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Pricing of Foreign Debt in the US Rule 144A Bond Market

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1. Introduction

Debt accounts for a significant proportion of corporate capital. For example, debt (both convertible and non-convertible), preferred stock, and equity accounted for 83%, 1%, 15%, respectively, of the domestic capital issues globally during 1990–2001.[16] The corresponding breakdown for international capital issues was found to be 90%, 1%, and 9%, respectively. Debt capital is raised by firms in foreign markets in three possible ways: foreign currency debt (e.g., an Indian firm issuing US dollar-denominated bonds in the US in Yankee/public or 144A/private debt market[17]); Euro issues (e.g., an Indian firm issuing US dollar-denominated bonds in London or Luxemburg exchanges); or global issues (e.g., an Indian firm issuing debt in both domestic as well as foreign venues).

Corporate debt markets in emerging markets are often undeveloped, and they lack market depth and liquidity.[18] Domestic capital funding is dominated by informal finance sources, bank loans, and private placement markets that crowd out corporate debt issues. As a result capital-hungry firms with strong potential from emerging markets tap into global debt markets. Large Indian firms with significant market capitalization and global presence typically borrow in the US and other international markets (see Table 1). Since the collapse

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[16] See Henderson, B., Jegadeesh, N., Weisbach, M., 2006. "World markets for raising new capital," *Journal of Financial Economics*, 82: 63–101.

[17] Yankee bonds are US dollar-denominated public bonds issued by non-US borrowers to US investors, while Rule 144A debt represents non-bank private debt (hereafter "private debt") issued by foreign firms to qualified institutional buyers (QIBs). Yankee debt is publicly traded; however, trading in 144A debt is restricted to QIBs until the initial holding period is over or such debt is publicly registered. Rule 144A debt is exempt from SEC registration and US GAAP and SOX compliance.

[18] Source: "India's bond market needs to bulk up," *Business Week* (Feb 10, 2011). The article argues that India's ambitious USD 1 trillion infrastructure program will not succeed without a more robust corporate bond market.

of Lehman Brothers in 2008, Bank for International Settlements (BIS) estimates that non-banking emerging market firms have issued USD 692 billion in international bonds (USD 89 billion in the first six months of 2014 alone).[19] Many of the bonds are issued through offshore subsidiaries in low-tax jurisdictions such as the Cayman Islands; this approach appeals to (a) asset managers, as many of them face investment restrictions investing in emerging bond markets and (b) issuing firms from emerging markets (Brazil and China being the biggest issuers), as it helps them to skirt capital controls.

Table 1: Sample of Indian Yankee and 144A Bond Issuers (1994–2010)

(I) Primary market issuers from FISD

Type	Name	Offering Date	Issuing Amount ($ mi)	Offer_Maturity (yrs)	Rating	Offer_ Spread	Secondary Market Spread (%)
144A	RELIANCE INDS LTD	27-Sep-95	150	9.98	4.5	1.41	1.38
144A	RELIANCE INDS LTD	17-Jun-96	100	30.01	4.5	1.81	2.63
144A	RELIANCE INDS LTD	17-Jun-96	100	20.01	4.5	2.83	2.79
144A	RELIANCE INDS LTD	30-Jul-96	100	49.78	4.5	3.06	3.87
144A	RELIANCE INDS LTD	09-Jan-97	214	30.02	4.5	1.10	5.17
144A	RELIANCE INDS LTD	09-Jan-97	100	99.89	4.5	3.19	2.34
144A	TATA ENGR & LOCOMOTIVE LTD	10-Jul-97	200	10.01	4	1.28	5.64
144A	POWER FIN LTD	25-Jul-97	100	7.10	4	0.87	3.10
144A	TATA ELEC COS	12-Aug-97	150	20.02	5	1.59	1.93
144A	TATA ELEC COS	12-Aug-97	150	10.02	5	1.17	3.68
144A	ICICI BK LTD	09-Nov-05	500	5.02	4.5	0.83	2.47
144A	ICICI BK LTD	09-Jan-07	750	15.30	4.5	1.20	1.44
144A	ICICI BK LTD	09-Jan-07	500	1.31	4	-4.23	2.05
144A	ICICI BK LTD	09-Jan-07	750	5.01	4.5	0.76	2.38
144A	ICICI BK LTD	08-Jul-10	500	5.52	4	2.79	1.77
144A	ICICI BK LTD	08-Nov-10	1,000	10.02	4	3.14	3.09
144A	ICICI BK LTD BAHRAIN BRH	26-Sep-07	2,000	5.02	4	1.71	3.35
144A	ICICI BK LTD BAHRAIN BRH	20-Nov-09	750	5.34	4	2.96	3.32
144A	STATE BK INDIA LONDON BRH	22-Jul-10	1,000	5.01	4	2.71	0.67
Yankee	INDUSTRIAL DEV BK INDIA	25-Feb-04	300	4.75	4.5	1.49	3.33
Yankee	ICICI BK LTD	15-Oct-03	300	4.77	4.5	1.07	3.15
Yankee	EXPORT IMPORT BK INDIA	07-Jul-04	250	3.51	4.5	1.42	0.15

