

Foreign Investment in Local Currency Bonds

Considerations for Emerging Market Public Debt Managers

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Abstract

Foreign investors are increasingly important participants in the local currency sovereign bond markets of developing countries. This note provides context on the overall growth of local currency sovereign debt markets in emerging markets and the growth of foreign investor participation in these markets, a short review of the relevant academic literature, and a summary of the sources of foreign demand. The note concludes with a

discussion of the implications of growing foreign investor participation for the managers of public domestic debt in developing countries. The aim of the note is to provide a useful, practically-oriented primer for debt managers beginning to engage on this issue, and in particular to facilitate moving the dialogue beyond overly simple categorizations of countries as “emerging markets” and of investors as a homogeneous source of “hot money”.

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Foreign investment in local currency bonds – Considerations for emerging market public debt managers

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1. Introduction

The sovereign borrowing landscape in emerging market economies (EMs) is evolving rapidly. A notable trend in recent years has been the growth of local currency—as opposed to foreign currency—sovereign bond markets, enabling more developing country governments to meet an increasing proportion of their borrowing requirements by issuing securities domestically, in their own currencies. This success is attributable partly to improved macroeconomic fundamentals in emerging markets (lowering inflation risk premia enough to make longer-term borrowing in local currency feasible), and partly to the rise of domestic market participants with an appetite for longer-term lending (especially domestic pension and insurance companies).

These changes are well-known.¹ But one increasingly important source of demand for local currency sovereign bonds in EMs is more of an unknown quantity: foreign investors. This note explores this investor base, aiming to highlight salient aspects for EM government debt managers as they pursue their mandates. We briefly summarize recent trends, starting with the overall growth in EM local currency bond markets, followed by the extent to which foreign investor participation in these markets has risen. We then examine what the relevant academic literature can tell us about how offshore demand affects bond markets, before taking a more detailed look at the evolving sources of foreign demand and whether these are likely to be sustained. The note concludes with a discussion of considerations for EM debt managers based on our exploration of this topic.

The scope of this note is limited to describing and discussing some of the implications of increasing foreign investor activity in EM local currency bond markets, with the aim of providing a useful discussion for EM debt managers. We only touch on the much broader issue of managing portfolio investment as a whole, an area which is the subject of an ongoing debate with macroeconomic, fiscal, monetary and prudential policy implications that go well beyond the remit of public debt management.

A preview of this note's central conclusions is as follows:

- The trend of rising foreign investor participation in EM domestic bond markets was in place before the global financial crisis and has since accelerated, with foreign ownership levels now at historic highs in several EMs.
- High-level categorizations of “foreign investors” and “EMs” risk being misleading. The class of “foreign investors” includes a broad range of investor types, while EMs encompass countries across a spectrum of economic and market size and development. Therefore, for the purposes of debt management, a more detailed categorization of foreign investor types is needed, and the impact of, and appropriate debt management responses to, foreign participation may differ significantly across countries.
- There is a lot that debt managers can do should they wish to encourage foreign investor demand. Many of the measures that might be considered are compatible with broader market development goals, including benchmark-building, the adoption of a consistent and transparent issuance strategy, and active management of investor relations and market communication. Benchmark bond index inclusion may motivate taking additional, specific measures.
- Improving market monitoring in order to maximize debt managers' knowledge of foreign investors' participation in their debt markets is a priority, given the significant odds that offshore demand for EM debt will prove to be sustained. In many countries which are witnessing more foreign investor participation, there is an urgent need for accurate, detailed and up to date holdings data.

¹ For a good overview through 2005 see IMF, *Structural Changes in Emerging Sovereign Debt and Implications for Financial Stability*, Ch. 3 of the *Global Financial Stability Report* (April 2006). A more up to date treatment is Burger et al (2010).

2. The growth of EM local currency bond markets and foreign investor participation

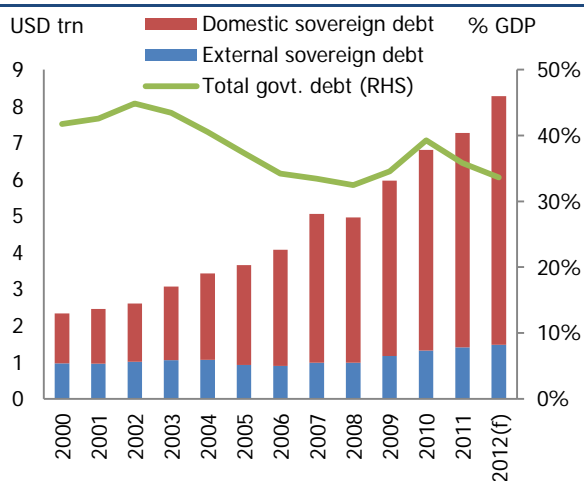
Local currency bond markets have grown rapidly in recent years across a wide array of developing countries. Nevertheless, reliable, comprehensive and up to date data in this area remain hard to come by. Here, we provide some views of the broad trend by drawing on data for two different subsets of EMs, prepared by JP Morgan and the Bank for International Settlements (BIS), respectively.

Figure 1 draws on data compiled by JP Morgan for 26 EMs (together accounting for over 50% of GDP of the 150 countries classified as “developing and emerging” by the IMF)ⁱ. It illustrates the rapid growth of EM domestic sovereign debt since 2000, both relative to external sovereign debt and in absolute terms. Until the economic slowdown in 2009 induced by the global financial crisis, GDP grew even faster than net debt issuance in these economies in aggregate, so the total government debt to GDP ratio dropped (also shown in Figure 1). This trend was interrupted by the crisis, but has since resumed, and the debt ratio remains moderate—and very low compared with that of advanced economies—at under 35%.

