

Economics of Banking and Finance Markets
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Lecture - 49
Monetary policy RBI

Hello everyone, welcome to this session.

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Monetary policy in India

So, in the previous sessions, we discussed the monetary policy in the US system in detail. In this session let us have a discussion on the Monetary Policy in India.

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The Reserve Bank of India (RBI)

The Reserve Bank of India (RBI) is the central bank of India.

The RBI was established on April 1, 1935 in accordance with the provisions of the RBI Act, 1934.

Headquartered in Mumbai.

RBI is governed by a central board (headed by a Governor) appointed by the Central Government.

RBI has 22 regional offices across India.

About the monetary policy, the central bank of India, as you are well as you are aware, that is the Reserve Bank of India, this is the central bank of India, our country.

The Reserve Bank of India, the central bank of India, was established on April 1st, 1935, in accordance with the provisions of the RBI Act 1934 and as you know is headquartered in Mumbai. RBI is governed by a central board headed by a Governor appointed by the Central Government. So, RBI also you know that RBI has 20 regional offices across India.

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• Functions of the RBI

1. Issue of Currency

- Except one-rupee note and coins of smaller denominations (issued by government mints per the direction of RBI)

2. Banker to Government

- To both central and state governments. ✓
- It carries out all banking business of the government. Government keeps their cash balances in the current account with the central bank.
- Similarly, central bank accepts receipts and makes payment on behalf of the governments.
- Central bank gives loans and advances to governments for temporary periods ✓

3. Exchange Control ✓

- RBI takes steps to ensure external value of a rupee, using exchange control system (managed floating system)

- ① ✓ Fixed exchange rate ✓
- ② ✓ Flexible exchange ✓
- ③ ✓ Managed float

So, let us have a quick overview of the functions of the RBI, which will help you to further understand more about RBI's monetary policy as well. The first important function of RBI is to issue a currency, except one-rupee note and coins of smaller denominations, other currencies are issued by the currencies are issued by RBI.

So, another function is to act as banker to government. The RBI is the banker to both Central and State Government. The RBI carries out all banking businesses of the government. Government keeps their cash balances in the current account with the central bank. Similarly, central bank accepts receipts and make payments on behalf of the governments. Central bank also gives loans and advances to government for temporary periods.

In addition, the RBI also engage in exchange control. So, RBI takes steps to ensure external value of a rupee, that is the exchange rate using exchange control system. As you may be aware that in the exchange rate determination, there are mainly two regime one is a fixed exchange regime, fixed exchange rate and another one is a flexible exchange rate regime, flexible exchange rate.

So, in the case of fixed exchange rate, the governments of both countries agree to maintain a fixed exchange rate. If we are following fixed exchange rate, then the exchange rate is already fixed, and it is the responsibility of both central banks to ensure that the exchange rate is maintained at the fixed rate.

Another regime is that is most common these days, that is flexible exchange rate. That means, the exchange rate is determined by the demand and supply for foreign exchange, that is, the demand and supply for foreign currency. The supply and demand for export and import leads to the demand and supply of foreign exchange.

And another thing is the third regime, the managed floating system, that is the 3rd one, this is 1, 2 and 3; 3rd one is managed float; that means, it is also called as dirty float. That means, government or central bank intervenes in the forex market.

In the normal time, it will be flexible exchange regime. But if the RBI sees that the home currency value is depreciating and is at a danger, then at that time central bank will intervene in the market by supplying a foreign exchange from its reserve, then this is called as managed floating system. So that means, sometime Reserve Bank of India can do the managed floating to ensure that value of Indian rupee is not depreciating below a certain threshold.

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4. Banker's Bank and Supervisor

Regulator and supervisor of the financial system: Prescribes broad parameters of banking operations within which the country's banking and financial system functions.

