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Covid-19 pandemic: Central Banks' Policy Rates andtheir Implications

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ABSTRACT

It is observed since the inception of spread of COVID 19 Pandemic across the globe that central banks have become very active in managing the monetary mechanism of the financial system all across the countries. This is obvious as the present crisis has severely affected the all segments of the economy and virtually the economies for a particular period brought to a halt deliberately to control and minimise the wider impact. With the lockdown across the segments, the economies practically paralysed if perceived from the financial angle. The Central banks alertness and prompt actions by way of immediate policy measures were very much called for. All the Central banks have taken required policy measures in providing liquidity to the financial markets and businesses through easing various policy rates. This paper assesses the monetary policy measures initiated by the Reserve Bank of India, the Central Bank of the country since the beginning of COVID cases in different phases. The paper analyses the correlation among COVID cases and policy rates and co-integration among different variables and their short term and long term implications. The study primarily finds some of the variables have long term impact while fewof them not much significant effect.

Key words: *COVID, Policy Rate, REPO rate, Reverse REPO rate, Bank Rate*

Introduction

The COVID 19 pandemic has severely impacted the world economy to the worst scenario effecting wider sufferings to humankind, economies, society, relationship, peoples' movement across the countries. It was never in the history that economy was put to derail deliberately by the governments to minimize the severe impact on human life at large. Because of the rampant impact of this crisis across the segments with uncertainty of the Pandemic, the responsibilities of central banks across the countries have increased considerably to keep the economy on the track.

In the overall process of revival and survival of the economy in general and people at large in particular, the Central banks assume significant role. The availability of finance is the only panacea for coming over the crisis and disaster occurred in pandemic. No doubt, the central banks all across the countries have been very prompt in implementing the required policy measures to ensure that individuals and businesses do not suffer much during pandemic. There are primarily two major responsibilities before the central banks in all the countries; a) to maintain adequate liquidity in the financial system by modifying the policy rates to have easy and immediate access by the public and businesses to provide short term relief, b) workout strategies and policy measures for normalising the situation in the phasedmanner, known as "New Normal" (G 20 Monetary policy strategies).

In India, the Central Bank (RBI) of the country has been very prompt in dealing with the crisis to save the economy, financial system and monetary mechanism from the likely impacts of financial shocks and financial crisis. During the COVID -19, the RBI has been very judicious in implementing necessary and timely policy measures to control the damage and financial

implications on the economy and economic growth. The following table 1.1 represents the initiatives taken by the RBI in phases following the danger of COVID 19.

Table: 1.1 RBI Policy Measures in COVID - 19 Pandemic

March 3	On account of outbreak in the market volatility on account of COVID 19, the RBI Governor released a press note stating that RBI is cautious and keenly watching the developments on account of the crisis. He also assured of initiating required measures and strategies according to the developments.
March 6	Keeping the further fall in the stock markets, The RBI Governor issued a notification stating that India will be able to respond the expected challenges occurring and impacting the economy due to corona virus epidemic. It also states RBI's intervention the way it is needed.
March 16	RBI issued instructions to banks advising to corroborate operational and business continuity measures so as to sustain economic and business activities. These instructions were issued immediately after declaration COVID 19 as a Global Pandemic by the World Health Organization (WHO). A signal of moral support from the Central bank of the country.
Mid-March	A special Task force was constituted by the RBI consisting of 150 RBI officials. The task of this team was to handle critical operations like debt, reserve management as part of the Reserve bank's business continuity plan to minimize the disruption of Covid on the financial system.
March 27	The RBI announced following monetary policy measures to provide liquidity in the financial system a) A cut in repo rate 75 basis points, b) Reduction in CRR by 100 basis points c) Long Term Repo Operations (LTRO) to provide approximately USD 13335 million liquidity and support measures. This was in view of the first Monetary Policy Committee (MPC) meet immediately after the pandemic. d) Also, three-month moratorium on all loan repayments was announced till May 31, 2020
April 3	RBI curtailed daily money market trading operations time from 10 am to 2 pm just to four hours.
April 17	The following policy measures further announced to provide further liquidity in the system. i) A further reduction in reverse repo rate by 25 basis points ii) Announced a special finance package of about USD 6700 million for National Bank for Rural Development, Small Industries bank of India and National Housing Bank iii) A targeted LTRO of USD 6700 million and iv) Bringing changes in non-performing assets classification by excluding the 90-day moratorium period
April 27	To keep the confidence of Mutual funds in view of the volatile market, RBI announced a special liquidity facility to the extent of 6700 USD million for mutual funds
May 22	For the third time, RBI brought following changes in the monetary policy instruments. 1. A cut in the REPO rate by another 40 basis points based on recommendations of second MPC meet. 2. A further extension of the three-month moratorium on repayment of loans to banks ending till August 31, 2020.

