CHAPTER 11

India Survey: Issues in Local Bond Market Development

JOHN LEONARDO

India has debt markets for government securities, corporate bonds, and short-term bank and commercial paper. The Government securities market is far the largest market, it has expanded considerably since 1991, as has the range of available maturities and secondary market activity in both short- and longer-term maturities. Since 1997, when banks were permitted to hold corporate debt securities, the market for these securities has grown as well, although it is dominated by paper issued by state-owned enterprises rather than private sector entities, and trading is limited.

India's debt markets as a whole have grown steadily since 1992, and many efforts are under way to support further development. However, policymakers face a number of major challenges to further market development particularly by providing a more supportive economic, legal, and regulatory policy environment; upgrading market infrastructure; authorizing the use of new debt instruments; and improving education services for debt market participants.

If the impediments to growth identified in this study can be removed, secondary market trading in government and corporate debt securities should increase significantly. In the short term, secondary market trading in corporate debt securities is likely to show the strongest growth, once the planned stamp duty reforms are implemented.[1]

---

[1] Since this report was prepared in mid-late 1999, the Indian Parliament has

Table 1. India's Economic Performance, 1997–99
(percentage change from previous year)

Indicator	1997	1998	1999 [a]
GDP	7.8	5.0	6.0
Agricultural production	9.3	–5.6	7.6 [b]
Industrial production	5.6	6.6	4.0
Inflation (WPI)	6.9	5.3	4.8

[a] Provisional 1998-99 figures.

[b] Estimated wholesale price index calculated on a point-to-point basis.

Source: RBI (1998-99), appendix table 1.1.

In the medium term, further growth in secondary market activity in government securities is also anticipated.

This chapter discusses the status of the debt markets in India, some impediments to their development, and recommendations for removing those impediments and building the markets further. First, an overview of the Indian economy and the government's fiscal position is presented. Next, the government securities market is discussed followed by an overview of the Indian corporate bond market. The penultimate section discusses impediments to the development of the Indian debt markets and assesses their relative priority from a remedial action perspective. The chapter concludes with recommendations on how to remove the identified impediments.

ECONOMIC OVERVIEW

Economic growth in India is currently on an upward trend. Real GDP growth in fiscal 1998/99 was about 6%, and it is expected to be about 6% to 6.5% in fiscal 1999/2000 (RBI, 1998–99). Overall economic growth during 1998–99 was materially assisted by a marked improvement in agricultural output. India's recent economic performance is set out in table 1. Continuing favorable growth in the agri-

passed legislation which allows bonds to be dematerialized which in turn will eliminate the stamp duty problem. (See later discussion.)

Table 2. India's Debt, 1996–2000
(billions of rupees)

Debt parameter	1995–96	1996–97	1997–98	1998–99[a]	1999–2000[b]
Domestic debt	5,549.83	6,214.37	7,229.62	8,199.65	9,344.29
(% of total debt)	(91.5)	(92.0)	(92.9)	(93.6)	(94.3)
External debt	512.49	542.39	553.32	559.60	561.34
(% of total debt)	(8.5)	(8.0)	(7.1)	(6.4)	(5.7)
Total debt	6,062.32	6,756.76	7,782.94	8,759.25	9,905.63
Domestic debt as % of GDP	45.6	44.0	46.2	46.6	46.7
External debt as % of GDP	4.2	3.9	3.6	3.2	2.8
Total debt as % of GDP	49.8	47.9	49.8	49.8	49.6

Note: Figures in brackets represent percentages to GDP at current market prices based on new series with 1993-94 as base year.

[a] Revised estimates

[b] Budget estimates

Source: RBI (1998-99), appendix table IV.7.

cultural and industrial sectors is likely to be the major source of the economic improvement forecast for 1999–2000.

During 1998–99, the central government's gross deficit rose from Rs 889.37 billion to Rs 1,037.37 billion, following a marked increase in 1997–98 (RBI, 1998–99). Budget estimates for 1999–2000 show the deficit shrinking, from Rs 1,037.37 billion to Rs 799.55 billion. The revised estimate for 1998–99 was 5.90% of GDP, compared with 5.70% in 1997–98. This revised figure should be treated with caution, however. Gross domestic savings (GDS) as a proportion of GDP remained a modest 24.4% in 1996–97 and 23.1% in 1997–98.

As mentioned earlier, India is a heavily indebted nation. Revised RBI estimates indicate the value of total government debt was equivalent to 49.8% of GDP during 1999. Trends in national debt as a percentage of GDP (see table 2)[2] suggest that India has made little progress in curbing the level of debt.

To complicate matters, debt-servicing costs have been rising steadily. Between 1991–92 and 1998–99, interest payments as a ra-

[2] Based on a new series of GDP data using 1993–94 as a base year.

tio of government revenue receipts increased from 40.28% to 49.00% (RBI 1998–99, appendix table IV.2). Since 1997–98, this ratio has stabilized at around 49%.

Details of the composition of the funding of the government's deficit are set out in table 3. Most of the deficit is financed internally; government securities represent the largest source of domestic funding. Between 1996 and 1999 the fiscal deficit as a proportion of GDP rose steadily to just under 6%.

The RBI relies on several mechanisms to manage domestic liquidity. During 1998–99, the principal ones were open market operations and repo transactions.

GOVERNMENT SECURITIES MARKET

Financial reforms introduced by the RBI since 1992 have brought some major changes to the banking sector. Significant changes have also been made in the government securities market. As the RBI is pursuing a deliberate policy of gradual reforms in the financial sector, the government securities market is steadily evolving. The RBI actively seeks the views of market participants to proposed policy changes that affect the government securities market. This section describes recent trends in the government securities market and the key impediments to market development.

Table 3. Net Financing of India's Gross Fiscal Deficit, 1996–2000

(billions of rupees)

	1996–97	1997–98	1998–99 Revised Estimates	1999–2000 Budget Estimates
Deficit to be financed	667.33	889.37	1,037.37	799.55
Financed through:				
(a) External Resources	29.87	10.91	9.10	8.45
(b) Internal Resources	637.46	878.46	1,028.27	791.10
(i) Market Borrowings	200.12	324.99	649.11	574.61
(ii) Other Liabilities	305.50	562.57	346.82	216.49
(iii) 91-day Treasury Bills	131.84	–9.10	32.34	0
Fiscal deficit as % of GDP	4.7%	5.7%	5.9%	Not available

Source: RBI (1998–9), appendix table IV.4.

Market Size

The main points to consider here are the sector's outstanding debt, secondary market turnover, and yield curve.

Outstanding Domestic Debt. At present, the government of India issues securities only to wholesale investors when raising debt finance. The composition of outstanding domestic debt on March 31, 1999, is shown in table 4; these figures are based on unaudited accounts supplied by the Ministry of Finance.

Wholesale government debt instruments comprise treasury bills and dated securities purchased by wholesale investors for investment and/or statutory ratio purposes. These instruments are sold either through auctions conducted by the RBI or in the secondary market. In April 1999, the RBI announced the introduction of 182-day treasury bills. Auctions of 14-day and 91-day treasury bills are now held weekly, while auctions of 182-day and 364-day treasury bills are held fortnightly.

The Indian government does not offer retail securities at present, as the RBI's offices are not fully computerized. However, Post Office savings bonds issued by the Ministry of Finance and relief bonds issued by the RBI are de facto retail government securities. These securities carry a 9% tax-free interest rate, but market participants do not consider tax to be a major issue influencing retail investment. Banks act as agents for the Ministry of Finance in the distribution of Post Office savings bonds.

