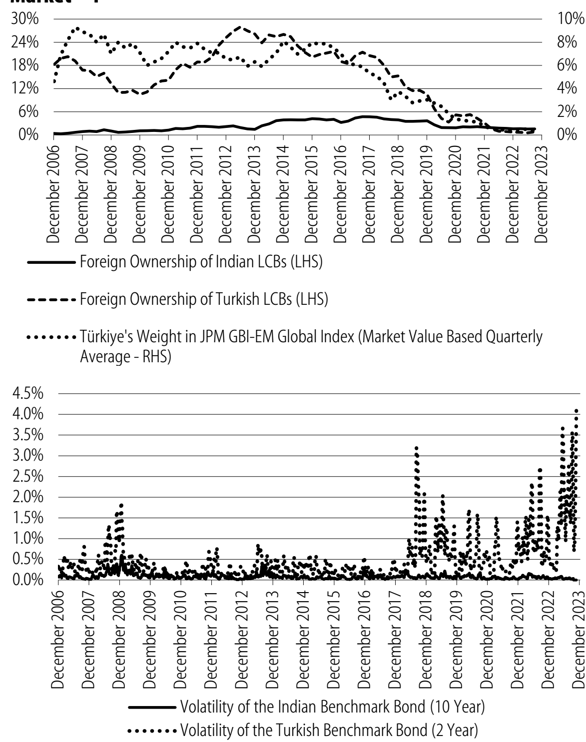
In his influential work, "Playing with Fire: Deepened Financial Integration and Changing Vulnerabilities of the Global South," published in 2017, Yılmaz Akyüz raised critical concerns about the potential repercussions of intense global integration of bond markets in emerging and developing economies (EDEs). He highlighted that the true test of the prudence behind this integration could emerge during the normalisation of the United States (US) monetary policy. Akyüz cautioned against overlooking the possibility that governmental actions addressing the aftermath of the 2007–09 global financial crisis might inadvertently become new sources of instability, potentially triggering the next crisis. He specifically pointed out that the internationalisation of local currency bond markets (LCBMs) in EDEs might not necessarily represent a path towards improvement but rather echo the errors of the past, suggesting that it might be "a significant mistake as the original one, rather than a path back to Eden" (Akyüz 2017: 148).

Once a star in the emerging market global bond indices, Türkiye is now on a quest to reintroduce its LCBM to foreign investors. If nothing else, this sad story of Türkiye that we narrate proves Akyüz right and stands as an example for discussing the risk-reward implications of foreign investor participation in LCBMs. It prompts areconsideration of the aforementioned great expectations.

Türkiye's journey towards capital account liberalisation commenced in the late 1980s, persisted through what is often referred to as "an almost lost decade" in the 1990s, and gained momentum following the reforms implemented in the aftermath of the 2001 financial crisis (Cömert and Öncü 2023a, 2023b). The Turkish LCBM has been fully open to non-residents since 1989, and at its peak in April 2013, the local currency bond stock held by non-resident investors reached a staggering $70 billion. Fast forward to 2023, and the value of that stock now hovers around $1 billion.

Türkiye has been included in the JP Morgan GBI-EM Global Index since its launch in November 2006. Figure 1 illustrates the quarterly evolution of its GBI-EM Global Index weight, encompassing foreign ownership of Turkish and Indian local currency bonds for comparison. We also compare the volatilities of the Turkish and Indian benchmark government bond interest rates reported daily, highlighting that while the Turkish LCBM has been fully accessible to foreign investors since 1989, the Indian LCBM has been restricted throughout.[2] The Turkish benchmark interest rate has exhibited notably higher volatility compared to its Indian counterpart. Furthermore, following the onset of the August 2018 currency crisis (Cömert and Öncü 2023b) during the April–October 2018 EDE bond market sell-off, its volatility skyrocketed. This surge coincided with a significant exodus of foreign investors from the Turkish LCBM, as observed in Figure 1.

