SRIRAM's IAS

MONETARY AND CREDIT POLICY

Definitions:

- The strategy of influencing movements of the money supply and interest rates to affect output and inflation
- The actions of a central bank that determine the size and rate of growth of the money supply, which in turn affects interest rates.
- A macroeconomic policy tool used to influence interest rates, inflation, and credit availability through changes in the supply of money available in the economy
- An attempt to achieve broad economic goals by the regulation of the supply of money
- The regulation of the money supply and interest rates by a central bank in order to control inflation and stabilise currency
- Monetary policy is the process of managing a nation's money supply to achieve specific goals—such as constraining inflation, achieving full employment etc.
- Monetary policy is made by the central bank to manage money supply to achieve specific goals—such as constraining inflation, maintaining an appropriate exchange rate, generating jobs and economic growth. Monetary policy involves changing interest rates, either directly or indirectly through open market operations, setting reserve requirements, or trading in foreign exchange markets.

Monetary Policy

The use by the Central Bank of interest rate and other instruments to influence money supply to achieve certain macro economic goals is known as monetary policy. Credit policy is a part of monetary policy as it deals with how much and at what rate credit is advanced by the banks. Objectives of monetary policy are:

- accelerating growth of economy
- price stability
- exchange rate stabilization
- balancing savings and investment
- Generating employment and

Monetary policy can be expansionary or contractionary: expansionary policy increases the total supply of money in the economy, for example, in 2008-09 all over the world including India, to beat recession/slowdown; and a contractionary policy decreases the total money supply by tightening credit conditions. Expansionary policy is traditionally used to combat unemployment in a recession by lowering interest rates, while contractionary policy has the goal of raising interest rates to control inflation.

Historically, Monetary Policy was announced twice a year - a slack season policy (April-September) and a busy season policy (October-March) in accordance with agricultural cycles. However, since monetary Policy has become dynamic in nature, RBI reserved its right to alter it from time to time, depending on the state of the economy. Reserve Bank of India decided to announce Bi-monthly Monetary Policy Statements- once every two months- from April 1, 2014. This statement is in keeping with the recommendation of the Urjit Patel Committee.

The tools available for the central bank to achieve the monetary policy ends are the following

- Bank rate
- Reserve ratios
- Open market operations
- Intervention in the forex market and
- Moral suasion

Bank Rate

Bank Rate is the rate at which RBI lends long term to commercial banks. Bank Rate is a tool which RBI uses for managing money supply. Any revision in Bank Rate by RBI is a signal to banks to revise deposit rates as well as prime lending rate (PLR is the rate at which banks lend to the best customers. It is not in use any more.)

Since beginning of the last decade, bank rate is in a limbo. It has no effective use. It is a penal rate. In 2011, the bank rate was aligned with the newly introduced marginal standing facility. Today it stands at 6.5% (2017).Bank Rate is aligned with Marginal Standing Facility (MSF) rate, which, in turn, is linked to the policy repo rate. Alignment was because the MSF is also a penal rate. (Read ahead).

Earlier, bank rate was the policy rate. Bank rate has been replaced with repo rate as the policy rate for many years now. The Bank Rate today acts as the penal rate charged on banks for shortfalls in meeting their reserve requirements (cash reserve ratio and statutory liquidity ratio). Read ahead.

Ready Forward Contracts (Repos)

It is a transaction in which two parties agree to sell and repurchase the same security. Under such an agreement the seller sells specified securities with an agreement to repurchase the same at a mutually decided future date and a price. Similarly, the buyer purchases the securities with an agreement to resell the same to the seller on an agreed date in future at a predetermined price.

In India, RBI lends on a short term basis to banks on the security of the government bonds (repo). Banks undertake to repurchase the security at a later date- over night or few days. RBI charges a repo rate for the money it lends. It is 6.25 % presently (2017)

Reverse repo is when RBI borrows from the market (absorbs excess liquidity) on the basis of securities and repurchases them the next day or after a few days. The rate at which it borrows is called reverse repo rate as it is the reverse of the repo operation. Reverse repo rate 25 basis points (0.25%) below the repo rate- 6% (2017)

The Repo/Reverse Repo transaction can only be done in securities as approved by RBI (Treasury Bills, Central/State Govt. securities). RBI uses Repo and Reverse repo as instruments for liquidity adjustment in the system.

Repo rate is known as policy rate and is used as signal to the financial system to adjust their lending and borrowing operations.

MSF

In 2011, RBI introduced the Marginal Standing Facility as a window through which the commercial banks can borrow from the RBI at a rate that is more than the repo rate. It is meant to ease liquidity in the market. Banks can use the repo route for the securities that they hold over and above the mandatory SLR level- 19.5% of bank deposits. If the banks do not have securities over and above the SLR requirement for any reason, MSF is open to them. They can use securities below the stipulated SLR. MSF is open to the banks that want to borrow from the RBI even if the credit is costlier. However, there are limits to how much can be borrowed from the MSF window. The aim is to ease liquidity.

MSF is the penal rate- because the SLR limit is breached. Bank rate is also a penal rate- for breaching the SLR and CRR limits. Therefore, there is a need to bring the bank rate on par with the MSF as was done by the RBI in 2011-12. Both stand at 6.25% today (2017).

MSF window also has become necessary because the repo operations are limited to a specific period during the day. Banks have securities in excess of the SLR requirement as is a safe investment and also repo window opens. Only Scheduled Commercial banks use this route. They use the *collateral of* government securities *including* SLR. (Read above)

LAF

Liquidity Adjustment Facility (LAF) was introduced by RBI in 2000. Funds under LAF are used by the banks for their day-to-day mismatches in liquidity. LAF covers credit at repo and reverse repo rates. *Under LAF, Minimum credit limits are* Rs. 5 crore. It has uses for Banks, NBFCs, DBs (Development banks) and government. That is, all the clients of RBI. Money is lent by the RBI at Repo rate. *Collateral used includes* all the government securities.

Reserve Requirements

In economics, fractional-reserve banking is the near-universal practice of banks in which banks keep a fraction of the total deposits managed by a bank as reserves that are not to be lent. The reserve ratios are periodically changed by the RBI. The reserve requirement is a bank regulation, that sets the minimum reserves each bank must hold as a part of the deposits. These reserves are designed to satisfy various needs like providing loans to the Government), safety of banking operations, regulation of liquidity, management of interest rates, checking speculation and inflation management(CRR).They are in the form of RBI approved securities (SLR) kept with themselves or cash that is kept with the RBI (CRR).