The distribution of domestic debt, based on the figures presented in table 4 (provided by the Ministry of Finance), is shown in table 5. As of March 31, 1999, domestic debt consisted mainly of dated securities and securities issued to the RBI for eventual sale to the market. Although there was only a modest amount of treasury bills on issue on that date, material use is being made of these securities.

Nationalized banks and insurance companies appear to be the largest holders of government securities. No detailed breakdown of the distribution of ownership of treasury bills and dated securities is readily available.

The 182-day treasury bill was one of several steps taken in 1999 to increase the available range of treasury bill instruments. The RBI

Table 4. Outstanding Domestic Debt, March 31, 1999
(billions of rupees)

Kind of debt	Amount
Market loans (i.e., dated securities)	2,855.9
91-day Treasury Bills	19.0
Securities held by RBI	1,228.6
14-day Treasury Bills	71.5
364-day Treasury Bills	98.0
Securities held by International Financial Institutions	215.2
Other	123.7
Total Internal Debt	4,611.9

also authorized interest rate swaps (IRS) and forward rate agreements (FRAs) and extended the number of organizations able to participate in repurchase transactions in government securities.

Secondary Market Turnover. Between 1997–98 and 1998–99, the value of outright turnover in government securities rose from Rs 3,221.8 billion to Rs 3,750.6 billion. Over the same period, the value of repos in government securities increased from Rs 984.8 billion to Rs 1,587.9 billion. Total turnover in government securities amounted to Rs 5,338.5 billion in 1998–99, compared with Rs 4,206.6 billion in 1997–98. Average daily trading volume in government securities, inclusive of repos, is approximately Rs 20 billion per trading day. Turnover figures confirm comments from market participants that the overall level of trading in the government securities market is rather modest, and the percentage of stock traded is small in relation to the amount on issue.

The primary dealers (discussed below) have contributed to a material increase in daily secondary market trading volumes since

Table 5. Distribution of Domestic Debt, March 31, 1999

Debt	Distribution (%)
Treasury Bills	4.09
Market loans (i.e. dated securities)	61.92
Securities held by RBI	26.64
Other	7.35
Total Internal Debt	100.00

Table 6. Growth in Trading Volumes 1996–98 (March years)
(billions of rupees)

	NSE Transactions 1996–97	NSE Transactions 1997–98	NSE Transactions 1998 June qtr	SGL Transactions 1996–97	SGL Transactions 1997–98	SGL Transactions 1998 June qtr	NSE Share of SGL 1996–97	NSE Share of SGL 1997–98	NSE Share of SGL 1998 June qtr
Government Securities	272.3	842.3	247.4	832.5	1,411.3	383.0	33%	60%	65%
Treasury Bills	109.0	188.7	24.0	366.5	464.2	70.5	30%	41%	34%
Total	381.3	1,031.0	271.4	1,199.0	1,875.5	453.5	32%	55%	60%

Source: NSE (1998), Table 38.

1996. The Rs 20 billion average daily trading volume is considerably higher than the Rs 2 billion to 3 billion of three years ago. Table 6 shows details of the volumes traded on the NSE and total transactions recorded through the RBI's Subsidiary General Ledger (SGL) system during the period April 1, 1996, to June 30, 1998.[2] (Note that the published figure for SGL transactions in 1997–98 is materially less than the turnover figures published in RBI's 1998–99 annual report).

Primary dealers account for 25% of secondary market trading, foreign banks 25%, state-owned banks 40%, and others 10%. There is a marked difference in the relationship between shares of government security volumes and shares of banking assets. Foreign banks hold 7% of banking assets yet generate 25% of turnover. By contrast, Indian banks hold 93% of banking assets and generate only 40% of the volume. This demonstrates the potential for growth in trading volumes with a more competitive and efficient banking sector.

Details of volumes traded on the NSE and transactions recorded through the RBI's system during June 1999 are set out in table 7. Interestingly, before the scandal surrounding fraudulent trading in government securities erupted in 1992, volumes were 30 to 40 times current levels. Trading volumes did go up in 1999, however, owing to a reduction in the corporate spread over the sovereign rate, surplus liquidity in the banking system, and limited opportunities for prime lending on the part of the banks. Trading received another boost from the RBI's mark-to-market requirements introduced on March 31, 1999, under which bank investments in government se-

Table 7. Volumes of Secondary Market Trading in Government Securities,1999
(billions of rupees)

	April (NSE)	May (NSE)	June (NSE)	June (RBI:SGL)	% traded at NSE
Treasury Bills	13.1	5.3	9.9	27.0	36.86%
14-day Bills		.03	.4	5.4	7.52%
91-day Bills	2.0	1.5	1.1	5.4	20.14%
182-day Bills			.2		
364-day Bills	11.1	3.8	8.3	16.2	51.03%
Dated Government Securities	179.5	186.0	144.1	246.5	58.45%
Converted	42.0	25.1	16.3	21.0	77.95%
Regular	130.5	154.0	120.8	183.6	65.79%
Zero Coupon	4.2	5.5	5.2	7.3	71.36%
Repo	2.8	1.3	1.7	34.6	5.00%
Total Government Securities	192.6	191.2	154.0	273.4	56.33%

curities must be valued at no less than 70% of the market value. This requirement is to increase progressively to 100% by March 31, 2002.

On balance, the state-owned banks have little understanding of opportunity cost concepts. India's two major insurance companies (General Insurance Corporation and Life Insurance Corporation of India, LIC) recently started trading to improve yields, and a number of the state-owned banks are now following suit. This trend has been aided by a change in management since the initiation of tight controls on secondary market trading after the 1992 scandals. There are only a few genuine long-term investors in government securities at the moment.

The Yield Curve for Government Securities. Table 8 shows secondary market yields for government securities. As can be seen, the market is relatively active in terms of issuance, but trading on the whole is limited. Figure 1 presents a graph of the current yield curve in government securities based on the yields in table 8.

Dealers in the Government Securities Market

The RBI has established a system of primary and satellite dealers to help promote development of the wholesale and retail government securities markets.

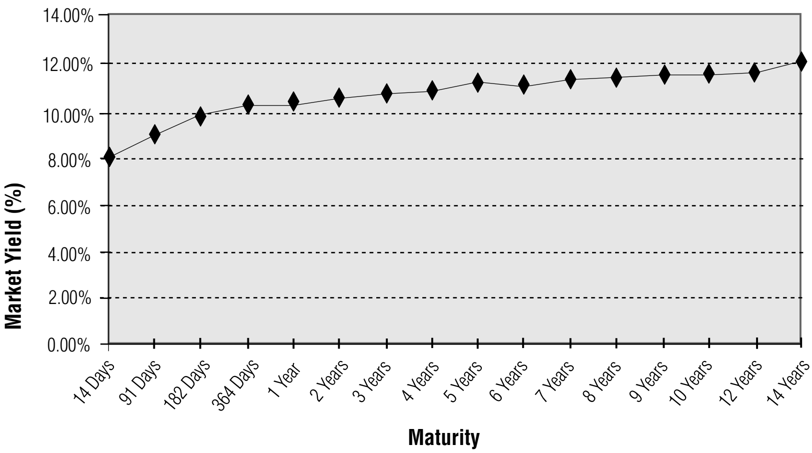
Table 8. Yield Curve for Government Securities, 31 July 1999

(percent)

Tenor	Treasury Bills	Dated securities
14 days	8.11	
91 days	8.98	
182 days	9.91	
364 days	10.31	
1 year		10.48
2 years		10.71
3 years		10.97
4 years		11.08
5 years		11.25
6 years		11.33
7 years		11.45
8 years		11.56
9 years		11.66
10 years		11.75
12 years		11.94
14 years		12.10

Source: For treasury bills, SBI Gilts Limited; for dated securities, ICICI Secutities and Finance Company Limited.

