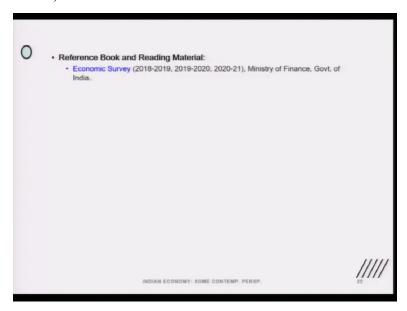
## Indian Economy: Some Contemporary Perspectives Professor. Wasim Ahmad Department of Economic Sciences Indian Institute of Technology, Kanpur Lecture No. 32 Indian Economy - Monetary Policy 4

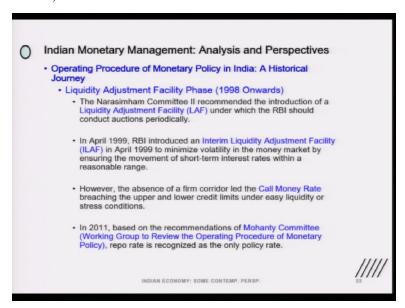
So, hi everyone. So, let us start now with the new topic, we will be now continuing whatever we have discussed in the last session. And we are now talking about the historical perspective of the monetary policy. So, in this direction, we, I will be also focusing on the recent development. So, this is about the monetary policy that we have already discussed. So, this is lecture 32.

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And for this, the reference remains same. I have not mentioned about the Deepak Mohanty report that I had mentioned in the last lecture. But rest of the references will remain same. So, the Economic Survey 2018-19, 2019-20 and 2020-21 will remain same here.

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So here, post 1998 when we were in the second phase of the Narasimham Committee report, so I think when we are discussing about the banking sector reforms, we had mentioned about this Narasimham Committee report in detail. So, this Narasimham Committee report had mentioned that there is a need to have the liquidity adjustment facility. We should be providing sufficient buffer to the economy and to just make sure that RBI conducts the monetary policy expansion process quite efficiently. So, this was also a given.

And it was also mentioned the RBI should conduct the auctions, whatever we have the auctions of the government bonds. So, there should be some kind of monitoring on that front also and RBI should conduct the auctions whatever the government bonds that are supposed to be there under the liquidity adjustment facility.

In April 1999, RBI introduced an interim liquidity adjustment facility and it was to minimize the volatility in the money market. By ensuring the movement of the short-term interest rate within a reasonable range, so it means that a while whatever we had the overnight rate that we were talking about, so repo and reverse repo rate, since it was a new recommendation coming from the committee, so it was decided that, let us have the some kind of pilot experience.

So, for that it was created something called Interim Liquidity Adjustment Facility in April 1999. And it was also just to make sure that there should not be high aberration in the increase in money supply or the decrease in money supply. So, either the increase in liquidity in the

economy or squeezing the liquidity from the economy, so just to keep in mind. However, the absence of a firm corridor, which means that banks since it was a new measure, so banks are also not very reluctant or very happy with this particular setup, so RBI always keeps in mind the adjustment in liquidity with the reversion repo.

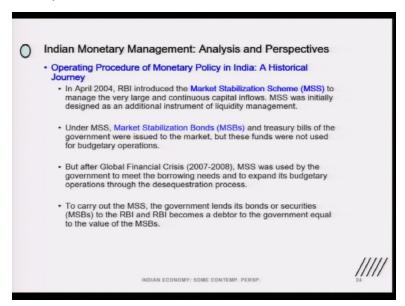
So, the, since the call money rate had the quite a large volume in terms of trading, so call money rate became one of the important, it started actually acting as a policy rate at that point of time, under easy liquidity or stress condition, so CMM, which means that whatever we have the call money rate, it became one of the important benchmarks for the monetary policy.

Then in 2011, that I mentioned, there is a committee set up under the Deepak Mohanty. A committee, it is also called as Deepak Mohanty Committee it mentions about the, and RBI had created this committee. It was a working group to review the operating procedure of monetary policy and in this process here are the repo rate was a was recognized as the only policy rate. So, apart from the repo rate, rest of the policy rate that we see on the RBI website that I just mentioned in the last to last lecture.