Figure 1: The Rise and Fall of the Turkish Local Currency Bond Market—I

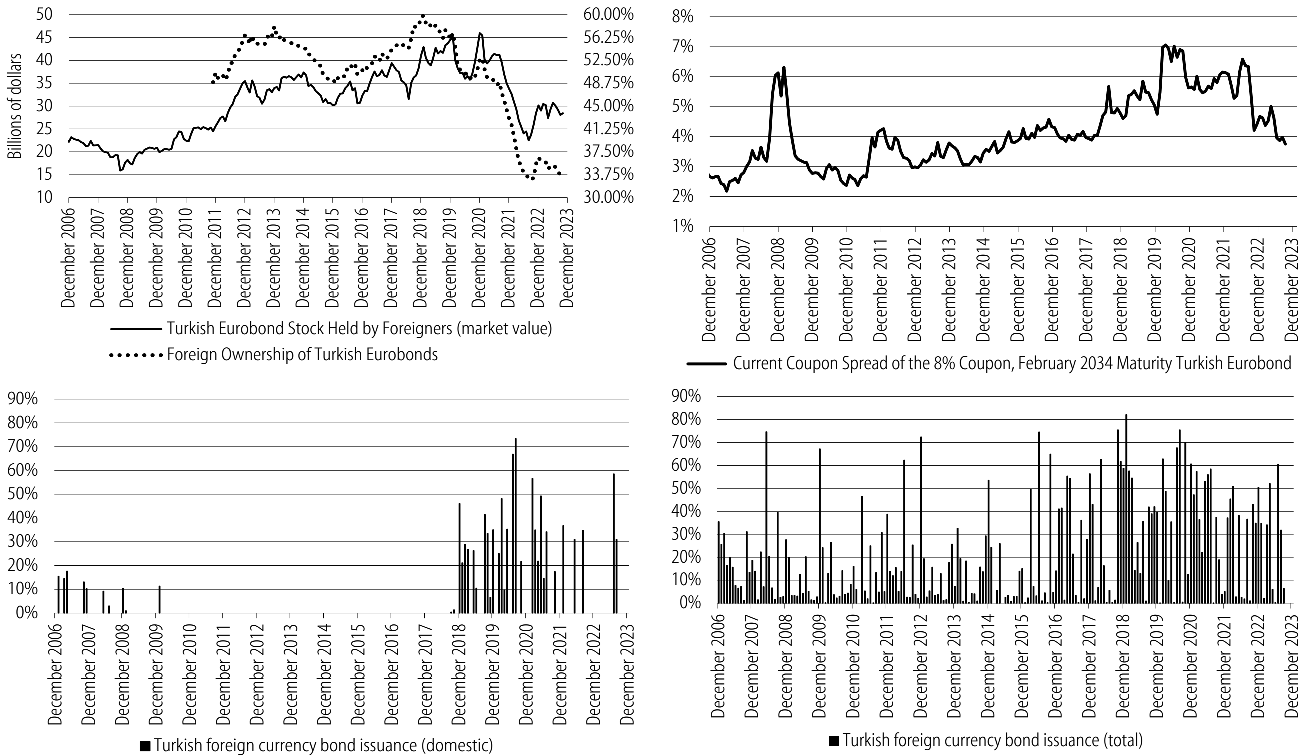


Source: IMF, CBRT, Bloomberg, investing.com, authors' calculations.[3]

Figure 1 also illustrates that increased foreign involvement in the LCBM did not remedy the original sin, at least in Türkiye. Numerous studies, including those by Carstens and Shin (2019), Hofmann et al (2020), and the Hong Kong Monetary Authority (2020), echo similar findings in other EDEs.

Carstens and Shin (2019) note that the original sin phenomenon did not disappear but rather shifted from borrowers to lenders. In EDEs, foreign holders of local currency bonds mainly consist of

Figure 2: Original Sin Redux



Source: CBRT, Börse Frankfurt, FRED, authors' calculations.[4]

money managers from advanced economies—such as pension funds, hedge funds, and life insurance companies—holding liabilities in their home currencies. This shift effectively moved the original sin from borrowers to lenders, creating a new form of original sin.

Consequently, when the value of local currency bonds declines in EDEs, often due to currency depreciation and exacerbated by the absence of developed derivatives markets for currency risk hedging, these lenders tend to offload these bonds in substantial volumes. This practice exacerbates the challenges faced by EDEs.

Examining both Figures 1 and 2, where Figure 2 illustrates different facets of the Turkish foreign currency bond markets and tracks the evolution of the current coupon interest rate spread of the 8% coupon, 14 February 2034 maturity Turkish Eurobond issued on 14 January 2004 against the identical remaining maturity US government bond coupon interest rate, we observe that the emergence of the new original sin did not eradicate the old one in Türkiye. Notably, following the August 2018 currency crisis, the Government of Türkiye reinstated domestic foreign currency borrowing due to challenges in issuing bonds to non-residents.

