



भारतीय रिजर्व बैंक  
RESERVE BANK OF INDIA

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October 28, 2009

Chief Executive Officer of  
All Primary (urban) Cooperative Banks

Dear Sir/ Madam

**Guidelines on Exchange Traded Interest Rate Futures (IRFs) – UCBs**

It has been decided to introduce Interest Rate Futures on a notional coupon bearing 10-year Government of India security. In this regard, Reserve Bank of India has issued a direction FMD.MSRG. 1/02.04.003/2009-10 dated August 28, 2009 under section 45 W of the Reserve Bank of India Act, 1934, which has been placed on the Reserve Bank of India website ([www.rbi.org.in](http://www.rbi.org.in)). A copy of the Direction is enclosed.

2. Accordingly, UCBs may participate in the designated interest rate futures exchanges recognized by SEBI, as clients, subject to RBI / SEBI guidelines in the matter only for the purpose of hedging their underlying exposures. The guidelines on Exchange Traded Interest Rate Futures are furnished in the Annex I.

3. In this connection, it is clarified that banks are not allowed to undertake transactions in IRFs on behalf of clients.

4. UCBs participating in IRF exchanges may submit the data in this regard on a monthly basis, in the proforma enclosed (Annex II) to the Regional office concerned within a fortnight of the succeeding month.

Yours faithfully,

(A. K. Khound)  
Chief General Manager  
Encl: as above

**RESERVE BANK OF INDIA  
FINANCIAL MARKETS DEPARTMENT  
23RD FLOOR, CENTRAL OFFICE  
FORT  
MUMBAI 400 001**

**Interest Rate Futures (Reserve Bank) Directions, 2009**

**Notification No. FMD. 1 /ED(VKS) - 2009 dated August 28, 2009**

The Reserve Bank of India having considered it necessary in public interest and to regulate the financial system of the country to its advantage, in exercise of the powers conferred by section 45W of the Reserve Bank of India Act, 1934 and of all the powers enabling it in this behalf, hereby gives the following directions to all the persons dealing in **Interest Rate Futures**.

**1. Short title and commencement of the directions**

These directions may be called the Interest Rate Futures (Reserve Bank) Directions, 2009 and they shall come into force with immediate effect.

**2. Definitions**

(i) Interest Rate Futures means a standardised interest rate derivative contract traded on a recognized stock exchange to buy or sell a notional security or any other interest bearing instrument or an index of such instruments or interest rates at a specified future date, at a price determined at the time of the contract.

(ii) Interest Rate Futures market means the market in which Interest Rate Futures are traded.

(iii) The words and expressions used but not defined in these directions shall have the meaning assigned to them in the Reserve Bank of India Act, 1934.

**3. Permitted instruments**

(i) Interest Rate Futures are permitted on 10-year notional coupon bearing Government of India security or any other product, as may be approved by the Reserve Bank from time to time.

(ii) Persons resident in India may purchase or sell Interest Rate Futures referred to in subparagraph (i) to hedge an exposure to interest rate risk or otherwise. Foreign Institutional Investors, registered with Securities and Exchange Board of India, may purchase or sell Interest Rate Futures referred to in sub-paragraph (i)

subject to the condition that the total gross long (bought) position in cash and Interest Rate Futures markets taken together does not exceed their individual permissible limit for investment in government securities and the total gross short (sold) position, for the purpose of hedging only, does not exceed their long position in the government securities and in Interest Rate Futures at any point in time.

(iii) Notwithstanding anything contained in sub-paragraph (i), no scheduled bank or such other agency falling under the regulatory purview of the Reserve Bank under the Reserve Bank of India Act, 1934, the Banking Regulation Act, 1949 or any other Act or instrument having the force of law shall participate in the Interest Rate Futures market without the permission from the respective regulatory Department of the Reserve Bank.

Explanation: - The expression 'Person resident in India' shall have the meaning assigned to it in sub-section (v) of section 2 of the Foreign Exchange Management Act, 1999.