Objective: Maintain public confidence in the system, protect depositors' interest and provide cost-effective banking services to the public.

i) Custodian of their cash reserves: CRR ✓

ii) lender of last resort ✓

- RBI guarantees solvency and provides financial accommodation to commercial banks
- (i) by rediscounting their eligible securities and bills of exchange and
- (ii) by providing loans against their securities. central bank, by providing temporary financial accommodation, saves the financial structure of the country from collapse.

iii) a bank of central clearance, settlements and transfers.

Then another function is to act as banker's bank and supervisor. So, as bankers bank and supervisor you can say, the central bank acts as a regulator and supervisor of the financial system, not only for the bank, but also for the entire financial system.

So, it prescribes broad parameters of banking operations within which the country's banking and financial system functions. So, here you can see that the main objective is to maintain public confidence in the system, protect depositors' interest and provide cost effective banking services to the public.

So, in this regard central bank act as the custodian of their cash reserves, custodian of the banking systems' cash reserve. That means, they must keep cash required cash, cash reserve ratio that the required with the central bank.

And it also acts as a lender of last resort: that means, RBI guarantees solvency and provides financial accommodation to commercial banks. So, by rediscounting their eligible securities and bill of exchange and by providing loans against their securities, central bank by providing temporary financial accommodation saves financial structure of the country from collapse.

And in addition, the central bank acts as the banks point of clearance: the central clearance. That means, transaction between banks is cleared through the central bank, and settlements and transfers are all done by the central bank.

In addition, you also know that the central bank it prescribes the desired capital ratio for the member banks, and it also monitor and supervise the banking activity. For example, through prompt corrective actions etcetera.

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RBI: the Monetary Authority

1. Controller of Credit and Money Supply

- Controls credit and money supply through its monetary policy which consists of two parts—currency and credit.
- Central bank has monopoly of issuing notes (except one-rupee notes, one-rupee coins and the small coins issued by the government) and thereby can control the volume of currency.

2. Formulates, implements the monetary policy.

Objective: maintaining price stability and ensuring adequate flow of credit to productive sectors

$MB = C + R$

By now, you are familiar that RBI is the monetary authority in the country.

RBI is the controller of credit as well as the money supply in the economy. It controls credit and money supply through its monetary policy, which consists of two parts: one is currency that the issue of currency, then other one is through the influencing the credit supply with the banking system. So, central bank has monopoly of issuing notes as you know that except some coins of coins, the rest of the currency is mainly issued by the central bank. And thereby can control the volume of currency.

And you also know that in the monetary base, monetary base is C plus R and see that the currency here are the central bank has more control over the C by printing or issuing new currency into the system. And it also formulates and implements the monetary policy. So, the objective here is maintaining price stability and ensuring adequate flow of credit to productive sectors, keeping that in mind the Reserve Bank formulates and implements monetary policy.

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Monetary Aggregates in India

$M_0 = C + R$

- Monetary Base (Reserve Money/M0) = Currency in circulation + Bankers' deposits with the RBI + 'Other' deposits with the RBI
- M1 = Currency with the public + Demand deposits with the banking system + 'Other' deposits with the RBI
- M2 = M1 + Saving deposits of post office saving banks
- M3 = M1 + Time deposits with the banking system

So, before moving further, since we are talking about monetary policy, let us have a clear idea what are the monetary aggregates measures in India. Coming to the first part of the monetary base MB, it consists of currency in circulation plus bankers' deposits with the RBI. This is nothing but the reserves.

This is so the currency plus reserves plus other deposits with the RBI. That means, the deposits by for example Prime Minister, ex-PM, Governance etcetera that also become part of the monetary base here, that is called M0, this is M0 money supply definition, monetary aggregates definition. Then M1 means currency with the public that is C plus demand deposit with the banking system plus other deposits with the RBI.

I am sure you are familiar with all this concept, based on our discussion in the previous sessions. Then coming to M2 money definition is M1 plus saving deposits of post office savings banks. Then M3, this is the broad money supply definition in India we follow, we currently follow this one, this is called M1 plus time deposit with the banking systems.

