

NBFIs' footprint on EMEs' financial markets

Bank of Mexico

This note explores three themes relating to the growth of non-bank financial institutions (NBFIs) and some of their potential consequences for emerging market economies (EMEs). First, we describe the key features of global NBFIs, which result in some having fickle portfolio investment positions in EMEs. We also provide an explanation on the role of *local* NBFIs as part of the investor base. Second, we examine interconnectedness, à la Diebold and Yilmaz (2015), among financial conditions indices of five Latin American economies.¹ We examine how it impacts bond flows and, conversely, the extent to which bond flows affect their co-movements. Third, we review some of the short- and long-term policy responses that EME authorities have pursued, partly due to NBFIs' growing footprint. For the long-term responses, we focus on the case of Mexico.

Global NBFIs

NBFIs render services similar to those of banks, but do not accept deposits in the traditional sense.² Some prominent examples of NBFIs are insurance companies, pension funds, broker-dealers, investment funds and hedge funds. Unlike banks, they are normally funded through capital markets rather than from deposits, which makes them, in general, more sensitive to financial conditions. Nonetheless, it is worth noting the heterogeneity among NBFIs as they differ from each other in important ways.³

The Great Financial Crisis (GFC) was a watershed in many respects; most notably, in terms of regulations affecting global banks. One of the main consequences of this is that a significant portion of capital flows ceased to be intermediated by banks and instead became intermediated by NBFIs. As part of this process, NBFIs have grown substantially in size and influence. In fact, they now account for nearly half of global financial assets (Graph 1). Although they bring many benefits such as increased

¹ According to the FSB (2022, 2025), interconnectedness is a broad concept that can take many forms. For instance, it can be financial, depending on the source of the linkage between institutions. There are two main categories: (i) direct, bilateral transactions between institutions, including funding, counterparty transactions, deposits and investments, among others; and (ii) indirect, portfolio linkages via similarities in investment strategies or in asset holdings. The latter operates primarily through price contagion. In this note, we use the measure proposed in Diebold and Yilmaz (2015); thus, this note refers to their specific notion. It is worth noting that the interconnectedness index à la Diebold and Yilmaz is intimately related to the notion of co-movement; we use the two terms interchangeably.

² These include credit, payment, asset management, financial advisory and custody services, among others.

³ Their heterogeneity can be beneficial for financial stability if risk-sharing across their balance sheets takes place (Aquilina et al (2025)).

market efficiency, their nature can have consequences in terms of the volatility of capital flows and the interconnectedness of financial conditions.

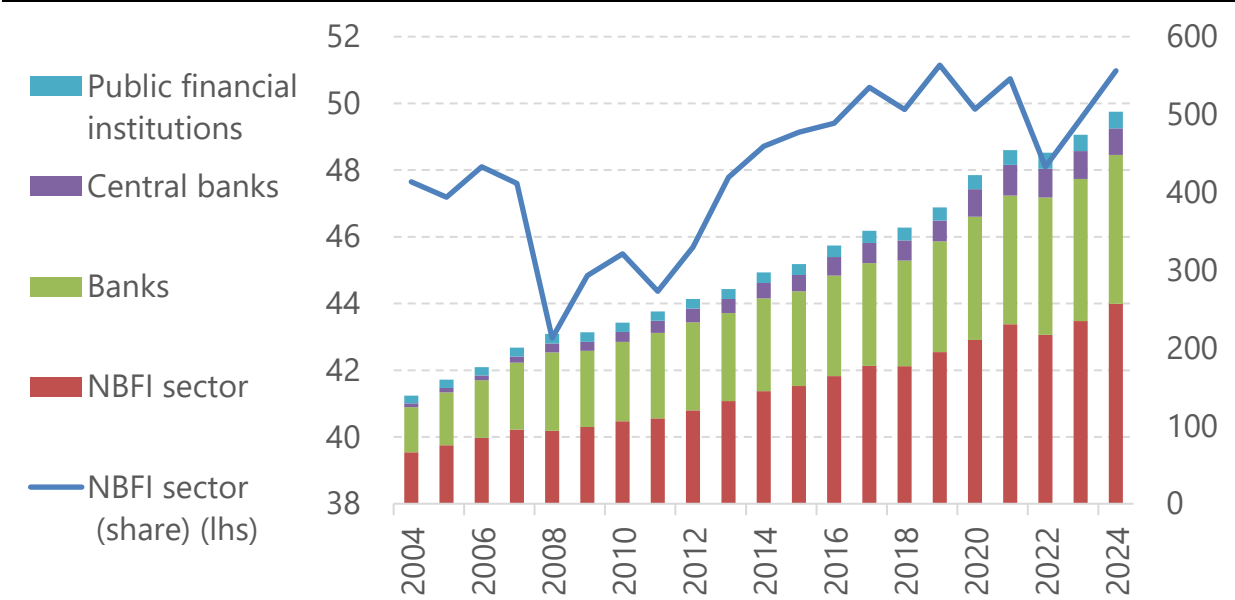
Having briefly outlined the growth and financial importance of NBFIs, our focus turns to global investment funds.⁴ In effect, these funds could affect local financial conditions through their investment decisions. To understand the different mechanisms that explain this impact, it is useful to review a few models.

