

# Impact of Monetary Policy on Financial Markets: An Empirical Study

**MAHIMA THAKUR**

(23GSOB2010675)

Under the Guidance of

**Mrs. Ranjul Rastogi**

GALGOTIAS UNIVERSITY

2024-2025

## Abstract

Monetary policy, a cornerstone of economic strategy, plays a pivotal role in steering macroeconomic conditions, including inflation, employment, and economic growth. As a core instrument in the economic policy framework, it acts through tools such as the repo rate, reverse repo rate, Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), and Open Market Operations (OMOs). The purpose of this empirical study is to analyze the nuanced effects of monetary policy decisions on Indian financial markets, with a specific focus on stock indices, bond yields, and foreign exchange rates. The study spans a decade, from April 2015 to March 2025, providing a robust temporal window for investigation.

The methodology integrates event study techniques with advanced econometric tools, notably regression analysis and vector autoregression (VAR), to discern the timing, magnitude, and persistence of market reactions. This comprehensive approach enables a multi-dimensional understanding of how financial instruments respond to policy signals. The empirical results point to statistically significant and economically meaningful impacts of policy changes across the financial landscape. Stock and bond markets exhibit both immediate and short-term responses, underscoring their sensitivity to rate announcements. Currency markets, while influenced, show more muted and sometimes lagged responses.

The study concludes that the efficacy of monetary policy transmission in India is subject to a variety of mediating factors, including global monetary trends, geopolitical developments, and investor sentiment. While domestic monetary instruments are powerful levers, their influence is interwoven with external forces. These insights are valuable to investors aiming to optimize their portfolios, analysts interpreting market signals, and policymakers seeking to refine intervention strategies. Key recommendations include enhancing the transparency and predictability of policy communication, strengthening monetary transmission mechanisms, and fostering market resilience to global shocks. Future research should consider the evolving post-pandemic economic landscape, potential digital currency integration, and the role of artificial intelligence in monetary policy analysis.

## INTRODUCTION

### i. Background Factors Necessitating the Project

#### 1. Situational Analysis

India is one of the fastest-growing large economies in the world. Over the past few years, its financial markets—such as the stock market, bond market, and currency market—have grown stronger and more connected. As these markets develop, the job of handling monetary policy has become more important and more complex.

The Reserve Bank of India (RBI), which is the country's central bank, uses monetary policy to control inflation, support economic growth, and keep the Indian rupee stable. It does this by changing interest rates, managing how much money is in the economy, and affecting the cost of borrowing and lending.

Today, India's financial markets are not just affected by what happens inside the country, but also by events around the world. For example, if the U.S. raises its interest rates or global oil prices rise, it can impact India's economy too. Because of this, the RBI has to consider both local and international factors while making decisions.

Financial markets react quickly to anything the RBI says or does. For example, if the RBI cuts interest rates, loans can become cheaper, stock prices may go up, bond returns may fall, and the value of the rupee might change. So, it's very important for the RBI to speak clearly and make thoughtful decisions.

As India's financial system becomes bigger and more connected to the rest of the world, it's very important to understand how monetary policy affects different parts of the market. This helps us see if the RBI's actions are working and how different markets—like the money market, government bond market, stock exchanges, and foreign exchange market—respond.

In short, the RBI's role in guiding the economy through monetary policy has never been more important. That's why it is essential to study how these policy choices affect India's financial markets.

#### 2. Literature Review

##### **Bernanke and Kuttner (2005)**

In a pioneering analysis, Bernanke and Kuttner explored how the U.S. stock market responds to unexpected changes in monetary policy introduced by the Federal Reserve. Their research revealed that markets tend to react sharply when policy announcements differ from what investors had anticipated. For instance, an unforeseen rate cut often leads to a surge in stock prices, as it signals lower borrowing costs and potential growth in corporate earnings. In contrast, an unexpected hike can result in falling stock prices due to concerns over higher financing costs. This study underscored the vital role of managing market expectations and showed how closely financial markets monitor and respond to central bank decisions in real time.

##### **Mishkin (1996)**

Frederic Mishkin significantly contributed to the understanding of how monetary policy affects the broader economy, particularly through asset prices. According to his findings, monetary policy doesn't just operate through traditional credit mechanisms—it also impacts financial variables like stock prices, bond yields, and real estate values. For example, lowering interest rates can increase stock valuations by reducing discount rates and enhancing future earnings expectations. Rising asset prices often lead to a wealth effect, encouraging households to spend more. Mishkin

emphasized that central banks must monitor asset markets closely, as they can amplify or buffer the effects of monetary interventions.

