Kohli, Renu; Sahoo, Pravakar; Shuheb Khan, M.

Working Paper
Developing India's offshore local currency bond market: Lessons from emerging countries

Working Paper, No. 344

Provided in Cooperation with:
Indian Council for Research on International Economic Relations (ICRIER)

Suggested Citation: Kohli, Renu; Sahoo, Pravakar; Shuheb Khan, M. (2017) : Developing India's offshore local currency bond market: Lessons from emerging countries, Working Paper, No. 344, Indian Council for Research on International Economic Relations (ICRIER), New Delhi

This Version is available at:
http://hdl.handle.net/10419/176371

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
Developing India's Offshore Local Currency Bond Market: Lessons from Emerging Countries

Renu Kohli
Pravakar Sahoo
M. Shuheb Khan

August 2017
Table of Contents

1. Introduction .................................................................................................................. 1
2. Masala Bond Market: Current Structure and Position ................................................. 4
3. Perspectives from Market Participants ....................................................................... 7
  3.1 Issuer Side .................................................................................................................. 7
  3.2 Investors’ Side .......................................................................................................... 10
  3.3 Major concerns of market participants and implications for masala bond market .... 11
4. Case Studies – China and Brazil ...................................................................................... 12
  4.1 China’s Dimsum Bonds ............................................................................................. 12
  4.1.1 Dim Sum Market Profile ....................................................................................... 14
  4.1.2 Factors driving RMB-bond market development .................................................... 15
  4.2 Brazil ......................................................................................................................... 18
  4.2.1 Market profile ........................................................................................................ 18
  4.2.2 Factors driving the BRL Offshore Bond Market ................................................... 19
5. Lessons for India ............................................................................................................. 20
  5.1 What lessons can be drawn for the masala bond market? ......................................... 23
6. Conclusion: Future Path and Issues ............................................................................. 26
References ......................................................................................................................... 29
Annexure I ........................................................................................................................ 32

List of Figures

Figure 1: Development of the EM debt markets .............................................................. 2
Figure 2: IFC Offshore Rupee Yield Curve ......................................................................... 6
Figure 3: RMB Offshore Bond Market (in billion Yuan) .................................................... 14
Figure 4: Renminbi and other currencies: Movements against USD ................................. 16
Figure 5: RMB as Payment Currency ............................................................................... 16
Figure 6: Current Account Settlement (RMB billion) ........................................................ 16
Figure 7: Annualised Returns on Bonds ........................................................................... 17
Figure 8: Comparison of Coupon Rates for Bonds (23–02–2011 to 31–08–2016) .......... 17
List of Tables

Table 1: Masala bond issuance ................................................................. 5
Table 2: Sovereign Bond Market Profile for Brazil (average values for 1997–2016) ... 19
Abstract

After the 2008 financial crisis, macroeconomic positions and growth prospects weakened in the advanced economies; emerging market economies (EMEs) improved however. Offshore, local-currency bonds of EMEs became popular as result, with many EMEs exploiting the opportunity. India also launched its rupee-denominated bond (masala bond) abroad in 2013, seeking to cultivate this channel for domestic infrastructure financing, while mitigating currency risks. Although still nascent, masala bonds have generated tremendous interest amongst issuers and investors. Market growth and development is challenged though by several issues, notably lacking liquidity and depth. This paper takes stock. It assesses the current market state and structure, surveys a cross-section of market participants to identify the relevant issues, and employs two case studies of EME peers, China and Brazil, to learn from their respective paths and experiences in similar regard. The paper concludes by listing the key essentials for future growth and long-term sustainability of the masala bond market and its emergence as a viable avenue for infrastructure financing.

Keywords: Offshore Bond, Local currency, Masala bond, Dim Sum Bond, China, Brazil.

JEL Classification: F15, F21, F32, G12, G15

Authors’ Email: renukohli@yahoo.com; pravakarfirst@gmail.com; shuhebkhan01@gmail.com

Disclaimer: Opinions and recommendations in the report are exclusively of the author(s) and not of any other individual or institution including ICRIER. This report has been prepared in good faith on the basis of information available as on the date of publication. All interactions and transactions with industry sponsors and their representatives have been transparent and conducted in an open, honest and independent manner as enshrined in ICRIER Memorandum of Association. ICRIER does not accept any corporate funding that comes with a mandated research area that is not in line with ICRIER’s research agenda. The corporate funding of an ICRIER activity does not, in any way, imply ICRIER’s endorsement of the views of the sponsoring organisation or its products or policies. ICRIER does not conduct research that is focused on any specific product or service provided by the corporate sponsor.
Developing India's Offshore Local Currency Bond Market: Lessons from Emerging Countries*

Renu Kohli, Pravakar Sahoo and M. Shuheb Khan

1. Introduction

In recent years, offshore issuances of local currency-denominated bonds by emerging markets have seen a remarkable rise. Private investors have been particularly attracted to these in the post-crisis period as investment opportunities shrank while global liquidity has been abundant. Emerging market economies (EMEs) that escaped relatively unscathed from the global financial crisis offered striking alternatives compared to advanced countries whose public finances and other fundamentals deteriorated markedly. Investors seeking to diversify and obtain better yields reappraised sovereigns risk in these EMEs favorably on the basis of improved parameters such as low debt levels, large forex reserves, strong anti-inflation policies and a commitment to structural reforms. The relative macroeconomic stability of these countries triggered the emergence of local-currency sovereign bonds as a separate asset class, a desirable alternative to similar bonds of developed markets (McCauley and Jiang 2004; Eichengreen et al, 2004; Tovar, 2005; Burger and Warnock 2006).

Supranational borrowers like the World Bank played an introductory role, which enabled international investors to become familiar with local credits, standards and documentation. Mainstream international investors, with little exposure to EM local currencies through dedicated funds, became more comfortable with local currency debt in addition to existing EM dollar-denominated sovereign debt portfolios. Divergent monetary and business cycles amongst the advanced and emerging economies also offered opportunities to diversify by exploiting monetary conditions (Capital Group 2015).

From an EME perspective, issuing local currency securities, onshore or offshore, is attractive. The advantages include mitigation of foreign currency risk, the associated ‘original sin’ problem and securing balance sheet damages from currency mismatches, particularly where earnings are denominated in domestic currency. Further, local currency debt offers an additional avenue for channeling foreign resources into local long-term infrastructure projects for which financing is often scarce and costly (IMF, 2016; Dong and McCauley 2010), but without the attendant currency risk. Countries like China have systematically built a local-currency bond market abroad to promote financial liberalization and internationalize usage of its currency (Fung and Yau 2012; 2014). Other countries such as Brazil, Chile, Colombia, Egypt, Peru, Philippines, Russia and Uruguay have offered international bonds in respective local currencies to attract foreign investors that are deterred by capital controls (e.g. withholding taxes), are comfortable with international law, disclosure, documentation standards and clearing mechanisms, or who may prefer bond maturities not on offer in the

* We are thankful to Mr. Abheek Barua, Mr. Tamal Bandhopadhya and participants of the conference to discuss the draft report (Mumbai, November 30, 2016) for useful comments and suggestions.
domestic capital market because of different preferences (Tovar, 2005). Sovereign issuers have also capitalized on opportunities to achieve attractive funding costs or policy objectives like extension of the local currency nominal yield curve.

Both demand and supply for local currency bonds of many EMs has thrived. Although principally composed of sovereign bond issues, the market for private corporate issuances has also been rising (Figure 1) due to strong demand from domestic and international investors in search of higher yields and diversification. In terms of market capitalization, the EM local-currency debt overtook the EM US dollar-denominated market ($941 billion, compared with $651 billion at the end of 2014). At nearly $1 trillion in market capitalization in 2013 and 2014, the EM local currency debt was almost double its size in 2008-09 according to the JP Morgan index. Prominent issuers have countries such as Brazil, Mexico, Poland, China, Brazil, Chile, Colombia, Peru, Russia, and Uruguay.

**Figure 1: Development of the EM debt markets**

India has not been immune to the aforementioned developments, although a relative latecomer to the scene. Within its domestic context of capital market development and a new macroeconomic framework, the first steps to issue rupee-denominated bonds in overseas markets were taken in September 2015 (See Annexure I for details). Cultivating such a funding source is important for India due to structural as well as cyclical reasons: The country has a large, unmet infrastructure gap (Planning Commission 2012), which requires funding. Budgetary constraints limit public funding of infrastructure investments while domestic banks, the key medium for financing all types of economic activity, are inherently ill-suited for financing large-scale infrastructure projects that typically have long gestation periods. Moreover, the public sector banks are already overburdened by soured loans from the past and have little appetite for fresh infrastructure financing. And despite many initiatives and efforts,

---

1 India’s erstwhile Planning Commission projected total investment in infrastructure to go up to 8.18% of GDP in the 12th Plan (2012-17) or US$ 1 trillion.
India still lacks the vibrant, developed bond market\(^2\) that is needed to fill this vacuum (Khan 2015).

The first offshore issue of rupee-denominated bonds, popularly termed the masala bond, was launched by The International Finance Corporation (IFC) in 2013. Subsequent issues followed and their successful placements with global investors made these bonds a hit in international markets (see section 3). This bolstered the confidence of Indian regulators (Khan 2015) with the RBI quickly allowing resident corporate firms, real estate and infrastructure investment trusts to issue masala bonds of a 5-year tenor up to $750 million annually, under the automatic route for the first time (see Annexure 1 for details).

The masala bond route of external financing has attracted plentiful interest from relevant quarters. This applies to Indian firms, especially the segment engaged in activities generating rupee revenues and who are facing long-term financing constraints in the domestic capital market. Despite this eagerness however, issuances of offshore rupee bonds did not take off for almost a year after the launch because prospective issuers and investors remained deadlocked on aspects such as taxation, pricing and liquidity. In this period, global liquidity conditions too were relatively unfavorable while financial volatility was high. Masala bond issues came alive however in the second half of 2016 with a few top- and second-rung corporates lining up in response to changed market conditions abroad and some critical regulatory reforms. The enthusiasm of issuers and investors is palpable. There currently are 12 masala bonds listed on the London Stock Exchange, with a combined outstanding value of INR 93.76 billion.\(^3\) But there are constraints. The masala bond market needs to further deepen and rapidly become more liquid to develop and sustain.