The association between capital owners and fund managers can be viewed as a principal-agent relationship.⁵ There are several devices with which these agency frictions could be lessened. In this context, one such device is ranking fund managers within a given fund category, making them averse to ranking last. In the aggregate, this might lead to greater co-movement, herd-like behaviour and capital flow volatility.

NBFI as a share of total global financial assets increased in 2024

In percent and trillions of US dollars

Graph 1



Source: FSB.

To set the stage, suppose there is a set of portfolio managers competing against each other. As these managers care about their relative ranking, strategic interactions occur (Morris and Shin (2014)). Moreover, when fund managers have significant positions in relatively shallow financial markets, such as those in EMEs, their interactions become even more relevant, as asset prices can be sensitive to changes

⁴ Investment funds can be further classified into mutual funds, exchange-traded funds, money market funds, hedge funds, private equity funds, venture capital funds, private debt funds, real estate funds, commodity funds, funds-of-funds, structured credit funds and crypto asset funds, among others.

⁵ The term fund manager is being used in a general sense here. It could also refer to a portfolio manager in an NBFI different from a fund.

in their positions. In short, managers are subject to pecuniary externalities (Aramonte et al (2021)).

In this context, there are several potential mechanisms through which such dynamics could be exacerbated. As a case in point, suppose that each fund manager individually knows its type, conscientious or slacker, but no one else can observe it, including capital owners. Everyone observes each manager's performance and changes in asset positions. Thus, slackers have an incentive to follow others' portfolio allocation decisions in order to hide their type.⁶

In addition, some NBFIs, notably investment funds, can face important redemption pressures. There have been some financial stress episodes in which some fund managers have amplified stress as they tend to sell assets beyond what their redemptions warrant (ie so-called discretionary sales). This links retail and institutional outflows to market pressure on EMEs' bonds (Shek et al (2018)).

During such episodes, institutional funds may decide to rebalance their portfolios, which could impact financial conditions in EMEs, with a significant effect on those with low credit quality. Some NBFIs tend to be concentrated; for instance, the top investment funds have a significant portion of the total assets under management (AUM). Thus, funds could be affected by general investment decisions or similar valuation models.

One might consider other mechanisms that could lead to greater co-movements among global NBFIs' investment decisions, potentially implying greater volatility in capital flows.⁷ While these mechanisms are challenging to identify, they could be present in many financial markets. We now turn to the issue of the leverage taken by NBFIs, which could exacerbate these dynamics.

Leverage and NBFIs

Leverage can take many forms. This is one of the reasons it can be challenging to assess, especially at an aggregate level. In fact, comparing leverage across a group of financial institutions is only reasonable if such institutions share similar investment strategies and regulatory constraints.

In one of its simplest forms, many NBFIs borrow cash using repurchase agreements (repos) and a safe asset as collateral (commonly, US Treasury bonds). NBFIs can also borrow securities to short-sell them. In both cases, NBFIs would increase their leverage. For its part, (synthetic) leverage can be implemented through derivatives, in this case with no need to borrow cash. Positions in futures and options

⁶ Similarly, one could also think of manager types in terms of being informed or uninformed. In another case, suppose that managers receive a noisy signal sequentially. Each signal is informative with respect to EMEs' asset prospects. All managers see what other managers decide in terms of investing in EMEs after receiving their signal. An issue with their dynamics is that small deviations in terms of their signals can lead to different outcomes (Bikhchandani et al (2024)). Similarly, one could envision a set of investors that are overly optimistic about EMEs' assets. In its complement, investors are realistic but aware of other investors being optimistic (De Long et al (1990)).

⁷ Other well-known mechanisms include flight to safety, deleveraging, unwinding of positions for liquidity preservation and making margin calls, among others.

are common cases of this type of leverage. Indeed, these enable NBFIs to gain exposure to financial assets without requiring initial capital. This form of leverage is very popular among investment funds.

NBFIs can also have off-balance sheet leverage. Examples include securitisation vehicles and private equity through leveraged buyouts. There is implied leverage through risk exposure; for example, liability-driven investment funds and insurance companies may have duration mismatches.