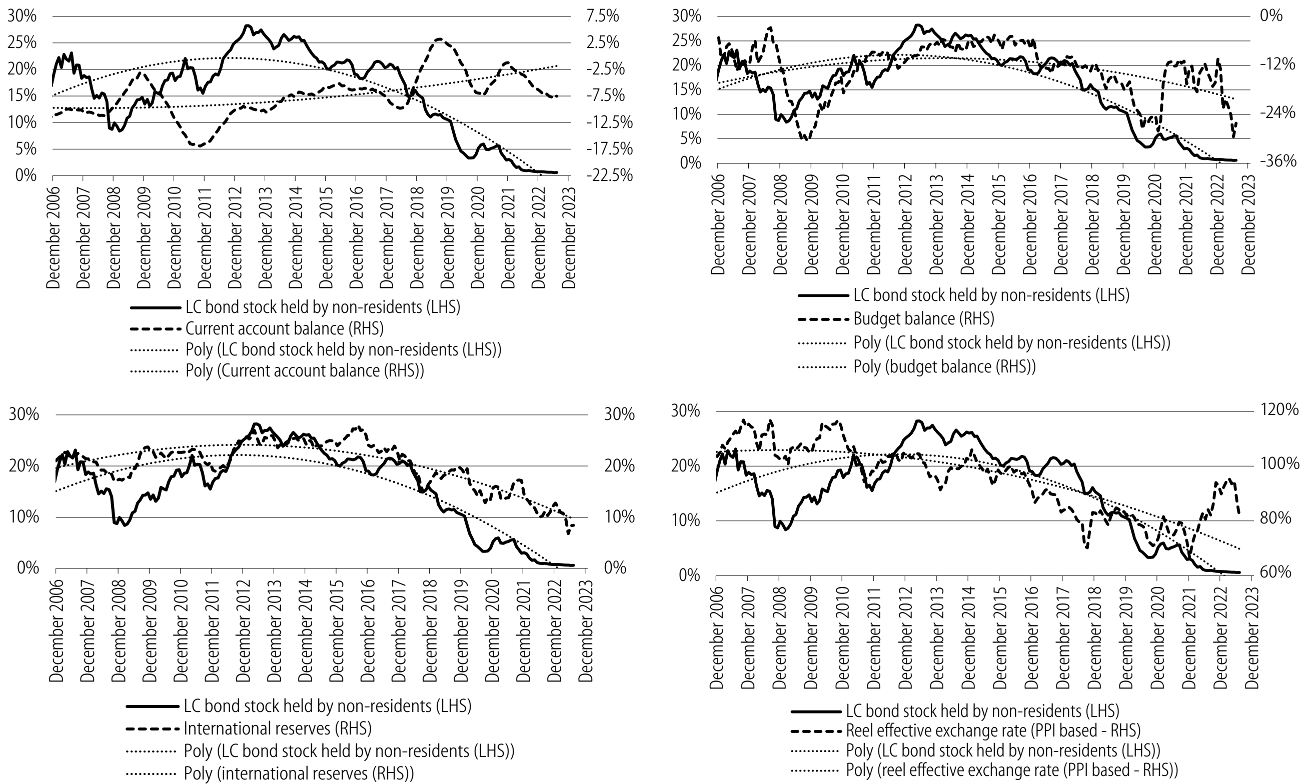
Great Expectations—Revisited

Figure 3 (p 16) illustrates the local currency bond stock since 2006, encompassing not only local currency sovereign bonds but also a small amount of corporate bonds, along with valuation effects. The comparison includes the current account balance, budget balance, international reserves and the real effective exchange rate ([REER] gauging the exchange rate concerning inflation), with quadratic trend lines imposed on them. While both the current account and international reserves are influenced by various factors, the aforementioned balance of payments mechanics is evident. It is clear that the increasing participation of foreign investors in the LCBM of Türkiye was associated with a widening current account deficit and increasing international reserves. On the downside, the gradual departure of foreign investors was linked to a shrinking current account deficit (associated with low and unstable economic growth patterns not shown in the figure) and a declining international reserve that erodes confidence in financial stability.

While policy choices often dictate the budget balance, it is also influenced by growth patterns, partially driven by inflows to the LCBM. However, the behaviour of the budget balance post December 2020 does not seem to be directly driven by these inflows. The REER sheds light on the self-perpetuating mechanisms driving Türkiye's current/capital account imbalances. An appreciating REER trend attracts more capital inflows, relaxes balance sheet constraints on domestic net borrowers of foreign currency, fosters increased imports, and vice versa. Persistent fluctuations in Türkiye's REER indicate that short-term challenges stemming from LCBM inflow effects, as highlighted by various commentators discussing risks, might morph into enduring, structural economic issues.

In addition, there is a misconception, if not misdirection, among advocates that foreign portfolio inflows into LCBMs are stable, long-term foreign funding sources. However, as the saying goes, everyone is a long-term investor until they realise the end is near. When concerns arise about short-term capital losses, whether