This view includes loans from the official and commercial sectors (not just bonds). The bulk of these loans will tend to be foreign currency-denominated, so the relative decline of external debt incorporating such financing supports the idea that a strong de-dollarization trend in EM public borrowing is underway. However, in some cases strong recorded rises in domestic financing may also reflect local commercial banking sector growth, rather than the domestic bond issuance which is our focus here.

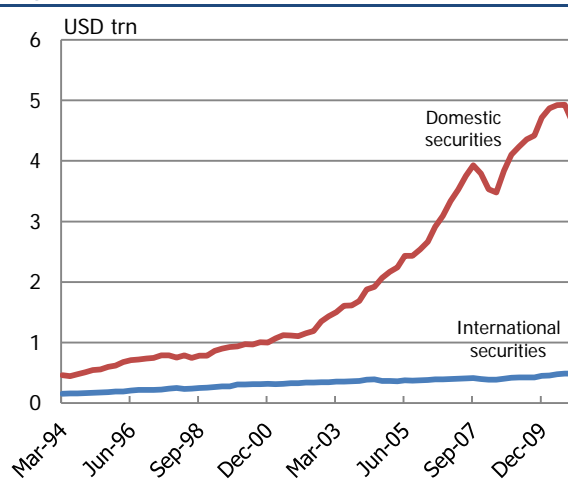
We therefore also consider an alternative, securities-specific perspective: the trend in international and government debt securities outstanding since 1994 for a similar, but smaller, subset of 22 countries tracked by BIS (Figure 2).ⁱⁱ Again, the rapid relative and absolute increase in domestic sovereign borrowing (this time specifically in the securities markets) is clear.

Figure 1: Domestic and external debt of 26 EMs



Source: Calculations based on JP Morgan EM Debt and Fiscal Indicators (2012) and the IMF World Economic Outlook (April 2012)

Figure 2: Total government securities outstanding of 22 EMs

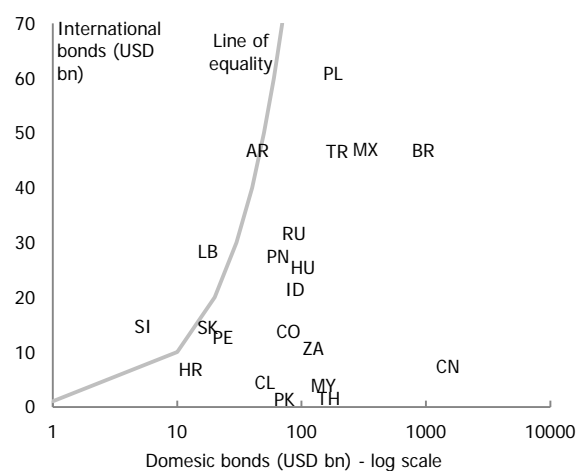


Source: Calculations based on BIS securities data

What aggregate trends such as those shown in Figure 1 and Figure 2 obscure is the considerable variation that exists amongst EM debt markets. To illustrate this, it is useful to compare the total amount of domestic and international government securities outstanding at a given time. Figure 3 does so for the BIS sample of 22 EMs as of the end of 2011. We see that there are many differences amongst these countries in the relative amounts outstanding of domestic versus international bonds, and in the size of domestic sovereign bond markets.

The increase in the stock of EM debt has been accompanied by an increase in foreign demand. EM debt is now firmly institutionalized as a mainstream asset class², as demonstrated by the rise in the global financial centers of investment funds with EM bond-specific asset management mandates, and sizable EM-dedicated capital markets sales, trading and research operations in global investment banks.

Figure 3: Outstanding government securities of 22 EMs as of end-2011



Source: BIS

Note: A log scale for the x-axis has been used to improve the display (the value of domestic bonds outstanding increases exponentially with every unit increase along the x-axis).

Yet despite their strong growth, emerging local currency bond markets remain small relative to those of the advanced economies, and to other asset classes. As of the end of 2011, the total value of the local currency government securities outstanding of the BIS sample of 22 EMs employed above was around US\$4.7 trillion. While up sharply from only US\$863 billion at the end of 1999, this is still equal to only about 13% of the US\$37 trillion in domestic government securities of the 30 advanced economies tracked by BIS statistics, and roughly comparable to the value of the local currency government securities of France, Germany, and the United Kingdom combined (about US\$5 trillion as of end-2011). The total bond market value of the six largest Southeast Asian economies (the ASEAN-6), at US\$883 billion, is equivalent to about 7% of Japan's.³

Such aggregate statistics in fact exaggerate the investible universe for foreign investors, who may face restrictive regulations or taxes, and often have minimum liquidity requirements that exclude smaller markets and bond issues. The total market capitalization of the most widely followed EM local currency bond benchmark, the JP Morgan Government Bond Index-Emerging Markets (GBI-EM) Global Diversified Index, was US\$832 billion in mid-2012. This compares with nearly US\$21 trillion for the equivalent JP Morgan developed market-only index (GBI-Global).⁴

The combination of increased foreign investor interest and the still relatively small size of the EM local currency bond asset class has resulted in a sharp increase in the share of local currency EM bonds held by foreign investors. As is the case when examining broader trends in local currency bond market development, the degree and impact of this rise in foreign involvement differs widely across EMs.

Figure 4 illustrates the trend over the last decade for seven EM markets (and Australia, the United States and the United Kingdom, for comparison). This shows the rapid pace at which the foreign ownership stake of EM debt has risen, particularly since the financial crisis. The proportion of domestic, local currency government securities held by foreigners is now at historic highs in many EMs. Table 1 provides

² This terminology is due to JP Morgan – see, for example, *EM Moves into the Mainstream as an Asset Class*, JP Morgan (November 2010).

³ Source: Calculations based on data as of September 2011 from the *Asia Bond Monitor* (April 2012), Asian Development Bank (p7, Table B). Note: comprises both corporate and sovereign bonds (though the latter predominate).