Figure 1. India Government Securities Yield Curve as at 31 July 1999



Structure. Primary dealers were introduced in March 1995 to activate wholesale primary and secondary markets; satellite dealers were established in December 1996 to provide a mechanism for purchasing government securities from primary dealers for subsequent resale to retail investors. By September 30, 1999, there were 14 primary dealers and 4 satellite dealers, as well as 9 gilt funds (discussed later in this section).

Primary dealers are required to bid for prespecified amounts of treasury bills and dated securities in RBI auctions each financial year. In addition, they must achieve a minimum success ratio of 40% for treasury bills and 33.3% for dated securities.

Although the primary/satellite dealer system has contributed to growth of the secondary market since 1995, trading volumes remain very low compared with those before the onset of the 1992 scandal. As discussed below, this is due in part to weaknesses in the supporting infrastructure and policy framework for the government securities market.

Increasing Hedging and Financing Mechanisms for Dealers. In July 1999, the RBI issued guidelines covering interest rate swaps and forward rate agreements. This action has allowed banks, primary dealers, and financial institutions to hedge their interest rate risks and represents the first step in the development of the fixed-interest derivatives market. In August 1999, the RBI increased the number of nonbanking entities authorized to undertake reverse repo transactions in treasury bills and some dated government securities. In addition, it allowed these parties to undertake ready forward (repo) transactions. Reverse and ready forward repo transactions must be settled through the RBI's SGL accounts. No sales are allowed if the securities are not in the seller's portfolio—that is, no short selling is permitted.

Central Market Infrastructure for Government Securities

The notable aspects of this infrastructure are its trading mechanisms and clearing and settlement practices.

Trading Mechanisms. Trading in government securities is conducted through two channels: by telephone, on an over-the-counter basis;

and through the wholesale debt market segment of the NSE, initiated in June 1994. The WDM has an automated trading facility, but it is only for clients who are not major dealers in debt securities.

Most secondary market trading in government securities is transacted over the telephone, with only a small proportion going through the NSE. This demonstrates market participants' preference for telephone trading rather than screen trading.

All the major institutional players in the government securities market trade are registered on the NSE, which allows them to monitor the market via inquiry screens, establish exposure limits for other "participants" in the NSE market, provide settlement details to the NSE for distribution to the market, and transact repo trades through the WDM. As of October 1998, there were 79 registered non-NSE members participating in the WDM and trading through NSE brokers.

Trading in the WDM is not fully on-line as participants have to enter transaction details separately. These details are disseminated to the market when trades are concluded/reported in the NSE system. The transactions are settled privately.

At present, the RBI releases secondary market trading information daily, drawing on transactions actually settled through the SGL on any given day. Reported transactions may not necessarily have been concluded on the day they are reported. The SGL transfer form has to be lodged within 24 hours after the contract has been executed, but the lodgement date may not coincide with the date of the transaction. Consequently, the SGL system allows gaps to arise between the deal date, contract date, and actual settlement date.

Clearing and Settlement. Ownership records relating to government securities are maintained on the RBI's SGL accounts. Over-the-counter transactions for those parties with RBI bank accounts (banks and primary dealers) are settled through the RBI's SGL and clearinghouse facilities using the RBI's delivery-versus-payment (DVP) system, which synchronizes the transfer of securities with purchase and sale settlements. Other over-the-counter transactions are settled privately, with transfers effected through the RBI's depository. The volume of market-sensitive information released by the RBI is increasing steadily; most of this information is available on its website.

Issuers and Investors in Government Debt

As previously mentioned, government securities are issued only to wholesale investors. No retail market exists owing to constraints in the RBI's MIS. On the investor side, nationalized banks and insurance companies appear to be the largest holders of government securities, with provident funds and mutual funds having only minor holdings. Direct investment by retail investors is negligible.

Gilt mutual funds specializing in government securities ("gilt funds") are a recent phenomenon. With two new funds established in October 1999, their total now comes to nine, and their value to about Rs 11.2 billion. The growth in gilt funds has been assisted by the declining margin of corporate bond yields over long-term government securities, which fell from about 3% to 1.5% over the past year.

Gilt funds are a useful addition to the government securities market. With growth, they will bring a longer-term and more varied perspective to the current single-dimensional market and provide an attractive option for retail investors. At the same time, this group should also be allowed to invest directly in retail government securities if they wish.

India has six money market mutual funds, with total assets of Rs 6.3 billion. As of October 31, 1999, the total value of funds they manage was in the neighborhood of Rs 869.5 billion. While the total amount of mutual fund investment in government securities is not readily available, it is unlikely to be more than Rs 400 billion.

Organizations Formed by Market Participants. Market participants monitor developments in the government securities market through three organizations: the Primary Dealers Association, the Fixed Income Money Markets Dealers Association (FIMMDA), and the NSE's Committee for the Development of the Debt Market. The Primary Dealers Association has considerable interaction with the RBI. According to several primary dealers, the foreign securities firms with newly appointed primary dealers have brought an inflow of expertise into the government securities markets. The FIMMDA is composed of banks, some of which are primary dealers. The NSE committee has been very active in raising matters affecting the WDM. One of its major achievements has been to establish an NSE benchmark interest rate for the country's debt markets. Following the launching of the NSE-MIBID/MIBOR rate (NSE Mumbai interbank bid/offer rate) in June 1998, the NSE introduced 14-day, 1-month, and 3-month benchmark rates for the term money market. The NSE-MIBID/MIBOR rate has been used as a benchmark for some IRSs, FRAs, floating rate debentures, and term deposits.

CORPORATE BOND MARKETS

Public companies have been issuing term debt securities on a regular basis ever since India's independence in 1947. Throughout this period, the primary market has been active, whereas the secondary market has experienced a marked lack of liquidity. Market volumes remain relatively low, and the secondary market yield curve is not well developed. In 1985–86, following some debt market reforms, state-owned enterprises (referred to as "public sector undertakings" or PSUs) began issuing term debt instruments known as "PSU bonds."

Size of the Market

Most bonds issued in the corporate bond market are issued as private placements and mostly by public sector corporations.

Primary Market

The total value of outstanding private sector debentures as of March 31, 1993, was Rs 98.4 billion (this figure excludes the value of zero coupon/deep discount bonds issued by private sector borrowers, which amounted to less than Rs 17 billion). In contrast, the total value of outstanding PSU bonds (bonds issued by public sector corporations) was over Rs 150 billion. During 1992–93 the annual value of new PSU issues amounted to approximately Rs 50 billion, while the figure for private sector bond issues was between Rs 10 billion and 20 billion. The corporate debt market has grown considerably since 1996, mainly because of relaxed RBI controls on bank term lending and Ministry of Finance amendments to the investment rules for LIC and provident funds (as discussed below).

