

VI

PUBLIC DEBT MANAGEMENT

VI.1 During 2005-06, the Reserve Bank, as the Government's debt manager, continued to be guided by the twin objectives of minimisation of cost over time and elongation of the maturity profile of Government securities in a scenario of an upward shifting yield curve. A number of developments had an impact on the management of the internal marketable debt as well as the liquidity position of the Central and State Governments during 2005-06. First, the sustained pick-up in non-food credit coupled with the rise in international crude oil prices and global interest rates put some upward pressure on domestic interest rates, which affected the volume of transactions and yields on Government securities. Second, reflecting the ongoing fiscal consolidation process, gross fiscal deficit (GFD) of State Governments showed further moderation during 2005-06, which helped to contain the pressure on the demand for funds. Third, following the recommendations of the Twelfth Finance Commission (TFC), Central loans for State Plan schemes were eliminated during 2005-06, exposing the States to greater market discipline. Finally, the financing pattern of the GFD of the State Governments continued to reflect the predominance and buoyancy of small savings, an 'autonomous' source of funds, which helped to reduce the need for accessing alternative market resources, *albeit* at a relatively higher cost.

VI.2 The Reserve Bank continued with its efforts towards imparting liquidity to the Government securities market by favouring reissuances of existing securities. The borrowing programme of the Central Government which was considerably larger than that in the previous year was completed successfully in 2005-06 without any devolvement on the Reserve Bank. Market borrowings by States during 2005-06 also elicited good response reflecting improved market perception of States' fiscal position. Both the Central and the State Governments recorded an improvement in their liquidity positions. The issuances of floating rate bonds were discontinued in 2005-06 due to lukewarm market response in the previous year on concerns about issues relating to their pricing and liquidity.

VI.3 The weighted average cost of market borrowings of the Centre and the States increased for the second consecutive year amidst the general hardening of interest rates across the financial

markets. The weighted average maturity of the primary issuances of loans of the Centre during 2005-06 increased by nearly three years as the lukewarm response from banks was neutralised by increased participation by non-bank players, such as insurance companies and pension/provident funds, with higher appetite for longer maturity papers. Furthermore, there was a decline in the spread between primary market cut-off yields in the auctions of dated securities and the prevailing secondary market yields of securities of similar maturity reflecting efficient price discovery on account of the concerted efforts by the Reserve Bank in deepening and widening the market.

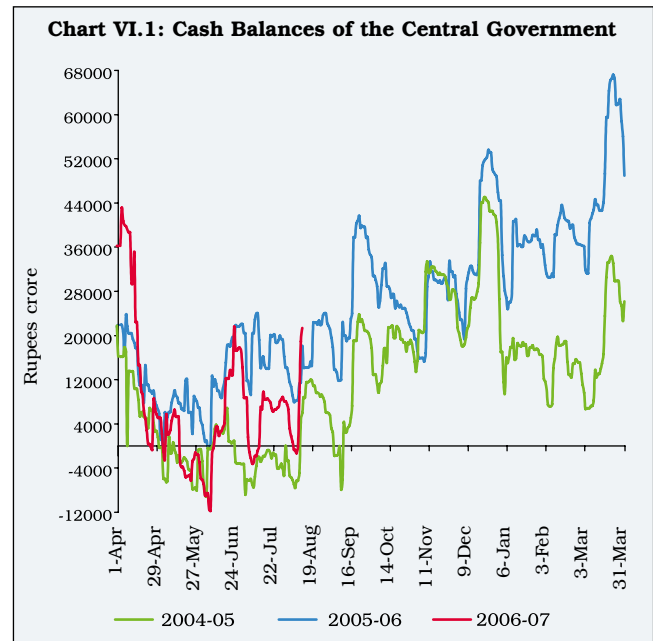
VI.4 This Chapter reviews the debt management operations of the Reserve Bank taking into account the monetary policy objectives and the prevailing macroeconomic situation. The review covers the trends in cash management by the Centre as well as the State Governments, progress of market borrowings of the Central and State Governments and maturity profile of the outstanding stock of Government securities. Initiatives taken during the year to put in place institutional arrangements to meet the debt management objectives in the context of the withdrawal of the Reserve Bank from the primary market for Central Government securities effective April 2006 and cessation of Central loans for State plans are also presented.

CENTRAL GOVERNMENT

Ways and Means Advances

VI.5 The limits of Ways and Means Advances (WMA) to the Central Government for the fiscal year 2005-06 were retained at Rs.10,000 crore during the first half of the year (April–September) and Rs. 6,000 crore during the second half of the year (October–March). The interest rate on WMA continued to be at the Bank Rate and that on overdraft at two percentage points above the Bank Rate. The minimum balance required to be maintained by the Government of India with the Reserve Bank was to be not less than Rs.100 crore on Fridays, on March 31 (*i.e.*, closure of Government of India's financial year) and on June 30 (*i.e.*, closure of the annual accounts of the Reserve Bank) and not less than Rs.10 crore on other days. Reflecting the improvement in its cash position, the

Central Government did not resort to overdrafts during 2005-06. Furthermore, the Centre availed WMA on two days only during the year (May 3 and June 4, 2005). In the previous year, although the Centre had not resorted to overdraft, it had availed of WMA on a number of occasions till September 9, 2004. Since then, the Central Government continuously maintained surplus cash balances in its current account with the Reserve Bank up to end-March 2006. While the build-up of the Centre's surplus during 2004-05 had mainly reflected substantial inflows on account of prepayment of high cost debt by the States under the debt swap scheme (DSS), the build-up during 2005-06 mainly reflected the investment of the State Governments in 14-day Intermediate Treasury Bills and auction Treasury Bills. With the ceiling on investment balance retained at Rs. 20,000 crore since October 2004, the Central Government's cash balances in the form of investment balance (Rs.20,000 crore) and cash balance (Rs.28,928 crore) parked as non-interest bearing deposits with the Reserve Bank amounted to Rs.48,928 crore as at end-March 2006 as compared with Rs.26,202 crore in the previous year (Chart VI.1). Large surplus cash balances can have



significant impact on liquidity in the banking system necessitating active management of surplus cash balances (Box VI.1).

Box VI.1

Management of Surplus Cash Balances: Cross Country Practices

During 2005-06, the build-up and volatility in Central Government's cash surplus with the Reserve Bank had a significant impact on liquidity conditions in India. Government's cash balances, when maintained with the central bank, do not form part of the liquidity in the banking system. Therefore, sharp increase in surplus balances in Government's account reduces liquidity in the banking system and this could drive up the short term interest rates. Arrangements which facilitate transfer of surplus funds from Government's account to deficit participants in the system could help in better management of liquidity in the system. Such arrangements not only enable the Government to earn better returns on the cash balances, but also mitigate volatility in short-term interest rates and keep overnight money market rates stable.

Arrangements aimed at achieving such transfer of liquidity vary widely across countries. For instance, in Canada, the cash balances of the Central Government are auctioned in a competitive auction twice a day to a select set of participants. The participants' auction limits (collateralised and uncollateralised) are decided on the basis of their credit rating. All Government receipts and disbursements flow through the Government's accounts at the Bank of Canada and the accounts are managed such that the balances at the central bank are essentially nominal. As a result, the Central Government invests effectively all of its cash balances in the market almost on a daily basis.

In contrast, in other G-7 countries, substantial cash balances are generally maintained with their respective

central banks. Japan and Italy, for example, maintain all Government balances at their respective central banks. France and the United States maintain a significant working balance at their central banks while amounts beyond the targeted working balances are invested in the market. Germany invests cash surpluses in the market only on rare occasions.

Countries that keep balances at the central bank, of course, rely on the central bank to invest the funds. The United States allocates its balances to market participants on a *pro rata* basis at a fixed reference rate of interest (currently 25 basis points below the Fed funds rate), while France and the United Kingdom deal directly with market participants. The United States requires full collateral for its cash balances while France and the United Kingdom invest mainly through the repo market. These country practices may be useful in designing an appropriate cash management strategy for the Government of India.

References

1. Federal Reserve Bank of New York (2004), "Recent Innovations in Treasury Cash Management", Current Issues in Economics and Finance, Vol.10, No. 11, November.
2. Bank of Canada (2000), "Proposed Revisions to the Rules Pertaining to Auctions of Receiver General Term Deposits", Bank of Canada Discussion Paper, July.

VI.6 With a view to achieving a smooth transition to the new regime as envisaged in the Fiscal Responsibility and Budget Management (FRBM) Act whereby the participation of the Reserve Bank in the primary issuance of Central Government securities has been prohibited with effect from April 1, 2006, and to facilitate market preparedness, the WMA arrangements for 2006-07 were revised in consultation with the Government. As per the revised arrangement, the WMA limits would be fixed on a quarterly basis instead of the existing half-yearly basis. Accordingly, the WMA limits for 2006-07 have been placed at Rs.20,000 crore and Rs.10,000 crore for the first and second quarters, respectively, and Rs.6,000 crore each for the third and fourth quarters of the year. The Reserve Bank would retain the flexibility to revise the limits in consultation with the Government of India taking into consideration the transitional issues and prevailing circumstances. Furthermore, the interest rates on WMA and overdraft have been linked to the repo rate as against the Bank Rate hitherto, following its emergence as the short-term reference rate. Accordingly, the interest rate on WMA will be at the repo rate and that on overdraft will be at repo rate plus two percentage points. During 2006-07 so far (up to August 18, 2006), the Centre did not resort to overdraft but availed of WMA on five occasions (39 days in all).

Treasury Bills

VI.7 During 2005-06, the notified amounts of regular issuances of 91-day and 364-day Treasury Bills (*i.e.* excluding that under Market Stabilisation Scheme (MSS)) were retained at Rs.500 crore and Rs.1,000 crore, respectively. The auction of 182-day Treasury Bills (TBs) was re-introduced in April 2005 with a notified amount of Rs.500 crore. All the auctions during the year were held as per schedule except for the auctions of 91-day and 182-day TBs scheduled

for July 27, 2005 which were cancelled due to declaration of holidays on July 27-28, 2005 by the State Government on account of heavy rains in Mumbai.

