



# **MONETARY POLICY CHALLENGES IN A FINANCIALLY LIBERALIZED ENVIRONMENT**



ISAS-SCAPE SEMINAR  
10 OCTOBER 2007

**DILIP M. NACHANE,**  
***CURRENTLY SR. VISITING FELLOW,***  
***ISAS***

**&**

***SENIOR PROFESSOR, INDIRA***  
***GANDHI INSTITUTE OF***  
***DEVELOPMENT RESEARCH,***  
***MUMBAI, INDIA***



- ***I ACKNOWLEDGE THANKFULLY MR. SHAHIDUL ISLAM'S HELP ON VARIOUS ISSUES RELATED TO THIS PRESENTATION***



# STRUCTURE OF PRESENTATION

- **1. BRIEF OVERVIEW OF INDIAN FINANCIAL SYSTEM**
- **2. MONETARY POLICY IN A REGULATED ECONOMY**
- **3. MONETARY POLICY IN A FINANCIALLY LIBERALIZED ECONOMY**
- **4. RBI APPROACH TO MONETARY MANAGEMENT**
- **5. CURRENT PROBLEMS CONFRONTING MONETARY POLICY MAKING IN INDIA**



# BRIEF OVERVIEW OF INDIAN BANKING SYSTEM

**THE INDIAN BANKING SYSTEM COMPRISES 4 MAJOR SEGMENTS:**

**1. COMMERCIAL BANKS: THESE INCLUDE**

- A. PUBLIC SECTOR (NATIONALLY OWNED) BANKS: STATE BANK OF INDIA AND ITS 7 SUBSIDIARIES (LARGEST BANKING GROUP) AND 20 OTHER BANKS**
- B. PRIVATE BANKS**
- C. FOREIGN BANK BRANCHES**
- D. REGIONAL RURAL BANKS .**

**2. CO-OPERATIVE CREDIT INSTITUTIONS:**

- A. URBAN CO-OPERATIVE BANKS (UCBs)**
- B. STATE CO-OPERATIVE BANKS (SHORT TERM RURAL CREDIT)**
- C. DISTRICT CENTRAL CO-OPERATIVE BANKS (SHORT TERM RURAL CREDIT)**



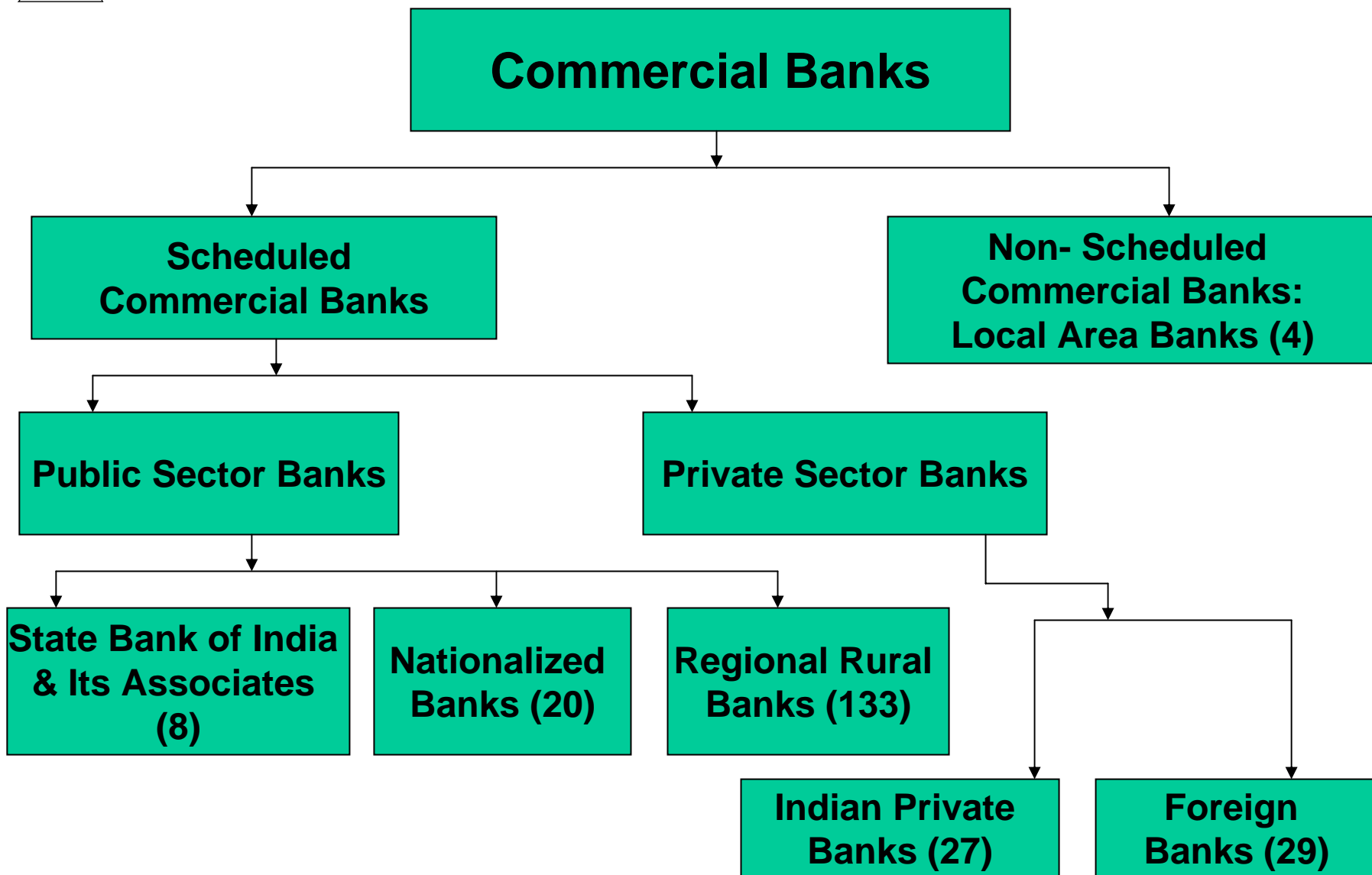
# BRIEF OVERVIEW OF INDIAN BANKING SYSTEM (CONTD.)

