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# Bond Markets: Should India Look For a Regional Solution?

RAMIT NAGPAL\*

## I. Introduction

This paper examines the need for, and feasibility of, India considering a combination of regional initiatives in Asia to overcome the constraints impeding the development of its bond markets.

While the robust growth in the equity markets has caught the attention of the internationally-mobile investor, the Indian bond markets still have a long way to go. Since the 1990s, the Indian government has laid the infrastructural, componential, and technological framework for building its bond markets, but the lack of a critical pool of “issuers” and “investors” remains a serious inhibitor of any further development. This not only deprives the Indian financial system of a “spare tire,”<sup>1</sup> but also of an alternate avenue for financing its colossal infrastructure over the next decade.

The Asian financial crisis of 1997-98 acutely highlighted the importance of deep and liquid bond markets as an alternative channel of financial intermediation. Domestic banks, whose assets were in long-term local currency, faltered when their short-term dollar borrowings came under external pressures. With no viable local bond markets to turn to, the ensuing banking crisis resulted in a string of corporate insolvencies. India did well to survive the contagion by controlling its external debt and staggering the Indian Rupee float over a period of time. Now, as India integrates globally and as the Indian Rupee is fully convertible on the current account and partially, but increasingly, convertible on the capital account, it cannot possibly remain immune to any shake-out in the international financial markets and needs to assiduously build its bond markets to back up the banking system.

The financing requirements to develop the vast infrastructure of roads, ports, power, telecom, water, irrigation, railways, and the like are estimated to be in the region of US \$350 billion<sup>2</sup> over the next decade. While this estimate may vary from time to time, the

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1. Alan Greenspan, Chairman, Fed. Reserve Bd., Remarks before the 1999 Financial Markets Conference of the Federal Reserve Bank of Atlanta, Sea Island, Georgia, Do Efficient Financial Markets Mitigate Financial Crises? (Oct. 19, 1999), <http://www.federalreserve.gov/boarddocs/speeches/1999/19991019.htm>.

2. FEDERATION OF INDIAN CHAMBERS OF COMMERCE & INDUSTRY, FICCI'S ECONOMIC AGENDA FOR THE NEXT FIVE YEARS 29 (Feb. 2004), <http://ficci.com/ficci/general/new-addition/eco-agenda.pdf>.

Indian government has admitted that the development of the infrastructure is beyond its budgetary resources. India's lagging infrastructure is cited as a key impediment to its tryst with the BRIC (Brazil, Russia, India, and China) economies of 2050.<sup>3</sup> As long-term lending by commercial banks shrinks and domestic development financial institutions struggle to stay afloat, the infrastructure sector is heading for a financial crunch unless India quickly moves the needle on its bond markets.

Against this backdrop, part II presents the factors favoring the development of bond markets as a crucial supplement to bank financing; part III is a contextual discussion on the size and depth of the Indian bond market and the two fundamental impediments to its further development; part IV explores the feasibility of India's joining the Asian Bond Fund and the Asian Bond Markets Initiative as a viable regional solution to overcome its fundamental bond market limitations; and part V concludes.

## II. Bond Markets vs. Bank Financing

Before reviewing the specific factors in India that favor the growth of bond markets, it would be useful to briefly summarize, as a matter of background, the general importance of bond markets in an economy and take a look at the respective shares of, and comparative international trends in, banking and bond markets as a source of finance.

### A. BACKGROUND: IMPORTANCE OF BOND MARKETS

Very broadly, the *raisons d'être* for efficient bond markets can be set out as follows:

1. Developed bond markets provide critical pricing information for financing decisions in an economy—a market determined term structure of interest rates that reflect the opportunity cost of funds at a wide range of maturities. An active market in government securities and a benchmark yield curve enable the development of new financial products that not only provide tools for risk management but also facilitate operation of monetary policy by the central bank and liquidity management by financial institutions.
2. Bond markets are a source of long-term capital for the infrastructure sector. Relative to the bank market, bond markets offer advantages in longer maturities, tradability, and repayment structures. Long-term bonds issued by participants in the infrastructure sector enable institutional investors, such as insurance companies and pension funds, to generate stable long-term cash flows to match their long-term liabilities.
3. Bond markets help prevent the concentration of financial intermediation in banks and also provide diversification and spreading of risk between capital markets and the banking system. Over-reliance on banks to provide investment financing leaves the economy vulnerable to credit crunches. The bond markets, therefore, offer resilience to a country's financial system against external shocks and contagion. As Alan Greenspan, Chairman, U.S. Federal Reserve, notes:

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3. See DOMINIC WILSON & ROOPA PURUSHOTHAMAN, *DREAMING WITH BRICs: THE PATH TO 2050* (Oct. 1, 2003), <http://www.gs.com/insight/research/reports/99.pdf>. BRIC economies—Brazil, Russia, India, and China together could be larger than the G6 in terms of U.S. dollars. By 2025 they could account for over half the size of the G6. Of the current G6, only the United States and Japan may be among the six largest economies in terms of U.S. dollars in 2050.

When American banks stopped lending in 1990, as a consequence of a collapse in the value of real estate collateral, the capital markets were able to substitute for the loss of bank financial intermediation. Interestingly, the then recently developed mortgage-backed securities market kept residential mortgage credit flowing, which in prior years would have contracted sharply. Arguably, without the capital market backing, the mild recession of 1991 could have been far more severe.<sup>4</sup>

Bond markets also generate competition in the financial services industry by lowering the transaction costs and compelling banks to constantly innovate and remain competitive.

#### B. INTERNATIONAL TRENDS IN BANKING VS. BOND MARKETS

On a global basis, while the share of bond financing has grown from 32 percent in 1997 to 56 percent of the total international consolidated lending in 2003, banks are still the dominant source of finance for infrastructure projects, contributing 69.8 percent of the total global lending on infrastructure in 2003 (though declining from a high of 89 percent in 1997).

