Effects of CRR Rate and Repo Rate on Various Economic Variables

Dr Rajesh Kumar Srivastava

Associate Professor, Department of Economics G. D. Binani P.G. College Mirzapur, U.P. Email- 1961drs111@gmail.com

Abstract:

The present Monetary Policy of our country has been set against a rather complex economic backdrop. Although the situation is more reassuring than it was a year ago, uncertainty about the shape and pace of global recovery persists. The economy is recovering rapidly from the growth slowdown but inflationary pressures, which were triggered by supply side factors, are now developing into a wider inflationary process. As the domestic balance of risks shifts from growth slowdown to inflation, the policy stance of Reserve Bank of India had recognized and responded to this transition. In the present study, an attempt has been made to ascertain the impact of changes in the CRR rate and Repo rate on bank's credit standard as applied to the approval of loans to the households as well as business enterprises. The study tries to understand the change in the demand pattern for loans and credit lines as well as fixed deposits during the past three months owing to the policy changes by the reserve bank of India. The impact of change in the stance of monetary policy on the liquidity of the economy is also analyzed. The data collected has been analyzed using the software SPSS 17.0 and with the help of descriptive analysis, cross tabulations and testing of hypothesis relationship between the CRR and Repo rates changes and other economic variables have been established.

Introduction

Monetary policy is the process by which the monetary authority of a country controls the supply of money, often targeting a rate of interest for the purpose of promoting economic growth and stability. Monetary Policy for 2010-11 was set against a rather complex economic backdrop. Although the situation was more India's growth-inflation dynamics are in contrast to the overall

Corresponding author: Dr Rajesh Kumar Srivastava

^{© 2020} by The Author(s). CONTRACTION ISSN: 1307-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.

Dr Rajesh Kumar Srivastava (July 2020) Effects of CRR Rate and Repo Rate on Various Economic Variables *International Journal of Economic Perspectives*,14(7),79-91 Retrieved from http://ijeponline.com/index.php/journal

global scenario. The economy is recovering rapidly from the growth slowdown but inflationary pressures, which were triggered by supply side factors, are now developing into a wider inflationary process. As the domestic balance of risks shifts from growth slowdown to inflation, the policy stance of Reserve Bank of India had recognized and responded to this transition. While global policy co-ordination was critical in dealing with a worldwide crisis, the exit process will necessarily be differentiated on the basis of the macroeconomic condition in each country. India's rapid turnaround after the crisis induced slowdown evidences the resilience of our economy and our financial sector. However, the need to focus into the twin challenges of macroeconomic stability and financial sector development persists unabated.

Against this backdrop, the stance of monetary policy of the Reserve Bank is intended to:

- Anchor inflation expectations, while being prepared to respond appropriately, swiftly and effectively to further build-up of inflationary pressures.
- Actively manage liquidity to ensure that the growth in demand for credit by both the private and public sectors is satisfied in a non-disruptive way.
- Maintain an interest rate regime consistent with price, output and financial stability.

CRR and repo rates have an impact on Interest rates. The Federal bank controls the monetary policy of the land and exercise substantial control on the supply side of the money supply. The increase in these ratios will have an impact on the amount of available funds with the banks and as demand remains the same the people will have to pay more as interest and interest rate will go up **(Presto, 2004)**.

The statutory liquidity requirement (SLR), as a monetary policy instrument, has experienced infrequent changes in Bangladesh. Past evidence shows that reduction in SLR produced positive impact on bank credit and investment especially prior to the 1990s. The CRR and SLR for scheduled banks are used only in situations of drastic imbalance resulting from major shocks. The effectiveness of SLR in bringing about desired outcomes, however, depends on appropriate adjustments of other indirect monetary policy instruments such as repo and reverse repo rates. **(Younus, Akhtar, 2006).**

^{© 2020} by The Author(s). (()) INTERING INTERNATIONAL JOINT INTERNATIONAL JOURNAL OF AUTOMATING AND ALL AND ALL

Submitted: 14 March 2020, Revised: 09 April 2020, Accepted: 12 May 2020, Published; 30 July 2020

Dr Rajesh Kumar Srivastava (July 2020) Effects of CRR Rate and Repo Rate on Various Economic Variables *International Journal of Economic Perspectives*,14(7),79-91 Retrieved from http://ijeponline.com/index.php/journal

