

# VI

## PUBLIC DEBT MANAGEMENT

VI.1 During 2006-07, the debt management strategy of the Reserve Bank continued to be guided by the twin objectives of minimisation of cost over time and pursuit of maturity profiles consistent with rollover risk. The debt management operations were undertaken in an environment characterised by pre-emptive monetary tightening measures and upward shifting of yield curve. A major source of the demand for Government securities emanated from the banking and insurance sectors for complying with the statutory requirements. The Reserve Bank was prohibited from participating in the primary issuances of Government securities from April 1, 2006 in accordance with the provisions of the Fiscal Responsibility and Budget Management (FRBM) Act, 2003. Carrying forward the process of development of the Government securities market and with a view to facilitate debt management in the post-FRBM environment, specific measures were undertaken during the year such as permitting short sales, introduction of "when issued" market and introduction of a revised scheme of underwriting commitment for primary dealers (see Chapter IV). The Reserve Bank continued with the policy of passive consolidation of dated securities and elongation of maturity profile.

VI.2 This Chapter reviews the public debt management operations of the Reserve Bank during 2006-07. The borrowing programme of the Central Government, higher than that in the previous year, was conducted smoothly during 2006-07 - the first year of the Reserve Bank's absence from the primary market as per the FRBM stipulations. This was enabled by concerted efforts to improve the market microstructure. The pre-emption of revenue receipts by the interest cost of open market loans continued to decline during 2006-07. At the same time, the risk profile of outstanding open market debt improved as reflected in the near stability in the weighted average maturity (around 10 years) as well as in modified duration (5.6 years) in recent years. The weighted average cost of market borrowings increased during the year, reflecting the hardening of interest rate structure.

VI.3 A notable aspect of the market borrowings of the States during 2006-07 was that the actual borrowings were lower than those allocated. The reduction in borrowings was mainly on account of a

build-up of cash balances. The upsurge in cash balances during 2006-07, notwithstanding deceleration in small savings collections, was facilitated by fiscal consolidation initiatives and higher Central devolution and transfers. For the first time, the States raised the entire amount through the auction route. In general, the spreads of the cut-off yields in the auctions over the secondary market yields of comparable Central Government securities were lower than those in the previous year, reflecting improved market perception of States' fiscal position.

### CENTRAL GOVERNMENT

#### Ways and Means Advances

VI.4 With the Reserve Bank withdrawing from participation in the primary issuance of Central Government securities with effect from April 1, 2006 in accordance with the FRBM Act, 2003, the Ways and Means Advances (WMA) arrangements were revised from 2006-07 in consultation with the Government. Under the previous arrangements, the limits of WMA were fixed on a half-yearly basis; for 2005-06, the limits were Rs.10,000 crore for the first half of the fiscal year (April-September) and Rs.6,000 crore for the second half of the fiscal year (October-March). In order to facilitate the transition necessitated by the new FRBM provisions, under the revised arrangements, the limits for 2006-07 were fixed on a quarterly basis instead of a half-yearly basis. Accordingly, the WMA limits for 2006-07 were 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 retained the flexibility to revise the limits in consultation with the Government of India taking into consideration the transitional issues and prevailing circumstances. Interest rates on WMA and overdraft have been linked to the repo rate as against the Bank Rate hitherto, following the emergence of the repo rate as the short-term reference rate. Accordingly, the interest rate on WMA is at the repo rate and that on overdraft is at repo rate *plus* two percentage points.

VI.5 The liquidity position of the Government remained by and large comfortable during 2006-07. The surplus cash balances of the Centre which

amounted to Rs.48,928 crore (inclusive of investment balance of Rs.20,000 crore) at end-March 2006 dwindled during April 2006 and the Centre had to take recourse to WMA during May-August 2006. The peak WMA availed during the year was Rs.11,754 crore (59 per cent of the limit) on June 6, 2006. The Centre, however, did not resort to overdraft during the year. During 2006-07, the Centre availed WMA for a total of 39 days as compared with only two days during 2005-06. The Centre availed WMA up to August 7, 2006, and, thereafter, maintained surplus cash balances with the Reserve Bank. The surplus exceeded the investment ceiling of Rs.20,000 crore from September 16, 2006. The surplus balance reached a historic peak of Rs.77,726 crore on March 22, 2007, reflecting State Governments' investment in Government of India Treasury Bills and buoyancy in advance tax collections. The surplus balance, however, declined to Rs.50,092 crore as on March 31, 2007, but remained higher than the previous year's level of Rs.48,928 crore (Chart VI.1). The surplus averaged Rs.27,976 crore during 2006-07 as compared with Rs.25,772 crore a year ago.

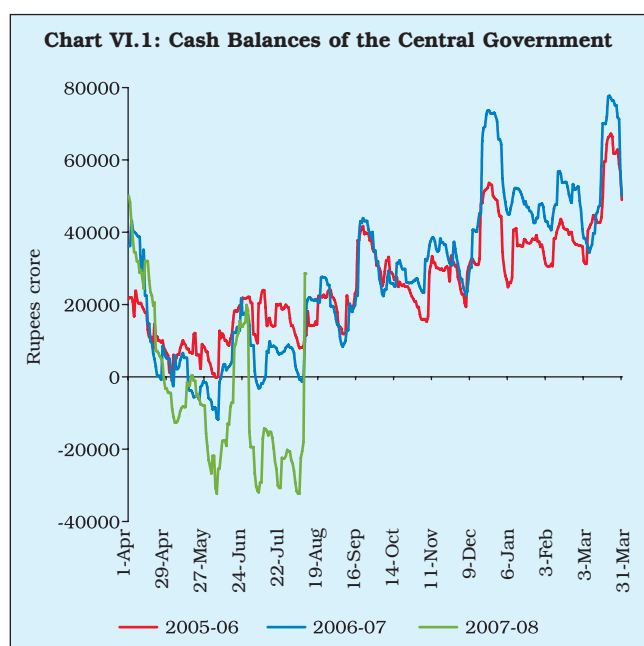
VI.6 The WMA limits for 2007-08 have been fixed at Rs.20,000 crore for the first half of the year (April-September) and Rs.6,000 crore for the second half of the year (October-March). The applicable interest rate on WMA and overdraft would continue to be linked to the repo rate as hitherto. The Centre began the fiscal year with a large surplus balance of Rs.50,092 crore, which eroded rapidly and turned into a deficit by April 27, 2007 reflecting sharp reduction in the

investments in the Government of India Treasury Bills by States, higher than anticipated spending and lower collections under the National Small Saving Fund (NSSF). The cash balance of the Government persisted in a deficit mode till June 17, 2007 except for a brief period of 2 days on May 17-18, 2007. The cash deficit crossed the WMA limit of Rs.20,000 crore on May 30, 2007 and remained in an overdraft position till June 8, 2007. Additional issuance of 91-day and 182-day Treasury Bills amounting to Rs.27,500 crore on six occasions, during June 6-27, 2007, coupled with an auction of dated securities amounting to Rs.5,000 crore on June 12, 2007 outside the calendar, advance tax inflows for the April-June quarter together with the resumption of investment by States in the Government of India Treasury Bills facilitated building up of a surplus position in Government balances from June 18, 2007. With the transfer of the State Bank of India (SBI) stake from the Reserve Bank of India to the Government involving cash outgo of Rs.35,531 crore on June 29, 2007, the cash balance of the Government again turned into a deficit and remained so till August 8, 2007. Following the transfer of surplus from the Reserve Bank on August 9, 2007, the cash balance of the Government of India returned to a surplus mode. The Government resorted to overdraft on three occasions during 2007-08 (up to August 10, 2007) in contrast with the previous year when it did not resort to any overdraft. During 2007-08 so far, the Government availed of WMA/OD on 90 days as against 39 days during the previous year.

### Treasury Bills

VI.7 As per the annual issuance calendar released on March 24, 2006, the notified amounts of 91-day, 182-day and 364-day Treasury Bills (TBs) under the normal market borrowing programme were kept unchanged at Rs.500 crore (weekly auction), Rs.500 crore (fortnightly auction) and Rs.1,000 crore (fortnightly auction), respectively. The notified amount of the TBs issued under the market stabilisation scheme (MSS) was, however, varied during the year keeping in view the prevailing liquidity conditions. The net issuances (excluding MSS) of 91-day, 182-day and 364-day TBs were placed at Rs.28,911 crore, Rs.7,435 crore and Rs.8,795 crore, respectively, during 2006-07 (Table 6.1 and Appendix Table 58). The normal market borrowing component of all issues of the TBs was fully subscribed to by the market and there was no devolvement on primary dealers (PDs).

VI.8 During 2006-07, the primary market yields of the TBs across all the maturities were consistently



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

(Rupees crore)

Type of Treasury Bill	Weighted Average Cut-off Yield (Per cent)		Gross Amount		Net Amount		Outstanding Amount	
	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07	End-March 2006	End-March 2007
1	2	3	4	5	6	7	8	9
91-Day	5.51	6.80	1,03,424 (52,057)	1,31,577 (48,222)	-11,474 (-19,500)	28,911 (14,473)	16,318 0	45,229 (14,473)
182-Day	5.65	6.87	26,828 (13,078)	36,912 (16,125)	9,771 (3,000)	7,435 (4,950)	9,771 (3,000)	17,206 (7,950)
364-Day	5.87	7.07	45,018 (16,000)	53,813 (20,440)	-2,114 (-4,981)	8,795 (4,440)	45,018 (16,000)	53,813 (20,440)

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

higher than their respective levels a year ago. The average primary market yields of TBs increased by 95-108 basis points over the previous year (Chart VI.2). The firming up of the yields reflected a variety of factors such as rise in domestic inflation, hike in fed funds rate, larger issuances of TBs on account of reintroduction of the MSS, and increase in repo and reverse repo rates and the cash reserve ratio.