Statutory Liquidity Ratio (SLR)

It is the portion of time (fixed deposits) and demand liabilities(savings bank and current accounts) of banks that they should keep in the form of designated liquid assets like government securities and other RBI-approved securities like public sector bonds ; current account balances with other banks and gold .SLR aims at ensuring that the need for government funds is partly but surely met by the banks. SLR was progressively brought down from 38.5% in 1991 to 19.5% (2017).

The main objectives for maintaining the SLR ratio are the following:

- to control the expansion of bank credit. By changing the level of SLR, the Reserve Bank of India can increase or decrease bank credit expansion.
- to ensure the solvency of commercial banks.
- to make the commercial banks to invest in government securities like government bonds so that government has adequate financial resources for its commitments

SLR is a blunt instrument and was unchanged for more than a decade and half till the Lehman-induced global financial and economic crisis of 2008.

Banking Regulation Act, 1949 fixed the floor and cap on SLR at 25% and 40% respectively. But the amendment made in the statute in 2007 removed the lower limit but retained the cap at 40%. RBI has, as a result, the freedom to reduce the SLR to any rate depending on the macro economic conditions. The amendment was an enabling one. SLR is governed by the provisions of Section 24 of the Banking Regulation Act.

CRR

CRR is liquidity management and a monetary tool to regulate money supply. It is the portion of the bank deposits that a bank should keep with the RBI in cash form. CRR deposits earn no interest. The Reserve Bank of India Act, 1934 and the Banking Regulation Act, 1949 fixed the floor and cap on CRR at 3% and 20% respectively. But the amendment made in these statutes in 2007 removed the limits- lower and upper. RBI has, as a result, greater operational flexibility to make its monetary adjustments. CRR is adjusted to manage liquidity and inflation. The more the CRR, the less the money available for lending by the banks to players in the economy. CRR was 15% in 1991 and today it is 4% (2017). If inflation is high, money supply needs to be taken out and so CRR is generally increased. But in a regime of moderate inflation, low CRR is in place. CRR is governed by the provisions of Section 42 of the Reserve Bank of India Act, 1934.

RBI uses CRR either to drain excess liquidity or to release funds needed for the growth of the economy from time to time. Increase in CRR means that banks have less funds available and money is sucked out of circulation. Thus it serves two purposes is a portion of bank deposits is kept with RBI and is totally risk-free enables RBI to control liquidity in the system, and thereby, inflation. RBI increases CRR to tighten credit and lowers CRR to expand credit. During the downturn after the global Great Recession 2008 October onwards, CRR was reduced but as growth and inflation returned since 2009, CRR was gradually increased.

CRR as a tool of monetary policy is used when there is a relatively serious need to manage credit and inflation. Otherwise, normally, RBI relies on signaling its intent through the policy rates of repo and reverse repo. Based on these rates, RBI conducts open market operations for liquidity management.

Incremental CRR

In a circular to banks, the RBI said that on the increase in deposits between September 16 and November 11, scheduled banks will have to maintain incremental CRR of 100%. This measure is intended to absorb a part of the surplus liquidity arising from the return of the demonetised ₹500 and ₹1,000 bank notes. RBI observed that with the demonetisation decision, there was a surge in deposits relative to the expansion in bank credit, leading to large excess liquidity in the system.

It assessed that the magnitude of surplus liquidity available with the banking system was expected to increase further in the weeks to come. In view of this, RBI decided to absorb this surplus liquidity by applying an incremental CRR as a purely temporary measure. The process of putting in place other liquidity absorption measures like issuance of Market Stabilization Scheme (MSS) bonds was taking time and in the meantime the incremental CRR hike was an interim measure. It also aimed at signaling RBI's apprehension that interest rates could fall sharply with such unprecedented excess of liquidity.

Banks raise deposits to lend and make profitBut in the case of remonetisation deposits, they will be allowed to be withdrawn after some time- months or weeks and if the bajkks don't have the money having lent all, there will be a crisis. The deposits that came into the banking system as a result of the demonetization were not voluntary but forced. They were not savings but only to get remonetized. Thus, their nature is different. They were not to be lent and therefore had to taken out of the system. That explains the 100% CRR on these deposits within a certain period. That is why it is called incremental CRR and not CRR. CRR continued to be 4%.

SLR vs CRR

Both Cash Reserve Ratio (CRR) and SLR are instruments in the hands of RBI to regulate money supply in the markets. Both manage liquidity. But they are used for different purposes. CRR has a short and medium term relevance while SLR is a long term tool. SLR enables banks to earn money while CRR part does not earn any interest.CRR is maintained in cash form with central bank, whereas SLR is money held as govt. securities and kept with the banks themselves.

Open Market Operations of RBI

OMOs of the RBI can be described as outright purchase and sale of government securities in the open market (open market essentially means banks and financial institutions) by the RBI in order to influence the volume of money and credit in the economy. Purchase of government securities injects money into the market and thus expands credit; sales have the opposite effect- absorb excess liquidity and shrink credit. Open market operations are RBI's most important and flexible monetary policy tool. Open market operations do not change the total stock of government securities but change the proportion held by the RBI, commercial and cooperative banks.

There are two methods that the RBI uses to control the money supply in the economy-

- Qualitative Method
- Quantitative Method- through reserve requirements and ratios

Qualitative Method

By *Quality* we mean the uses to which bank credit is directed.

For example- the Bank may feel that speculators or the big industrialists are getting a disproportionately large share in the total credit, causing various disturbances and inequality in the economy, while the small-scale industries, consumer goods industries and agriculture are starved of credit. Correcting this type of discrepancy is a matter of Qualitative Credit Control.

Because it does not reduce the total quantum of credit available to the market but changes the quantum of what is available to a particular sector.

Qualitative Method controls the manner of channelizing of cash and credit in the economy. It is a 'selective method' of control as it restricts credit for certain section and may expand for the others known as the 'priority sector' depending on the situation.

Tools used under this method are-

Margin Requirement
Lending to a select sector may be accompanied by having to set aside a certain percentage of money for safety. When banks have to keep aside some money (margin) whenever they lend to the specified sectors, it hurts them with blocked funds. Thus, the credit flow to such sectors comes down as intended. In case the flow of credit has to be increased, the margin requirement will be lowered.