#### Total Global International Bank Lending and Bond Issuance (1993–2003) (US \$ Billions)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total Bank Lending of which to Infrastructure	548 89	812 129	1154 221	1325 261	1601 335	1336 277	1507 377	1910 553	1574 385	1554 347	1489 296
Total Bond Issuance of which to Infrastructure	499 40	457 29	496 28	713 39	757 41	912 65	1379 150	1469 157	1716 201	1500 103	1912 128

Source: World Bank, Global Development Finance 2004<sup>5</sup>

In developing countries, where bank and bond financing have alternated as a source of finance, the average annual rate of growth in the stock of bond debt was 23 percent compared to 2 percent in bank lending.<sup>6</sup>

In the aftermath of the financial crisis in Asia, structural changes occurred in the regional pattern of borrowing. For example, international claims on East Asia and the Pacific declined from US \$233 billion in 1997 to US \$152 billion in 2003.<sup>7</sup> Japanese bank lending in Asia fell by 72 percent between June 1997 and September 2003, and it now accounts for just 17 percent of international claims on the region, compared with 40 percent in 1997.<sup>8</sup>

4. See Greenspan, *supra* note 1.

5. THE WORLD BANK, GLOBAL DEVELOPMENT FINANCE: HARNESSING CYCLICAL GAINS FOR DEVELOPMENT 161 (2004), available at [http://siteresources.worldbank.org/GDFINT2004/Home/20177154/GDF\\_2004%20pdf.pdf](http://siteresources.worldbank.org/GDFINT2004/Home/20177154/GDF_2004%20pdf.pdf).

6. *Id.* at 45.

7. *Id.* at 55.

8. *Id.*

In 2003, bank lending in East Asia declined from 68 percent in 1997 to 61 percent of total domestic financing, while bond financing accounted for 19 percent of total domestic financing, up from 13 percent in 1997.<sup>9</sup> The role of bonds in corporate finance also registered a slight increase. In 1997, bank lending, which accounted for 71 percent of the total corporate finance, dropped to 66 percent in 2003.<sup>10</sup> On the other hand, the share of bond financing in corporate finance moved up from 8 percent in 1997 to 11 percent in 2003.<sup>11</sup>

### Bank vs. Bond as a percentage of total domestic financing

		1997	1998	1999	2000	2001	2002	2003
China (PRC)	Bank	75	74	71	63	66	71	72
	Bond	9	11	12	12	13	13	13
Indonesia	Bank	71	76	47	54	56	55	50
	Bond	—	—	22	30	29	29	27
Korea	Bank	69	63	53	58	55	56	51
	Bond	23	25	22	27	27	28	29
Malaysia	Bank	48	46	39	43	42	43	40
	Bond	20	21	20	23	24	23	23
Singapore	Bank	36	40	26	29	34	33	28
	Bond	12	14	11	15	20	24	21
Thailand	Bank	85	80	68	72	67	64	51
	Bond	4	8	12	15	17	19	16

Source: Asia Development Bank, *Asia Bond Monitor* November 2004<sup>12</sup>

Turbulence experienced by developing countries in the international financial markets has hastened the development of local bond markets and regional bond initiatives. Even though the pace of growth in bond markets varies from country to country, the trend is clear—bank lending, though still dominant, is on the decline as understanding of the merits of a diversified financial system takes root in various countries.

### C. INDIA: FACTORS FAVORING BOND MARKET DEVELOPMENT

While India has been a predominantly bank-oriented system similar to other emerging markets, various factors are fueling the urgency to develop India's bond markets as an alternative source of debt capital.

#### 1. Policy Intent

Learning from international experiences in market-based economies and from financial crises around the world, the Indian government's stated policy is to lean toward development of an integrated and diversified financial system. The basic tenets of this policy were nicely echoed by Ms. Anne Krueger, First Deputy Managing Director of the International Monetary Fund, at the Bankers' Conference in New Delhi on November 10, 2004:

9. Asian Development Bank, *Asia Bond Monitor* 2004, Nov. 2004, at 17, [http://asianbondsonline.adb.org/documents/abm\\_nov2004.pdf](http://asianbondsonline.adb.org/documents/abm_nov2004.pdf) [hereinafter *Asia Bond Monitor* 2004].

10. *Id.* at 19.

11. *Id.*

12. *Id.*

The banking sector is crucial. But it should not be the only source of finance and credit allocation. As an economy grows in size and complexity, the financial sector must grow with it. It must become wider and deeper in order to spread risk. The more sources of finance, and the more sources of credit—and the greater the competition—the better placed the sector is to assess risk and potential rates of return. The more efficient credit allocation is, the more likely it is that credit goes to where it will deliver the best return, so raising the potential growth rate of the economy as a whole. The better risk assessment and management, the better directed credit is, and the better-regulated the financial sector, the more resilient the economy as a whole will be to external shocks.<sup>13</sup>

In Asia, Japan is the flag-bearer for bank-oriented systems, where 89 percent of the supply of funds is intermediated by banks and other private financial institutions, and only 11 percent is directly financed from the securities markets.<sup>14</sup> Historically, the Japanese preferred to make deposits rather than invest in capital markets, mainly because people chose financial institutions located close to home or work. Further, banks were not only providers of loan capital, but also of corporate governance through shareholding and board membership. With the bursting of the economic bubble in the 1990s came the realization that factors which were responsible for success of post-war Japan were now out of sync with and incapable of responding to the developments in international markets. Consequently, Japan is now actively moving to diversify its debt markets.

## 2. *Decline in Project Lending by the Indian Banking Sector*

In recent years, India's predominantly government owned and controlled banking sector has been busy cleaning up its balance sheet. Domestic banks, in order to avoid asset-liability mismatches, are leaning toward working capital advances over long-term financing. To facilitate compliance with capital adequacy norms, there is marked preference for risk-free government securities, with domestic banks investing up to 41.3 percent of their net demand and time liabilities therein—far in excess of the required Statutory Liquidity Ratio of 25 percent.<sup>15</sup> Furthermore, 40 percent of the net bank credit for domestic banks (32 percent for foreign banks) is directed by the government to the priority sector.<sup>16</sup> There has also been a significant shrinkage in project lending by domestic Development Financial Institutions (DFIs). DFIs were set up to provide long-term finance for infrastructure and industrial sectors.<sup>17</sup> With financial reforms cutting off their access to concessional funding, DFIs are pulling back on project lending, preferring to lend on a short- to medium-term basis. However, unable to compete with commercial banks, DFIs are now either converting into or merging with them.

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13. Anne Krueger, First Managing Deputy Director, International Monetary Fund, Keynote address before Bankers Conference, New Delhi, India, Banking Needs of A Global Economy (Nov. 10, 2004), <http://www.imf.org/external/np/speeches/2004/111004.htm>.