Source: Compiled by the Author from RBI website

Literature Review

The enduring covid-19 pandemic is one of the prime crises of recent times in contrast to the global financial crisis of 2008. The pandemic has shown the difficulty of making clear discrepancies between aiming at addressing economic stability and those targeting the availability of credit to the real economy. However, the procedures tracked to combat the

situation cannot be accomplished by purely macroeconomic or macroprudential actions without altering the micro prudential policy stance. Therefore, the study found that there is practically sound argument for assigning a financial stability function to central banks **(Restoy, 2020).**

Ejiogu et al, 2020 found that increased borrowing, to fund COVID-19 associated economic and social interventions have significantly squeezed fiscal space. **Jong & Ho, 2020** suggested that budgetary and fiscal responses to the COVID-19 pandemic speckled in magnitude but had many resemblances in policy types across countries. The magnitude of the response is not significantly correlated with fiscal conditions but is positively correlated with the pandemic caseload and negatively with medium-term expenditure planning, healthcare spending and anticipated unemployment changes. The crisis has certainly highlighted the role of the state and public finance in the economy. The eminent menace is that once the pandemic is over, governments will again resort to a new dose of austerity, instead of using the crisis as a prospect to embark on investment in infrastructure that helps to address the menace of impending pandemics but also the ongoing climate and biodiversity crisis **(Hallegatte & Hammer 2020).**

Barua & Barua 2020, suggest that banks are likely to see a fall in capital adequacy ratios, risk-weighted asset values and interest income at sectoral levels as well as at individual banks. Banks should sensibly draw on the lessons that the current situation offers and use them to apprise their digital transformation, while edifice a much-advanced degree of both operational and financial resiliency **Buehler, et al, 2020.**

Tissot and Beer, 2020 opined that evolve a comprehensive overview of the entire economy and create statistical frameworks more flexible to support the users experience in this pandemic. Moreover, develop a "central marketplace" to increase accessibility to official statistics (**Jomo Chowdhury, 2020)**. The crisis has prompted unprecedented cooperation between fiscal and monetary authorities. **Rubbaniy et, al 2020** found that there was no adverse impact of COVID-19 on the European stock market because of some financial measures taken by central banks like reduction in capital buffers.

This paper examines the relationship between COVID-19 cases and various liquidity and monetary measures taken up by the RBI, also the extent of relationship in the different time periods viz. short term, medium term and long term. The study as an experiment has considered the case of India alone. The next part of the paper deals with research methodology followed by data analysis and interpretation. Finally paper concludes with the conclusion.

Research Methodology

Research Question:

The study particularizes policy initiatives undertaken by the central banks to provide liquidity, stability and confidence in the financial system of the country. The measures taken have been categorized into three categories viz. immediate relief measures, measures for short term and near future reliefs and steps for long term revival and rehabilitation of the economy. Various opinions and references have been reviewed in the study to understand the implications and significance of these measures initiated. However, the whole exercise raises the following questions.

i) Whether the decision of change in policy rates by the central banks on account of COVID19 is rational?

ii) Whether the Central bank's decision to change the policy rates during COVID 19 has impacted the all the rates of banks and financial institutions?

iii) What will be the extent of integration among various policy rates changes on account ofCOVID 19?

iv) Which of the policy rates will have more impact during and post COVID 19 pandemic?

v) Will the policy measures implemented by the central banks, will have long term impact?