Not only does leverage lead to more risk, it is also more challenging to measure, which is a potential concern for financial authorities. In addition, some NBFIs often reuse collateral received in a repo or securities lending transaction (ie re-hypothecation). Authorities need to understand the extent to which NBFIs are reutilising their collateral.

All in all, returns under leverage tend to be higher than those from unleveraged positions. However, leveraged returns cut both ways, as substantial losses are a possibility. In short, leverage can amplify the speed and magnitude of financial contagion.⁸

As an exercise to illustrate the role of leverage in EMEs' bond flows, we consider a VAR model with three variables: EMEs' bond flows, the (change in the) VIX, and the (change in) US dollar credit to EMEs.⁹ Based on McCauley et al (2015), we interpret the US dollar credit to non-bank borrowers as a *proxy* of global dollar leverage, reflecting both bank balance sheet expansion and NBFIs' bond market intermediation. All the variables are expressed in terms of their z-scores, so their units are in standard deviations.

Consider the generalised impulse response functions (GIRFs) of shocks to the VIX and credit, and the respective responses of EME bond flows (Graph 2). While a shock to the VIX leads to bond outflows and a shock to credit leads to bond inflows, a noteworthy result is that the latter seem to have greater magnitudes and persistence.

Thus, changes in leverage appear to be as relevant as changes in uncertainty. While leverage can enhance market efficiency and support liquidity, there is a possibility of market instability if market participants are unable to absorb the unwinding of positions and asset sales in an orderly manner.

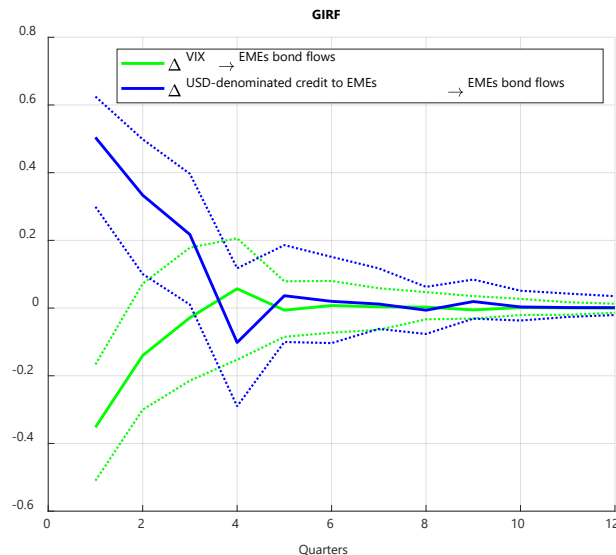
⁸ On a related matter, unwinding positions and keeping track of them can be challenging too.

⁹ The estimation sample is Q1 2005–Q1 2025. While the initial date of the sample is limited by the bond and equity flow data from the Institute of International Finance (IIF), the quarterly frequency is determined by the US dollar credit data frequency. The identification is based on generalised impulse response functions (Pesaran and Shin (1998)).

Changes in US dollar-denominated credit to EMEs and EME bond flows

In standard deviations

Graph 2



An increase in credit to EMEs, as a proxy of leverage, leads to bond inflows. An increase in the VIX leads to bond outflows. Notably, this proxy leads to greater magnitudes and persistence. Based on McCauley et al (2015), we interpret US dollar credit to non-bank borrowers as a proxy of global dollar leverage, reflecting both bank balance sheet expansion and NBFIs' bond market intermediation. In line with their findings, we use US dollar credit to EMEs as a proxy for externally financed leverage in market-based intermediation into emerging markets. A similar result holds when considering the sum of bond and equity flows. Intervals are set at the 95% confidence level.

Sources: Bloomberg; IIF; BIS.

Local NBFIs

Having considered key aspects of global NBFIs, we now turn to analyse key aspects of local NBFIs. Some of these entities are placed to take the positions being left by global NBFIs in the event of tightened financial conditions. The extent to which changes in global investors' positions in local assets affect their prices largely depends on the ability and willingness of local investors to take those positions.

In this respect, local NBFIs can play a key role. Their investment mandates largely determine their behaviour. A feature that captures part of this is their risk aversion. All else being equal, more risk-averse and more patient investors (eg pension funds) are willing to pay a lower price for a given financial asset.¹⁰ An upshot to this point is that global and domestic investors with similar degrees of risk aversion and patience contribute towards smoother price dynamics when trading financial assets with one

¹⁰ Concretely, the price, $P_{i,t}$, an investor, i , with a constant relative risk aversion coefficient (CRRA) of γ_i , is willing to pay for a financial asset decreases as their risk aversion increases. Technically, $P_{i,t} = \mathbb{E}_t(P_{t+1})R_{t,f}^{-1} - \gamma_i \beta_i \mathbb{Cov}_t(\Delta c_{t+1}, P_{t+1})$ where a positive covariance is expected. We have that $R_{i,t}^{-1}$ is the risk-free rate and c_t is the (log) of consumption. For simplicity, we have assumed the existence of a stochastic discount factor based on a utility function with a CCRA equal to γ , and have taken a linear approximation. That said, the result holds under more general conditions.

another. If the local investor base is not well diversified, there is likely to be a smaller number of local investors similar to the global ones.