Rationing of Credit
Under this method there is a maximum limit to loans and advances that can be made, to a particular sector which the commercial banks cannot exceed. RBI fixes ceiling for specific categories. Such rationing is used for situations when credit flow is to be checked, particularly for speculative activities.

Both these tools make up selective credit controls(SCCs) that can be imposed for meeting various goals like discouraging hoarding and black-marketing of certain essential commodities by traders etc by giving them less credit. In SCCs, the total quantum of credit does not change, but the amount lent and the cost of credit may be changed for specific sector or sectors.

Controlling credit in the Economy is amongst the most important functions of the Reserve Bank of India. The basic and important needs of Credit Control in the economy are-

- To encourage the overall growth of the *"priority sector"* like agriculture etc
- To keep a check over the channelization of credit so that credit is not delivered for undesirable purposes.
- To achieve the objective of controlling "Inflation" as well as "Deflation".
- To boost the economy by facilitating the flow of adequate volume of bank credit to different sectors to develop the economy.

Moral Suasion

A persuasion measure used by Central bank to influence and pressure, but not force, banks into adhering to policy. Measures used are closed-door meetings with bank directors, increased severity of inspections, discussions, appeals to community spirit etc.

Recently the RBI Governor appealed to banks not to raise rates even though the central bank was following a tight money policy.

MCLR And Base Rate

Passing on the rate changes made by the MPC is crucial for growth, equity, inflation management etc. It is called monetary policy transmission. The experience with the Marginal Cost of Funds Based Lending Rate (MCLR) system introduced in 2016 for improving the monetary transmission has not been entirely satisfactory, even though it has been an advance over the Base Rate system that was introduced in 2011. An internal Study Group has been constituted by the Reserve Bank of India (RBI) to study the various aspects of the MCLR system from the perspective of improving the monetary transmission and exploring linking of the bank lending rates directly to market determined benchmarks. The Group will submit the report by September end 2017.

MCLR is based on current cost of funds rather than overall cost of funds which was used to calculate based rate. This will ensure quicker transmission of RBI rate cuts to borrowers.

Market Stabilization Bonds

For normal liquidity management, there are open market operations of the RBI when the RBI sells and buys G-secs as the market conditions demand. But when the need to absorb huge amounts of cash arises for example post-demonetisation in 2016, normal OMOs do not work. Similar has been the condition since 2004 when India started attracting foreign currency inflows of unprecedented magniture. In 2004, RBI floated Government securities, as a part of the Market Stabilization Scheme, to absorb excess liquidity from the market. When RBI started buying US dollars with freshly minted rupee it led to over-supply of the domestic currency raising inflationary fears. MSS was introduced to mop up this excess liquidity. The excess liquidity is the result of RBI buying dollars from the market. MSS is a sterilization effort of the central bank. The normally available government securities are not enough for the RBI to suck out the huge rupee supply (printed money) that was caused for buying dollar. Therefore, the MSS was started.

There are limits to MSS. The limits were raised to absorb the post-demonetisation deposits. The raising took time and in the meantime the incremental CRR was brought in at 100% of incremental deposits as detailed above.

Interest Rates And Their Significance

Interest rates are the rates offered to money that is deposited in the banks; rates offered for investment in bonds; rates at which money is borrowed from banks and financial institutions etc.

Savers want higher interest rate while investors want the cost of credit to be low. There has to be a balance. The determinants of interest rates are:

- Inflation- the higher the inflation, the higher the interest rates because the same money invested in commodities and other assets should not fetch more, because of the inflation. Savers need to be ttracted which is possible only when their money neutralizes inflation.
- Need for growth :lower interest rates reduce cost of credit and facilitate investment for growth
- Promotion of savings
- Government's need to borrow: the magnitude of government's borrowing programme also determines interest rates. The more the borrowing, the higher the interest rates.

- Need to generate demand :as interest rates come down, consumer demand for credit goes up and there will be a stimulus for growth
- Global trends as we need to retain foreign funds. For example, interest rates on NRI deposits are kept high to attract their dollar deposits under the FCNR (B).

Deregulation of Interest Rates

As a part of banking sector reforms, interest rates have been deregulated. The rationale is that banks can adjust rates quickly according to market conditions; financial innovations should be facilitated; competitive rates can be good for savers and investors; global alignment is possible more dynamically; etc. RBI however, uses repo rates and CRR adjustments to influence interest rates.

Floating and Flexible Rates of Interest

There are two types of interest rate- fixed and floating. If they are offered together (when they co-exist), it is called flexible interest rate regime. Floating interest rates are linked to an underlying benchmark rate. In other words, the interest rate offered 'floats' in relation to the interest rate of a government security instrument of similar maturity (5 years or 10 years maturity etc) as determined by the market. That is, floating rates of interest are basically market driven rather than 'fixed'. The effective rate is adjusted on a quarterly or semi-annually or annually.

Inflation Targeting

Under this policy approach the target is to keep inflation in a particular range or at a particular level. Government and the RBI agree on convergence between the fiscal and the monetary policies to achieve the common goal. RBI is given autonomy to manage inflation while the government agrees to have a fiscal policy that will contribute to price stability- for example, not borrow excessively etc. India does not follow it.

This monetary policy approach was pioneered in New Zealand. It is currently used in the Eurozone, Australia, Canada, New Zealand, Sweden, South Africa, Norway and the United Kingdom. (See Chapter on I

Urjit Patel Committee 2014

An expert committee appointed to examine the current monetary policy framework of the Reserve Bank of India (RBI) in early 2014 suggested that the apex bank should adopt the new CPI (consumer price index) as the measure of the nominal anchor for policy communication. That is, the policy should centre around the new CPI and not any other index like WPI etc.

The expert committee was headed by Urjit R. Patel, Deputy Governor of the Reserve Bank of India. Recommendations are:

- The target for inflation should be set at 4 per cent with a band of +/- 2 per cent around it.
- The nominal anchor should be defined in terms of headline CPI inflation, which closely reflects the cost of living and influences inflation expectations relative to other available metrics. This target should be set in the frame of a two-year horizon.

- The committee asked the Central Government to ensure that the fiscal deficit as a ratio to GDP (gross domestic product) is brought down to 3.0 per cent by 2016-17. "Administered setting of prices, wages and interest rates are significant impediments to monetary policy transmission and achievement of the price stability objective and so these required a commitment from the government towards their elimination.
- The Patel panel felt that the monetary policy decision-making should be vested with a monetary policy committee (MPC). It went on to recommend that the Governor of the RBI should be the Chairman of the MPC.

