Monetary Policy in India

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Outline

Monetary Policy

- What is monetary policy?
- What is the role of monetary policy?
- How does monetary policy work?

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When interest rates are reduced

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- Rahul takes a consumer loan
- Raj takes a loan to add capacity to his factory
- Rani takes a housing loan

Increase in expenditure.

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- WPI inflation rate at 5.9 percent
- Real estate prices
- Bank credit growth high
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What is monetary policy?

Monetary policy is the management of money supply and interest rates by central banks to control prices and employment.

How does monetary policy achieve its goals?

- Monetary policy impacts demand in the economy through affecting interest rates
- Traditionally this was done through changing money supply
- Now it is done by directly changing interest rates.

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Contractionary monetary policy

A rise in interest rates

- Individual loans more expensive
- Assets lose value. The wealth effect reduces spending.
- Firms can hold less inventories
- Borrowing for investment is more expensive

Reduction in aggregate expenditure.

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Expansionary monetary policy

Similarly, with a cut in interest rates, monetary policy is expansionary.

Credit policy

- RBI announces a credit policy every quarter. The next one will be announced on 31st January.
- Interest rates were raised in the last credit policy. In recent weeks, the cash reserve ratio was hiked.
- The repo rate is the rate at which RBI lends to banks in the short run.
- The reverse repo rate is the rate at which banks lend to RBI.
- Why people are expecting interest rates to go up?

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Money demand and supply

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Money supply

Money is something that is used as a medium of exchange, a store of value and a unit of account.

- In its narrow most definition (M0) money comprises of all currency in circulation.
- M1 is all currency plus demand deposits.
- M3 consists of currency plus demand deposits plus time deposits.
- Adding post office deposits to M1 we get M2 and to M3 we get M4.

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Monetary base

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Money creation

Money is created when the central bank either lends to the money, or adds to its kitty of foreign exchange reserves.

Money multiplier

Example

1. Suppose an exporter brings 2 dollars into India and RBI buys the dollars at Rs 50 per dollar. This leads to an increase in M0 by Rs 100.
2. He deposits Rs 100 in a bank.
3. The bank holds, for example, Rs 10 as reserves and lends out Rs 90.
4. Borrowers of the Rs 90 hold it in bank deposits.
5. Banks that receive these deposits hold 9 and lend out the rest.
6. The banking system as a whole lends out a multiple of the amount that was initially created by the central bank.

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3	81
4	72.90
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  = 100+100(1-r)+100(1-r)(1-r)+...
  = 100(1/r)), where r is the amount that banks hold as reserves
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- Money supply increases by Rs 1000 when the central bank increases the monetary base by Rs 100.
- The multiple 10 is known as the *money multiplier*.

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Instruments of monetary policy in India

To change money supply

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- Instability of money demand function
- Money supply is not exogenous
- Result: Interest rates do not move as hoped
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Monetary policy in an open economy

Impossible trinity

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- Pegged currency regime
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- Let us say you have inflation and so want a contractionary monetary policy.
- You raise interest rates.
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- This puts a pressure on the rupee to appreciate.

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- The RBI buys up the dollars coming in to prevent rupee appreciation.
- This leads to an expansion in net foreign exchange assets of the RBI and thus of M3.
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A country with an open capital account cannot hope to have an independent monetary policy if it runs a pegged exchange rate.

Sterilised intervention

The central bank could then try to impact money supply through open market operations. This is known as sterilizing the impact of the forex intervention.

India's currency regime

- RBI says that the rupee is a "market determined exchange rate".
- '*Pegging*': A nominal rate, and reduction in volatility of this rate, is the main focus of trading by the central bank.
- *Fear of floating* (Calvo & Reinhart, 2002) : currency flexibility in India has not changed over 1979-1999.
- Reinhart & Rogoff, 2003: identification of *de facto* currency regime – They classify India as a "peg to the US dollar".

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- The reserves buildup after mid-2002 cannot be explained by a quest for reserves as insurance.
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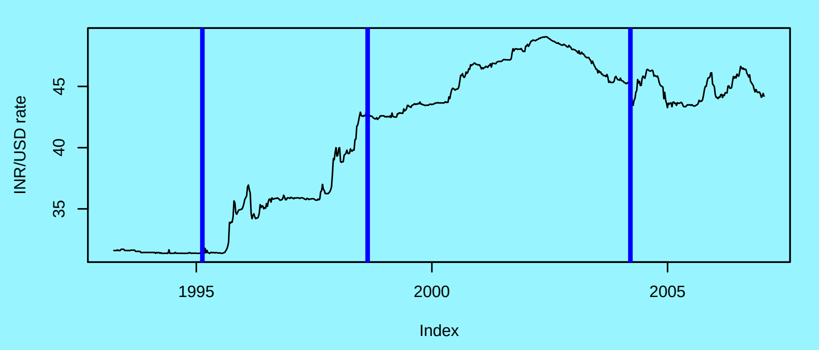

Implications of the impossible trinity

- Controls on the current account and the capital account have eased.
- Through the impossible trinity, stifling the currency market must come at a cost in terms of loss of autonomy of monetary policy.
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- What has RBI's stance of sterilisation been?
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Elements of openness

Current account The current account was sharply liberalised in the 1990s, and is a well known channel for evading capital controls.

Investment flows FDI, foreign portfolio investment, outward flows: These are new, and least-controlled.

"Other capital flows" These may play a role in evasion of capital controls.

Loans These are subject to significant restrictions.

Banking flows RBI has detailed control on capital flows intermediated by banks - e.g. RBI sets the *interest rate* on "NRI deposits".

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Initiation – capital market reforms, 1993

Foreign portfolio investment:

Period	Inflow (Mln. USD)
Q2 1993-94	307
Q3 1993-94	935
Q4 1993-94	2283

Evolution of BOP in Episode I

(Billion USD)

Year	Current account balance	Net capital Inflows
1991-92	-9.6	3.7
1992-93	-1.2	2.9
1993-94	-1.2	9.6
1994-95	-3.4	9.1
1995-96	-5.9	4.7
1996-97	-4.6	11.5

Banking reserve requirements

Date	Action
11-Jun-1994	Cash Reserve Ratio (CRR) was raised from 14% to 14.5%.
09-Jul-1994	CRR was raised to 14.75%.
06-Aug-1994	CRR was raised to 15%.
29-Oct-1994	CRR for Foreign Currency Non-Resident (FCNR) Accounts was raised from 0% to 7.5%.
21-Jan-1995	CRR for Non-Resident accounts raised from 0% to 7.5%, and CRR for FCNR accounts was raised to 15%.
17-Jul-1995	Conditions for overdraft facility to stock brokers to draw money from banks were made more stringent.

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2. NFA as percent of M0 went up from 20% to 45%.
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