A closely related consideration is the conformation of local NBFIs. On the one hand, institutional investors such as pension funds and insurance companies tend to be more patient and have longer-term investment horizons. On the other hand, local retail investors such as hedge funds are less patient and tend to focus more on short-term investments.

Having a large and diversified investor base brings about benefits. Macroeconomic shocks affect NBFIs in different ways depending on the nature of both the shocks and NBFIs themselves. For instance, an insurance company would probably shrug off a short-lived shock, whereas an investment fund would probably respond to it. As previously mentioned, this heterogeneity could benefit financial stability if there is risk-sharing across their balance sheets. In addition, a large investor base is also beneficial for its sheer capacity to withstand large shocks.

Similarly, different NBFIs have different liquidity needs. Thus, a diversified investor base could lead to more resilient liquidity conditions.¹¹ That said, it is important to understand the nature of liquidity provision and the demand that different types of NBFIs can provide, as well as how these can change during periods of financial stress. During such episodes, financial conditions can quickly erode intermediation capacity and amplify price movements.

Although one could take some comfort from the fact that the banking sector remains dominant in many economies, there is evidence that financial stress in NBFIs could transmit to banks through counterparty, liquidity and valuation channels (BCBS (2025)). Moreover, some global banks have turned into conglomerates, adopting some NBFIs' activities (Cetorelli and Prazad (2025)).

Co-movements in financial conditions indices of Latin America

The literature has paid much attention to understanding how US financial conditions can affect capital flows to EMEs (eg Rey (2015)), how some global NBFIs can be subject to herd-like dynamics (eg Radatz and Schmukler (2012)) and how local financial conditions can affect capital inflows to a given EME (eg Bruno and Shin (2012)). However, relatively less attention has been paid to understanding interconnectedness in local financial conditions indices (FCIs).¹²

Thus, a natural exercise is to explore the extent to which FCIs in the region present co-movements and their nature. To this end, we use estimates of the FCIs of five Latin American economies: Brazil, Chile, Colombia, Mexico and Peru (Graph 3). In the case of the United States, we use Goldman Sachs' US FCI. Next, we use the

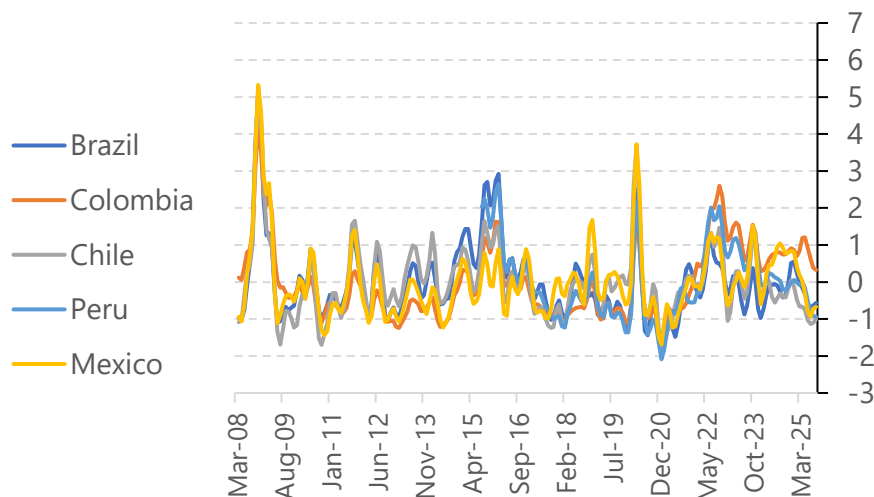
¹¹ This is not always the case, as, for example, events in the US Treasury markets have attested over the past year.

¹² The literature has explored connectedness across EMEs' specific financial markets, for example Assaf et al (2025).

FCIs for Brazil, Colombia, Chile, Mexico and Peru

In standard deviations

Graph 3



These FCIs are estimated based on principal component analysis (PCA) with the same set of financial variables for each of these economies. The financial variables used are: 10-year yield, three-month yield, corporate spread, stock exchange returns, FX implicit volatility (one-year horizon), sovereign spread (EMBI Spread), DXY, VIX and the US FCI (Goldman Sachs).