14. ROCHELLE KOPP, *ECONOMIC ISSUES IN CONTEMPORARY JAPAN* 12, 60 (2000).

15. *See* RESERVE BANK OF INDIA, *ANNUAL POLICY STATEMENT FOR THE YEAR 2005–2006* 7 (2005), <http://www.business-standard.com/general/pdf/280405credit.pdf>.

16. Government of India: Ministry of Finance, *Union Budget & Economic Survey: Economic Survey 2004–2005*, at 65, <http://indiabudget.nic.in/es2004–05/chapt2005/chap36.pdf> (last visited Sept. 25, 2005) [hereinafter *India Economic Survey*].

17. *See generally* R.H. Patil, *Broadbasing and Deepening the Bond Market* (The Wharton Financial Institutions Center, Working Paper No. 01-32, 2001), <http://fic.wharton.upenn.edu/fic/papers/01/0132.pdf>.

### 3. *Weakness in the Banking System*

#### a. Non-Performing Advances (NPAs)

The issue of mounting NPAs over the past decade has been threatening the viability of the Indian banking system. The consolidated NPAs of all the banks in India (public, private, and foreign banks) amounted to Re 708 billion (approximately US \$16 billion) in 2001–02 constituting 10.4 percent of their gross advances (5.5 percent on net basis).<sup>18</sup> While frantic corporate debt restructuring, rescheduling of loans, settlements, recoveries through debt tribunals, and the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act of 2002<sup>19</sup> have assisted in bringing down gross NPAs to 7.2 percent in 2003–04 (2.9 percent on net basis), the current gross figure of Re 647 billion (US \$14 billion) is still staggering.<sup>20</sup> It has been suggested that one way to limit the growth of NPAs is to slow the growth of bank deposits by encouraging households to shift their savings into capital market instruments.

#### b. Other Concerns

Indian banks still need to implement advanced risk management techniques and credit information and assessment systems. They are also handicapped by relatively high operating costs, poor rate of technological absorption (particularly in public sector banks), weak internal control systems, overstaffing, and lack of training and education—all of which not only lowers the operational efficiency but also significantly impairs their ability to meet the obligations of Basle.

### 4. *Privatization*

In India, privatization has twofold implications: (1) partial equity disinvestments by government-owned companies to raise budgetary resources with or without sharing control and (2) private participation in the ownership/management/operation of utility and social infrastructure, which had traditionally been owned/managed/operated and subsidized by the government. Taking (2) forward, Mr. P. Chidambaram in his budget speech to the Indian Parliament on February 28, 2005, stated that,

[f]rom a policy perspective, there is now a widespread consensus that direct government production of all infrastructure services introduces difficulties concerning technical efficiency, adequate scale of investment, proper enforcement of user charges, and competitive market structure. At the same time, a pure reliance on private production in an unregulated market is not likely to produce sound outcomes. India has been actively engaged in finding the appropriate policy framework, which gives, private sector adequate confidence and incentives to invest on massive scale but simultaneously preserves adequate checks and balances through transparency, competition and regulation.<sup>21</sup>

In developing countries, annual investment commitments for infrastructure projects with private participation grew strongly from US \$18 billion in 1990 to US \$128 billion in

18. See India Economic Survey, *supra* note 16, at 62.

19. This Act enabled the financial institutions to foreclose and enforce their security interest directly, with due notice, but without involvement of the courts.

20. See Government of India: Ministry of Finance, Union Budget & Economic Survey: Budget 2005–2006, <http://indiabudget.nic.in/ub2005-06/ubmain.htm> (last visited Sept. 25, 2005).

21. India Economic Survey, *supra* note 16.

1997.<sup>22</sup> Despite a sharp decline in investment to US \$58 billion in 2001 due to the impact of various financial crises in the developing countries, private participation accounted for a significant 25 percent share of the total investment in infrastructure from 1990-2001.<sup>23</sup> Closer to home, cumulative investment in infrastructure projects with private participation in India during the period of 1990-2001 was US \$27.7 billion compared to US \$53.8 billion in China, US \$36.6 billion in Malaysia, US \$33.2 billion in Korea, US \$28.9 billion in Indonesia, and US \$23.9 billion in Thailand.<sup>24</sup> The burden of financing infrastructure is increasingly passing from the public sector to the private sector, which in turn will largely depend on bond markets for its long-term financing needs.

### 5. Securitization

The early securitization deals entered into by Citibank and ICICI and the subsequent passing of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act of 2002, which, among other things, set out a framework for securitization in India, have provided impetus to the number of securitization transactions.<sup>25</sup> India now ranks third, after Japan and Korea, in the securitization activity in Asia, though it is still small in actual quantum of amounts securitized. Lack of deep bond markets and a small investor base has led to most transactions being either privately placed or amounting to bilateral portfolio buyouts.

In summary, positive factors (government intent, privatization, securitization) and negative factors (weaknesses in the banking system) are all unrelenting in their push for development of an alternate and viable source of raising debt. Further, with the traditional sources of financing drying up, the infrastructure sector is heading for a serious resource crunch unless India can rapidly develop its bond markets as a viable alternative.

## III. Fundamental Impediments: Lack of Issuers and Investors

India's US \$250 billion plus bond market is the fourth largest in Asia after Japan, South Korea, and China. The size notwithstanding, serious limitations are apparent in the Indian bond markets that impair its ability to provide a back up to the banking system and support the demands of the infrastructure sector. These limitations or fundamental impediments can be better understood after a brief comparative overview of the Indian bond market.

### A. OVERVIEW OF THE INDIAN BOND MARKET

The bond markets in India are comprised of mainly two segments: the government securities market and the corporate securities market. The government securities market is predominant in outstanding issues, market capitalization, and trading value and is reason-

22. Ada Karina Izaguirre, *Private Infrastructure: A Review of Projects with Private Participation 1990-2001*, in THE WORLD BANK GROUP PRIVATE SECTOR AND INFRASTRUCTURE NETWORK NOTE No. 250 (Oct. 2002), available at <http://ppi.worldbank.org/ppi2/book/250izagu-101502.pdf>.

23. *Id.*

24. See The World Bank Group, Private Participation in Infrastructure Database, <http://ppi.worldbank.org> (last visited Sept. 25, 2005).

25. See generally, Lakshmi Mohandas, *Securitisation*, in BOMBAY STOCK EXCHANGE ANNUAL CAPITAL MARKET REVIEW '03 (2003), <http://www.bseindia.com/downloads/Securitisation.pdf>.

ably well developed, while the corporate securities market—following the sequential growth pattern experienced in other countries—is still in its infancy.