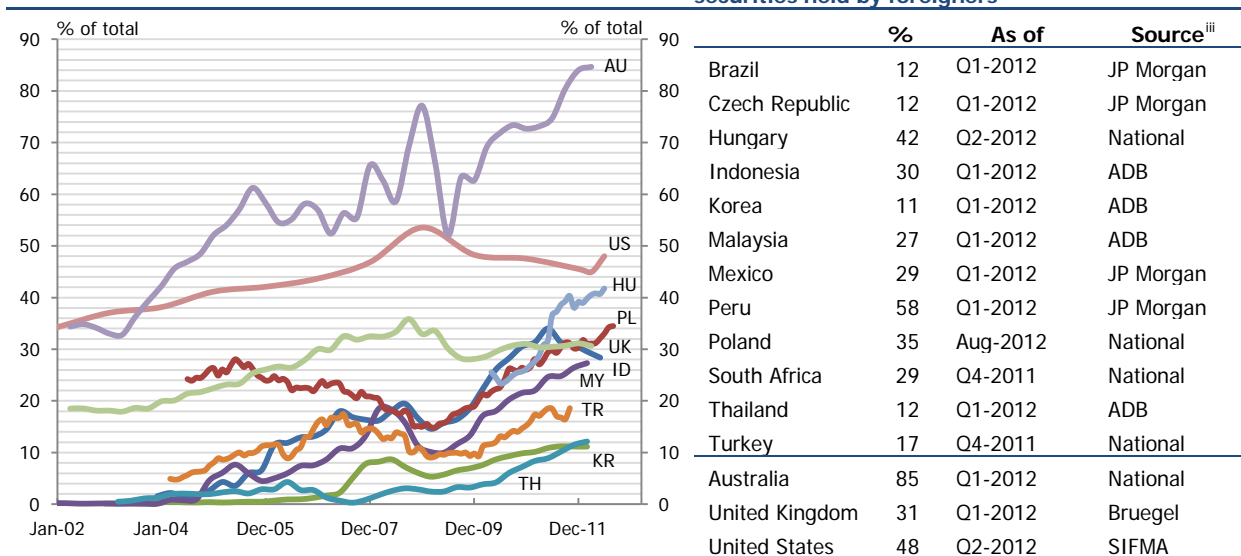
⁴ Market capitalization figures from JP Morgan.

recent figures for a bigger sample of EMs and the three developed markets shown in Figure 4.

While the significant ownership shares of foreign investors in a large number of EMs is striking, it is worth noting that even these proportions may understate the importance of offshore demand in certain parts of the market, since offshore ownership is not necessarily evenly-distributed amongst domestic debt issuances. For example, foreign ownership may be concentrated in longer tenors even when overall foreign ownership as a proportion of all debt is quite low, making long-term yields much more sensitive to foreign demand than aggregate holdings data suggest.

Amongst the limitations of the foreign holdings data used for Figure 4 is the difficulty of gauging who the beneficial owners of debt are, given the wide variety of custodial arrangements that exist. The intermediary role of banks, including those with an onshore EM presence, is worth highlighting here; the true extent of foreign investor participation in a market will be understated by basic holdings data in cases where onshore banks warehouse bonds in order to satisfy foreign client demand, or to meet risk management needs arising from their own issuance of instruments, which provide foreign clients with exposure to local yields. The EM credit-linked note (CLN) market has existed since 1996 and as early as 2003 the notional value of all credit derivative contracts based on sovereign EM underlyings was estimated at US\$250 billion (including local currency instruments, though these would have been only a small share).⁵ Comprehensive market statistics remain elusive, but while the credit derivative market as a whole was hit hard by the financial crisis, it continues to evolve, including for local currency EM debt underlying instruments (e.g. total return swap products replicating local currency bond index returns).

Figure 4: Foreign holdings of domestic government securities **Table 1: Proportion of domestic government securities held by foreigners**



Source: National sources (Australia, Hungary, Poland, Turkey); Asian Development Bank (Indonesia, Korea, Malaysia, Thailand); ONS & BOE via Bruegel (United Kingdom); SIFMA (United States)^{iv}

The emergence of offshore investors as important participants—and in some cases the single largest investor category—in EMs is an important shift. This trend testifies to the growing relative appeal of EM local currency debt, due to the economic and policy-making progress of developing countries and, more recently, also to the high market volatility and dramatic declines in fixed income yields seen in many advanced economies since the global financial crisis. What is less clear, however, is the direction of causality between local market development and foreign investor participation, and the market impacts of

⁵ Dates and figures from the British Bankers' Association Credit Derivatives Report (2003/04), cited in Dages et al (2005).

the trend. Next, we therefore turn to a review of the relevant academic literature.

3. Literature review

It seems reasonable to expect that foreign investment in bonds, by helping to diversify the investor base and adding to overall demand, is broadly complementary to domestic bond market development and helpful in lowering average borrowing costs. However, this may possibly come at the expense of greater volatility, in which case a tradeoff may exist between the dampening effect on local yields of extra demand, and volatility. Testing the validity of these sorts of priors and, where they are supported by the evidence, attempting to quantify them is the task of the academic literature.

In fact, the literature examining the causes, nature and impact of rising foreign investor participation in developing country local currency bond markets is limited. This can be ascribed to the relatively recent emergence of the trend, and (relatedly) to sparse data. Our review here is correspondingly brief.

Bond inflows are of course a component of overall capital inflows, and this leads naturally to questions about the impact of inward portfolio investment as a whole on domestic capital markets and macroeconomic outcomes, the answers to which have important policy implications. Here, we confine ourselves here more narrowly to the literature on the bond market.