Source: Own estimations, with data from Bloomberg.

Diebold-Yilmaz (DY) index (Diebold and Yilmaz (2015)) to measure the FCIs' interconnectedness. This index is a way to measure how much FCIs (or other variables) influence one another at a given moment in time. If most movements reflect external shocks, the level of connectedness is high. If an FCI moves mainly due to local shocks, connectedness is low.¹³ In sum, the index provides a single number reflecting how tightly financial markets are linked.¹⁴

Consider Graph 4. During the 2018–19 period, the financial interconnectedness between Latin America and the United States remained relatively high for the sample period. Regional differentiation increased marginally, largely through domestic policies, but the common factor remained dominant. The onset of Covid-19 in 2020 led to a significant increase in cross-market connectedness between the United States and Latin American economies under review. At the time, the DY index exhibited a marked increase. Thereafter, the global monetary easing spread to Latin America. The period was characterised by synchronised shocks, as macroeconomic and, until then

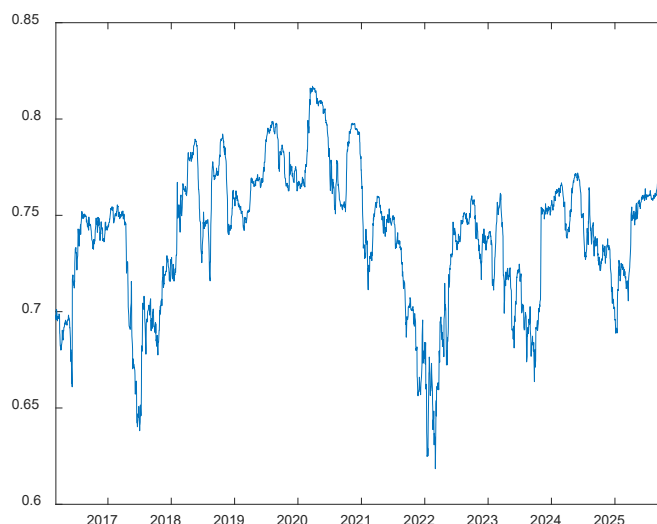
¹³ There are no a priori levels with which one could determine whether the level of a DY index is high or low. It is a relative index, so one can consider a point of reference with respect to a known event, and then compare it with the levels on other dates.

¹⁴ More formally, the DY connectedness index is a framework that quantifies how shocks in one variable spill over to others. It is based on a forecast error variance decomposition of a VAR model. For each variable, the method computes how much of its future uncertainty is explained by shocks originating in other economies versus its own economy. By aggregating these contributions across economies, the DY index provides a unique measure of connectedness, expressed as a percentage. It is worth underscoring that the DY index is agnostic about the sign of their interconnection.

The Diebold–Yilmaz (DY) connectedness index based on FCIs

Index; 1 indicates total connectedness and 0 indicates no connectedness

Graph 4



This index is based on FCIs of Brazil, Chile, Colombia, Mexico, Peru and the United States. A higher value means markets are tightly linked and shocks propagate widely, while a lower value indicates segmentation or weaker spillovers. The VAR on which the DY index is estimated uses a 220-day rolling window. The DY considers the average of the forecasts for one- to 20-day horizons. Estimation sample: May 2015–Oct 2025.

Source: Authors' estimations with data from Bloomberg.

unfamiliar, epidemiological cycles took hold. In this period, financial conditions in the region were linked to US conditions.

In contrast, 2022 marked a notable decline in co-movements between US and Latin American financial conditions. The United States remained a global driver, but its transmission apparently weakened, and several Latin American markets (eg Brazil, Mexico and Chile) began to behave more idiosyncratically. From 2023 onwards, spillovers between the United States and Latin America intensified but did not return to the previous relatively high contagion regime of 2018–19. Finally, since 2024, spillovers have risen during periods of US data surprises and geopolitical shocks.

Next, as a key empirical exercise, we explore a VAR with the DY index based on the FCIs, Latam Bond Flows (ie the average of Brazil, Chile, Colombia, Mexico and Peru) and (the change in) the VIX.¹⁵ We use bond flows from EPFR Global to obtain a weekly frequency. We consider shocks to the DY index and, separately, to the VIX, and consider the bond flows' response to each. In addition, we explore shocks to bond flows and the DY index response (Graph 5).