During 2003–04, the government and corporate sector collectively mobilized Re 2,509,089 million (US \$56 billion) from the primary debt market, of which approximately 79 percent was raised by the government (both central and state governments).<sup>26</sup> The remaining 21 percent mobilization from the debt market was by the corporate sector—consisting of private corporates, public sector units, and domestic financial institutions. Interestingly, the net borrowings of the central government financed 75.6 percent of the gross “fiscal deficit” of the central government.<sup>27</sup> A major part of the corporate debt was on private placement basis.<sup>28</sup>

In the secondary market, the aggregate transactions in all debt securities increased by 36.6 percent in 2003–04, but the corporate/non-government securities accounted for only 1.6 percent of total turnover in debt market.<sup>29</sup>

### Debt Market (in Re million)

Issuer/Securities	Amount raised from Primary Market		Turnover in Secondary Market	
	2002–03	2003–04	2002–03	2003–04
Government	1,819,790	1,981,570	19,557,313	26,792,084
Corporate/Non-Government	531,166	527,519	360,387	422,622
Total	2,350,956	2,509,089	19,917,700	27,214,706

Source: National Stock Exchange of India, Securities Market Review 2004<sup>30</sup>

The total market capitalization of securities available for trading in the wholesale debt segment of the National Stock Exchange (retail being negligible) stood at Re 12,158,638 million (US \$270 billion) at the end of March 2004, and registered a growth of 40.64 percent over end-March 2003.<sup>31</sup> At the same time, government securities accounted for 78.9 percent of total market capitalization.<sup>32</sup> Clearly, at the moment the Indian bond market is synonymous with the government bond market, with the privately-placed corporate bond market microscopic in terms of size, depth, and liquidity.

### B. INTERNATIONAL CONTEXT

Notwithstanding relatively high capitalization, a comparison within Asia, in a sample of eight countries, shows that Indian bond markets standing at 32.8 percent of the gross domestic product (GDP) (at market rate), are one of the smallest relative to its GDP, that

26. NATIONAL STOCK EXCHANGE OF INDIA LIMITED, INDIAN SECURITIES MARKET: A REVIEW VOL. VIII (2004), at 139, [http://www.nseindia.com/archives/us/ismr/us\\_ismr2004.htm](http://www.nseindia.com/archives/us/ismr/us_ismr2004.htm) [hereinafter INDIAN SECURITIES MARKET REVIEW].

27. *Id.*

28. *Id.* at 150.

29. *Id.* at 160.

30. *Id.* at 139.

31. *Id.* at 167.

32. See *id.*

is just marginally higher than China and Indonesia.<sup>33</sup> While it has registered an impressive growth of 27.2 percent (between 2002 and September 2004), the highest in the sample, an overwhelming portion of that has come from the growth in the government bond market, which has largely been funding the fiscal deficit of the government.<sup>34</sup> The government bond market led market growth in most countries (except South Korea). The corporate bond markets, though small on average, with India being the smallest, were growing steadily in the region.

### Domestic Debt Securities (US \$billion)—Amounts Outstanding

	2002 Dec	2003 Dec	2004 Sept	GDP 2003 (at market rate)	Debt/GDP % (2003)
China	377.3	440.4	451.1	1,445.3	30.5
Govt.	243.0	287.4	287.4		
FI	122.1	140.8	151.5		
Corporate	12.2	12.2	12.2		
India	155.8	196.8	214.1	599	32.8
Govt.	153.6	194.0	210.5		
FI	0.2	0.8	1.1		
Corporate	1.9	1.9	2.5		
Indonesia	58.1	65.7	53.2	208.3	26.4
Govt.	55.7	60.1	47.1		
FI	1.1	2.5	2.6		
Corporate	1.4	3.1	3.5		
Japan	6,372.5	7,818.1	8,137.9	4,300	181.0
Govt.	4,543.7	5,831.2	6,231.2		
FI	1,145.8	1,217.2	1,180.1		
Corporate	683.0	769.7	726.7		
Malaysia	84.4	98.7	106.6	103.2	95.6
Govt.	34.0	40.4	45.2		
FI	11.6	13.4	16.4		
Corporate	38.7	44.9	45.0		
Singapore	54.0	58.3	62.8	91.3	63.9
Govt.	33.4	37.1	41.4		
FI	16.2	16.0	16.1		
Corporate	4.4	5.3	5.3		
South Korea	380.9	445.5	490.8	605.3	73.6
Govt.	82.8	113.9	146.7		
FI	134.0	164.1	194.0		
Corporate	164.0	167.6	150.2		

33. See *The International Banking Market*, BIS QUARTERLY REVIEW, Sept. 2005, at A96-97, available at [http://www.bis.org/publ/qtrpd/r\\_qa0509.pdf#page=96](http://www.bis.org/publ/qtrpd/r_qa0509.pdf#page=96).

34. *Id.*; INDIAN SECURITIES MARKET REVIEW, *supra* note 26, at 158-59.

Thailand	47.3	56.8	60.2	143.0	39.7
Govt.	28.9	30.7	34.5		
FI	3.0	6.8	7.2		
Corporate	15.3	19.3	18.4		

Source: BIS Quarterly Review September 2005<sup>35</sup>

Overall, national bond markets in developing countries have doubled in size since 1993 from 18 percent to 36 percent of the GDP (2003).<sup>36</sup> In a wider context, this is still well below the average of 120 percent of the GDP in developed countries.<sup>37</sup> In fact, the total local currency bonds outstanding worldwide stood at US \$40 trillion at the end of 2003, with the United States accounting for 44 percent and the European Union 15 for 26 percent.<sup>38</sup>

### C. FUNDAMENTAL IMPEDIMENTS

A range of structural and operational changes has been introduced in India over the past decade in the government securities market. In the primary market, diversified debt securities—zero coupon bonds, floating rate bonds, and capital index bonds—are issued through the auction system at market-related rates across maturities to develop a benchmark yield curve. To build the secondary market, a system of primary dealers was set up to provide two-way quotes for the transactions. The Negotiated Dealing System was introduced to facilitate screen-based negotiated dealing for secondary market transactions in government securities, money market instruments, online reporting of transactions, and dissemination of trade information to the members.<sup>39</sup> The Clearing Corporation of India was established to facilitate settlements using the higher versions of Delivery vs. Payment mechanism and to act as a central counterparty for clearing and settlement of securities transactions.<sup>40</sup> The Real Time Gross Settlement System has now been introduced to reduce settlement risks and costs.<sup>41</sup> Active credit rating agencies have been woven into the regulatory framework. Other regulatory measures, such as abolition of withholding tax and stamp duty on transfer of dematerialized debt securities, have also been taken to build the debt market.