#### **Rigobon and Sack (2004)**

Rigobon and Sack investigated how financial markets respond to "policy shocks," or unexpected changes in central bank policies. They discovered that such surprises often trigger a spike in market volatility. When a policy move defies investor expectations, uncertainty increases, leading to rapid re-evaluations of inflation forecasts, economic outlooks, and earnings projections. This frequently results in sharp price swings in equity and bond markets. Their research pointed to the importance of clear communication and transparency in monetary policy to help stabilize markets and reduce uncertainty.

#### **Bhattacharya et al. (2011)**

Shifting to the Indian context, Bhattacharya and colleagues examined the sensitivity of Indian banking stocks to monetary policy changes made by the Reserve Bank of India (RBI). Their study found a strong link between policy rate adjustments and the performance of banking shares. This is understandable, as banks are directly influenced by interest rate movements—lower rates reduce funding costs and improve profit margins, often boosting stock prices. On the other hand, higher rates can compress margins and drag down valuations. The findings highlighted the key role banks play in passing on policy decisions to the broader economy.

#### **Patra and Kapur (2012)**

Patra and Kapur provided a broader view of how Indian financial markets react to changes in monetary policy. Their analysis revealed that the market's response varies over time and is influenced by prevailing economic conditions. Sometimes, markets respond as expected—bond yields fall after a rate cut—but at other times, the reactions can be muted or even contradictory. This inconsistency can be attributed to factors like global trends, investor confidence, fiscal policy, and the clarity of RBI communication. Their work highlights the challenges of ensuring effective policy transmission in a complex and diverse economy like India.

#### **Narayana and George (2018)**

In a more recent study, Narayana and George looked at how Indian monetary policy decisions affect not only the stock market but also bond yields and the value of the rupee. Their research showed that interest rate cuts typically lower bond yields, indicating easier borrowing conditions. Additionally, such rate cuts can put downward pressure on the rupee, as lower returns might reduce foreign capital inflows. Their work emphasized that monetary policy impacts multiple channels within the financial system, particularly in an open economy like India's. It also underscored the importance of coordinated and well-communicated policy actions in managing these interconnected effects.

### **3. Exploratory Research**

Preliminary investigations, involving secondary data, policy documents, and financial surveys, reveal inconsistency in the transmission of policy changes. These exploratory insights underscore the need for a detailed and empirical study.

## ii. Explanation of Research Topic

Monetary policy is how a country's central bank—like the Reserve Bank of India (RBI)—controls the money supply and interest rates to keep the economy stable. The main goals are to control inflation, support economic growth, and maintain financial stability. Simply put, it's about how the central bank makes borrowing easier or harder by adjusting the cost of money in the economy.

### Key Tools the RBI Uses

To manage the money flow, the RBI uses the following tools:

- **Repo Rate:** This is the interest rate at which the RBI gives loans to commercial banks. When the repo rate is reduced, loans become cheaper, encouraging people and businesses to borrow and spend more. When it goes up, borrowing becomes expensive, which helps reduce inflation.
- **Reverse Repo Rate:** This is the rate at which the RBI takes money from banks. A higher reverse repo rate motivates banks to keep their money with the RBI, which reduces the amount of money flowing in the economy.
- **Cash Reserve Ratio (CRR):** This is the percentage of money that banks must keep with the RBI in cash. If the CRR goes up, banks have less money to give out as loans.
- **Statutory Liquidity Ratio (SLR):** This is the portion of bank deposits that must be invested in government-approved securities. It helps make sure banks stay financially secure and also helps fund the government's needs.
- **Open Market Operations (OMOs):** This involves the RBI buying or selling government bonds in the open market. Buying bonds puts more money into the banking system, while selling bonds takes money out.

### What Are Financial Markets?

Financial markets are places where money-related instruments are bought and sold. These include:

- **Stock Markets** – where people trade shares of companies.
- **Debt Markets** – where bonds issued by the government or companies are traded.
- **Foreign Exchange (Forex) Markets** – where currencies like the Indian Rupee or US Dollar are exchanged.
- **Money Markets** – where short-term financial tools like treasury bills are traded.

### Why This Relationship Matters

When the RBI changes its policies—like adjusting the repo rate—it has a ripple effect across the financial system. For example, a lower repo rate can raise stock prices, lower bond yields, and impact the value of the Indian Rupee. These markets react quickly to RBI decisions and adjust prices accordingly.