VI.9 The yield spread of 364-day TBs over 91-day TBs varied between 74 basis points (June 7, 2006) and (-)26 basis points (February 14, 2007) (Table 6.2). The average yield spread during the fiscal year was 38 basis points (28 basis points a year ago).

VI.10 During 2006-07, non-competitive bids aggregating Rs.72,514 crore of TBs were received as compared with Rs.29,702 crore during the previous

year, reflecting investment of surplus cash balances of a relatively more enduring nature with the State Governments. The share of non-competitive bids in gross issues of auctioned TBs increased to 33 per cent during 2006-07 from 17 per cent during 2005-06, almost entirely due to investments by the State Governments.

VI.11 On March 30, 2007, the calendar for the regular auction of TBs for 2007-08 (April-March) was announced. The notified amounts 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.

VI.12 Under the modified arrangements for liquidity management announced on March 2, 2007, the Reserve Bank, subject to variations in liquidity, would announce every Friday the possibility and the quantum of MSS issuances, covering TBs and dated securities, for the succeeding week. The total outstanding amount of 91-day, 182-day and 364-day Treasury Bills issued under the MSS during 2007-08 (as on August 3, 2007) amounted to Rs.13,500 crore, Rs.10,030 crore and Rs.21,440 crore, respectively.

VI.13 Till end-May 2007, the issuances of Treasury Bills under the normal portion were undertaken in accordance with the indicative calendar. In June 2007, TBs were actively used as a cash management instrument to enable the Government to acquire the stake in SBI from the Reserve Bank. Issuance of TBs under the MSS was accordingly discontinued after June 6, 2007. Additional issuances of TBs under the normal portion aggregating Rs.27,500 crore were undertaken on six occasions during June 2007; of these, the amounts raised through 91-day, 182-day and 364-day TBs were Rs.18,500 crore, Rs.6,000 crore and Rs.3,000 crore, respectively. The additional issuances were synchronised with the then prevailing easy liquidity conditions and thus did not distort the

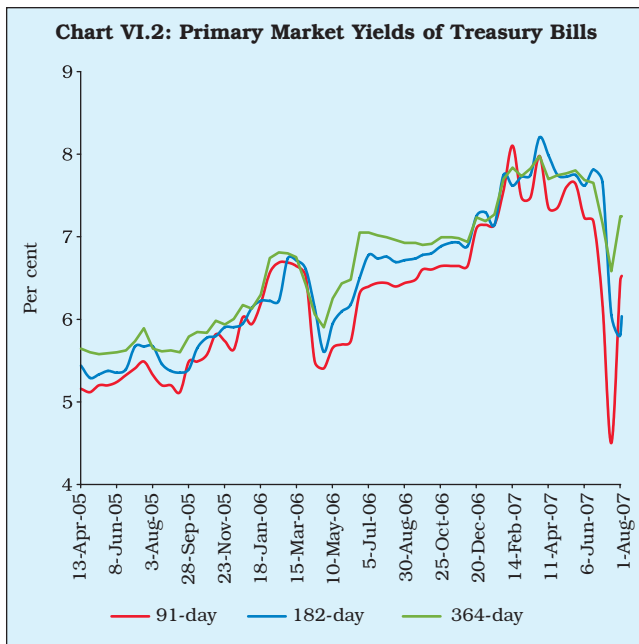


Table 6.2: Treasury Bills – Primary Market

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
<b>2006-07</b>							
April	5,000	5.52	5.87	5.98	5.57	4.96	2.02
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	6.42	6.75	7.03	1.82	1.55	3.12
August	19,000	6.41	6.70	6.96	2.03	2.71	3.48
September	15,000	6.51	6.76	6.91	1.35	1.80	2.92
October	15,000	6.63	6.84	6.95	1.31	1.20	2.02
November	18,500	6.65	6.92	6.99	1.33	1.22	2.49
December	15,000	7.01	7.27	7.09	1.19	1.29	3.34
January	19,000	7.28	7.45	7.39	1.02	1.35	1.74
February	15,000	7.72	7.67	7.79	2.48	2.56	3.16
March	15,000	7.68	7.98	7.90	2.08	2.15	3.87
<b>2007-08</b>							
April	15,000	7.53	7.87	7.72	2.87	3.36	3.16
May	18,500	7.59	7.70	7.79	2.33	2.57	2.33
June	35,000	7.39	7.76	7.67	3.23	4.11	3.97
July	12,500	5.07	5.94	6.87	5.99	2.67	4.10

\* : Ratio of competitive bids received to notified amount.

yields. During the first quarter of 2007-08, the average cut off yields in the primary auctions of 91-day, 182-day and 364-day TBs hovered around 7.50 per cent, 7.75 per cent and 7.70 per cent, respectively. In July 2007, the average cut off yields of the three TBs declined sharply to 5.07 per cent, 5.94 per cent and 6.87 per cent, respectively, reflecting further easing of market liquidity conditions.

### Dated Securities

VI.14 Net market borrowings through dated securities during 2006-07 amounted to Rs.1,06,916 crore, showing an increase of 12.1 per cent over that of Rs.95,370 crore during 2005-06. Gross market borrowings aggregated Rs.1,46,000 crore in 2006-07 (11.5 per cent higher than that of Rs.1,31,000 crore during 2005-06) (Table 6.3 and see Appendix Table 34). The total devolvement on the PDs during 2006-07 was Rs.5,604 crore; there was no devolvement on the PDs or the Reserve Bank during 2005-06.

VI.15 The Reserve Bank continued with the policy of passive consolidation and elongation of maturity profile of Government dated securities during 2006-07. Out of 33 issues of dated securities during the year, 30 were reissues of existing securities; three new securities of 10-year, 15-year and 30-year maturities were issued to provide a benchmark in the

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

Instrument	(Rupees crore)				
	2005-06 (Actual)	2006-07 (BE)	2006-07 (Actual)	2007-08 (BE)	2007-08 (Actual)*
1	2	3	4	5	6
Total	1,60,018 (98,237)	1,81,875 (1,13,778)	1,79,373 (1,11,270)	1,87,769 (1,10,827)	96,628 (56,047)
<i>of which:</i>					
(i) Dated Securities	1,31,000 (95,370)	1,55,018 (1,15,939)	1,46,000 (1,06,916)	1,55,455 (1,09,579)	83,000 (55,232)
(ii) 364-day Treasury Bills	29,018 (2,867)	26,857 (-2,161)	33,373 (4,354)	32,314 (1,248)	13,628 (815)

BE : Budget Estimates. \* : Up to August 10, 2007.

Note : Figures in parentheses represent net borrowings.

secondary market (Appendix Table 59). In 2005-06, only one out of the 31 issues was a new security. The share of reissued securities in total issuances in 2006-07 was 90.4 per cent (97.7 per cent in the previous year). Out of 100 outstanding marketable securities as on March 31, 2007, amounting to Rs.10,83,346 crore, eleven securities each with minimum outstanding amount of Rs.25,000 crore accounted for 32 per cent of the total outstanding amount at end-March 2007 (14 per cent as at end-March 2006).

VI.16 Like the major Treasuries, India has been following the practice of releasing an issuance calendar (Box VI.1). In India, the system of releasing the calendar began during 2002-03. Since then, half-yearly issuance calendars are released every year. During 2006-07, the issuance calendar for the first half of the year was issued on March 24, 2006 for Rs.89,000 crore. The aggregate amount raised during the first half of the year was exactly the same as was indicated in the issuance calendar, although on a few occasions the actual issuance differed from the scheduled issuance. In the auction held on June 22, 2006, an additional issuance of Rs.4,000 crore was made to absorb excess liquidity in the system. Taking into account the liquidity conditions and investor demand, the notified amounts in the two auctions held in July 2006 were reduced by Rs.4,000 crore, offsetting the additional issuance in June 2006. The issuance calendar for the second half of the fiscal year, released on September 25, 2006, was for Rs.63,000 crore. After a review of the Central Government's requirements, the scheduled auction in the 10-year segment for Rs.5,000 crore on January 12, 2007 was cancelled while the notified amount in the auction held in March 2007 was reduced by Rs.1,000 crore. Thus, the actual issuance during the second half was lower at Rs.57,000 crore.

**Box VI. 1****Auction Calendar for Dated Securities: Underlying Considerations**

Debt management strategy based on the principles of transparency and predictability is believed to be most effective in minimising government borrowing costs in the long-term. The uncertainty about the timing and amount of borrowing creates upward pressure on the Government's borrowing costs as investors load 'uncertainty risk premium' for an unpredictable and opportunistic issuance policy. The announcement of a calendar for market borrowings can reduce uncertainty about the debt manager's future actions and enables investors to plan their investments in the desired securities. Accordingly, by the early 1990s most of the major Treasuries in the world transited in favour of a more predictable and transparent issuance policy.