While the Indian government is constantly reviewing a slew of additional measures, such as amending the legislative framework, developing transparency, and disseminating information to full market on a real time basis, which would increase liquidity through short selling, the government needs to recognize two fundamental impediments: (1) lack of debt issuers and (2) lack of investors.

#### 1. *Lack of Debt Issuers*

As discussed earlier, the dominant issuer in the Indian bond market is the central government. In the recent past, a few local bodies, such as municipal agencies, have also tapped

35. See *The International Banking Market*, *supra* note 33 at A96-A97.

36. See generally *THE FUTURE OF DOMESTIC CAPITAL MARKETS IN DEVELOPING COUNTRIES* (Robert Litan et al. eds., Brookings Inst. Press 2003).

37. *Id.*

38. See *Asia Bond Monitor 2004*, *supra* note 9.

39. *INDIAN SECURITIES MARKET REVIEW*, *supra* note 26, at 18.

40. *Id.*

41. *Id.* at 139.

the market; but the municipal-bond market has not taken off due to lack of transparency, creditworthiness, and political inertia. Bonds issued by government-sponsored institutions like DFIs, banks, and public sector units did not raise many funds from the bond market. Corporate bond markets saw some structured bond products being issued but were undertaken overwhelmingly on a private placement basis.

### Security-wise Distribution of Turnover

Securities	% of Turnover	
	2002-03	2003-04
Government Securities	93.62	92.60
T-Bills	3.02	4.23
PSU Bonds	1.37	1.21
Institutional Bonds	0.50	0.85
Bank Bonds & Cert. of Deposit (short term paper)	0.28	0.33
Corporate Bonds & Commercial Paper	1.21	0.78
Total	100.00	100.00

Source: National Stock Exchange of India, Securities Market Review 2004<sup>42</sup>

Hesitation in the Indian corporate sector to tap the bond markets stem from the fact that most Indian companies have yet to mature from family setups to widely held corporations. Floating debt or equity is still perceived as ceding control, making the company vulnerable to interference by outsider investors. Public disclosure of information otherwise closely held is poor, which does not support the public issue of corporate debt. When undertaken, the disclosure requirements of public issuance are evaded by relying on the private placement route. Additionally, the legal, accounting, reporting, and transactional costs of raising funds from the bond market are significant compared to the ease of access to bank funding. It is notable that the securities regulator in India has in 2004 made it mandatory for any listed company issuing debt securities on a private placement basis to comply with disclosure requirements under stipulated terms and conditions. Subsidiaries of multinational companies in India, given the thin and illiquid corporate securities market, also by-and-large prefer to rely on domestic banks (through commercial borrowing or privately placed bonds) or raise short-term debt from their parent companies overseas.

While it can be argued that corporate bond markets traditionally have been underdeveloped in most emerging markets, reflecting dominance of bank lending, it is alarming that the share of corporate debt securities of the total debt outstanding in India was an abysmal 0.96 percent as of the end of year 2003, compared to 2.8 percent in China, 4.7 percent in Indonesia, 9.8 percent in Japan, 45.5 percent in Malaysia, 9 percent in Singapore, 37.6 percent in South Korea, and 33.9 percent in Thailand.<sup>43</sup>

Additionally, under the Fiscal Responsibility and Budget Management Act of 2003, the government is required to reduce its fiscal deficit, financed largely by borrowings in the government securities market.<sup>44</sup> A reduction in the market borrowing program of the gov-

42. *Id.* at 164.

43. *Id.* at 4.

44. India Economic Survey, *supra* note 16, at 36.

ernment could dampen the government securities market as well, unless steps are taken to remove obstacles in the development of a municipal-bond market (e.g., the United States and Japan), which the municipal agencies can tap for infrastructural and other services.

Notably, multilateral development financial institutions are now displaying interest in the domestic Indian Rupee bond market. Asian Development Bank (ADB) mobilized Re 5 billion (over US \$100 million) in the year 2004. It was the first supranational issue by a foreign entity in India to be listed on the National Stock Exchange and set a benchmark in documentation, disclosure, clearing and settlement, and pricing. ADB plans to actively undertake interest rate swap transactions, which in turn will provide greater liquidity in the swap market and enhance the efficiency of the bond market.<sup>45</sup>

## 2. *Narrow Investor Base*

A narrow investor base impedes liquidity and development of secondary bond market in the government, but, more particularly, in corporate debt securities. Banks (Indian, foreign, and investment banks) were clearly the largest participants (collectively at 60 percent) in the debt market, but participation by financial institutions, mutual funds, and corporates was a measly 4.56 percent.<sup>46</sup> Most mutual funds are invested and traded in government securities through specialized gilt and liquid funds. While foreign institutional investors are permitted to invest in treasury and corporate bonds, within certain limits, they were conspicuous in their near absence in the bond markets (as compared to their bullish activity in the equity markets).<sup>47</sup>

### Participant-wise % Distribution of Turnover in Wholesale Debt Segment

Participants	2002–03	2003–04
Indian Banks	38.77	36.36
Foreign Banks	10.62	7.25
Primary Dealers (Investment Banks)	22.03	17.03
Trading Members	24.81	34.80
FI, Mutual Funds and Corporates	3.77	4.56
Total	100.00	100.00

Source: National Stock Exchange of India, Securities Market Review 2004<sup>48</sup>

On the other hand, ADB's Indian Rupee bond issue in 2004 achieved a broad distribution—up to 60 percent of the bonds were placed with banks, 21 percent with insurance companies, and 19 percent with mutual funds<sup>49</sup>—suggesting that some potential investors stay dormant in the bond market due to lower quality of debt issues, poor disclosure, and lack of transparency in pricing.

Contractual savings institutions—pension funds and provident funds—and insurance companies, which have a voracious appetite for long term debt and are the largest investors

45. Press Release, Asian Development Bank, ADB Issues Indian Rupee Bonds (Feb. 27, 2004), *available at* <http://www.adb.org/documents/news/2004/nr2004017.asp> [hereinafter ADB Press Release].