VI.8 The notified amount of TBs issued under the MSS was, however, varied during the year keeping in view the prevailing liquidity conditions. During the period up to August 24, 2005, the notified amount for issuance under the MSS was Rs.1,500 crore in case of 91-day TBs and Rs.1,000 crore each in case of 182-day TBs and 364-day TBs. Subsequently, the notified amount in respect of 91-day TBs under MSS was increased to Rs.3,500 crore for the five auctions between August 31, 2005 and September 28, 2005. In view of liquidity conditions, the Reserve Bank rejected all the bids for the TBs auctions under the MSS scheduled on November 9, 2005 and discontinued the auctions under the MSS from November 16, 2005 onwards. On a review of the liquidity conditions, the auctions under the MSS were re-introduced effective May 3, 2006.

VI.9 All the issues of regular TBs were fully subscribed to by the market and there was no devolvement on the Reserve Bank. During 2005-06, non-competitive bids amounting to Rs.25,368 crore, Rs.2,250 crore and Rs.2,019 crore were received in the auctions of 91-day, 182-day and 364-day TBs, respectively, mainly reflecting the investment of surplus cash balances with State Governments.

VI.10 The primary market yields of TBs edged higher during 2005-06 mirroring the liquidity conditions as well as movements in the LAF (repo/reverse repo) rates (Table 6.1 and Appendix Table 58). The increase in primary market yields during the year mainly took place after mid-September 2005, reflecting liquidity tightening due to festival demand for cash, quarterly advance tax outflows, and IMD redemption on December 29, 2005 amidst strong credit demand. After recording a somewhat sharp jump during January-

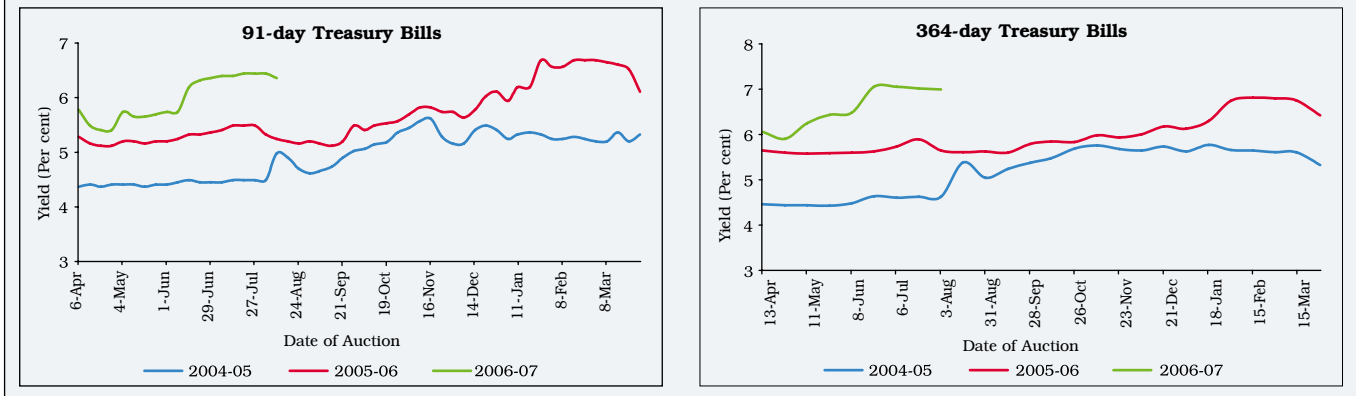
Table 6.1: Profile of Treasury Bills
(At Face Value)

Type of Treasury Bill	Weighted Average Cut-off Yield (Per cent)		Gross Amount		Net Amount		Outstanding Amount	
	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06	End-March 2005	End-March 2006
	1	2	3	4	5	6	7	8
91-day	4.89	5.51	1,00,592 (67,955)	1,03,424 (52,057)	20,653 (19,500)	-11,474 (-19,500)	27,792 (19,500)	16,318 (0)
182-day*	-	5.65	- (13,078)	26,828	- (3,000)	9,771	- (3,000)	9,771
364-day	5.15	5.87	47,132 (20,981)	45,018 (16,000)	20,997 (20,981)	-2,114 (-4,981)	47,132 (20,981)	45,018 (16,000)

* : 182-day TBs were re-introduced on April 6, 2005.

Note : Figures in parentheses pertain to issuances under the MSS.

Chart VI.2: Primary Market Yields of Treasury Bills



February 2006 reflecting the continued tight liquidity conditions in the aftermath of IMD redemption, the yields eased during March 2006 with the easing of liquidity conditions (Chart VI.2). The primary market weighted average cut-off yields increased by 62-72 basis points during 2005-06.

VI.11 The yield spread between 91-day and 364-day TBs turned negative in January 2006 but remained otherwise positive and varied between 46 basis points (September 2005) and 15 basis points (February and March 2006) during 2005-06 (Table 6.2).

VI.12 On March 24, 2006, the calendar for the regular auction of TBs for the period April 1, 2006 to March 31, 2007 was announced. The notified amounts

Table 6.2: Treasury Bills - Primary Market

Month	Notified Amount (Rupees crore)	Average Implicit Yield at Minimum Cut-off Price (Per cent)			Bid-Cover Ratio*		
		91-day	182-day	364-day	91-day	182-day	364-day
1	2	3	4	5	6	7	8
2005-06							
April	19,000	5.17	5.36	5.62	4.03	4.48	2.54
May	15,000	5.19	5.35	5.58	3.30	3.37	2.29
June	18,500	5.29	5.37	5.61	1.54	2.42	1.81
July	11,500	5.46	5.67	5.81	1.21	1.79	1.68
August	21,000	5.23	5.42	5.63	3.07	2.68	2.54
September	23,000	5.24	5.37	5.70	1.52	1.45	1.61
October	15,000	5.50	5.71	5.84	1.69	1.53	3.44
November	11,000	5.76	5.85	5.96	2.12	1.92	2.30
December	5,000	5.89	6.00	6.09	3.07	2.97	2.36
January	5,000	6.25	6.22	6.21	2.86	2.83	2.72
February	5,000	6.63	6.74	6.78	3.04	2.07	2.71
March	6,500	6.51	6.66	6.66	4.17	3.43	3.36
2006-07							
April	5,000	5.52	5.87	5.98	5.57	4.96	2.03
May	18,500	5.70	6.07	6.34	1.88	1.84	1.69
June	15,000	6.15	6.64	6.77	1.63	1.35	2.11
July	15,000	6.41	6.75	7.03	1.82	1.55	3.12

* : Ratio of Competitive Bids Received to Notified Amount.

Note : 182-day TBs were re-introduced with effect from April 6, 2005.

of 91-day, 182-day and 364-day TBs were kept unchanged at Rs.500 crore, Rs.500 crore and Rs.1,000 crore, respectively. As noted earlier, auctions of TBs under the MSS were resumed from May 3, 2006. The notified amount under MSS was placed at Rs. 1,500 crore in case of 91-day TBs and Rs. 1000 crore each in the case of 182-day and 364-day TBs. The yields of TBs dipped in April 2006 and increased thereafter. The yield spread between 91-day and 364-day TBs increased from 46 basis points in April 2006 to 62 basis points in July 2006.

Dated Securities

VI.13 During 2005-06, the gross market borrowings (including dated securities and 364-day TBs but excluding issuances under MSS) raised by the Central Government were significantly higher at Rs.1,60,018 crore (net Rs.98,237 crore) than the previous year, reflecting discontinuation of DSS on the one hand and requirements of financing a higher GFD on the other hand (Rs.1,46,175 crore in 2005-06 as compared with Rs.1,25,202 crore a year ago) (Table 6.3 and Appendix

Table 6.3: Gross and Net Market Borrowings of the Central Government

Market Borrowings	(Rupees crore)				
	2004-05 (Actual)	2005-06 (Estimates)#	2005-06 (Actual)	2006-07 (Estimates)#	2006-07 (Actual)*
1	2	3	4	5	6
Total	1,06,501 (46,050)	1,65,573 (1,03,791)	1,60,018 (98,237)	1,81,875 (1,13,778)	93,821 (52,715)
<i>Of which:</i>					
(i) Dated Securities	80,350 (46,034)	1,39,573 (1,03,942)	1,31,000 (95,370)	1,55,018 (1,15,939)	80,000 (50,212)
(ii) 364-day Treasury Bills	26,151 (16)	26,000 (-151)	29,018 (2,867)	26,857 (-2,161)	13,821 (2,503)

: Net market borrowings as per budget estimates and repayments as per RBI records.

* : Up to August 21, 2006.

Note : Figures in parentheses represent net borrowings.

Table 59). There was no devolvement on the Reserve Bank or Primary Dealers (PDs) during 2005-06 as against devolvement of Rs.847 crore on the Reserve Bank and Rs.985 crore on PDs during the previous year. During 2005-06, Rs.10,000 crore was, however, privately placed with the Reserve Bank on March 6, 2006 as against Rs.350 crore during 2004-05.

VI.14 The Reserve Bank persisted with the policy of passive consolidation and elongation of maturity profile of Government dated securities during the

year. Out of 30 issues of dated securities during the year, 29 were reissues while a new security was issued to provide a benchmark for 30-year maturity. Thus, the share of reissuances in the total securities issued increased to 97.7 per cent during 2005-06 from 82.1 per cent during 2004-05. All issuances were by way of fixed rate securities during 2005-06. The issuance of Floating Rate Bonds (FRBs) was not undertaken on account of lukewarm market response during 2004-05 reflecting, *inter alia*, issues relating to liquidity and pricing (Box VI.2).

Box VI.2 Floating Rate Bonds

Floating Rate Bonds (FRBs) are medium to long term debt instruments offering variable coupons linked to some prefixed benchmark rate, which is usually some short-term rate such as yields on Treasury Bills (TBs) or money market rate. Coupons also include a fixed spread, which may, *inter alia*, reflect credit risk of issuer, liquidity risk and demand and supply of FRBs at the time of issue. The spread, which remains fixed throughout the tenure of the bonds, is decided at the time of first issuance of the bonds either through an auction or is prefixed by the issuer just before the issuance of bonds. The coupon rate of the bonds is reset at current market rate on every coupon reset date providing market risk immunising characteristic to FRBs. This makes them an attractive investment instrument to depository institutions particularly in a rising interest rate scenario. To the issuer, the bonds offer the advantage of bringing down the cost of borrowing in falling interest rate scenario but in a rising interest rate scenario the debt servicing cost may increase.