While Urjit Patel committee said that RBI should fix inflation target, Central government believes that it should specify 'inflation targets' for the Reserve Bank of India (RBI) to achieve. The reason is that t is best that inflation targets are set by the governments elected by the people.

Indian Financial Code (IFC), MPC and Inflation Targeting

The Financial Sector Legislative Reforms Commission was constituted in 2011. The commission was set up since it was felt there was a need to review the legal and institutional structures of the financial sector in India and recast these in tune with contemporary requirements. The commission gave its first report in 2013 containing an analysis of the current regulatory architecture and a draft Indian Financial Code to replace the bulk of the existing financial laws. IFC proposes changes in the way monetary policy is made and public debt is managed etc. Indian Financial Code (IFC) suggested an MPC to take rate decisions by a majority vote.

Under the pre-MPC set-up, the government appointed RBI Governor, who controlled the monetary policy and had veto power over the existing advisory committee of RBI members and outside appointees that sets rates. The final policy is usually a consensus arrived at by the governor, the Deputy Governor in-charge of monetary policy and the Executive Director In-charge of monetary policy. But ultimately the responsibility is the governor's.

There are three advantages of taking the decision of monetary policy formulation away from the Governor and giving it to a committee. First, a committee can represent different viewpoints and studies show that its decisions are typically better than an individual's. Second, spreading the responsibility for the decision can reduce the internal and external pressure that falls on an individual. Third, a committee will ensure broad monetary policy continuity when any single member including the governor changes.

It leads to institutionalising the process of monetary policy formulation which is vital given that the government has given the RBI a clear inflation objective.

Reserve Bank of India

The central bank of the country is the Reserve Bank of India (RBI). The Reserve Bank of India Act, 1934 came into effect in 1935. The Act provides the Statutory basis of the functioning of the bank.It was established with a share capital of Rs. 5 crores on the basis of the recommendations of the Hilton Young Commission. The share capital was entirely owned by private shareholders in the beginning. The Government held shares of nominal value of Rs.2,20,000.

Reserve Bank of India was nationalised in the year 1949. The general superintendence and direction of the Bank is entrusted to Central Board of Directors of 20 members, the Governor and four Deputy Governors, one Government official from the Ministry of Finance, ten nominated Directors by the Government to give representation to important elements in the economic life of the country, and four nominated Directors by the Central Government to represent the four local Boards with the headquarters at Mumbai, Kolkata, Chennai and New Delhi.

RBI

Functions

The Reserve Bank of India Act of 1934 entrusts all the important functions of a central bank to the reserve bank of India.

Bank of Issue

Under Section 22 of the Reserve Bank of India Act, the Bank has the sole right to issue bank notes of all denominations. The distribution of one rupee notes and coins and small coins all over the country is undertaken by the Reserve Bank as agent of the Government. The Reserve Bank has a separate Issue Department which is entrusted with the issue of currency notes.

RBI should maintain gold & foreign exchange reserves of Rs. 200 cr, of which Rs. 115 cr. should be in gold. This is a technical criterion. In reality, in a growing globalized economy like ours, as foreign currency inflows take place, the RBI will acquire them by printing more rupee thus adding to the rupee stock and the money supply keeping the demand for money satisfied in the economy for the given macroeconomic goals. The only restriction on RBI is the systemic one- it should not create instability with too much or too less of money supply. Money supply should have a correspondence to the goods in the economy and the rates of growth.

Banker to Government

The second important function of the Reserve Bank of India is to act as Government banker, agent and adviser. The Reserve Bank is agent of Central Government and of all State Governments in India. The Reserve Bank has the obligation to transact Government business, to receive and to make payments on behalf of the Government and to carry out their other banking operations. The Reserve Bank of India helps the Government - both the Union and the States to raise loans. The Bank makes ways and means advances to the Governments. It acts as adviser to the Government on all monetary and banking matters.

Banker's Bank And Lender of The Last Resort.

The Reserve Bank of India Acts As The Bankers' Bank

The scheduled banks can borrow from the Reserve Bank of India on the basis of eligible securities by rediscounting bills of exchange. CRR deposits of banks are kept with the RBI. Since commercial banks can always expect the Reserve Bank of India to come to their help in times of banking crises, the Reserve Bank is the lender of the last resort.

Controller of Credit

The Reserve Bank of India is the controller of credit i.e. it has the power to influence the volume of credit created by banks in India. It can do so through the variety of instruments available to it like reserve requirements etc (see above). According to the Banking Regulation Act of 1949, the Reserve Bank of India can ask any particular bank or the whole banking system not to lend to particular groups or persons. All its monetary policies are aimed at this function directly or indirectly.

Agent and Adviser of The Government

The RBI acts, as the financial agent and adviser to the Government. It renders the following functions:

a) As an agent to the Government, it accepts loans and manages public debts on behalf of the Government.

b) It issues Government bonds, treasury bills, etc.

c) Acts as the financial adviser to the Government in all important economic and financial matters.

Debt Management Office (DMO)

Public Debt Management Agency (PDMA) is a specialized independent agency that manages the internal and external liabilities of the Central Government and renders advice. PDMA manages the issue and trading of Government securities and undertakes cash management for the government.

PDMA is considered to be set up with the objective of "minimising the cost of raising and servicing public debt over the long-term within an acceptable level of risk at all times, under the general superintendence of the central government". This will include managing the public debt and related activities.

As of now, RBI manages the market borrowing programmes of Central and State Governments. External debt is managed by the GOI. DEA (Department of Economic Affairs), Ministry of Finance, Government of India along with Reserve Bank of India, monitors and regulates ECB guidelines and policies. Establishing a debt management office would consolidate all debt management functions in a single agency and bring in holistic management of the internal and external liabilities.

It is considered as an internationally accepted best practice that debt management should be disaggregated from monetary policy, and taken out of the realm of the central bank. Most advanced economies have dedicated debt management offices. Several emerging economies, including Brazil, Argentina, Colombia, and South Africa, have restructured debt management in recent years and created an independent agency for the same.

There is a conflict of interest between setting the short term interest rate (i.e. the task of monetary policy) and selling bonds for the government. RBI has to manage inflation for which the rates have to be kept high when the prices are high. But being a debt manager, it has to borrow at lower rates of interest for the GOI.