The issuance calendars by the majority of the developed countries such as the US, the UK, France, Canada and Japan provide information on only two major variables of the auctions, viz., (a) the timing of issuance and (b) the tenor and type of security to be issued at that time. The most unpredictable variable of the issuance calendar, i.e., the requirement of funds by the Government at the time of scheduled auction or the notified amount for the auction is not covered by these treasuries in their auction calendars. These treasuries subsequently release the information relating to the size of issuance when they gain certainty about the likely market borrowing requirement of the Government at the time of auction - some with the formal announcement of the auction and others through a periodic fortnightly/quarterly schedule.

The issuance calendar issued by the Reserve Bank of India is similar to the one released by the German Treasury but distinct from those of other developed treasuries as it covers all three variables of auctions, with notified amount given in exact terms. The performance of the issuance calendar released by the Reserve Bank has so far been generally satisfactory, with a very low rate of deviation between actual and scheduled issuances.

The calendar is drawn up by estimating inter-temporal market borrowing requirement of the Government and selection of maturity bucket/security to be issued. The size and timing of the auction in the calendar are based on a number of variables such as the expected cash position of the Government at the time of commencement of calendar, size of maturing debt to be rolled over, coupon payment liabilities, expected transfers to States, routine payment liabilities of the Centre, tax inflows and other transfer payments such as surplus transfer from the Reserve Bank. The securities/maturity bucket is identified after taking into consideration factors such as the likely demand for Government securities from different segments of the market, the likely interest rate scenario, the redemption profile of existing debt, and the need for benchmark securities by the market. Though the calendar, thus, prepared is indicative in nature, it has largely been adhered to. On some rare occasions, the actual issuance differs from the announced issuance on account of the evolving cash position of the Government, the prevailing market conditions, the interest rate scenario and other public policy considerations.

VI.17 The market response to the primary auctions of dated securities during 2006-07, as measured by bid-to-cover ratio (BCR), was more favourable than that in the previous year (Box VI.2).

VI.18 The weighted average yield of dated securities increased to 7.89 per cent during 2006-07 from 7.34 per cent during 2005-06 and 6.11 per cent during 2004-05 reflecting the hardening of interest rate structure (Table 6.4 and Appendix Table 60). Despite an increase in the yield during the year, the weighted average coupon on the outstanding stock of Government dated securities continued its downward trend, declining to 8.55 per cent as on March 31, 2007 from 8.75 per cent at end-March 2006 and 10.84 per cent at end-March 2002. The weighted average maturity of dated securities issued during 2006-07 was 14.72 years; it was lower than that of 16.90 years during 2005-06 but close to that prevailing during 2001-02 to 2004-05. The weighted average maturity of outstanding stock, however, inched up further to 9.97 years as on

March 31, 2007 from 9.92 years at end-March 2006 and 8.20 years at end-March 2002.

VI.19 Apart from average maturity, another indicator of the risk profile of debt is modified duration, which is a measure of the sensitivity of the market value of debt to interest rate movements. Longer duration indicates, *ceteris paribus*, a greater degree of sensitivity of market value of debt to small interest rate changes. The modified duration of the outstanding open market loans of the Government increased steadily from 4 years at end-March 2000 to 6.2 years at end-March 2004 (Chart VI.3). This implied that a one per cent decline in yield would have resulted in an increase of 6.2 per cent in the market value of outstanding open market debt. The increase in the modified duration during this period essentially reflected the demand for longer duration securities in the context of a persistent decline in the secondary market yields. Since end-March 2005, the modified duration has hovered around 5.6 years. The reduction in modified duration in recent years

## Box VI. 2

## Primary Auctions of Government Securities in 2006-07 – An Analysis

The market response for the auctions during 2006-07, as measured by bid-to-cover ratio (BCR), was better than that in the previous year. The average BCR for 2006-07 was 2.36 as compared with 2.19 during 2005-06. The BCR is largely influenced by the prevailing liquidity conditions in the market, interest rate expectations and the statutory requirement of market participants at the time of auctions. The pattern of primary subscription by different groups of investors, however, does not indicate any major shift in demand pattern during the past two years. Since PDs have the responsibility to ensure the success of the primary issuances, they continued to remain the largest subscriber group accounting for nearly 49 per cent of issuances during both the years. The share of the insurance sector, which subscribed nearly 26 per cent of total issuances in 2005-06, fell to around 23 per cent in 2006-07, largely on account of availability of special Government securities such as Oil bonds and FCI bonds offering higher yields. The higher demand for Government securities by the banking sector, reflecting their emerging SLR requirement as well as larger availability of short tenor securities issued under the MSS, led to an increase in the banking sector's share from 22 per cent to 25 per cent.

An inverse relationship was observed to exist between the issue size and the BCR, reflecting inflexibility in demand for Government securities on account of the fixed

set of market participants. No significant relationship of the BCR was found with other variables such as the coupon rate and the tenure of the securities.

A comparison of cut-off prices emerging in the auction with the closing market prices of the securities on the auction date and one day prior to it, reflected a high degree of alignment of primary issuance with secondary market yields. The weighted average dispersion of the bid prices from the cut-off price was low in the case of most auctions, indicating efficiency in bidding. Only on a few occasions, the dispersion was found to be high.

To measure the extent of uniformity of market expectations about the outcome of the auctions and also the bidding skills of the market participants, concentration of bid prices was measured by weighing the Herfindahl index of bid prices with the number of bids received in the auction. A higher value of the measure reflects the higher concentration of bids around the expected cut-off price/yield. A reasonably higher value for concentration of bids was obtained for most of the auctions, which was also consistent with the results observed for efficient bidding. Furthermore, the BCR and the concentration of bid price revealed a strong positive correlation, indicating that primary market demand for securities under auction increases during conditions when market participants hold uniform views.

reflected a myriad of factors, viz., the upward movement in yields, issuance of floating rate bonds during 2004-05 [with duration equivalent to the

coupon reset period (6 months to one year)], and lengthening of the maturity profile of issuances undertaken during 2005-06. The extant modified

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

(Yield in per cent/Maturity in years)

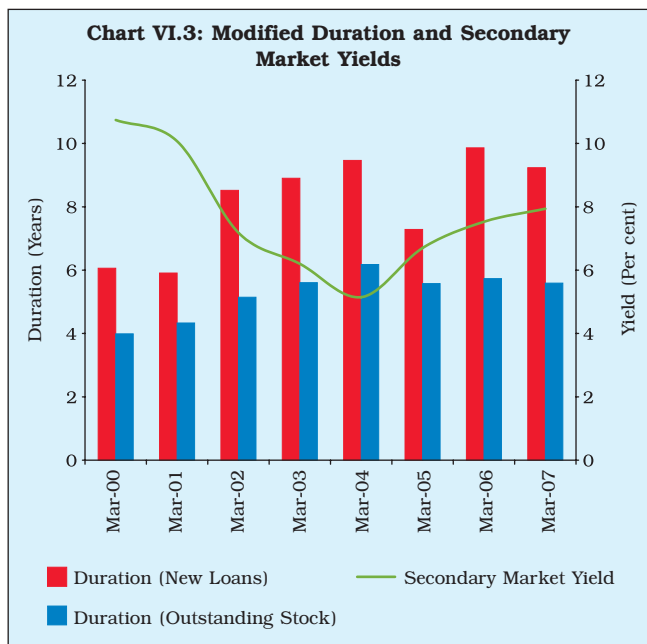
Year	Range of YTM's at Primary Issues			Weighted Average Yield	Range of Maturities of New Loans	Weighted Average Maturity	Weighted Average Maturity of Outstanding Stock	Weighted Average Coupon of Outstanding Stock
	Under 5 years	5-10 years	Over 10 years					
1	2	3	4	5	6	7	8	9
1997-98	10.85-12.14	11.15-13.05	–	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	9.78	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	7.43-8.75	7.89	4-30	14.72	9.97	8.55
2007-08#	—	7.58-8.44	8.34-8.64	8.23	6-30	14.32	10.39	8.46

# : Up to August 10, 2007.  
.. : Not Available.

\* : Excludes issuances under the MSS.  
– : No Issues.

YTM: Yield to Maturity.

**Chart VI.3: Modified Duration and Secondary Market Yields**



duration of outstanding open market loans of the Government of India is comparable with the sovereign debt profile of some of the developed countries.

VI.20 During 2006-07, the spread between the primary cut-off yields in the auctions of dated securities and the prevailing secondary market yields of dated securities of similar maturity ranged between (-) 3 and 14 basis points. However, for a majority of issues (22 out of the 30 auctions of dated securities), the spread was quite narrow (ranged between (-) 3 and 6 basis points), indicating efficient price discovery in the primary auctions (Table 6.5).

VI.21 As a consequence of passive consolidation, a predominant share of the securities have been reissues, with coupons often at variance from the prevailing secondary market yields, resulting in premium received or discount paid by the Government. The total interest cost (adjusted for premium received and discount paid in respect of reissues) on outstanding market loans as a ratio of revenue receipts has declined steadily from 28.3 per cent in 2003-04 to 19.3 per cent in 2006-07.

VI.22 The absolute cost of underwriting of new issues borne by the Reserve Bank declined during 2006-07, notwithstanding the introduction of a revised scheme entailing 100 per cent underwriting commitment by PDs. During 2006-07, Rs.43.8 crore was paid as underwriting commission to PDs as compared with Rs.68.5 crore during the previous year.