In India, the FRBs were issued by the Government of India for the first time on September 29, 1995. As the first issuance failed to generate enthusiastic response, no further issuance of FRBs was undertaken for nearly 6 years. Subsequently, on November 21, 2001, the FRBs were reintroduced with some modification in the structure on the request of market participants. Overwhelming market response showed the way for subsequent issuances and till October 9, 2004 ten issuances of FRBs were undertaken. However, the later phase witnessed gradual erosion in the market interest for FRBs, with last two FRBs devolving partially on the Reserve Bank and the PDs. Erosion in the market interest for FRBs at that time was, *inter alia*, attributed to strong credit pick-up, low secondary market liquidity in FRBs, structure related issues and consequent complex pricing methodology followed by market participants. As regards low secondary market liquidity in FRBs, it could be attributed to (i) low trading interest of market participants in the FRBs as they, by design, are a hedging instrument and offer limited scope for trading gains, (ii) no reissuance of FRBs on account of complexities associated with pricing FRBs, (iii) preference of the commercial banks to place these bonds under 'HTM' category reducing the availability of bonds for trading, and (iv) complex pricing method which deterred the market participants from undertaking outright transactions in FRBs.

The complexities in pricing of existing FRBs are associated with the method of valuation used by market participants and the benchmark for determining the semi-annual coupon payments. Theoretically, an ideal benchmark instrument should have the following characteristics: (i) the tenor of that instrument should equal the coupon payment period as well as the coupon reset period of the bonds, and (ii) the yield of the instrument should reflect the prevailing market yield. In the absence of any instrument fulfilling the above characteristics, 364-day TBs were used as a benchmark instrument at the time of re-introduction of FRBs. The use of cut-off yield of 364-day TBs as benchmark rate for resetting semi-annual coupon has contributed to the complexity in the pricing of FRBs. The issue could theoretically be addressed by making use of 182-day TBs as the benchmark instrument but these TBs have not emerged so far as a liquid instrument.

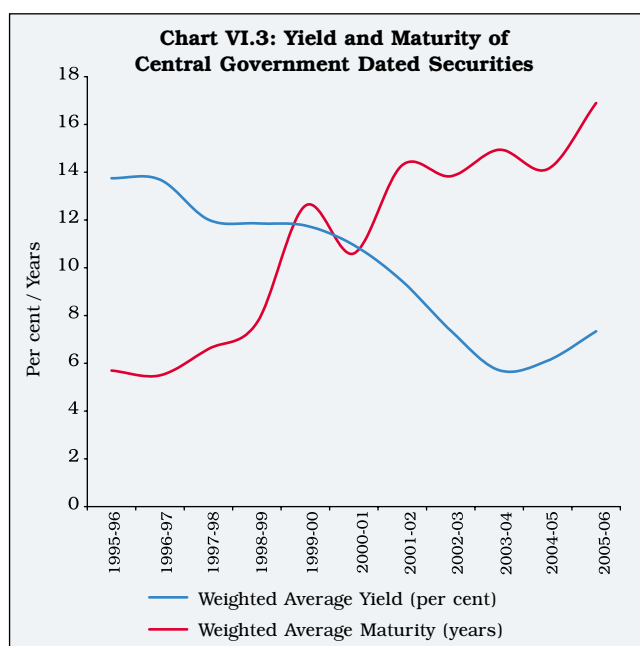
The existing valuation method used by market participants assumes FRBs as long term bonds, paying variable coupons till the date of maturity. The (dirty) price of FRBs as per this method is arrived at by discounting the sum of the expected coupon flows on the next coupon payment date and the expected price of the FRBs on the next coupon reset date by a suitable discount factor for a period covering the valuation date to the next coupon reset date. The expected price of FRBs on the next coupon payment date is recursively derived from the expected price on the maturity date. For this purpose, forward rates computed from the zero coupon rates, which are adjusted for convexity and time factors, are used to estimate the expected coupon payment rate on each coupon reset dates and also the suitable discount factor. Besides complexity, the above method also suffers from a lacuna that the price of FRBs under this method does not necessarily come back to its par value on a reset date, which undermines the interest rate risk immunisation characteristic of the bonds. The existing methodology for pricing of FRBs, therefore, needs simplification. A simpler method for pricing the FRBs such as one which uses spread based pricing, as is the case internationally, may perhaps be more appropriate.

References

1. Fabozzi, F.J. and S.V.Mann (2000), *Floating Rate Securities*, John Wiley & Sons.
2. FIMMDA (2001), "Valuation Methodology for SLR and non-SLR Securities".

VI.15 During 2005-06, as against Rs.83,000 crore to be issued as per the issuance calendar for the first half (April 1, 2005 - September 30, 2005), only Rs.81,000 crore were raised through dated securities as the notified amount in the auction of dated security held on May 3, 2005 was reduced from Rs.4,000 crore to Rs.2,000 crore. Taking into account this reduction in the notified amount, the amount of dated securities to be issued during the second half of the year (October 2005-March 2006) as per the issuance calendar was placed at Rs.58,000 crore. Against this, the actual issuance was lower at Rs.40,000 crore. This shortfall was on account of (i) rejection of bids for an issue of Rs.6,000 crore on October 6, 2005, (ii) cancellation of auction of dated securities scheduled for October 18-25, 2005 for an amount of Rs.4,000 crore, (iii) reduction in the notified amount from Rs.6,000 crore to Rs.3,000 crore in the auction of dated security on February 7, 2006, and (iv) cancellation of the auction of dated security scheduled for February 14-22, 2006 for an amount of Rs.5,000 crore. As against this, the Government of India privately placed dated securities for an amount of Rs.10,000 crore with the Reserve Bank on March 6, 2006, which was outside the issuance calendar. As a result, the total borrowings of the Centre through dated securities amounted to Rs.50,000 crore in the second half of the fiscal year.

VI.16 The weighted average yield of the dated securities issued during 2005-06 increased further by 123 basis points to 7.34 per cent. The weighted average maturity of the dated securities issued during 2005-06 increased by 2.77 years to 16.90 years,



reflecting appetite for longer maturity papers by non-bank investors such as insurance companies (Table 6.4, Appendix Table 60 and Chart VI.3). Despite an increase in the yield during the year, the weighted average coupon on the outstanding stock of Government securities declined further, *albeit* marginally, during the year.

VI.17 During 2005-06, the spread between primary cut-off yields in the auctions of dated securities and the prevailing secondary market yields of dated securities of similar maturity ranged between (-)12 to

Table 6.4: Central Government's Market Loans - A Profile*

(Yield in per cent/Maturity in years)

Year	Range of YTM's at Primary Issues			Weighted Average Yield	Range of Maturities of New Loans	Weighted Average Maturity	Weighted Average Maturity of Outstanding Stock	Weighted Average Coupon of Outstanding Stock
	Under 5 years	5-10 years	Over 10 years					
1	2	3	4	5	6	7	8	9
1997-98	10.85-12.14	11.15-13.05	-	12.01	3-10	6.60	6.50	..
1998-99	11.40-11.68	11.10-12.25	12.25-12.60	11.86	2-20	7.70	6.30	..
1999-00	-	10.73-11.99	10.77-12.45	11.77	5-19	12.60	7.10	..
2000-01	9.47-10.95	9.88-11.69	10.47-11.70	10.95	2-20	10.60	7.50	..
2001-02	-	6.98-9.81	7.18-11.00	9.44	5-25	14.30	8.20	10.84
2002-03	-	6.65-8.14	6.84-8.62	7.34	7-30	13.80	8.90	10.44
2003-04	4.69	4.62-5.73	5.18-6.35	5.71	4-30	14.94	9.80	9.30
2004-05	5.90	5.53-7.20	4.49-8.24	6.11	5-30	14.13	9.63	8.79
2005-06	-	6.70-7.06	6.91-7.79	7.34	5-30	16.90	9.92	8.75
2006-07 @	7.69-7.94	7.06-8.29	7.94-8.75	7.92	4-30	12.73	10.12	8.64

* : Excludes issuances under MSS.

YTM : Yield to Maturity.

.. : Not available.

- : No Issues.

@ : Up to August 21, 2006.

Table 6.5: Primary Cut-off Yield and Prevailing Secondary Market Yield

(Amount in Rupees crore/Yield in per cent)

Date of Auction	Residual Maturity (Years)	Gross Amount Raised	Primary Cut-off Yield	Prevailing Secondary Market Yield	Spread (Basis points) (4) - (5)	Bid-Cover Ratio
1	2	3	4	5	6	7
April 5, 2005	6.98	5,000	6.80	6.77	3	2.16
April 5, 2005	27.39	3,000	7.79	7.69	10	2.00
April 19, 2005	11.74	5,000	7.48	7.45	3	1.94
April 19, 2005	29.31	2,000	7.94	7.93	1	2.47
May 3, 2005	5.03	6,000	6.99	6.94	5	3.59
May 3, 2005	29.27	2,000	7.98	8.02	-4	3.21
May 24, 2005	16.05	4,000	7.28	7.40	-12	2.63
June 6, 2005	15.98	4,000	7.47	7.27	20	1.88
June 6, 2005	8.86	6,000	6.91	6.86	5	1.94
June 23, 2005	10.81	5,000	6.91	6.94	-3	2.28
July 5, 2005	8.16	6,000	7.06	7.11	-5	1.90
July 5, 2005	15.90	4,000	7.57	7.46	11	2.05
July 18, 2005	15.86	5,000	7.81	7.65	16	2.59
August 11, 2005	28.99	3,000	7.44	7.48	-4	2.15
August 11, 2005	11.43	5,000	7.14	7.10	4	1.82
August 18, 2005	8.66	5,000	7.04	7.03	1	2.10
August 18, 2005	28.98	3,000	7.55	7.46	9	1.63
September 8, 2005	13.04	5,000	7.23	7.19	4	1.51
September 8, 2005	30.00	3,000	7.40	7.40	0	2.17
October 6, 2005	29.92	3,000	7.66	7.58	8	1.54
October 6, 2005 *	9.10	7.13
November 8, 2005	11.44	5,000	7.33	7.31	2	1.79
November 8, 2005	29.83	3,000	7.73	7.51	22	2.13
November 24, 2005	16.47	5,000	7.43	7.41	2	2.81
December 6, 2005	11.11	5,000	7.24	7.22	2	1.78
December 6, 2005	29.76	3,000	7.55	7.53	2	2.89
January 9, 2006	5.48	6,000	6.70	6.68	2	1.67
January 9, 2006	29.66	4,000	7.43	7.43	0	2.92
February 7, 2006	11.56	3,000	7.38	7.39	-1	2.49
February 7, 2006	29.59	3,000	7.63	7.52	11	2.50
March 6, 2006 #	29.51	10,000	7.77	7.78	-1	..