According to figures presented in the NSE's 1997–98 review of India's securities market, the total value of bonds raised by private placement amounted to Rs 181 billion in 1996–97 and Rs 309.4 billion in 1997–98. Details of debt funds mobilized in the fiscal 1997–98 are presented in table 9. Bonds raised by financial institutions and private sector corporations represented 56% of total placements in 1996–97 (Rs 101.4 billion) and 64% of total placements in 1997–98 (Rs 198.1 billion). Remaining placements were made by federal and state government agencies. Bonds raised by private sector corporations represented 10% of total placements in 1996–97 (Rs 18 billion) and 25% of total placements in 1997–98 (Rs 76.2 billion). Owing to the generally sluggish economic conditions, few leading Indian private sector corporations are making issues at present.

Bonds raised by Indian financial institutions represented 46% of total placements in 1996–97 (Rs 70 billion) and 39% of total placements in 1997–98 (Rs 121.8 billion). The 1997–98 figures include new bond issues by the Industrial Development Bank of India (IDBI) (Rs 15 billion in two bond issues) and the Industrial Credit and Investment Corporation of India (ICICI) (Rs 16 billion in five bond issues).

Most corporate bonds continued to be issued as private placements during 1998–99. Between 1997–98 and 1998–99 private place-

Table 9. Mobilization of Debt Funds in Fiscal 1997–98

(billions of rupees)

Issuer Type	Private placement	Public	Total
Public sector units	40.1	1.2	41.2
All India financial institutions/banks	121.8	18.1	140.0
Private sector	76.2	0	76.2
State undertakings and state financial institutions	71.3	0	71.3
Totals	309.4	19.3	328.7

Source: NSE (1998).

ments by banks, financial institutions, and private and public sector companies rose from Rs 301.0 billion to Rs 496.6 billion (RBI, 1998–99). New issue activity continued to be dominated by public sector entities rather than private sector entities (see table 10).

According to the RBI, total outstanding corporate debt inclusive of bonds issued by public financial institutions in September 1999 is estimated at Rs 1,400 billion. By contrast, the value of outstanding domestic debt was nearly Rs 5,000 billion (see table 4). The public sector is crowding out the private sector in the bond markets: the funding of the relatively higher-risk state government issues is increasing only because these public organizations are able to tap funds from other state-owned entities through regulatory controls.

Although the range of debt instruments in the Indian corporate debt market is limited, it is steadily increasing. Authorization of FRAs in August 1999 is particularly encouraging. The corporate bond market as a whole, however, faces a weak supporting infrastructure. Details of corporate bond interest rates prevailing in late July 1999 are set out in table 11. A graph of the current yield curve in corporate bonds based on yields in table 11 is presented in figure 2.

Secondary Market Trading Volumes. The average total daily turnover in private sector corporate bonds is low, about Rs 400 million. The total annual secondary market turnover continues to be less than the value of private sector bonds issued. Trends in annual

Table 10. Mobilization of Debt Funds in Fiscal 1998–99

(billions of rupees)

Issuer type	1998–99	1997–98
Private sector:	169.8	92.0
Financial	121.7	43.2
Nonfinancial	48.1	48.8
Public sector:	326.8	209
Financial	203.8	96.6
Nonfinancial	123.0	112.4
Totals	496.6	301.0

Source: RBI (1998–99), table 5.3.

Table 11. Corporate Bond Yields, July 31, 1999
(percent)

Maturity	Primary market	Secondary market
1 year	Not available	11.25%
2 years	Not available	11.75%
3 years	12.25%	
5 years	12.50%	
7 years	12.75%	

Source: ICICI (1999).

traded volumes at the NSE WDM (see tables 12 and 13) reflect modest trading in private sector corporate bonds at the NSE during 1997–98 (less than Rs 160 million per day).

Between 1997–98 and 1998–99, the traded volume of corporate debentures (i.e., corporate bonds) fell from Rs 11.5 billion to Rs 8.8 billion (RBI, 1998–99). As a result of the low trading volume in private sector corporate bonds, secondary market retail and wholesale yields differed by as much as 300 to 400 points (three to four percentage points) during 1999. No real secondary market yield curve has emerged to date.

Although more institutions are now dealing in the secondary bond market, trading volumes remain very low. The increased trading in

Figure 2. Indian Indicative Corporate Bond Yields as at 31 July 1999

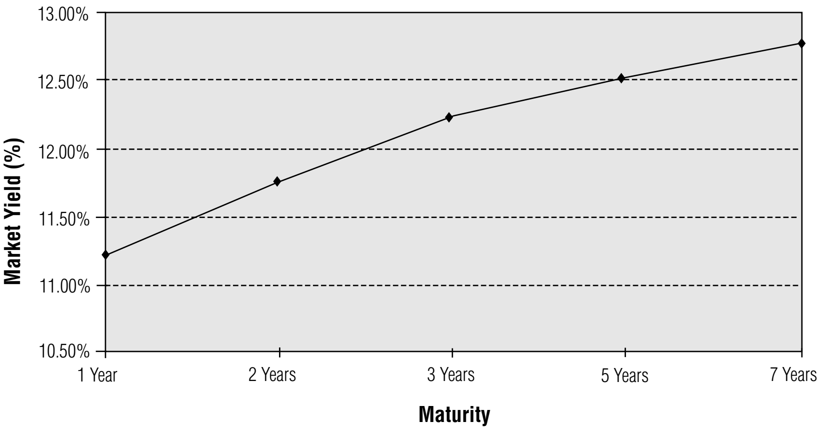


Table 12. Traded Volumes at NSE WDM, by Security Type, Fiscal 1995 to Fiscal 1998
(billions of rupees)

	1994–95 (9 months)	1995–96	1996–97	1997–98	1998 June Quarter
Dated government securities	30.3	77.3	273.5	847.2	247.4
PSU bonds	7.6	10.0	19.7	25.2	3.5
Financial institutional bonds	0.7	1.5	8.0	15.3	9.0
Treasury bills	26.3	22.6	109.6	188.7	24.0
Bank bonds & CDs	1.0	1.4	5.0	11.9	2.2
Corporate bonds & CPs	1.9	5.9	7.0	24.3	3.5
Total	67.8	118.7	422.8	1,112.5	289.6

Source: NSE (1998).

Table 13. Distribution of Traded Volumes at NSE WDM, by Security Type, Fiscal 1995 to Fiscal 1998
(percent)

	1994–95 (9 months)	1995–96	1996–97	1997–98	1998 June Quarter
Dated government securities	44	66	64	77	85
PSU bonds	11	8	5	2	2
Financial institutional bonds	1	1	2	1	3
Treasury bills	39	19	26	17	8
Bank bonds & CDs	2	1	1	1	1
Corporate bonds & CPs	3	5	2	2	1
Total	100	100	100	100	100

Source: NSE (1998).

government securities is having a modest impact on trading of corporate bonds, but a significant proportion of corporate bonds are still not traded. The planned removal of stamp duties on transactions in securities held in dematerialized form is expected to boost secondary market volumes considerably. Recent deregulation of the insurance sector (and perhaps the provident sector in due course) should also encourage increased secondary market trading in the medium to long term. Although RBI has authorized repos in corporate bonds, providing the securities are held in dematerialized form, such transactions remain negligible for the time being.

Developments in Corporate Bond Infrastructure

The two notable features of the corporate bond infrastructure are its trading and settlement practices and its depositories.

Trading and Settlement. Like government securities, corporate bonds are traded over the counter and through the NSE. However, the over-the-counter market has no depository and clearinghouse arrangements, such as those provided by the RBI for the government securities market.