**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	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 10, 2006	10.00	5,000	7.59	...	-	2.26
April 10, 2006	28.33	3,000	7.97	7.95	2	2.14
April 25, 2006	6.02	6,000	7.06	7.09	-3	1.93
April 25, 2006	26.34	4,000	8.00	7.98	2	2.35
May 4, 2006	9.94	6,000	7.55	7.53	2	1.88
May 4, 2006	28.26	4,000	8.14	8.10	4	2.16
May 23, 2006	15.00	5,000	7.94	...	-	2.27
June 6, 2006	5.07	6,000	7.39	7.33	6	2.19
June 6, 2006	30.00	4,000	8.33	...	-	2.46
June 22, 2006	7.81	5,000	7.91	7.88	3	1.66
June 22, 2006	14.92	4,000	8.46	8.38	8	1.66
July 11, 2006	9.75	5,000	8.29	8.30	-1	1.51
July 11, 2006	28.08	2,000	8.75	8.61	14	2.04
July 27, 2006	3.79	4,000	7.69	7.68	1	2.26
August 8, 2006	4.90	6,000	7.94	7.86	8	2.55
August 8, 2006	9.68	3,000	8.27	8.20	7	3.24
August 18, 2006	10.40	5,000	8.12	8.10	2	2.65
August 18, 2006	29.79	3,000	8.72	8.72	0	3.15
September 8, 2006	9.59	6,000	7.76	7.70	6	2.79
September 8, 2006	27.91	3,000	8.45	8.41	4	2.72
October 13, 2006	9.49	6,000	7.63	7.63	0	1.76
October 13, 2006	29.64	3,000	8.10	8.10	0	2.30
November 3, 2006	5.49	6,000	7.50	7.48	2	2.55
November 3, 2006	27.76	3,000	8.02	8.01	1	2.44
November 24, 2006	10.13	5,000	7.43	7.42	1	2.74
December 8, 2006	7.35	5,000	7.31	7.30	1	2.14
December 8, 2006	29.49	4,000	7.63	7.60	3	2.61
January 12, 2007	29.39	4,000	8.24	8.17	7	1.43
January 25, 2007	14.32	5,000	8.20	8.12	8	2.41
February 9, 2007	7.18	6,000	7.88	7.82	6	1.67
February 9, 2007	29.32	3,000	8.19	8.12	7	2.92
March 9, 2007	9.84	4,000	8.06	8.00	6	2.93
March 9, 2007	29.24	3,000	8.40	8.33	7	2.73

.. : Not available. - : Not applicable.

The reduction in the underwriting commission during 2006-07, despite a higher underwriting obligation of Rs.1,46,000 crore than that of Rs.1,31,000 crore in the previous year, reflected the successful adaptation of PDs to the post-FRBM environment, in general, and the revised system of underwriting, in particular.

VI.23 The share of securities of tenor between 5 and 10 years issued during 2006-07 increased to 47 per cent from 26 per cent in the previous year. The hardening of yields and the higher statutory investment demand for Government securities by the banking sector prompted the relatively higher issuance of securities of tenor up to 10 years (Table 6.6).

**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	15	80	24	32	44
2004-05	11	11	78	27	30	43
2005-06	0	26	74	26	31	43
2006-07	7	47	46	26	41	33

VI.24 Annual repayment obligations would hover in a range of Rs.44,028 crore to Rs.74,074 between 2008-09 and 2015-16 before peaking at Rs.1,08,130 crore during 2016-17 (Table 6.7).

VI.25 The declining trend in the share of high cost debt continued during 2006-07. The share of

**Table 6.7: Repayment Schedule of the Centre's Outstanding Market Loans**

(As on March 31, 2007)

(Rupees crore)

1	2
2007-08	45,876
2008-09	44,028
2009-10	54,589
2010-11	66,586
2011-12	73,581
2012-13	74,074
2013-14	65,009
2014-15	69,018
2015-16	65,244
2016-17	1,08,130
2017-18	63,774
2018-19	42,478
2019-20	28,000
2020-21	11,000
2021-22	41,846
2022-23	41,000
2023-24	21,000
2025-26	16,688
2026-27	19,389
2027-28	15,000
2028-29	11,000
2031-32	2,687
2032-33	21,000
2034-35	29,350
2035-36	29,000
2036-37	24,000
<b>Total</b>	<b>10,83,346</b>

**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 2006	end-March 2007	end-March 2006	end-March 2007
1	2	3	4	5
4.00-4.99	19,500	11,000	2.0	1.0
5.00-5.99	1,15,818	82,818	11.9	7.6
6.00-6.99	1,42,307	1,63,949	14.6	15.1
7.00-7.99	2,12,540	3,20,540	21.8	29.6
8.00-8.99	60,973	1,07,681	6.2	9.9
9.00-9.99	59,424	71,424	6.1	6.6
10.00-10.99	93,067	1,01,382	9.5	9.4
11.00-11.99	1,59,308	1,18,668	16.3	10.9
12.00-12.99	94,249	93,184	9.7	8.6
13.00-14.00	19,530	12,700	2.0	1.2
<b>Total</b>	<b>9,76,717</b>	<b>10,83,346</b>	<b>100</b>	<b>100</b>

outstanding debt with coupon of more than 8 per cent declined to 46.6 per cent at end-March 2007 from 49.8 per cent a year ago. About 45 per cent of the outstanding stock of debt at end-March 2007 was contracted at interest rates of 6.00-7.99 per cent (36.4 per cent a year ago) (Table 6.8).

VI.26 During 2006-07, insurance companies continued to absorb the largest share of fresh issues of dated securities, followed by commercial banks, largely reflecting their increased investment requirements. Notwithstanding the steady erosion in their share over the past three years, commercial banks continued to account for the predominant share in the outstanding stock of dated securities at end-March 2007 (Box VI.3).

**Recapitalisation Bonds**

VI.27 The Union Budget 2006-07 had announced the unwinding of the entire outstanding amount of 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 conversion in each tranche was proposed to be effected in successive quarters beginning with the second quarter of 2006-07 and the fourth and the final tranche of conversion was to be effected during 2007-08. However, only one tranche of conversion was effected during 2006-07 (on February 15, 2007) under which two Recapitalisation Bonds, aggregating Rs.8,708 crore were converted into three marketable Government securities with residual maturities of 15, 20 and 25 years. During 2007-08 (up to August 10, 2007), another tranche of conversion was effected on



### Box VI.3 Ownership Pattern of Government Securities

A diversified investor base is one of the basic characteristics of a well developed and efficient market. Diversity in investor base imparts stability to the markets by minimising the impact of 'herd mentality'.

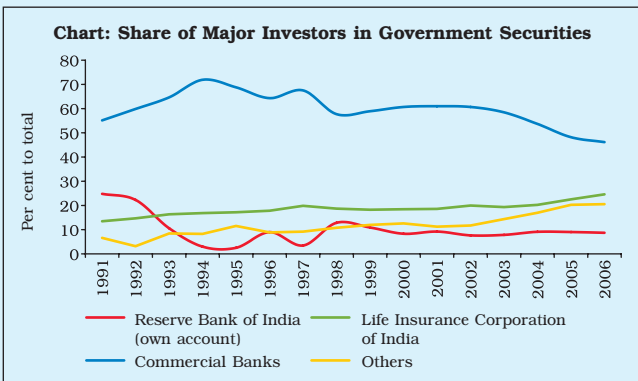
In India, traditionally, the major holders of Government securities have been banks and insurance companies. While banks and insurance companies held the securities due to the statutory stipulations, the Reserve Bank held these securities in discharge of its role as monetary authority and merchant banker to the Government. The share of banks' holdings in outstanding Government securities declined sharply from a peak of 71.9 per cent at end-March 1994 to 44 per cent by end-December 2006, reflecting a variety of factors such as the reduction in SLR requirement and the strong demand for bank credit (Chart).

The share of the Reserve Bank in holdings of Government securities has also declined from about 25 per cent in 1991 to around seven per cent by end-December 2006, on account of a number of factors such as sterilisation operations in the face of sustained capital flows, the

gradual phasing out of the monetisation of fiscal deficits and the growing commitment to fiscal discipline by the Government. The reforms in the Government securities market have been aimed at widening and diversifying the investor base to ensure efficient price discovery. Expanding the instrument base to cater to different kinds of investors, permitting non-competitive bidding in auctions, establishment of the primary dealer system for market making, permitting FIIs to invest in Government securities, introduction of anonymous order matching system for enhancement of trading efficiency and expanding its scope to odd lot trading, and CSGL trading are some of the measures initiated in this direction. While these measures have helped in bringing new players into the market (Table), active and widespread participation of these entities is expected to materialise gradually. The holdings remain concentrated in a few major categories of institutions. This scenario is expected to change with the development of new segments like pension and provident funds and more retail participation.

**Table: Holding Pattern of Central Government Dated Securities**

Category	(Per cent to total)			
	Mar-06	Jun-06	Sep-06	Dec-06
1	2	3	4	5
Commercial Banks	45	44	45	44
Insurance Companies	25	26	27	27
Primary Dealers	5	6	5	5
Mutual Funds	1	1	1	1
Cooperative Banks	4	3	3	3
Financial Institutions	1	1	1	1
Corporates	1	2	2	2
Provident Funds	6	6	6	6
Reserve Bank of India	8	7	7	7
Others	4	4	3	4



August 2, 2007 under which three Recapitalisation Bonds aggregating Rs.6,831 crore were converted into three marketable Government securities with the same residual maturities as in the first conversion.