That means that M1 plus time deposits with the banking system, this consists of the broad money supply definition that the M3 money definition. So, in India when we talk about monetary aggregates, we mostly focus on this M3 money supply definition.

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Instruments of Monetary Policy

- Several direct and indirect instruments that are used for implementing monetary policy.
- **Repo Rate:** The interest rate at which the RBI provides liquidity under the liquidity adjustment facility (LAF) against the collateral of government and other approved securities.
- **Reverse Repo Rate:** The interest rate at which the RBI absorbs liquidity from banks against the collateral of eligible government securities under the LAF.
- **Cash Reserve Ratio (CRR):** The average daily balance that a bank is required to maintain with the Reserve Bank as a percent of its net demand and time liabilities (NDTL) as on the last Friday of the second preceding fortnight that the RBI may notify from time to time in the Official Gazette.
- **Statutory Liquidity Ratio (SLR):** Every bank shall maintain in India assets, the value of which shall not be less than such percentage of the total of its demand and time liabilities in India as on the last Friday of the second preceding fortnight, as the Reserve Bank may, by notification in the Official Gazette, specify from time to time and such assets shall be maintained as may be specified in such notification (typically in government securities, cash and gold).
- **Open Market Operations (OMOs):** These include outright purchase/sale of government securities by the Reserve Bank for injection/absorption of durable liquidity in the banking system.
- **Bank Rate:** The rate at which the RBI is ready to buy or rediscount bills of exchange or other commercial papers. The Bank Rate acts as the penal rate charged on banks for shortfalls in meeting their reserve requirements (cash reserve ratio and statutory liquidity ratio).

The instruments of monetary policy, let me give you an overview, what are the tools the RBI has been following as part of monetary policy.

There are several direct and indirect instruments that are used for implementing monetary policy in India. The key rate that you often read in the newspaper and in the other media is that the main policy tool is the repo rate, the interest rate at which the RBI provides liquidity under the liquidity adjustment facility against the collateral of government and other approved securities.

So, you can say that the rate at which RBI gives loans to the member banks against collateral of government and other approved securities. This is the key tool, then another tool is reverse repo rate, this is the rate at which the RBI absorbs liquidity from banks against collateral of eligible government securities under the LAF program facility. So, here means the RBI borrows from the member banks at a reverse repo rate.

So, normally repo rate will be greater than the reverse repo rate. Another tool is a cash reserve ratio: you are already familiar with this concept but let me again give you the correct definition: the average daily balance that a bank is required to mainly with the Reserve Bank as a percent of its net demand and time liabilities as on the last Friday of the second preceding fortnight, that the RBI may notify from time to time in the official gazette.

The certain fraction of the total deposit including demand and liabilities should be kept with the RBI, it is called as CRR. Then comes statutory liquidity ratio, it is mostly prevalent in India. So, in India in addition to cash reserve ratio, banks are also required to keep some of their assets in the form of SLRs, Statutory Liquidity Ratio.

That means every bank shall maintain liquid assets, the value of which shall not be less than such a percentage of the total of its demand and time liabilities in India as on the last Friday of the second preceding fortnight. Say 18 percentage of their total demand and time liabilities, it should be invested in government securities, cash, or gold, this is in addition to required cash reserve ratio. Suppose the cash reserve ratio is 4 percentage, that is, should be kept with the central bank plus of their total asset another 18 percentage should be invested in government securities, cash, or gold.

This is to ensure that banks are having sufficient liquidity to meet unforeseen deposit outflow. Also, the objective is to ensure that there is no bank failure or no bank banking crisis and no bank failure.

Another tool is open market operations. So, these include outright purchase or sale of government securities by the Reserve Bank for injection or absorption of durable liquidity in the banking system.

So, if they want to inject more money, more liquidity in the economy; that means, the RBI will do open market purchase. Otherwise, if they want to reduce; that means, reduce the liquidity in the banking system, then the RBI will sell government securities in the market and reduce the money supply in the banking system, in the economy.