The present paper takes stock of the masala bond market, surveys a cross-section of market participants, appraises the regulatory policy framework and illustrates some important prerequisites for market development using the experience of China and Brazil. It also highlights the elements essential for long-term sustainability and growth of the market. It is structured as follows. Section 2 discusses the nascent market structure of masala bonds and its current state of development. Survey-based inputs and considerations of participant resident firms (issuers) and investors (subscribers) are laid out in Section 3. Section 4 contains case studies of China and Brazil, two countries who have emerged as prominent and fairly successful issuers of local-currency denominated debt in international markets to inform our perspectives. Section 5 summarizes the lessons that could be drawn from the country studies, while Section 6 concludes.

\(^2\) Private placements dominate bond issuance, at about 95 percent of total (2014-15); the majority of these are in the 2-5 year tenor. Trading activity, although it is gradually improving, is far lower than observed in sovereign bonds while the market for credit default swaps (CDS), instituted to stimulate the corporate bond market by facilitating risk transfer, is yet to show any significant activity (Khan, 2015).

2. Masala Bond Market: Current Structure and Position

At present, the top tier of the masala bond market is composed multilateral agency issuers. As stated earlier, the introductory role was played by IFC, which tested the waters in 2013 by launching the first ever Rupee-Linked Offshore Bond (RLOB) programme. This had maturity periods of three, five, and seven years. In 2014, the IFC’s issuance program was expanded to an INR10 billion (or USD163 million) size, 10-year masala bond issue, the first rupee bonds to be listed on the London Stock Exchange and the longest-dated bonds in the offshore rupee market till date. Building upon the IFC’s previous offshore rupee issuances, these extended the offshore rupee yield curve (see below). To date, the IFC has issued a total of 7 tranches with tenors ranging from 3-15 years, adding up to Rs 110 billion (approx. $1.73Bn) in offshore masala bonds (Annexure III).

Subsequent issuances by the European Bank for Reconstruction and Development (EBRD) and Inter-American Development Bank (IADB) have followed as have the World Bank’s Sustainable Development Bonds (renminbi- as well as rupee-denominated) on the Italian Stock Exchange in July 2016. The entry of the BRICS’ New Development Bank (NDB), which issued the first yuan-denominated bond in China’s interbank bond market in July 2016, has enhanced multilateral issuer presence. The NDB is likely to issue rupee bonds in India, and masala bonds abroad, to fund local projects.

The next level in the primary masala bond market is constituted by the top and second-rung firms. So far, the rating profiles of masala bond issuers has been limited to ‘AAA’ and ‘AA’, the first two tiers of the credit scale. Large public sector companies (PSUs), who carry a proxy sovereign status and low default risk, are at the top of the credit ladder, followed closely by large private corporates such as the Housing Development Finance Corporation (HDFC), which command topnotch domestic ratings but face relatively higher overseas’ premiums from perceived higher default risks. Table 1 shows that these issuers have generally faced slightly lower funding costs through masala bond route as compared to domestic issuance.

---

4 The proceeds are for local investments in infrastructure bond issuance by a commercial bank in India. As illustration, the IFC has utilized the proceeds from the bonds for its projects in India, e.g. investment in Axis Bank’s 10-year infrastructure bond and Yes Bank’s 10-year Green Bond.

5 This is NDB’s first issue - a Green Financial Bond for RMB 3 billion, at 3.07% and a 5-yr tenor. Total subscription exceeded RMB 9 billion, with a cover ratio of 3.1 and participation of more than 30 investors.

6 The NDB President K.V. Kamath believes there is enormous scope to raise local currency resources in domestic and global capital markets. http://ndb.int/NDB-Successfully-Issued-First-RMB-denominated-Green-FinancialBond.php#parentHorizontalTab2.
The next tier of issuers is formed by second-rung firms, composed mainly of Non-Banking Financial Companies (NBFCs) at present. NBFCs have rapidly emerged as keen masala bond issuers for regulatory reasons (footnote 9, section 4). Low-rated categories such as small-medium enterprises (SMEs) are absent from the masala bond market at current levels of development, although they are neither restricted nor ineligible. However, international investors usually take time to warm up to this segment; typically they do not want to assume credit risk in the early stages of market development. SME issuances of masala bonds are likely to take time as demand is not anticipated, while it is unlikely to be viable at this point: risk premiums could be very high as firms of this size do not have international ratings to which investors attach greater weight, lacking credit appraisal facilities for small firms themselves. Differences in domestic-international credit ratings also matter as the latter tend to be a notch higher. Other costs of issuance further make SME issuances unviable: according to the IFC, the issue price could go up substantially because of the guarantee fee in addition to the cost of the covenant; if privately placed, an anchor investor would be required. Finally, issue sizes below Rs 500 crores are considered uneconomical, while capital needs of small firms barely reach these levels.

A promising niche category for masala bonds are the Green bonds, for which ethical, environment-conscious and impact-driven investors are proving eager buyers. As evidence, the IFC’s Green Bond program was subscribed to by 8 Asian and European investors and listed on the London Stock Exchange. The bond’s proceeds will be used for infrastructure and sustainable development projects in the BRICS; it will follow the green guidelines as set out by the People’s Bank of China (PBOC) in December 2015. Both issues witnessed overwhelming investor response, demonstrating the demand in private capital markets as also potential capacity for mobilizing savings for climate finance. Large investors

Table 1: Masala bond issuance

<table>
<thead>
<tr>
<th>Entity</th>
<th>Masala bond issuance</th>
<th>Masala bond yield</th>
<th>Domestic bond yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDFC (July 2016)</td>
<td>Rs.3,000 crore</td>
<td>8.33</td>
<td>8.38</td>
</tr>
<tr>
<td>Adani Transmission Limited (August 2016)</td>
<td>Rs. 500 Crore</td>
<td>9.1</td>
<td>9.85</td>
</tr>
<tr>
<td>NTPC (August 2016)</td>
<td>Rs. 2,000 Crore</td>
<td>7.48</td>
<td>7.58</td>
</tr>
<tr>
<td>HDFC (September 2016)</td>
<td>Rs 500 crore</td>
<td>7.64</td>
<td>7.80-8</td>
</tr>
<tr>
<td>HDFC (September 2016)</td>
<td>Rs. 1,000 crore</td>
<td>7.50</td>
<td></td>
</tr>
<tr>
<td>Indiabulls Housing Finance Ltd. (IBHFL)</td>
<td>Rs 1,330 Crore</td>
<td>8.57</td>
<td>Higher than domestic borrowing costs but almost at par</td>
</tr>
</tbody>
</table>

Source: NSDL and media reports

---

7 The proceeds of the Green Masala Bond have been invested in a green onshore rupee bonds issued by Yes Bank and eventual deployment will be utilized in renewable energy and energy efficiency projects mainly in the solar and wind sector – a fast-growing sphere of Indian infrastructure activity.

8 The bond’s proceeds will be used for infrastructure and sustainable development projects in the BRICS; it will follow the green guidelines as set out by the People's Bank of China (PBOC) in December 2015.

9 NDB’s mobilization is aimed at augmenting the supply of renewable energy in member countries and contributing to the transition towards a green economy.
such as the Norwegian sovereign wealth funds are increasingly turning to ethical investment strategies tied to environment and climate change concerns.

The investor base of multilateral issuers is well dispersed and fairly broad but very narrow for private corporate issues. IFC’s issues have been well received by international investors, covering diverse regions (United States, followed by investors in Europe and Asia) and investor classes such as asset funds, banks, insurance companies and central banks, whose tenor preferences are specifically distributed. By comparison, the few corporate masala bond issues so far are concentrated in Asia (close to two-fifths) followed by Europe. By investor class, sovereign wealth funds have been major subscribers, followed by a few asset fund managers (Blackrock) and private wealth management firms.

IFC’s issuances created the first “AAA” offshore rupee yield curve, through maturities ranging from 3 to 15 years. Although these helped initial establishment, the curve is confined to the sub-government level. The masala bond market presently lacks sufficient, regular supply of paper at different tenors, especially at the long end, to allow emergence of the yield curve. Private corporate issues are too few, in part due to low demand and lack of familiarity with the product but also because of quantitative caps and eligibility restrictions.

**Figure 2: IFC Offshore Rupee Yield Curve**

The secondary market is virtually non-existent at the moment, due to the low volume of bonds issued. Liquidity is very tight, considerably lower than in the dollar-denominated bond market, and inhibits trading of masala bonds that currently trade at least 30-40 basis points above the dollar-denominated bonds of the same corporate, the difference explained by expectations of higher interest rates on the dollar vis-à-vis the rupee. The absence of easy exit options dissuades investors, who may otherwise be enthusiastic about masala bonds.

The hedging for rupee exposure is expensive. The initial, 5-year tenure for masala bonds was a major consideration for investors who were unwilling to face the currency risk at this tenor. In the second half of 2016, higher yields on masala bonds compared to low returns in advanced economies was a major attraction for investors. HDFC issued the first masala bond at 8.33 per
cent, but in the subsequent months yields declined below 8 percent levels. Several market players suggest most investors are currently betting on rupee stability and not hedging currency risk; others might have a dynamic hedge, as at the current swap rate of 6-7 per cent (for 5 years), a full hedge would erode the return.

Cyclical factors also weigh on buying, sell-offs as is the case with other EM-currency bonds. Prospects for issuance and buying appetite vary with global financial conditions, uncertainties and risks, along with relative growth and yield differentials. While the masala bond market is too nascent to have witnessed sell-offs, the risks that offshore markets may draw liquidity away remains. The triggers are all too familiar as the two case studies in this paper reveal.

Over the medium-to-long term, there is considerable scope and opportunity for the masala bond market to evolve at different levels and types of resident issuers as our survey findings in the next section indicate.

3. Perspectives from Market Participants

This section is based upon extensive interviews and discussions with market participants on either side of the masala bond market, i.e. issuers and investors. It seeks to understand the primary drivers of their interest from the standpoint of viability and sustainability, as also flag key issues that matter for market development and long run growth.