[19] Source: "Emerging-market corporate debt-invisible bonds," *Economist*, 8 November 2014.

Public and private debt issued by foreign corporations in the US is not only sizeable but has significantly grown over time. During 1994–2010, USD 5.6 trillion worth of total debt was issued by foreign corporates in the US; the ratio of foreign to domestic debt issuance grew from only 9% in 1990–1994 to 31% in 2006–2010.[20] Private debt issues, in turn, are a key foreign source of funding for corporations and predominantly so for emerging market firms. About 37% of the total foreign corporate debt issued in the US is composed of private debt, compared to only 18% of private debt for domestic US corporate debt issues.

Figures 1 and 2 present the historical evolution of international debt offerings affiliated to developed and emerging economies in the US market during 1990–2010. Figure 1 shows that the US dollar volume of private vs. Yankee debt issues witnessed a growth spurt after the year 2000, particularly for emerging market issues, making 144A the most important debt financing source for foreign emerging firms. Figure 2 further reveals that BRIC market firms have historically resorted to private debt capital predominantly, rather than Yankee debt issues.

2. Research Issue

In this paper, we examine the following issues. How are secondary market prices determined in private debt markets compared to public debt markets? How are private and public bond yield spreads different in primary vs. secondary markets? Why do foreign firms, especially those from emerging markets, preferentially issue in the private 144A debt market? Is there any special role of information evident in the 144A market that is restricted to only QIBs? What is the experience of Indian vs. BRIC cohort firms?

3. Findings

The study is implemented using an exhaustive 144A bond sample of secondary market trades by US insurance companies, including 561 bond issues belonging to 267 issuers from 40 different countries.[21] While the 144A trades recorded in our data are strictly between two QIBs, the Yankee trades are between a QIB and any other financial institution (which could be a QIB or a non-QIB). We record three key findings.