(iv) Agencies falling under the regulatory purview of any other regulator established by law shall not participate in Interest Rate Futures market except with the permission of their respective regulators and participation of such agencies as members or clients shall be in accordance with the guidelines issued by the regulator concerned .

#### **4. Features of Interest Rate Futures**

Standardized Interest Rate Futures contract shall have the following features:

- a.** The contract shall be on 10-year notional coupon bearing Government of India security.
- b.** The notional coupon shall be 7% per annum with semi-annual compounding.
- c.** The contract shall be settled by physical delivery of deliverable grade securities using the electronic book entry system of the existing Depositories, namely, National Securities Depositories Ltd. and Central Depository Services (India) Ltd. and Public Debt Office of the Reserve Bank.
- d.** Deliverable grade securities shall comprise Gov securities maturing at least 7.5 years but not more than 15 years from the first day of the delivery month with a minimum total outstanding stock of Rs 10,000 crore.

#### **5. Membership**

Interest Rate Futures contracts on instruments referred to in sub-paragraph (i) of paragraph 3 shall be traded on the Currency Derivative Segment of a recognized

Stock Exchange. The members registered with Securities and Exchange Board of India for trading in Currency /Equity Derivative Segment shall also be eligible to trade in Interest Rate Futures referred to in subparagraph (i) of paragraph 3. Membership for both trading and clearing, in the Interest Rate Futures segment shall be subject to the guidelines issued by the Securities and Exchange Board of India.

## **6. Position limits**

i. The position limits for various classes of participants in the Interest Rate Futures market shall be subject to the guidelines issued by the Securities and Exchange Board of India.

ii. All regulated entities shall operate within the prudential limits set by the regulator concerned.

## **7. Risk Management measures**

The trading of Interest Rate Futures contracts referred to in sub-paragraph (i) of paragraph 3 shall be subject to maintaining initial, extreme loss and calendar spread margins and the Clearing Corporations / Clearing Houses of the exchanges should ensure maintenance of such margins by the participants on the basis of the guidelines issued by the Securities and Exchange Board of India from time to time.

## **8. Surveillance and disclosures**

The surveillance and disclosures of transactions in the Interest Rate Futures market shall be carried out in accordance with the guidelines issued by the Securities and Exchange Board of India.

## **9. Powers of Reserve Bank**

The Reserve Bank may from time to time modify the eligibility criteria for the participants, modify participant-wise position limits, prescribe margins and / or impose specific margins for identified participants, fix or modify any other prudential limits, or take such other actions as deemed necessary in public interest, in the interest of financial stability and orderly development and maintenance of interest rate market in India.

**Sd/-**  
**(V.K. Sharma)**  
**Executive Director**

### **Guidelines on Exchange traded Interest rate futures (IRFs)**

1. With a view to enabling primary (urban) co-operative banks (UCBs) to manage their exposure to interest rate risks, it has been decided to permit them to deal in IRFs in a phased manner. In the first phase, UCBs can transact in Exchange traded 10-Year notional coupon bearing GoI security futures only for the limited purpose of hedging the risk in their underlying investment portfolio. Allowing transactions in a wider range of products, as also market making could be considered in the next stage on the basis of the experience gained.

2. While Interest Rate Futures (IRFs) present immense opportunity for mitigating the market risks inherent in the balance sheet, it can also expose one to substantial losses on account of inadequate understanding of the product, absence of proper monitoring, poor risk control measures, etc. UCBs desirous of transacting in IRFs on the stock exchanges should take specific approval from their respective Boards covering, *inter alia*, the products that they may transact in, size/composition of the investment portfolio intended to be hedged, organizational set-up to monitor, rebalance, report, account and audit such transactions. Further, it is desirable that derivative desks are created within the treasury and the management level responsibility clearly assigned.

### **3. Membership**

Interest Rate Futures contracts on instruments referred to in paragraph 1 is traded on the Currency Derivative Segment of a recognized Stock Exchange. Membership for both trading and clearing, in the Interest Rate Futures segment shall be subject to the guidelines issued by the Securities and Exchange Board of India. UCBs not seeking membership of Stock Exchanges can transact IRFs through approved Futures and Options (F and O) members of Exchanges.