PSU bonds are transferred by endorsement and delivery, with no stamp duty payable. Corporate bonds are transferred by a deed, a process that usually takes at least six weeks to complete. Sales cannot be made if the scrip has not been issued. It is also difficult to trade partial holdings. Settlement is undertaken privately, and traders who do not exercise caution face potential settlement risks. In the absence of a real-time gross settlement system, the risk associated with private settlement will remain an impediment until electronic banking services are provided nationwide.

Corporate bond transactions undertaken in the over-the-counter and private placement markets tend to lack transparency, as they are reported only if a broker is involved. There is no real-time price discovery mechanism.

Depositories. India has two depositories: the National Securities Depository Limited (NSDL), established in November 1996; and the Central Depository Services (India) Limited, established in February 1999. During fiscal 1999, the market value of dematerialized securities principally equities, held by NSDL increased from Rs 227 billion to Rs 1,150 billion. This jump represents significant progress in expanding the use of dematerialized trading. In the same year, the number of companies whose securities had been admitted for dematerialization at NSDL increased from 191 to 375. These companies represented about 80% of the market capitalization of all listed companies in India. Four government stock maturities and one state government issue are available for dematerialization at NSDL. No data were found for the operations of the Central Depository Service Limited.

Factors Influencing Demand for and Supply of Corporate Bonds

Issuers. The issuers of corporate debt securities include private and public financial and nonfinancial entities. Paper is issued mainly by public sector financial and nonfinancial entities rather than private sector entities. During the past two years, private sector corporations have made limited new bond issues, owing to the uncertain economic outlook for the medium term. The overall supply of private sector corporate bonds is kept in check by the significant size of India's state-owned enterprise sector. Increased privatizations will help the private sector corporate bond market grow in the medium term.

According to the RBI, most securitization deals transacted to date have consisted of direct purchases of receivables by institutions and large nonbanking finance companies. There has been little reported use of special purpose corporation structures.

Investors. Institutional investors—principally banks, insurance companies, mutual funds, and provident funds—hold approximately 80% of corporate bonds, with the balance (20%) held by retail investors. A relaxation in investment regulations for banks and institutional investors has created additional investment interest in corporate bonds and led to strong growth in new corporate bond issues since the 1997 June quarter.

The RBI first allowed scheduled banks to invest in corporate bonds (and shares) in October 1993, up to a ceiling of 5% of their incremental aggregate deposits of the previous year. In October 1996, banks were allowed to purchase bonds (and shares) in the secondary market within the existing ceiling. The regulations on preference shares and bonds were removed in April 1997.

The banks' investments in bonds have increased materially in the two years since the removal of investment controls in 1997. According to the RBI (1999), bank investments in bonds/debentures/preference shares issued by the private corporate sector increased from Rs 23.5 billion in March 1997 to Rs 94.75 billion in March 1998. During fiscal 1999, these investments further increased to Rs 178.8 billion. Between March 1997 and February 1999, the banks' investments in bonds/debentures/preference shares issued by PSUs increased from Rs 118.6 billion to Rs 231.3 billion.

In 1997–98, the LIC's ceiling for market-related investments rose from 25% to 60%, with the balance invested in public sector securities. In 1998–99, nongovernment provident funds were allowed to make investments in private sector bonds/securities for the first time (up to a ceiling of 10% of total investments in securities with investment-grade rating from at least two credit rating agencies). At the same time, government provident funds are not allowed to invest in private sector securities, although up to 40% of their investments can go into bonds/securities issued by public sector organizations. The current investment regulations for nongovernment provident funds are heavily skewed in favor of public sector securities.

Retail interest in private sector corporate bond investment remains low because of the limited use of fixed-interest investment in India. Retail investors are almost absent, except for those holding issues made by the two state-owned banks (the Industrial Development Bank of India and the Industrial Credit and Investment Corporation of India).

Intermediaries. The major intermediaries in the Indian debt markets are domestic and foreign banks and the primary dealers. Although detailed information on turnover by different intermediaries in the government securities and corporate bond markets is not readily available, turnover statistics at the wholesale debt market at the NSE provide some broad guidance (for details of turnover in the period April 1, 1996, to June 30, 1998, see table 14).

IMPEDIMENTS TO BOND MARKET DEVELOPMENT

The corporate bond market in India faces several impediments, primarily the stamp duty, which hampers trading. Several external, macroeconomic, and internal factors also create problems for this market.[3]

External Impediments

External constraints consist mainly of political, macroeconomic, and legal factors, along with weaknesses in the broader financial system.

Table 14. Wholesale Debt Market Volume on the National Stock Exchange, 1996–98
(billions of rupees)

Investors	12-month March 31, 1996/97 Rs	%	12-month March 31, 1997/98 Rs	%	3-month April–June 1998 Rs	%
Foreign banks	314.0	37.13	504.1	22.65	139.8	24.13
Indian banks	253.8	30.01	917.7	41.24	236.1	40.75
Primary dealers	136.0	16.08	269.6	12.12	88.2	15.24
Financial institutions and mutual funds	25.	3.01	85.2	3.83	18.4	3.17
Trading members and corporates	116.4	13.76	448.7	20.16	96.6	16.68
Total	845.6	100.00	2225.3	100.00	579.1	100.00

Around the Bond Markets

Political issues. Political developments slowed the pace of economic reform in India during 1998–99. The previous government was unable to implement several planned financial reform measures owing to limited political support during its term in office. The newly elected government of Prime Minister Vajpayee, which took office in October 1999, has undertaken to implement some outstanding financial reforms and has already passed the long-awaited legislation deregulating the insurance sector. The powerful financial sector trade unions create additional obstacles to improving the viability of the state owned banking sector.

The first major concern is the slow pace of economic reform. Although there is apparent widespread acknowledgement in India of the need to implement further economic reform measures (such as addressing the federal governments's fiscal situation and privatization of government-owned corporations (including the public sector banks), Indian politicians have been slow in recent years to implement recommended measures. Unless substantial economic reforms are initiated in the short to medium term, subsequent governments may be faced with implementing unpopular measures, which will be resented all the more if the economy moves into an unexpected downturn.

A second concern is that recent governments have, on balance, been reluctant to let the financial markets operate in a conventional market-oriented manner, partly because they consider some financial instruments and practices to be highly speculative, especially after the 1992 scandal surrounding government securities. This stance creates further obstacles to the development of efficient debt markets. Other obstacles stem from limited understanding of debt markets and the desire in some quarters to retain the inefficient public sector banks.

A third problem is the government's inability to implement major financial sector reforms. Despite efforts of the Ministry of Finance and the RBI, the outgoing Parliament was unable to pass legislation exempting from the stamp duty debt market transactions in securities that are held in dematerialized form. (To do this, the government would have to amend the Securities Contract [Regulations] Act and replace the Public Debt Act.[3]) The proposed legislative changes are critical to the development of secondary market trading in the corporate debt market. Such changes would also promote the use of dematerialized (electronic form) government securities, introduction of new debt instruments to broaden the debt market, and creation of an effective regulatory agency for this market. The merits of introducing derivative products for the debt market cannot be considered until after the government has determined which organization (either the RBI or SEBI) will be responsible for regulation of the debt markets.