#### *Special Securities to Oil Marketing Companies (OMCs)*

VI.28 With a view to compensating oil marketing companies (OMCs) for under-recoveries in their domestic LPG and kerosene (PDS) operations during 2006-07, the Government of India issued five special securities to OMCs on five occasions in 2006-07 aggregating Rs.24,121 crore. The special securities, with 15-year, 17-year and 20-year maturities, were without SLR status as these were not issued as a

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.

#### *Special Securities to Food Corporation of India (FCI)*

VI.29 As part of settlement of the outstanding dues of the Food Corporation of India (FCI) in respect of food grains supplied by it to the Ministry of Rural Development, the Government of India issued special securities worth Rs.16,200 crore during 2006-07 to the FCI. The first tranche of the Special Bonds was issued for Rs.5,000 crore (nominal) on October 16, 2006. Two further tranches were issued on December

15, 2006 and February 12, 2007 for Rs.5,000 crore and Rs.6,200 crore, respectively. The bonds issued were of 16-year, 18-year and 20-year maturity. The investments in these FCI Special Bonds are not reckoned as eligible investment by banks and insurance companies for their statutory requirements. However, investment by provident funds, gratuity funds, and superannuation funds in the Special Bonds would be treated as eligible investment under the administrative order of the Ministry of Finance. These bonds are transferable and eligible for repo transactions.

#### Market Borrowings during 2007-08

VI.30 Market borrowings (through dated securities) of the Central Government for 2007-08 are budgeted at Rs.1,55,455 crore (net Rs.1,09,579 crore), Rs.9,455 crore higher than the actual amount raised in 2006-07. The issuance calendar for dated securities for the first half of 2007-08 released on March 30, 2007 was fixed at Rs.92,000 crore (Rs.89,000 crore raised during the corresponding period of the previous year). The monthly amount to be raised varies

between Rs.7,000 crore (September 2007) and Rs.19,000 crore (July 2007) (Table 6.9). A sizeable amount (46 per cent) to be raised during the first half would be through securities of tenor between 10-14 years.

VI.31 During 2007-08 so far (up to August 10, 2007), a gross amount of Rs.83,000 crore (excluding issuances under the MSS) has been raised through dated securities, as compared with Rs.72,000 crore in the corresponding period of the previous year. While the amounts raised in April and May 2007 were in accordance with the issuance calendar, an additional Rs.5,000 crore, outside the calendar, was raised on June 12, 2007 to fund the acquisition of SBI stake by the Government. All but one of the securities were reissues. The weighted average yield of the dated securities issued was higher at 8.23 per cent than that of 7.87 per cent during the corresponding period of the previous year. The weighted average maturity of the dated securities issued at 14.72 years was higher than that of 13.21 years during the corresponding period of the previous year.

**Table 6.9: Indicative Calendar and Actual Borrowings of Central Government during 2007-08**

(Amount in Rupees crore/Maturity in years)

Sr. No.	Borrowings as per Indicative Issuance Auction Calendar			Actual Borrowings			
	Period of Auction	Amount	Residual Maturity	Date of Auction	Amount	Residual Maturity	Yield (Per cent)
1	2	3	4	5	6	7	8
1.	April 5-12, 2007	6,000	5-9	April 12, 2007	6,000	8.39	8.16
		4,000	20 and above	April 12, 2007	4,000	29.15	8.58
2.	April 20-27, 2007	6,000	10-14	April 27, 2007	6,000	9.71	8.16
		4,000	20 and above	May 11, 2007	4,000	29.06	8.64
3.	May 4 -11, 2007	6,000	10-14	May 11, 2007	6,000	9.92	8.31
		4,000	20 and above	May 11, 2007	4,000	29.06	8.64
4.	May 18-25, 2007	5,000	5-9	May 25, 2007	5,000	8.26	8.24
		3,000	15-19	May 25, 2007	3,000	14.96	8.40
5.	June 1-8, 2007	6,000	10-14	June 5, 2007	6,000	9.86	8.18
		3,000	20 and above	June 5, 2007	3,000	29.00	8.52
6.	June 15-22, 2007	6,000	10-14	June 12, 2007*	5,000	9.84	8.44
		6,000	10-14	June 15, 2007	6,000	9.83	8.35
7.	July 6-13, 2007	6,000	10-14	July 6, 2007	6,000	10.00	7.99
		4,000	20 and above	July 6, 2007	4,000	28.91	8.45
8.	July 20-27, 2007	6,000	5-9	July 20, 2007	6,000	6.11	7.59
		3,000	20 and above	July 20, 2007	3,000	25.10	8.34
9.	August 3-10, 2007	6,000	10-14	August 3, 2007	6,000	9.93	7.93
		4,000	20 and above	August 3, 2007	4,000	25.06	8.45
10.	August 17-24, 2007	5,000	5-9				
		2,000	10-14				
11.	September 7-14, 2007	4,000	10-14				
		3,000	20 and above				

\* : An additional Rs.5,000 crore, outside the calendar, was raised on June 12, 2007 to fund acquisition of SBI stake by the Central Government.

VI.32 The Union Budget 2007-08 had proposed the establishment of an autonomous Debt Management Office (DMO), which would take up debt management functions from the Reserve Bank. In the first phase, a Middle Office would be set up to facilitate transition to a full-fledged DMO.

### STATE GOVERNMENTS

#### Ways and Means Advances

VI.33 Following the recommendations of the Advisory Committee on Ways and Means Advances (WMA) and Overdrafts (OD) to State Governments (Chairman: Shri M.P. Bezbaruah), a revised WMA/OD Scheme was put in place from 2006-07. The aggregate Normal WMA limit for the State Governments was increased by 10.5 per cent to Rs.9,875 crore for 2006-07. The rates of interest on Normal and Special WMA and OD were linked to the repo rate. In addition, with the objective of providing an incentive to the State Governments to build-up the Consolidated Sinking Fund (CSF) and the Guarantee Redemption Fund (GRF), net incremental annual investments in these Funds were made eligible for the purpose of availing Special WMA up to a ceiling equivalent to the Normal WMA limit.

VI.34 The daily average utilisation of Normal WMA, Special WMA and overdrafts by the State Governments declined during 2006-07 (Table 6.10).

VI.35 During 2006-07, eight States resorted to WMA as against 12 States in the previous year

(Table 6.11). Only two States resorted to overdraft during 2006-07 as against eight States in the previous year. The lower utilisation of WMA reflected improved liquidity position on the back of persistent cash surplus with the State Governments.

VI.36 Notwithstanding some slowdown in the automatic inflow of funds under the high-cost NSSF, most State Governments continued to accumulate sizable cash surpluses during 2006-07 emanating mainly from substantially higher Central transfers by way of taxes and grants, and fiscal consolidation measures. The surplus cash balances of the State Governments are automatically invested in 14-day Intermediate TBs, the discount rate in respect of which is 5 per cent at present. While 14-day Intermediate TBs can be rediscounted with the Reserve Bank (with a load of 50 basis points), auction TBs cannot be rediscounted with the Reserve Bank. The outstanding investments of States in 14-day Intermediate TBs at Rs.45,769 crore (by 22 States) at end-March 2007 was 17 per cent higher than that of Rs.38,983 crore (by 24 States) at end-March 2006. On the other hand, the outstanding investment of the State Governments in auction TBs recorded a substantially higher order of increase of 165 per cent to Rs.34,186 crore at end-March 2007 from Rs.12,883 crore at end-March 2006. This could be attributed to the perceived durability of surplus balances with the State Governments and relatively higher yield (around 7-8 per cent) in auction TBs. In terms of monthly averages, the total investments (14-day Intermediate TBs and auction TBs taken together)

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

(Rupees crore)

Month	Special WMA			Normal WMA			Overdraft			Total		
	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
1	2	3	4	5	6	7	8	9	10	11	12	13
April	458	25	235	1,984	723	114	1,084	37	15	3,526	785	364
May	254	6	437	920	162	654	118	0	461	1,292	169	1,552
June	5	1	204	61	3	222	0	0	10	66	4	436
July	67	5	389	282	56	310	38	0	3	387	61	702
August	79	10		244	145		31	10		354	164	
September	27	10		113	223		0	2		140	235	
October	8	9		102	189		0	22		110	220	
November	13	10		148	268		0	48		161	327	
December	8	22		175	246		24	122		207	390	
January	3	43		15	297		0	75		19	415	
February	1	39		2	121		0	5		4	165	
March	0	35		3	4		0	2		3	41	
<b>Average</b>	<b>77</b>	<b>18</b>	<b>316</b>	<b>337</b>	<b>203</b>	<b>325</b>	<b>108</b>	<b>27</b>	<b>122</b>	<b>522</b>	<b>248</b>	<b>763</b>

\* : Average of daily outstandings.