Then another tool is bank rate, this rate is at which RBI is ready to buy or re-discount bills of exchange or other commercial paper. And, the bank rate is used as a tool, act as a penal rate charged on banks for shortfalls in meeting their reserve requirements. Suppose if the banks are unable to keep the cash reserve ratio, that this one for a stipulated period.

If they keep on failing to maintain this rate, then there are some provisions, there are some penal rates at which the penalty that the bank need to pay to the central bank. The rate is fixed at the bank rate, this is the bank rate, the penalty rate.

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Instruments of Monetary Policy (contd....)

- **Standing Deposit Facility (SDF) Rate:** The rate at which the Reserve Bank accepts uncollateralised deposits, on an overnight basis. The SDF rate is placed at 25 basis points below the policy repo rate. With introduction of SDF in April 2022, the SDF rate replaced the fixed reverse repo rate as the floor of the LAF corridor.
- **Marginal Standing Facility (MSF) Rate:** The penal rate at which banks can borrow, on an overnight basis, from the Reserve Bank by dipping into their Statutory Liquidity Ratio (SLR) portfolio up to a predefined limit (2 per cent). This provides a safety valve against unanticipated liquidity shocks to the banking system. The MSF rate is placed at 25 basis points above the policy repo rate.
- **Liquidity Adjustment Facility (LAF):** The LAF refers to the Reserve Bank's operations through which it injects/absorbs liquidity into/from the banking system. It consists of overnight as well as term repo/reverse repos (fixed as well as variable rates), SDF and MSF. Apart from LAF instruments of liquidity management include outright open market operations (OMOs), forex swaps and market stabilisation scheme (MSS).
- **LAF Corridor:** The LAF corridor has the marginal standing facility (MSF) rate as its upper bound (ceiling) and the standing deposit facility (SDF) rate as the lower bound (floor), with the policy repo rate in the middle of the corridor.

Then coming some more instrument that is called Standing Depository Facility Rate, that is the rate at which RBI accept uncollateralized deposits on an overnight basis.

Now, then comes Marginal Standing Facility, also called as a MSF rate: this is the penal rate at which banks can borrow on an overnight basis from the RBI by dipping into their SLR portfolio up to a predefined limit. So, this provides a safety valve against unanticipated liquidity shocks to the banking system.

So, if banks are unable to meet its liquidity, then they can borrow it using the marginal standing facility window at this rate. Then called Liquidity Adjustment Facility or also called as a LAF, refers to the RBI's operation through which it injects absorbed liquidity into the banking system. It consists of overnight as well as term reverse repo reverse repos rate, SDF and MSF.

Now, there are some more, the LAF corridor, LAF corridor has the margin standing facility rate as its upper bound and standing deposit facility rate of the lower bound with the policy repo rate in the middle of corridor. So, I would suggest you visit the RBI website and there are lots of resources given in the RBI website, about these instrument, further clarification about these instruments and how they have been used etcetera.

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The Monetary Policy Framework

- In May 2016, the RBI Act, 1934 was amended to provide a statutory basis for the implementation of the flexible inflation targeting framework.
- **Inflation Target:** The Central Government, in consultation with the RBI, determines the inflation target in terms of the Consumer Price Index (CPI), once in five years.
- Accordingly, on August 5, 2016, the Central Government fixed 4% Consumer Price Index (CPI) inflation as the target for the period from August 5, 2016 to March 31, 2021 with the upper tolerance limit of 6% and the lower tolerance limit of 2%. $\rightarrow \pi_t = 4\% \pm 2$
- On March 31, 2021, the Central Government retained the inflation target and the tolerance band for the next 5-year period - April 1, 2021 to March 31, 2026.
- **Failure to Maintain Inflation Target:** The Central Government has notified the following as the factors that constitute failure to achieve the inflation target: (a) the average inflation is more than the upper tolerance level of the inflation target for any three consecutive quarters; or (b) the average inflation is less than the lower tolerance level for any three consecutive quarters.