This study focuses on understanding how all these changes are connected. By analyzing how monetary policy affects the financial markets, we can see how well the RBI's decisions work and how different parts of the market help pass on these policy effects to the overall economy.

## iii. Research Questions

### 1. General Research Questions

- How does monetary policy influence Indian financial markets over time and across instruments?

### 2. Specific Research Questions (Hypotheses)

- H0: Changes in monetary policy have no statistically significant impact on Indian financial market variables.

- H1: Changes in monetary policy have a statistically significant and observable impact on Indian financial market variables.

### 3. Expected Relationships

- Increases in the repo rate are generally expected to suppress stock valuations and raise bond yields.
- Reductions in policy rates are likely to weaken the domestic currency.

### 4. Logic Linking Questions to Hypotheses

Monetary policy actions affect the cost of borrowing, liquidity conditions, and investor sentiment. These changes impact valuation models, risk premiums, and ultimately market pricing and capital flows.

#### iv. Research Objectives

1. Investigate the impact of monetary policy on stock indices.
2. Analyze yield movements in the bond market in response to policy announcements.
3. Examine the effect on the INR/USD exchange rate around policy events.
4. Compare and contrast market responses during policy tightening versus easing cycles.

## RESEARCH DESIGN AND METHODOLOGY

### i. Research Design

This study uses an analytical and empirical research design, combining descriptive, diagnostic, and causal approaches, the methodology emphasizes capturing immediate as well as lagged market responses to monetary signals.

### ii. Data Collection

#### 1. Secondary Data Sources:

- RBI Bulletins and Monetary Policy Statements
- SEBI and Ministry of Finance reports
- NSE and BSE trading data
- Bloomberg, Investing.com, Trading Economics

#### 2. Time Period:

April 2015 to March 2025 (120 months of data)

#### 3. Variables:

- **Independent Variables:** These are the monetary policy instruments used by the Reserve Bank of India (RBI), which are presumed to influence financial market outcomes.
  - **Repo Rate:** The rate at which the RBI lends short-term funds to commercial banks. It serves as the benchmark interest rate for the economy and affects the cost of borrowing across sectors.

- **Reverse Repo Rate:** The rate at which the RBI borrows funds from commercial banks. It is used to absorb excess liquidity and signals policy tightening.
- **Cash Reserve Ratio (CRR):** The proportion of total deposits that commercial banks must hold as reserves with the RBI. A higher CRR reduces the money available for lending.
- **Statutory Liquidity Ratio (SLR):** The minimum percentage of deposits that banks must invest in government securities. Adjusting the SLR influences liquidity and interest rates.
- **Open Market Operations (OMOs):** Buying or selling of government bonds in the open market to regulate liquidity and influence interest rates.
- **Dependent Variables:** These represent key indicators of financial market performance, which are hypothesized to respond to changes in monetary policy.
- **Nifty 50:** A benchmark Indian stock market index representing the weighted average of 50 of the largest Indian companies listed on the National Stock Exchange (NSE).
- **BSE Sensex:** The 30-share benchmark index of the Bombay Stock Exchange (BSE), reflecting overall market sentiment and equity performance.
- **10-Year Government Securities (G-Sec) Yield:** The return on investment from government bonds with a maturity of 10 years. It reflects investor expectations regarding inflation and interest rates.
- **INR/USD Exchange Rate:** The value of the Indian Rupee relative to the US Dollar. It is influenced by capital flows, trade balances, and interest rate differentials driven by monetary policy changes.

#### 4. Questionnaire:

Not applicable (entirely based on secondary data)

#### iii. Sampling Design

- **Target Population:** Financial markets in India
- **Sampling Frame:** High-frequency macroeconomic and market data
- **Sampling Units:** Individual monetary policy announcements and adjacent market data
- **Sampling Method:** Event-based sampling combined with time-series econometrics
- **Sample Size:** Approximately 10–12 major monetary policy decisions
- **Response Rate:** Not relevant

#### iv. Fieldwork

Fieldwork involved sourcing, validating, and aligning data from multiple repositories. Event windows were constructed symmetrically around policy dates. Data integrity was verified through cross-referencing across platforms.