Table 6.11: State-wise Availment of WMA/Overdraft

(Rupees crore)

Sr. No.	State	WMA		Overdraft			
		2005-06	2006-07	2005-06		2006-07	
		Number of days	Number of days	Number of Occasions*	Number of days	Number of Occasions*	Number of days
1	2	3	4	5	6	7	8
1.	Andhra Pradesh	0	0	0	0	0	0
2.	Bihar	0	0	0	0	0	0
3.	Chhattisgarh	0	0	0	0	0	0
4.	Goa	0	0	0	0	0	0
5.	Gujarat	0	0	0	0	0	0
6.	Haryana	0	0	0	0	0	0
7.	Jharkhand	0	29	0	0	0	0
8.	Karnataka	0	0	0	0	0	0
9.	Kerala	240	223	11	63	9	63
10.	Madhya Pradesh	0	0	0	0	0	0
11.	Maharashtra	41	42	1	20	0	0
12.	Orissa	0	0	0	0	0	0
13.	Punjab	22	0	0	0	0	0
14.	Rajasthan	0	0	0	0	0	0
15.	Tamil Nadu	0	0	0	0	0	0
16.	Uttar Pradesh	34	0	1	11	0	0
17.	West Bengal	0	0	0	0	0	0
<b>Special Category States</b>							
1.	Arunachal Pradesh	29	2	0	18	0	0
2.	Assam	57	0	2	22	0	0
3.	Himachal Pradesh	25	1	0	0	0	0
4.	Manipur	63	0	1	44	0	0
5.	Meghalaya	15	0	1	1	0	0
6.	Mizoram	14	1	0	0	0	0
7.	Nagaland	42	28	1	17	2	16
8.	Tripura	0	0	0	0	0	0
9.	Uttaranchal	27	63	1	13	0	0

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

increased from Rs.41,066 crore during 2005-06 to Rs.63,995 crore during 2006-07 (Table 6.12).

VI.37 The upsurge in the surplus cash balances of the State Governments since the middle of 2004-05, in sharp contrast to the liquidity pressures witnessed in the earlier period, has posed newer challenges to the financial and cash management of the State Governments. Under the extant arrangements, the cash balances of the State Governments are automatically invested in 14-day Intermediate Treasury Bills (ITBs) issued by the Central Government. The State Governments are also permitted to invest, as non-competitive bidders, in the auction Treasury Bills (ATBs) of the Central Government. The rates of discount on ITBs and ATBs are lower than the interest paid on open market borrowings and small savings, resulting in a negative carry on cash balances. Consequently, many State

Governments have expressed the need for alternative investment options for their cash balances. In view of large surpluses, while some States decided to curtail the size of their market borrowings, two States decided to use a part of surplus to buyback a portion of their outstanding stock (Box VI.4).

VI.38 The issues relating to the investment of surplus cash balances of the States were discussed in the 18th Conference of State Finance Secretaries held on August 7, 2006. Taking cognisance of the different views expressed during the Conference, it was decided to constitute a small group of State Finance Secretaries and the Reserve Bank officials to suggest a framework for alternative investment options of surplus cash balances of the State Governments. The Working Group included the Finance Secretaries of Assam, Karnataka,

Table 6.12: Investments of State Governments\*

(Rupees crore)

Month	Investment in 14-day Treasury Bills			Investment in Auction Treasury Bills			Total		
	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
1	2	3	4	5	6	7	8	9	10
April	14,764	32,538	31,160	2,492	14,247	34,496	17,256	46,785	65,656
May	18,458	34,559	31,203	3,460	17,542	32,612	21,918	52,101	63,815
June	32,318	40,480	44,430	4,202	19,262	32,500	36,520	59,742	76,930
July	32,633	47,089	35,938	4,891	16,626	39,557	37,524	63,715	75,495
August	35,611	47,538		4,511	17,249		40,122	64,787	
September	40,530	47,858		6,974	18,762		47,504	66,620	
October	36,252	38,470		6,247	21,529		42,499	59,999	
November	40,429	41,694		6,423	21,656		46,852	63,350	
December	44,109	43,879		5,610	25,106		49,719	68,985	
January	42,905	42,860		7,626	25,591		50,531	68,451	
February	36,515	48,084		7,913	24,554		44,428	72,638	
March	48,811	51,848		9,116	28,920		57,927	80,768	
<b>Average</b>	<b>35,278</b>	<b>43,075</b>	<b>35,683</b>	<b>5,789</b>	<b>20,920</b>	<b>34,791</b>	<b>41,066</b>	<b>63,995</b>	<b>70,474</b>

\* : Average of Friday outstanding.

Maharashtra and Rajasthan, who had volunteered their participation. The Working Group submitted its Report to the Reserve Bank in December 2006.

VI.39 Following the recommendations of the Advisory Committee on Ways and Means Advances and Overdrafts to the State Governments (Chairman: Shri M.P. Bezbaruah), the State-wise limits of Normal WMA limits for 2006-07 were reviewed towards the end of the year. It was perceived that the extant

Normal WMA limits were adequate, *inter alia*, on account of (i) low utilisation of WMA by the State Governments during 2006-07; (ii) acclimatisation of the State Governments to the changes in the fiscal environment as envisaged by the Twelfth Finance Commission, thereby signaling the end of the period of transition; and (iii) expected persistence of the comfortable liquidity position of the State Governments during 2007-08. Accordingly, it was decided to retain the extant State-wise Normal WMA

#### Box VI. 4

##### Pre-payment of Debt by State Governments

Accumulation of sizeable surplus cash and the negative carry on these balances led the States to adopt different strategies during 2006-07. While most of the States preferred to curtail the size of their market borrowing, the State Governments of Orissa and Rajasthan decided to utilise a part of their surplus cash balances to prepay some of their outstanding debt through buyback auctions. The modalities of buyback auctions were finalised by the Reserve Bank in consultation with these State Governments and the Government of India. Prepayment of outstanding debt reduces future coupon payment liabilities, generates market interest in the otherwise dormant securities and imparts liquidity in those securities.

Two rounds of buyback auctions were conducted on February 22, 2007 and March 23, 2007 for these States. In the first round of buyback auctions for the State Development Loans (SDLs) of Orissa and Rajasthan, the target amounts were fixed at Rs.300 crore and Rs.100 crore

(face values), respectively. Eighty two bids for an aggregate amount of Rs.542.4 crore were received in the buyback auction for the SDLs of Orissa, whereas the SDLs of Rajasthan attracted 25 bids aggregating Rs.386.2 crore. Orissa accepted bids amounting to Rs.308.2 crore against the target amount of Rs.300 crore at a cut-off discount of 0.37 per cent to the reference prices, whereas Rajasthan accepted an amount of Rs.84.5 crore against the target amount of Rs.100 crore at nil cut-off discount to the reference prices. One of the reasons cited by market participants for the subdued response in buyback auction for the SDLs of Rajasthan was the selection of low coupon securities by the State. The second buyback auction with a target amount of Rs.400 crore was conducted on March 23, 2007 for the Government of Orissa. In the auction, 34 bids for Rs.195.2 crore were received and the State Government decided to accept an amount of Rs 86.4 crore at a cut-off discount of 0.21 per cent to the reference prices.

Table 6.13: 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)#	2007 (effective April 1, 2007)#
1	2	3	4	5	6	7
<b>Non-Special Category States</b>						
Andhra Pradesh	520	620	700	770	880	880
Bihar	245	305	340	380	425	425
Chhattisgarh	100	130	155	175	190	190
Goa	50	50	65	65	65	65
Gujarat	445	485	520	575	630	630
Jharkhand	75	105	175	225	280	280
Haryana	180	205	245	280	295	295
Karnataka	375	460	505	570	625	625
Kerala	225	270	315	345	350	350
Madhya Pradesh	275	345	395	420	460	460
Maharashtra	760	905	1,000	1,050	1,160	1,160
Orissa	185	215	250	270	300	300
Punjab	235	240	325	360	360	360
Rajasthan	310	365	405	440	505	505
Tamil Nadu	415	570	615	670	730	730
Uttar Pradesh	630	755	835	920	1,020	1,020
West Bengal	360	420	480	495	545	545
<b>Sub Total</b>	<b>5,385</b>	<b>6,445</b>	<b>7,325</b>	<b>8,010</b>	<b>8,820</b>	<b>8,820</b>
<b>Special Category States</b>						
Arunachal Pradesh	50	50	50	50	65	65
Assam	180	210	250	295	300	300
Himachal Pradesh	115	135	140	145	190	190
Manipur	50	50	50	55	60	60
Meghalaya	50	50	50	55	60	60
Mizoram	50	50	50	50	55	55
Nagaland	50	55	60	65	80	80
Tripura	55	60	70	80	100	100
Uttaranchal	50	65	95	130	145	145
<b>Sub Total</b>	<b>650</b>	<b>725</b>	<b>815</b>	<b>925</b>	<b>1,055</b>	<b>1,055</b>
<b>Total</b>	<b>6,035</b>	<b>7,170</b>	<b>8,140</b>	<b>8,935</b>	<b>9,875</b>	<b>9,875</b>

\* : 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.

limits for 2007-08 (Table 6.13). Other terms and conditions of the Scheme would also continue to remain unchanged for 2007-08.

VI.40 The liquidity position of most of the States has remained fairly comfortable during 2007-08 so far. The weekly average investment by the States in the 14-day TBs during 2007-08 (up to July 31, 2007) at Rs.35,683 crore was broadly at the same level as that in the corresponding period of the previous year. On the other hand, the weekly average investment by the States in ATBs during 2007-08 (up to July 31, 2007) at Rs.34,791 crore was higher than that of

Rs.16,919 crore in the corresponding period of the previous year. A few States, which could not build up a sufficient financial buffer during 2006-07 by way of investment in TBs, however, had to resort to WMA/OD facility from the Reserve Bank for meeting their temporary cash mismatches. During 2007-08 (up to July 31, 2007), seven States availed of Normal WMA, of which three States availed it for a period exceeding two weeks and also resorted to overdrafts. The daily average utilisation of WMA and overdraft by the States was Rs.763 crore in 2007-08 (up to July 31, 2007) as compared with Rs.255 crore in the corresponding period of the previous year.