2. CO-OPERATIVE CREDIT INSTITUTIONS (CONTD.):
  - D. PRIMARY AGRICULTURAL CREDIT SOCIETIES (SHORT TERM RURAL CREDIT)
  - E. STATE CO-OPERATIVE AGRICULTURAL & RURAL DEVELOPMENT BANKS (LONG TERM RURAL CREDIT) (SCARDs)
  - F. PRIMARY CO-OPERATIVE AGRICULTURAL & RURAL DEVELOPMENT BANKS (LONG TERM RURAL CREDIT)(PCARDs)
3. ALL INDIA FINANCIAL INSTITUTIONS:
  - A. ALL INDIA DEVELOPMENT BANKS (LONG TERM CREDIT FOR DEVELOPMENT AND INFRASTRUCTURE) –IDBI, SIDBI, IDFC ETC.
  - B. SPECIAL FINANCIAL INSTITUTIONS – IUCF, ICICI VENTURE, IIBI, TFCI
  - C. INVESTMENT INSTITUTIONS – LIC, UTI, GIC
4. NON-BANK FINANCIAL COMPANIES (NBFCS):

THESE MAINLY COMPRISE EQUIPMENT LEASING, HIRE PURCHASE, HOUSING FINANCE, STOCK BROKING COMPANIES, ETC.