First, an increase in global uncertainty, as measured by the VIX, leads to bond outflows (green line). Second, a shock to interconnectedness leads to bond outflows (red line). Third, a shock to bond inflows leads to less interconnectedness (blue line). Equivalently, a shock to bond *outflows* leads to *greater* interconnectedness. While the

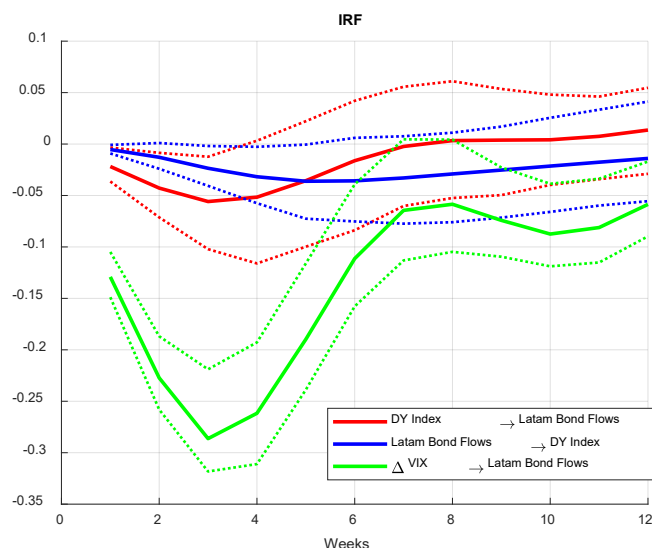
¹⁵ The estimation period is March 2017–October 2025. The data have a weekly frequency. The identification is based on generalised impulse response functions (Pesaran and Shin (1998)).

latter effect seems to be relatively weaker, it points to the possibility of a potential feedback loop given sufficiently strong shocks.

Generalised impulse response function based on a VAR with three variables, the change in the VIX, the DY index and the average of bond flows of Brazil, Chile, Colombia, Mexico and Peru

In standard deviations

Graph 5



Bond inflows lead to a decrease in the DY index (blue). A shock to the DY index leads to bond outflows (red). Under sizeable shocks, this last effect could give place to an adverse feedback loop, which could prove fragile. For reference, positive (changes in) the VIX lead to bond outflows (green). In this case, we use EPFR Global to obtain a weekly frequency. Intervals are set at the 90% confidence level.

Source: Own estimations with data from Bloomberg and EPFR Global.

Another key issue is the extent to which global factors versus interconnectedness determine local financial conditions. A deterioration of global financial conditions would typically adversely affect local financial conditions. However, the extent to which interconnectedness adversely affects local financial conditions depends on several factors. In fact, interconnectedness could either be favourable or not depending on several circumstances. To explore this point, we regress each FCI on the z-scores of the VIX and the Latin American and US DY index:¹⁶

$$FCI_{i,t+1} = \beta_{i,0} + \beta_{i,1}VIX_t + \beta_{i,2}DY_t + u_{i,t+1}.$$

Our main interest is comparing $\beta_{i,1}$ with $\beta_{i,2}$. Not surprisingly, and partly by construction, the VIX plays an important role in determining the local FCIs being considered. In fact, in general, it is more relevant than the DY index itself. However, the role of the DY index varies depending on the economy and the period in question.

Since 2022, we find that in all five cases, an increase of the DY index adversely affects the individual local financial conditions. In fact, the mean of the coefficients

¹⁶ For this regression, we use the sample January 2022–November 2025.

associated with the VIX index is approximately 0.25, whereas the mean of the coefficients associated with the DY index is around 0.07, about a third of the former. All the individual coefficients are individually statistically significant. This indicates that under global financial stress, interconnectedness in financial conditions could add to the already adverse referred global conditions.

This reveals the potential of regional interconnectedness to exacerbate local financial conditions. In comparison with estimations based on longer samples, the coefficients associated with the DY index in some cases have been found to be either not statistically significant or negative but small. This provides suggestive evidence that the importance of interconnectedness has increased in determining financial conditions in the region.

Policy responses

It is worth noting that some dynamics of global NBFIs, which could be considered externalities, originate beyond EMEs.¹⁷ As the cost of the externality is not borne by institutions in the country of origin, a policy response in the economy of origin is highly unlikely. In fact, not even data-sharing between authorities is a common practice. While it would be desirable to have some policy coordination among jurisdictions, it is up to the local authorities in the affected economy to deal with the challenges that these dynamics could entail, including cross-border ones.

As a general rule, local NBFIs do not have access to central banks' facilities. That said, banks and NBFIs tend to maintain tight financial relationships through different channels. On the one hand, banks finance NBFIs based on repos, credit lines, collateral and market-making services, among others. On the other hand, NBFIs influence banks' liquidity needs, balance sheet usage and trading activity through their portfolio flows, hedging demands and redemption dynamics.