* : All the bids were rejected. # : Private placement with the Reserve Bank. .. : Not Applicable.

22 basis points. However, for a majority of issues (20 out of the 29 auctions of dated securities), the spread ranged lower between (-) 5 to 5 basis points, indicating efficient price discovery in the primary auctions (Table 6.5).

VI.18 Securities of over 10-year maturity continue to represent the largest share in the outstanding stock of securities as well as in new issuances (Table 6.6).

VI.19 The repayment schedule of outstanding market loans of the Central Government as on March 31, 2006 indicates bunching of repayments in the short to medium term period. Repayment obligations would be of the order of around Rs.60,000 crore during 2010-11 to 2013-14 and 2015-16 to 2017-18 (Table 6.7).

Table 6.6: Maturity Profile of Central Government Dated Securities

(Per cent)

Year	Issued during the Year			Outstanding Stock (End-March)		
	Under 5 Years	5-10 Years	Over 10 Years	Under 5 Years	5-10 Years	Over 10 Years
1	2	3	4	5	6	7
1997-98	18	82	0	41	41	18
1998-99	18	68	14	41	42	16
1999-00	0	35	65	37	39	24
2000-01	6	41	53	27	47	26
2001-02	2	24	74	31	36	33
2002-03	0	36	64	26	35	39
2003-04	5	18	77	24	32	44
2004-05	4	19	77	27	30	43
2005-06	0	26	74	26	31	43

Table 6.7: Repayment Schedule of Central Government Dated Securities

(As on March 31, 2006)

(Rupees crore)

Year	Amount
1	2
2006-07	44,079 *
2007-08	51,876 **
2008-09	44,028
2009-10	52,589
2010-11	62,586
2011-12	61,581
2012-13	62,074
2013-14	65,009
2014-15	53,018
2015-16	65,244
2016-17	63,130
2017-18	63,774
2018-19	42,478
2019-20	28,000
2020-21	11,000
2021-22	26,213
2022-23	41,000
2023-24	21,000
2025-26	16,688
2026-27	15,000
2027-28	15,000
2028-29	11,000
2032-33	17,000
2034-35	14,350
2035-36	29,000
Total	9,76,717

* : Includes repayment of Rs.5,000 crore under MSS.

** : Includes repayment of Rs.6,000 crore under MSS.

VI.20 The declining trend in the share of high cost debt continued during 2005-06. The share of the outstanding stock with a coupon of less than 8 per cent increased to 50.2 per cent from 47.6 per cent in the previous year (Table 6.8).

Table 6.8: Interest Rate Profile of the Outstanding Stock of Central Government Securities

Interest Rate (Per cent)	Outstanding Amount (Rupees crore)		Share in Total (Per cent)	
	end-March 2005	end-March 2006	end-March 2005	end-March 2006
1	2	3	4	5
4.00-4.99	42,500	19,500	4.8	2.0
5.00-5.99	96,818	83,818	10.8	8.6
6.00-6.99	1,51,772	1,62,307	17.0	16.6
7.00-7.99	1,34,540	2,24,540	15.0	23.0
8.00-8.99	37,638	60,973	4.2	6.2
9.00-9.99	56,424	59,424	6.3	6.1
10.00-10.99	83,537	93,067	9.3	9.5
11.00-11.99	1,65,646	1,59,308	18.5	16.3
12.00-12.99	94,249	94,249	10.5	9.7
13.00-14.00	32,222	19,530	3.6	2.0
Total	8,95,348	9,76,717	100.0	100.0

VI.21 As noted earlier, under the FRBM Act 2003, the Reserve Bank has been prohibited from subscribing to the primary issues of the Central Government securities from the financial year beginning April 1, 2006. In order to ensure a smooth transition to the new system, the Reserve Bank has taken a number of measures to make the market deeper, broader and more liquid while improving trading/settlement and institutional infrastructure (Box VI.3).

Oil Bonds

VI.22 With a view to compensating oil marketing companies for under-recoveries in their domestic LPG and kerosene sales under the Public Distribution System (PDS) during the financial year 2005-06, the Government of India issued six special marketable dated securities to oil marketing companies on two occasions, viz., March 7, 2006 and March 23, 2006, aggregating Rs. 11,500 crore. These securities with interest rates in the range of 7.07 per cent and 7.61 per cent were issued with 3-years, 6-years and 9-years maturities without SLR status as these were not part of the approved market borrowing programme of the Government. The coupon rates on these bonds were fixed on the basis of prevailing secondary market yields with a suitable non-SLR spread of 20-25 basis points.

Recapitalisation Bonds

VI.23 The Union Budget 2006-07 announced the unwinding of entire outstanding Recapitalisation Bonds/Special Securities issued to nationalised banks, amounting to Rs. 20,809 crore, through conversion into tradable, SLR eligible, Government of India dated securities. The substitution of non-tradable securities with tradable securities having SLR status would facilitate increased access of the banking sector to additional resources for lending to productive sectors especially agriculture and SME sectors, in the light of the increasing credit needs of the economy.

Market Borrowings during 2006-07

VI.24 Market borrowings (including dated securities and 364-day TBs) of the Central Government for the year 2006-07 are budgeted at Rs.1,81,875 crore (net Rs.1,13,778 crore), Rs.21,857 crore higher than the actual amount raised in 2005-06. On March 24, 2006, the issuance calendar for dated securities for the first half of 2006-07 fixed at Rs.89,000 crore (Rs.81,000 crore raised during the corresponding period of last year) was issued in consultation with the Central Government (Table 6.9). During 2006-07 so far (up to August 21, 2006), gross market borrowings (excluding

Box VI.3**Implementation of the FRBM Act : Reserve Bank's Initiatives**

As per the provisions under the Fiscal Responsibility and Budget Management (FRBM) Act 2003, the Reserve Bank's participation in the primary market for Central Government Securities stands withdrawn beginning April 1, 2006.

In order to address the issues arising from these provisions of the FRBM Act and to equip the Reserve Bank as well as the market participants appropriately, a Technical Group on Central Government Securities Market was constituted which proposed a medium-term framework for the evolution of the Central Government securities market. On the basis of the recommendations of this Group, the Reserve Bank's Annual Policy Statement of April 2005 indicated that in the post-FRBM period, the Reserve Bank would reorient Government debt management operations while simultaneously strengthening monetary operations. Accordingly, the Reserve Bank constituted a new department, named as Financial Markets Department (FMD) in July 2005, with a view to moving towards functional separation between debt management and monetary operations.

Second, it was proposed that the number of actively traded securities would be enlarged to enhance liquidity and improve pricing in the market through active consolidation in consultation with the Government while continuing the programme of reissuances. In this regard, the Annual Policy Statement of April 2006 has further proposed that identified illiquid securities will be bought from the secondary market by the Reserve Bank and once a critical amount of securities is acquired, they would be bought back by the Government to extinguish the stock. The modalities of consolidation are being worked out in consultation with the Government.

Third, the settlement system for transactions in Government securities was standardised to T+1 cycle effective May 11, 2005 to provide the participants with more processing time at their disposal and therefore, to enable better management of both funds as well as risk.

Fourth, in order to provide Negotiated Dealing System (NDS) members with a more advanced and more efficient trading platform in Government securities, the Negotiated

Dealing System - Order Matching (NDS-OM) trading module was introduced effective August 1, 2005.

Fifth, intra-day short sale was permitted in Government dated securities subject to certain stipulations with effect from February 28, 2006. The subsequent phases of short sale are proposed to be implemented after assessing the feedback and experience with intra-day short selling.

Sixth, guidelines for introduction of 'When Issued' market in Central Government securities were issued on May 3, 2006. 'When Issued' is a conditional transaction in a security authorised for issuance but not as yet actually issued. 'When Issued' market facilitates stretching the actual distribution period for each issue and allows the market more time to absorb large issues without disruption and helps in price discovery by reducing uncertainties surrounding auctions. When issued trading commenced from August 1, 2006 in respect of two securities auctioned on August 8, 2006.

Seventh, guidelines on the expansion of the permitted structure of PD business to banks which fulfil certain minimum eligibility criteria were issued on February 27, 2006.

Eighth, operational guidelines permitting stand alone PDs to diversify their activities, in addition to their core business of Government securities, were issued on July 4, 2006.

Finally, a revised scheme for underwriting commitment and liquidity support to PDs has been introduced with effect from April 1, 2006 whereby PDs are required to meet an underwriting commitment, replacing the earlier requirement of bidding commitment and voluntary underwriting.

Reference

Mohan, Rakesh (2006), "Recent Trends in the Indian Debt Market and Current Initiatives", Reserve Bank of India Bulletin, April.

issuances under the MSS) raised by the Central Government through dated securities and 364-day TBs amounted to Rs.93,821 crore (net Rs.52,715 crore) as compared with Rs.67,312 crore (net Rs.44,259 crore) during the corresponding period of the previous year. All issuances were by way of fixed coupon securities. Out of the Rs.80,000 crore raised through issuances of dated securities up to August 21, 2006, Rs.5,604 crore devolved on PDs; there was no devolvement in the previous year. The weighted average yield of dated securities issued

during 2006-07 (up to August 21, 2006) increased to 7.92 per cent from 7.27 per cent in the corresponding period of 2005-06. The spread between primary cut-off yields and the prevailing secondary market yields of dated securities ranged between (-) 15 to 8 basis points. For a majority of issues (13 out of 18 auctions) the spread ranged lower between (-) 1 to 4 basis points. The weighted average maturity of securities decreased to 12.73 years during 2006-07 (up to August 21, 2006) from 14.04 years in the corresponding period of 2005-06.