#### v. Data Analysis and Interpretation

##### 1. Preparation and Processing:

**First step :** We take all the data of repo rate , Sensex ,bond rate , inr/us Currency rate change from different websites for particular date in every year after the policy announcement or (change in repo rate) to see the reaction of variables and those date are as follows :

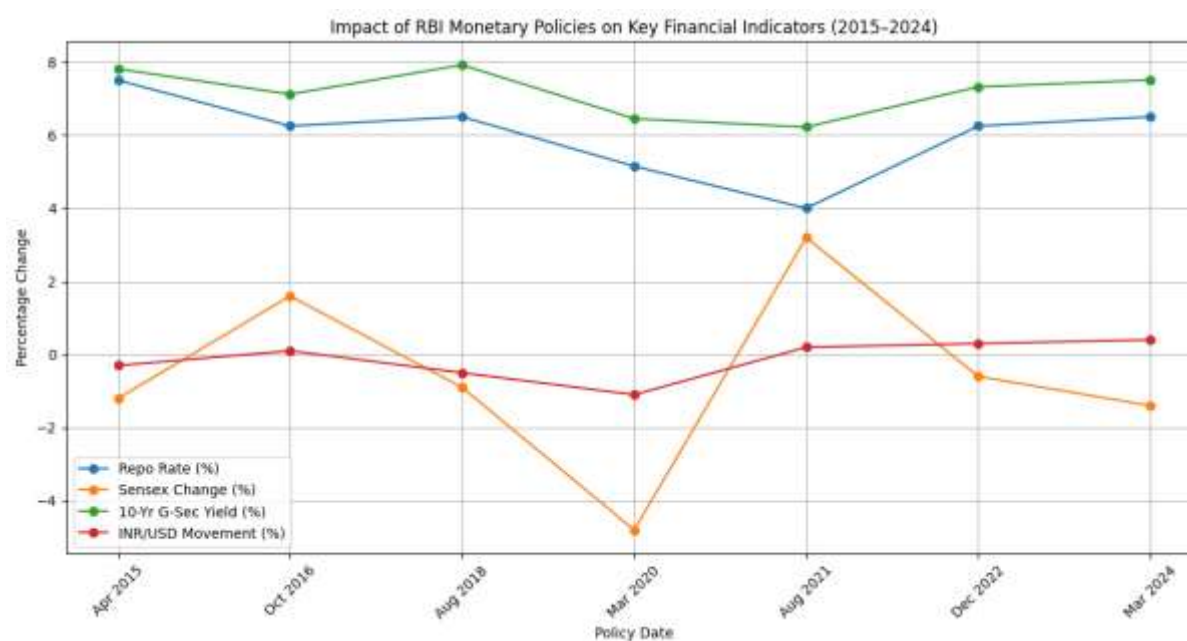
Policy Date	Policy Name	Repo Rate (%)	Sensex Change (%)	10-Yr G-Sec Yield (%)	INR/USD Movement (%)
Apr 2015	Rate Hike	7.50	-1.2	7.81	-0.3
Oct 2016	Rate Cut	6.25	+1.6	7.12	+0.1



Aug 2018	Rate Hike	6.50	-0.9	7.92	-0.5
Mar 2020	Pandemic Response	5.15	-4.8	6.45	-1.1
Aug 2021	Accommodative	4.00	+3.2	6.22	+0.2
Dec 2022	Rate Hike	6.25	-0.6	7.32	+0.3
Mar 2024	Neutral Stance	6.50	-1.4	7.51	+0.4

In this above table we have taken all the raw data of different variables which reacts with change in repo rate , here we have to find out that what changes took place after change in policy (change in repo rate )

**Second step:** Now I have made a graph represent the table through excel .



Now we will find out impact of repo rate change in sensex and other variables which also means that impact of monetary policy (Repo rate) on financial market (sensex, bonds, currency),

**Third Step:** Here we will find out relationship between repo rate and other variables.and now we have to observe through graph and table .Here are some key observation are as follows:

1. **Rate Hikes Correlate with Negative Sensex Movement:**

○ During Apr 2015, Aug 2018, and Dec 2022 (rate hike periods), the Sensex witnessed negative returns (-1.2%, -0.9%, and -0.6% respectively), suggesting investor caution during tightening cycles.

2. **Accommodative and Rate Cut Policies Boost Market Sentiment:**

○ In Oct 2016 and Aug 2021, rate cuts and accommodative policies led to positive movements in the Sensex (+1.6% and +3.2%), indicating market positivity. .

3. **Pandemic Response Led to Sharp Declines Across All Indicators:**

- The March 2020 "Pandemic Response" policy caused a dramatic Sensex drop (-4.8%), fall in bond yields (6.45%), and INR depreciation (-1.1%), highlighting market panic and risk aversion.