### Market Borrowings

VI.41 The provisional net allocation under the market borrowing programme for the State Governments for 2006-07 was placed at Rs.17,242 crore. Taking into account the repayments of Rs.6,551 crore and additional allocation of Rs.2,804 crore, the gross allocation amounted to Rs.26,597 crore during 2006-07. The State Governments raised a gross amount of Rs.20,825 crore in 2006-07 as compared with Rs.21,729 crore in the previous year (Table 6.14 and Appendix Table 61). The entire amount was raised through the auction route during 2006-07 as compared with 48.5 per cent in the previous year and 2.3 per cent in 2004-05. Six States (Bihar, Chhattisgarh, Gujarat, Haryana, Karnataka and Orissa) did not participate in the market borrowing programme during 2006-07, while two States, viz., Goa and Tripura did not raise their full allocations.

VI.42 During 2006-07, 12 tranches of auctions were held under the market borrowing programme of the State Governments as compared with three tap issuances and 9 tranches of auctions during the previous year. All the issues during 2006-07 were of 10-year maturity. The State Governments raised market loans during all but two months (June and September) of 2006-07 (Table 6.15 and Appendix Table 62).

**Table 6.14: Annual Market Borrowings of the State Governments**

(Rupees crore)

Item	2005-06	2006-07	2007-08
1	2	3	4
1. Net Allocation	16,112	17,242	23,024
2. Additional Allocation	3,522	2,804	535
<b>3. Total Allocation (1+2)</b>	<b>19,634</b>	<b>20,046</b>	<b>23,559</b>
4. Repayments	6,274	6,551	11,555 (9,186) #
<b>5. Gross Allocation (3+4)</b>	<b>25,909</b>	<b>26,597</b>	<b>35,114</b>
<b>6. Total Amount Raised (6.1 + 6.2)</b>	<b>21,729</b>	<b>20,825</b>	<b>8,542 #</b>
6.1 Raised through Tap	11,186	–	–
6.2 Raised through Auction	10,544	20,825	8,542 #
<b>7. Net Amount Raised (6-4)</b>	<b>15,455</b>	<b>14,274</b>	<b>-644 #</b>
<b>8. Outstanding State Development Loans (end-period)</b>	<b>2,28,898</b>	<b>2,42,777</b>	<b>–</b>

# : Up to August 10, 2007.

**Note :** 1. Net allocations in respect of three States, viz., Goa, Uttarakhand and Uttar Pradesh under market borrowing programme of State Governments during 2007-08 are yet to be finalised.

**Table 6.15: Month-wise Market Borrowings of the State Governments**

(Amount in Rupees crore)

Sr. No.	Month	No. of States	Raised through Auction		Spread over Central Government Dated Security (Basis points)
			Amount	Cut-off Yield (Per cent)	
1	2	3	4	5	6
<b>2006-07</b>					
1.	April	1	300	7.65	22
2.	May	16	5,585	7.89-8.05	34-52
3.	June	–	–	–	–
4.	July	7	1,458	8.62-8.66	29-33
5.	August	4	1,050	8.11	14
6.	September	–	–	–	–
7.	October	2	201	7.99-8.04	31-36
8.	November	11	2,431	7.74-7.82	21-29
9.	December	8	1,963	7.81-7.99	12-30
10.	January	4	1,215	7.96-7.99	15-18
11.	February	1	200	7.95	26
	February	7	3,400	8.10-8.45	14-49
12.	March	10	2,284	8.25-8.45	28-48
	March	1	738	8.35	41
	<b>Total</b>		<b>20,825</b>	<b>7.65-8.66</b>	<b>12-52</b>
<b>2007-08</b>					
1.	April	5	1,837	8.30	22
2.	May	1	350	8.34	23
	May	2	1,400	8.40	28
3.	June	9	3,566	8.45-8.57	23-25
4.	July	5	1,389	8.00-8.25	19-44
	<b>Total</b>		<b>8,542</b>	<b>8.00-8.57</b>	<b>19-44</b>

VI.43 During 2006-07, one State Government accessed the market as many as seven times, while seven State Governments accessed the market on four occasions. In all, 72 new securities were issued by all the States during 2006-07 for a gross amount of Rs.20,825 crore; the average issue size was Rs.289 crore (Table 6.16). The small size of issuance has been one of the factors that has impacted upon liquidity of the State Government securities. In this context, the process of consultation with the State Governments to introduce a system of reissuances of SDLs is underway.

VI.44 The weighted average yield of State Government securities issued firmed up by 47 basis points to 8.10 per cent during 2006-07 in line with that of Central Government securities, reflecting the general upward movement in interest rates (Table 6.17). The cut-off yield in the auction of State Government

**Table 6.16: Frequency Distribution of Tranches of Auctions during 2006-07**

No. of times entering the Market/Tranches	No. of States	No. of Securities Issued
1	2	3
1	2	2
2	6	12
3	4	12
4	7	28
5	1	5
6	1	6
7	1	7
<b>Total</b>	<b>22</b>	<b>72</b>

securities during 2006-07 ranged between 7.65-8.66 per cent. The cut-off yields were 12 to 52 basis points higher than secondary market yields of Government of India dated securities of comparable maturity.

VI.45 While the spreads for almost all the States remained well below 50 basis points, a clear linkage between the fiscal performance of the State Governments and the weighted average spreads obtained in the auctions during the year was not evident (Table 6.18).

VI.46 As at end-March 2007, 70.3 per cent of outstanding stock of debt was at interest rate of less than 9 per cent (65.6 per cent a year ago) (Table 6.19).

VI.47 Almost two-thirds of the outstanding stock of State Government securities were in the maturity bucket of 6-10 years at end-March 2007 (Table 6.20).

VI.48 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 6.21).

VI.49 With the cessation of Central loans to the State Governments from 2005-06 as recommended by the Twelfth Finance Commission, the reliance of

**Table 6.17: Yield on 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	8.10
2007-08*	8.00-8.57	8.35

\* : Up to August 10, 2007.

the States on alternative forms of borrowings is expected to increase within the parameters of their Fiscal Responsibility Legislations, wherever applicable. At the same time, in line with the progressive increase in the reliance of the State Governments on open market borrowings through the auction route, competitive pressures amongst the States are expected to intensify in future. There would, thus, be a greater need for coordination between the Central and the State Governments as well as the Reserve Bank to ensure that the Government borrowing programmes are conducted smoothly, consistent with the objectives of monetary policy. An important initiative in this regard is the constitution of a Standing Technical Committee on Borrowings of State Governments (Box VI. 5).

VI.50 Based on the recommendations of the Report of Expert Group on the Settlement of SEB Dues (Chairman: Shri M. S. Ahluwalia) (2001), a scheme for one-time settlement of outstanding dues of State Electricity Boards (SEBs) to Central Public

**Table 6.18: Weighted Average Spreads during 2006-07**

Weighted Average Spread (Basis points)	General Category States	Special Category States
1	2	3
Less than 20	Goa, Rajasthan	Tripura
20 – 25	Kerala, Tamil Nadu	–
25 – 30	Andhra Pradesh	Arunachal Pradesh, Assam, Himachal Pradesh
30 – 35	Jharkhand, Maharashtra, Punjab, West Bengal	Sikkim
35 – 40	Madhya Pradesh	Jammu and Kashmir, Manipur, Meghalaya, Mizoram, Nagaland
Above 40	Uttar Pradesh	Uttaranchal



**Table 6.19: 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 2006	End-March 2007	End-March 2006	End-March 2007
1	2	3	4	5	6
1.	5.00-5.99	33,825	33,825	14.8	13.9
2.	6.00-6.99	58,563	58,564	25.6	24.1
3.	7.00-7.99	49,601	59,638	21.7	24.6
4.	8.00-8.99	8,004	18,791	3.5	7.7
5.	9.00-9.99	5,412	5,412	2.4	2.2
6.	10.00-10.99	14,563	14,468	6.4	6.0
7.	11.00-11.99	17,062	16,934	7.5	7.0
8.	12.00-12.99	26,146	25,959	11.4	10.7
9.	13.00-13.99	15,722	9,186	6.9	3.8
<b>Total</b>		<b>2,28,898</b>	<b>2,42,777</b>	<b>100</b>	<b>100</b>

Sector Undertakings (CPSUs) was finalised. Under the Tripartite Agreements (TPA) signed among the