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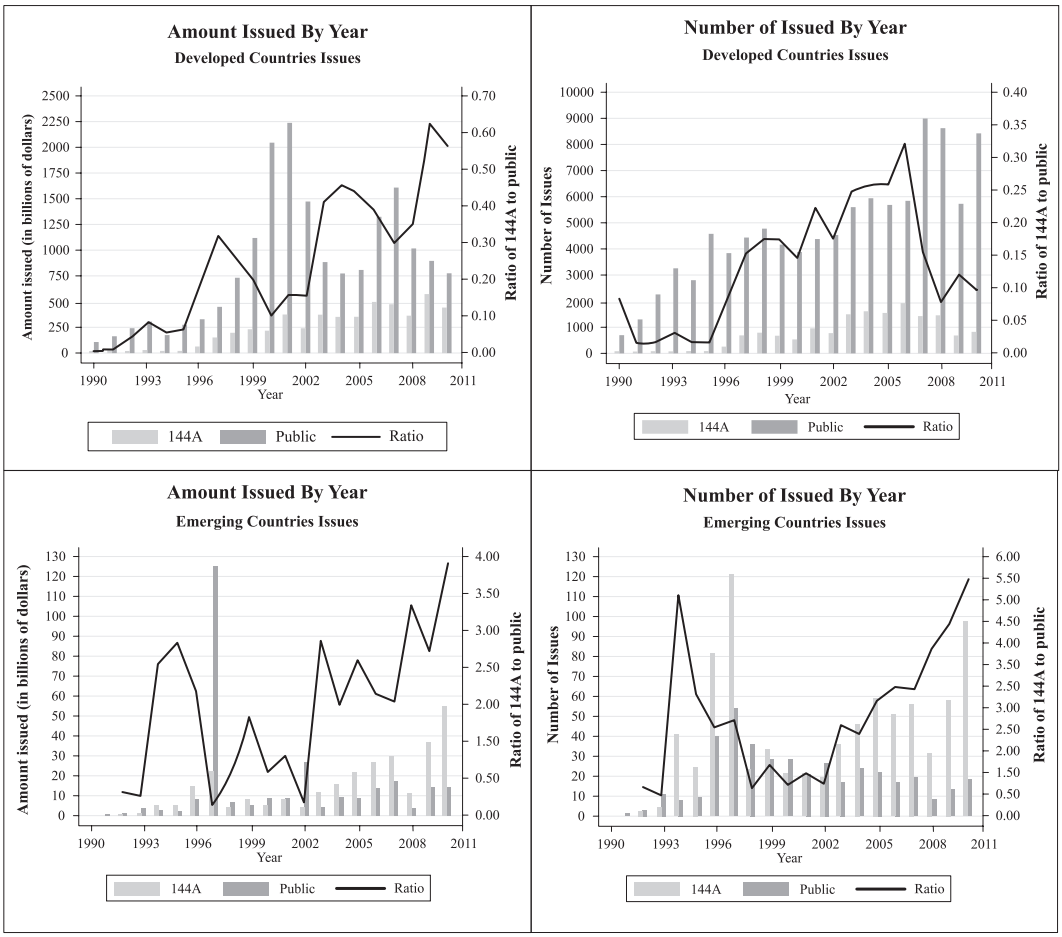
[20] Source: Fixed Income Securities Database (FISD).

[21] Data were sourced from the National Association of Insurance Commissioners (NAIC) database from 1994 to 2010 that had matching bond issuer data on FISD and equity data in COMPUSTAT International.

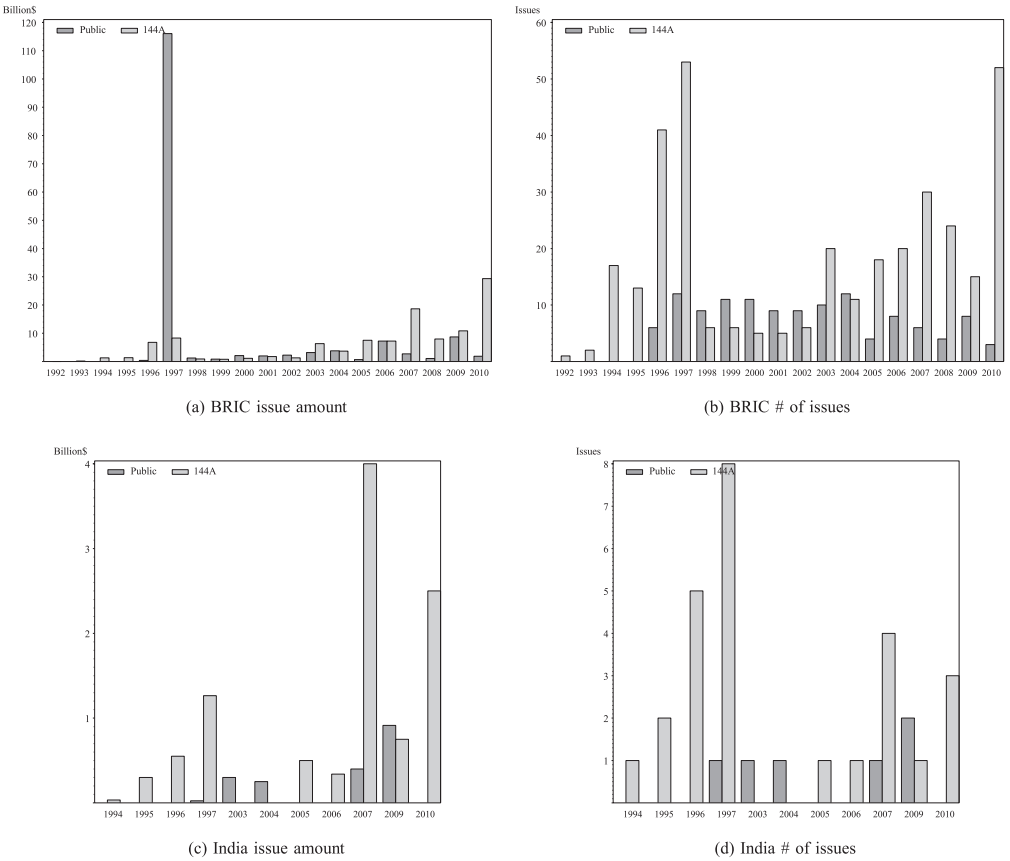
Figure 1: Public and 144A Debt Offerings (both USD amount and no. of issues): Developed vs. Emerging Markets