3.1 Issuer Side

We inferred that many firms are eager to tap the masala bond route. This includes large and medium-sized corporates as well as large public sector units (PSUs) such as the Indian Railway Finance Corporation (IRFC), Power Finance Corporation (PFC), National Thermal Power Corporation (NTPC). This interest however, is yet to translate into actual issuances, particularly by the large PSUs. For example, the IRFC’s investment needs are large and fast-expanding in scope beyond usual investments in rolling stock to include bridges, buildings, etc. Where private organizations are concerned, the largest housing finance bodies, the HDFC, along with several nonbank financial companies also face expansion of capital requirements. Discussions with a mix of raters and arrangers for recent masala bond issues revealed that NBFCs were interested in raising resources through this route. Major motivations underlying this interest are as follows.

**Reduction of tenor from five to three years helped kickstart issuances.** Participants on both buyer and seller sides confirmed that tenor reduction, from 5 to 3 years, had a positive impact upon investors otherwise reluctant to be exposed to the rupee for long periods. Issuers were not confident about the delivery in the initial phases.

**Elimination of exchange rate risk, rupee stability:** Firms are attracted towards rupee-denominated resource raising through masala bonds because their exposure is then restricted to just credit risk as compared to dollar-denominated bond issues or external commercial borrowings (ECBs). Many already place masala bonds above ECBs in the financing pecking order of their financing hierarchy. According to the RBI too, corporates have substantially
lowered their dependence on external commercial borrowings since masala bonds became available (RBI, 2016). Stable currency expectations have also facilitated issuances.

**Regulatory restrictions on NBFCs’ borrowing from banks:** NBFCs have restricted access to bank borrowings as per regulation. This segment therefore, is most eager to tap alternative sources at attractive prices to fund their growth, which has gathered considerable pace in recent years. For example, Indiabulls Housing Finance issued Rs 1330 crores of secured, rupee-denominated, affordable housing masala bonds bearing a coupon of 8.57% with a tenor of 3 years and 1 month, to be listed on the Singapore Stock Exchange. Survey findings suggest other NBFCs in the housing finance and commercial vehicle financing segment such as Dewan Housing Finance, Sriram Transport Finance, etc. are also expected to mobilize rupee funds through this route.

**Diversification and overseas recognition:** A key motivation for corporates, particularly large ones who are able to easily raise domestic resources at fine prices, is the prospect of diversifying funding risks across currencies, tenors, regions and markets. As investments in infrastructure and housing tend to be bulky, firms welcome possibilities of different sources for raising capital. They are also seeking to arbitrage relative costs of funds by exploiting changes in market conditions. For example, entities such as HDFC have shown an interest despite the relatively higher cost vis-à-vis onshore costs. Although the IRFC had not yet issued masala bonds at the time of this survey, it was actively watching market conditions, had appointed arrangers and was confident of commanding lower risk premium due to its quasi-sovereign status. Issuers have also been willing to pay a risk premium of 50-80 basis points to establish their names and presence in international capital markets. They are eager to gain recognition among a class of investors, which is altogether different from those present in the onshore market. Some PSUs such as the Power Finance Corporation are holding back on account of taxation costs.

**Relative (offshore-onshore) borrowing costs are both a driver and impediment:** Public sector firms with regular issues in the onshore bond market are aware their quasi-sovereign rating enables them to borrow at spreads just 40-50 bps above the sovereign. They therefore are willing to participate in the masala bond market only if borrowing cost equals or is lower than domestic funding costs. This indicates that onshore-offshore movements are likely to be a regular feature, as is the case with other EMEs too. But large private corporate such as the Adani Group, have faced a lower coupon (9.1%) on their masala bond issue, substantially cheaper than the 10.25% for an onshore rupee bond issue. Variations across corporate

---

10 As per exposure ceilings under the large exposure framework of the RBI, banks’ exposures to a single NBFC will be restricted to 15 percent of their eligible capital base; if risk perceptions are higher for certain categories of NBFCs, exposure limits could be even more stringent. In the case of banks’ exposures to a group of connected NBFCs or groups of connected counterparties having NBFCs in the group, the restriction will be 25 percent of their Tier I Capital. See https://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=3244.

11 The NBFC sector expanded by 15.5 per cent in March 2016 compared to 15.7 per cent growth in the previous year. Loans and advances increased by 16.6 per cent, while total borrowings rose 15.3 per cent in March 2016 over 16.9 percent in the previous year (Financial Stability Report June 2016, page 42, RBI).
categories, capital constraints and their interplay with onshore-offshore cost dynamics are thus likely to be a robust future driver of the masala bond market.

**Banking sector stress, sector credit limits:** In a difficult context of large bad-loan pileup with the banks, especially public entities and in the infrastructure segment, the perception of market participants is i) bank-financing for infrastructure has evaporated with banks turning risk-averse and reluctant to increase exposure to this segment, and ii) establishment of fresh sources of financing for infrastructure needs has assumed urgency looking to the medium- and long-term requirements. Another ‘push’ factor are new, tighter regulatory norms that will govern domestic bank credit henceforth: *Inter alia*, a revised prudential ‘large exposure framework’ limits overall credit sanction for large borrowers with progressive reductions from Rs.250 billion in 2017-18 to Rs.100 billion from April 1, 2019. These will be categorized as ‘higher risk’, needing additional provisioning and higher risk weights, pushing up costs. Structural changes induced by regulation could likely spur a shift to more rupee bond borrowings, onshore as well as offshore, in the future.

**The inclusion of banks encouraged market development.** Allowed to raise additional tier I and tier II bank capital through masala bonds, the presence of banks deepens and helps market-making, widening the issuer base. No bank has issued so far but likelihood for meeting Basel requirements is high, although the riskier features attached to Basel-III compliant bonds could push up premiums. While some banks are better placed to issue offshore rupee-bonds at reasonable yields, pricing could be a concern for others as, according to most participants who remain skeptical of the investor’s appetite for these.

**Withholding tax, compliance costs are a concern.** Practically all large issuers, other than NBFCs, are concerned and favor withdrawal. Several corporates including NTPC, HDFC and Power Finance Corporation chose not to issue masala bonds due to the tax burden. Prospective PSU issuers with colossal capital requirements such as the IRFC are especially concerned, pointing to PSUs such as the NTPC paying an effective coupon of 7.9 percent against a 7.48 percent subscription premium because the tax component is withheld. Our meetings with diverse public sector undertakings that they were unwilling and unlikely to use the masala bond funding route at present without offsets to the withholding tax; they are confident of meeting their funding requirements domestically. The absence of financing pressures within the country also provides no motivation to access costlier funds abroad. Issuers also weigh the higher

---

12 The Indian banking system, especially public sector, is overladen with bad assets, has strained lending capacity and limited risk appetite for extending fresh loans. See, for example, http://www.livemint.com/Opinion/defArPW3rNXJxhmC8S6K/Designing-the-bad-bank-of-India.html.

13 Beyond these lending limits, banks can subscribe to bonds issued by these specified borrowers over and above these limits as per following milestones: not below 30% percent by March 31, 2019, 60% by March 31, 2020 and 100% by March 31, 2021 (https://rbi.org.in/Scripts/NotificationUser.aspx?Id=10574&Mode=0).

14 This is a 5 percent (concessional) tax applied on all foreign borrowings. The Union Budget, 2017-18, recently extended the concessional withholding tax rate by three years, to July 2020. For example, an 8.33% coupon paid on masala bonds by HDFC works out to total funding costs of 8.99 percent after inclusion of withholding tax.

15 IRFC started its issuance process several months ago but found such borrowings costlier; subsequent easing of global liquidity conditions revived interest, but the extra 40-50bps load of withholding taxes is a deterrent.
compliance costs of bond finance (for example, greater dispersion of liabilities and obligations, legal documentation or bond covenants, certifications and other elements of investor protection), which are perceived relatively higher for masala bonds compared to domestic bond issues.

### 3.2 Investors’ Side

Discussions with investors reflected many threads common to EME local-currency bonds overall. For instance, signs of stabilizing macroeconomic fundamentals encourage perceptions of masala bonds as an attractive asset class while expected returns are not just credit-based but include movements in currencies and domestic interest rates. The shape of the yield curve, which is primarily driven by expectations of short-term rates and country risk premiums,\(^\text{16}\) is very significant; different segments of the yield curve also appeal differently to offshore-onshore investors. Investment decisions are diversified across an array of returns across countries, leading to the importance of macroeconomic conditions and policies. Investors’ outlook and concerns about masala bonds need to be understood in this light.

**At its inception, investor demand for masala bonds is observably robust.** For example, the introductory issue by the IFC was a success with $1 billion placed with investors globally. Subsequently too, IFC’s issuances have been oversubscribed. On the private corporate side, the first such issue by HDFC (Rs 2000 crore, with the option of another Rs 1000 crores) attracted heavy bids (Rs 8,673 crore from 48 accounts), and the issue was oversubscribed 4.3 times. The second HDFC tranche (Rs. 500 crore) was subscribed to entirely by the Province of British Columbia, the first foreign government to issue masala bonds; the third tranche sized Rs 1000 crore takes the entire issuance to Rs 4500 crore ($671 million). Discussions with participants who engaged in masala bond road shows in Singapore suggest many institutional investors are excited about the rupee bond but are uncertain about translating this into actual investments.

**The investor base is not too wide or diverse:** At present, most investors are Asia-based and in the institutional category. Early subscriptions to masala bonds (e.g. HDFC, NTPC) show some diversification across Asia and Europe with 86 per cent demand met from the former region and 82 per cent of allocations to institutional investors, followed by private banks (18 per cent). Major subscribers are sovereign wealth funds (GIC, Singapore\(^\text{17}\)), asset fund managers (Blackrock), long-term asset fund management firms, and a few private wealth management firms. By comparison, the IFC’s investor base is spread out across European and American regions with a fair mix of pension funds, banks and asset funds.

**Relative returns and diversification are primary drivers:** Investors are primarily attracted by relatively higher Indian yields, combined with improved outlook for the rupee due to lower inflation and positive expectations about its stability, strong growth and future economic

---

\(^{16}\) The country risk premium embodies credit concerns as well as the degree of uncertainty about the future path of rates and inflation. For example, rising inflation concerns can cause steepening of the yield curve, while hawkish central bank policies could flatten it.