Table 6.9: Indicative Issuance Calendar and Actual Borrowings of the Central Government during 2006-07

(Amount in Rupees crore)

Borrowings as per Indicative Issuance Auction Calendar				Actual Borrowings			
Sr. No.	Period of Auction	Amount	Residual Maturity (Years)	Date of Auction	Amount	Residual Maturity (Years)	Yield (Per cent)
1	2	3	4	5	6	7	8
1.	April 3-12, 2006	5,000	10 -14 year	April 10, 2006	5,000	10.00	7.59
		3,000	20 year and above	April 10, 2006	3,000	28.33	7.97
2.	April 18-25, 2006	6,000	5-9 year	April 25, 2006	6,000	6.02	7.06
		4,000	20 year and above	April 25, 2006	4,000	26.34	8.00
3.	May 2-9, 2006	6,000	10-14 year	May 4, 2006	6,000	9.94	7.55
		4,000	20 year and above	May 4, 2006	4,000	28.26	8.14
4.	May 16-24, 2006	5,000	15 -19 year	May 23, 2006	5,000	15.00	7.94
5.	June 1-8, 2006	6,000	5-9 year	June 6, 2006	6,000	5.07	7.39
		4,000	20 year and above	June 6, 2006	4,000	30.00	8.33
6.	June 15 - 24, 2006	5,000	15-19 year	June 22, 2006	5,000	8.52	7.92
				June 22, 2006 *	4,000	14.95	8.46
				July 11, 2006	5,000	9.75	8.29
7.	July 3-11, 2006	6,000	10-14 year	July 11, 2006	2,000	28.08	8.75
		4,000	20 year and above	July 27, 2006	4,000	3.79	7.69
8.	July 17-25, 2006	5,000	15-19 year	August 8, 2006	6,000	4.90	7.86
9.	August 1-8, 2006	6,000	5-9 year	August 8, 2006	3,000	9.68	8.20
		3,000	20 year and above	August 18, 2006	5,000	10.40	8.12
10.	August 14-22, 2006	5,000	10-14 year	August 18, 2006	3,000	29.79	8.73
		3,000	20 year and above				
11.	September 4-12, 2006	6,000	10-14 year				
		3,000	20 year and above				
Total		89,000			80,000		

* : Not scheduled.

STATE GOVERNMENTS

Ways and Means Advances

VI.25 During 2005-06, the average utilisation of normal WMA, special WMA and overdrafts by the States remained substantially lower reflecting an improvement in their overall cash position (Table 6.10 and Chart VI.4).

VI.26 There was a reduction in the number of States that availed normal WMA during 2005-06 (12 States as compared with 21 States in 2004-05) as well as the number of days (ranging between 14-63 days, except for Kerala which had availed normal WMA for 240 days as compared with 348 days in 2004-05). Similarly, there was a reduction in the number of the State Governments availing overdraft

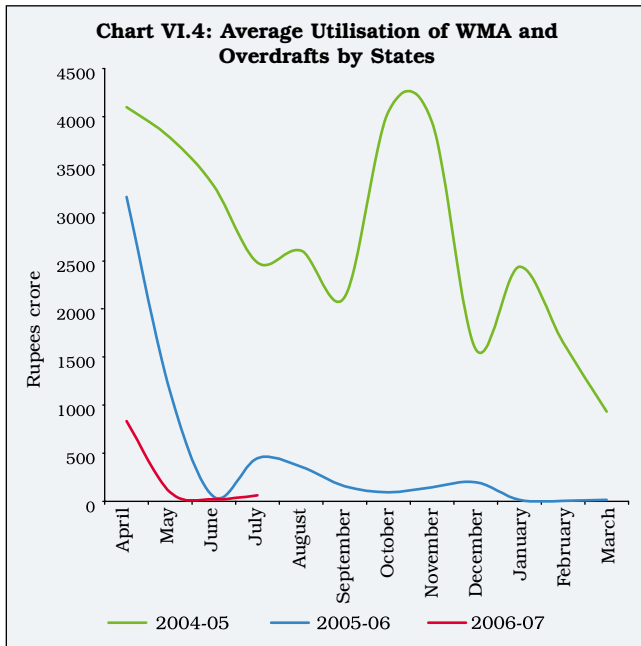
Table 6.10: WMA/Overdrafts and Investments of State Governments*

(Rupees crore)

Month	Special WMA		Normal WMA		Overdraft		Investments in 14-day Treasury Bills	
	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06
1	2	3	4	5	6	7	8	9
April	1,118	368	1,908	1,824	1,075	974	5,585	14,764
May	1,044	221	2,177	824	560	90	5,917	18,458
June	1,049	3	1,724	43	506	0	7,959	32,318
July	863	78	1,196	292	425	76	7,693	32,633
August	890	93	1,472	254	247	14	8,348	35,611
September	856	61	1,258	97	14	0	9,887	40,530
October	951	11	2,556	85	547	0	9,606	36,252
November	933	13	2,545	132	465	0	12,011	40,429
December	601	8	827	181	152	9	14,722	44,109
January	695	3	1,530	11	216	0	12,632	42,905
February	438	1	1,110	2	107	0	15,039	36,515
March	115	1	631	16	188	0	17,337	48,811
Average	796	72	1,578	313	375	97	10,561	35,278

* : Average of Friday outstandings.

PUBLIC DEBT MANAGEMENT



(eight States as compared with 13 States in the previous year) (Table 6.11). Only two States resorted

to overdraft on more than one occasion during the year. During 2006-07 so far (up to August 18, 2006), six States availed of WMA for a period of 2-61 days while two States resorted to overdraft for a period ranging between 3-15 days. The lower utilisation of WMA reflects persistent cash surplus with State Governments.

VI.27 The large build up of surplus cash balances by the State Governments was reflected in the spurt in their investments in 14-day Intermediate Treasury Bills. During 2005-06, the monthly investments averaged more than thrice their levels in the previous year. The outstanding investments increased from Rs.14,314 crore (by 16 States) as at end-March 2005 to Rs.38,983 crore (by 24 States) as at end-March 2006 and further to Rs. 44,370 crore (25 States as on August 18, 2006) (Chart VI.5). In view of the build-up of surplus cash balances, some States have desired to utilise their surplus to swap high cost debt with new low coupon issues or prepay their outstanding high coupon market borrowings (Box VI.4).

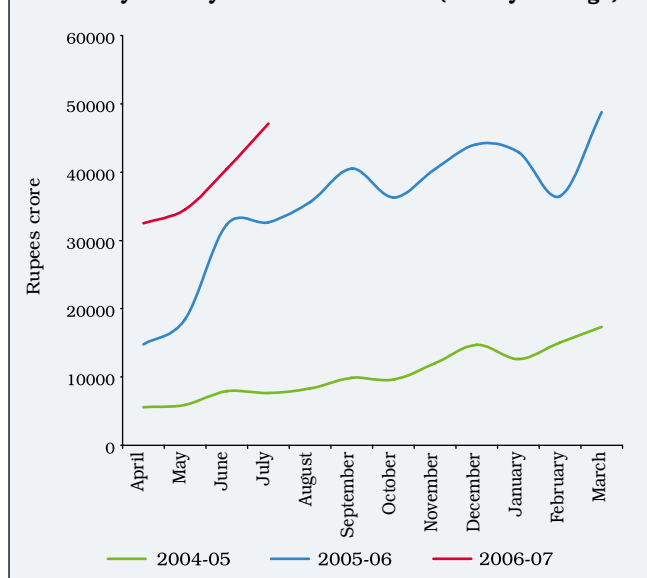
Table 6.11 State-wise Availment of WMA/Overdraft

(Rupees crore)

Sr. No.	States	WMA		Overdraft			
				2004-05		2005-06	
		2004-05	2005-06	Number of Occasions*	Number of days	Number of Occasions*	Number of days
		Number of days	Number of days				
1		2	3	4	5	6	7
Non-Special Category States							
1.	Andhra Pradesh	0	0	0	0	0	0
2.	Bihar	5	0	0	0	0	0
3.	Chhattisgarh	0	0	0	0	0	0
4.	Goa	212	0	3	13	0	0
5.	Gujarat	116	0	0	0	0	0
6.	Haryana	0	0	0	0	0	0
7.	Jharkhand	0	0	0	0	0	0
8.	Karnataka	7	0	0	0	0	0
9.	Kerala	348	240	19	161	11	63
10.	Madhya Pradesh	110	0	0	0	0	0
11.	Maharashtra	68	41	5	22	1	20
12.	Orissa	91	0	0	0	0	0
13.	Punjab	268	22	9	115	0	0
14.	Rajasthan	21	0	0	0	0	0
15.	Tamil Nadu	7	0	0	0	0	0
16.	Uttar Pradesh	294	34	13	98	1	11
17.	West Bengal	268	0	15	115	0	0
Special Category States							
1.	Arunachal Pradesh	35	29	3	6	0	18
2.	Assam	225	57	13	126	2	22
3.	Himachal Pradesh	159	25	4	27	0	0
4.	Manipur	149	63	2	118	1	44
5.	Meghalaya	0	15	0	0	1	1
6.	Mizoram	147	14	1	1	0	0
7.	Nagaland	103	42	3	18	1	17
8.	Tripura	31	0	0	0	0	0
9.	Uttaranchal	95	27	2	16	1	13

* : Refers to fresh occurrences of overdraft during the year.

Chart VI.5: Investments in 14-day Intermediate Treasury Bills by State Governments (Weekly Average)



VI.28 The Advisory Committee on Ways and Means Advances and Overdrafts to the State Governments (Chairman: Shri M.P. Bezbaruah) constituted by the Reserve Bank in April 2005 to review the WMA/OD Scheme in the light of the recommendations of the Twelfth Finance Commission (TFC) submitted its Report on October 29, 2005. The Report was discussed in the 17th Conference of State Finance Secretaries on January 13, 2006 and there was a general concurrence of the States on the

recommendations of the Committee. Based on the recommendations of the Bezbaruah Committee, a revised WMA Scheme for State Governments was put in place for 2006-07 (Box VI.5). Accordingly, the aggregate Normal WMA limit was increased by 10.5 per cent to Rs.9,875 crore for the year 2006-07 (Table 6.12). The interest rate on WMA has been linked to the LAF repo rate as against the Bank Rate earlier.

Market Borrowings

VI.29 Following the implementation of the recommendations of the TFC, no provision was made in the Union Budget in respect of Central loans for State plans during 2005-06 and States were encouraged to access the market to raise their required resources. Gross market borrowings during 2005-06 by the State Governments were, however, lower than the previous year, mainly reflecting the impact of the DSS in 2004-05 as well as build up in their surplus cash balances (Table 6.13 and Appendix Table 61). Nine States (*viz.*, Bihar, Goa, Gujarat, Karnataka, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu and West Bengal) did not raise the entire allocated amount in view of their holdings of surplus cash balances while Chhatisgarh did not participate in the market borrowing programme during the year. Excluding market borrowings raised under DSS and to pre-pay Rural Infrastructure Development Fund (RIDF) loan, the net market borrowings of States during 2005-06 were in line with that in the previous year.