So, the repo rate will be the reference rate, based on the repo rate other rates will be decided. So, for example, marginal standing facility as we saw that the repo rate is right now 4 percent the marginal standing facility is 4.25 percent, even bank rate is 4.25 percent and the reverse repo rate is lower than the repo rate. So, the reference repo rate that we have, it has started formally accepted in and it will formally be accepted after the 2011 this Deepak Mohanty Committee, working committee report, and this also gave us some kind of legitimacy of the repo rate to be called as the policy rates.

So, in case of US, as I had mentioned that it is about the federal funds rate. Now, in case of India after Deepak Mohanty Committee, it became like an official declaration of the repo rate and liquidity adjustment facility hovers around this repo and reverse repo.

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In 2004, we had one more major development in the area of the monetary policy, it was called Market Stabilization Scheme, since in 2004, we were doing really good. Our economy was having a good economic growth and at that time, we also experienced a huge surge in foreign capital inflows and that also created extra pressure on the exchange rate and then, we had to keep in mind some kind of volatility experiencing the exchange rate management and then, also there was some kind of cushion required that if there was something wrong with these high inflows of capital, then what will happen and how the overall domestic monetary conditions you will be stabilized.

So, at that time, the Market Stabilization Scheme was launched to manage the very large and continuous capital inflow. So, MSS was initially designed as an additional instrument of liquidity management and just to keep in mind that since we have the huge inflow of capital happening in inflow coming into the economy, then how we can safeguard our economy with any adverse impact.

Under market stabilization in bonds and treasury bills of the government were issued. So, there was at that point of time the government had gone for issuing the market stabilization bonds and the treasury bills of the government were issued to the market, but these funds were not used for the biometric conditions. So, government was not using this for the meeting the capital expenditure requirement or the fiscal deficit requirement if there is a higher amount of borrowing

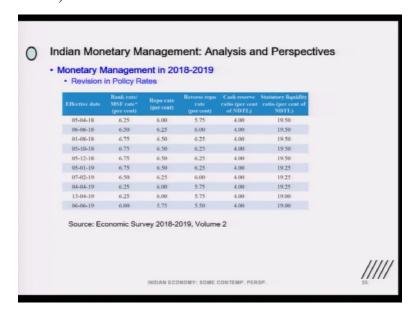
required. But this was only for the liquidity adjustment facility, liquidity conditions, in case if the Central Bank's wants to utilize.

Then we had the era of global financial crisis 2008-09 and 2007-08 and at that time government was in really need of money, there were a lot a lot of borrowing requirements coming from the government. And then government took over this MSS scheme. And MSS was used by the government to meet the borrowing needs and to expand the budgetary operations through the I would say desequestration, it is called that when you go for completely suspending the activities and taking over a particular system, so with that, government had gone and it has captured the market stabilization scheme.

And to carry out the MSS, the government lends its bonds or securities to RBI and RBI becomes the debtor equal to the value of MSB. So, market installation bonds now, it is completely in the hands of the government. And similar to what we have the monetized deficit or the deficit financing that we say. So, the market stabilization scheme is now almost has become the proxy of the deficit financing or the monetized deficit.

But in the beginning, it was just to make sure that we have a sufficient buffer liquidity conditions in the economy to meet any awkward moment in the foreign capital market or even the domestic economy. So, if we are allowing high inflow of capital, then this will also create extra burden on the economy. So, this was one that was the requirement.

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I have also referred the economic survey 2018-19 and this particular table that you always read in economic survey. So, apart from this, I would also recommend that some of you, you must go to RBI website and there you have the monetary policy report. So, in this multi policy report, I was looking at April and October reports. And then, you can see that in the first chapter, they give the scenarios of the inflation this will have the crude oil, exchange rate and all in terms of capital inflow, inflation, everything mentioned with the base scenarios, that on what stands the government or the Central Bank is going to decide about the rate increase or decrease in terms of repo rate.

And they also have the very good table mentioned about that during the period in which all countries what are the stands of the government or Central Bank with regard to the monetary policy change. So, the monetary policy committee whatever they have voted, whether they have voted for no change, whether there had been changed or those changes are given. The monetary policy report also gives you a complete idea about the inflationary scenario.