\(^{17}\) The large amount invested by the GIC is also explained by the 2.02 percent shareholding (Government of Singapore) in HDFC under the foreign portfolio investment (FPI) route as on June 2016.
prospects. The latter features offset the currency risk assumed by investors in masala bonds. Favorable long-term growth differentials weigh particularly upon a section of investors. Most investors, who tend to be asset management funds at this juncture, find it easier to take a 3-5 year view on Indian interest rates and uncomfortable at longer tenures. Cyclical factors such as the continued pause on US Federal Reserve’s expected monetary tightening that supported global liquidity and negative returns on European and Japanese assets also boosted relative yields and propelled investor demand towards diversification into the new masala bond, where real returns are pegged in the 3-4 percent region.

**Reduction of tenor from 5 to 3 years and listing at the London Stock Exchange spurred demand and convenience.** Global investors were hesitant to take a long-term view either on the rupee or credit exposure implied by the initial 5-year tenor attribute of masala bonds. Regulatory relaxation to three-year tenor matched the risk investors were willing to undertake. Listing at the London Stock Exchange also lowered transaction costs for large investors and enabled easier access by foreign governments such as the Province of British Columbia.

**Important deterrents at this stage are the withholding tax, lack of market liquidity, restricted trading, absence of a yield curve and hedging.** Many are reluctant to subscribe to masala due to uncertainty about devolution of the tax burden, which has been taken on by domestic issuers (e.g. HDFC agreed to bear the 5% withholding tax, pushing up premium) in initial issues. If paid by investors, the effective reduction on returns from the withholding tax works out to about 7.6 percent on an 8 percent coupon. Foreign investors are also learnt to incorporate an “illiquidity premium” due to potential difficulties in offloading masala bonds from lack of secondary buyers. Overall costs then imply Indian firms would have to offer an interest rate of over 8.5 percent, at which point the onshore pricing becomes more attractive. The emergence of the yield curve, which is likely to take time, also lowers comfort levels for investors. At present, the need for rupee hedging has declined with the reduction in tenor and a stable currency outlook. Investors are reported to be betting on currency stability and not hedging the currency risk, while some of them could be having a dynamic hedge, because at the current swap rate of 6-7 per cent (for 5 years), a full hedge would erode their return.

### 3.3 Major concerns of market participants and implications for masala bond market

The major issues that emerged from our discussions with market participants centre around withholding tax, a lack of liquidity and benchmark yield curve. Important fallout of these concerns is that several prospective issuers, mainly PSUs who have large capital requirements and could lead the masala bond market, are both unwilling and unlikely to use this route for financing needs, especially as they are confident of their ability to do so onshore. They noted that an 8.33 per cent coupon paid by private issuer HDFC is effectively 8.99 per cent post-withholding tax whereas a 7.48 percent subscription premium paid by NTPC is effectively 7.9

---

18 This is a 5 percent (concessional) tax applied on all foreign borrowings. The Union Budget, 2017-18, recently extended the concessional withholding tax rate by three years, to July 2020.

percent against because the tax component is withheld.\textsuperscript{20} Adding in illiquidity premium could further raise costs; moreover, better liquidity makes dollar-denominated funds a more attractive option. Credit funds that bought some of the recent issuances (e.g. NTPC’s \textit{Green Masala Bonds}, listed on the Singapore Stock Exchange) are likely to retain these bonds on their portfolio, reducing liquidity. The lack of benchmark offshore prices further lowers comfort levels.

How have other EMEs handled such issues, which are common in nascent markets? The next section takes a look at the path and experience of two countries, China and Brazil.

\section{Case Studies – China and Brazil}

\subsection{China’s Dimsum Bonds}

The development of China’s renminbi-denominated (RMB) bond market, popularly called \textit{dim sum}, took place amidst a backdrop of sustained double-digit growth rates and rising shares in world trade. The shift to a progressively flexible exchange rate regime from 2004-05 onwards provided motivation to limit exposure to currency fluctuations, promote internationalization of the renminbi and expand the pool of resources for financing development. Offshore RMB-financing served the purpose of providing wider access to the RMB to manage working capital requirements, enable expansion, facilitate investor diversification, improve global profiling and meet hedging strategies against volatile exchange conditions.

Offshore RMB bonds or dim sum bonds\textsuperscript{21} were first issued in 2007. This however was preceded by regular efforts of Chinese authorities for progressive acceptability of the RMB and limited convertibility at centres such as Hong Kong and Singapore to facilitate cross-border settlements and offshore liquidity (Box). Market development efforts took place through relaxation of regulatory restrictions and initiatives taken at both government-to-government as well as private firm-investor levels. As result, the dim sum bond market offshore posted healthy growth during the period. Figure 3 shows that dim sum bond issuances increased substantially in value, particularly after 2010, peaking at RMB 597billion in 2014. The acceleration is linked to reform and market development initiatives such as

\begin{footnotesize}
\textsuperscript{20} IRFC started its issuance process several months ago but found such borrowings costlier; subsequent easing of global liquidity conditions revived interest, but the extra 40-50bps load of withholding taxes is a deterrent.
\textsuperscript{21} Here onwards, ‘offshore RMB bonds’ and ‘dim sum bonds’ are used interchangeably.
\end{footnotesize}
**Box**

**Dim Sum bond market: Time-line of the key measures and processes**

- **2003**: Retail banking services in RMB including deposits, remittances, bank cards, etc., were offered in Hong Kong. This helped establish the renminbi’s presence offshore, based upon trade-related transaction demands for the currency between mainland and non-resident Chinese.

- **2007**: Financial institutions incorporated in China were allowed to issue RMB-denominated bonds offshore.

- **2009**: The Ministry of Finance, China, sold the first sovereign RMB offshore bonds.

- **2010**: China signed a Supplementary Memorandum with the Hong Kong Monetary Authority (HKMA), allowing wider access to financial services, including loans, currency conversion and payments to offshore firms. The London Stock Exchange was accessed through first issues of RMB-denominated limited bonds of European Bank for Reconstruction and Development (EBRD). Hong Kong was established as the first offshore clearing centre for RMB bonds.

- **2011**: The renminbi qualified foreign institutional investor (RQFII) category was introduced to enlarge the scope of qualified foreign institutional investors (QFII) for inward and outward direct investments in RMB. QFIIs were directly allowed to use offshore RMB proceeds for investments in the mainland markets, subject to a limit of RMB 70 billion. The first European stock exchange, LuxSE (Luxembourg), was explored for listing a “Dim Sum Bond”.


- **2013**: The Bank of England and the People’s Bank of China (PBoC) signed a reciprocal 3-year GBP/RMB currency swap line for a maximum value of RMB 200 billion. The clearing banks’ bases in Taipei and Singapore were also enlarged. This was followed by creation of the ‘RMB-Initiative group’ in Frankfurt between Chinese banks operating in Germany, German suppliers of financial services, and the Bundesbank. The group examined three possible clearing models for an offshore RMB platform in Frankfurt: the correspondent bank, the clearing bank, and the clearing house.22

- **2014**: The Bank of China (Luxembourg) listed its first offshore RMB Schengen bond on the Luxembourg Stock Exchange creating scope for Luxembourg-based investors. The PBoC simultaneously appointed three new RMB clearing banks for London (China Construction Bank), Frankfurt (Bank of China), and Seoul (Bank of Communications). Possibilities for establishing RMB clearing centres in Malaysia and Thailand were explored.

- **2015**: At the end of October, 2015, 217 banks were participating directly in the RMB RTGS system. Quota under the RQFII was enhanced to RMB 580 billion. The Shanghai-Hong Kong Stock Connect was established to facilitate onshore-offshore trading of shares for investors. Funds were recognized on the mainland and in Hong Kong to enhance cross-border RMB fund flows under portfolio investments. The bilateral agreement between the Bank of England and the PBoC was renewed for three years and the swap line raised to 350 billion.

- **2016**: All onshore Chinese entities (including Chinese enterprises and those with foreign ownership but excluding financial institutions) were allowed to repatriate 100 per cent of the proceeds of offshore debt and bond issuances and convert the proceeds to RMB. A parent company was exempted from providing a guarantee.

*Sources: HSBC (2011); Prasad (2016), Marconi et al (2016).*

---

offshore bond launches, offshore retail services, establishment of Hong Kong as key intermediary center, enlarged scope for Qualified Foreign Institutional Investors (QFII)\textsuperscript{23} investors, expansion into European stock markets amongst many others. Issuances dropped in 2015 due to a number of reasons but mainly from adverse turn in currency expectations and concerns about growth and financial stability.\textsuperscript{24}

**Figure 3: RMB Offshore Bond Market (in billion Yuan)**

![Graph showing RMB Offshore Bond Market (in billion Yuan)](image)

*Source: Xiao (2016)“RMB Internationalisation”*

### 4.1.1 Dim Sum Market Profile

The issuer base of the Chinese offshore bond market is considerably diversified, consisting of large corporates and banks. The base reflects the strong official support and sponsorship, which helped establish market credibility and mitigated early risks. The major issuers of dim sum bonds are government, People’s Bank of China (PBoC), Agricultural Development Bank of China, China Development Bank, Export-Import Bank of China, the ‘Big Four’\textsuperscript{25} banks, state-owned enterprises (SOEs), listed and non-listed corporations. An increasing number of SOEs

\begin{itemize}
  \item The Qualified Foreign Institutional Investor (QFII) Scheme of 2002 provided direct capital market access to institutional investors, allowing those meeting certain qualifications limited scope to invest in cross-border securities products. The RMB Qualified Foreign Institutional Investor (RQFII) Scheme of 2011 allowed using RMB funds raised in Hong Kong by subsidiaries of domestic fund management and securities firms in Hong Kong (subsidiaries) to invest in domestic securities market, for which approval of China Securities Regulatory Commission (CSRC) and investment quota approval by State Administration of Foreign Exchange (SAFE) is necessary. http://english.sse.com.cn/investors/qfii/what/.
  \item The gross issuance of dim sum bonds, yuan-denominated bonds issued in Hong Kong, yuan bonds issued in Taiwan and yuan-denominated certificates of deposits may reach 230 billion yuan (HK$ 275 billion) to 250 billion yuan in 2016, down 41–46 per cent from an overall 425 billion yuan issuance in 2015 (“Offshore yuan bond issuance seen cooling to a five-year low in 2016,” South China Monitoring Post, 22 March 2016).
  \item These are the state-owned commercial banks, viz. Industrial and Commercial Bank of China, China Construction Bank, Bank of China and Agricultural Bank of China.
\end{itemize}
have issued dim sum bonds to fund projects and Chinese banks have been major issuers of commercial deposits (CDs) in Hong Kong and other offshore centers to exploit lower costs. On the investor side, the major dim sum bondholders are Asia-based in Hong Kong and Singapore (Heiniger 2015). This geographical spread is explained by the robust intra-regional trade from interlinked, manufacturing supply-chains, regional investment opportunities from ASEAN interlinkages and well-developed financial markets and clearing houses in Hong Kong and Singapore.26

A majority of the bonds are rated, have no withholding taxes with relatively high degrees of transparency (Invesco, 2016). Over 2011-2016, mostly investment grade, i.e. low-yielding and high credit quality, bonds were issued which attracted investors due to the international ratings. rms with high debt levels (high-paying but low credit quality), attached to investment grade bonds issued by corporate, treasury, municipal governments. Dim sum bonds, including certificates of deposits, are largely of short-maturity, below three years.