The paper pursues a computationally intensive approach to generate future inflation, followed by an exploration of the determinants of inflation expectations by estimating a new Keynesian type Phillips curve that takes into account country-specific characteristics, the stance of monetary and fiscal policies, marginal costs and exogenous supply shocks. The empirical results indicate that high and climbing inflation could easily seep into people's anticipation of future inflation and linger. There is a reputational bonus for monetary policy to act against inflation now rather than going for cold turkey when societal compulsions reach a critical mass. **(Patra, Ray, 2010).**

Objectives of The Study

The main objective of the study was to determine the effects of changes in CRR and Repo rates on the various economic variables like interest rates, deposit rate, liquidity etc., however, what made this study more interesting was an attempt to try to gather first hand information from the various people who are into the financial system and whose daily operations have direct bearing because of the policy changes made by the Reserve Bank of India. The select objectives as set out for the study are:

- i). to study the recent changes in the made by the Reserve bank of India in the CRR and Repo rates;
- ii). to analyze the impact of changes in the CRR and Repo rates on the various economic variables;
- iii).to ascertain the impact of the changes in CRR and Repo rates on the liquidity of the economy.

Research Methodology

In the present research Descriptive Research has been carried with the help of a Structured Non-Disguised Questionnaire.

Primary Data Collection - A survey of 60 bankers, high net worth individuals and financial analysts was made in the NCR and Chandigarh.

Secondary Data Collection - Secondary Data has been collected from journals, magazines and internet.

^{© 2020} by The Author(s). Constant ISSN: 1307-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.

Submitted: 14 March 2020, Revised: 09 April 2020, Accepted: 12 May 2020, Published; 30 July 2020

Data Analysis and Interpretation

Q. Why do you think such changes were made?

Figure 1 : Reason for changes in CRR and Repo rates

Analysis

As can be seen from the frequency table and pie chart that 37 respondents out of the total sample size of 60 respondents feel the changes were made by the RBI in the CRR and Repo rates to combat the high inflationary trends existent in the Indian economy and around 19 respondents feel the changes were made because of lack of liquidity in the economy i.e., around 61.7% and 31.75 respectively. Only 6.7% respondents feel the changes were made to combat financial crisis.

Q. Over the past three months, how have your bank's credit standards as applied to the approval of loans or credit lines to enterprises changed?

Figure 2 : Changes in credit standards as applied to enterprises

Analysis

As we can see from the frequency table and bar chart that 29 respondents say that their bank's credit standards as applied to approval of loans to enterprises have tightened and 22 respondents feel they have remained the same over the past three months. 48.3% of the respondents may feel that their banks have tightened the standards because of the increase in the CRR and Repo rates by the RBI and another 36.7% feel that already they have quite stringent credit standards and hence, their credit standards have remained the same over the past three months.

Q. In the past three months the changes in CRR and Repo Rate could be seen, while taking loans what did you find out of the following?

Figure 3 : Change in the liquidity

Analysis

^{© 2020} by The Author(s). ((2)) INTERING INTERNATIONAL JOINT INTERNATIONAL JOURNAL OF AUTOMATING STREET, STREET

Submitted: 14 March 2020, Revised: 09 April 2020, Accepted: 12 May 2020, Published; 30 July 2020

As we can observe from the frequency table and histogram that 37 respondents out of the sample size of 60 respondents observed that during the past three months with the changes in CRR and

Q. Over the past three months, how have your bank's credit standards as applied to the approval of loans to households changed?

Figure 4 : Changes in credit standards for the household loans

Analysis

As can be seen from the frequency table and histogram that 28 respondents (i.e., 46.7%) respondents say that their bank's credit standards as applied to approval of loans to household have tightened somewhat and nearly 22 respondents (i.e., 36.7%) feel that credit standards to approval of loans to households have remained basically unchanged. The mean of the observations is 2.58, lying nearly half way between tightened somewhat and remained basically unchanged. The changes in CRR and Repo rates have forced the banks in some cases to tighten their credit standards as applied to approval of loans to households.

Testing of Hypothesis

In this section researcher has picked up two different variables and tried to find out if a significant relationship exists between the two with the help of cross tabulations using chi-square test. If the value of Pearson's chi-square is less than 0.05 then it means a significant relationship exists between the two variables otherwise there is no such relation between the two variables.

1. Analyzing the significant relationship between the changes in the CRR and Repo rates and the bank's credit standards as applied to the approval of loans to the enterprises.

Table1: Chi-Square Table (changes in CRR and Repo rates and change in credit standards)

Figure 5 : Relationship between the changes in the CRR and Repo rates and the bank's credit standards as applied to the approval of loans to the enterprises

Null hypothesis, Ho: There is no significant relationship between the changes in the CRR and Repo rates and the bank's credit standards as applied to the approval of loans to the enterprises.

