

**Draft guidelines on improvements to banks' Asset  
Liability Management framework**

An indicative framework in respect of bucketing of various items of assets and liabilities along with the yields that could be used are as follows:

Sr.	Heads of Accounts	Rate sensitivity and time bucket as per extant ALM Guidelines for interest rate sensitivity statement	Suggested Framework for bucketing of liabilities and computation of Modified Duration
	<b>Liabilities</b>		
1.	<b>Capital</b>	Non-sensitive.	Non-sensitive.
2.	<b>Reserves and Surplus</b>	Non-sensitive.	Non-sensitive.
3(i).	<b>Current Deposits</b>	Non-sensitive.	<p>1. Banks better equipped to estimate the behavioral pattern of current deposits should classify them in the appropriate buckets based on behavioral maturity as per the behavioural study. In such cases to compute the Modified Duration, banks must use its relevant term deposit rates as the yield.</p> <p>2. However, banks which have not conducted the above behavioral study may classify 15% of the current deposits as <i>volatile in the first time bucket</i> (viz. 1-28 days) and the <i>core portion viz. 85% may</i> be placed in the 1-3 years time bucket.</p> <p>Coupon Rate: Zero</p> <p>Yield: Overnight Call Money Rate may be used as the yield for the volatile portion to compute the Modified Duration.</p> <p>As the mid-point of the 1-3 years time bucket is 2 years, each bank could take its 2-year term deposit rate as the yield to compute the Modified Duration of the core portion.</p>

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3(ii).	<b>Savings Bank Deposits</b>	<p>Sensitive to the extent of interest paying (core) portion. This may be included in over 3-6 months bucket. The non-interest paying portion may be shown in non-sensitive bucket.</p> <p>Where banks can estimate the future behaviour/sensitivity of current/savings bank deposits to changes in market variables, the sensitivity so estimated could be shown under appropriate time buckets</p>	<p>1. Where banks can estimate the future behaviour / sensitivity of savings bank deposits to changes in market variables, the sensitivity so estimated could be shown under appropriate time buckets. In such cases, the bank's own relevant term deposit rates must be used as the yield to compute the Modified Duration.</p> <p>2. However, where banks have not undertaken any behavioral study they may treat the interest paying (core) portion as rate sensitive and include the same in 1-3 years time bucket. The non-interest paying portion may be treated similar to volatile portion of current deposits (1-28). For the core portion: Coupon Rate: Existing Savings bank interest rate.</p> <p>Yield: As the mid-point of the 1-3 years time bucket is 2 years the respective bank's term deposit rate for 2 years may be taken as the yield.</p> <p>For the volatile portion: Coupon Rate: zero (as banks are not required to pay interest on volatile portion). Yield: Overnight Call Money Rate may be used as the yield for the volatile portion to compute the Modified Duration.</p>
3(iii).	<b>Term deposits</b>	Sensitive and reprices on maturity. The amounts should be distributed to different buckets on the basis of remaining term to maturity. However, in case	Banks may study the behavioural pattern of large value term deposits to arrive at the percentage of deposits encashed before maturity, i.e the quantum on which the option is exercised.

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		of floating rate term deposits, the amounts may be shown under the time bucket when deposits contractually become due for re-pricing.	<p>Distribution in various time buckets on the basis of remaining term to maturity. In case of floating rate term deposits, the amounts may be shown under the time bucket when the deposits contractually become due for re-pricing.</p> <p>Coupon rate: Each bank's card interest rate for deposits for the relevant term may be used.</p> <p>Yield: Each bank's card interest rate for deposits for the relevant term may be used.</p>
3(iv).	<b>Certificates of Deposit</b>	Sensitive and reprices on maturity. The amounts should be distributed to different buckets on the basis of remaining term to maturity. However, in case of floating rate term deposits, the amounts may be shown under the time bucket when deposits contractually become due for re-pricing.	FIMMDA Commercial Paper benchmark may used as both coupon rate and yield for CDs.
4.	<b>Borrowings</b>		
4(i).	<b>Call and Short Notice</b>		<p>The amounts should be distributed to different buckets on the basis of remaining maturity/ repricing date.</p> <p>Overnight call money rate may be taken as both the coupon and yield.</p>
4(ii).	<b>Inter-Bank (Term)</b>		<p>The amounts should be distributed to different buckets on the basis of remaining maturity/ repricing date.</p> <p>The coupon and yield may be based on the FIMMDA benchmark for corporate bonds. The rating of the bank may be taken for calculating the</p>