Where the Central Bank also regulates banks, as in India, there is a further conflict of interest. If the Central Bank tries to do a good job of discharging its responsibility of selling bonds, it has an incentive to mandate that banks hold a large amount of government paper. This bias leads to flawed banking regulation and supervision, so as to induce banks to buy government bonds, particularly long-dated government bonds. Having a pool of captive buyers undermines the growth of a deep, liquid market in government securities, with vibrant trading and speculative price discovery. This, in turn, hampers the development of the corporate bond market - the absence of a benchmark sovereign yield curve makes it difficult to price corporate bonds.

Ministry of Finance formed an Internal Working Group, Chaired by Shri. Jahangir Aziz, to analyse how best to move forward on establishing a DMO. Report of the Internal Working Group on Debt

Management (2008), suggested creating a "National Treasury Management Agency (NTMA)" as an independent public debt management office.

Dr Raghuram Rajan chaired Committee on Financial Sector Reforms (2009) constituted by the Planning Commission pointed out that internationally, there has been a strong movement towards establishing independent debt management offices (DMOs) which is now considered as the best practice, and favoured it.

Justice B. N. Srikrishna chaired FSLRC or Financial Sector Legislative Reforms Commission report (2013) also recommended setting up the independent "Public Debt Management Agency (PDMA) at the earliest.

The Constitution of India gives the executive branch of the Government t powers to borrow upon the security of the Consolidated Fund of India. Reserve Bank as an agent of the Government (both Union and the States) implements the borrowing program. The Reserve Bank draws the necessary statutory powers for debt management from the Reserve Bank of India Act, 1934. While the management of Union/Central Government's public debt is an obligation for the Reserve Bank, the Reserve Bank undertakes the management of the public debts of the various State Governments by agreement. The debt management functions comprise of formulation of a calendar for primary issuance, deciding the desired maturity profile of the debt, size and timing of issuance, designing the instruments and methods of raising resources, etc. taking into account government's needs, market conditions, and preferences of various segments while ensuring that the entire strategy is consistent with the overall macro-economic policy objectives.

The Indian central bank has countered this by saying that in countries such as India, given the large size of the government borrowing programme, the sovereign debt management is much more than merely an exercise in resource-raising, as it could impact interest rates which, in turn, could have wider public policy implications.Other arguments which have been put forward by those backing the RBI are that the size and dynamics of government borrowing programmes have a much wider influence on interest rate movements, systemic liquidity and even loan growth through the crowding out of private sector loan demand.Management of public debt, therefore, has necessarily to be seen as part of broader macroeconomic management framework involving various trade-offs. According to them, once this is recognised, the centrality of central banks in this regard becomes quite evident and that only central banks have the requisite market pulse and instruments which an independent debt agency, driven by narrow objectives, will not be able to do.

The concern which has been flagged off is that if debt management is moved away from the RBI to DMO, which could function as an extended arm of the ministry of finance, the possibility of conflict of interest is greater as the government is the owner of the majority of banks in India.This conflict of interest is more potent in the backdrop of banking sector continuing to be the dominant player for government market borrowing, with banks holding over 50% of outstanding government securities. As an interim arrangement for a full-fledged agency for managing public debt to be called as Public Debt Management Agency (PDMA), the government in 2016 set up Public Debt Management Cell (PDMC) at RBIs Delhi office.

RBI as National Clearing House

In India RBI acts as the clearing house for settlement of banking transactions. This function of clearing house enables the other banks to settle their interbank claims easily. Further it facilitates the settlement economically. It essentially means the inter-bank cheque clearing settlement.

RBI as Lender of Last resort

The RBI acts as a lender of last resort or emergency fund provider to member banks. If the commercial banks are not able to get financial assistance from any other sources, then as a last resort, they can approach the RBI for the necessary financial assistance. In such situations, the RBI provides credit facilities to the commercial banks on eligible securities including genuine trade bills which are usually made available at repo Rate/MSF. This facility comes into operation when the bank is struggling to survive and there are no sources of credit available because of its weakness.

Custodian of Foreign Reserves

The Reserve Bank of India has the responsibility to act as the custodian of India's reserve of international currencies. It takes up operations in the forex market to stabilize the exchange rate of rupee and ensure that there is no speculation and there is order. To be able to do so effectively, it holds forex reserves which it acquires from the market (purchases). It has about $400 b of forex reserves (2017 November) which includes foreign currency assets, gold and IMF's SDRs. SDRs are increasing in importance since 2008 when dollar stability came under question. Diversification and hedging of risk is being done by all central banks. Even though rupee exchange rate is market driven, RBI watches the movement to ensure order and normalcy and there is no volatility. Thus, it maintains exchange rate oversight. It has many levers which we will discuss in the chapter ahead on BOP.

Supervisory Functions

The Reserve Bank Act, 1934, and the Banking Regulation Act, 1949 have given the RBI wide powers of supervision and control over commercial and co-operative banks, relating to licensing and establishments, branch expansion, setting reserve ratios etc. They are:

- Granting license to banks.
- Inspect and make enquiry or determine position in respect of matters under various sections of RBI and Banking Regulation Act.
- Implementation of Deposit Insurance Scheme.
- Periodical review of the work of commercial banks.
- Giving directives to commercial banks.
- Control the non- banking finance corporations.
- Ensuring the health of financial system through on-site and off-site verifications
- Banking Regulation (Amendment) Act 2017 enables the GOI to authorise the RBI to issue directions to banks to initiate insolvency resolution process to recover bad loans.

Promotional Functions

Since Independence, the range of the Reserve Bank's functions has steadily widened. The Bank now performs a variety of developmental and promotional functions. The Reserve Bank promotes banking habit, extend banking facilities to rural and semi-urban areas, and establish and promote new specialised financing agencies. Accordingly, the Reserve Bank helped in the setting up of the IFCI and the SFC; the Industrial Development Bank of India in 1964, the Agricultural Refinance

Corporation of India in 1963 and the Industrial Reconstruction Corporation of India in 1972. These institutions were set up directly or indirectly by the Reserve Bank to promote savings, and to provide industrial finance as well as agricultural finance. NABARD was set up in 1982. It has an important role in facilitating microfinance for financial inclusion. Further, its innovations include banking correspondent model for rural banking.

Functions of Central Bank, In Sum

- monopoly on the issue of banknotes
- the Government's banker
- bankers' bank
- Lender of Last Resort
- manages the country's foreign exchange and gold reserves
- regulation and supervision of the banking industry;
- setting the official interest rate - used to manage both inflation and the country's exchange rate.