4.1.2 Factors driving RMB-bond market development

Both demand and supply side factors played a role. Coincident with emergence of international investor appetite for EME bonds (Section 1), dim sum bonds compelled attention from 2010 also because of the flush of liquidity due to launch of the US quantitative easing, which burnished China’s robust growth and external indicators. In addition, some other factors were critical as discussed below.

- Currency stability combined with long-term appreciation expectations were critical motivations for investors of dim sum bonds. China’s capital controls and extensive exchange rate management kept the renminbi’s path stable even during crises in 1997 (East Asia), 2008 (global), 2011–12 (European debt) crisis,27 and 2013 (US Fed taper-related disturbance), supported by trade and current account surpluses (Figure 4). A gradual progression towards a flexible exchange rate regime from 2005 engendered expectations of RMB strengthening with the speed of adjustment moderated by regular intervention. This is buttressed by the decline in RMB bond purchases after mid-2014 when RMB expectations reversed towards weakening due to persistent capital outflows, declining trade surplus, regular intervention support to maintain RMB’s value that further accelerated downwards in 2015 (Prasad, 2016) and the heightened volatility in equity and forex markets that contributed to the first-ever fall (about 20 per cent, to 485 billion yuan) in dim sum issuances. The surprise RMB devaluation in August-2015 also led to selling pressures in the offshore bond market as returns on dim sum bonds fell.

27 At the height of the European Debt Crisis, May 2012, the RMB depreciated just 1 per cent against the dollar compared to above-5 per cent depreciation of the major as well as EM currencies (“China’s Onshore and Offshore RMB Markets,” IP Viewpoint, Income Partners, July 2014, IP Viewpoint, 2014).
China’s efforts to promote international usage of RMB, through aggressive cross-border trade settlements, facilitated accumulation of offshore RMB deposits that created liquidity and demand. In this while, the RMB has also grown in stature as payment currency, reflected in the rise in shares and rankings of international trade and settlements (Figure 5), number of current account items settled (Figure 6), the jump from thirteenth most popular currency for global payments in 2013 to seventh by 2015, with values tripling. It became the second-most active currency in trade finance in 2015, after the US dollar, as total trade-related settlements reached $1.7 trillion, or 25 percent of China’s annual trade volume (Buxbaum 2016). Offshore cross-border settlements rose nearly three-and-a-half times over 2013-2015 to RMB 11 trillion.

Source: World Development Indicators

---

Figure 4: Renminbi and other currencies: Movements against USD

Source: World Development Indicators

---

Figure 5: RMB as Payment Currency


---

Figure 6: Current Account Settlement (RMB billion)


---

28 Society for Worldwide Interbank Financial Telecommunication.
The appreciating currency-high yield combine was an enduring attraction. Dimsum bonds fetched higher returns even after hedging against currency risks relative to dollar or euro-denominated issues (Figure 7). Until August 2016, Chinese bonds consistently yielded more than US Treasury bonds at different maturities (Figure 8). The dimsum bond index enjoys a higher coupon rate than the US and world multi-asset bond indices for below-10 year maturities. Illustratively, short-term high-grade US-, Hong Kong- or Singapore dollar-denominated bonds typically yield less than 1 per cent; similar-rated dimsum bonds could yield 2.50 per cent or more. Likewise, the 10-year dim sum bonds offer 3.48 per cent, far above corresponding US Treasury (1.96 per cent), German bunds (0.16 per cent) and Japanese sovereign (0.29 per cent) bonds.

Monetary policy moves complemented as firms responded to changes by onshore-offshore arbitrage for bond issues. At the initial stage, Chinese mainland issuers faced tighter onshore liquidity and thin foreign investor presence, both of which favored offshore issues. But in recent years, onshore interest rates moved significantly higher with the five-year sovereign bond (CGB) yield rising 133 basis points to 4.5 per cent. This coincides with the peak in offshore dim sum bond issuances after a decade of consistent rise (Law and Chan, 2015).

A variety of tenors offered greater investor choice. About four-fifths of the dim sum bond preferences has been relatively short duration, below-three years, allowing investors to limit risks. Issuers offered a range of products, e.g. fixed income returns (over 95 per cent of all issuances in 2007-2014), floating interest rates offered by zero coupon bonds (Fung

31 Subsequent stock market crash in summer (2015) followed by 125 basis points cuts in policy rates saw Investors rush to safe assets, triggering a long, onshore bond rally. The yield of the benchmark 10-year government bond fell to 3.15 per cent in 2015 from 3.65 per cent at end- 2014.
32 As example, two major banks (Bank of China, Hong Kong and HSBC) raised yuan deposit rates in Hong Kong in October 2012 as competition for funds intensified; yuan deposits surged to one trillion by March 2015 in response. http://www.asianinvestor.net/article/rmb-bonds-making-a-strong-comeback/397572.
and You, 2014), as well as certificates of deposit that normally have a shorter tenure than bonds and are easier to issue at maturities ranging from one month to five years.

Chinese authorities thus gained valuable time and space to develop necessary infrastructure for launching a secondary market that would provide investors reasonable liquidity at different maturities. As dim sum bond issuance was immensely facilitated by banks or through collaboration with outside banks, liquidity conditions became favorable. The yuan deposit base in Hong Kong as well as retail banking services enhanced liquidity provision capacities for RMB bond-holders and also strengthened clearing house facilities. The strong offshore market base was thus critical in making the Chinese bond market liquid.33

4.2 Brazil

Brazil’s domestic capital markets are fairly well developed and firms have been issuing real-denominated bonds in local markets for a long time, together with foreign currency denominated issues abroad. In the past decade however, real-denominated offshore bond issues corresponded to global trends: Brazil as well as other EMEs such as Korea, Mexico, Hungary, South Africa and Indonesia made a marked shift towards bond financing; such bonds, according to the Institute of International Finance (IIF) accounted for nearly a fourth of corporate financing in South Africa, Thailand, and Brazil.34 In 2000-15, more than a quarter of Brazilian companies (46 out of 166) issuing offshore bonds sold local currency denominations (Serena and Moreno, 2016); during this period, debt issued by Latin American firms ($ 639 billion) overshadowed that of their Asian counterparts ($ 273 billion, nearly 1,000 firms).

4.2.1 Market profile

Brazil started raising external local-currency debt in September 2005, issuing BRL 3.4billion ($1.5 billion) worth of global bonds at a coupon rate of 12.5 per cent with a maturity of more than 10-years. Like masala bonds, interest and principal on real-bonds were settled in US dollars (Tovar, 2005). During 2005-12, Brazil issued local currency bonds of over BRL 14billion in the offshore market (Table 2); of the total global bond issues, real-denominated bonds (measured in US$) accounted for 10 per cent during 1997-2016. The offshore market for real-denominated bonds reached $6.4 billion in 2013.35 It is interesting to note that Brazilian bonds have almost similar maturity periods as US dollar-denominated bonds but the coupon rate differs because of currency risk.

---

Table 2: Sovereign Bond Market Profile for Brazil (average values for 1997–2016)

<table>
<thead>
<tr>
<th>Currency Denomination</th>
<th>Maturity (Years)</th>
<th>Original Currency (million)</th>
<th>US$ (million)</th>
<th>% shares in total ($)</th>
<th>Coupon (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazilian real</td>
<td>17</td>
<td>14,438</td>
<td>7,075</td>
<td>10.6</td>
<td>11</td>
</tr>
<tr>
<td>Euro</td>
<td>9</td>
<td>1,800</td>
<td>2,390</td>
<td>3.6</td>
<td>6</td>
</tr>
<tr>
<td>US dollar</td>
<td>19</td>
<td>57,076</td>
<td>57,076</td>
<td>85.8</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>66,541</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>


The issuer base is wide and includes sovereign, banks, resident corporates and supranational agencies. Major issuers are typically large multinational banks such as Bank of America, Morgan Stanley and Merrill Lynch, the European Bank for Reconstruction and Development (EBRD) whose issues are favoured over sovereign and corporate bonds because of AAA ratings. Relatively higher yields, about 7 per cent, have attracted investors. Brazil’s offshore issuances are fixed-rate instruments rather than floating-rate bonds. Typical attributes of real-denominated bonds are long maturities, an average coupon above 10 per cent, with an interest payable semi-annually. The offshore market has also extended the local currency nominal yield curve beyond those maturities of interest to most local market investors.

4.2.2 Factors driving the BRL Offshore Bond Market

- Reduction of its foreign-currency denominated debt was a key underlying motivation for local-currency denomination issues. In 2005-08, Brazil was amongst the biggest debtor nations amongst the developing countries group. In response, the country started shifting towards longer maturity, local-currency denominated bonds to guard against abrupt currency fluctuations as also lower financing costs. Offshore, real-denominated bond financing was comparatively cheaper as currency risk shifted to investors.