From an academic perspective, the 2008-9 global financial crisis provided a useful test of the behavior of EM bond markets under extreme global market conditions. Turner (2011) takes this approach and finds that EM local currency bond markets, while hit hard by the crisis, were in fact fairly resilient. Much of the volatility in returns occurred through the currency channel (not bond prices in local currency), insulating dollar-hedged and local currency-benchmarked investors. An important source of selling pressure on EM local currency bond markets was forced liquidations by foreign investors due to the relatively low collateral value of EM bonds. EM domestic bonds clearly remain risky assets for foreign investors, making foreign investors a source of selling pressure during crises (Turner 2011).

The growing interconnectedness of global capital markets increases the sensitivity of EM asset prices, including bonds, to global factors. For hard currency EM bonds, for example, there is evidence that global market liquidity conditions and risk appetite have driven 50% or more of the variance in spreads (Gonzales-Rozada and Levy-Yeyati 2008, Braasch 2010). However, there is also some evidence that global bond market integration is a stabilizing force. A “virtuous cycle” may be at work in local currency bond markets, with rising foreign investor participation helping to absorb more issuance (especially of longer-term paper), encouraging more market development and policy improvements and adding liquidity, and thus further stimulating demand, including more foreign demand (Burger et al 2008, to whom the “virtuous cycle” terminology is due).

Triggering and sustaining virtuous cycles of this kind requires that markets offer adequate access and high enough risk-adjusted returns to draw in foreign investors in the first place. In other words, they must be sufficiently open and sufficiently rewarding. In an ambitious and important paper, Burger and Warnock (2010) find that openness, measured using an “investability index” combining a range of indicators including the policy stance towards investors, liquidity, market infrastructure, regulatory quality and others, is in fact a stronger driver of foreign investment in EM local currency bonds than returns, for U.S. investors (to whom diversification benefits also matter).

In perhaps the most comprehensive attempt to examine the issue, Peiris (2010) describes the results of exploiting a novel database of foreign participation in the domestic bond markets of ten EMs over 2000-9. The key finding is that a 1% increase in the share of foreign investors is associated with a 6-basis point reduction in yields, on average and all else equal. There is no evidence that foreign participation raises volatility.

Empirical results on the impact of foreign investor participation in *developed* country local currency bond markets are perhaps surprisingly few, though a recent noteworthy exception is Andritzky (2012) (and see also citations of previous work therein). Using a new dataset comprising 13 OECD economies, Andritzky finds a statistically significant relationship between bond yields and non-resident ownership, but of a smaller magnitude than Peiris (2010) does for EMs; a 1% increase in the share of securities held by non-residents is associated with a 3.2 to 4.3-basis point drop in yields (and a larger -6.6-basis point effect in the Eurozone). In contrast to Peiris (2010), this paper also finds a statistically significant relationship between foreign participation and volatility, although the effect is not large. Causality tests are somewhat ambiguous, but on the whole they suggest that lower yields may exert a “pull effect” on foreign investors (resulting in the negative relationship referenced above), rather than foreign investors themselves driving down yields.

In summary, it is fair to say that the literature examining the dynamics of foreign investor participation in EM domestic bond markets is nascent. Work so far suggests, tentatively, that increased foreign participation is associated with lower yields, while the impact on volatility is ambiguous. Foreign investment may also contribute to “virtuous cycles” in bond market development. Future research may uncover more robust evidence of impacts on yields and domestic market development, though data constraints and significant variation amongst markets will pose a continuing challenge for researchers.

4. Sources and likely persistence of foreign investor demand

The growing popularity of EM local currency debt is no mystery when its strong performance versus other major asset classes in recent years is considered (Figure 5).⁶ Indeed, the basic long-term investment case for EM local currency debt—exposure to relatively high real yields, prospects for currency gains (more on this immediately below), and capital allocation to sounder sovereign balance sheets than those of many advanced economies—has not only weathered the crises of recent years, but arguably been strengthened by them.

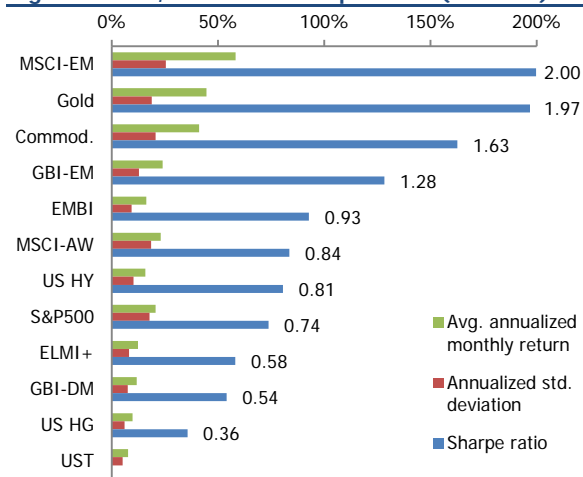
From a multi-asset perspective, some allocation to EM local currency debt of course also confers portfolio diversification benefits. This holds even though, as a “risky asset”, the correlation of benchmark GBI-EM index returns to those of other asset classes has tended to be quite high (Figure 6). Inspecting historical correlations also reveals the close link between GBI-EM returns and EM currency returns (proxied using the JP Morgan ELMI+ index – an EM currency return index). Gaining exposure to EM currencies, which have shown secular appreciation trends, has likely been a major motivation for investors’ increased allocations to these countries’ domestic bonds.

But who exactly are these investors? Unfortunately, there are no comprehensive data on the current composition of the foreign investor base for EM local currency debt, nor is it straightforward to gauge its potential future size. However, some recent estimates are available from market participants.