Corresponding author: Dr Rajesh Kumar Srivastava

^{© 2020} by The Author(s). ((2)) INTERING INTERNATIONAL JOINT INTERNATIONAL JOINT INTERNATIONAL JOINT INTERNATIONAL JOINT AND INTERNATIONAL LICENSE.

Alternate hypothesis, H1: There is significant relationship between the changes in the CRR and Repo rates and the bank's credit standards as applied to the approval of loans to the enterprises.

Analysis

It can be observed from the frequency table and histogram that 57 respondents have said that with the changes in the CRR and Repo rates by the Reserve Bank of India there has been a change in their bank's credit standards as applied to the approval of loans or credit lines to enterprises. 29 respondents have observed that their bank' credit standards as applied to approval of loans to enterprises have tightened with the increase in CRR and Repo rates because of less availability of capital for lending purposes. According to 22 respondents there has been no significant change in their banks credit standard's as applied to enterprises for loans and credit lines with the change in the CRR and Repo rates.

Using chi-square test it is found that the value is less than 0.05 so we accept the alternate hypothesis and reject the null hypothesis.

2. Analyzing the significant relationship between the changes in the CRR and Repo rates and the demand for the fixed deposits.

Table 2 : Chi-Square Table (the changes in the CRR and Repo rates and the demand for the fixed deposits)

Figure6: Relationship between the changes in the CRR and Repo rates and the demand for the fixed deposits

Null Hypothesis, Ho

There is no significant relationship the changes in the CRR and Repo rates and the demand for the fixeddeposits

Alternate Hypothesis, H1

There is significant relationship between the changes in the CRR and Repo rates and the demand for the fixed deposits

Analysis

It can be observed from the frequency table and histogram that 27 respondents observed that with increase in the CRR and Repo rates, there has been somewhat increase in the demand for

^{© 2020} by The Author(s). CONTRACTION ISSN: 1307-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.

Submitted: 14 March 2020, Revised: 09 April 2020, Accepted: 12 May 2020, Published; 30 July 2020

Dr Rajesh Kumar Srivastava (July 2020) Effects of CRR Rate and Repo Rate on Various Economic Variables *International Journal of Economic Perspectives*,14(7),79-91 Retrieved from http://ijeponline.com/index.php/journal

the fixed deposits as banks generally offer higher fixed deposit rates to the customers. 15 respondents said that demand for the fixed deposits have remained basically unchanged during the last three months though there have been changes in the CRR and Repo rates by the Reserve Bank of India. The demand may have remained constant due to other avenues available for investing in the form of stock market and bond market. So since here in the chi-square table the value of Pearson's coefficient is less than 0.05 so we accept the alternate hypothesis and reject the null hypothesis.

Findings

The major findings of the study undertaken on the effects of changes in CRR and Repo rates on the various economic variables are:

- The changes in the CRR rate and Repo rate have an impact on the lending activities of the banks and financial institutions ranging from approval of loans to loan syndication and all other credit facilities provided by the financial institutions. With the increase in the CRR and Repo rates the credit standard's as applied to the approval of loans and credit lines to the enterprises are tightened.
- The change in the policy stance by the Reserve bank of India has its bearing on the bank's credit standards applied to approval of loans to the households and increase in the CRR and Repo rates tend to considerably tighten the credit standards for the households.
- The impact of the changes in CRR and Repo rates can be felt in the form of decrease in the demand for the loans as applied to both households and enterprises as there is a tightening of the bank's credit standards as applied to the approval of loans.
- The liquidity in the economic corridors is reduced owing to increase in the various policy rates during the past three months.
- The increase in the CRR and Repo rates by the Reserve Bank of India is characterized by the increase in the demand for the fixed deposits.
- > The majority of the corporate and institutional investors feel that there can be further increase in the CRR and Repo rates because of the soaring double digits inflation though there is an associated fear that too hard policy stance can impair the economic growth of the country.