Let us now talk about the monetary policy framework, in May 2016, the RBI Act 1934 was amended to provide a statutory basis for the implementation of the flexible inflation targeting framework.

So, the Central Government in consultation with the RBI, determines the inflation target in terms of the Consumer Price Index, once in five years. So, since 2016 we have been following the inflation target, inflation targeting as one of the main policy frameworks for the monetary policy in India.

In August 2016, the Central Government fixed 4 percentage; as the target, Consumer Price Index inflation as the target for the period from August, that is 2016 to 2021 with an upper tolerance limit of 6 percentage and lower tolerance limit of 2 percentage.

That means the inflation target; the inflation target is equal to 4 percentage, that is using the consumer price index, with the upper and lower tolerance limit of 2. That means, the minimum it can go 2 percentage and maximum it can go up to 6 percentage, and this is the mandate given to the RBI by the Central Government. And again, initially it was till 2021, this has been extended to 2026. The same band, that the upper limit and normally the target is 4 percentage with the upper limit and lower limit going to be 2 percentage.

Every time, the RBI is able to maintain this lower limit and upper limit, but there can be some instances where it can fail; that means, Central Government has notified the following as the factors, that constitute failure to achieve the inflation target.

The average inflation is more than the upper tolerance level of the inflation target for any three consecutive quarters. And the average inflation is less than the lower tolerance level for any three consecutive quarters.

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Monetary policy committee ✓

- Section 45ZB of the RBI Act provides for the constitution of a six-member Monetary Policy Committee (MPC) to determine the policy rate required to achieve the inflation target. ^{repo}
- The first empowered six-member monetary policy committee (MPC) was constituted on September 29, 2016. ✓
- Members include Governor (RBI), Deputy Governor (RBI), One officer of the RBI, and three external experts (eminent personalities from research/academia.) ✓
- The MPC is required to meet at least four times in a year.
- Each member of the MPC has one vote, and in the event of an equality of votes, the Governor has a second or casting vote.
- Each Member of the Monetary Policy Committee writes a statement specifying the reasons for voting in favor of, or against the proposed resolution.

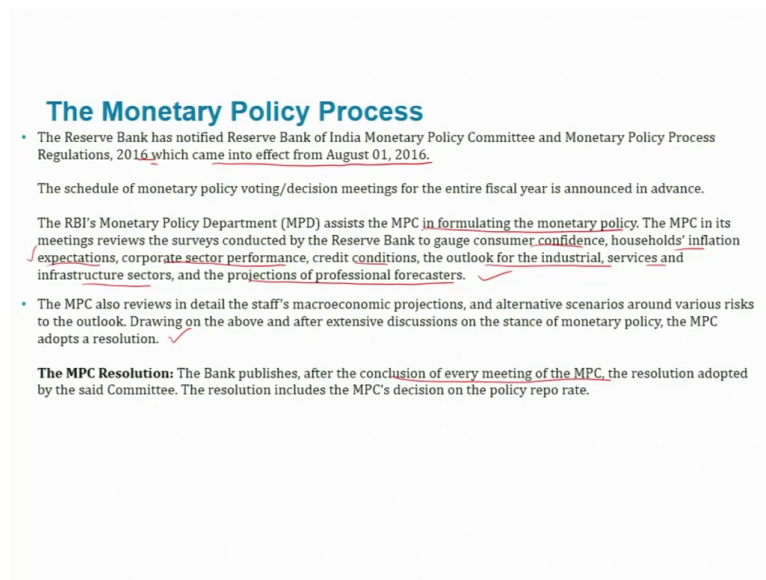
And to implement, achieve this inflation target and the overall to make the implement the monetary policy, a committee named Monetary Policy Committee has been appointed.

In amendment of the RBI act, it provides the constitution of a six-member Monetary Policy Committee to determine the policy rate required to achieve the inflation target. So, you can see that in the US, it is the Federal Open Market Committee that is the main body interested with the monetary policy and they use their open market operation as the main policy tool to achieve to implement the monetary policy.