The above issues need immediate attention of researchers and policy makers to analyse and understand the policy implications in this perspective. This paper is an attempt to primarily examine and evaluate some of the

above issues. For the purpose of primary analysis, we have taken the case of COVID 19 India and the policy measures initiated by the Reserve Bank of India since the beginning of COVIOD cases in India.

Objectives of study:

The broad objective of the study is to assess the impact of monetary policy measures taken by central banks during the COVID 19 Pandemic. The study focuses on the following two objectives.

1. To analyse relationship between COVID-19 cases and various liquidity and monetary measures takenby the Reserve bank of India,

2. To evaluate relationship between policy rates and COVID -19 cases over a time span, and

3. To examine the policy rates having long term implications on the monetary policy.

Hypothesis development:

Based on the research questions and objectives of the study, the following hypotheses are framed.

Ho1: There is no significant impact of various regulatory policy rates imposed by the RBI on accountof COVID-19 cases.

Ha1: There is significant impact of various regulatory policy rates imposed by the RBI on account ofCOVID-19 cases.

Ho2: There is no long term association between various regulatory policy rates initiated by the RBI andCOVID-19.

Ha2: There is long term association between various regulatory policy rates initiated by the RBI andCOVID-19.

Research Design:

Sample Selection:

The main criteria for selecting parameters for obtaining secondary data are the numbers of COVID 19 cases and the policy measures introduced and implemented by the RBI in India in different phases with the developments in COVID cases. Among the policy measures, the Repo Rate, Reverse Repo Rate, Bank rate, Base rate and movements in deposits on Banks term deposits are considered for the analysis. These are the policy rates that impact the liquidity in the system, credit off take, flow of deposits and risk management by banks in India. Since, the commercial banks' functioning are regulated by the RBI, the policy rates do impact the banking operations. The various rates for the study are selected since the period of beginning of COVID -19 cases and movements in these rates with the increased number of COVID case observed.

Selection of Variables

The following variables were chosen for the study since they are relevant and form integral part of monetary policy measurements.

a) Bank Rate: This is the rate at which RBI provides loans to commercial banks in India. It ultimately affects the cost of borrowing to the banks and thus impact directly the interest rates decoded by banks on loans and advances.

b) REPO Rate: Repurchasing Operations also known as Repo rate refers to the rate at which commercial banks borrow money from the RBI against securities in case of liquidity crunch or to meet statutory requirements. This has become now an effective monetary control instrument to manage the money supply in the system and thereby control the inflation too.

c) Reverse REPO Rate: Reverse REPO rate is an opposite mechanism to REPO rate whereby the RBI borrows the surplus funds from the banks.

d) Interest on Deposits: Interest payable on term deposits by the individual banks. This is decided by the individual banks and it gets impacted by the changes in RBI policy rates. Therefore, thisvariable has also been chosen for the analysis.

e) Base Rate: Minimum rate decided by RBI not to lend customers below it.

Data Selection and source of Data:

The data on various RBI rates and COVID-19 cases has been used for the study. These rates are used to regulate functioning of credit

extension, monetary transmission and liquidity management. The time-period for the study has been selected from 02 January 2020 till 8 May 2020. The data used is based onweekly reported cases under the COVID 19 aligned with movements in weekly RBI policy rates. We have collected policy rates from the RBI website and Covid-19 data from the official website of the Government of India.

Statistical tools:

The statistical test used in the study includes Unit root test, Granger causality test and Co integration tests. Further, Johansson causality test has been used to explore the independent and dependent variables and thereby, evaluating long term association of COVID-19 cases with RBI policy rates. The statistical software used for analysing the data is EVIEW-11 primarily to check stationery of data by use of Unit root test.