So, different components of inflation, the CPI and WPI plus apart from that, we have the household survey about the expectations. So, it is mentioned over there. So, it is always some kind of some supplementary a good supplementary document to read if you are going through the economic survey. So right now, if you ask in detail that if I want to know about the India's economy in everything in documents, so where I should refer? So, economic survey is the number one plus after this we have two more reports that especially, those who are from economics student, they should refer one is called monetary policy report and then another is called financial stability report.

In financial stability report, you will be having the complete idea about what is the financial health of the country right now, how institutions are functioning, whether are the institutions are going in the right direction, if there is some problem then government or the Central Bank will not convey directly, but it will try to signal that there is some stress happening in this particular segment. So, those policymakers or those government institutions may would like to go for some kind of revision in their decisions.

So normally, those who are economics students, those who go and work in consultancy firm any requirement, you will find that they always monitor or they always go through these reports and they try to at least draw some opinion on that that what is the document, what is the signal that

the government is giving and how we can incorporate in our macroeconomic analysis? So, from a macroeconomic perspective, the economic survey, monetary policy report plus the financial stability reports are three important documents that one should read whenever you have a time.

You do not have to read for each and every chapter, but at least have a look, it may develop interest in some sections and you may would like to pursue for higher studies or for your doctor research or if you want to go for any kind of job in the core economics domain. For non-economics also it is important now, after doing this course, I think you will be having some fair idea about how we can understand the economic survey better and then you can also explore and read at least first chapter of the monetary policy report, so that you will also have the idea about how Central Bank decides about the monetary policy.

So, I will not go by each and every indicator, but the trend it shows that since everything is going down. So, the trend, it shows that the Central Bank had gone for some kind of monetary policy expansion. So, you can see that the SLR requirement from 9.50, which were there on fifth April 2018, it has come down to 19 percent which means that banks are now having higher liquidity to go for lending.

In the same way, the cash reserve ratio has been kept as a constant 4 percent, it also shows that the banks do not have to worry about the increase in cash reserve requirement. So, the money will be available. So, with this table, the only inference that you have to draw is that this table talks about whether the monetary policy has gone for the expansionary phase or it has gone for contractionary phase. If it has gone for expansionary phase, then the rates will be lower and if it has gone for contractionary phase, then the rates will be higher.

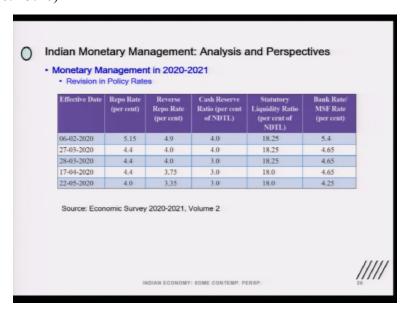
So, if the Central Bank thinks that the price stabilization mechanism is not working properly and there is a need to take action on that and how they can curtail the price then of course, Central Bank would like to go for raising these indicators up. And once, they raise up there will be liquidity squeezing happening and this will create some kind of extra pressure on reducing the inflationary scenario in the country, because money will be available in the limited amount to everyone and then as a result, the supply money supply cut will again have the positive impact in reducing the inflation.

But in some cases, when we have the special situations, like for example, we had gone for demonetization where we had suspended the higher denomination of notes at that point of time this policy table will not be sufficient to understand because those are the structural breaks that we call as an economist in normal economics context that if there is sudden shock in the economy and that leads to add a huge amount of change in different segments that are called the structural breaks that we have.

So, since the summary is that since 2018-19, there is a downward. So, from fifth April so, here we have the fifth April, so it is 6.25. Then by October, we had the increase in interest rate then again it has gone down. So, 0.50 basis point was an increase in the bank rate. Here in the repo rate, you can see that here we had the 6.50 and 6.50, so which means that during this period there was some kind of apprehension that price will increase or there will be some kind of inflationary pressure.

So as a result, this particular period had seen increase in the repo rate, but after that, there is a decline with that also can be linked with the 2019 development that we had seen. But rest of the indicators are same. Reverse repo will always be lower than the repo rate. So, those rates are being reflected here. So overall, this is a trend scenario that we can say

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Recently on Ministry of Finance website, you will find that there also they have now come up with the economic survey 2020-2021. So, I was going through the chapter 3 of this and then we

find that post COVID-19 when we had the outbreak of pandemic, we had the Coronavirus pandemic outbreak, since then February 2020 and so, the Central Bank had taken measures and it had revised the repo rate to 5.5 percent. On twenty seventh of March, it revised again to 4.4 percent. On twenty eighth March again, it kept the same on seventeenth April, it kept the same. On twenty seventh May it revised again to 4 percent.