But in India we use we have Monetary Policy Committee, and we use the repo rate, repo rate as the main policy tool to achieve its monetary policy targets. So, about this committee, the first empowered six-member Monetary Policy Committee was constituted in 2016. The members are Governor, Deputy Governor, one officer from RBI and three external experts, so far, they were eminent personalities from research and academia.

And the MPC is required to meet at least four times in a year. So, each member of the MPC has one vote, and in the event of an equality of votes the Governor has a second or casting vote. Each member of the Monetary Policy Committee writes a statement specifying the reason for voting in favor of or against the proposed resolution.

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The Monetary Policy Process

- The Reserve Bank has notified Reserve Bank of India Monetary Policy Committee and Monetary Policy Process Regulations, 2016 which came into effect from August 01, 2016.

The schedule of monetary policy voting/decision meetings for the entire fiscal year is announced in advance.

The RBI's Monetary Policy Department (MPD) assists the MPC in formulating the monetary policy. The MPC in its meetings reviews the surveys conducted by the Reserve Bank to gauge consumer confidence, households' inflation expectations, corporate sector performance, credit conditions, the outlook for the industrial, services and infrastructure sectors, and the projections of professional forecasters.

- The MPC also reviews in detail the staff's macroeconomic projections, and alternative scenarios around various risks to the outlook. Drawing on the above and after extensive discussions on the stance of monetary policy, the MPC adopts a resolution.

The MPC Resolution: The Bank publishes, after the conclusion of every meeting of the MPC, the resolution adopted by the said Committee. The resolution includes the MPC's decision on the policy repo rate.

Monetary Policy Process: Monetary Policy Process Regulation 2016, which came into effect from August 2016 as the main framework for implementing the monetary policy.

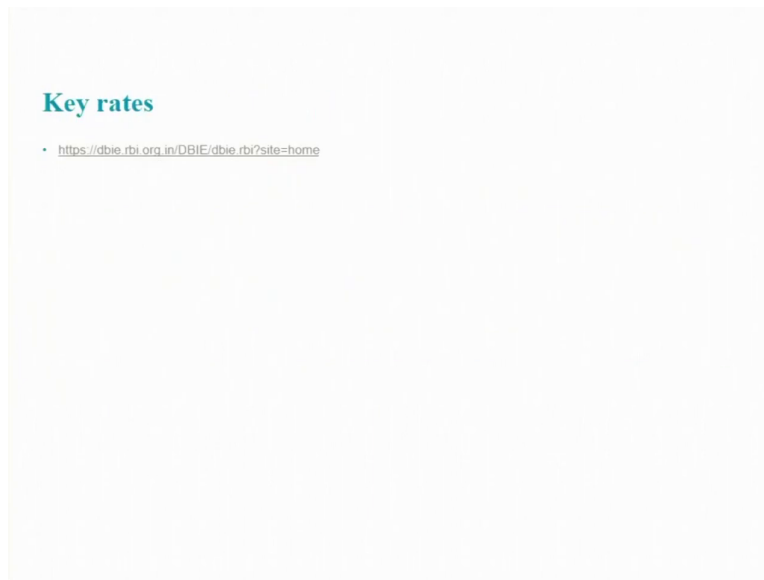
So, here the schedule of monetary policy meeting for the entire fiscal year is announced in advance. So however, in some emergency, they meet without advance announcement of the meeting.

So, the RBI's Monetary Policy Department assist the MPC in formulating the monetary policy. The MPC in its meeting reviews the surveys conducted by the RBI on consumer confidence, households' inflation expectation. You can get these details from RBI website; the survey results are already uploaded on RBI website.