Box VI.4

Surplus Cash Balances and High Coupon Debt

Auction-based buy-back and swapping of high coupon debt are two alternative ways of reducing the quantum of high coupon debt stock of State Governments. As regards debt swap, the gains to the Government on account of lower coupon on new issues is exactly offset by the premia the Government will have to pay to the high coupon bond holders and the net present value (NPV) of the cash flows under both streams will be exactly equal. As in the case of debt swap, outright prepayment also involves upfront payment of premia in the year of prepayment as long as the coupon on the stock being bought back is higher than the rate at which it is bought back. Debt prepayment enables the Government to improve its fiscal and revenue balances, the extent of which would depend on the difference between the (higher) average yield arrived at the debt buy-back auction and the (lower) rate of return on investments of surplus cash balances in Treasury Bills. Second, the reduction in the outstanding liabilities due to prepayment of debt is expected to improve the market perception of States' fiscal position with positive

implications for the cost of future market borrowings. Thus, auction-based buy-back of outstanding high coupon debt could in certain situations be a superior alternative to swapping of high coupon debt with low coupon debt contracted, assuming that both are conducted on a pure voluntary basis and without any incentive.

At the same time, it needs to be recognised that surplus cash balances provide a cushion to tide over any unforeseen developments such as a deterioration in the liquidity environment. Hence, States that are considering prepayment of debt need to satisfy themselves that the surplus cash balances are of an enduring nature. Second, given that the State Government securities are rarely traded, the pricing of securities contemplated to be bought back could be an issue. Third, since the investor profile is dominated by the 'buy-and-hold' investors, the likely response from the market participants could be lukewarm. An alternative option to debt buy-back could be refraining from open market borrowings and other loans where States have an active role in mobilisation.

Box VI.5

Report of the Advisory Committee on Ways and Means Advances (WMA) to State Governments and the Revised WMA Scheme (2006-07)

The Advisory Committee on Ways and Means Advances to State Governments (Chairman: Shri M.P. Bezbaruah) observed that there was an improvement in the finances of the State Governments in recent years as evident from the reduction in alternative measures of deficit as well as improvement in liquidity management. Viewing the existing Normal WMA limits as more than adequate, the Committee observed that the recommendations of the Twelfth Finance Commission (TFC) (2005-06 to 2009-10) would have an increasingly positive impact on the finances and liquidity position of the State Governments over the medium term. In view of the shift from Central Plan loans (which are relatively 'orderly' flows to the States) to market borrowings by the State Governments, as recommended by the TFC, the year 2006-07 would be a period of transition and accordingly, State Governments require some more time to adjust to the fiscal *milieu* as envisaged by the TFC.

Based on the recommendations of the Bezbaruah Committee, a revised WMA Scheme for State Governments has been put in place by the Reserve Bank for 2006-07 with the following key features:

- The base for calculating Normal WMA limit has been changed from revenue receipts, as hitherto, to total (revenue plus capital) expenditure excluding repayments and adjusted for one-time *ad hoc* expenditures. The revenue deficit, wherever applicable, would be excluded from the base.
- The base would be obtained as the average of actual data for three years (as against the existing practice of incorporating actual data for two years and revised estimates for one year). A multiplication factor of 3.1 per cent (existing: 3.19 per cent) for the non-special category States and 4.1 per cent (existing: 3.84 per cent) for the special category States has been applied on the average of the recommended base, with the objective of maintaining equivalence with the existing limits. The computed limits for 2006-07 have been rounded off to the nearest multiple of Rs.5 crore. It has also been ensured that there is no reduction in the Normal WMA limit for any State Government from the existing (2005-06) level.
- As per the revised formula, the total Normal WMA limits for 2006-07 work out to Rs.9,875 crore, an increase of about 10.5 per cent over the limits for 2005-06.
- The Normal WMA limits would be reviewed every year and the decision to modify the limits would be taken by the Reserve Bank in the light of the emerging situation.
- The interest rate on WMA has been linked to the repo rate (as against the existing Bank Rate), since it is more reflective of short-term monetary conditions. Accordingly, the rate of interest charged on Normal WMA will be (a) repo rate for the period of 1 to 90 days and (b) one percentage point above the repo rate for the period beyond 90 days. The rate of interest applicable to Special WMA will be one percentage point below the repo rate.
- The rate of interest on overdraft will be: (a) two percentage points above the repo rate (existing: 3 percentage points above the Bank Rate) for overdraft up to 100 per cent of Normal WMA limit, and (b) five percentage points above the repo rate (existing: 6 percentage points above the Bank Rate) for overdraft exceeding 100 per cent of the Normal WMA limit.
- The net incremental (*i.e.*, new investment less redemption/liquidation) annual investment of States in Consolidated Sinking Fund (CSF)/Guarantee Redemption Fund (GRF) will be eligible for availing Special WMA, as an incentive for the States to build-up these funds. In case the CSF/GRF Scheme of the State Governments incorporate this provision, then Special WMA against the net incremental annual investment in CSF/GRF will be provided but up to a ceiling equivalent to their Normal WMA limit.
- The next review of the WMA scheme will be undertaken after the receipt of the recommendations of the Thirteenth Finance Commission.

Reference

Reserve Bank of India (2005), Report of the Advisory Committee on Ways and Means Advances to State Governments (Chairman: Shri M.P. Bezbaruah), October.

VI.30 During 2005-06, State Governments preferred to borrow through the auction route, raising as much as 48.5 per cent of their total borrowings through auctions (only 2.3 per cent in 2004-05). Twenty-four States opted for the auction route under the market borrowing programme during 2005-06 as compared with only three States in the previous year. In fact, for the first time ever, a State (Punjab) raised the entire amount through the auction mode. The increased recourse to auctions indicated improved market

perception of States' fiscal situation as reflected in the lower spread of cut-off yields *vis-à-vis* tap issues (20-50 basis points in auctions as against 50 basis points in tap issues) over Central Government securities of corresponding maturity. The coupon of the tap issuance ranged between 7.53-7.77 per cent while the cut-off yield in the auction of State Government securities ranged between 7.32-7.85 per cent. The wider range of yields at auctions mainly reflected the timing of the issuances which were spread throughout the year

Table 6.12: Normal WMA Limits of States

(Rupees crore)

State	2002 (effective April 1, 2002)	2003 (effective March 3, 2003)*	2004 (effective April 1, 2004)	2005 (effective April 1, 2005)	2006 (effective April 1, 2006)#
1	2	3	4	5	6
Non-Special Category States					
Andhra Pradesh	520	620	700	770	880
Bihar	245	305	340	380	425
Chhattisgarh	100	130	155	175	190
Goa	50	50	65	65	65
Gujarat	445	485	520	575	630
Jharkhand	75	105	175	225	280
Haryana	180	205	245	280	295
Karnataka	375	460	505	570	625
Kerala	225	270	315	345	350
Madhya Pradesh	275	345	395	420	460
Maharashtra	760	905	1,000	1,050	1,160
Orissa	185	215	250	270	300
Punjab	235	240	325	360	360
Rajasthan	310	365	405	440	505
Tamil Nadu	415	570	615	670	730
Uttar Pradesh	630	755	835	920	1,020
West Bengal	360	420	480	495	545
Sub Total	5,385	6,445	7,325	8010	8,820
Special Category States					
Arunachal Pradesh	50	50	50	50	65
Assam	180	210	250	295	300
Himachal Pradesh	115	135	140	145	190
Manipur	50	50	50	55	60
Meghalaya	50	50	50	55	60
Mizoram	50	50	50	50	55
Nagaland	50	55	60	65	80
Tripura	55	60	70	80	100
Uttaranchal	50	65	95	130	145
Sub Total	650	725	815	925	1,055
Total	6,035	7,170	8,140	8,935	9,875

* : Advisory Committee on WMA to State Governments (Chairman: Shri C. Ramachandran), January 2003.

: Advisory Committee on WMA to State Governments (Chairman: Shri M. P. Bezbaruah), October 2005.

(except May, July and October 2005) (Appendix Table 62). There were only three tap issuances during 2005-06

(in the months of May 2005, September 2005 and January 2006) (Table 6.14 and Appendix Table 63).

Table 6.13: Annual Market Borrowings of State Governments

(Rupees crore)

Item	2004-05	2005-06	2006-07
1	2	3	4
1. Net Allocation	13,969	16,112	17,077
2. Additional Allocation	843	3,522	35
3. Allocation to be Raised under DSS	19,766	-	-
4. Allocation to Prepay RIDF Loan	2,393	-	-
5. Total Allocation (1+2+3+4)	36,970	19,634	17,112
6. Repayments	5,123	6,274	6,551
7. Gross Allocation (5+6)	42,093	25,909	23,663
8. Amount Raised under DSS	16,943	-	-
9. Amount Raised to Prepay RIDF Loan	1,386	-	-
10. Total Amount Raised (10.1 + 10.2)	39,101	21,729	7,343#
10.1 Raised through Tap	38,216	11,186	-
10.2 Raised through Auction	885	10,544	7,343#
11. Net Amount Raised (10 - 6)	33,978	15,455	2,417#
12. Net Amount Raised (other than DSS) (11 - 8)	17,035	15,455	2,417#
13. Net Amount Raised (other than DSS and RIDF) (11- 8- 9)	15,649	15,455	2,417#
14. Outstanding State Development Loans (end-period)	2,13,443	2,28,898	2,32,608

: Up to August 21, 2006.

Source: Reserve Bank of India.