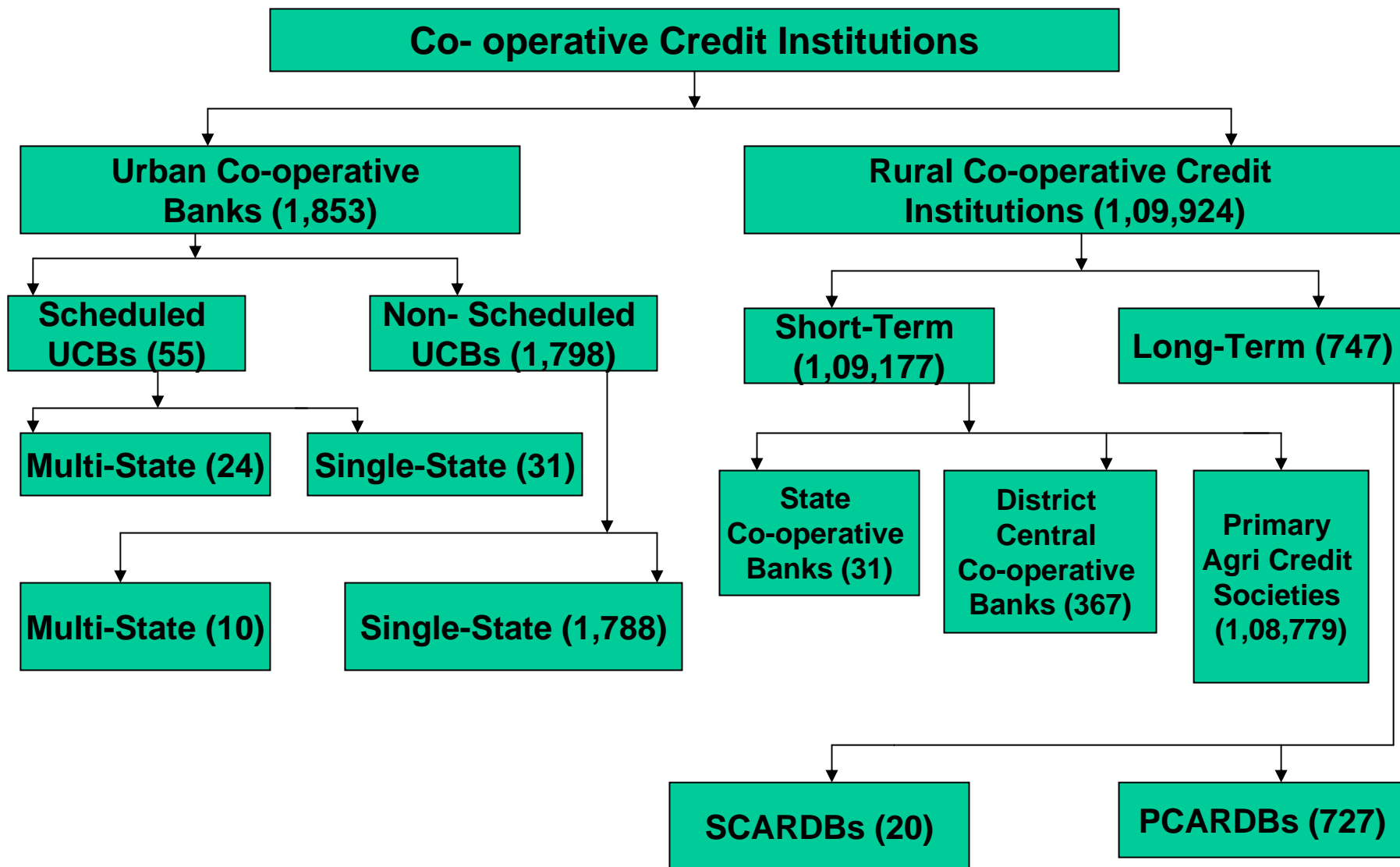


# Structure of Indian Banking





# Structure of Indian Banking





# **MONETARY POLICY PARDIGM IN A PRE-LIBERALIZED ENVIRONMENT**

- 1. *OBJECTIVES* : GROWTH, EMPLOYMENT, LOW & STABLE INFLATION ETC.**
- 2. *INTERMEDIATE TARGETS/INDICATORS* : MONEY SUPPLY, CREDIT AGGREGATES, MARKET INTEREST RATES, ETC.**
- 3. *INSTRUMENTS* : MONETARY BASE, SHORT-TERM INTEREST RATES**
- 4. *ATTITUDE TO FINANCIAL MARKETS* : KEEP MARKETS GUESSING ABOUT MONETARY POLICY DEVELOPMENTS**