Political instability is another, more broadly based impediment. Politicians supporting proposed banking and insurance reforms face a possible political backlash from some voters. Political instability frustrates the drafting of legislative changes, such as deregulation of the insurance sector. In that case, it took more than four years to complete the draft legislation. Even though all major political parties in the outgoing Parliament supported the proposed insurance reforms, they were not passed.

Macroeconomic problems. One major impediment to the growth of debt securities markets is India's extensive government borrowing, which crowds out the private sector, or has the potential to do so. Large

[3] See Footnote 1.

government spending and low government revenues have put the fiscal deficit at a level that impedes the development of both the private sector and the domestic corporate debt market. Yet the government continues with its spending preferences, such as its large ongoing subsidies. The borrowing requirements of the public sector (including public sector undertakings) retard private sector development by crowding out private borrowing. The government's excessive spending is also due to its continued support of numerous poorly performing state-owned corporations and rising government debt-servicing costs. With government revenue still relatively low, it is all the more difficult to reduce the fiscal deficit.

Broader Legal and Regulatory Environment

In the broader legal environment, the major problem is India's commercial law, which does not provide a supportive legal framework for debt market development. Sweeping changes are required here, especially to enable bond investors and trustees to enforce commercial contracts. Extensive legal and tax policy changes are also required to build an active market in securitized paper.

Across the Financial System

The problems relating to the financial system can be divided into those arising within the banking sector and those in the government securities market.

The Banking sector: The state of the banking system is impeding development of the local corporate bond market. Notwithstanding the banking reforms undertaken since 1992, India's banking sector will not fully comply with international prudential banking standards until 2002. Numerous other problems remain that need close RBI monitoring. Special attention should also be given to the rationalization of the public banking sector in order to increase competition. The weakness of public sector banks puts additional strain on the development of the secondary market in government securities and to a lesser degree, the secondary market in corporate debt securities.

The government securities market. As noted earlier, the government securities market is increasingly providing a solid foundation for corporate bond market development. But despite this gradual strengthening, the government securities market will not be able to operate at full tilt unless something is done to improve primary dealer relationships with RBI; to introduce short selling; to facilitate trading, clearing, and settlement; and to cultivate the investor base.

With regard to primary dealer relationships with RBI, primary dealers are concerned about the increased proportion of dated securities that the government is placing directly with the RBI, owing to its growing deficit. In order to limit pressure on market bond yields (and therefore maintain stability in the money market), the government placed significant volumes of its securities with the RBI during 1998–99—the amount came to almost Rs 290 billion, out of a total of Rs 700 billion. The RBI subsequently resold these securities in the secondary market when short-term conditions were more favorable.

On some occasions when the RBI has taken dated securities into its portfolio, it has resold the securities to primary dealers within half an hour of purchase from the government. This practice reduces the profit of primary dealers. According to the RBI (1998–99), total commission/underwriting fees paid to primary dealers in 1998–99 amounted to Rs 833.1 million, compared with Rs 1,100 million in 1997–98.

With regard to short selling, current RBI guidelines prohibit banks from going short in securities. This makes it difficult for primary dealers to actively provide two-way quotes in government securities, which significantly impedes market making. Although these guidelines do not extend to other market participants, it has become customary for them to be in the Indian debt markets. There are no legislative prohibitions, however, if the RBI wished to approve short selling of securities by the banks. Currently, there is no real short-term incentive for major dealers in government securities to seek primary dealer status.

Increased market making in government securities markets is unlikely to change appreciably until short selling is approved. The RBI is currently considering such a move, although probably not in the short term. The RBI's unwillingness to approve short selling reflects a cautious approach to implementing further changes in the government securities market and historical concerns emanating from the problems experienced in the government securities market after the 1992 scandal.

Another point the RBI should consider is that short selling would encourage primary dealers to increase their use of competitive two-way quotes. Before short selling is approved, reasonable volumes of stock would have to be available in individual maturities to prevent a short squeeze from developing. The RBI should make every effort to attend to these and other details that would help create a climate for the introduction of short selling of government securities.

As far as the central market infrastructure is concerned, some market participants believe that the largest impediment to the development of the government securities market is the lack of on-line trading and real-time settlement facilities. Because of delays in the distribution of market information, distortions occur on occasion. These anomalies tend to benefit banks with large market shares. A sophisticated on-line trading system would alleviate many of these problems.

The RBI would like to promote on-line trading with accompanying real-time settlement, especially because it would be beneficial for price discovery, market transparency, and efficiency. However, the RBI does not have the computer resources to provide real-time trading and settlement capabilities, and legislative impediments also stand in the way of such a move. As a result, secondary market trading in government securities is showing limited growth. With a better supporting infrastructure, trading volumes could increase by an estimated 20% to 30%. Without real-time systems, there are delays in the dissemination of secondary market trading information. MIS systems also need to be expanded before a retail market in government securities can develop. These matters are currently being addressed by the RBI, which foresees changes in these areas by June 2001.

In June 1999, India inaugurated a major initiative to facilitate interaction within the financial sector, known as the Indian financial network (INFINET). INFINET will provide the communication backbone of the proposed integrated payment and settlement system (IPSS) for the financial sector and facilitate the establishment of a real-time gross settlement system. The RBI (1998–99) has indicated that it plans to introduce a real-time gross settlement system "in about one and a half year's time" (i.e., by June 2001). Full screen trading seems unlikely to occur for at least two years.

The RBI is also working to establish a system for disseminating details of all trades undertaken by members of the trading network as soon as the deals are done, though the traders would remain anonymous. The RBI has been discussing this idea with the Primary Dealers Association. Barring satisfactory progress in developing on-line trading and settlement systems, a useful alternative would be to consider integrating the NSE and RBI systems.

Since the RBI is unable to service current trading volumes effectively, some questions arise about its role as a clearinghouse and a depository. While the RBI's dematerialized registry system is satisfactory, some market participants suggest trading could increase by 20% to 30% with a better settlement system. They also wonder how quickly the RBI will be able to improve settlement procedures.

Other concerns relate to market participants. Some worry about the difficulty of developing the local retail investor base and the lack of supporting market infrastructure. Thus it is not surprising that satellite dealers have encroached on the primary dealers' market. At the same time, primary dealers have entered the retail market. Because of various problems with the system, there are only four satellite dealers so far. They have slim profit margins because the RBI has not given them access to call money, they can only borrow up to 50% of the government paper they own, and they face significant capital constraints. However, the RBI's planned computerization of its branch offices will provide the foundation for the development of a retail market in government securities.

Another problem is that few investors are aware of government securities. This problem can be addressed through a major education initiative. Although most of the scheduled banks have a sound understanding of the government securities market, this is not the case among the other banks, the insurance companies, and the provident funds.

The RBI is well aware of the concerns of market participants and has taken several steps to improve market infrastructure, while also continuing to evaluate other possible changes. This is in line with its policy objective of progressively developing the government securities market. Market participants remain skeptical, however, that the RBI will be able to implement pending major changes in market infrastructure within proposed time frames.

Priorities in addressing external impediments. The priorities that should be set in dealing with such impediments can be ranked as high, moderate, and low according to the degree to which their removal would contribute to substantial increases in corporate bond trading. As tables 15 and 16 show, external impediments are all significant, and none fall at the low end of the scale.