### **4. Settlement:**

a) As trading members of the F&O segment, UCBs should settle their trades directly with the clearing corporation/clearing house.

b) UCBs participating through approved F & O members shall settle proprietary trades as a participant clearing member or through approved professional / custodial clearing members.

c) Broker / trading members of stock exchanges cannot be used for settlement of IRF transactions.

## **5. Eligible underlying securities**

For the present, only the interest rate risk inherent in the government securities classified under the Available for Sale (AFS) and Held for Trading (HFT) categories will be allowed to be hedged. For this purpose, the portion of the Available for Sale and Held for Trading portfolio intended to be hedged, must be identified and carved out for monitoring purposes.

## **6. Hedge criteria**

Interest Rate Derivative transactions undertaken on the exchanges shall be deemed as hedge transactions, if and only if,

- a) The hedge is clearly identified with the underlying government securities in the Available for Sale and Held for Trading categories.
- b) The effectiveness of the hedge can be reliably measured
- c) The hedge is assessed on an ongoing basis and is “highly effective” throughout the period.

## **7. Hedge Effectiveness**

The hedge will be deemed to be “highly effective” if at inception and throughout the life of the hedge, changes in the marked to market value of the hedged items with reference to the marked to market value at the time of the hedging are “almost fully offset” by the changes in the marked to market value of the hedging instrument and the actual results are within a range of 80% to 125%. If changes in the marked to market values are outside the 80% -125% range, then the hedge would not be deemed to be highly effective. At present, the investments held in the (a) AFS category are to be marked to market at quarterly or more frequent intervals (b) HFT category are to be marked to market at monthly or more frequent intervals. The hedged portion of the AFS/HFT portfolio should be notionally marked to market, at least at monthly intervals, for evaluating the efficacy of the hedge transaction.

## **8. Accounting**

The Accounting Standards Board of the Institute of Chartered Accountants of India (ICAI) has issued comprehensive Accounting Standard covering various types of financial instruments including accounting for trading and hedging. (AS 30). UCBs may follow these instructions for accounting of interest rate futures. However, since UCBs are being permitted to hedge their underlying portfolio, which is subject to periodical mark to market, the following norms will apply

- a) If the hedge is “highly effective”, the gain or loss on the hedging instruments and hedged portfolio may be set off and net loss, if any, should be provided for and net gains if any, ignored for the purpose of Profit & Loss Account.

b) If the hedge is not found to be "highly effective" no set off will be allowed and the underlying securities will be marked to market as per the norms applicable to their respective investment category.

c) Trading position in futures is not allowed. However, a hedge may be temporarily rendered as not "highly effective". Under such circumstances, the relevant futures position will be deemed as a trading position. All deemed trading positions should be marked to market as a portfolio on a daily basis and losses should be provided for and gains, if any, should be ignored for the purpose of Profit & Loss Account. UCBs should strive to restore their hedge effectiveness at the earliest.

d) Any gains realized from closing out / settlement of futures contracts can not be taken to Profit & Loss account but carried forward as "Other Liability" and utilized for meeting depreciation provisions on the investment portfolio.

## **9. Corporate governance risk management and aspects**

This section sets out the basic principles of a prudent system to control the risks in derivatives activities. These include:

a) appropriate oversight by the board of directors and senior management;

b) adequate risk management process that integrates prudent risk limits, sound measurement procedures and information systems, continuous risk monitoring and frequent management reporting; and

c) comprehensive internal controls and audit procedures.

### **9.1 Corporate governance**

a) It is vital, while dealing with potentially complex products, such as derivatives that the board and senior management should understand the nature of the business, which the bank is undertaking. This includes an understanding of the nature of the relationship between risk and reward, in particular an appreciation that it is inherently implausible that an apparently low risk business can generate high rewards.

b) The board of directors and senior management also need to demonstrate through their actions that they have a strong commitment to an effective control environment throughout the organization.

c) The board and senior management, in addition to advocating prudent risk management, should encourage more stable and durable return performance and discourage high, but volatile returns.

d) The board of directors and senior management should ensure that the organization of the bank is conducive to managing risk. It is necessary to

ensure that clear lines of responsibility and accountability are established for all business activities, including derivative activities.

e) The central risk control function at the head office should also ensure that there is sufficient awareness of the risks and the size of exposure of the trading activities in derivatives operations.