The value of the assets under management (AUM) benchmarked to JP Morgan’s local currency EM debt indices is estimated by JP Morgan to have stood at US\$146.5 billion in December 2011, up from US\$79.1 billion at the end of 2010.⁷ Standard Chartered estimates that as of end-2011, the total AUM benchmarked to all dedicated local currency EM bond indices was US\$175 billion.⁸

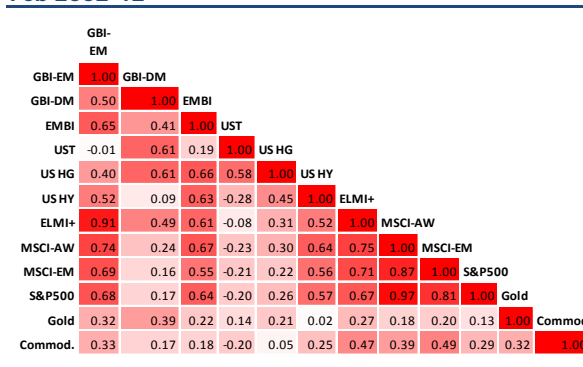
Standard Chartered also notes, however, that a bottom-up analysis aggregating country-specific data on bond holdings leads to a much higher estimate of total foreign bond holdings – around US\$310 billion for countries accounting for 90% of the market capitalization of the JP Morgan GBI-EM Global Diversified Index.⁹ This observation goes to the heart of understanding the investor base: foreign participation in local currency EM debt markets involves many different investor types, not just EM-dedicated, benchmarked funds.

Figure 5: Risk, return and Sharpe ratios (2002-12)^v



Source: Calculations based on data from JP Morgan

Figure 6: Correlation of annualized monthly returns, Feb 2002-12



Source: Calculations based on data from JP Morgan

⁶ The finding that EM local currency debt has been a strong performer relative to other asset classes since at least the early 2000s is a robust one, but it should be noted that specific numbers such as those shown here are very sensitive to the time period chosen and to the inclusion of the extreme market price moves seen at the height of the financial crisis.

⁷ JP Morgan, *Emerging Markets Outlook and Strategy* (January 2012)

⁸ Standard Chartered, *Local Markets Compendium* (2011)

⁹ Standard Chartered, *ibid*

This calls into question the treatment of “foreign investors” as a unified investor category; not only do EM funds themselves have different investment mandates, but there are multiple sub-classes of foreign investors, who may have widely differing attitudes to risk, and behaviors. For the debt manager, it is likely to be increasingly important to differentiate in a systematic way amongst foreign investors, since assessing the category as a whole may not yield accurate insights into the behavior of different classes of offshore participants in the debt market.

Amongst asset managers benchmarked to EM domestic debt indices such as the JP Morgan GBI-EM, there is a spectrum of approaches running from index-tracking, passive investors, to active managers with large permitted index tracking errors. A notable recent development has been the growth of exchange-traded funds (ETFs) tracking EM local currency bond indices. Two examples are the iShares Emerging Markets Local Currency Bond Fund, launched in October 2011 and benchmarked against the Barclays Emerging Markets Broad Local Currency Index, and the SPDR Barclays Capital Emerging Markets Local Bond ETF, launched in February 2011 and benchmarked against the Barclays EM Local Currency Government Diversified Index. Both funds are listed on the NYSE. ETFs such as these provide investors, including retail investors, with exposure to an entire EM bond index at low cost, potentially significantly boosting investor access and interest.

Beyond EM-dedicated investment funds, including ETFs, a first additional foreign investor category to consider is official sector investors, comprising:

- i. Central banks. Global central bank reserves remain heavily concentrated in US dollars and Euros, but as reserves continue to grow and some diversification continues, demand from central banks for EM local currency debt instruments (including bonds) looks likely to rise. Total reserves allocated in “other” (non-traditional reserve) currencies, recorded by the IMF’s COFER database, stood at US\$294 billion as of Q1-2012. This is an order of magnitude higher than the US\$22 billion recorded in 1999, but still represents just 5% of the total allocated amount (Figure 7). Total global reserve holdings, including unallocated reserves not included in the COFER data were approximately US\$10.4 trillion as of Q1-2012.
- ii. Sovereign wealth funds (SWFs). SWFs have also grown rapidly and had assets of around \$4.6 trillion as of Q1-2012.¹⁰

Given their size, allocations by central banks and SWFs to local currency EM bonds need increase only very slightly to boost demand significantly. EM central banks may themselves drive this trend, as EM reserve assets continue rising and “south-south” trade linkages grow.

A second additional investor category is absolute return investors: global hedge fund AUM stood at about US\$2 trillion at the end of 2011, following net inflows for the year of US\$70 billion.¹¹ Hedge funds’ aggregate allocation to EM debt is hard to gauge but significant. As of Q2 2012, one estimate placed EM-dedicated hedge fund AUM at US\$203 billion (though this includes allocations to EM asset classes other than bonds, notably equities); macro hedge fund AUM was estimated at US\$173 billion (a portion of which is allocated to EM debt).¹² Increases in liquidity as debt markets continue to develop may attract more trading-oriented, leveraged investors.

A third additional investor category is benchmarked funds which have not traditionally focused on EM debt, but may increasingly begin allocating at least some assets to this area. The drivers of such fresh allocations include:

- i. Adjustment of funds’ investment mandates to incorporate benchmarked EM debt exposure;
- ii. Funds making permissible off-index asset allocations to gain exposure that is determined to be

¹⁰ Source: Preqin

¹¹ Hedge Fund Research Inc., *Hedge Fund Investors Rotate into Macro, Arbitrage Strategies for 2012* (Press Release, 2012)

¹² Source of numerical estimates: BarclayHedge

- desirable on a risk-adjusted return basis;
- iii. Changes in the composition of benchmarks themselves.