#### 4. **Bond Yields React Strongly to Rate Hikes:**

- Yields spiked during rate hikes (e.g., 7.92% in Aug 2018), reflecting increased cost of borrowing and inflation expectations.

#### 5. **INR/USD Movement Reflects External Vulnerability:**

- Currency depreciation is evident during risk-off environments (e.g., pandemic or rate hikes), while minor appreciation is seen during easing policies (e.g., +0.2% in Aug 2021).

### **Graph Observation:**

1. As we see in graph the blue line represents the repo rate and yellow line represent the Sensex change and we observe that as repo rate hikes there is downward movement and when repo rate cut then it shows upward movement which shows the negative relation between them .

2. As we see green line represent the 10yr govt. sector yield and blue line is repo rate and now we can as repo rate hikes the bond yield also increased and as repo rate cuts it also go downwards which shows direct relationship with repo rate .

3. As in pandemic we can see that all the indicators are declines like repo rate, bond rate, Sensex ,inr/us rate etc.

4. As we see in red line represents the INR/US currency rate which go downwards when rate hikes and in pandemic. And it shows minor increase when repo rates cuts .

### **2. Statistical Method:**

- **Event Study Analysis:** Captured abnormal returns around announcement windows when policy comes or repo rate then what's the impact or changes on other variables which can be observe in this Event Study Analysis.

### **3. Summary of Findings:**

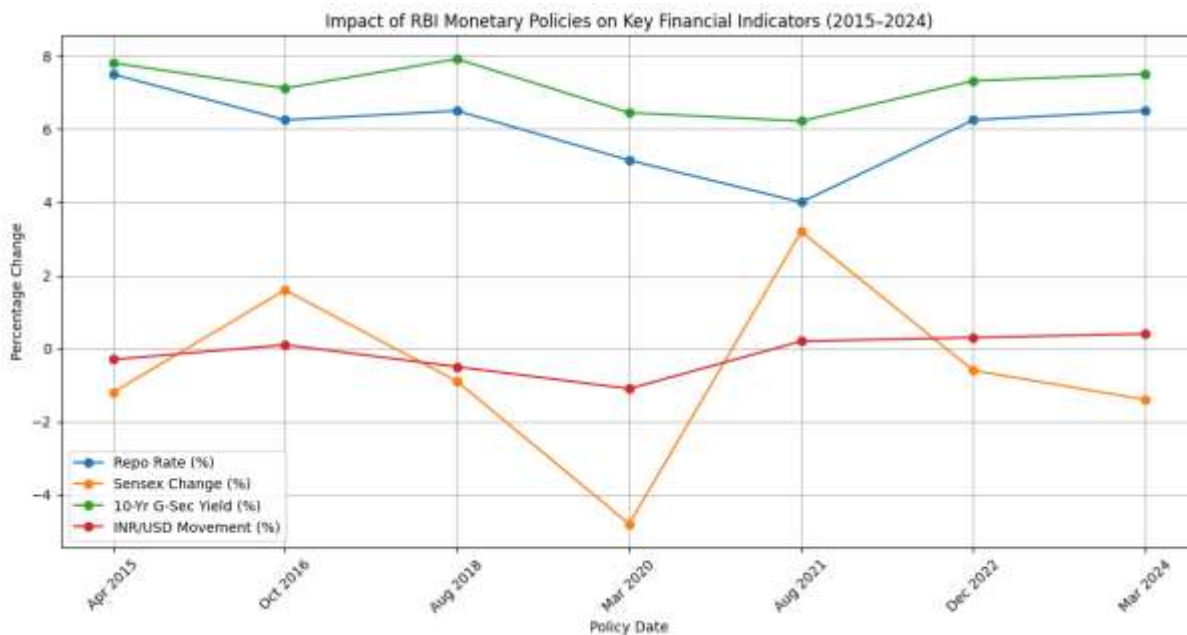
- **Equity Markets:** Negative returns observed after the rate hikes; sharp rebounds after the rate cuts
- **Bond Markets:** Bond yields rise with hikes, reflecting higher borrowing costs
- **Forex Markets:** little depreciation after cuts; limited appreciation after hikes.