- As elsewhere, monetary policy plays a role. Yield movements of both, dollar-denominated and real-denominated bonds, have normally moved in tandem, driven by monetary policy. The difference in the coupon rate of Brazilian-real and US-dollar denominated bond in the offshore markets is not substantial and has been decreasing over time, pushing down funding costs through real-denominated bond issues. The comparatively higher domestic interest rates drove up domestic financial costs for issuers, shifting them to the offshore market. From September 2005 to March 2007, Brazil experienced 14 straight cuts in policy


37 Food conglomerate Brasil Foods, issued real-linked bonds in June 2014 with four-year maturity and 12.25 per cent yield to maturity; AmBev issued at 9.5 per cent coupon and 39 months’ maturity in April 2014.

rates to boost the economy;\footnote{“Brazil to Sell Real-Bond Due 2028 Twice More in 2007”, 
http://cbonds.com/news/item/365543.} after 2008, interest rates further reduced to around 7 per cent by 2013. The narrowing dollar-real differentials on similar bond issues also points to a lowering of perceived risks by investors relating to currency risks during 2007-12 as the Brazilian real gained against the US dollar. From 2014 onwards, monetary tightening following real depreciation triggered offshore-onshore movements in bond sales, which declined overseas.

- Exchange rate and macroeconomic volatility arising from buildup of vulnerabilities has been a critical influence. Currency volatility and real depreciating from higher inflation and plunging commodity prices, political instability and rating downgrade heightened investor risks in 2013, leading to sell-offs by foreign investors. Yields on real-linked debt rose 1.12 percentage points in one month, touching a record 8.73 per cent, while bondholders lost 13.4 per cent in dollar terms. With the Brazilian real registering a consistent decline after 2013, and a “negative” sovereign debt outlook due to slowing growth and large fiscal deficit (Hong and Wirz, 2014), foreign investors turned risk-averse despite high yields and their holdings of local public debt decreased sharply by July 2015 (Pacheco and Sambo, 2015). In this period, some investors opted for safer, dollar-denominated bonds of Brazilian corporates, settling for lower yields.\footnote{Ashley Lau and David Randall, “US Investors Look to profit on Brazil Rate Hike”, 
Reuters, April 2014.}

- Onshore taxes also spurred offshore BRL bond issues as over time, tax restrictions were imposed upon fixed income securities. In October 2010, the country raised the tax rate to 4 per cent for fixed income inflows, increasing this to 6 per cent in March 2011. In the same month, the 6 per cent tax on offshore borrowings with maturity periods of under one year was gradually increased to maturities of two years, three years, and to below five years by 2012; the maturity clause was gradually lifted while the 6 per cent tax was also withdrawn in 2013.

5. **Lessons for India**

The two case studies offer useful insights about growth and development of overseas local-currency bond markets from other EMEs. In seeking to establish domestic currency bond markets abroad, there are both similarities as well as differences arising from country-specific, structural characteristics as well as policy objectives. Nevertheless, there is much to be learnt from. The important distinctions as well as similarities between the countries, underlying objectives and other processes and features are discussed below.

**Economic context and features:** The motivations for venturing into issuance of local-currency bonds abroad vary significantly across China, Brazil and India. For China, a RMB-denominated bond market abroad has been aligned to the broader financial liberalization and currency internationalization goals. Brazil initially issued offshore bonds to lessen its foreign currency debt as well as restructure its composition and maturity. India, on the other hand, is seeking to guard against currency and maturity mismatches in firms’ balance sheets by limiting
foreign-currency denominated debt through provision of local-currency resource avenues, especially for nontradable sectors such as infrastructure, which generate rupee revenues and where domestic financing is constrained.

Two, while a local bond market base exists in all three countries, the degree of development, environment for foreign investors and their presence varies significantly; this influences the ability to use the domestic base as a springboard for advancing financial products and establishing markets abroad. Three, there are differences in the level and stage of capital account liberalization and flexibility of exchange rate regimes. Four, macroeconomic features like fiscal and external accounts, importer or exporter of commodities, international credit ratings metrics, inflation, and so on are fundamentally distinct, although as part of the EME grouping, all three countries attract higher yield-seeking global investors. There is a major difference in India’s sovereign rating compared to China and Brazil; the latter have been rated investment-grade by agencies, with Brazil downgraded only recently (2016, as its credit metrics deteriorated) while India’s remains below-investment grade.

Relatively high growth rates, coupled with strong fundamentals in the post-crisis period facilitated issuance and successful placements of local currency debt by China and Brazil at an opportune time when demand for such assets arose. While Brazil has been relatively open, financially, and familiar to foreign investors, it has also been helped by early adoption of inflation targeting (1999), which lent higher certainty and credibility to its monetary and exchange rate policies. In both countries, the currency appreciation-high yields combination favored global investors and immensely contributed to initial market growth. A shift in Chinese currency policy from 2005 was closely associated with gradual RMB appreciation as the country began to rebalance growth. Moreover, and as stated earlier, high demand for multiple uses of the RMB - trade settlements, currency payments, and investment adjustments and so on – facilitated the dimsum bond initiative.

India is a late entrant into this sphere by contrast. But it shares several positive features with China and Brazil. Inter alia, these are, favorable growth and yield differentials vis-à-vis advanced countries, financial liberalization, and macroeconomic stability gains after a bout of intense financial volatility triggered by US Fed Chairman’s remarks on tapering off its bond-buying programme. Two, the launch of masala bonds is preceded by introduction of a flexible inflation targeting framework for monetary policy conduct, which imparted certainty and transparency in financial markets and infused confidence and trust about maintenance of rupee’s value. Enduring differences, particularly vis-à-vis China, are due to international usage of respective currencies and a depreciating bias attached to the rupee on account of larger inflation differentials with rest of the world.

**Nature and Procedural Features:** There are differences as applicable to offshore bond issues that are denominated in domestic currency. Important ones are listed below

- The initial pace for masala bond issues is provided by a few supranationals and resident firms. Regulation initially restricted issuances to corporate and non-bank lenders such as housing finance corporations and large NBFCs; banks have been allowed to enter much
later for limited purposes, viz. raising capital, financing infrastructure and affordable housing. Chinese dimsum bonds were led by the sovereign entities, Ministry of Finance and central bank; China’s banks often buy 30-40 per cent of issuances from fellow lenders, while as active suppliers of dimsum bonds, they can issue either through onshore entities within a quota or through offshore subsidiaries without a quota.

- Chinese authorities were proactive, working with their Asian counterparts such as Hong Kong, towards success of the bond market. This proximity, coupled with presence of a large Chinese expatriate population interlinked with mainland Chinese through trade, was a big facilitator. India lacks such a conduit and masala bonds are either listed at, or dependent upon Singapore and London exchanges and private financial markets; the reinforcing trade links are far weaker than observed in the case of China.

- There are differences in regulatory design and limits upon issue size and maturity. The maximum issue size of masala bonds is US$ 750 million; prior approval is required from the Reserve Bank of India (RBI) to increase the issue size beyond US$ 750 million. However, in China, multinational companies (including MNCs not present in China) can issue dim sum bonds to professional investors without seeking approval from either the PRC or the Hong Kong authorities. After issuing such bonds, multinational issuers may use their proceeds freely in Hong Kong—regulatory approval from the PRC is not required—or to settle cross-border trades or repatriate them to the mainland with the approval of the PBC. End use of funds mobilized through masala bonds is restricted and debarred from specified activities and sectors.\(^4^1\)

- The minimum average maturity period of masala bonds had to be reduced from 5 years to 3 years to match global investors’ preferences, but is still longer than that of dim sum bonds, most of which had 1-3 year maturity period 2011-16 and dominated by certificates of deposits. Brazil succeeded in longer maturity period (about 10 years, on average) in its offshore bonds before 2005 because its currency was strong, expected to appreciate further and foreign investors already had a toehold in the onshore bond market; in 2005-10 however, the offshore real-denominated bonds were neither short-maturity nor investment-grade, but still found a market. Still more recently, and like China, Brazil offered investment grade bonds of shorter maturity (3-4 years), displaying a sound investor base.

- Taxation plays an important role as already uncovered in our market survey above. Taxes are not withheld on dim sum bonds, but a 5 per cent withholding tax upon interest income and exemption of capital gains accessed through currency appreciation between issue and redemption of masala bonds applies.

\(^4^1\) The proceeds can be used for all but the following purposes: Real estate activities other than for development of integrated township/affordable housing projects; Investing in capital market and using proceeds for domestic equity investment; Activities prohibited as per Foreign Direct Investment (FDI) guidelines; On-lending to other entities for any of these activities; and land purchases. https://www.rbi.org.in/Scripts/FAQView.aspx?id=113.
A key difference lies in the currency of settlement. Masala bonds are traded at London and Singapore exchanges and settled in only US dollars for the rupee is partially convertible. Dim sum bonds, on the other hand, are cleared and settled in renminbi, which is facilitated largely by the offshore central banks, local banks and the Chinese banks.

There are differences in repatriation of offshore proceeds. Chinese corporate can use offshore proceedings onshore under QFII and RMB QFII schemes, subject to a certain quota. The Shanghai Free Trade Zone (FTZ) further liberalised this in February 2015 by creating a new channel for Chinese firms and banks to repatriate offshore RMB as well as foreign currency funds. Indian offshore proceeds are subject to provisions applying to external commercial borrowings (ECBs), which mandate funds repatriated to India are credited to borrowers’ rupee accounts with local banks, pending utilization for permissible end uses.

5.1 What lessons can be drawn for the masala bond market?

In seeking examples from practices followed by other countries, differences in policy goals assume significance. For example, China’s broader goals of overhauling its pre-2005, pegged exchange rate regime and capital account liberalization demanded certain settings and structures. This provided the incentives for calculated accumulation of offshore RMB deposits, increased scale of trade transactions in the RMB followed by launch of financial products, enhanced roles of investors and banks, a steady increase of scope and freedom, the start of bidirectional flows between Hong Kong and mainland (onshore) market. Some of this may be hard for India to replicate because the course and pace of capital account liberalization as well as timing of relaxing capital controls tend to be country specific.