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			relevant rate. For un-rated banks – Tier II Rating may be used as the standard rate.
4(iii).	<b>Refinances</b>		The amounts should be distributed to different buckets on the basis of remaining maturity/ repricing date.  The appropriate refinance rate of RBI, NHB, NABARD, etc. may be used as both the coupon and yield.
4(iv).	<b>Others (specify)</b>	-	-
5.	<b>Other Liabilities and Provisions</b>		
i)	<b>Bills Payable</b>	Non-sensitive.	Non-sensitive.
ii)	<b>Inter-office adjustment</b>	Non-sensitive	Non-sensitive.
iii)	<b>Provisions</b>	Non-sensitive.	Non-sensitive.
iv)	<b>Others</b>	Non-sensitive.	Non-sensitive.
6.	<b>Repos</b>	Sensitive on maturity.	The amounts should be distributed to different buckets on the basis of remaining maturity.  The overnight call money rate may be used as both the discount and coupon rate.
7.	<b>Bills Rediscounted (DUPN)</b>	Reprices only on maturity and should be distributed to the respective maturity buckets.	The amounts should be distributed to different buckets on the basis of remaining maturity. The overnight call money rate may be used as both the discount and coupon rate.
8.	<b>Forex Swaps (Buy/Sell)</b>		The all in rupee implied rate through forward premium viz. MIFOR for the relevant tenor may be used as both coupon and yield.
9.	<b>Others</b>	-	-

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A.	Total Liabilities		

Sr.	Assets	Rate sensitivity and time bucket as per extant ALM Guidelines for interest rate sensitivity statement	Suggested Framework for bucketing of assets and computation of Modified Duration
1.	Cash	Non - sensitive.	Non-sensitive.
2.	Balances with RBI	Interest earning portion may be shown in over 3 - 6 months bucket. The balance amount is non-sensitive.	The interest earning portion may be shown in over 3 - 6 months bucket. For computation of Modified Duration both the coupon and yield may be taken as the rate of interest being paid by RBI. The balance amount is non-sensitive.
3.	Balances with other banks		
i)	Current account	i) Non-sensitive.	Non-sensitive.
ii)	Money at call and short notice, term deposits and other placements	ii) Sensitive on maturity. The amounts should be distributed to the respective maturity buckets.	Sensitive on maturity. The amounts should be distributed to the respective maturity buckets.  For the first bucket viz. less than 1 month time bucket, the overnight call money rate may be used for both the yield and coupon rates.  For rest of the time buckets, each bank's term deposit rates may be used as the coupon and yields.
4.	Investments (Performing) (including those under reverse repos but excluding repos)		For the purpose of bucketing and calculation of Modified Duration, investments may be classified into SLR and non-SLR investments.
	SLR investments		It is suggested that the actual Modified Duration of the SLR investments may be used. Else, the G-Sec. yield curve may be used for

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			the yields to compute the Modified Duration.
	<b>Non-SLR investments</b>		It is suggested that the actual Modified Duration of Non-SLR investments should be used.
5.	<b>Advances (Performing)</b>		<p>The average rating of the advances portfolio may be estimated by each bank. One of the methods for estimating the average rating may be as follows: Multiply the outstanding advances in each bucket with the internal rating scores to arrive at the weighted average rating of the advances in that bucket. Thereafter, this rating may be mapped to an external rating.</p> <p>Banks may compute the average coupon for the advances portfolio by comparing the interest income during the relevant accounting period from 'standard' advances to the monthly average outstanding 'standard' advances.</p>
i)	<b>Bills Purchased and Discounted (incl. Bills under DUPN)</b>	(i) Sensitive on maturity.	<p>The yield curve prescribed by FIMMDA for valuation of corporate bonds as per the average rating estimated above may be used for arriving at the yield.</p> <p>The average coupon for the advances portfolio, as computed above, may be used.</p>
ii)	<b>Cash credit/Overdrafts (incl. TODs/Loans repayable on demand)</b>	(ii) Sensitive only when PLR/risk premium is changed. Of late, frequent changes in PLR have been noticed. Thus, each bank should foresee the direction of interest rate movements of funding options and capture the amounts in the respective maturity buckets	<p>The yield curve prescribed by FIMMDA for valuation of corporate bonds as per the average rating estimated above may be used for arriving at the yield.</p> <p>The average coupon for the advances portfolio, as computed above, may be used.</p>