#### 4.Tables and Charts:

**Fig.`1 Variables reaction on monetary policies**

Policy Date	Policy Name	Repo Rate (%)	Sensex Change (%)	10-Yr G-Sec Yield (%)	INR/USD Movement (%)
Apr 2015	Rate Hike	7.50	-1.2	7.81	-0.3
Oct 2016	Rate Cut	6.25	+1.6	7.12	+0.1
Aug 2018	Rate Hike	6.50	-0.9	7.92	-0.5
Mar 2020	Pandemic Response	5.15	-4.8	6.45	-1.1
Aug 2021	Accommodative	4.00	+3.2	6.22	+0.2
Dec 2022	Rate Hike	6.25	-0.6	7.32	+0.3
Mar 2024	Neutral Stance	6.50	-1.4	7.51	+0.4



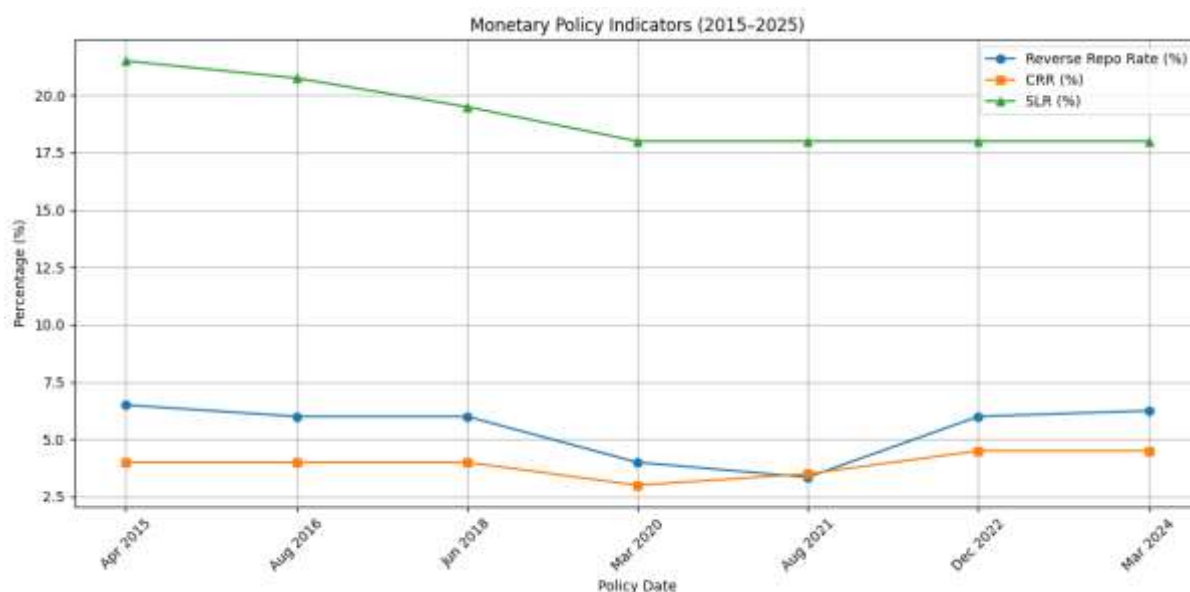
#### Graph Explanation:

The graph presents a composite visualization of four key indicators:

- **Repo Rate (%)** is plotted to indicate the central bank's policy stance.
- **Sensex Change (%)** tracks equity market response.
- **10-Year G-Sec Yield (%)** reflects investor expectations on inflation and interest rates.
- **INR/USD Movement (%)** shows currency market reactions.

Supplementary Table: Reverse Repo Rate, CRR, SLR, and OMO Impact (2015–2025)

Policy Date	Policy Name	Reverse Repo Rate (%)	CRR (%)	SLR (%)	OMO Activity (Net Purchase/Sale)	Market Reaction Summary
Apr 2015	Rate Hike	6.50	4.00	21.50	OMO Sale	Equity dip, bond yields rose
Aug 2016	Rate Cut	6.00	4.00	20.75	OMO Purchase	Market positive, yields fell
Jun 2018	Rate Hike	6.00	4.00	19.50	OMO Sale	Negative equity move, INR weakens
Mar 2020	Pandemic Response	4.00	3.00	18.00	Aggressive OMO Purchase	Market panic, INR falls sharply
Aug 2021	Accommodative	3.35	3.50	18.00	OMO Purchase	Positive equity response
Dec 2022	Rate Hike	6.00	4.50	18.00	Limited OMO Activity	Mixed market reaction
Mar 2024	Neutral Stance	6.25	4.50	18.00	Neutral	Mild market correction



### Explanation of the Supplementary Table (Liquidity Tools and Market Response)

This table details the monetary policy measures beyond the Repo Rate, including:

- **Reverse Repo Rate**
- **CRR (Cash Reserve Ratio)**
- **SLR (Statutory Liquidity Ratio)**
- **OMO Activity (Open Market Operations)**

### Key Observations:

#### 1. Reverse Repo Rate:

- Tends to mirror the direction of the Repo Rate. The **sharp drop in Mar 2020** was meant to discourage banks from parking funds with the RBI and encourage lending.