^{© 2020} by The Author(s). ((2)) INTERING INTERNATIONAL JOINT INTERNATIONAL JOURNAL OF AUTOMATING STREET, STREET

Submitted: 14 March 2020, Revised: 09 April 2020, Accepted: 12 May 2020, Published; 30 July 2020

Dr Rajesh Kumar Srivastava (July 2020) Effects of CRR Rate and Repo Rate on Various Economic Variables *International Journal of Economic Perspectives*, *14*(7), 79-91 Retrieved from http://ijeponline.com/index.php/journal

Conclusion

India's growth-inflation dynamics are in contrast to the overall global scenario. The economy is recovering rapidly from the growth slowdown but inflationary pressures, which were triggered by supply side factors, are now developing into a wider inflationary process. As the domestic balance of risks shifts from growth slowdown to inflation, the policy stance of Reserve Bank of India had recognized and responded to this transition. While global policy co-ordination was critical in dealing with a worldwide crisis, the exit process will necessarily be differentiated on the basis of the macroeconomic condition in each country. India's rapid turnaround after the crisis induced slowdown evidences the resilience of our economy and our financial sector. However, the need to focus into the twin challenges of macroeconomic stability and financial sector development persists unabated.

The Reserve Bank of India have tried to balance the two sides of the coin tactfully so as to control the soaring inflation by increasing the CRR and Repo rates as they have a direct bearing on the amount of liquidity available in the market but at the same time to ensure that these measures do not hinder the development prospects as the changes in the monetary policy stances tend to tighten the bank's credit standards as applied to enterprises as well as households in the economy due to increased interest rates.

The Indian growth rate has been good as compared to other economies globally but given the current inflationary pressures the macro economic scenario looks hazy, making long term prediction, at most, sheer guess work. India Inc is in the middle of one of the greatest capacity expansion plans ever and given the current situation it is difficult to say whether the current monetary policy stances will be able to bell the soaring inflationary pressures and usher India into a new era of economic empowerment.

^{© 2020} by The Author(s). () ISSN: 1307-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.

Submitted: 14 March 2020, Revised: 09 April 2020, Accepted: 12 May 2020, Published; 30 July 2020

Dr Rajesh Kumar Srivastava (July 2020) Effects of CRR Rate and Repo Rate on Various Economic Variables *International Journal of Economic Perspectives*, *14*(7), 79-91 Retrieved from http://ijeponline.com/index.php/journal

References

Journals & Research Papers

'Akhtar Mahfuza', 'YounusSayera', "The SLR as a Monetary Policy Instrument in Bangladesh",Report of the Financial Sector Reform Program , Bangladesh Bank, 2000

'McAfee Preston R', 2004," Impact of Monetary Policy on Interest Rates", California Institute of Technology Journal, Vol. 50, No.1, 125-135.

'Mohan Rakesh', 2008, "The Indian Monetary Policy: A Panoramic View", Working Paper Series No.98, International Monetary Fund.

'Patra Debabrata Michael', 'Ray Partha', 2010 March, "Inflation Expectations and MonetaryPolicy in India: An Empirical Exploration", Working Paper Series No. 124, International Monetary Fund.

Cagan, Phillip. The Channels of Monetary Effects on Interest Rates (NBER, 1999).

Friedman, Milton. "The Role of Monetary Policy" American Economic Review (March 1968), pp. 1–17.

Melvin, Michael, "The Vanishing Liquidity Effect of Money on Interest: Analysis and Implications for Policy," Economic Inquiry (April2003), pp. 188–202.

Niehans, Jurg. "Classical MonetaryTheory, New and Old," Journal of Money, Credit and Banking, (November 1987), pp. 234-36.

Peek, Joe, "Interest Rates, Income Taxes, and Anticipated Inflation," American Economic Review (December 1982), pp. 980–91.

Sargent, Thomas J. "Commodity Price Expectations and the Interest Rate," The Quarterly Journal of Economics (February 1999), pp. 12740

^{© 2020} by The Author(s). © SN: 1307-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.

Submitted: 14 March 2020, Revised: 09 April 2020, Accepted: 12 May 2020, Published; 30 July 2020

Dr Rajesh Kumar Srivastava (July 2020) Effects of CRR Rate and Repo Rate on Various Economic Variables *International Journal of Economic Perspectives*, *14*(7), 79-91 Retrieved from http://ijeponline.com/index.php/journal

ANNEXURES

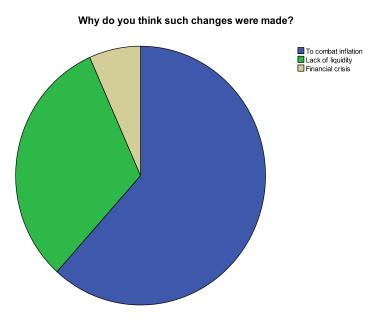
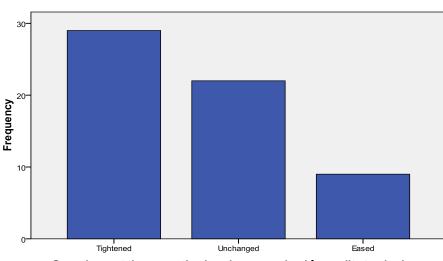


Figure1: Reason for changes in CRR and Repo rates



Over the past three months, how have your bank's credit standards as applied to the approval of loans or credit lines to enterprises changed?