The compliance risks in all new products and processes should be thoroughly analysed and appropriate risk mitigates by way of necessary checks and balances should be put in place before the launching of new products. The Chief Compliance Officer must be involved in the mechanism for approval of new products and all such products should be signed off by him. The Compliance Officer should also review and sign off all the existing products in light of these guidelines.

## **9.2 Board and senior management oversight**

Consistent with its general responsibility for corporate governance, the board should approve written policies, which define the overall framework within which derivatives activities should be conducted, and the risks controlled. The management of derivative activities should be integrated into the bank's overall risk management system using a conceptual framework common to the bank's other activities.

The policy framework for derivatives approved by the board may be general in nature. But the framework should cover the following aspects:

- a) establish the institution's overall appetite for taking risk and ensure that it is consistent with its strategic objectives, capital strength and management capability to hedge or transfer risk effectively, efficiently and expeditiously.
- b) define the approved derivatives products and the authorized derivatives activities.
- c) detail requirements for the evaluation and approval of new products or activities.
- d) provide for sufficient staff resources and other resources to enable the approved derivatives activities to be conducted in a prudent manner;
- e) ensure appropriate structure and staffing for the key risk control functions, including internal audit;
- f) establish management responsibilities;
- g) identify the various types of risk faced by the bank and establish a clear and comprehensive set of limits to control these;
- h) establish risk measurement methodologies which are consistent with the nature and scale of the derivatives activities;



- i) require stress testing of risk positions ; and
- j) detail the type and frequency of reports which are to be made to the board (or committees of the board).

The type of reports to be received by the board should include those, which indicate the levels of risk being undertaken by the institution, the degree of compliance with policies, procedures and limits, and the financial performance of the various derivatives and trading activities. A board-level audit committee should review internal and external audit reports and significant issues of concern should be drawn to the attention of the board.

### **9.3 Management Information Systems**

The frequency and composition of board and management reporting should depend upon the nature and significance of derivative activities. Where applicable, board and management reports should consolidate information across functional and geographic divisions. Board and management reporting should be tailored to the intended audience, providing summary information to senior management and the board and more detailed information to line management.

### **9.4 Operational controls**

Operational risk arises as a result of inadequate internal controls, human error or management failure. This risk in derivatives activities is particularly important, because of the complexity and rapidly evolving nature of some of the products. The nature of the controls in place to manage operational risk must be commensurate with the scale and complexity of the derivatives activity being undertaken. As noted earlier, volume limits may be used to ensure that the number of transactions being undertaken does not outstrip the capacity of the support systems to handle them.

#### Segregation of duties

Segregation of duties is necessary to prevent unauthorized and fraudulent practices. This has a number of detailed aspects but the fundamental principle is that there should be clear separation, both functionally and physically, between the front office which is responsible for the conduct of trading operations and the back office which is responsible for processing the resultant trades.

A basic and essential safeguard against abuse of trust by an individual is to insist that all staff should take a minimum continuous period of annual leave (say 2 weeks) each year. This makes it more difficult to conceal frauds in the absence of the individual concerned.

### Policies and procedures

Policies and procedures should be established and documented to cover the internal controls, which apply at various stages in the workflow of processing and monitoring trades. Apart from segregation of duties, these include:

- trade entry and transaction documentation
- confirmation of trades
- settlement and disbursement
- reconciliation
- revaluation
- exception reports
- accounting treatment
- audit trail

A checklist of some of the key controls under these headings is given in Appendix A.

### Contingency plan

Plans should be in place to provide contingency systems and operations support in the case of a natural disaster or systems failure. These should include emergency back-up for dealing functions as well as critical support functions. Contingency plans should be reviewed and tested on a regular basis.