Data analysis

In this section we have made an analysis considering fluctuations in various policy rates brought out by the RBI in various phases since the inception of the pandemic in India. For this, hypotheses have been developed to assess the validity and to arrive at a decision either to accept or reject the hypothesis. The variables used in the study include number of COVID cases, bank rate, base rate, repo rate, reverse reporate and interest rates on term deposits. For the analysis, Unit root test, Granger causality test and Co integration tests statistical tools have been used primarily to check stationery of data by use of Unit root test. The statistical software used for analysing the data is EVIEW-11.

The analysis is processed step by step. Primarily, the stationery of each and every variable has been checked. The variables for which stationery has been checked are bank rate, base rate, repo rate, reverserepo rate, term deposit rate and COVID cases.

1. Unit root test

A unit root refers to stochastic trends in time series data. This test has been performed on each and every variable in order to check its stationery. The stationery of data represent constant mean, variance and covariance in each variable. Practically, use of unit root in data refers to that data is stationery in other words it validates attributes in time series data. We have used Augmented Dickey-fuller test(ADF) for accuracy of stationery data results.

**Table:1 Unit root test results*

			t-Statistic	Prob.*
Covid cases	Augmented Dickey-Fuller test statistic		-13.2343	0.0001
	Test critical values:	1% level	-4.00443	
		5% level	-3.0989	
		10% level	-2.69044	
Reverse repor rate	Augmented Dickey-Fuller test statistic		-4.27263	0.00466
	Test critical values:	1% level	-3.88675	
		5% level	-3.05217	
		10% level	-2.66659	
Policy repor rate	Augmented Dickey-Fuller test statistic		-4.12311	0.006267
	Test critical values:	1% level	-3.88675	
		5% level	-3.05217	
		10% level	-2.66659	
Base rate	Augmented Dickey-Fuller test statistic		-4.12311	0.006267
	Test critical values:	1% level	-3.88675	
		5% level	-3.05217	
		10% level	-2.66659	
Bank rate	Augmented Dickey-Fuller test statistic		-4.12311	0.006267
	Test critical values:	1% level	-3.88675	
		5% level	-3.05217	
		10% level	-2.66659	
Term deposit rate	Augmented Dickey-Fuller test statistic		-3.878	0.010175
	Test critical values:	1% level	-3.88675	
		5% level	-3.05217	
		10% level	-2.66659	

In the above table 1, it is evident that all variables are stationery in nature. The t- critical value for COVID cases is 0.000, reverse repo rate value 0.0046, repo rate value 0.0062, base rate 0.0062, bank rate 0.0062 and term deposit with a value of 0.0101. Therefore, all variables are significant since the t-critical value is lesser than p-value of 0.05. However, the stationery of all variables is achieved on first level difference of each variable period to period change. It means statistical time series whose properties like mean variance, autocorrelation all are constant over time.

In the study, all variables are on same level of stationarity with first difference I (1). The next step is to understand cause and effect variable on other variables. For this purpose, the Granger causality test has been executed in order to extract independent and dependent variables for the study. For each variable, granger causality test has been run. The objective of conducting this test is to identify as which of the variables are getting impacted due to changes in COVID cases emerged per week since January 3, 2020. While performing test the lag value is 2, obviously minimum, the lag value, better will be the results.

Table 2: Granger causality test output

	Null Hypothesis:	Lag	Obs	F-Statistic	Prob.
1	BANK_RATE does not Granger Cause COVID_CASES	2	17	0.357293	0.706763
	COVID_CASES does not Granger Cause BANK_RATE			4.503027	0.034755
2	BASE_RATE does not Granger Cause COVID_CASES	2	17	0.045048	0.956112
	COVID_CASES does not Granger Cause BASE_RATE			1.477623	0.266886
3	POLICY_REPO_RATE does not Granger Cause COVID_CASES	2	17	0.357293	0.706763
	COVID_CASES does not Granger Cause POLICY_REPO_RATE			4.503027	0.034755
4	REVERSE_REPO_RATE does not Granger Cause COVID_CASES	2	17	0.394415	0.6825
	COVID_CASES does not Granger Cause REVERSE_REPO_RATE			5.074114	0.025296
5	TERM_DEPOSIT_RATE__1_YEAR does not Granger Cause COVID_CASES	2	17	0.206619	0.816163
	COVID_CASES does not Granger Cause TERM_DEPOSIT_RATE_1_YEAR			0.42223	0.664955