Internal Impediments

Significant impediments exist within India's debt markets themselves. Particularly notable are the weaknesses in the supporting regula-

Table 15. External Impediments of High Priority

Political
Slow pace of economic reform
Past reluctance to deal with financial sector reform measures
Government's historic inability to implement agreed financial sector reforms
Opposition to economic and financial reform measures
Macroeconomic
Crowding out of private sector by excessive government borrowings
Retention of a large number of inefficient public sector undertakings that should be privatized
Significant regulation of organizations controlling long-term savings, particularly provident funds
Broader financial system
Without rationalization of public sector banking, banking sector not competitive
National debt markets not fully developed
Legal environment
Ineffective commercial law

Table 16. External Impediments of Moderate Priority

Macroeconomic
Low government revenue, limits government's ability to reduce its fiscal deficit
Low savings rates, limit resources available for investment in corporate debt securities

tory frameworks, in some sections of the central market infrastructure, and in the overall level of knowledge of significant institutional investors. Some steps have already been taken to address these weaknesses.

Regulators and Regulations

India's government and corporate debt securities markets face a number of regulatory problems. One is the uncertainty regarding which apex organization will be responsible for the debt markets. Another is the delay in implementing planned stamp duty changes, which is limiting secondary market trading in corporate debt securities. Yet another is the need for some minimum regulation of the corporate debt private placement market. These issues can be subdivided into those concerning regulators and those having to do with regulations.

Regulators. The two main questions that need to be addressed here are how can regulators improve their knowledge and how should the RBI and SEBI split responsibility for regulation of the local bond markets? The regulatory parties (Ministry of Finance, RBI, and SEBI) do not always have the technical knowledge required to deal with more complex issues relating to the development of the debt markets. As for the question of whether RBI or SEBI is officially responsible for supervising the corporate debt markets, this matter will be resolved when the Securities Contract (Regulations) Act is amended. The uncertainty surrounding the question for the time being is hindering market development.

Regulations. Wholesale investors have expressed support for some (limited) regulation of the private placement market. This matter will inevitably be considered by RBI and SEBI in light of the present inquiry into the performance of numerous trustees for corporate bond issues and the findings arising from a recent HLC subgroup study of the debt markets.

The Ministry of Finance clearly needs to promote legislation exempting transactions in securities in dematerialized format from stamp duty.[4] This change was outlined in the 1999 budget but was not implemented by the outgoing Parliament. This delay has put a serious constraint on secondary market trading. The government also needs to improve policies for supervising institutional portfolios, especially in the case of insurance companies (and provident funds), which are currently not required to value fixed-interest investment portfolios at market yields. This is expected to change when the planned insurance reforms are implemented.

Rules that apply to provident funds are also in need of reform. For instance, the legislative requirement for a 12% guaranteed return on provident funds should be abolished. This policy helps to prop up interest rates, impedes development of retail fixed-interest security markets, and acts as a disincentive for provident funds to trade in the government security and corporate debt secondary markets. The guarantee should be eliminated prior to the introduction of retail government securities. Wholesale investors should not be allowed to invest in retail government securities when these instruments are eventually introduced to the market. The regulations governing provident fund investments should be progressively replaced with rules based on international prudential norms.

Impediments Relating to Central Market Infrastructure

The trading, clearing, settlement, and information infrastructure for the corporate bond market is underdeveloped. There are no plans for any supporting infrastructure for over-the-counter transactions in corporate debt securities that are executed outside of the NSE's WDM facility. There is only limited support for full screen-based trading among market participants, in spite of its advantages over

[4] See Footnote 1.

the current over-the-counter trading practices. There is no principal entity for settlement of transactions in corporate bonds. Settlement may be made through the NSE's facilities for WDM participants. Since transactions are reported only when brokers are involved, certain market information is not disseminated. Although India has four credit-rating agencies, they need to become more proactive.

Market Participants

The present low trading volumes and poor market liquidity in India have little to do with the number of issuers or investors. Rather, the problem is the stamp duty, on one hand, and the fact that most large investors know little about debt portfolio management techniques, on the other. A serious concern of institutional investors is the lack of regulation of the corporate debt private placement market.

Issuers. The main problems on the issuer side are limited development of the corporate debt secondary market, which reduces financing options for issuers, and the lack of retail interest in corporate debt securities. In spite of the higher costs associated with making public corporate debt issues, prospective issuers would like to see retail investors having a healthy interest in corporate debt securities.

Investors. One problem on the investor side is the poor liquidity in the secondary market for corporate debt securities, which will be partly alleviated when the promised stamp duty reform occurs. Another impediment arises from deficiencies in the private placement market for corporate debt securities. Wholesale investors are concerned about the performance of trustees, low disclosure standards, lack of transparency in trading information, and the need for some minimum standard practices in the corporate debt private placement market. A further concern is the limited knowledge of debt market portfolio management. Until recently, nationalized banks, insurance companies, and provident funds knew little about debt management techniques. Hence these organizations have traditionally followed a cautious approach to managing their portfolios, especially in the aftermath of the 1992 scandals. These institutions are now taking a greater interest in the market, and some have even begun trading in the secondary markets. Limited participation by long-term investors in the secondary market generally results in the market having a one-sided view. As a result, market yields tend to become inflated during periods of tight liquidity, when overnight interest rates drive the market's pricing of long-term securities. For wholesale investors, a main concern is the need for more debt market education services, at reasonable cost.

Intermediaries. The main constraints for intermediaries operating in the market today are the inability to short-sell and thin secondary markets, which restrict their profit-making opportunities.

Priorities in Addressing Internal Impediments

Priorities for addressing these impediments can again be ranked on a scale of high, moderate, and low. As tables 17 and 18 show, most of the impediments here are in the high category and only one is in the moderate category. None are considered to be of low priority.

RECOMMENDATIONS FOR REMOVING IMPEDIMENTS

This section outlines specific recommendations for removing external and internal impediments to the development of the debt markets in India.

Removing External Impediments

The following recommendations apply both around the bond markets and across the financial sector.

Around the Bond Markets. The government should prepare new economic and financial sector reform programs. These should focus on reducing government expenditure, increasing government revenue, reducing the government's borrowings, and accelerating the privatization of commercial activities now carried out in the public sector. In addition, the reforms should accelerate the privatization of public sector banks and gradually deregulate the provident fund

Table 17. Internal Impediments of High Priority

Rules, regulations, and regulators

Lack of sophisticated understanding by regulators

Uncertainty as to the apex organization responsible for supervising the corporate debt markets

RBI's tolerance of weaker prudential banking policies, which delays improvements in efficiency in the banking sector

Poor monitoring of organizations managing long-term savings

Inadequate standard accounting practices

Limited overall knowledge of the role of the debt market in private sector development, especially in the public sector

Central market infrastructure

No real-time infrastructure for transactions in government and corporate debt securities undertaken outside the NSE system

Limited distribution of market information for secondary market transactions in government and corporate debt securities

RBI's limited MIS systems

Primary dealer structure not achieving RBI's objectives owing to the manner in which the RBI is undertaking government debt management operations

Outgoing government's failure to implement proposed stamp duty reforms, which is seriously limiting secondary market trading in corporate debt securities

Credit rating agencies not very proactive.

Market participants: issuers

Limited secondary market trading

Low retail interest

Market participants: investors

Continuing low level of investor confidence in debt securities, owing to the 1992 scandal in government securities

Deficiencies in the corporate debt private placement market

Nonbank wholesale investors relatively inactive in the secondary markets

Limited reasonably priced training facilities

Continuing poor secondary market liquidity

Weak portfolio management skills

Market participants: intermediaries

Limited market-making capability

Thin secondary markets

Table 18. Internal Impediments of Moderate Priority

Central market infrastructure
Credit rating agencies not very proactive

sector, through the progressive elimination of guaranteed investment returns by provident funds and a gradual relaxation in provident fund investment restrictions. It is also essential to develop and implement a strategy for reducing the fiscal deficit. Multilateral agencies should provide the incoming government with continued assistance.