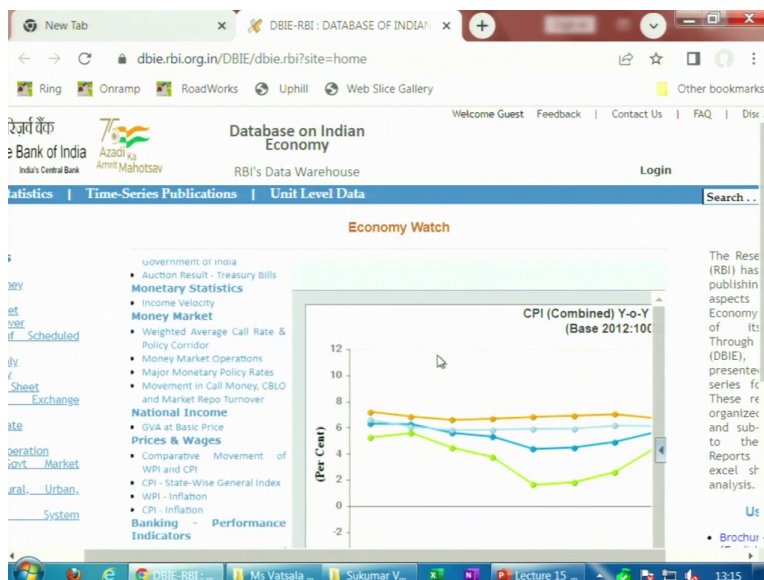
And, the corporate sector performance, credit conditions, the outlook of the industrial services and infrastructure sectors, and the projections of professional forecasters, all these has been collected by RBI's Monetary Policy Department and it will be made available to the MPC, they review all these details. So, MPC also reviews in detail the staff's macroeconomic projection and alternative scenarios around various risks of the outlook.

So, drawing on the above, and after extensive discussion on the stance of money policy, the MPC adopts a resolution. So, the MPC resolution the RBI publishes after the conclusion of every meeting of the MPC, the resolution adopted by the set committee. The resolution includes the MPC's decision on the policy repo rate.

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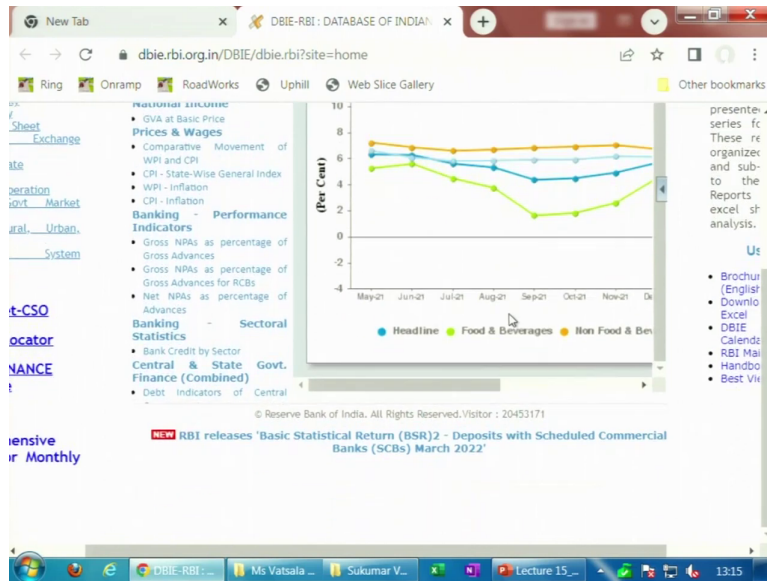