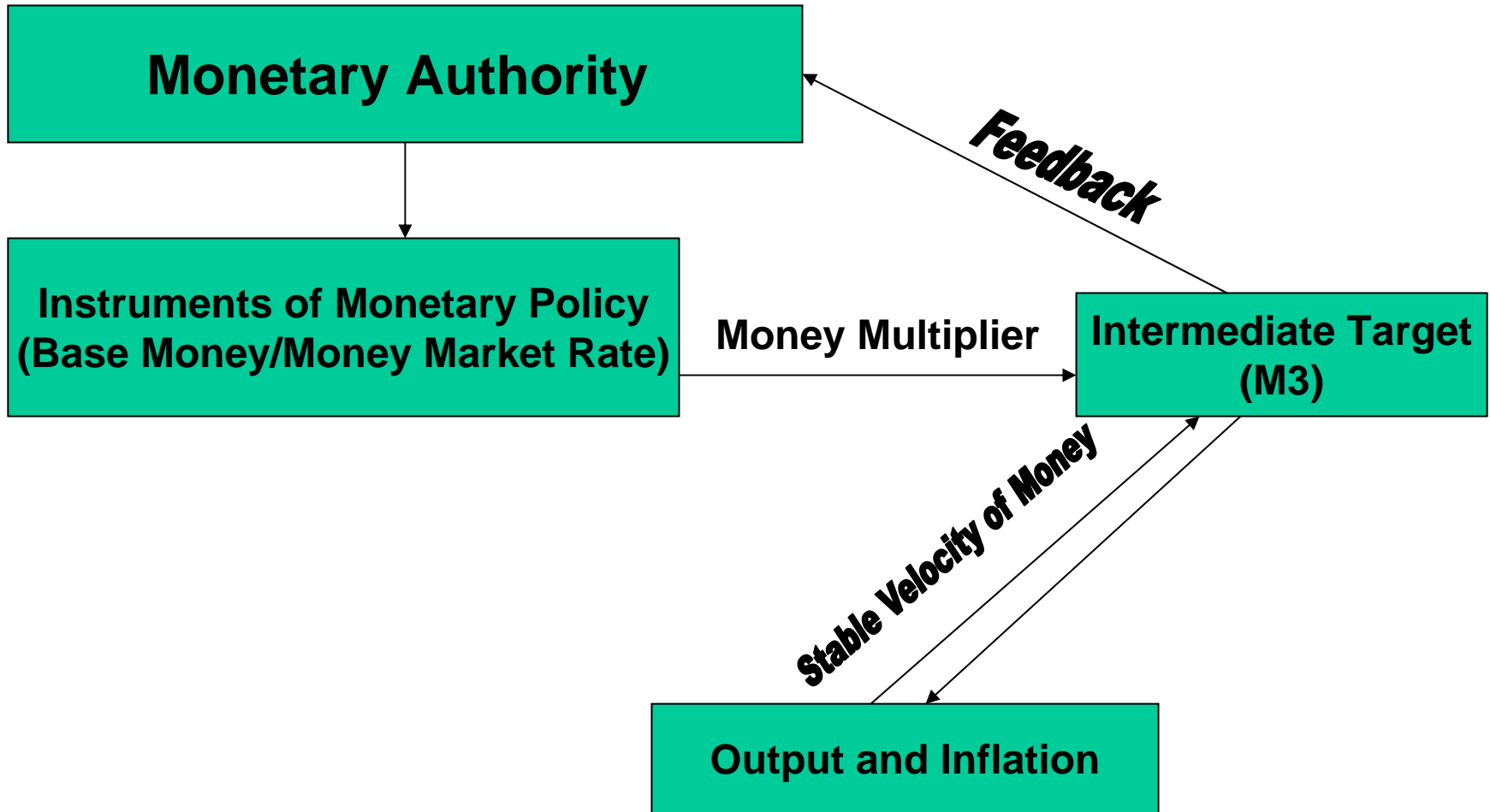


# THE TRINITY OF MONETARY POLICY

- THE *INTERMEDIATE TARGETS* WERE “CONTROLLABLE ” via THE *INSTRUMENTS* WITHIN TOLEARBLE MARGINS OF ERROR.
- *INTERMEDIATE TARGETS* BORE A STABLE RELATIONSHIP TO *ULTIMATE OBJECTIVES* SUCH AS EMPLOYMENT , INFLATION ETC.
- IF EXCHANGE RATES WERE KEPT FLEXIBLE, NATIONAL MONETARY POLICIES COULD BE PURSUED INDEPENDENTLY OF ACTIONS BY OTHER INTERNATIONAL CENTRAL BANKS.



# TRINITY





# FINANCIAL LIBERALIZATION & BREAKDOWN OF TRINITY

## REASONS FOR BREAKDOWN

1. EMERGENCE OF MONEY SUBSTITUTES (INCLUDING CREDIT CARDS)
2. BREAKDOWN OF STABLE RELATIONSHIP BETWEEN MONEY AND INCOME
3. EASING OF CREDIT & LIQUIDITY CONSTRAINTS
4. WITH GLOBAL INFLOWS OF CAPITAL, THE PURSUIT OF INDEPENDENT DOMESTIC MONETARY POLICY IS IMPEDED



# **INSTEAD OF A TRINITY WE NOW HAVE A TRILEMMA !**

**BERNANKE (2005) POSES THE FOLLOWING  
TRILEMMA OF MODERN DAY MONETARY  
POLICY MAKING**

**IT IS IMPOSSIBLE FOR A COUNTRY TO  
MAINTAIN IN SIMULTANEOUS OPERATION  
ALL 3 OF THE FOLLOWING POLICY REGIMES**

- (i) OPEN CAPITAL ACCOUNT**
- (ii) A FIXED EXCHANGE RATE**
- (iii) AN INDEPENDENT DOMESTIC MONETARY  
POLICY.**



# RESOLUTION OF TRILEMMA

- **1. FLEXIBLE EXCHANGE RATE**
- **2. AN INFLATION TARGET**
- **3. MONETARY POLICY RULE  
(TAYLOR 1995)**



# AN EMERGING GLOBAL CONSENSUS ON THE OBJECTIVES OF MONETARY POLICY

- MAIN OBJECTIVE OF MONETARY POLICY
- *INFLATION CONTROL*
- SUBSIDIARY OBJECTIVES
- *GROWTH*
- *EXCHANGE RATE STABILITY*
- *STABILITY OF FINANCIAL MARKETS*



# **ADDITIONAL SPECIAL OBJECTIVES IN EMEs**

- **ALIGNING THE OPERATIONS OF  
LARGE FINANCIAL  
AGGLOMERATES WITH LOCAL  
POLICY PRIORITIES**
- **CREDIT DELIVERY TO  
AGRICULTURE AND SMEs**