On the broader legal and regulatory front, the Ministry of Finance, RBI, and SEBI should encourage the incoming government to promptly enact the debt market legislation that the outgoing government did not pass before it left office. This legislation would have exempted from stamp duties those debt market transactions in securities that are held in dematerialized form; would have amended the Securities Contract (Regulations) Act to allow the introduction of new debt instruments to broaden the debt market and creation of an effective regulatory agency for this market; and would have replaced the Public Debt Act to allow the electronic transfer of government securities. In addition, the government should enact legislation authorizing deregulation of the insurance sector. The RBI has indicated that it expects amendments to the Securities Contract (Regulations) Act and the Public Debt Act to be passed by the end of 2000. Finally, the government should initiate an extensive review of commercial legislation that is outdated and a barrier to achieving a major improvement in corporate governance. This matter is now under review and should be given the government's full support.

Also important, accounting practices for some elements of debt market transactions should be brought in line with generally accepted international standards. The Ministry of Finance (together with the RBI and SEBI) should encourage the Institute of Chartered Accountants of India to amend its standard accounting practices as soon as practicable.[4]

Across the Financial Sector: To guard against unforeseen setbacks, the RBI should ensure that all banks implement the planned banking sector reforms by 2002. To strengthen the government securities market, the RBI should review the present primary and satellite dealer structure in government securities and determine whether any changes to current policy are appropriate; complete the planned introduction of a national branch office settlement system to help develop a retail market in government securities; and review the present timetable for the planned introduction of a real-time gross settlement system for government security transactions. The RBI should also consider integrating its depository and clearinghouse systems with those of the NSE if the implementation of a real-time gross settlement system does not appear feasible within, say, two years.

Removing Internal Impediments

These recommendations can be divided into three groups: those pertaining to rules, regulations, and regulators; central market infrastructure; and market participants.

Rules, Regulations, and Regulators. As soon as the government has determined whether RBI or SEBI is to be responsible for regulating the corporate debt market, the organization selected should review the regulatory requirements for the corporate debt private placement market to determine whether any regulation of this market is necessary. From time to time, the RBI, Ministry of Finance, and SEBI need help in understanding technical issues associated with the development of the debt market and in formulating related policies. That means the Indian government should increase its financial support to the ministry and SEBI to allow them to play larger roles in promoting the debt markets.

Central Market Infrastructure. The regulatory agency for the corporate debt market should monitor clearinghouse arrangements and act as a catalyst for development of additional infrastructure, if necessary. Current trading in corporate debt securities undertaken outside the NSE structure is limited because the appropriate trading and settlement infrastructure is lacking. This matter must be addressed in the long term. The immediate concern should be to develop the government securities market infrastructure, which is slated within the next two years.

Market Participants. All market participants need to learn more about debt markets. Mechanisms are required to provide long-term educational services for the different groups participating in the wholesale debt markets. Likely participants would include professionals employed in the accounting, actuarial, banking, corporate, financial, insurance, legal, and regulatory sectors. The first kind of technical assistance provided should enable interested Indian parties to evaluate possible educational mechanisms and prepare preliminary cost estimates, taking into consideration international experience. A draft strategic plan should subsequently be prepared for the mechanism of choice. Some possible mechanisms would be to expand the role of the present FIMMA organization, create a new entity to service these needs, or add this activity to an existing private sector organization that has a marked focus on education. To judge by the apparent interest in these mechanisms, there should be little difficulty obtaining a private sector sponsor for this exercise. With increased access to such educational services, portfolio management skills in the private sector should improve greatly over the long term.

Investors urgently need to see improvements in the management of private sector portfolios. Present governance requirements for organizations managing long-term savings are rudimentary and should be revised.

CONCLUSIONS

India's debt markets have experienced considerable growth since 1992. The RBI has helped the government securities market expand by introducing new debt instruments and creating market structures to boost secondary market trading. These steps have been very beneficial, as can be seen in the increasing volume of securities traded. Even so, market volumes in government securities remain below the levels prevailing before the 1992 scandal emanating from fraudulent trading in securities.

Activity in the primary corporate debt market has also increased, following the liberalization of investment regulations for banks, insurance companies, and provident funds. To date, the increased primary activity has not had much effect on secondary market activity owing to the stamp duty on secondary market debt transactions.

Government securities and corporate debt markets currently face a number of impediments to growth. Many can be easily surmounted. Others will require a firm commitment by the parties affected. The RBI, Ministry of Finance, and SEBI must work together to remove these obstructions as soon as practicable. The Regulators (particularly the RBI, Ministry of Finance, and SEBI) should adopt a flexible approach to changing market infrastructure and formulating supporting policies because it is essential to achieve material improvements within a relatively short period of time. The opportunity is ripe: the new government has indicated that further economic and financial reforms are likely to be introduced during its term in office.

REFERENCES

Association of Mutual Funds in India. 1999. "AMFI Monthly" (October). Issue IV (Internet version).

Banks, Erik. 1994. *The Emerging Fixed-Income Markets in Asia: A Country-by-Country Guide to the Structure, Practices and Players of the World's Fastest Growing Debt Markets.* Chicago, Ill.: Probus.

ICICI Securities and Finance Company Ltd. 1999. "Mark to Market," for the week ending July 31.

India, Government. 1998. "Economic Survey 97–98, Capital and Money Markets."

_______. 1999. "Economic Survey 98–99, Capital and Money Markets."

International Finance Corporation. 1999. "South Asia Debt Market Symposium October 1999: Informal Meeting Notes." Washington, DC.

National Stock of Exchange India Limited (NSE). 1998. *Indian Securities Market: A Review* (October).

Reserve Bank of India (RBI). 1997–98. "1997–98 Annual Report."

_______. "1998–99 Annual Report" (Internet edition).

_______. "Bulletin May 1999."

_______. 1999. "Debt Market in India: Reforms, Impact and Future Agenda." Speech delivered by Usha Thorat, RBI Central Office, to South Asia Debt Market Symposium (October).

SBI Gilts Limited. 1999. "Market Analysis—Review of Fortnight ended 31 July 1999" (Internet version).

ENDNOTES

1. While official Indian publications use the figure crore (= 10,000,000), numbers in this discussion have been converted into billions. "Billion" is defined as one thousand million (= 1,000,000,000). Thus Rs. 88,937 crore = Rs. 889.37 billion.

The Indian Central Statistics Office's "Quick Estimates," as reported in RBI (1998–99).

2. The SGL is where the RBI records who owns the government securities.

3. For the purposes of this discussion, external impediments are deemed to be influences outside the capital markets, but include forces within the country. Internal impediments are related specifically to the capital markets and include regulators, market infrastructure, issuers, investors, and intermediaries. This definition has been suggested by IFC. External and internal impediments to the development of the bond market in India are discussed later in the chapter.

4. SEBI should be proactive in promoting efforts by the Institute of Chartered Accountants of India to adopt international accounting standards on all accounting issues associated with fixed-interest securities. Matters of concern to wholesale investors in corporate debt securities include the determination of accrued interest income, the valuation of investments, and accounting for repo transactions.