That clearly shows that since at that time the economy was facing the unprecedented lockdown and then it was also a time where the economy was needing some kind of excess liquidity to support or to meet the requirements of the pandemic related the regulations and the need at that time. So, you can see that it is all in lower order. So, these numbers clearly show that the monetary, the Central Bank had gone for creating extra liquidity in the economy during this period. So, this table also shows about the same.

And this is what it says, the repo rate then we have the reverse repo rate, then we have the cash reserve ratio and the statutory liquidity ratio that we have and the bank rate and the marginal standing facility rate. So, bank rate and marginal standing facility rate we have the same not much change. But there are some other incentives given for example, marginal standing facility has now, I read somewhere that it was extended to the regional, rural banks also, cooperative banks also. So, those access benefits we will discuss maybe when will be going for closing of this course.

So, maybe towards the end, I will be mentioning only the recent initiatives during COVID-19 and how we had to take certain measures to tackle this unprecedented shock in the economy. But from this table, it is clear that the Central Bank has gone for a revision of the policy rate which is the repo rate and it has come down. So, repo rate from 5.5 percent it has come down to 4 percent. So, 1.15 basis point it has. So, 115 or so, it can be called as the basis point for the cut. So, because of the pandemic we had to go for such changes.

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road Money (M3) 10.1 6.9	9.2 10.5	8.9	12.5

Here, we have the monetary aggregates. So, one of the reasons why I had to discuss this in the beginning itself, when we are discussing about the types of money and the different types of the reserve and the broad money and high-powered money. So, at that time, we are now we are mentioning about what is called growth. So, here y-o-y means that year-on-year growth, which means that compared to last year, so in case of economics, we have some indicators, which experience the seasonal variations and seasonal variations should be accounted. So, for that, in economics we talk about the seasonality and non-seasonality testing.

So, once we have seasonality testing it means that if we have to make sure that there is no signal seasonality effect on the macro variables. For instance, the inflation is a seasonal phenomenon, if you go for higher frequency analysis or monthly analysis and inflation, then you find that when we have the festive season happening around September, October, November at that time, we see that inflation is having higher likelihood that it will go up because at that time because of the higher expenditure of the across class this leads to a higher demand of certain products.

And this higher demand of certain product is if it is having aberrations, then this will lead to some kind of variations and this will lead to some kind of variations in the whatever price scenarios that we experience. Now to deal with you will find that most of the economic indicators are adjusted. So, year-on-year means that this year minus last year upon last year, not just previous.

For example, if I am calculating for January, so it will be January 2021 minus January 2020 upon January 2020, not just January 2021 upon December 2020 and then December 2020, that is not the case, because with this we cover the one-year duration and with that, to some extent the seasonality effect is also taken care. But if you are working on yearly data then you do not need to work on, if you are working on quarterly data, if you have quarterly data to analyze, then you may be considering, but monthly and higher frequency it is required that you should be taking into consideration the seasonality effect.

So, here we have the growth year-on-year in monetary aggregates. So here, we have the first arrival, it talks about the circulation currency in circulation. So, you can say that, in 2016-17, because of the shock that we had experienced in terms of demonetization, it has gone down by minus 19. Then in 2017-18 we had the demonetization phase, so we had demonetization in 2016 towards the end and then in 2017-18 we had the demonetization phase. Then again, it came back and it was double.

So, this was one of the reasons, at that time it was mentioned that, that though demonetization a scheme has led to the encouragement of digital payment system, we had gone for some kind of Rupay and there are different types of Paytm's and all were launched. But still circulation of rupees nodes or in terms of currency, it was almost doubled. So, 19.7 minus 19.7 was the liquidity squeeze because of these higher denomination notes. But after that 2017-18 it was just double.

So, which means that from the pre-era of the cash circulation we had it has just gone by 37 percent that had also created a lot of buzz among the economist and at that time, it was mentioned that the demonetization scheme is a big failure, because it has not been able to reduce the cash circulation, rather it has doubled the cash circulation. So, that was also one of the reasons. So, here it is reflected.