The central bank's main responsibility is making of monetary policy to ensure a stable economy, including a stable currency. It aims to manage inflation (rising average prices) as well as deflation (falling prices). It is the lender of last resort, and assists banks in cases of financial distress (see Note on bank runs).

Furthermore, it holds foreign exchange reserves and official gold reserves, and has influence over exchange rates. Some exchange rates are managed, some are market based (free float) and many are somewhere in between ("managed float" or "dirty float"). India falls in the market-determined category largely. Typically a central bank controls certain types of short-term interest rates (repo and reverse repo rates). These influence the stock- and bond markets as well as mortgage and other interest rates.

RBI Act Amended 2006

Government made amendments to RBI Act 1934 and Banking Regulation Act for allowing the apex bank to have more flexibility to fix the Cash Reserve Ratio (CRR). It removed the floor and cap on CRR to provide flexibility to RBI to manage liquidity. This would result in better liquidity management in the system.

RBI And Bitcoin

Bitcoin is a worldwide private cryptocurrency and digital payment system. It is the first decentralized digital currency, as it works without a central repository or single administrator. It was developed under the name Satoshi Nakamoto and released as open-source software in 2009. The system is peer-to-peer, and transactions take place between users directly, without an intermediary.These transactions are verified by network nodes and recorded in a public distributed ledger called a *blockchain*.

Bitcoins are created as a reward for a process known as *mining*. They can be exchanged for other currencies, products, and services. Because of bitcoin's decentralized nature, restrictions or bans on it are impossible to enforce, although its use can be criminalized.The legal status of bitcoin varies substantially from country to country and is still undefined or changing in many of them. While some countries have explicitly allowed its use and trade, others have banned or restricted it.

The Reserve Bank of India is in control of fiat but not bitcoins which is private. A fiat currency is the legal status given to a currency issued by the central bank. Non-fiat cyptocurrencies like bitcoins are not approved or disapproved by the RBI nor does RBI find them to be viable and desirable.

Reserve Bank had talked of possible "black money" risks from virtual currencies like bitcoins and that they are "susceptible to misuse" by terrorists and fraudsters for laundering money. Some have expressed concerns that bitcoin could be a Ponzi scheme. Bitcoins can be inflationary and thus RBI should have a role in regulating it.

The Reserve Bank of India has not given any licence and authorisation to any entity or company to operate such schemes or deal with bitcoins or any virtual currency (VCs). An inter-disciplinary committee, which includes an RBI representative, has been constituted by the Finance Ministry to examine the regulatory framework with regard to virtual currencies in 2017.

Autonomy for RBI

RBI being the architect of the monetary policy requires autonomy to be effective. Advocates of central bank independence argue that a central bank should be autonomous to manage money, credit and exchange rate dynamics in the globalizing economy. It helps check populist pressures and schemes that the political leadership may be tempted to indulge in. For example, the RBI may come under pressure to reduce rates to allow banks to lend easy to corporates and consumers to stimulate growth even as the inflation is high. It can resist the pressure if it has autonomy.

Others believe that the elected governments should have the final say within which RBI should be autonomous both while tendering advice and also with enough discretionary powers. For example, demonetization of 2016 November when the government suggested to the RBI and RBI agreed.

The recent measures to make RBI independent are

- replacement of adhoc treasury bills with WMA from 1997
- FRBM Act empowers RBI with autonomy- no primary borrowing from 1-4-2006.
- RBI Act amended in 2006 to give it more power for reserve requirement management

The arguments in favour of autonomy are:

- monetary stability which is essential for the efficient functioning of the modern economic system can be best achieved if professional Central bankers with the long term perspective are given charge. Otherwise, political leadership may be tempted to populism
- without such autonomy, government tends to be profligate with its policies of automatic monetization

The arguments against are:

- democratic systems are run with Parliament and Cabinet making all important policies
- monetary policy is an integral policy of the overall economic policy and so RBI has to subordinate itself to the larger objective.

The best course is to have a middle path like in the MPC where the RBI and others together take decisions.

RBI Dividend

The RBI functions according to the Reserve Bank of India Act of 1934. Chapter 4, section 47 of the Act, titled "Allocation of Surplus funds" lays down that profits("surplus) made by the RBI from its operations should be transferred to the GOI.The original provision states :"After making provision for bad and doubtful debts, depreciation in assets, contributions to staff and superannuation funds .. the balance of the profits shall be paid to the Central Government."

The RBI earns its profits through its open market operation; forex market interventions etc. When what it costs the RBI is deducted from the gross profit, net is arrived at and that is called surplus and goes to the GOI.

Specified Bank Notes (Cessation of Liabilities) Act 2017enabled the Central Bank to write off the unreturned amount from its balance sheet after the demonetisation.The written-off amount, under the law, can be transferred to the government as a special dividend.

The Centre had budgeted Rs 58,000 crore as dividend from the RBI in 2017. The Reserve Bank of India (RBI) paid a dividend of Rs 30,659 which was less than half of the Rs 65,876 crore that was transferred in FY 2015-16. The fall in the amount may be due to the additional costs incurred because of printing of new currency notes and in managing the excess liquidity due to the unexpected and huge inflow of deposits into the banking system post remonetisation.

The lower dividend may make it necessary to borrow more from market thus widening the fiscal deficit, unless tax collections or some other budgetary source shows better than expected performance.

Money Supply

This refers to the total volume of money circulating in the economy. Money supply can be estimated as narrow or broad money.

M1 equals the sum of currency with the public and demand deposits with the banks. It is the narrow money.

M3 or the broad money, as it is also known, includes time deposits (fixed deposits), savings deposits with post office saving banks and all the components of M1.

These notions are important for the RBI to understand the demand in the economy so that it can gauge inflation, demand and so on for it to adjust the same. But with the coming of credit cards, bitcoins etc, the utility of these concepts is relatively diminished.

Liquidity Trap

A **liquidity trap** is a situation when rates and reserve requirements are lowered to stimulate demand but it does not impact on reviving demand and growth. There are no takers for bank credit. It happens in times of recession that is getting worse. There are deflationary expectations and the economy can be faced with the problem of short-term interest rates reaching or nearing zero. This makes the monetary policy ineffective. To come out of liquidity trap, QE is attempted. Otherwise, recession can turn into depression.