It is clear from the above table 2 that Granger causes one of the other variables. There are only three hypotheses that significantly reflect cause of COVID cases. The variables are Bank Rate with a value of 0.03, Repo Rate 0.03 and repo rate 0.02 where values are lesser than p-value of 0.05. It means that with the increased rate of COVID cases per week, there are policy changes by RBO in terms of bank rate, repo rate and reverse repo rate. In other words we can say that increasing COVID case cases cause in changes in bank rate, repo rate and reverse repo rate. Moreover, this is also evident that COVID cases are independent variable while bank rate, repo rate and reverse repo rate being dependent variables. The log used for causality is 2 log as the minimum the log stronger the results.

However, Term deposit interest rate and base rate are not impacted due to surge in COVID on weekly basis. Evidently the significance value of base rate is 0.2 and term deposit interest rate its 0.6 and therefore both are higher than p-value of 0.05 significance level. In view this, we accept the null hypothesis that states there are no changes term deposit interest rate and Base rate on account of changes in COVID cases.

Based on the above analysis, we have identified independent and dependent variables for the study. Inthe next stage it is about analyzing the existence of co-integration of these variables in the long run. For this, we have used Johanson co-integration test with an objective to evaluate the co-existence of bank rate, Repo rate and Reverse Repo rate with COVID cases in the long run. For this, a hypothesis is constructed which states that there is no integration between COVID cases and bank rate.

Table 3: COVID cases and bank rate

Trend assumption: Linear deterministic trend				
Series: COVID CASES BANK RATE				
Lags interval (in first differences): 2 to 4				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999878	145.3783	15.49471	0.0000
At most 1 *	0.745616	19.16474	3.841465	0.0002
Trace test indicates 2 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999878	126.2136	14.2646	0.0000
At most 1 *	0.745616	19.16474	3.841465	0.0000
Max-eigenvalue test indicates 2 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

An analysis of the results obtained in the above table 3 it shows an integration of COVID and bank rate.The results output reflect that there is significant interaction in the long run between bank rate and COVID cases. The lag period used for Johnson co integration is 2 to 4. When we have data on weeklybasis, a high lag period can be used.The trend pattern of data is linear deterministic trend is non stationery which means it is explicit function of time which is known to us.

$Yt = \alpha + \beta t + \varepsilon t$

The decision criteria of either to reject or accept the hypothesis depends on the probability value which is equal or lesser than 0.05 or 5 per cent level of rejection. Another criteria is to trace and Max- eighteen statistics that is supposed to be greater than 0.05 critical value.The Trace value of COVID and bank rateis 145 and 19 which is higher than 5% level of rejection. Further, the Max eighteen value of COVID and bank rate is 126 and 19 which more than as against 5 % level of rejection. Another criteria of rejection is p value which is 0.00 for COVID and bank rate is lower than 0.05 significant value. Thus, we can concretely come to a conclusion that there is long term association between bank rate and COVID cases. It means that if COVID cases keep on fluctuating or increasing day by day it will have apparent impact on bank rate. These COVID shocks in the shorter run may affect movement in bank rate, and would converge with time in long run. This combination of bank rate and COVID cases could be linear with passage of time. The RBI will also keep on shuffling bank rate time to time.