The second critical point is about sovereign ratings, where India lacks an investment grade. China and Brazil (the latter faced intense volatility in bond markets and yields when downgraded last year) had been issuing offshore sovereign debt in both hard and local currencies, a feature that helped extending and developing local-currency bond markets abroad. India is held back in this regard as a high level of public debt is a key stumbling block.

Nevertheless, even while difficult to completely adopt models embraced by other countries, it is useful to glean insights from the paths already traversed. Keeping in mind these caveats, we list some features for consideration allowing for differences in country objectives.

- Country experiences demonstrate that offshore bond markets, particularly when denominated in local currencies, succeed on the basis of investors’ confidence and convenience. The former relies upon the rule of law governing the offshore currency market, macroeconomic stability and appropriate monetary-fiscal policies. Convenience requires a sizeable market with both depth and breadth, an established trading and clearance infrastructure support, a well-connected transaction network and a variety of investment

---

and funding alternatives. China has been very successful on these two fronts: for example, more than 200 banks are involved in the Hong Kong clearance and settlement system; with high RMB deposit volumes, the institutions provide essential market liquidity and actively serve the market through RTGS. On the demand side too, there was need for servicing trade-related transactions and payments in the RMB. Notably, Brazil lacked such an offshore base and therefore, does not match up to the scale of bond issuances achieved by China; a relatively weak, offshore clearing mechanism limits the levels of clearing and obstructs the exchange rate risk mechanism. India does not share these similarities, while masala bonds, unlike dimsum ones, are settled in foreign currency and not rupees. It needs to focus instead upon provision of incentives and more market players to encourage trades for market deepening at existing platforms in London and Singapore.

- The functioning of offshore markets depends on coordination and the capabilities of partner countries/financial centres. China leveraged the base and experience of Hong Kong to liberalize, develop and internationalize its currency, advancing to other overseas bourses over time. It requires emphasis here that India’s objective for offshore rupee-debt is mainly mobilization of foreign sources for domestic infrastructure projects that do not generate hard currency revenues. Therefore, an imaginative exploiting of competence and expertise of sophisticated financial centres, viz. London and Singapore where masala bonds are listed, for design of differentiated products to match issuer-investor profiles and activate trading will help boost offshore rupee flows into domestic markets.

- Bond maturities of different durations and natures play an important role in making the bond market attractive as they allow duration trades along the yield curve besides other plays. Brazil progressed from offshore bonds of long-duration only in 2005-10, which were not even investment grade, but because of the currency advantage (the real was expected to appreciate), it found a ready market for these; it dynamically moved towards investment-grade bonds of shorter maturity. China, too, has successfully placed such offerings (3-4 years maturity). Masala bonds, which initially carried a minimum 5-year maturity profile and found no takers, were shortened to 3 years, which helped kick start the market. A progressive programme of familiarizing investors can be considered through introducing with different, longer maturities that can facilitate trading across currencies, yields and duration. The diversity of investor preferences across regions and categories can be actively cultivated and matched to domestic issuer needs. Coupled with enduring macroeconomic stability, investors will be keener to take on exposure to the rupee at longer horizons.

- Both China and Brazil had a diversity of issuers covering the sovereign, banks and corporates with stable credit profiles and capability to withstand possible default. By contrast, India does not issue sovereign debt abroad, the number of corporate issuers are currently very few, while banks have yet to enter the market besides being strictly restricted in purpose. Indian banks can issue masala bonds as (i) Perpetual Debt Instruments (PDI) qualifying for inclusion as Additional Tier 1 capital and debt capital instruments qualifying for inclusion as Tier 2 capital, and (ii) Long-

---

43 Cyclical and structural factors (severe debt overhang) also weigh upon
issuance appetite, especially large infrastructure firms capable of raising large, regular fund volumes through masala bonds. Steady flow of regular bond issues must be encouraged by both corporate and banks to deepen the market and develop a yield curve. Enhancing issuance limits beyond $750 million can be considered in this context. Prospective issuers can also be urged to mobilize rupee resources through this channel to boost the market.

- Dimsum bonds have a large pool of buyers, amongst which are institutional investors in Hong Kong and other financial centres, asset management funds, commercial and other private banks. Masala bond buyers are fewer in contrast and concentrated in specific categories and regions. Active pursuit, through arrangers and underwriters of masala bond issuances, of a wider range of global investors, e.g. on the lines of IFC placements, will help broaden this sphere. Popularizing, including through advertisements and road shows, the positive attributes of rupee-denominated bonds will also help. Again, the expertise of financial centres like London and Singapore can be utilized, especially to attract long-term investors such as pension and insurance funds, foreign governments and so on.

- Chinese banks and foreign asset management companies are active buyers of dim sum bonds and they competed with each other in this regard. Indian banks are allowed to act as arrangers/underwriters for issuance of masala bonds provided their holdings (to which prudential norms apply) do not exceed 5 percent of the issue size beyond 6 months from the date of issue in performing these functions; they currently cannot perform any other role, including trading and market making, in respect of these bonds. Relaxations in the holding limits and duration will allow greater flexibility and latitude to benefit from changes in liquidity conditions and exchange rate movements.

- The role of macroeconomic fundamentals is paramount. This is well exemplified by recent drop in the appeal of BRL-denominated bonds as Brazil was downgraded by rating agencies as bond investors remain especially averse to exchange and interest rate risks. In this regard, India’s shift to inflation targeting increases credibility and certainty about future interest rate movements, enhancing investors’ willingness to assume currency risk attached to masala bonds. But below-investment grade sovereign rating keeps risk premia high, adding to costs of exchange and interest rate fluctuations. Stable exchange rate value through assured inflation control, tighter grip on public finances with a steady improvement in its fiscal position will contribute to India’s credit ratings. Further, a committed progression towards rupee convertibility will boost investor confidence in India’s macroeconomic position. Finally, development of less costly swaps/derivatives will provide hedging possibilities and strategies to investors.

- China distinguishes between onshore withholding taxes on QFII/RQFII investors against those on the offshore dim sum market, which does not carry a similar tax burden and

---

term rupee-denominated bonds overseas for financing infrastructure and affordable housing., subject to Basel III Capital Regulations and prudential guidelines.
therefore attracts investors to take exposure to RMB-denominated bonds.\(^{44}\) India however follows the equity or non-discriminatory principle in this regard, placing masala bonds (withholding tax of 5 percent) on par with tax borne by onshore foreign portfolio investors on grounds of. Brazil has employed taxes on bond returns to foreign investors dynamically to either deter or slow down pace of debt inflows or to tilt their maturity towards longer tenures, lifting these whenever unnecessary or in times of currency stability. India could consider removing withholding taxes on the offshore local-currency-denominated bonds in order to encourage their take-off.

6. Conclusion: Future Path and Issues

Our survey of issuers and investors, in conjunction with the two country studies in this paper, reveal abundant investor interest in the offshore rupee bonds. This is similar to the case of other EMEs. Supply-side impulses revealed through feedback from existing and prospective issuers, arrangers and underwriters endorse the masala bond financing channel as well. On the demand side, the nearly one-decade long increase in investor appetite for EME currencies’ products is likely to persist, if only from a broader perspective of risk-reward opportunities. At present, the masala bond market is nascent, lacking in several important dimensions. Drawing upon cross-country experiences and survey of market participants and further research analysis offers some additional insights listed below.

- **The interplay of macro-monetary-financial conditions will always influence demand and supplies.**

Though participants universally view masala bonds as scoring over hard-currency issuances due to elimination of currency risk and are gravitating towards rupee-denominated foreign debt, this does not necessarily imply a complete or permanent shift. As observed for other EMEs, domestic and external changes in macroeconomic and financial conditions are a key driver of EME-currency bond dynamics.

- **Repeat, regular issuances to increase volumes for market growth and sustainability.**

Considering the current, extremely narrow issuer base of a few corporates and inactive banks, a strong push to increase bond volumes and enlarge the issuer base is required. Encouraging large public sector firms engaged in railways, power, ports and similar infrastructure segments is one way to ride out cyclical and structural impediments: Large, private sector firms in the infrastructure segment are currently highly indebted and lack the appetite for investment. Government capital expenditure, including off-balance sheet investments through large PSUs, aims to overcome this slack; it is cyclically opportune for the latter to mobilize rupee resources through masala bonds. The hesitation on account of costs from withholding taxes needs to be reconsidered in this light. Structural impediments exist for small and medium-sized firms and even domestic banks. But it is possible overcome this constraint through offering more trading

to investors across the yield curve and duration to offset higher credit/default risks attached to SMEs. This requires a well-developed yield curve, e.g. as is the case with the Mexican peso.

- **Make specific efforts to draw in more investors.**

There is potential for wider, diverse investor groups. The IFC’s investor base, while allowing for its supranational status, illustrates the span of interested investors across regions, wide base composition and pronounced tilt towards longer maturities. Observable attributes of IFC’s investor distribution profile reveals preference of European investors for longer tenors (10-years) as compared to American ones (4-year tenor) and the inclination of banks and insurance companies towards long-term investments compared to asset managers (4years). Our survey reveals that many more institutional investors are excited about rupee-denominated bonds but are not yet convinced to invest.

- **Masala bond issues for green, sustainable development hold promise.**

This is a promising source for mobilizing funds for solar, renewable energy and sustainable development projects where investor interest is high. It is also relevant in the context of India’s national commitment to shift from fossil fuels as per the Paris climate change agreement. Indian authorities acknowledge that “…there is a huge potential to raise money by way of issue of green bonds. India’s commitment to the Paris Climate Accord, makes it all the more important to work towards implementing infrastructure projects that are environmentally sustainable because it is both the need of the hour and there could be alternative sources for raising funds for projects that are environment friendly.”45 Many global investors increasingly exhibit preference for ethical, larger social impact investments. Proactive cultivation of this market segment will help expand the masala bond market.