Quantitative Easing

The term quantitative easing describes an unconventional form of monetary easing used to stimulate an economy. It involves the central bank to buy financial instruments which in ordinary times are not accepted for OMOs- for example, the housing market securities that were discredited in the USA since 2008. It is a step that is taken after the interest rate reduction to very low levels and similar downward adjustment of reserve ratios like CRR fail to induce any positive change. It involves printing fresh currency and de-risking lending as rates and supply of money ease to unprecedented levels. Central bank uses unconventional means, other than the usual monetary policy tools, to flood the financial system with new money through quantitative easing.

Federal Reserve of the US (its central bank like the RBI) used quantitative easing to overcome the liquidity crisis since the fall of Lehman Brothers in 2008 September when many banks went bankrupt and credit froze. It worked as US came out of recession. In 2017, GDP of USA increased at about 3% leading to announcement of its ending in October 2017.

EU, Japan and Britain also used the technique of QE to shore up growth.

Taper Tantrums

The unconventional monetary policy called quantitative easing means printing money by the central bank and supplying it to the market to stimulate demand and revive growth. US Central Bank Federal Reserve Started it in 2009 and since it is not meant to be a long term solution to recession and deflation, it is being phased out with the return of growth and inflation. Also, continuation of QE unduly leads to asset bubbles. Closing it in phases is called -tapering. When QEs is being tapered, markets react adversely as rates become dearer and consumers will not like it. Bonds sell off and stocks may fall as money supply decreases. On the other hand, when rates go up as taper takes effect, global money goes to USA as it earns them more in US banks. Other currencies may fall as Indian Rupee did in 2013 when QE taper started. These aftershocks of QE taper are called —taper tantrum. The US Federal Reserve in 2017 September announced the unwinding of the biggest experiment in the history of central banking starting from October. It will start the process of normalizing its balance sheet from October.There is such talk again and the question is how India will be affected. India is said to be more comfortable in late 2017 for the following reasons:

1. Real GDP growth is good though the potential is far higher than the actual. Therefore, foreign flows will continue thus checking any fall in rupee.
2. The country's foreign exchange reserves are at a record high of $404 billion in November 2017 mainly due to a rise in foreign currency assets (FCAs) and will arrest the possible fall in rupee.
3. Because India's interest rate is relatively high, existing foreign money will stay and more will come to take advantage of it.

Experts suggested that because of the volatility created in domestic and global markets due to the QE taper, there should an international mechanism to regulate it as US dollar is a global reserve currency and US GDP is worth about $19 trillion.

FSDC

Financial Stability and Development Council is apex-level body constituted by government of India. The idea to create such a super regulatory body was first mooted by Raghuram Rajan Committee in 2008.The recent global economic meltdown has put pressure on governments and institutions across globe to regulate the financial sector towards greater stability.

The new body envisages to strengthen and institutionalise the mechanism of maintaining financial stability, financial sector development, inter-regulatory coordination along with monitoring macro-prudential regulation of economy.

Its Chairperson is the Union Finance Minister of India.

Members are:

- Governor Reserve Bank of India (RBI),
- Finance Secretary and/ or Secretary, Department of Economic Affairs (DEA),
- Secretary, Department of Financial Services (DFS),
- Chief Economic Advisor, Ministry of Finance,
- Chairman, Securities and Exchange Board of India (SEBI),
- Chairman, Insurance Regulatory and Development Authority (IRDA),
- Chairman Pension Fund Regulatory and Development Authority (PFRDA),
- Joint Secretary (Capital Markets), DEA, will be the Secretary of the Council,
- The Chairperson may invite any person whose presence is deemed necessary for any of its meeting(s).

Responsibilities

- Financial Stability
- Financial Sector Development
- Inter-Regulatory Coordination
- Financial Literacy
- Financial Inclusion
- Macro prudential supervision of the economy including the functioning of large financial conglomerates
- Coordinating India's international interface with financial sector bodies like the Financial Action Task Force (FATF), Financial Stability Board (FSB) and any such body as may be decided by the Finance Minister from time to time.

17th Meeting of FSDC

The seventeenth Meeting of the Financial Stability and Development Council (FSDC) was held in mid-2017.

The Council noted that India has macro-economic stability today on the back of improvements in its macro-economic fundamentals, structural reforms with the launch of the Goods and Services Tax (GST), action being taken to address the Twin Balance Sheet (TBS) challenge, financial market confidence, reflected in high and rising bond and especially stock valuations and long-term positive consequences of demonetization. The Council also discussed the issues and challenges facing the Indian economy.

The Council also took note of the progress of Financial Sector Assessment Program for India, jointly conducted by the International Monetary Fund and the World Bank. Council directed that the assessment report should be finalized by the end of this calendar year. FSDC took note of the developments and progress made in setting up of Computer Emergency Response Team in the Financial Sector (CERT-Fin) and Financial Data Management Centre and discussed measures for time bound implementation of the institution building initiative. A brief report on the activities undertaken by the FSDC Sub-Committee Chaired by Governor, RBI was placed before the FSDC. The Council discussed the Central KYC Registry (CKYCR) system. The Council also deliberated on strengthening the regulation of the Credit Rating Agencies (CRAs).

CKYCR: Central KYC Registry or CKYCR replaces the multiple KYC submission process while opening savings bank accounts, buying life insurance or investing in mutual fund products into one time centralized process. The Government of India authorized the Central Registry of Securitization and Asset Reconstruction and Security interest of India (CERSAI) to manage Central KYC Registry process. From 1st August, 2016 this new process was made applicable to all individuals.

India and Financial Stability Board (FSB)

FSB was established in 2009 under the aegis of G20 by bringing together the national authorities, standard setting bodies and international financial institutions for addressing vulnerabilities and developing and implementing strong regulatory, supervisory and other policies in the interest of financial stability. India is an active Member of the FSB having three seats in its Plenary represented by Secretary (EA), Deputy Governor-RBI and Chairman-SEBI. The FSDC Secretariat in the Department of Economic Affairs coordinates with the various financial sector regulators and other relevant agencies to represent India's views with the FSB.

Macro Prudential Analysis

Macro prudential analysis is a method of economic analysis that evaluates the health, soundness and vulnerabilities of a financial system. Macro prudential analysis looks at the health of the financial institutions in the system and performs stress tests(simulate financial crises and check impact on the banks and other financial institutions) and scenario analysis to help determine the system's sensitivity to economic shocks.