Figure 3: The Rise and Fall of the Turkish Local Currency Bond Market—II

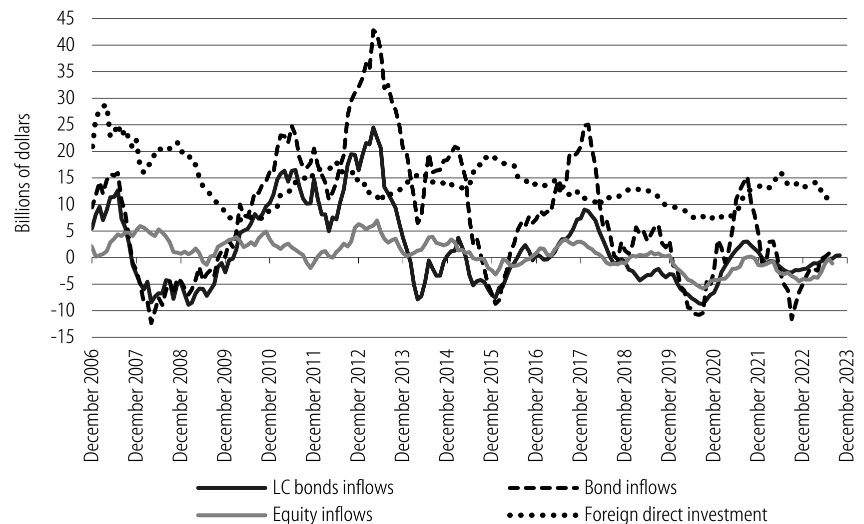


Source: CBRT, authors' calculations.[5]

due to upward-shifting interest rates, depreciation of the local currency, or both, stability flies out of the window.

Figure 4 illustrates Türkiye's experience with foreign portfolio inflows, including foreign direct investment (FDI) inflows, which consistently hovered around \$10–\$15 billion annually, serving as a benchmark. The figure highlights that, when assessed annually, bond inflows have proven to be significantly more unstable than equity inflows. Additionally, by comparing total bond inflows with local currency bond inflows in Figure 4, we observe that while LC bond inflows have dwindled since 2013—since the need for borrowing abroad has persisted—foreign currency bond borrowing from abroad has increased, exacerbating the original sin, as we mentioned.

Figure 4: Foreign Direct Investment and Portfolio Inflows to Türkiye



Sources: CBRT, authors' calculations.

The October 2022 RBI document makes a somewhat naïve comment about the potential risks linked to foreign participation in the LCBM: "such risks generally materialise when concerns emerge about the fiscal health of the country with potential rating downgrades or de-platforming from the index" (RBI 2022: 36). Ironically, Türkiye received its highest credit rating in May 2013, just one month after the peak in the value of the stock of local currency bonds held by foreign investors. Even more ironic is that this almost coincided with the Federal Reserve's announcement of tapering in the same month, marked by the infamous taper tantrum and the accompanying exodus of foreign investors from the emerging markets.

Overall, the decline of the Turkish LCBM can be attributed to various factors, including external shocks that led to local currency depreciation and other contractionary forces, causing discomfort for the government. As financial and economic instabilities resulting from these pressures weakened the government's ability to preserve its rule, it responded with unorthodox monetary and

fiscal policies (Cömert and Öncü 2023b), influenced also by election cycles and other related considerations. However, these measures were not well-received by mainstream economists, both foreign and domestic investors, domestic capitalists, and the international community. Coupled with fluctuating global financial conditions, these policies contributed to diminished cycles of local currency bond inflows to Turkey, marking a secular downtrend that eventually led to almost zero participation.

In Conclusion

While foreign access to its LCBM is crucial for any country aiming to internationalise its currency, as emphasised by Reddy (2023) in his insightful article, the rupee is yet to be regarded as an international currency. As he pointed out,

> [i]nternationalisation of the rupee is likely to be more an outcome of sustained development of the financial system and improved economic performance.

As Reddy wrote:

> The experience of other countries highlights that currency internationalisation cannot be decided in one day and pursued the next. It comes about after a long evolutionary process, when all the building blocks are in place.

We agree with Reddy that the "internationalisation of the rupee is inevitable as the Indian economy grows bigger, but there are associated problems." It is crucial to carefully consider the downsides of portfolio flows in and out of LCBMs, especially in light of the potential risks we discussed. Furthermore, the cautionary tale we drew from the experience of Türkiye compels us to recommend to India prudence when considering the relaxation of foreign portfolio investors' access to its LCBM.

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NOTES

1 https://indianexpress.com/article/business/economy/jp-morgan-india-emerging-markets-bond-index-8951000/.

2 Volatilities are 21 days running standard deviations.

3 The IMF data come from the 30 August 2023 version of its Sovereign Debt Investor Base for Emerging Markets and Developing Econonomies.

4 We calculated the corresponding identical maturity US government coupon interest rate through linear interpolation between the 10-year and 30-year constant maturity coupon rates (par yields) available from the FRED database of the Federal Reserve Bank of St Louis.

5 All series except non-resident ownership of local currency bonds are 12-month rolling sums; while the current account balance and international reserves are normalised by the absolute sum of current account items, the budget balance is normalised by the sum of government revenues. Official reserves are adjusted for cross-country flows between monetary authorities. Trend lines are second order polynomials.

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