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		which coincide with the time taken by banks to effect changes in PLR in response to changes in market interest rates.	
iii)	<b>Term Loans</b>		The yield curve prescribed by FIMMDA for valuation of corporate bonds as per the average rating estimated above may be used for arriving at the yield. The average coupon for the advances portfolio, as computed above, may be used.
6.	<b>NPAs (Advances and Investments) *</b>		Sub-standard NPAs –  These NPAs may be slotted in the 1-3 years time bucket. The coupon rate will be taken as zero. The yield curve prescribed by FIMMDA for the lowest available rating (currently BBB-) may be used as yield.  Doubtful and Loss Assets – These NPAs may be slotted in the 3-5 years time bucket. The coupon rate will be taken as zero. The yield curve prescribed by FIMMDA for the lowest available rating (currently BBB-) to be used as yield.
7.	<b>Fixed Assets</b>	Non-sensitive.	Non-sensitive.
8.	<b>Other Assets</b>		
i)	<b>Inter-office adjustment</b>		Non-sensitive.
ii)	<b>Leased Assets</b>		Yield curve prescribed by FIMMDA for valuation of corporate bonds as per the average rating estimated for leased assets to be used for arriving at the yields. The average coupon for the leased assets portfolio, as computed for advances, may be used.

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iii)	<b>Others</b>		Non-sensitive.
9.	<b>Repos</b>		Overnight call money rate may be used as both the yield and coupon rates.
10.	<b>Swaps (Sell / Buy)</b>		The all in rupee implied rate through forward premium viz. MIFOR for the relevant tenor may be used as both coupon and yield.
11.	<b>Bills Rediscounted (DUPN)</b>	Sensitive on maturity.	Overnight call money rate may be used as both the yield and coupon rates.
12.	<b>Others (specify)</b>	-	-
<b>B.</b>	<b>Total Assets</b>		
<b>C.</b>	<b>Gap (B-A)</b>		
	Other Products (Interest Rate)		
	<b>i) FRAs</b>		The notional of the FRA may be shown in the Statement of Interest Rate Sensitivity. For computation of the Interest Rate Sensitivity, the long and short positions may be shown in the corresponding buckets and the relevant maturity MIBOR/ OIS/INBMK curve may be used for both the coupon and yield.
	<b>ii) Swaps</b>		For bucketing the notional amounts of swaps must be used. The relevant maturity MIBOR/ OIS/ INBMK curve may be used for both coupon and yield.
	<b>iii) Futures</b>		The notional of the futures may be used.
	<b>iv) FC-Rupee Options</b>		Delta equivalent amount to be used in the respective maturity bucket.

\* Net of provisions, interest suspense and claims received from ECGC/DICGC.

Note:



1. Wherever FIMMDA spreads are proposed to be used, the FIMMDA Corporate Bond Spreads table may be used. The same can be downloaded from the FIMMDA website ([www.fimmda.org](http://www.fimmda.org)) or more from the exact link at [http://www.fimmda.org/Products and Services/asp/spread\\_gilt.asp](http://www.fimmda.org/Products_and_Services/asp/spread_gilt.asp)

Note: In respect of their options portfolio, banks must use the Delta equivalent amounts for calculation of Modified Duration for the purpose of undertaking Modified Duration Gap analysis as per the framework suggested above. Further, in respect of other balance sheet items such as investments also, Modified Duration being calculated on item by item basis should be straightaway used by banks. The same would assist the bank in undertaking Modified Duration Gap analysis in a more accurate manner and serve the purpose of reducing errors caused, if any, due to some assumptions involve as detailed in the framework above.

2. Equity holding, whether strategic or for investment purposes may be treated as Non-sensitive and bucketed accordingly.
3. In the above framework, for a number of items of assets and liabilities the coupon and discount have been taken as one as a measure of approximation in the absence of any standard method. However, if the bank is able to determine the average coupon yield for various buckets for items of assets and liabilities, they should use the same for computing Modified Duration. Pending the same, they may use the suggested ALM framework as above.