Monetary Policy Committee (MPC)

Monetary policy decisions by central banks are crucial for individuals for their consumer loans, corporates for their investment and government for its fiscal operations like borrowing. They are also crucial for savings, economic growth, price stability and financial stability. Therefore, the decisions need to be taken by a committee as many governments do. Committee system has many voices; not subject to vagaries of individual judgement; has multiple stakeholders and institutional continuity

In 2016, the Government amended the RBI Act to create Monetary Policy Committee (MPC). MPC was set up consequent to the agreement reached between Government and RBI to task RBI with the responsibility for price stability through inflation targeting. The Reserve Bank of India and Government of India signed the Monetary Policy Framework Agreement in February 2015.

Subsequently, in the Finance Act 2016 the government amended the Reserve Bank of India (RBI) Act, 1934 for giving a statutory backing to the MPC Agreement and for setting up a Monetary Policy Committee (MPC). By this amendment, it was written into the preamble of the RBI Act that the primary objective of the monetary policy is to maintain price stability, while keeping in mind the objective of growth and to meet the challenge of an increasingly complex economy. A new Chapter was introduced in the RBI Act detailing the operation of MPC. The new MPC is to be a six-member panel headed by the RBI Governor that is expected to bring value and transparency to interest rate-setting decisions. It is entrusted with the task of fixing the benchmark policy interest rate (repo rate) to contain inflation within the specified target level. The MPC replaces the system where the RBI governor, with the aid and advice of his internal team and a technical advisory committee, had complete control over monetary policy decisions.

It has three members from the RBI- Governor, the RBI Deputy Governor in charge of monetary policy, one official nominated by the RBI Board; and three independent members to be selected by the Government. The three central government nominees of the MPC appointed by the search cum selection committee will hold office for a period of four years and will not be eligible for re-appointment. RBI Act prohibits appointing any Member of Parliament or Legislature or public servant. A search committee will recommend three external members, experts in the field of economics, banking or finance, for the Government appointees. The MPC will meet atleast four times a year to decide on monetary policy by a majority vote. And if there is a tie, the RBI governor has the deciding vote.

Functions of the MPC: Under the Monetary Policy Framework Agreement, the RBI will be responsible for containing inflation targets at 4% (give or take 2%) in the medium term. Central Government determines the inflation target in terms of the headline (unadjusted) Consumer Price Index, once in every five years in consultation with the RBI. RBI would have to give an explanation in the form of a report to the Central Government, if it failed to reach the specified inflation targets for three consecutive quarters. It shall, in the report, give reasons for failure, remedial actions as well as estimated time within which the inflation target shall be achieved. Further, RBI has to publish a Monetary Policy Report every six months, explaining the sources of inflation and the forecasts of inflation for the coming period of six to eighteen months.

MPC decides the changes to be made to the policy rate (repo rate) so as to contain the inflation within the target level specified to it by the Central Government. Minutes of the MPC meeting are published by RBI after 14 days. In addition, subsequent to the MPC meeting, RBI has to publish a document explaining the steps to be taken by it to implement the decisions of the Monetary Policy Committee.

The MPC takes decisions based on majority vote (by those who are present and voting). In case of a tie, the RBI governor will have the second or "casting" vote. It is a casting vote in the sense that it breaks a tie. The decision of the Committee would be binding on the RBI. The government may, if it considers necessary, convey its views, in writing, to the MPC from time to time. RBI is mandated to furnish necessary information to the MPC to facilitate their decision making and if any Member of the MPC, at any time, requests the RBI for additional information, including any data, models or analysis, the same have to be provided, not just to that member but to all members.

In 2002 Y. V. Reddy Committee recommended for a MPC to decide policy actions. Subsequently, suggestions were made to set up a MPC in 2006 by the Tarapore Committee, in 2007 by the Percy Mistry Committee, in 2009 by the Raghuram Rajan Committee and then in 2013, both in the report of the Financial Sector Legislative Reforms Commission (FSLRC) and the Dr. Urjit R. Patel

Committee.As can be seen from above, India's shift to an MPC is driven by a clear inflation-targeting framework.

Negative Interest Rates

The Bank of Japan, the European Central Bank and several smaller European countries started negative interest rates regime lately. It is an attempt to spur demand and revive economy. Negative interest on excess reserves of banks parked with the central bank is an instrument of unconventional monetary policy applied by monetary authorities in order to encourage lending by making it costly for commercial banks to hold their excess reserves at central banks. Commercial banks have accounts with the central bank as the central bank is a bankers' bank. When they deposit their excess of money in their central bank accounts, generally they get paid for it. But in the NI regime, it is the reverse. Thus, NI is a rate when lender pays the borrower.Such policy can be associated with very slow economic growth, deflation, and attempts to prevent currency appreciation. The European Central Bank and central banks of other European countries, such as Sweden, Switzerland, and Denmark, have paid negative interest on excess reserves—in effect taxing banks for exceeding their reserve requirements - as an expansionary monetary policy measure. It makes lending by banks cheaper as banks will not keep their excess reserves in a central bank deposit account due to negative returns. They have to lend it. Further, there is competition among banks to lend their excess reserves and that also will push rates down. Low rates should make euro investors try to move to places where interest rates are higher, such as the U.S. When they do so, they sell euros and buy dollars which can weaken their currency for keeping exports high and attracting tourists. The Swiss National Bank, for instance, wants to keep the Swiss franc from strengthening against the euro. The criticism: Older people who depend on interest income are hurt and may cut their consumption more deeply than those who benefit – rich owners of equity. Many investors will shift their portfolios toward riskier assets, exposing the economy to greater financial instability.

Demonetisation

On 8 November 2016, the Government of India announced the demonetisation of all ₹500 and ₹1,000 banknotes of the Mahatma Gandhi Series. The government sought to curtail the shadow economy and crack down on the use of illicit and counterfeit cash to fund illegal activity and terrorism. Those with these notes had to deposit them in the bank and exchange them for new notes though initially there were some restrictions. By the end of August 2017, 99% of the banned currency was deposited in banks, leaving only around ₹14,000 crore of the total demonetised currency discarded.

The Indian government had demonetised bank notes on two prior occasions—once in 1946 and then in 1978—and in both cases, the goal was to combat tax evasion by "black money" held outside the formal economic system. In 1946, the pre-independence government hoped demonetisation would penalise Indian businesses that were concealing the fortunes amassed supplying the Allies in World War II. In 1978, the Janata Party coalition government demonetised banknotes of 1000, 5000 and 10,000 rupees, again in the hopes of curbing counterfeit money and black money. Demonetisation under the two occasions was done bh an ordinance while the 2016 decision was an executive decision.

Monetary Policy Transmission

(In the classroom)