Table 6.14: Month-wise Market Borrowings of State Governments

(Amount in Rupees crore)

Month	Raised through Tap		Raised through Auction		Total Raised
	Amount	Coupon (Per cent)	Amount	Cut-off Yield (Per cent)	
1	2	3	4	5	6
2005					
April	-	-	300	7.45	300
May	7,554	7.77	-	-	7,554
June	-	-	2,391	7.35-7.39	2,391
July	-	-	-	-	-
August	-	-	250	7.32	250
September	2,931	7.53	839	7.42-7.50	3,770
October	-	-	-	-	-
November	-	-	375	7.34	375
December	-	-	361	7.33	361
2006					
January	701	7.61	482	7.32-7.33	1,183
February	-	-	3,724	7.65-7.85	3,724
March	-	-	1,821	7.69-7.79	1,821
Total	11,186	7.53-7.77	10,544	7.32-7.85	21,729

VI.31 The weighted average yield of State Government securities issued during 2005-06 increased to 7.63 per cent from 6.45 per cent during 2004-05 (Table 6.15). The rise in yields was in line with that of Central Government securities and reflected general upward movement in interest rates. All the securities issued during 2005-06 were of 10-year maturity while in the previous year one issue was of 9-year maturity and two issuances were of 12-year maturity.

VI.32 The share of high cost market loans of State Governments declined further during 2005-06. As at end-March 2006, the share of outstanding stock with interest rate of 10 per cent and above declined to 32 per cent from 37 per cent as at end-March 2005 and 47 per cent as at end-March 2004 (Table 6.16).

Table 6.15: Weighted Average Yield of State Government Securities

(Per cent)

Year	Range	Weighted Average
1	2	3
1997-98	12.30-13.05	12.82
1998-99	12.15-12.50	12.35
1999-00	11.00-12.25	11.89
2000-01	10.50-12.00	10.99
2001-02	7.80-10.53	9.20
2002-03	6.60-8.00	7.49
2003-04	5.78-6.40	6.13
2004-05	5.60-7.36	6.45
2005-06	7.32-7.85	7.63
2006-07*	7.65-8.66	8.06

* Up to August 21, 2006.

VI.33 With the tenor of securities issued during 2005-06 limited to 10 years, 67 per cent of the outstanding stock of State Government securities belonged to the maturity bucket of 6-10 years as at end-March 2006 as compared with 60 per cent as at end-March 2005 (Table 6.17).

VI.34 The maturity profile of market borrowings shows a hump in repayments during 2012-13 to 2015-16 due to high amount of borrowings during 2002-03 to 2004-05 under the Debt Swap Scheme (Table 6.18).

Market Borrowings of State Governments during 2006-07

VI.35 Net initial allocations and gross market borrowings (provisional) of the State Governments for 2006-07 are placed at Rs.17,077 crore and Rs.23,663 crore, respectively (see Table 6.13). During 2006-07 (up to August 21, 2006), 18 State Governments raised Rs.7,343 crore exclusively by way of auctions (as compared with Rs.7,854 crore raised through a combination of auctions and tap issuances during the corresponding period of the previous year) at cut-off

Table 6.16: Interest Rate Profile of the Outstanding Stock of State Government Securities

Sr.No.	Range of Interest Rate (Per cent)	Outstanding Amount (Rupees crore)		Percentage to Total	
		End-March 2005	End-March 2006	End-March 2005	End-March 2006
1	2	3	4	5	6
1.	5.00-5.99	33,825	33,825	15.8	14.8
2.	6.00-6.99	58,563	58,563	27.4	25.6
3.	7.00-7.99	27,872	49,601	13.1	21.7
4.	8.00-8.99	8,004	8,004	3.7	3.5
5.	9.00-9.99	5,412	5,412	2.5	2.4
6.	10.00-10.99	14,563	14,563	6.8	6.4
7.	11.00-11.99	17,062	17,062	8.0	7.5
8.	12.00-12.99	26,146	26,146	12.2	11.4
9.	13.00-13.99	15,722	15,722	7.4	6.9
10.	14.00	6,274	Nil	2.9	Nil
Total		2,13,443	2,28,898	100.0	100.0

Table 6.17: Maturity Profile of Outstanding State Government Securities
(At end-March 2006)

Sr. No.	State	Per cent to Total Amount Outstanding			Total Amount Outstanding (Rupees crore)
		0-5 years	6-10 years	above 10 years	
1	2	3	4	5	6
1.	Andhra Pradesh	33.1	65.3	1.7	21,347
2.	Arunachal Pradesh	17.2	64.7	18.1	321
3.	Assam	29.9	66.0	4.1	5,847
4.	Bihar	30.4	61.4	8.2	10,909
5.	Chhattisgarh	33.5	55.1	11.4	2,657
6.	Goa	30.9	64.4	4.8	1,027
7.	Gujarat	25.0	70.1	4.8	13,003
8.	Haryana	25.3	72.0	2.7	5,142
9.	Himachal Pradesh	18.9	78.0	3.1	4,116
10.	Jammu & Kashmir	24.4	68.7	6.8	2,920
11.	Jharkhand	32.6	66.6	0.8	3,448
12.	Karnataka	29.6	68.5	1.9	11,933
13.	Kerala	29.4	66.6	4.0	11,060
14.	Madhya Pradesh	28.0	70.8	1.3	10,288
15.	Maharashtra	20.5	69.9	9.6	18,697
16.	Manipur	21.9	71.4	6.7	787
17.	Meghalaya	31.5	59.0	9.5	956
18.	Mizoram	22.4	64.3	13.3	601
19.	Nagaland	31.5	65.5	3.0	1,451
20.	Orissa	36.0	57.2	6.8	9,686
21.	Punjab	23.1	71.4	5.5	8,697
22.	Rajasthan	33.9	64.6	1.5	15,005
23.	Sikkim	40.5	46.4	13.1	420
24.	Tamil Nadu	28.1	69.0	3.0	15,002
25.	Tripura	29.0	53.3	17.7	1,144
26.	Uttar Pradesh	34.1	62.7	3.1	28,519
27.	Uttaranchal	13.1	86.9	0.0	3,920
28.	West Bengal	21.1	69.6	9.3	19,995
Total		28.3	67.0	4.7	2,28,898

yields ranging between 7.65–8.66 per cent. The weighted average yield of State Government securities

Table 6.18: Maturity Profile of Outstanding State Loans and Power Bonds
(At end-March 2006)

Year	(Rupees crore)		
	State Loans	Power Bonds	Total
1	2	3	4
2006-07	6,551	1,579	8,130
2007-08	11,555	3,159	14,714
2008-09	14,400	3,159	17,559
2009-10	16,511	3,159	19,670
2010-11	15,870	3,159	19,029
2011-12	22,032	3,159	25,191
2012-13	30,628	3,159	33,787
2013-14	32,078	3,159	35,237
2014-15	33,384	3,159	36,543
2015-16	35,191	3,159	38,350
2016-17	10,698	1,579	12,277
Total	2,28,898	31,587	2,60,485

issued during 2006-07 (up to August 21, 2006) was 8.06 per cent as compared with 7.66 per cent during the corresponding period of the previous year. The spreads over the corresponding yields of Central Government securities ranged between 22-47 basis points for all but two of 18 States. All the issues during the current fiscal year so far were of 10-year maturity, as in the previous year.

Major Initiatives

VI.36 At present, Consolidated Sinking Funds (CSFs) and the Guarantee Redemption Funds (GRFs) of State Governments are invested in Government securities held in the books of the Reserve Bank. The TFC recommended that all States should set up sinking funds for amortisation of all loans (and not just market borrowings) and continue to maintain the Calamity Relief Fund (CRF) in its present form. In the context of these developments and for management of investments of State Governments, the Annual Policy Statement for 2006-07 proposed to revisit the scheme of CSF to cover the entire liabilities of State Governments. It was also proposed to prepare a scheme of CRF in consultation with the Government (Box VI.6).

VI.37 A Working Group on Liquidity of State Government Securities (Chairman: Shri V.K. Sharma) was constituted with members drawn from the Technical Advisory Committee on Money, Forex and Government Securities Markets (TAC), select State Finance Secretaries and the Reserve Bank to review the issue of low liquidity of State Government securities and suggest appropriate measures (Box VI.7). The Group submitted its Report to the Reserve Bank in September 2005. Drawing from the recommendations of the Group and with a view to widening the investor base in State Development Loans (SDLs), the Annual Policy Statement for 2006-07 proposed to extend the facility of non-competitive bidding (currently limited to Central Government dated securities) to the primary auction of SDLs and also to introduce purchase and resale of SDLs by the Reserve Bank under the overnight LAF repo operations.

Borrowing Arrangements for States

VI.38 The Reserve Bank's Annual Policy Statement for 2005-06 had drawn attention to the likely impact of the implementation of the recommendations of the TFC on the borrowing arrangements for State Governments. In the 16th Conference of State Finance Secretaries convened on April 8, 2005 to specifically discuss the recommendations of the TFC, the necessity to strengthen the joint approach among the

Box VI.6**Investment Portfolio Management of State Governments**

The Reserve Bank has been managing, since the late 1990s, the investments of Consolidated Sinking Funds (CSFs) of 14 State Governments and the Guarantee Redemption Funds (GRFs) of five State Governments from its portfolio of holdings of Government securities. The investments under Calamity Relief Fund (CRF) set up by the State Governments are being managed by select public sector banks. The Twelfth Finance Commission (TFC) had recommended in favour of an expanded coverage of CSF to include amortisation of all loans (and not just open market borrowings as at present), while GRF and CRF would be continued in its present form. The expanded ambit of CSF is likely to increase States' investments in CSF and could constrain Reserve Bank's open market operations for monetary policy purposes in view of the finite stock of securities with the Reserve Bank. In this regard, the Technical Group on Borrowings by States (Chairperson: Smt. Shyamala Gopinath), in its Report submitted in December 2005, recommended that whereas the Reserve Bank should continue to manage the expanded CSF, the Reserve Bank should also acquire Central Government securities from the PDs/banks and immediately pass them on to the State Government concerned at the same price *i.e.*, without loading any charge and with proper dissemination of such transactions so as to obviate any confusion among market participants about the intent of such transactions.