This third driver—benchmark composition changes—is important. Inclusion or exclusion in widely-followed bond indices can have a major impact on global investors' asset allocations, and hence on net foreign flows. The announcement that South Africa would be included in Citigroup's World Government Bond index (WGBI), against which it is estimated that about US\$2 trillion in AUM are benchmarked, provides a recent example.¹³ Citigroup announced that South Africa's inclusion was being considered in April 2012 and the final announcement was made in June 2012.

While this was just one factor influencing the South African bond market over this period, the announcement does appear to have triggered a discernible upturn in net foreign purchases of domestic currency bonds, including the biggest daily net inflow seen in recent years just after the initial announcement (Figure 8); yields also fell. Contemporary estimates of the value of fresh inflows into South African bonds due to purchases by WGBI-benchmarked funds were US\$5-9 billion, or up to about 10% of total market capitalization.¹⁴ In 2010, when Mexico was added to the WGBI, foreign purchases of its domestic bonds surged by US\$11 billion over the year, resulting in a 7 percentage point rise in the proportion of bonds held by foreigners, to 31%.¹⁵ It is less easy to quantify the indirect, but generally positive, impacts of the increased visibility that high profile index inclusion brings.

South Africa brings to four the number of EMs currently included in Citibank's WGBI (along with Malaysia, Mexico and Poland). These countries are constituents both of EM-only bond indices, and of very widely-followed global bond indices comprising both "developed" and "emerging" markets. This exemplifies the blurring of the traditional lines between asset classes, a trend, which the explosion in public debt in advanced economies since the financial crisis, has surely accelerated.

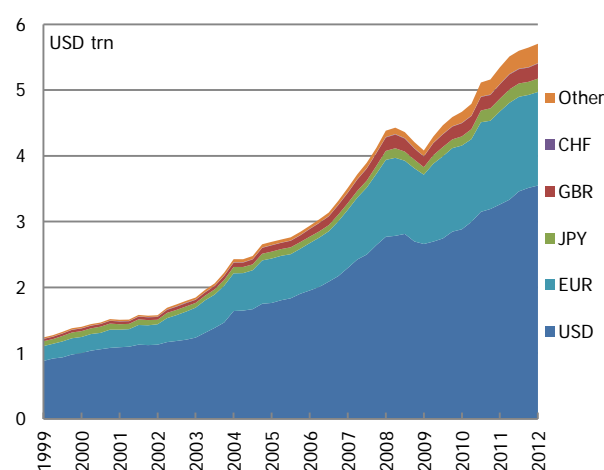
The convergence of EM debt ratings with those of developed markets provides a clear illustration of how traditional asset class definitions are being challenged. EM local and hard currency sovereign debt ratings upgrades have significantly outweighed downgrades since the global financial crisis, while the opposite is true for developed market debt. This trend reflects the increased macroeconomic and balance sheet strength of many developing countries. Although less easily quantifiable, improvements in policy-making environments in EMs is another factor driving improvements in EM sovereign ratings and increasing asset allocations to these markets. Interested readers are referred to *Public Debt Management in Emerging Market Economies: Has This Time Been Different?*, Anderson et al (2010), which provides an overview of how these factors, along with improved debt management practices, helped minimize the impact of the global financial crisis on EMs.

¹³ Reuters, *South African bond rush* (Rao, S., 10 May 2012)

¹⁴ Reuters, *S.Africa to join Citi world bond index in October* (11 June 2012)

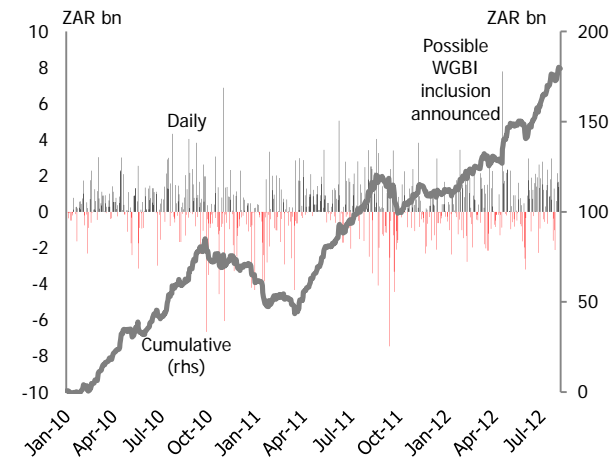
¹⁵ Reuters, *South African bond rush* (Rao, S., 10 May 2012)

Figure 7: Currency composition of allocated reserves of monetary authorities reporting to IMF COFER



Source: IMF (COFER database)

Figure 8: Net foreign purchases of South African domestic government bonds



Source: Johannesburg Stock Exchange data via Bloomberg

If sustained, even small changes in the asset allocations of major investors not traditionally focused on EM debt would significantly drive up demand, given the scale of assets under management in the investment industry. According to the EM debt and currency team at Investec, there are US\$80 trillion in conventional AUM globally and allocations to EM debt remain modest (e.g. estimates of an average of 2.2% of AUM allocated by pension funds in the U.S., U.K. and Europe); a reallocation to EM debt of just 1% of assets would therefore generate inflows of US\$800bn.¹⁶

It is probably impossible to make a reliable prediction of future global asset allocation and foreign demand for EM local currency debt. What is clear, however, is that there is a multiplicity of sources of this demand, and there is evidence that a powerful “virtuous cycle” in EM policies, macro dynamics, foreign participation and market development, of the kind described by Burger *et al* (2008) has been at work, and may in fact have been reinforced by the global economic and financial market turmoil of the last few years. It is not unreasonable to expect this to continue, though only time will tell how persistent the key underlying demand-side forces of increasing global economic and financial integration and diminishing home investment bias will prove to be.

5. Considerations for EM debt managers

What does the trend towards growing foreign investor participation mean for the managers of EM public debt?