**Table 6.20: Maturity Profile of Outstanding State Government Securities**  
(At end-March 2007)

Sr. No.	State	Per cent to Total Amount Outstanding		Total Amount Outstanding (Rupees crore)
		0-5 years	6-10 years	
1	2	3	4	5
1.	Andhra Pradesh	37.9	62.1	23,543
2.	Arunachal Pradesh	19.4	80.6	424
3.	Assam	32.8	67.2	6,525
4.	Bihar	42.0	58.0	10,492
5.	Chhattisgarh	41.6	58.4	2,562
6.	Goa	35.8	64.2	1,108
7.	Gujarat	33.2	66.8	12,722
8.	Haryana	30.3	69.7	4,994
9.	Himachal Pradesh	24.8	75.2	4,583
10.	Jammu & Kashmir	27.0	73.0	3,538
11.	Jharkhand	36.5	63.5	3,707
12.	Karnataka	39.3	60.7	11,700
13.	Kerala	33.1	66.9	12,847
14.	Madhya Pradesh	30.0	70.1	11,352
15.	Maharashtra	24.3	75.7	19,967
16.	Manipur	24.4	75.6	868
17.	Meghalaya	33.4	66.6	1,120
18.	Mizoram	22.8	77.2	709
19.	Nagaland	34.4	65.6	1,700
20.	Orissa	42.5	57.5	8,898
21.	Punjab	23.6	76.4	9,435
22.	Rajasthan	37.6	62.4	16,070
23.	Sikkim	32.8	67.2	517
24.	Tamil Nadu	31.5	68.5	16,373
25.	Tripura	33.3	66.7	1,159
26.	Uttar Pradesh	38.2	61.8	30,788
27.	Uttaranchal	15.9	84.1	4,237
28.	West Bengal	24.5	75.5	20,839
<b>Total</b>		<b>32.9</b>	<b>67.1</b>	<b>2,42,777</b>

Government of India, the Reserve Bank and all the 28 State Governments, the aggregate amount of power bonds issued by 27 State Governments (except Goa) amounted to Rs.31,581 crore during 2006-07. Taking into account the repayments during the year, the outstanding amount of power bonds issued by 27 State Governments amounted to Rs.30,002 crore as on March 31, 2007. On April 1, 2007, two State Governments, viz., Karnataka and Tamil Nadu, exercised the call option to prepay their entire outstanding Power Bonds (Rs.523 crore and Rs.1,864 crore, respectively), while the Government of Rajasthan exercised the call option for part prepayment of its outstanding dues (Rs.111 crore). Thus, on April 1, 2007, the outstanding amount of power bonds in respect of 25 State Governments amounted to Rs.26,051 crore.

**Table 6.21 : Maturity Profile of Outstanding State Loans and Power Bonds**  
(At end-March 2007)

Year	State Loans		Power Bonds	Total
	1	2		
1	2	3	4	
2007-08	11,555	5,405	16,959	
2008-09	14,371	2,907	17,278	
2009-10	16,315	2,907	19,222	
2010-11	15,734	2,907	18,640	
2011-12	21,999	2,907	24,906	
2012-13	30,628	2,870	33,498	
2013-14	32,079	2,870	34,949	
2014-15	33,384	2,870	36,254	
2015-16	35,191	2,907	38,098	
2016-17	31,522	1,453	32,975	
<b>Total</b>	<b>2,42,777</b>	<b>30,002</b>	<b>2,72,779</b>	

**Box VI.5****Standing Technical Committee on Borrowings of State Governments**

The Twelfth Finance Commission (TFC) had recommended that "...States, like the Centre, must decide their annual borrowing programme within the framework of their respective fiscal responsibility legislations. ... The overall limit to their annual borrowings from all sources should be supervised by an independent body like a Loan Council with representatives from the Ministry of Finance, Planning Commission, Reserve Bank of India and the State Governments. The Council may, at the beginning of each year, announce the annual borrowing limits for each State, taking into account the sustainability considerations...." (Para 15.7). The Action Taken Report of the Government of India had, however, not indicated any action in regard to Loan Council.

The Technical Group on Borrowings by the States (Chairperson: Smt. Shyamala Gopinath) constituted by the Government of India (2005) felt that the setting up of a new institution, like the Loan Council, would entail additional cost in terms of physical and human resources and would take time. Furthermore, a large majority of States are seized with the task of addressing the structural problems in managing Government finances which, if carried on to their logical conclusion, could usher in an era of debt sustainability over the medium-term of the TFC period. The Loan Council could lose its rationale for existence once the fiscal situation becomes tractable as seems to have been the case with the Australian Loan Council, which provides the international best practice in respect of coordinated borrowings by the Federal and State Governments.

Against this backdrop, the Technical Group felt that an arrangement for coordinated borrowings between the Centre and the States on the one hand, and among the States on the other could be best served by setting up a Standing Technical Committee (STC) with representation from the Central and the State Governments and the monetary authority. The Annual Policy Statement for 2006-07 (April 2006) had proposed to constitute the STC under the aegis of the State Finance Secretaries Conference with representation from the Central and State Governments and the Reserve Bank. Accordingly, the STC was constituted after consultation with the State Governments and with the concurrence of the Government of India in

December 2006. The STC is chaired by the Deputy Governor of the Reserve Bank and its members include the Principal Finance Secretaries of all the State Governments, senior officials of the Government of India and the Reserve Bank. The secretariat to the STC is provided by the Reserve Bank. The terms of reference of the STC include:

- To make annual projections of the borrowing requirements of the State Governments, taking into account the evolving macroeconomic and financial conditions with due regard to the sustainability of debt and the provisions of Fiscal Responsibility Legislation, wherever applicable. The STC's projections may be conveyed to the Reserve Bank by December every year for consideration as an input for internal monetary projections.
- To build alternative scenarios and suggest alternative strategies and instruments for raising resources for States.
- To develop a transparent mechanism for annual allocation of market borrowings among the States.
- To take note of actual borrowings of the State Governments during the year *vis-à-vis* the budgeted GFD. This would help in advising the States to take appropriate action in the case of large deviation of actual borrowings through various instruments from their respective budget estimates.
- To develop an appropriate database that would facilitate the above monitoring exercise.
- To assess the fiscal risks from issuances of State Government guarantees.
- To advise the State Governments on various issues relating to their borrowings including the formulation of a market borrowing calendar, taking into account the Centre's market borrowing requirements; the progressive adoption of the auction route for market borrowings; liquidity of State Government securities; and measures for building capacity relating to debt management at the State Government level.

### *Market Borrowings of State Governments during 2007-08*

VI.51 Net initial allocations and gross market borrowings (provisional) of the State Governments (excluding three State Governments for which the Annual Plans are yet to be finalised) for 2007-08 are placed at Rs.23,024 crore and Rs.35,114 crore, respectively (see Table 6.14). During the current

financial year so far (up to August 10, 2007), 14 State Governments raised an aggregate amount of Rs.8,542 crore (as compared with Rs.7,343 crore during the corresponding period of the previous year) at cut-off yields ranging between 8.00 and 8.57 per cent through the auction of their State Development Loans. The weighted average yield of State Government securities issued during 2007-08 (up to August 10, 2007) was 8.35 per cent as compared with

8.07 per cent during the corresponding period of the previous year. The spreads over the corresponding yields of Central Government securities ranged from 19 to 44 basis points for all States. All the issues were of 10-year maturity, as in the previous year.

*Consolidated Sinking Fund (CSF) and Guarantee Redemption Fund (GRF)*

VI.52 Eighteen State Governments have set up CSF and eight State Governments have set up GRF. These funds are managed by the Reserve Bank. The total investments in CSF and GRF at end-June 2007 were placed at Rs.15,015 crore and Rs.2,481 crore, respectively. The Twelfth Finance Commission had recommended in favour of an expanded coverage of CSF to include amortisation of all liabilities (and not just open market borrowings). The Bezbaruah Committee had recommended that the net incremental annual investment of States in CSF/GRF may be made eligible for availing Special WMA up to a ceiling of their Normal WMA limit. Following these recommendations, the Reserve Bank had circulated revised model schemes for CSF and GRF amongst the State Governments in May 2006. As on June 30, 2007, eleven of the 18 States had adopted the revised CSF scheme while three of eight States had adopted the revised GRF scheme.

*Conference of State Finance Secretaries*

VI.53 During 2006-07, the 18th and 19th Conferences of State Finance Secretaries were held on August 7, 2006 and January 24, 2007, respectively. Apart from an assessment of the market borrowing programme of the State Governments and operational issues pertaining to Government transactions, the discussion of the 18th Conference 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. The 19th Conference primarily

focussed on issues relating to indicative calendar of State Government open market borrowings, non-competitive bidding in respect of State Development Loans, re-issuance of State Government securities and payment of brokerage/commission on State Development loans.

*Workshop on Management of Foreign Exchange Risk*

VI.54 In the context of the recommendations of the Twelfth Finance Commission relating to the back-to-back transfer of external loans by the Centre to the State Governments, and following the discussions in the 19<sup>th</sup> Conference of State Finance Secretaries, the first workshop on the management of foreign exchange risk was organised by the Reserve Bank on May 24, 2007 for the benefit of State Government officials.

**Outlook**

VI.55 The size of the open market borrowing programme of the Central Government during 2007-08 through dated securities is placed slightly higher than the actual borrowing raised in the previous year. Carrying forward the market development process of the previous year, active consolidation, introduction of STRIPS, and re-introduction of floating rate bonds and inflation-indexed bonds are some of the measures that could be pursued during 2007-08. These are expected to enhance the efficiency of debt management operations. As far as the State Governments are concerned, efforts to enhance the liquidity of State Government securities and streamline their market borrowing operations would facilitate the mobilisation of funds in a cost effective manner. Reflecting the impact of various policy initiatives, it is expected that the combined Government market borrowing programme for 2007-08 would be completed successfully in accordance with the objectives of debt management.