In the context of these developments, the Annual Policy Statement for 2006-07 proposed to revisit the scheme of

CSF to cover the entire liabilities of State Governments. Furthermore, the Advisory Committee on Ways and Means Advances to State Governments (Chairman: Shri M.P. Bezbaruah) had recommended that the net incremental (*i.e.* new investment less redemption/liquidation) annual investment of States in CSF/GRF may be made eligible for availing Special WMA in case the CSF/GRF schemes of the State Governments incorporate the above provision. Accepting this recommendation, the Reserve Bank circulated the revised model schemes of CSF/GRF among the States in May 2006. As regards CRF, following the recommendations of the TFC, the Government of India had circulated the details of the scheme among all the State Governments. In this context, and in consultation with the Government of India, the Reserve Bank had drafted a revised scheme as applicable to the Reserve Bank as the manager of investments in the Fund and had forwarded the same to the Government of India for concurrence. The Central Government, in turn, has forwarded the revised scheme to all the State Governments. The changes incorporated by the Reserve Bank in the CRF scheme are essentially to bring about uniformity in the modalities of investment and payment of commission, similar to the CSF and GRF schemes. States would, however, have the discretion to choose the Reserve Bank as the fund manager. The investments of the CRF would be dictated by consideration of maximisation of market-related return to the State Governments while ensuring safety and liquidity of the investments.

Centre, States and the Reserve Bank to ensure a smooth transition to the proposed arrangement was noted. Subsequently, in July 2005, the Government of India constituted a Technical Group (Chairperson: Smt. Shyamala Gopinath) comprising members from the Centre, select State Governments and the Reserve Bank to work out the modalities for a smooth transition to the proposed arrangement for States' borrowings. The Group submitted its Report to the Government of India on December 22, 2005. On the basis of the recommendations of the Group, the Annual Policy Statement for 2006-07 proposed to constitute a Standing Technical Committee (STC) under the aegis of the State Finance Secretaries Conference with representation from the Central and State Governments and the Reserve Bank to advise on the wide-ranging issues relating to the borrowing programmes of Central and State Governments through a consensual and cooperative approach.

Conference of State Finance Secretaries

VI.39 During 2005-06, the 16th and 17th conferences of State Finance Secretaries were held on April 8,

2005 and January 13, 2006, respectively. In the 16th Conference, the recommendations of the TFC and operational issues emanating therefrom were deliberated exclusively.

VI.40 In the 17th Conference, issues relating to market borrowings of State Governments, setting up of Consolidated Sinking Fund, and operational and technical issues regarding Government transactions were discussed. In the Conference, the recommendations of the Report of the Technical Group on Borrowings by State Governments, Report of the Advisory Committee on WMA to State Governments, Report of the Working Group on Liquidity of State Government Securities and Report of the Working Group on Compilation of State Government Liabilities were also discussed. While the recommendations of the WMA Committee have been implemented from the year 2006-07, the Annual Policy Statement for 2006-07 has proposed action points in respect of recommendations made by the Groups on 'Borrowings by State Governments' and 'Liquidity of State Government Securities'.

Box VI.7**Report of the Working Group on Liquidity of State Government Securities**

The negligible level of secondary market liquidity in State Government securities could be attributed to certain interrelated factors such as (i) low level of outstanding stock resulting in an even lower level of floating stock, (ii) predominance of buy-and-hold investors, (iii) disconnect between the uniform coupon fixed in respect of States participating in a tap issue with their corresponding secondary market yields, and (iv) fragmentation across issuers (28 States) and securities (each State issuing up to eight new securities in a year). To address these issues, the Group explored the following options to build up volumes to ensure a critical minimum mass for secondary market liquidity: (i) increase in issue size; (ii) consolidation of securities; (iii) higher share of open market borrowings in financing of fiscal deficit; and (iv) securitisation of outstanding State Government securities. While considering these options, the Group felt that the issue size could be raised by limiting the number of issues. Second, passive consolidation of securities through reissuances of existing securities would involve bunching of repayments and reduction in the maturity profile. Third, an increase in the share of open market borrowings would depend, *inter alia*, on fiscal reform measures to boost investor confidence. Fourth, the outstanding stock of State Government securities could be consolidated through the securitisation route whereby the assets would be assigned to a special purpose vehicle (SPV) against which securities would be issued to the new investors. However, since this would result in a transfer of risk from the issuer to the SPV, the risk profile of the SPV would determine the yield/price of SPV securities.

Recommendations**(a) Role of Issuers (States)***In the Short Run*

- Improve their debt repayment capability to facilitate consolidation of securities.
- Resort to the auction route for market borrowings.

In the Medium Term

- Seek credit rating to impart greater transparency and enable pooling structures to attract wider base of investors.

(b) Role of Primary Dealers (PDs)*In the Short Run*

- Provide two-way quotes for State Development Loans (SDLs).
- Retail SDLs to develop a wider investor base.

(c) Role of the Reserve Bank*In the Short Run*

- Market borrowings with a minimum size of Rs.1,000 crore per tranche.
- Incentives such as short sale and reserved allotment at cut-off price/yield to encourage retailing and market making.
- Extension of non-competitive bidding facility in Central Government dated securities to the primary auction of SDLs to widen the investor base in SDLs.

In the Medium Term

- Use of OTC derivatives with State Government securities as the underlying and the exchanges permitting State Government bonds as eligible securities for delivery under the bond futures after wider consultation.
- Introduction of LAF repos using SDLs.
- Use of SDLs as collateral for the provision of intra-day liquidity under the RTGS.

(d) Role of Government of India*In the Short Run*

- Align tax structure/incentives on small savings with SDLs for a level playing field to promote retail investment in the SDLs.

In the Medium Term

- Set up SPV to issue SPV securities backed by Central Government guarantee for consolidation of outstanding State Government securities and build up volumes.

Reference

Reserve Bank of India (2005), Report of the Working Group on Liquidity of State Government Securities (Chairman: Shri V.K. Sharma).

VI.41 In the 18th conference held on August 7, 2006, the discussions primarily focussed on issues relating to computerisation of treasuries, underwriting in respect of open market loans and management of open market borrowings of the State Governments apart from operational issues pertaining to Government transactions. Issues arising from the sizable build-up of surplus cash balances of the State Governments and the exchange rate risk arising from the back-to-back transfer of external assistance loans by the Centre to the State Governments were also discussed (Box VI.8)

Outlook

VI.42 The market borrowing programme of the Central Government during 2006-07 is budgeted to be higher than that in the previous year. Furthermore, yields have hardened domestically reflecting oil price induced inflationary pressures and upturn in the international interest rate cycle. The Reserve Bank would endeavour to conduct debt management consistent with the objectives of minimising cost and rollover risk. The Reserve Bank's exit from the primary auctions of Central Government securities and the cessation of Central loans for State Plans

Box VI. 8

Conference of State Finance Secretaries – Emerging Issues in Cash and Debt Management

The improvement in the fiscal position of the State Governments in recent years, the buoyancy in economic growth and savings, and the change in the policy environment effected by the recommendations of the Twelfth Finance Commission (TFC) have brought to the fore new challenges in cash and debt management at the State-level. The major issues that have been raised in this regard in the 18th Conference of State Finance Secretaries are briefly highlighted below.

In sharp contrast to the experience of the past, there has been a sizable build-up of surplus cash balances of the State Governments since the second half of 2004-05. The build-up of cash balances mainly reflects buoyancy of Small Savings collections, increase in Central devolution and transfers to the States as recommended by the TFC and containment of expenditures by the State Governments.

The surplus cash balances are automatically invested in 14-day Intermediate Treasury Bills and auction Treasury Bills (as non-competitive bids) earning a return that is lower than the interest cost on borrowings (mainly Small Savings and open market loans). This negative carry adversely impacts on State finances. This has prompted some of the States to consider prepayment of some of their outstanding high cost market loans (see Box VI.4).

The excess inflow of high-cost Small Savings *vis-à-vis* the borrowing requirements of the State Governments is a consequence of the extant arrangement under which the entire Small Savings collections within a State are automatically transferred to the State budgets, irrespective of the budgetary requirements. The degree of such fund flow mismatches is, however, not uniform across States. In this context, many of the States have suggested that there should be a ceiling on the share of Small Savings in financing the GFD. Others have suggested that each State should be first permitted to draw upon the national pool of Small Savings collections as per its requirements; the balance of Small Savings in the pool could then be distributed amongst the States. It may be noted in this context that the issue of Small Savings as a source of finance for the State budgets is being examined by a Committee under the chairmanship of the Hon'ble Union Finance Minister.

Some of the States have set up Consolidated Sinking Fund (CSF), Guarantee Redemption Fund (GRF) and Calamity Relief Fund (CRF). These funds can be invested in auction

Treasury Bills and dated securities of the Government of India. Setting up and enhancing the corpus of these funds through the surplus cash balances could enable the States to improve the credibility of their fiscal policies as well as reduce the negative carry on their cash balances.

Other investment options – especially for reversible/temporary surpluses – could include collateralised lending by way of market repos/CBLOs.

Keeping in view the various factors that impinge upon the alternative investment options of the cash balances of the State Governments, a Working Group of select State Finance Secretaries has been recently constituted to examine the issue in its various dimensions and evolve a framework for such investments. The Group is expected to submit its Report by end-October 2006.

The 18th Conference of State Finance Secretaries also deliberated upon the future course of market borrowings. The TFC had recommended that Central loans for State Plans should be eliminated with effect from 2005-06 and the States should raise requisite resources from the market. The Annual Policy Statement issued in April 2006 had proposed to (i) encourage States to progressively increase the share of market borrowings under the auction route with a view to covering the entire borrowings through auctions as early as possible; (ii) encourage the States at their discretion and initiative to develop an advance indicative borrowing calendar; and (iii) extend the facility of non-competitive bidding – currently limited to Central Government dated securities – to the primary auction of State Government securities. Most States have favoured all the three proposals. These issues are being discussed with the States and steps are being taken to evolve a concrete action plan.

Another issue that has been engaging the attention of State Governments is the management of exchange rate risk in the context of the back-to-back transfer of external loans by the Centre, as recommended by the TFC. In this connection, it is felt that capacity building among State Government officials for managing the implications of exchange rate volatility would have to be accorded due importance. States could also consider setting up sinking funds for managing exchange rate risks which could be funded by the savings resulting from payment of lower rate of interest on external borrowings in favourable times.

necessitating States to mobilise resources from the market call not only for improved liquidity but also newer instruments for managing market risks for a smooth transition to the new environment. Against this backdrop, the steps taken by the Reserve Bank towards deepening and widening the Government securities market through measures such as emphasis on passive consolidation, introduction of intra-day short-selling and 'when issued' market in

Government securities as well as allowing new participants and diversification of activities by the existing participants are expected to enhance liquidity and facilitate efficient price discovery for the smooth conduct of debt management operations. As a result of the various market development measures, the combined market borrowing programme for 2006-07, though larger than that in 2005-06, is expected to be completed successfully.