46. INDIAN SECURITIES MARKET REVIEW, *supra* note 26, at 167.

47. *Id.*

48. *Id.*

49. ADB Press Release, *supra* note 45.

in debt segment in developed markets, are yet to make their presence felt in the Indian debt market. Investments by provident funds owned by the government and the government-dominated insurance sector are restricted due to directed fund deployment rules of the government. It will take some time before the private pension funds envisaged pursuant to the ongoing pension reforms make their presence felt.

At the retail level, interestingly, in 2002–03 the household sector invested 85.6 percent of its gross domestic savings into fixed income instruments—41.5 percent bank deposits, 29.8 percent insurance/provident funds, 14.3 percent small savings, 5.9 percent securities (4.3 percent of which has been government securities)—and 8.5% in currency instruments.<sup>50</sup> Thus, fixed-income bearing instruments are the most preferred assets of the Indian household sector, evidencing huge untapped potential for the bond market, unlike other emerging markets where the culture of diversifying fixed income investments is often lacking among households. The government is considering the possible introduction of Separate Trading of Registered Interest and Principal of Securities (STRIPS), under which the underlying security can be converted into multiple zero-coupon securities tradable separately to attract the retail investors and also to provide liquidity to issuers of long-term debt.<sup>51</sup> In order to further widen the retail investor base for government securities, non-competitive bids from retail investors are now accepted.

In the Association for Southeast Asia Nations (ASEAN) and East Asia, since the 1997 crisis, there has been a shift away from bank holdings toward more contractual savings institutions and retail investment in government bonds. As explained in the ADB's *Asian Bond Monitor 2004*,

[t]he most significant shift was in Thailand, where commercial banks' holding of government bonds fell from about 55 [percent] of outstanding bonds in 1997 to 30 [percent] at the end of 2003. In Indonesia, government bond holdings by banks fell from over 97 [percent] in 2001 to about 83 [percent] in 2003. Moreover, contractual savings institutions, such as pension and mutual funds, have become significant investors in Indonesian government bonds, rising from 1.4 [percent] in 2001 to 15.3 [percent] in 2003.<sup>52</sup>

Consistently across Asia (except Japan), banks hold over half of the local currency bonds, compared to 11 percent in the United States, 35 percent in Japan, and 42 percent in Germany.<sup>53</sup> The high proportion of government bonds held by banks in the Asian economies is partly attributable to statutory requirements in those countries.

Therefore, despite having made substantive progress in this area and building the bond market infrastructure, India—with a small issuer and investor base—will be severely confined to a thin and illiquid bond market. Such a market can neither back up the banking system nor support the anticipated requirement of US\$350 billion by the infrastructure sector alone over the next decade, unless India gets on the fast track with some outward thinking.<sup>54</sup>

50. See INDIAN SECURITIES MARKET REVIEW, *supra* note 26, at 7.

51. *Id.* at 174.

52. *Asia Bond Monitor 2004*, *supra* note 9, at 10–11.

53. *Id.* at 11.

54. Akin to the current “services sector” driven GDP growth (as opposed to manufacturing-sector led growth).

#### IV. Asian Bond Fund; Asian Bond Markets Initiative

In the past, arguably India has rightly adopted an “inward looking strategy”<sup>55</sup> to develop its domestic debt market infrastructure, and directed investments to aid in that process. Its conservative approach to capital account liberalization on the debt side, while opening up the equity side, did indeed insulate it from the disturbances in the international financial markets in the 1990s. Now, as India treads a high growth path and seeks to become a regional player, it needs to develop an appropriate outward looking strategy that would allow “international issuers” to raise debt in India and motivate “international investors” to invest in local bond markets, while permitting local issuers to simultaneously raise debt from bond markets abroad. India’s participation in a combination of Asian region initiatives could provide a strong stimulus in this direction.

##### A. BACKGROUND TO REGIONAL DEVELOPMENTS

In a mature Asian Bond Market scenario, Asian bonds are envisaged to be bonds issued by various governments, corporations, and financial institutions in Asia to investors preferably in Asia, denominated in Asian currencies, traded, and settled in Asian financial centers.

The need to develop the Asian Bond market gathered momentum after the Asian Financial Crisis of 1997–98. Takatoshi Ito, Professor of Research Center for Advanced Science and Technology, University of Tokyo, nicely provides the basis for this development:

First, it was found important to reduce vulnerability is to avoid the “double mismatch” problem, namely currency and maturity mismatches of borrowers in emerging market companies. Borrow short in the US dollar and lend long in the local currency is dangerous. Second, to avoid over-reliance on the banking sector is important, since the “twin crisis,” that is, a simultaneous currency and banking crisis, is quite damaging to the economy. Third, to avoid the dollar peg is important both from the viewpoint of maintaining price competitiveness of imports and of discouraging too much short-term capital inflows.<sup>56</sup>

Currently, four regional forums provide the framework for regional financial cooperation: Asia Cooperation Dialogue (ACD); Asia-Pacific Economic Cooperation Finance Ministers Meeting (APEC FMM); Executives’ Meeting of East Asia-Pacific Central Banks (EMEAP); and the Association for Southeast Asian Nations plus China, Japan, and Korea (ASEAN + 3). While these bodies carry varying mandates for bond market development in Asia, the initiatives taken by EMEAP and ASEAN + 3 as potential providers of demand- and supply- side solutions to India’s bond market problems are reviewed below.

##### B. EMEAP: ASIAN BOND FUNDS

In June 2003, the first US \$1 billion Asian Bond Fund was announced by EMEAP members, consisting of central banks of Australia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, and Thailand. It was funded by the foreign exchange reserves of EMEAP members with the objective of investing in dollar-

55. See generally Litan, *supra* note 36.

56. Takatoshi Ito, Paper Presented at the PECCAsia Bond Conference in Hua Hin, Thailand (July 8, 2003), at 2, <http://www.e.u-tokyo.ac.jp/tito/Seisaku/PECCAsiaBond.pdf>.

denominated bonds issued by the eight Asian governments/quasi governments of EMEAP (excluding Japan, Australia, and New Zealand).<sup>57</sup> The fund's primary purpose is to diversify and invest a small portion of Asian reserves, traditionally saved in Europe and the United States, for better returns within Asia. This was largely recognized as a good first step.