## **9.5 Internal audit**

Internal audit is an important part of the internal control process. Audit should be conducted by qualified professionals, who are independent of the business line being audited. Audit should be supplementary and not be a substitute for risk control function. The scope of audit coverage should be commensurate with the level of risk and volume of activity.

### Internal audit function should:

- a) review the adequacy and effectiveness of the overall risk management system, including compliance with policies, procedures and limits;
- b) review the adequacy and test the effectiveness of the various operational controls (including segregation of duties) and staff's compliance with the established policies and procedures;
- c) investigate unusual occurrences such as significant breaches of limits, unauthorized trades and unreconciled valuation or accounting differences;

- d) evaluate the reliability and timeliness of information reported to senior management and the board of directors;
- e) trace and verify information provided on risk exposure reports to the underlying data sources;
- f) be an appraisal of the effectiveness and independence of the risk management process;
- g) ensure that risk measurement models, including algorithms, are properly validated; and
- h) include an evaluation of the adequacy of the derivative valuation process and ensure that it is performed by parties independent of risk-taking activities. Auditors should test derivative valuation reports for accuracy. For hedge transactions, auditors should review the appropriateness of accounting.
- i) evaluate the risk disclosure statements issued to customers in terms of adherence to Customer Suitability and Appropriateness Policy

In preparing internal audit reports, major control weaknesses should be highlighted and a management action plan to remedy the weaknesses should be agreed with a timetable. Management should respond promptly to audit findings by investigating identified system and internal control weaknesses and implementing corrective action. Thereafter, management should periodically monitor newly implemented systems and controls to ensure they are working appropriately. Failure of management to implement recommendations within an agreed timeframe should be reported to the Audit Committee.

### **10. Capital adequacy**

The net notional principal amount in respect of futures position with same underlying and settlement dates should be multiplied by the conversion factor given below to arrive at the credit equivalent :

Original Maturity	Conversion Factor
Less than one year	0.5 per cent
One year and less than two years	1.0 per cent
For each additional year	1.0 per cent

The credit equivalent thus obtained shall be multiplied by the applicable risk weight of 100%.

### **11. ALM classification**

Interest rate futures are treated as a combination of a long and short position in a notional government security. The maturity of a future will be the period until delivery or exercise of the contract, as also the life of the underlying instrument. For example, a short position in interest rate future for Rs.5 crore

[delivery date after 6 months, life of the notional underlying government security 3½ years] is to be reported as a risk sensitive asset under the 3 to 6 month bucket and a risk sensitive liability in four years i.e. under the 3 to 5 year bucket.

### **12. Use of brokers**

The existing norm of 5% of total transactions during a year as the aggregate upper contract limit for each of the approved brokers should be observed by UCBs who participate through approved F & O members of the exchanges.

### **13. Disclosures**

The UCBs undertaking interest rate derivatives on exchanges may disclose as a part of the notes on accounts to balance sheets the following details:

<b>(Rs. Crores)</b>		
<b>Sr.No.</b>	<b>Particulars</b>	<b>Amount</b>
1	Notional principal amount of exchange traded interest rate derivatives undertaken during the year (instrument-wise) a) b) c)	
2	Notional principal amount of exchange traded interest rate derivatives outstanding as on 31st March _____ (instrument-wise) a) b) c)	
3	Notional principal amount of exchange traded interest rate derivatives outstanding and not "highly effective" (instrument-wise) a) b) c)	
4	Mark-to-market value of exchange traded interest rate derivatives outstanding and not "highly effective" (instrument-wise) a) b) c)	

### **14. Reporting:**

UCBs should submit a monthly statement to the Regional Offices concerned as per the enclosed format (Annex II).

**15.** The above guidelines are subject to review based on the feedback and experience.

**16.** These guidelines may be placed before the Board of Directors for formulating the policy, framework and appropriate risk control measures before the regulated entities undertake trades in interest rate futures on the stock exchanges.