Next is to assess co-integration between COVID cases and repo rate

Table 4. COVID and REPO rate

Trend assumption: Linear deterministic trend				
Lags interval (in first differences): 2 to 4				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999865	145.1736	15.49471	0.0000
At most 1 *	0.767797	20.442	3.841465	0.0000
Trace test indicates 2 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999865	124.7316	14.2646	0.00E+00
At most 1 *	0.767797	20.442	3.841465	0.00E+00
Max-eigenvalue test indicates 2 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

The above table 4, represents integration of COVID and repo rate and according to output, it reflects that there exists significant long run interaction between repo rate and COIVID cases. The lag period used for Johanson integration is 2 to 4. When we have data on weekly basis performance then high lag period can be used.The trend pattern of data is linear deterministic trendis non stationery but with trends which means it is explicit function of time which is known to us. $Yt = \alpha + \beta t + \varepsilon t$

The decision criteria to accept or reject the hypothesis is the probability value if it equals or lesser than

0.05 at 5 % of level of rejection. Another criteria is to Trace and Max- eighteen statistics supposed to be greater than 0.05 critical value. The Trace value of COVID and repo rate is 145 and 19 that is more than 5% level of rejection. Further, the Max eighteen value of COVID and repo rate is 126 and 19 way high against 5 % level of rejection. Another criteria of rejection is p value which is 0.00 for COVID and repo rate is lower than 0.05 significant value. Thus, we can conclude that there is long term association between repo rate and COVID cases. It means that if COVID Pandemic keeps on fluctuating or increasing day by day, it will have apparent impact on bank rate. These CIOVID shocks in the shorter run may affect movement in repo rate, and would converge with time in the long run. This combination of repo rate and COVID cases could be linear with passage of time. The RBI will also keep on shuffling repo rate over the time.

The next step is to assess co movement of COVID and reverse repo rate:

Table 5: COVID and Reverse Repo Rate

Trend assumption: Linear deterministic trend				
Lags interval (in first differences): 2 to 4				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999878	145.3783	15.49471	0.0000
At most 1 *	0.745616	19.16474	3.841465	0.0001
Trace test indicates 2 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				

**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999878	126.2136	14.2646	0.0000
At most 1 *	0.745616	19.16474	3.841465	0.0000
Max-eigenvalue test indicates 2 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

It is very much revealed from the results in table 5 that there exists significant integration in the long run between COVID cases and reverse repo rate. The lag period used for Johanson integration is 2 to

4. When we have data is weekly performance then use of high lag is recommended. The trend pattern of data is linear deterministic trendis non stationery but with trends which means it is explicit function of time which is known to us. $Yt = \alpha + \beta t + \varepsilon t$

Further, the decision criteria to reject or acceptance the hypothesis is the probability value which is equal or lesser than 0.05 at 5 % of level of rejection. Another criteria is to trace Max- eighteen statistics which is supposed to be greater than 0.05 critical value. The Trace value of COVID and reverse repo rate is 145 and 19 that is greater than 5% level of rejection. Further, the Max eighteen value of CIOVD and reverse repo rate is 126 and 19 greater as against 5 % level of rejection. Another criteria of rejection is p value which is 0.00 for COVID and reverse repo rate is lower than 0.05 significant value. Thus, we can conclude that there co-integrating vector, the tested series will not drifted apart in future refers to long term association between reverse rate and COVID cases. It also refers that if COVID cases continue fluctuating or increasing day by day, it will have apparent impact on bank rate. Thus, COVID shocks in the shorter run may affect movement in reverse repo rate, and would converge with time in long run. This combination of reverse repo rate and COVID cases shall be linear with passage of time. The RBI will also keep on shuffling reverse repo rate time to time.

Conclusion

This study concludes that the RBI in India has taken various measures to infuse liquidity in the financial system but also to provide a relief to individual borrowers of banks to reduce the burden of repayment obligations during the period of this crisis. The measures initiated have direct as well indirect impact on monetary mechanism. An analysis of the data obtained on selected variables for the study reveals that there exists co-movement of bank rate, repo rate and reverse repo rate with COVID cases. The findings of study supported the notion that COVID pandemic may have influential strength on variouspolicy rates being monitored by the RBI. The study also concludes that

shocks on account of COVID cases movements in the short run may influence movement in reverse repo rate, and would converge with time in the long run. This combination of reverse repo rate and COVID cases shall be linear along with time horizon. The RBI will also have close monitoring on the movements and keep on shufflingreverse repo rate time to time.

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