One positive implication is a higher payoff for generally sound debt management. The strong appetite for EM debt means that improvements in economic policies and management, including debt management, can be rewarded with significant offshore demand for the issuer’s paper. This can lower reliance on foreign currency borrowing and thus reduce currency risks to the public debt portfolio, as well as lower onshore borrowing costs.

This said, EM local currency debt remains a risky asset from the perspective of foreign investors. Consequently, there is no room for complacency on the part of debt managers, particularly as the supply of competing EM debt rises as new countries join the ranks of EM domestic bond issuers, the perceived credit quality of existing issuers improves, and economic development and public investment funding

¹⁶ Investec, *Emerging Markets Debt: the next 10 years*, Paper 7, (May 2012)

needs drive up issuance globally.

Many of the key determinants of the scale and type of foreign demand for domestic debt are beyond the control of debt managers, such as global fund flows. In other areas, debt managers do not have direct control, but may have some degree of influence; for example, debt managers do not control macroeconomic and fiscal policies, but debt management can and does influence macro and fiscal outcomes.

However, debt managers, through their issuance choices and other remits, can profoundly affect their market's attractiveness to foreign investors in a number of ways. A recent IMF survey of major asset managers found that "market liquidity" and "range of instruments available" were amongst the top five factors considered in cross-border investment decisions by asset managers and pension funds, respectively.¹⁷ Discussions in the 2008 World Bank/IMF/OECD Bond Market Forum pointed to debt managers being able to play a "significant" role in fostering liquidity, with liquidity based on: "...(i) concentrating issuance in critical tenors; (ii) well-functioning repo markets and ability to short issues; (iii) plain vanilla derivatives markets; (iv) facilitating investor demand and price discovery; and (v) supporting a network of primary dealers".¹⁸

One area that may merit special attention from EM debt managers is the possibility of benchmark index inclusion (or, where already included, the risk of exclusion). Examining the key criteria for some major indices is revealing (Table 2). Debt managers cannot control meeting criteria like country income level or overall market size, but they certainly can influence the instrument mix and maturity structure of the public debt over time. In this respect, maximizing the odds of index inclusion largely boils down to benchmark-building beyond the 1-year tenor mark, since inclusion often involves minimum specific issue sizes in addition to total market size requirements. A focus on conventional fixed-rate, bullet bonds, which constitute the bulk of bonds included in indices (in many cases exclusively so), is also desirable from an index-inclusion point of view. Such goals are likely to form part of a more general market development strategy in any case, and also need to be evaluated in the context of other factors such as the evolving cost and risk profile of the public debt.

Ongoing innovations in indexation, and the creation of new indices, pose both risks and opportunities for EM debt managers. Changes in the availability and popularity of weighting methods, for example, can have significant effects. Indices where weights are determined by GDP or measures of economic fundamentals aim to address the perverse tendency of conventional market-capitalization weighted bond indices to increase allocations to markets where debt supply (and hence credit risk) are rising. The differences can be significant; domestic bond market size and GDP, for example, are often not highly correlated. The GEMX index (part of the World Bank's GEMLOC Initiative) weights country constituents according to a measure of "investability".¹⁹ The potential influence of new indices tracking non-conventional bonds may also need to be considered, e.g. of EM inflation-linked bonds, such as the Barclays EM Global Inflation Linked (EMGILB) Index.

Even if significant steps are taken to enhance foreign investors' access to domestic markets, some investors will likely never be in a position to buy onshore, since they may have neither the operational capability, nor the ability to obtain a mandate to do so given the infrastructural, regulatory and legal hurdles involved. Yet it may still be possible for debt managers to tap such investors' potential demand for EM local currency duration exposure. Offshore markets for EM local-currency denominated bonds (e.g. of "global" bonds in the U.S. and "uridashi" bonds in Japan) are well-established. EM debt managers could consider some issuance in these markets, which may also be a good way to build offshore

¹⁷ IMF, *Long-term Investors and their Asset Allocation: Where are they now?* Ch. 2 in *Global Financial Stability Report* (September 2011) Table 2.17 (p37)

¹⁸ OECD/World Bank/IMF, *Secondary Market Liquidity in Domestic Debt Markets*, Tenth Annual OECD/World Bank/IMF Bond Market Forum, 29-30 April 2008

¹⁹ See <http://worldbank.org/gemloc>

investors' knowledge of local currency opportunities when domestic bond markets are quite new. Issuer-driven ETFs are another new and promising mechanism to raise the profile of, and dramatically reduce access costs to, domestic bonds for offshore investors, via listings on major global stock exchanges.

Debt managers also play a major role in maintaining investor relations, and are responsible for the predictability of fresh issuance and operations to manage existing liabilities, such as buy-backs and switches. Foreign investor confidence, and hence participation in the domestic market, is likely to respond positively to consistent, transparent debt management practices in these areas. In this respect, developing, maintaining and publicizing a comprehensive debt management strategy may be impactful.

Debt management offices are also key stakeholders in initiatives to lower transaction costs and raise market efficiencies, notably in the areas of secondary market clearing and settlement infrastructure. With respect to foreign participation, debt managers may want to weigh the potential benefits of allowing domestic bonds to be cleared and settled internationally. This may significantly boost foreign investor access to bonds in some jurisdictions where domestic infrastructure or regulatory constraints are binding, though at the expense of fragmenting the clearing and settlement infrastructure and a potential loss of the information and control yielded by domestic custody and payments systems.

The preceding discussion presupposes that increasing foreign investor participation is deemed to be desirable. It is reasonable to suppose that this is indeed the case, since from a narrow debt management point of view, there is no evidence that increased foreign participation threatens the usual debt management goals of minimizing cost while maintaining acceptable levels of risk, or that it impedes overall market development. On the contrary, by diversifying and increasing demand, more investment from offshore should generally complement these goals. Consequently, debt managers are likely to view participation by non-residents as a net positive, particularly when building from a low level. Anecdotally, some debt managers have commented that foreign investors have played a particularly useful role as buyers of longer-term debt, facilitating yield curve extension.