But by 2018-19 it got adjusted because then we had to go for the introduction of the lower denomination of notes. So, at that time, we were just relying more on the 2000 rupees and 500 rupees. But then there is introduction of lower denomination notes, so that was also led to a decline in the circulation of currency in 2018-19. And then after that, it has been quite stable. In 2020-21, it has gone up a bit because of the sudden developments that we had in the beginning of

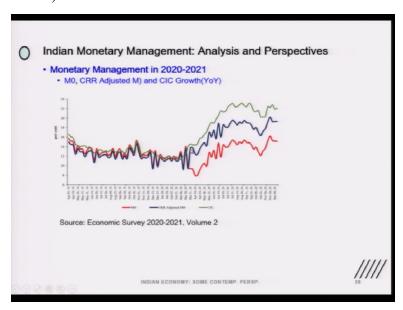
2020. And the most of the banks outlook were also better in 2020 because we had gone for certain measures and because of that the confidence was revived.

Cash with banks, it was minus 2.1 2017-18; 2016-17 it was 4.2. But by 2018-19 it was surplus 21.4 that also shows that banks were filled with cash. And that is why at that time you must be you can remember that at that time, those who are in job they were getting a lot of calls of the personal loans and all because banks were filled with cash with the whatever we had. So here, it was also the third indicator, we have the currency with the public, this also shows that minus 20.8 was a decline and this is also almost doubled.

So, this has also resulted in higher increase in the demand for currency from the public and this has gone from 16.6 to 14.5. Then we have the bankers deposit with RBI this is almost more like a stable except that 9.6 that was also quite possible because we had gone for the squeeze which means that the banking sector outlook was really not very good and at that time, government also given some kind of leeway, so that this particular amount can be used for other.

For rest of the things narrow money and all we see not much change except that in reserve money, narrow money the effect of demonetization is seen and after that we have this. Otherwise we in 2020-21 it has gone up because then we had the periods of analyzing the higher expenditure. And in terms of broad money, I see a lot of stability, not much change. So, the money supply is not having that much impact here. But the demonetization is clearly seen in this case.

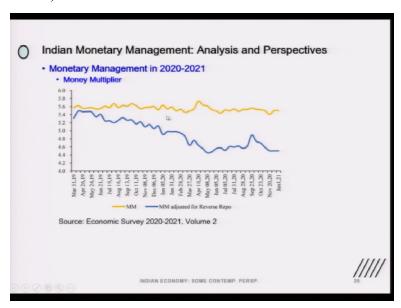
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Then here we have the M0, CRR adjusted and we have the currency in circulation. So that also you can see that it has the whole lot of adjustment. So, especially after March when we had lockdown, we can see that the M0 was the highest, which means the cash currency and it was highest. It got declined somewhat in October. But this, most of these things are going up because at that time everyone wanted to go for.

So, CRR is in the middle, you can say circulation is also low, but M0 whatever we have the cash currency it has gone up. So, expenditure was high during this period lockdown and post lockdown period. People had gone for buying some sanitizers and something for their well being and that is why it shows that there is a higher expenditure.

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Money multiplier also after adjusting for reverse repo, it looks like that it has gone down, but money multiplier, it is more or less stable not much change, except April 2020 when there are some aberrations, but after that, it is more or less stable, not much to be discussed. So overall, what it looks like that in 2020-2021 these charts whatever we have analyzed, it gives you a clear idea about that, what is going on the economy, what is the money supply conditions? So, the beginning chapters are mostly linked to the liquidity management in the economy, how liquidity is managed?

So, if you read the chapters especially those who are from a economics and non-economics background, at least now, you will be able to analyze and read those chapters with confidence and you will have some idea about how we can understand these particular tables better because economic survey especially this particular chapter becomes really tough, unlike the social sectors and all where it is quite easy to understand that this much amount was invested and this much amount is targeted.

But in this, you need some understanding about how these broad money and the narrow money functions are taking care. I will be continuing in the next class. In the next session again, we will be having something on the recent measures we have undertaken and some measures are mentioned in the economic survey. So, I thought it is worth mentioning here because these are unprecedented times. So, there are some rare tools are being used and those tools are being also

extended to some other activities. So that is why, I thought it is better that we should be mentioning about this. And I will end this lecture here. Thank you. Thank you so much.