# **A SHIFT IN ATTITUDE TOWARDS FINANCIAL MARKETS**

- **MONETARY POLICY SHOULD BE  
TRANSPARENT**
- **CENTRAL BANKS SHOULD  
COMMUNICATE ACTIVELY WITH  
FINANCIAL MARKETS**

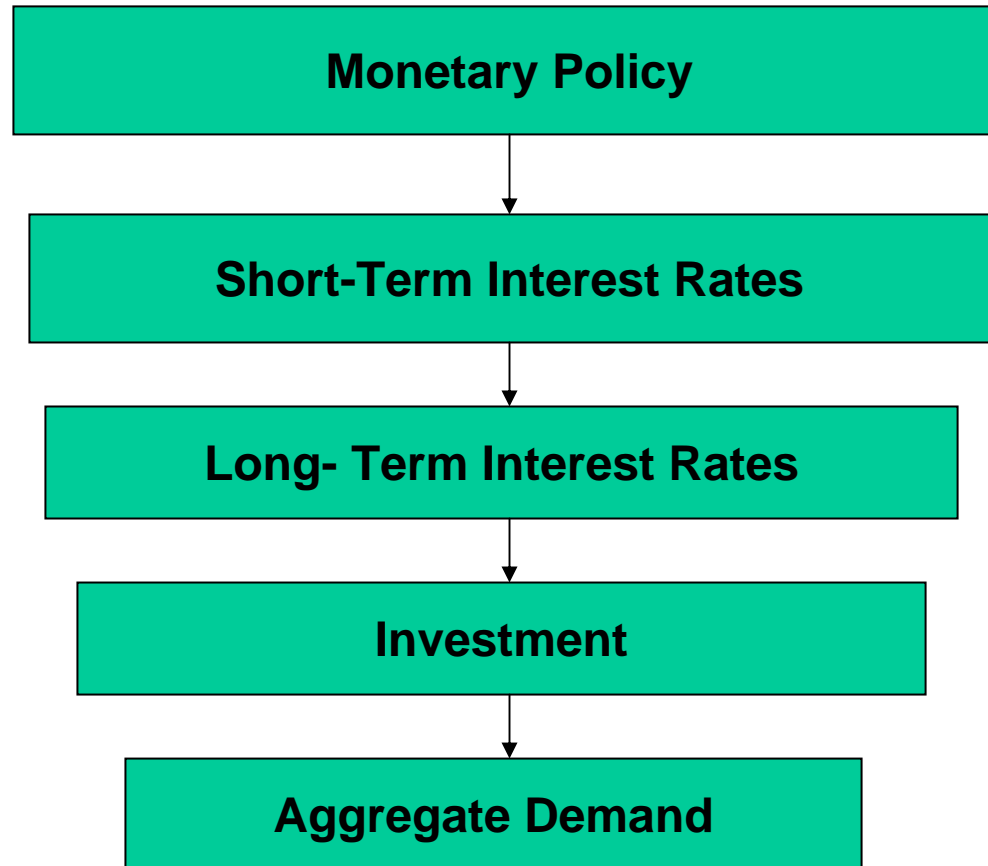


# HOW DOES MONETARY POLICY WORK?

- 1. TRADITIONAL VIEW (MONEY VIEW)
- *OPEN MARKET SALES OF GOVERNMENT SECURITIES -→ LIQUIDITY SHORTAGE-→SHORT-TERM RATES RISE→LONG TERM INTEREST RATES RISE→INVESTMENT FALLS→AGGREGATE DEMAND FALLS*



# Money View





# HOW DOES MONETARY POLICY WORK ? (CONTD.)

- **2. MODERN VIEW (CREDIT AVAILABILTY VIEW)**
- **SMALL AND FLEDGLING BUSINESSES ENTIRELY DEPENDENT ON BANK CREDIT (CANNOT ACCESS OTHER SOURCES OF FUNDS SUCH AS CPs, EQUITY OR BONDS)**