- **Indian authorities could encourage development of a secondary market; London could be a good start.**

At the moment, due to low volumes, a secondary market is virtually non-existent. But a secondary market is important for long duration bonds, instruments that are especially illiquid but which investors are more willing to buy if resale possibilities exist. The impediment for interested but hesitant investors is the lack of a ready exit option or market liquidity. Most participants are optimistic if the masala bond instrument becomes acceptable, liquidity will follow. Currently, institutional investors buying masala bonds are a potential source as allocations to emerging market funds are enlarged; a further enhancement of this portfolio will make them potential providers of liquidity. Yet another potential avenue for masala bond trades by investors is between dollar-denominated and rupee-denominated bonds of Indian firms; however, the issue sizes need to be reasonable, at least Rs 100 million, to facilitate trading. The Indian diaspora or nonresident Indians (NRIs) is perceived as another source by market participants who think this group constitutes a ready, secondary trading class. The reason why NRIs is because masala bonds are a close substitute for nonresident rupee accounts (NRE

45 Address delivered by Shri N. S. Vishwanathan, Deputy Governor, RBI at 6th National Summit organised by ASSOCHAM on ‘Infrastructure Finance - Building a New India’ in Mumbai on November 15, 2016.
accounts) maintained onshore. Some participants suggest domestic investors should be allowed investments in masala bonds like Chinese corporates in dim sum bonds to exploit their superior knowledge of resident firms that enhances appraisal of risk-bearing abilities compared to foreign investors who view them from afar and different perspective. With growing volumes, Indian authorities could consider active development of a secondary market in London through joint public-private sector efforts, e.g. India-UK partnership.

- **Long-tenure bonds needed for development of benchmark yield curve and infrastructure financing.**

The need for varied tenors, especially at longer maturities, and regular issuances is urgent for establishment of a benchmark yield curve. Bonds of such duration are also necessary for a market for infrastructure financing to evolve; this is typically structured with long time horizons. A market for 10-year or longer tenures is non-existent at this point, is a crucial gap and will take a long time to evolve but imperative for market sustenance. Although the masala bond market is only just evolving and different tenures may develop ahead, Indian authorities must devote specific attention to how some large, candidate firms could take the lead for creation of a market for 10-year or longer tenure masala bonds in the offshore market. This will allow its maturity into a viable, infrastructure financing channel. Cultivating major candidate issuers for short- and long-duration offshore rupee bonds will also signal authorities’ support for a robust yield curve.

- **Upgrade to sovereign rating will help in all aspects of market development.**

An improved country-rating has the capacity to impart a big, positive boost. *Inter alia*, the benefits are: lower costs of funds as risk premium falls, bringing more investor groups into the fold as many are prohibited from investments in below-investment grade countries/spheres due to internal guidelines, and greater ability to issue long-term bonds for infrastructure projects as risk perceptions come down and investors become more willing to take longer exposure.

In conclusion, it needs underlining that sovereign ratings are closely connected to enduring macroeconomic strengths and stability, upon which a stable currency is based, too. There is little doubt these features also underlie the successful establishment of an offshore rupee-bond market. While changes in the monetary policy framework in recent times have secured credibility and transparency, which favors bond markets, complementary efforts on the fiscal side are necessary for improved country ratings. Last of all, higher volumes of international trade, not an insignificant feature of support to China’s offshore RMB-bond market, will naturally impart demand for rupee-based products.

---

46 Large investments by NRIs could inject liquidity although it may be a while before this group understands and begins to use this investment avenue; however, most arrangers think that once large-scale buying by NRIs occurs, market liquidity will go up, too. It is instructive in this context to know that approximately $50 million went to NRIs in the HDFC issue, signifying initial interest via asset management firms.
References


**Buxbaum, Peter. 2016** ‘China Promoting International Use of RMB’ February, *Global Trade.*


Annexure I

<table>
<thead>
<tr>
<th>Eligibility</th>
<th>Maturity</th>
<th>Issuance limit (Individual and total)</th>
<th>Withholding Tax</th>
<th>Capital gains</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBI guidelines for Masala Bonds, Sep 29, 2015</td>
<td>Corporate or body corporate, Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs)</td>
<td>Minimum maturity period of 5 years</td>
<td>USD 750 million per annum per issuer</td>
<td>Ambiguous</td>
</tr>
<tr>
<td>Central Board of Direct Taxes clarification, Oct 29, 2015</td>
<td></td>
<td></td>
<td>Yes. 5 per cent withholding tax on interest income from Masala bond</td>
<td>Capital gains arising in case of appreciation exempted from taxation</td>
</tr>
<tr>
<td>RBI circular, Apr 13, 2016</td>
<td>Tenor reduced to 3 years</td>
<td>Rs. 50 billion annually, per issuer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEBI circular, Aug 04, 2016</td>
<td>Clarified that Masala bond investment shall not be treated as FPI investments</td>
<td>Clubbed Masala bond investment limit with Corporate debt limit of INR 244,323 crore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RBI press release, Aug 25, 2016</td>
<td>Banks allowed issuing Masala bond for their capital requirements and for financing infrastructure and affordable housing.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEBI circular, Aug 04, 2016</td>
<td>Clarified that Masala bond investment shall not be treated as FPI investments</td>
<td>Clubbed the Masala bond investment limit with the Corporate debt limit of INR 244,323 crore</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: RBI & SEBI*
<table>
<thead>
<tr>
<th>NO.</th>
<th>TITLE</th>
<th>AUTHOR</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>343</td>
<td>INDIAN FOOD AND WELFARE SCHEMES: SCOPE FOR DIGITIZATION TOWARDS CASH TRANSFERS</td>
<td>SHWETA SAINI, SAMEEDH SHARMA, ASHOK GULATI, SIRAJ HUSSAIN, JOACHIM VON BRAUN</td>
<td>AUGUST 2017</td>
</tr>
<tr>
<td>342</td>
<td>PROMOTING ORGANIC FOOD PRODUCTS AND EXPORTS - STATUS, ISSUES AND WAY FORWARD</td>
<td>ARPITA MUKHERJEE, SOUVIK DUTTA, DISHA MENDIRATTA, AVANTIKA KAPOOR, TANU M GOYAL</td>
<td>JULY 2017</td>
</tr>
<tr>
<td>341</td>
<td>FACTORS INFLUENCING INDIAN MANUFACTURING FIRMS’ DECISION TO HIRE CONTRACT LABOUR</td>
<td>JAI VIR SINGH, DEB KUSUM DAS, HOMAGNI CHOU DHUR Y, PRATEEK KUKREJA, KUMAR ABHISHEK</td>
<td>JULY 2017</td>
</tr>
<tr>
<td>340</td>
<td>ENVIRONMENT AND LABOUR ON THE TRADE AGENDA: LESSONS FOR INDIA FROM THE TPP AGREEMENT</td>
<td>ANWARUL HODA, DURGESH K. RAI</td>
<td>JULY 2017</td>
</tr>
<tr>
<td>339</td>
<td>MAKING RAPID STRIDES AGRICULTURE IN MADHYA PRADESH: SOURCES, DRIVERS, AND POLICY LESSONS</td>
<td>ASHOK GULATI, PALLAVI RAJKHOWA, PRAVESH SHARMA</td>
<td>APRIL 2017</td>
</tr>
<tr>
<td>338</td>
<td>CAN ASSET RECONSTRUCTION COMPANIES (ARCS) BE PART SOLUTION TO THE INDIAN DEBT PROBLEM?</td>
<td>JAIMINI BHAGWATI, M. SHUHEB KHAN, RAMAKRISHNA REDDY, BOGATHI</td>
<td>APRIL 2017</td>
</tr>
<tr>
<td>337</td>
<td>TRANSFORMING AGRICULTURE IN ODISHA: SOURCES AND DRIVERS OF AGRICULTURE GROWTH</td>
<td>ANWARUL HODA, PALLAVI RAJKHOWA, ASHOK GULATI</td>
<td>MARCH 2017</td>
</tr>
<tr>
<td>336</td>
<td>UNLEASHING BIHAR’S AGRICULTURE POTENTIAL: SOURCES AND DRIVERS OF AGRICULTURE GROWTH</td>
<td>ANWARUL HODA, PALLAVI RAJKHOWA, ASHOK GULATI</td>
<td>MARCH 2017</td>
</tr>
<tr>
<td>335</td>
<td>DOUBLING AGRICULTURAL GROWTH IN UTTAR PRADESH: SOURCES AND DRIVERS OF AGRICULTURAL GROWTH AND POLICY LESSONS</td>
<td>SMRITI VERMA, ASHOK GULATI, SIRAJ HUSSAIN</td>
<td>MARCH 2017</td>
</tr>
<tr>
<td>334</td>
<td>DESTRUCTION OR POLARIZATION: ESTIMATING THE IMPACT OF TECHNOLOGY ON JOBS IN INDIAN MANUFACTURING</td>
<td>PANKAJ VASHISHT</td>
<td>MARCH 2017</td>
</tr>
</tbody>
</table>
About ICRIER

Established in August 1981, ICRIER is an autonomous, policy-oriented, not-for-profit, economic policy think tank. ICRIER's main focus is to enhance the knowledge content of policy making by undertaking analytical research that is targeted at informing India's policy makers and also at improving the interface with the global economy. ICRIER's office is located in the institutional complex of India Habitat Centre, New Delhi.

ICRIER's Board of Governors includes leading academicians, policymakers, and representatives from the private sector. Dr. Isher Ahluwalia is ICRIER's chairperson. Dr. Rajat Kathuria is Director and Chief Executive.

ICRIER conducts thematic research in the following eight thrust areas:

- Macroeconomic Management Financial Liberalisation and Regulation
- Global Competitiveness of the Indian Economy-Agriculture, Manufacturing and Services
- Multilateral Trade Negotiations and FTAs
- Challenges and Opportunities of Urbanization
- Climate Change and Sustainable Development
- Physical and Social Infrastructure including Telecom, Transport Energy and Health
- Asian Economic Integration with focus on South Asia
- Promoting Entrepreneurship and Skill Development

To effectively disseminate research findings, ICRIER organises workshops, seminars and conferences to bring together academicians, policymakers, representatives from industry and media to create a more informed understanding on issues of major policy interest. ICRIER routinely invites distinguished scholars and policymakers from around the world to deliver public lectures and give seminars on economic themes of interest to contemporary India.