If banks have sufficient balance sheet capacity, NBFIs benefit from cheaper funding and deeper market liquidity. That said, when large NBFIs, for example, rebalance portfolios or face redemptions, they can drain liquidity from banks, increase dealers' inventory risks or raise collateral demands. This establishes a bidirectional relation, in which bank conditions influence NBFI behaviour, and NBFI behaviour affects bank intermediation capacity and local market liquidity. Thus, while NBFIs do not have direct access to the facilities, they can obtain liquidity through banks, which in turn obtain it from those facilities.

A natural theme to explore is what policymakers have done about NBFIs' footprint. This can be divided into short- and long-term policies. Regarding the short-term policy responses, we ponder liquidity enhancement measures and permanent backstop facilities.

Regarding the former, consider the following example, which is one of many. NBFIs' activity can sometimes lead to stress in certain nodes of the local bond markets. This could lead monetary authorities to implement measures such as debt

¹⁷ Recall the review on some of the mechanisms and factors and the reference to pecuniary externalities in the first section of the note.

swaps (ie exchanges of long-term for short-term securities) in order to procure uniform liquidity across the yield curve, alleviating possible pockets of illiquidity. Permanent *backstop* liquidity facilities entail benefits, but have relevant trade-offs. They are commonly rules-based and, thus, set off only under financial stress periods. Eligible financial institutions would be familiar with such facilities and the conditions under which they would be activated. In effect, they allow for a swifter deployment. That said, there is the possibility that having such information could lead to moral hazard.

It is useful to distinguish two aspects of moral hazard in this setting. First, it could be present when a facility is being used actively. Financial institutions take their decisions during periods of financial stress knowing that they can access such a facility.¹⁸ Second, if financial institutions are aware of the existence of a permanent backstop liquidity facility during their day-to-day normal business decisions, this could lead to the accumulation of risk in normal times. In effect, financial institutions could decide to take greater risks than they would under the absence of facilities. In sum, authorities need to be cognisant of the potential consequences of the moral hazard induced by a permanent backstop liquidity facility, in the short and long-term, and individually and collectively.

Authorities also need to watch for the possibility of stigma, as this would work against timely access to a facility. Under periods of financial stress, information asymmetry is exacerbated. Thus, financial institutions might be hesitant to deal with their peers, as they do not know whether a potential counterparty is really financially sound. If they learn that a potential counterparty has accessed a facility, they might interpret this as signalling financial hardship.

Institutions may be reluctant to utilise a permanent backstop liquidity facility due to concerns of being perceived as fragile. In the event of a liquidity shock, such hesitation may be the difference between a timely and decisive response from the financial institution, and a response that arrives too late. From the authorities' perspective, the former would help contain a shock, whereas a belated response by an institution could prove costly.¹⁹

¹⁸ This, however, is not necessarily always the case, as shown in the United States during the 2023 banking turmoil in which banks did not take on additional risk funded through the US Bank Term Funding Program facility (Glancy et al (2025)).

¹⁹ There have been two main potential responses to mitigate the presence of stigma attached to using a facility. One has been to preapprove access to a facility based on a prior financial assessment. Its overarching objective is to let stakeholders know that if the financial institution does access the facility, it is because of a short-lived financial mishap, unrelated to any fundamental issues. A second possible response is for authorities to force a set of financial institutions to access the facility. The objective here is to prevent market participants from stigmatising some facility users if a sufficiently large group uses it.

Long-term policies: the Mexican case of financial market development

A key long-term policy response to global NBFIs' dynamics is local financial market development. For financial markets to develop, there needs to be a joint effort between authorities and the private sector. Development typically requires joint improvement of several aspects and components.²⁰

In this context, Mexico's financial market development over the past few decades has been built on a well-defined strategy. In the aftermath of the 1994–95 crisis, authorities adopted a flexible exchange rate regime and an inflation targeting regime, while they also focused on strengthening the banking sector and fostering the growth of the FX, money, debt and derivatives markets. Moreover, Mexico was able to implement many elements of the Basel III standards early, including the definition and composition of regulatory capital. This was partly because some of these elements were already in place. These factors have contributed to Mexico having a resilient financial sector (Bank of Mexico (2020)).²¹

From the market perspective, Mexico has built one of the most developed local currency government bond markets in Latin America, with outstanding domestic public debt securities and an established yield curve, which also supports financial asset pricing (Bank of Mexico (2014, 2023)), underpinned by a gradual shift towards domestic, longer-maturity, local currency public debt (FSB (2022)).