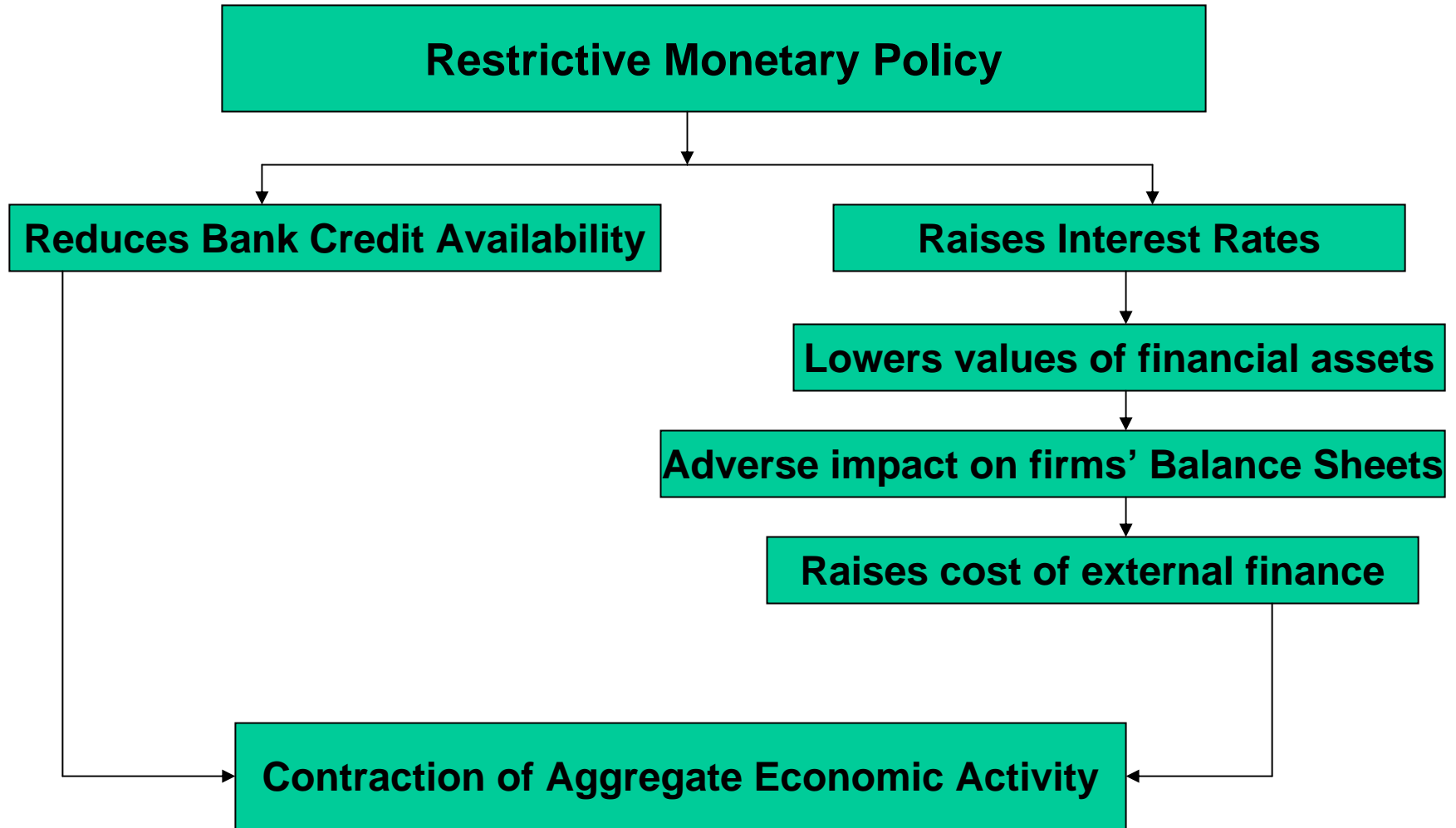


## CREDIT VIEW (CONTD).

- **THE COST OF EXTERNAL FINANCE TO THE FIRM DEPENDS ON THE STRENGTH OF ITS BALANCE SHEET**



# Credit View





# EMERGENCE OF STOCK MARKET CHANNEL

- **MAIN REASON :**
- **CREDIT CHANNEL WEAKENED AS LARGE COMPANIES HAVE BEGUN TO RAISE RESOURCES MORE FROM FINANCIAL MARKETS (INCLUDING STOCK MARKETS) THAN BANKS**