Note: Ratio refers to the ratio of dollar amount or number of issues for 144A to Yankee debt

Source: FISD

Figure 2: Public and 144A Debt Offerings (both USD amount and no. of issues): India vs. BRIC Countries



Note: Ratio refers to the ratio of USD amount or number of issues for 144A to Yankee debt
Source: FISD

(a) We find that foreign Rule 144A debt trades with 30 bps higher spread on average than comparable Yankee issues in the secondary market, compared to 18 bps mean yield premium observed in the primary market. The primary and secondary market yield spreads for foreign 144A issues are significantly higher for firms originating from emerging markets. Issuers from the BRIC countries have significantly higher spreads compared to issuers from the other emerging market, implying the high implicit risks perceived by the markets. Interestingly, Indian firms pay a significant yield discount compared to other BRIC 144A issuers in both primary as well as secondary markets as their spreads are much lower. The Indian sample consists of large firms with large market capitalization and global presence. The observed 144A bond spread discount of Indian 144A issuers can

be explained by the favorable liquidity and credit risk parameters of the underlying firms. Overall, our findings imply that US markets can offer competitive and attractive funding options for large Indian issuers.

(b) We document that default and illiquidity risks have the highest impact, followed by familiarity and governance risk measures in the secondary market pricing of foreign bond spreads, including the emerging and BRIC cohort bonds. Interestingly, each of these risks has a relatively lower impact on 144A bond spreads compared to Yankees. This provides support for the information role of QIBs, who are presumed to better monitor firms and resolve information asymmetry, thereby reducing the impact of the underlying risks on 144A bonds. We also observe that the 2007–2009 financial crisis significantly increased 144A bond spreads via the exacerbation of liquidity and credit risks.

(c) Increased private information—proxied by order imbalance and dealer inventories—leads to significantly lower bond spreads and borrowing costs for the foreign firms. Further, order imbalance and dealer inventories significantly increase the spreads of the foreign 144A bonds compared to those of the Yankee control sample. These results are consistent with the fact that insurance companies provide price support and liquidity in the 144A market. We also find that during the financial crisis, the supply of dealer inventories by insurance companies could have helped attenuate the impact of excessive selling in the QIB market.

4. Discussion

Taken together, our findings support the positive information role of QIBs in the 144A market. The ability of QIBs to access firms' financials and their information processing skills perhaps enable them to better resolve information asymmetry, thereby mitigating the impact of liquidity, credit, governance, and familiarity risks on 144A bond spreads. Insurance companies may have private information that can enable them to provide price support and liquidity in the 144A market. Foreign firms, therefore, issue in the 144A debt market to circumvent onerous registration requirements and GAAP reconciliations associated with Yankee debt, as well as to benefit from speedy issuance and better information processing in the QIB market.

5. Conclusion

Given that the managers of capital raising firms have discretion over three choice variables (type of debt securities they issue; location; and timing of their debt issue), our results help us better understand the type- and location-related decision choices that managers face. To the extent that foreign firms heavily rely on 144A debt as a funding option, our study also sheds light on the effectiveness of the SEC Rule 144A as a viable borrowing option for global firms.

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