Over the past decade, Mexico has experienced a shift in the composition of government debt holders. Global NBFIs have reduced their participation substantially. This has been due to a combination of factors, including the global monetary tightening and shifts in benchmark index weights and in the risk appetite towards EME assets. Their share of Mexican government securities has fallen from historically high levels in the early 2010s to lower levels in more recent years. This reduction has been absorbed domestically. Pension funds, insurance companies, banks and local investment funds have steadily increased their allocations to government securities. Structural factors are key to understanding this process: first, local pension funds have continued to grow, leading to increased demand for long-duration instruments. Second, local banks have increased their holdings partly as a result of liquidity regulation (eg the Liquidity Coverage Ratio), stronger deposit growth and a preference for liquid assets. Third, funds have expanded (AMIB (2025)) in line with rising household financial participation (CNBV and INEGI (2024)).

In sum, the combined effect is that the exit of foreign NBFIs has not led to a structural demand gap. That being said, the remaining non-resident participants in local markets are primarily investors who commonly use the World Government Bond Index (WGBI) as a benchmark. Constant outflows from the non-resident sector mean that local investors currently own 88% of peso-denominated government debt, which make the financial sector more susceptible to idiosyncratic shocks.

²⁰ Please refer to the appendix for further long-term policies in this context.

²¹ For example, shown by the orderly functioning of markets and strong bank balance sheets during the 2020 Covid-19 turmoil (FSB (2022)).

In addition, the reduced presence of non-residents has not been beneficial to trading conditions. In other words, strengthening the local investor base is a positive factor, though it increases the economy's exposure to idiosyncratic shocks.

Final remarks

The growing influence of NBFIs, particularly investment funds, has made capital flows more volatile, which can impact local financial conditions adversely. This note emphasises that regional financial interconnectedness could worsen local financial conditions during periods of financial stress.

In this context, policymakers must have a good understanding of the microstructure in the financial markets, particularly in relation to the NBFIs holding assets from their respective economies. It is particularly important that policymakers understand the incentives and regulatory restrictions that influence NBFIs, and how these might evolve over time.²²

Authorities should have a flexible policy toolkit to respond to financial market incidents if and when strictly warranted. Such a toolkit typically entails facilities to provide liquidity and foster favourable behaviour in the financial markets. Financial market development is a desirable policy response, but one that takes time and effort to implement. This should lead to a diversified and large investor base, including local investors, with more capacity to absorb significant changes in global investors' positions in local financial assets.

All in all, the absence of a significant financial stress episode more recently in local markets is a positive signal of growing resilience, but should not create complacency or be taken for granted. It might as well be the case that there are underlying risks of adverse financial episodes being accumulated. We take the results of our empirical exercises on the interconnectedness of regional financial conditions as suggestive of the potential presence of such risks. Thus, policymakers need to be prepared for the possibility of these events in the future.

²² For instance, the concept of "original sin" has evolved, for some economies, into what is now referred as "original sin redux". In Mexico, the low participation of non-residents in local debt markets significantly reduces the latter.

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Appendix: Long-term policies: the Mexican case of financial market development

This appendix covers some aspects of the Mexican case of financial market development which are important but not directly related to NBFIs.

The 2014 financial reform strengthened banking competition through measures such as portability of bank accounts and mortgages, and mandatory publication of interest rates. Since then, economic policies have placed particular emphasis on fostering competition, promoting inclusion and enhancing capital market access.

In 2018, Mexico enacted the Law to Regulate Financial Technology Institutions (“Fintech Law”), which regulates fintech providers and virtual-asset services based on principles of financial inclusion, innovation, competition, consumer protection, financial stability and anti-money laundering/countering the financing of terrorism (Bank of Mexico (2018)).

In this context, the 2022 IMF Financial Sector Assessment Program (FSAP) corroborated these findings, concluding that Mexico had had a robust financial system for many years, with banks maintaining high capital and liquidity buffers (IMF (2022)). That being said, the FSAP also underscores that credit to the private sector remains low relative to its economic fundamentals. It goes without saying that it remains low relative to its peers. This points to the need for further work in terms of research as well as policy.

The authorities have also promoted sustainable finance. By 2023, Mexico had accumulated green, social, sustainability and sustainability-linked bonds (Climate Bonds Initiative (2024)). These developments have also supported orderly trading in local currency government bond markets during recent episodes of global financial stress.

Recently, the Securities Market Law and new secondary regulations adopted in 2024–25 were amended. These changes have led to the creation of the figure of “simplified issuers”. This figure should allow moresmall and medium-sized enterprises to register securities through a simplified procedure and place them with institutional and qualified investors (Martin et al (2024)).

The cited FSAP notes that capital markets remain relatively modest in size relative to those in other EMEs, are heavily focused on sovereign bonds and only have a comparatively small stock market capitalisation (IMF (2022)). In addition, financial inclusion indicators remain low and call for a constant effort to expand access (Maravalle and González Pandiella (2022)).