Over the past three months, how have your bank's credit standards as applied to the approval of loans or credit lines to enterprises changed?

© 2020 by The Author(s). (C) INTERING ISSN: 1307-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.

Corresponding author: Dr Rajesh Kumar Srivastava

Figure2: Changes in credit standards as applied to enterprises

In the past three months the changes in CRR and Repo Rate could be seen, while taking loans what did you find out of the following?

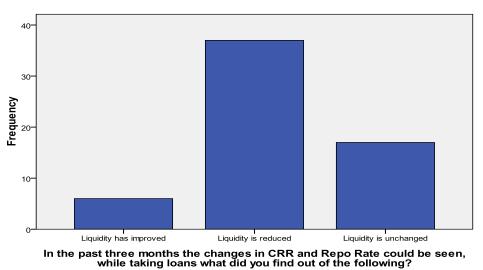
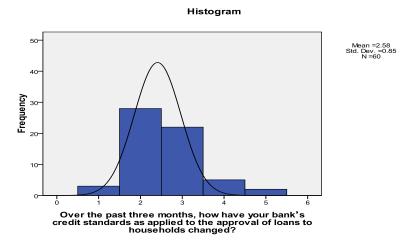


Figure3: Change in the liquidity



Figures: Changes in Credit Standards for the Household Loans

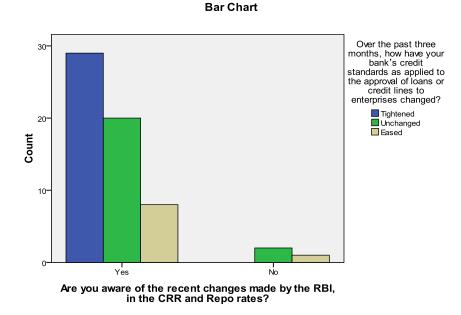
^{© 2020} by The Author(s). © ISSN: 1307-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.

Submitted: 14 March 2020, Revised: 09 April 2020, Accepted: 12 May 2020, Published; 30 July 2020

Table1: Chi-Square Table (changes in CRR and Repo rates and change in credit standards)

Chi-Square Tests				
	Value	df	Asymp. Sig. (2-	
			sided)	
Pearson Chi-Square	3.009 ^a	2	.032	
Likelihood Ratio	4.139	2	.026	
Linear-by-Linear	2.643	1	.014	
Association				
N of Valid Cases	60			

Figure5: Relationship between the changes in the CRR and Repo rates and the bank's credit standards as applied to the approval of loans to the enterprises



© 2020 by The Author(s). © 1007-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.

Submitted: 14 March 2020, Revised: 09 April 2020, Accepted: 12 May 2020, Published; 30 July 2020

Table2: Chi-Square Table (the changes in the CRR and Repo rates and the demand for the fixed deposits)

Chi-Square Test				
	Value	df	Asymp. Sig. (2-	
			sided)	
Pearson Chi-Square	1.062 ^a	4	.032	
Likelihood Ratio	1.785	4	.025	
Linear-by-Linear Association	.110	1	.020	
N of Valid Cases	60			



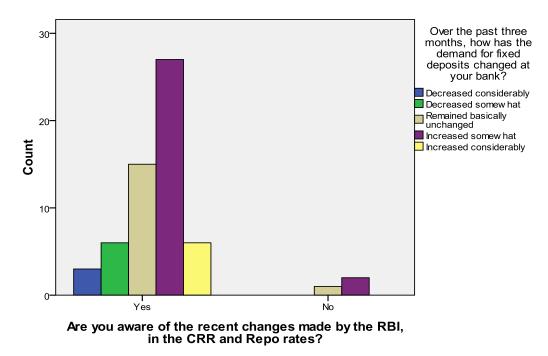


Figure6: Relationship between the changes in the CRR and Repo rates and the demand for the fixed deposits

Corresponding author: Dr Rajesh Kumar Srivastava

^{© 2020} by The Author(s). © STATE ISSN: 1307-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.