## 2. CRR and SLR:

- Both were gradually reduced over time, especially in **Mar 2020**, to inject liquidity and maintain stability during the pandemic shock.
- Post-pandemic, they gradually increased, reflecting a return to neutral policy normalization.

## 3. OMO (Open Market Operations):

- **OMO Purchases** (injection of liquidity) dominated during accommodative phases (e.g., Aug 2016, Mar 2020).
- **OMO Sales** occurred during rate hikes (e.g., Apr 2015, Jun 2018) to absorb excess liquidity.
- In **Dec 2022 and Mar 2024**, OMO activity was limited or neutral, reflecting a wait-and-watch stance by the RBI.

## 4. Market Reactions:

- Accommodative policies with supportive liquidity measures (Aug 2021) triggered positive equity responses.
- Mixed or mild reactions occurred when policy stances were neutral or when markets had already priced in the changes.

# LIMITATIONS AND CHALLENGES OF THE STUDY

## 1. Global Factors Beyond Our Control

When studying how India's financial markets react to monetary policy, it's important to remember that there are outside factors—called exogenous variables—that can strongly affect the results. These include events like interest rate changes by the U.S. Federal Reserve, global oil price swings, wars, trade conflicts, or natural disasters. Such events can cause sudden changes in Indian stock prices, bond yields, and currency values. Since the RBI and Indian policymakers cannot control these global events, it becomes hard to tell how much of the market's reaction is really due to the RBI's actions and how much is caused by these external factors.

## 2. Difficulty Measuring Investor Sentiment

Financial markets are not driven only by economic data. They are also shaped by investor sentiment—how positive or negative people feel about the future. This sentiment is influenced by news, social media, expert opinions, and even rumors. While we do have some ways to estimate market mood (such as the India VIX index or surveys), we can never fully measure investor psychology. Because of this, it can be tricky to know whether market movements after a policy announcement are based on solid reasoning or on emotional reactions. This adds another layer of complexity when trying to understand the true impact of monetary policy.

## 3. Monthly Data May Miss Short-Term Effects

Most of the data used to study monetary policy effects—such as inflation rates, GDP, or financial market indicators—is reported monthly. This is useful for looking at longer-term trends but can miss the sharp movements that happen in the days right after a policy announcement. For example, bond yields may drop or stock prices may spike just a few days after an interest rate cut, but this quick change could be “smoothed out” in monthly data. This makes it harder to capture the immediate effects of monetary decisions.

## 4. Limited Number of Major Monetary Events

Big monetary policy actions—like changes in the repo rate or major liquidity announcements—don't happen very often. They may occur just a few times each year. Because of this, when we look at a short study period (say, 5 to 10 years), we only have a small number of clear policy events to analyze. This makes it challenging to apply certain statistical techniques that require lots of data points. It also becomes harder to separate the effects of one policy move from

another—especially when multiple events happen close together or when other factors are influencing the markets at the same time.

## 5. Ensuring Valid and Reliable Results

To make sure this study's findings are trustworthy, only high-quality data from reliable sources has been used. These include respected organizations like the Reserve Bank of India, Ministry of Finance, World Bank, IMF, Bloomberg, and others. Using such data helps reduce the risk of errors and ensures the information is accurate and consistent. In addition, the research methods have been carefully tested. The analysis was run in different ways (such as using different time lags or alternative variables) to check if the results hold true under various conditions. Statistical tests were also used to ensure that the models are correct and that no hidden errors or patterns were distorting the results. By combining good data with sound methods, the study aims to produce conclusions that are clear, reliable, and useful for both academic research and real-world policymaking.

## 6. Challenges Faced During the Study

One of the biggest challenges was matching the timing of market data with key policy events. For example, financial markets (like stocks or bonds) react almost instantly to new information, while economic indicators (like inflation or GDP growth) are reported monthly or quarterly. This mismatch makes it hard to say for sure whether a market change was directly caused by a monetary policy action or by other economic news released around the same time.

It's also common for multiple events to happen close together. For instance, an RBI interest rate announcement might come out on the same day as new inflation data or global news that affects markets. This overlap can make it difficult to isolate the impact of just one event.

Another issue is that markets sometimes *anticipate* policy moves before they happen. If investors expect a rate cut and act on it before the official announcement, some of the market reaction will occur in advance, making it harder to measure the post-announcement effect.