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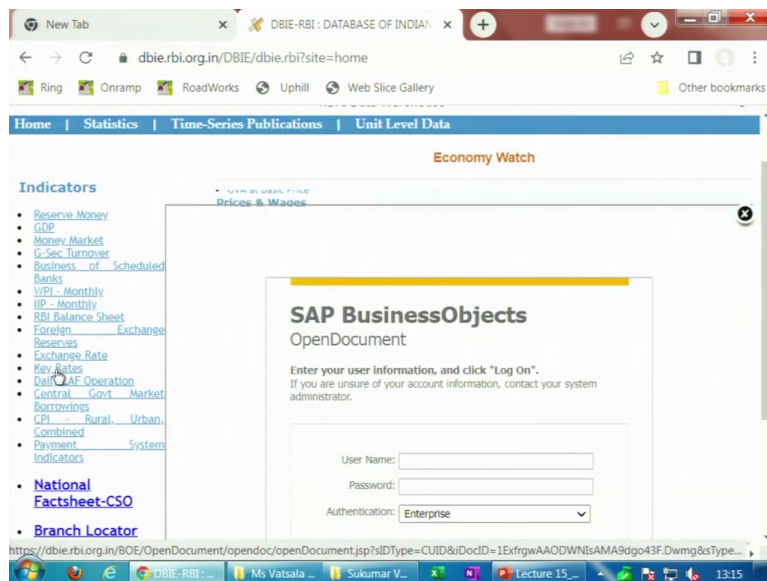
So, you can find out the key rates that are being announced by the Reserve Bank, RBI, which I can show you here. This is when you click here, you will find these rates here.

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So, the key rates are available here.

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So, when you visit this website, you will be getting access to the key rates including repo rate or the cash reserve rate, the SLR, and bank rate as well as other rates, whichever we have discussed in this session, you will be getting a clear idea what all the rates RBI has been using.

Suppose for example, during the economies at a crisis time or in a recessionary time then; obviously, you can see that most probably RBI will be following an expansionary monetary policy. So, at that time, their objective is to increase the liquidity in the economy, accordingly the key rates will be announced.

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Inflation targeting

- Since 2016, RBI has been following the inflation targeting by abandoning the operating/intermediate target of Monetary aggregate (M3).
- Inflation target: 4% ± 2%
- The MPC determines the policy repo rate required to achieve the inflation target
- Accordingly, the RBI use interest rate as the operating/intermediate target for the final inflation targeting
- An intermediate target is a variable that central bank controls not because the variable is important but because, by controlling it, the policymakers believe they are influencing the ultimate policy targets (e.g., inflation, and growth in real GDP and employment) in a predictable way.

So, we have seen that RBI has been following inflation targeting since 2016; RBI has been following the inflation targeting by abandoning the operating or intermediate target of monetary aggregate, that is the M3.

So, as I have mentioned you the earlier, our inflation target is 4 percentage with a lower and upper limit of 2 percentage. So, here the Monetary Policy Committee determines the policy repo rate, the rate at which commercial bank can borrow from the central bank by pledging collaterals, to achieve the inflation target.

In one of the previous sessions, I have said that in contrast to the US, where they have been following interest targeting, India has been following monetary aggregate targets, but you can see that since 2016, since we have been following the inflation targeting. And to achieve that we have been following intermediate target, that the operating target of interest rate, interest rate is the intermediate target. In that way, we are following the interest targeting since 2016.

We abandoned monetary aggregate target, that the monetary money supply target in 2016 and with the final inflation target to achieve this, we have been following the interest rate target.

That means, interest rate target is nothing but the repo rate that we have been following. So, an intermediate target, I remember an intermediate target, I have given a definition here is a variable that a central bank controls not because the variable is important.

So, for example, here the repo rate, this is not the outcome variable because the variable itself is not important, but because controlling it for example, repo rate here the policy makers believe they are influencing the ultimate policy targets, that the inflation growth, real GDP, employment in a predictable way.

So, what we have covered so far? We in this session we given an overview of the functions of the Reserve Bank of India and then we discussed what are the monetary policy making process in India.

And the also we also discussed that RBI has been following, the inflation targeting since 2016 and in the next session we will continue this discussion, we will also discuss how the independence of central bank is also important in the effectiveness of monetary policy.

Thank you very much, see you in the next session.

Keywords: RBI, monetary policy, banker's bank, repo rate, reverse repo rate, cash reserve ratio, statutory liquidity ratio, inflation targeting, interest rate target, intermediate target