When foreign flows become sizable relative to the size of the domestic bond market, or to other foreign exchange flows, however, this can start to create new challenges. At this point, debt managers' potential responses form a subset of the overall policy approach to the capital account, and should be approached accordingly. Capital account liberalization has been the orthodoxy in recent decades, but this has been challenged by events over the last decade, resulting in a more pragmatic recognition that optimal capital account policies may involve some restrictions, and will vary across countries.

For the debt manager, foreign investors certainly do differ importantly from most domestic investors in the fundamental sense that, for them, local currency sovereign bonds of all tenors are risky assets. This leads to worries about the possibility of abrupt stops or reversals in foreign investor demand during times of local or external crisis. These are valid concerns, but the benefits of attracting foreign capital are also real, and as we have seen, foreign investors are not a monolithic bloc that can be characterized merely as a source of "hot money". Many have long-term investment horizons and strong allocation commitments, though this does not render them immune to liquidation and redemption pressures, or to herding behavior.

What is clear is that there are strong indications that foreign investors of many different types are here to stay in EM local currency debt markets, and that their relative importance as a source of demand will most likely continue to rise. This is perhaps best seen as constituting just one aspect of the increasing global integration of capital markets, presenting both risks and opportunities for economic and market development in developing countries.

Consequently, debt managers should probably get used to the existence or prospect of significant offshore investor participation in their local currency debt market, make the most of the opportunities this may present, and take steps to equip themselves with as much information as possible about the

changing investor base for their debt. In this respect, improving market monitoring, the timely availability and quality of ownership statistics, and good investor communication and outreach to establish solid links with key participants (wherever they may be), will be ever more important.

Table 2: Summary of inclusion criteria for some widely tracked EM / global local currency bond indices

	Rating/ income level	Market size/ liquidity	Issue size/ liquidity	Coupon	Redemption	Embedded options?	Maturity	Other
GLOBAL INDICES								
Citi World Govt. Bond Index	Min. A-/A3 by S&P or Moody's	Total of all eligible issues \geq \$50bn	Market specific (e.g. MXN: \geq MXN 10bn)	Fixed or zero only	Bullet or sinking fund	Yes	\geq 1 year	Sovereign must actively encourage fgn. investor participation
Barclays global aggregate bond index	IG using middle ranking of the big 3 ratings agencies	Market-specific minimum issues sizes. E.g. \$300m/€300m equivalent for EM issues in USD and EUR pricing "regions"		Fixed or changed according to schedule (e.g. step-up)	Bullet or soft bullet	Yes	\geq 1 year	FX must be freely tradable and hedgeable
EM-DEDICATED INDICES								
JPM GBI-EM family	Low or middle income (World Bank classification)	No minimum size or universal liquidity standard, but market must be reasonably liquid (prices available, tradable, reasonable spreads) and only most liquid bonds included		Fixed only	Bullet only	No	\geq 13 months	Cannot be explicit capital controls
Barclays EM local currency govt. universal index	A1 or lower (middle rating of big 3), or \leq Upper Middle income classification by World Bank	Total debt with \geq 1y maturity must be \geq \$5bn	Market-specific minimum issue sizes	Fixed or changed according to pre-determined schedule (e.g. step-up)	Bullet only	Yes	\geq 1 year	Market investability considered; must be reliable pricing source

Source: Barclays, Citigroup, JP Morgan bond index factsheets^{vi}

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Endnotes

ⁱ The 26 countries included are Argentina, Brazil, Bulgaria, Chile, China, Colombia, Czech Republic, Dominican Republic, Ecuador, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Panama, Philippines, Poland, Russia, South Africa, Thailand, Turkey, Ukraine, Uruguay and Venezuela.

ⁱⁱ The 22 countries included are Argentina, Brazil, Chile, China, Colombia, Croatia, Hungary, India, Indonesia, Lebanon, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Russia, Slovakia, Slovenia, South Africa, Thailand and Turkey.

ⁱⁱⁱ ADB source: *Asia Bond Monitor*, April 2012; JP Morgan source: *EMEA EM Local Markets Bond Flows and Technicals Report* (Laura Bierer, Mike Trounce), 5 July 2012; National Sources: Ministries of Finance.

^{iv} Sources, beginning with national sources: Australia – RBA, Hungary - NBH, Poland - Ministry of Finance, Turkey - CBRT; Asian countries – ADB, web link: <http://asianbondsonline.adb.org/regional/data.php>; UK: Bruegel database of sovereign bond holdings developed in Merler and Pisani-Ferry (2012), web link: <http://www.bruegel.org/nc/blog/detail/article/874-introducing-the-bruegel-dataset-of-sovereign-bonds-holdings-and-more>; US: SIFMA, Treasury Securities Holders data, <http://www.sifma.org/research/statistics.aspx>. All foreign holdings expressed as proportion of bonds only (except for Poland [proportion of t-bills and bonds] and the US [proportion of all public debt securities except savings bonds and state and local govt. instruments]).

^v Commodities: JP Morgan Commodities Aggregate Price Index (JPMCCI); US HY: US high yield corporate bond returns (JP Morgan Domestic HY Summary Market Value), US HG: US high grade corporate bond returns (JP Morgan US Liquid Index, JULI); UST: US treasury security returns (JP Morgan US Treasuries Traded Index, total return)

^{vi} Barclays Global Aggregate Bond Index and Barclays EM Local Currency Government Universal Index: Barclays Capital Indices (February 2011); Citi World Government Bond Index: Citigroup Global Fixed Income Index Catalog – 2012 Edition; JP Morgan GBI-EM family of indices: Index factsheets via MorganMarkets.