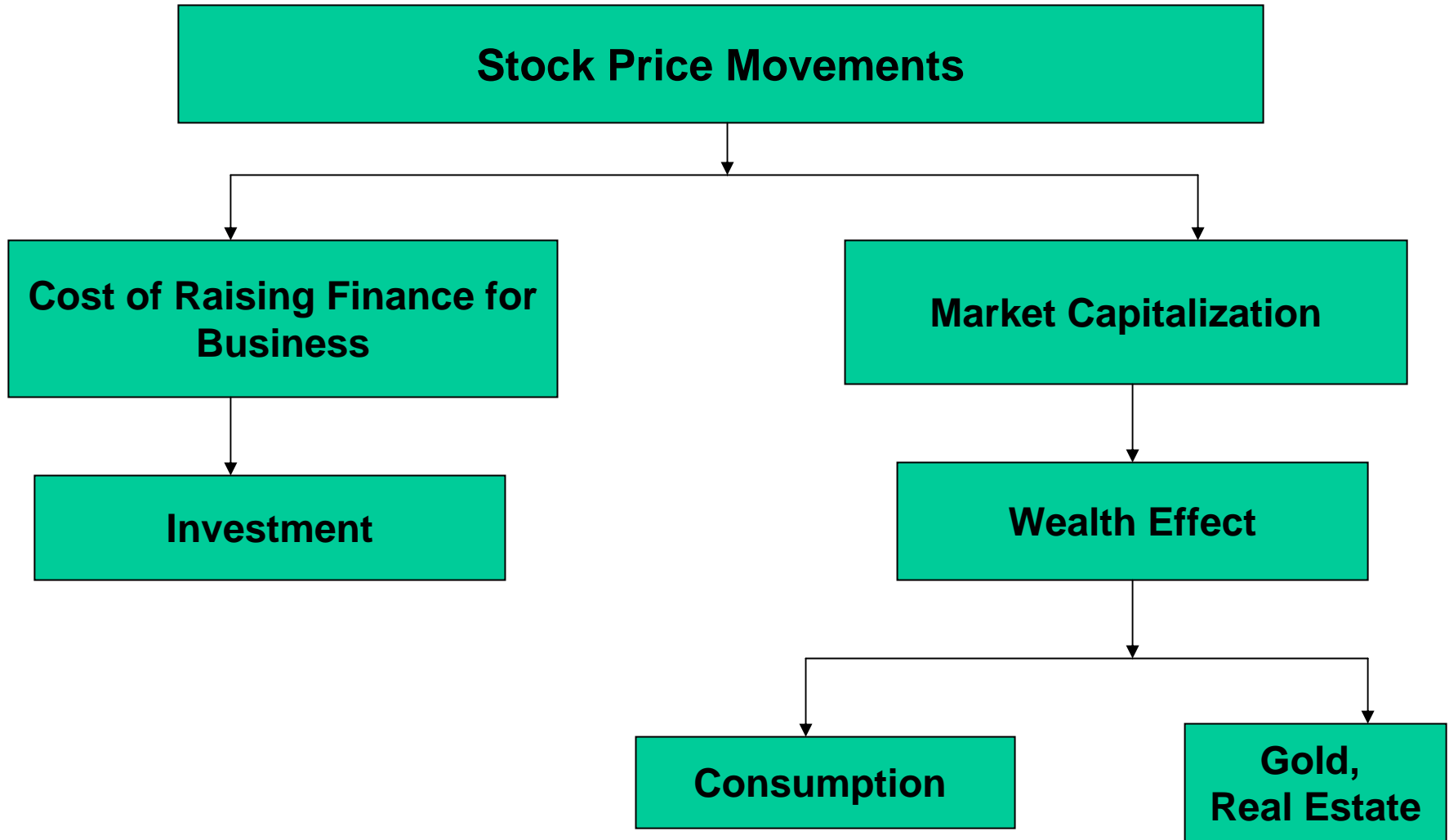


# **STOCK MARKET TRANSMISSION OF MONETARY IMPULSES**

- **1. EFFECT ON COST OF FINANCE  
TO BUSINESS**
- **2. WEALTH EFFECT, WHICH  
LEADS TO RISE IN SPENDING ON  
CONSUMPTION, GOLD, REAL  
ESTATE ETC.**



# Stock Market Transmission Channel





# **RESERVE BANK OF INDIA (ROLE AND RESPONSIBILITIES)**

- 1. MONETARY POLICY**
- 2. CURRENCY AUTHORITY**
- 3. BANKER TO CENTRAL AND STATE GOVERNMENTS**
- 4. MANAGEMENT OF PUBLIC DEBT**
- 5. REGULATION & SUPERVISION OF**
  - 1. COMMERCIAL BANKS,**
  - 2. ALL-INDIA FINANCIAL INSTITUTIONS**
  - 3. PRIMARY (URBAN) CO-OPERATIVE BANKS**
  - 4. NON-BANK FINANCE COMPANIES**

**IN THIS TALK WE FOCUS ON THE FIRST OF THE  
ABOVE ASPECTS**



# MONETARY POLICY (OPERATING PROCEDURES)

## A. EARLIER FRAMEWORK; (QUANTITY BASED MONETARY TARGETING )

1. RESERVE MONEY USED AS OPERATING TARGET
2. M3 USED AS INTERMEDIATE TARGET  
(FROM MID-1980s TO MID-1990s)

***SINCE THE FINANCIAL LIBERALIZATION THAT BEGAN IN 1991, THE MONETARY POLICY OPERATING PROCEDURE HAS BEEN GRADUALLY CHANGING***



# CURRENT FRAMEWORK

- 1. LESS RELIANCE ON DIRECT INSTRUMENTS & LIQUIDITY MANAGEMENT THROUGH OPEN – MARKET OPERATIONS (OMO) AND REPO AND REVERSE REPO OPERATIONS UNDER LIQUIDITY ADJUSTMENT FACILITY (LAF)**
- 2. MULTIPLE INDICATOR APPROACH (SINCE APRIL 1998)**



# **THREE-PRONGED APPROACH OF THE RBI TO MONETARY MANAGEMENT**

- **1. SHORT-TERM LIQUIDITY  
MANAGEMENT (LAF)**
- **2. LONG-TERM LIQUIDITY  
MANAGEMENT**
- **3. STERILIZATION**



# **LIQUIDITY ADJUSTMENT FACILITY (LAF)**

- **INTENDED TO CORRECT SHORT-TERM LIQUIDITY MISMATCHES IN THE BANKING SYSTEM AND PROCEEDS BY DAILY AUCTION**
- **REPO RATE (RATE AT WHICH BANKS BORROW FROM RBI AGAINST GOVT. & OTHER APPROVED SECURITIES (REPURCHASE AGREEMENT) CURRENTLY AT 7.75%)**
- **REVERSE REPO RATE (RATE AT WHICH BANKS CAN PLANT SURPLUS LIQUIDITY WITH RBI) CURRENTLY AT 6%**



# STERILIZATION

- **MARKET STABILIZATION SCHEME (MSS) INTRODUCED EFFECTIVE APRIL 2004 TO DEAL WITH SURGING CAPITAL INFLOWS**
- **UNDER MSS, RBI IS ALLOWED TO ISSUE ( BY AUCTIONS) TBs AND GoI SECURITIES**
- **THE TBs AND GoI SECURITIES ISSUED UNDER MSS WOULD HAVE ALL THE ATTRIBUTES OF EXISTING TBs & SECURITIES**
- **THE MSS INSTRUMENTS WILL NOT FIGURE IN THE GOVT. BUDGET EXCEPT FOR THE INTEREST COST**
- **ANNUAL CEILING ON MSS (REVISED IN OCT.2007 TO RS. 200,000 CRORES).**