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**ANNEX- II****Monthly Return on Exchange Traded Interest Rate Futures (IRFs)****Name of the Bank**As on last working day of the **Month**:**I. Analysis of outstanding futures position:**

Settlement dates of the Futures Contract outstanding in the books	Underlying interest rate exposure of the futures contract	Number of contracts outstanding in the books	Open Interest position of the futures contract
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**II. Activity during the Month :**

NPA* of the futures contract outstanding at the beginning of the month (settlement date / underlying interest rate exposure wise break up )	NPA* entered into during the month (settlement date / underlying interest rate exposure wise break up)	NPA* of the futures contract reversed during the month (settlement date / underlying interest rate exposure wise break up )	NPA* outstanding at the end of the month (settlement date / underlying interest rate exposure wise break up)
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**III. Analysis of “highly effective” hedges:**

Size of the underlying investment portfolio being hedged	Change in MTM*** value of the underlying hedge portfolio since inception of hedge	Change in MTM*** value of the futures position since inception of hedge	PV01** of the underlying investment portfolio being hedged	PV01** of the hedging futures position
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**IV. Analysis of not “highly effective” hedges:**

Size of the underlying investment portfolio intended to be hedged	Change in MTM*** value of the underlying hedge portfolio since inception of hedge	Change in MTM*** value of the futures position since inception of hedge	Duration for which the hedge was ineffective	Remark : Action if any, to restore hedge effectiveness

\* NPA - Notional principal amount

\*\* PV01- Price value of a basis point

\*\*\* MTM - Marked to Market

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## Recommendations on operational controls

### A. Segregation of Duties

There should be clear segregation, functionally and physically, between the front office and back office.

There should be a middle office independent of the trading room and it should be responsible, *inter alia*, for undertaking various risk related monitoring, product approval, validation of valuation models used, stress testing, back testing of the risk limits etc. and also for regulatory reporting and compliance.

### B. Trade Entry and Transaction Documentation

Management should ensure that procedures are in place to provide a clear and fully documented audit trail of derivatives transactions.

All derivatives transactions should be sequentially controlled to ensure that all deals are accounted for and to provide an audit trail for deals effected.

Every transaction should be updated (i.e. mark to market) in the calculation of market and credit risk limits.

Deals should be transacted at market rates.

### C. Confirmation Procedures

The method of confirmation used should provide a documentation trail that supports the institution's position in the event of disputes.

### D. Settlement and Disbursement Procedures

Specific procedures should be established for the initiation of, and authority for, funds transfer.

Daily independent reconciliation of transferred funds with nostro accounts and general ledger is an essential control for detection of errors or misapplications of funds.

### E. Reconciliation Procedures

All pertinent data, reports, and systems should be reconciled on a timely basis to ensure that the institutions official books agree with dealers' records. At the minimum, the following reports should be reconciled:

Unusual items and any items outstanding for an inordinately long period of time should be investigated.



There should be adequate audit trail to ensure that balances and accounts have been properly reconciled. Reconciliation records and documentation should be maintained and independently reviewed. Such record should be kept for an appropriate period of time prior to their destruction.

#### **F. Revaluation Procedures**

The revaluation procedures should cover the full range of derivatives instruments included in the institutions trading portfolio.

Revaluation rates should be obtained from or verified by a source (or different sources in the case of OTC derivatives) independent of the dealers, representative of the market levels and properly approved. Revaluation calculations should be independently checked.

Revaluation rates and calculations should be fully documented.

#### **G. Exceptions Reports**

To track errors, frauds and losses, the back office should generate management reports that reflect current status and trends for the following items:

- Outstanding general ledger reconciling items.
- Failed trades.
- Off-market trades.
- After-hours and off-premises trading.
- Aging of unconfirmed trades.
- Suspense items payable/receivable.
- Brokerage payments.
- Miscellaneous losses.
- Limit breaches
- Details of deals resulting in exceptional profits and losses

The management information system/reporting system of the institution should enable the detection of unusual patterns of activity (i.e. increase in volume, new trading counterparties, etc.) for review by management.

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