The second Asian Bond Fund, announced by EMEAP in December 2004, is aimed at investments in local currency bonds of governments/quasi-governments in eight EMEAP members—Thailand, China, Indonesia, Philippine, Singapore, Hong Kong, Korea, and Malaysia.<sup>58</sup> It is intended that in phase II this fund will be open to investment by non-EMEAP public and private sector investors as well. The second Asian Bond Fund is expected to raise investor awareness and interest in Asian bonds by promoting innovative and low cost products in Asia, enhance regional bond market infrastructure by introducing a new set of transparent and credible bond indices, and accelerate regulatory reform at both regional and domestic levels, eventually accruing to the benefit of potential issuers and investors in the region.<sup>59</sup>

### C. ASEAN + 3: ASIAN BOND MARKETS INITIATIVE

The Asian Bond Markets Initiative (ABMI) was undertaken by the Association of South-east Nations (ASEAN)—consisting of Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam as well as the People's Republic of China, Japan, and Republic of Korea—collectively known as ASEAN + 3. Announced in December 2002, ABMI had a broad regional mandate to develop efficient and liquid bond markets across Asia, enabling better utilization of Asian savings for Asian Investments and mitigating currency and maturity mismatches.<sup>60</sup>

Fundamental to ABMI is the reliance on a private-sector-led economic growth model, where the private sector has a supply of stable, long-term capital through well-developed bond markets that have access to a wider (regional) range of issuers, investors, and products, and to mitigate currency and maturity mismatch in its financing. Also central to ABMI is the belief that savings of the Asian region should be effectively utilized within the region itself by developing both domestic markets in each country as well as the regional markets.<sup>61</sup>

Consequently, ABMI focuses on bond issuance in the region by Asian governments (to establish benchmarks), multilateral development banks, and government financial institutions. It encourages bond issuance to finance foreign direct investment in the region and issuance of asset-backed securities markets, including collateralized debt obligations. It is also working on the following: expansion of local currency-denomination of bonds and the introduction of a currency basket of bonds; construction of a regional guarantee and investment mechanism to cover credit risks on regional bond issuances; strengthening the rating system by enhancing the role of domestic rating agencies, as well as considering the

57. Press Release, Executives' Meeting of East Asia-Pacific Central Banks, EMEAP Central Banks to Launch Asian Bond Fund (June 2, 2003), *available at* <http://www.emeap.org/press/02june03.htm>.

58. Press Release, Executives' Meeting of East Asia-Pacific Central Banks, EMEAP Central Banks Announce the Launch of the Asian Bond Fund 2 (Dec. 16, 2004), *available at* <http://www.emeap.org/press/16dec04.htm>.

59. *Id.*

60. Asian Development Bank: AsianBondOnline, ASEAN + 3 Asian Bond Markets Initiative: Overview, [http://asianbondsonline.adb.org/regional/asean\\_plus\\_three\\_asian\\_bond\\_market\\_initiatives/overview.php](http://asianbondsonline.adb.org/regional/asean_plus_three_asian_bond_market_initiatives/overview.php).

61. *Id.*

possible establishment of an Asian Credit Rating Board; establishment of a mechanism for disseminating information on issuers and credit rating agencies; addressing settlement issues on cross-border transactions; and examining legal and institutional infrastructure.<sup>62</sup>

Six working groups are progressing key areas for local currency bond market development: (1) new securitized debt instruments; (2) credit guarantee and investment mechanisms; (3) foreign exchange transactions and settlement issues; (4) issuance of bonds denominated in local currencies by multilateral development banks, foreign government agencies, and Asian multinational corporations; (5) rating systems and dissemination of information on Asian bond markets; and (6) technical assistance coordination.<sup>63</sup>

ABMI has reported considerable progress on various fronts, such as (1) issuance of Ringgit-denominated bonds by the ADB in Malaysia; (2) provision of credit guarantees by Japan Bank for International Cooperation and Nippon Export and Investment Insurance for bonds issued by Asian multinational companies; and (3) creation of a new scheme by Korea and Japan for cross-country bond issuance collateralized and/or backed by bundling of diverse underlying assets.<sup>64</sup>

ABMI is supplemental to, and cannot succeed without, each member country's continuous efforts to develop its own domestic markets. ABMI, by providing a wider pool of issuers, investors, and products, hastens the bond market development regionally and nationally.

#### D. INDIA'S PARTICIPATION IN ASIAN BOND FUND AND ABMI

India's participation in the regional initiatives should be undertaken at two levels to increase both the investor and issuer base.

1. EMEAP's Asian Bond Fund initiatives have been endorsed by the Asia Cooperation Dialogue (ACD), of which India is an active member. India could have the option of contributing in phase II of the "second" Asian Bond Fund when it is opened up to non-EMEAP members. ACD has also toyed with the idea of a new bond fund for its member countries. India, with its burgeoning foreign exchange reserves (now in excess of US \$140 billion), can contribute generously to the corpus of the fund. The fund could then invest in Indian Rupee bonds of the government and its agencies. Such a fund, as a lead investor, can catalyze further investments by other international investors in the Indian bond markets.

2. India's joining the ABMI of ASEAN + 3 would lead to the mitigation or removal of market and regulatory impediments, harmonization of rules and procedures, building of infrastructure, and will facilitate: (a) Asian governments and multilateral aid agencies in tapping the Indian bond market to meet their lending and aid commitments in India; (b) international financial institutions and companies investing or doing business in India in meeting their Indian Rupee requirements (and, at a later stage, depending on factors such as the strength of its economy and the Indian Rupee, level of foreign exchange reserves, the size of the foreign exchange market, and the liquidity in the bond market, the Indian government can even permit international companies seeking efficient funding opportunities to tap the local currency bond market); and finally (c) enable the Indian government

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62. *Id.*

63. *Id.*

64. Asian Development Bank, *Progress Report of the Asian Bond Markets Initiative (ABMI)* (Nov. 2004), [http://asianbondsonline.adb.org/documents/Progress\\_Report\\_ABMI\\_Nov\\_2004.pdf](http://asianbondsonline.adb.org/documents/Progress_Report_ABMI_Nov_2004.pdf).

and its agencies and private companies to float bonds in a basket of Asian currencies, tradable in various markets including India. The presence of a wide variety of issuers and investors will bring liquidity and efficiency and help build robust primary and secondary bond markets both at the regional level and in India.