# MANAGING LONG-TERM LIQUIDITY

- **1. SIX-MONTHLY CALENDAR OF AUCTION OF GOVT. SECURITIES (MORE GEARED TO GoI BORROWING REQUIREMENTS)**
- **2. EVERY WEDNESDAY THERE IS AN AUCTION OF 91-DAY TBs**
- **3. LAST WEDNESDAY OF EVERY MONTH THERE IS AN AUCTION OF 364-DAY TBs**



# **THREE CURRENT PROBLEMS CONFRONTING RBI**

- **RUPEE APPRECIATION**
- **STOCK MARKET & REAL ESTATE  
BUBBLE**
- **GLOBAL SUB-PRIME LOAN CRISIS**



# RUPEE APPRECIATION

- **LIBERALIZATION OF CAPITAL OUTFLOWS (25 SEPT. 07)**
- **AGGRESSIVE BUYING OF US\$**
- **INTEREST SUBVENTION OF 2% ON POST AND PRE-SHIPMENT EXPORT CREDIT FOR CERTAIN CATEGORIES OF EXPORTERS SUCH AS TEXTILES, LEATHER PRODUCTS, ENGINEERING ETC.**
- **INTERVENTION IN THE FORWARD MARKET ?**



# DETAILS OF RBI GUIDELINES ON EXPORT CREDIT

- **As per the existing guidelines, banks charge interest rate not exceeding BPLR minus 2.5% on rupee pre-shipment credit upto 180 days and rupee post-shipment credit upto 90 days. Banks will now charge interest rate not exceeding BPLR minus 4.5% on pre-shipment credit upto 180 days and post-shipment credit upto 90 days on the outstanding amount for the period April 1, 2007 to December 31, 2007 to the above mentioned sectors.**



# **STOCK MARKET & REAL ESTATE BUBBLE**

- **1. HUGE BUBBLE SEEMS TO BE BUILDING UP IN THE REAL ESTATE AND STOCK MARKET IN INDIA**
- **2. SHOULD THE RBI *PRICK* THE BUBBLE ?**



# TWO VIEWS ON CENTRAL BANKS & BUBBLES

- ***FIRST VIEW :***
- **CENTRAL BANK SHOULD NOT *PRICK* A BUBBLE BUT *MOP UP* AFTERWARDS. WHY SO?**
- **(A) BUBBLES HARMFUL ONLY WHEN FINANCIAL SYSTEM IS FRAGILE**
- **(B) PRICKING BUBBLES MAY TRIGGER A RECESSION.**



## ***ALTERNATE VIEW***

- **CENTRAL BANK SHOULD INTERVENE AND TRY TO STOP A BUBBLE. WHY?**
- **(A) BUBBLES DISTORT RESOURCE ALLOCATION**
- **(B) FINANCIAL CRISES CAN ADVERSELY IMPACT THE POOR.**



# **RBI RESPONSE SO FAR**

- **PRE-EMPTIVE TIGHTENING**
  - 1. RISK WEIGHTS FOR HOME LOANS RAISED**
  - 2. PROVISIONING NORMS TIGHTENED**
  - 3. CHECK ON FINANCIAL INSTITUTIONS' SECURITIZATION EXCESSES**



# RESULT

- **SLOWDOWN IN HOUSING LOAN GROWTH TO 21.6% IN MAY 07 FROM 54% IN JUNE 06**
- **RESIDENTIAL PROPERTY MARKET STABILIZED**



# **RECENT SUB-PRIME LENDING CRISIS. WILL IT AFFECT INDIA?**

- **INDIA NOT INSULATED FROM THE CRISIS.**
- **CUMULATIVE NET FOREIGN EQUITY INVESTMENT IN INDIA STOOD AT US\$44 BN. AS OF AUG. 07—APPROX. 3.4% OF TOTAL MARKET CAPITALIZATION (FREE FLOAT) OF ABOUT US \$ 1200 BN. (AS OF Aug. 07).**
- **IN THE MONTH OF AUG. 07, THERE WAS AN OUTFLOW OF US \$2.4BN.**
- **SENSEX (NEXT SLIDE) FIRST REACTED SHARPLY TO THE CRISIS BUT NOW SEEMS TO HAVE WEATHERED THE STORM.**



# The Bombay Stock Exchange Sensitive Index (Sensex)



Source: <http://finance.yahoo.com>



# A POSSIBLE SOURCE OF WORRY

- **. Leading software companies heavily exposed to the US and European financial services sector (financial services constitute anywhere between 24 to 47% of total revenues of top Indian software companies). A decline in IT sector growth could have a non-negligible impact on the overall growth rate.**



- **BUT IMPACT (OF SUBPRIME LENDING CRISIS) LIKELY TO BE LIMITED BECAUSE THE LOAN-DEPOSIT RATIO IN INDIAN BANKS LOWER THAN IN SEVERAL OTHER ASIAN COUNTRIES (BECAUSE OF THE SLR REQUIREMENTS OF 26%)**