#### E. COMFORT FACTORS

The primary concerns in India of opening up the debt market to foreign investment on a fully convertible basis are the credit risk and the potential large outflows of foreign exchange. Factors mentioned below will put this proposal in its political, economic, and regulatory perspective, which should alleviate the concerns.

1. India's gain would be a huge pool of investors and issuers that it sorely needs. ASEAN + 3 is one of the largest cross-border investors in bond markets worldwide, holding US \$1.2 trillion, or 15 percent of global bonds outstanding as of December 2002.<sup>65</sup> But, its cross-border investments, for example, in East Asia were a mere US \$18 billion, which is about 1.5 percent in the year 2002.<sup>66</sup> Clearly, a huge potential exists for moving Asian savings into investment within the region and for India to tap.

2. India is externally financially healthy. Its foreign exchange reserves have now crossed US \$140 billion—a relatively healthy figure in the Asian region.<sup>67</sup> In fact, a proposal for use of a portion of its reserves to fund infrastructure investment is now under consideration. The foreign direct investment crossed US \$5 billion in 2004 (it is reported that this figure if computed as per the formula prescribed by International Monetary Fund amounts to US \$50 billion, close behind US \$60 billion received by China in 2004).<sup>68</sup> The cumulative investment by foreign institutional investors touched US \$25.75 billion by end March 2004.<sup>69</sup> The total external debt amounted to US \$111 billion, approximately 17.8 percent of the GDP, and the short-term component was a safe US \$4.7 billion, that is 4.3 percent of the total external debt.<sup>70</sup> Moreover, the share of government debt in total external debt has come down from 60.1 percent in 1995 to 38.9 percent in 2004.<sup>71</sup> As India liberalizes increasingly on the capital account, it must continue to monitor closely the magnitude of the external debt flows and its maturity profile.

3. The debt markets should be opened up to external flows in a phased manner. Asian governments, multilateral development banks, and other international aid agencies, tapping on a large scale the local currency bond market for meeting Indian Rupee commitments (as ADB has already done), present minimal credit and foreign exchange risk, but in turn provide diversification for local investors and attract international attention. Subsequently, depending on India's macro-economic position, the local bond markets could also be opened in a regulated manner for other international private investors, who would be interested only if they can achieve favorable cross currency swap spreads. It may be pertinent

65. See *Asia Bond Monitor 2004*, *supra* note 9 at 15.

66. *Id.*

67. See Reserve Bank of India, Weekly Statistical Supplement, <http://www.rbi.org.in/scripts/WSSView.aspx?ld=9242> (last visited Oct. 15, 2005).

68. See India Economic Survey, *supra* note 16.

69. See INDIAN SECURITIES MARKET REVIEW, *supra* note 26, at 8.

70. See India Economic Survey, *supra* note 16, at 136.

71. *Id.* at 133.

to add that the current regulatory environment is already quite liberal towards the outflow of foreign exchange. For example, foreign institutional investors, non-resident Indian financial institutions, and multilateral financial institutions are already permitted to invest in dated government securities. Limits for Indian companies raising debt overseas are very liberal—for example, Indian corporates can raise external debt up to US \$500 million with maturity of more than five years to finance investment in industrial, infrastructure, and for acquisition of shares under the government's disinvestment program without any prior approval of the Reserve Bank of India. In fact, during the period April–December 2004, US \$9.4 billion had been sanctioned collectively for External Commercial Borrowing and Foreign Currency Convertible Bonds.<sup>72</sup>

4. ASEAN+3 has emerged as India's dominant trading partner, accounting for 19.9 percent of India's total merchandise trade, followed by the European Union and North America with shares of 19 percent and 12.9 percent in 2003–04, respectively, reflecting the current "look East" approach.<sup>73</sup> Interestingly, in a recent survey conducted by the Federation of Indian Chambers of Commerce & Industry, Indian banks now look toward ASEAN over any other area while considering overseas expansion to support the burgeoning business requirements.<sup>74</sup>

In light of the above, this proposal, a manifestation of increased capital account convertibility, is both feasible and desirable. A suitable regulatory framework with a system of prudential checks, balances, and guarantees can be implemented.

## V. Conclusion

India has traditionally been a bank-dominated system, and a legitimate basis now exists to be concerned about over-reliance on bank financing. The wisdom of diversifying financial intermediation through development of bond markets was apparent after the Asian Financial Crisis of 1997–98. India has laid a good foundation by developing its government securities market, but can now jump ahead only if it considers a regional solution in conjunction with domestic development of its bond markets. Participation in a suitable Asian Bond Fund and Asian Bond Markets Initiative will address the fundamental issues attributable to lack of issuers and investors in the system, catapult Indian bond markets to the next level, and transform India into a strong regional player.

A caveat, however, to this proposal, is that to prevent financial intermediation from moving overseas, India needs to continue to strive to improve both the macroeconomic and bond market environment. High inflation and fiscal deficits undermine the demand for local currency paper. Further, the attractiveness of a market to investors depends upon the quality of price discovery and information. India needs to work with ABMI to harmonize rules, regulations, and accounting standards that are crucial to building this credibility. India should look at strengthening its contract enforcement and insolvency structures. The international perception that the Indian judiciary cannot deal with commercial claims in an expeditious manner will also continue to deter investment in the bond market.

72. See India Economic Survey, *supra* note 16.

73. Sultan Shahin, *India's "Look East" Policy Pays Off*, ASIA TIMES, Oct. 11, 2003, available at [http://www.atimes.com/atimes/South\\_Asia/EJ11Df05.html](http://www.atimes.com/atimes/South_Asia/EJ11Df05.html); See generally P. Chidambaram, Minister of Finance, Speech on Union Budget 2005–2006 (Feb. 28, 2005), <http://indiabudget.nic.in/ub2005-06/bs/speecha.htm>.

74. Federation of Indian Chambers of Commerce and Industry, FICCI Survey on the Status of the Indian Banking Industry, [http://www.ficci.com/ficciimage/88888888\\_544/banking1.pdf](http://www.ficci.com/ficciimage/88888888_544/banking1.pdf) (last visited Sept. 25, 2005).

P. Chidambaram, India's Finance Minister, in his Budget Speech to the Indian Parliament on February 28, 2005, among other things, talked about his vision for the city of Mumbai as a regional financial hub (midway between London and Tokyo), developing bond markets, and setting up a special purpose vehicle for financing infrastructure.<sup>75</sup> The regional solution proposed herein can well lead the way for India.

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75. See Chidambaram, *supra* note 73.