To handle these challenges, this study carefully chose short “event windows”—such as looking at market behavior within 3 to 5 days before and after an announcement. Even so, it is impossible to fully eliminate the influence of overlapping events, and this remains a limitation of the analysis.

## Lessons Learned:

### 1. Using a Mix of Methods Gives Better Results

In research about the economy and financial markets, it helps to use more than one method to understand what's really happening. This is called a hybrid approach. In this study, that meant combining number-based methods (like event study analysis) with more descriptive insights (such as looking at investor mood or the background of policy decisions). It also meant using both big-picture data (like inflation and interest rates) and more detailed data (like company stock movements or specific market trends).

By using this mixed approach, the study was able to explain market behavior more clearly. For example, just looking at interest rates alone doesn't show why markets react the way they do—things like investor expectations, news events, and global influences also matter.

In short: using both numbers and context gives a fuller, more accurate picture of how markets respond to monetary policy.

## 2. Market Reactions Change Depending on the Asset and the Economy's Phase

Financial markets include many different types of investments—called *asset classes*—like stocks, bonds, and currencies. Each type reacts differently to changes in monetary policy:

- **Stocks** often rise when interest rates are cut, because companies are expected to earn more.
- **Bonds** can go up or down depending on how interest rate changes affect the returns investors expect.
- **Currencies** may strengthen or weaken based on how India's interest rates compare to those of other countries.

But it's not just about the type of investment. The overall state of the economy also matters a lot. For example:

- If the economy is weak or in a slowdown, a rate cut may be seen as helpful and boost markets.
- If inflation is already high, a rate cut could worry investors and cause negative reactions, such as a weaker currency.

In other words, the same policy decision—like a rate cut—doesn't always produce the same result. The timing of the decision (where the economy is in the cycle) and the type of investment being looked at both make a big difference. This is an important lesson for both policymakers and investors: they must always consider the bigger economic picture and the nature of each market when reacting to or planning monetary policy moves.

## CONCLUSIONS AND RECOMMENDATIONS

### i. Conclusions

Financial markets are made up of different kinds of investments—like stocks, bonds, and currencies. Each of these reacts differently when the Reserve Bank of India (RBI) changes interest rates or other policies.

- Stocks usually go up when interest rates are cut. That's because businesses can borrow money more cheaply, which may help them grow and make more profit.
- Bonds can either rise or fall. It depends on how the change in interest rates affects what investors expect to earn.
- Currencies (like the Indian Rupee) may get stronger or weaker depending on how India's interest rates compare to those in other countries.

But how the market reacts also depends on the overall economy:

- If the economy is slow or struggling, a rate cut might be seen as a good step and could help boost markets.
- But if inflation (rising prices) is already a problem, a rate cut might scare investors and make the currency weaker.

So, the same policy—like cutting interest rates—can have different effects depending on when it happens and what part of the market you're looking at.

That's why both the government and investors need to look at the bigger economic picture and understand each market type before making decisions or reacting to policy changes.

## ii. Recommendations

### Managerial Implications

#### 1. Portfolio Managers Should Watch RBI Decisions Closely

People who manage money (like mutual funds or investment portfolios) should always pay attention to what the RBI might do next. If they think interest rates will go up or down, they should change their investment choices accordingly. For example, if a rate cut is expected, they might put more money into stocks or long-term bonds, which usually do better when interest rates are low. This helps reduce risk and find better chances to earn profits.

#### 2. RBI Should Share Plans Clearly

Monetary policy works better when everyone understands what the RBI wants to do. That's why it's important for the RBI to explain its plans clearly and on time. When investors know what to expect, they can make better decisions. This also avoids confusion and stops the market from reacting in the wrong way due to guesswork or rumors.

### Future Research Ideas

#### 1. Study Digital Monetary Tools After 2025

In the future, central banks may use new digital tools, such as digital rupees (CBDCs). These changes could affect how monetary policy works. Researchers should study how these digital tools change the way financial markets behave, especially after 2025.

#### 2. Check How Different Sectors Respond

Most research only looks at how the whole market reacts. But different industries—like banks, real estate, tech, or consumer products—may react in different ways. Future research should look at these sectors separately to better understand how each one responds to RBI's policy changes.

#### 3. Understand the Global Impact on India

The world's financial systems are all connected. So, when big central banks like the U.S. Federal Reserve or the European Central Bank make changes, it can affect India's markets too. Future studies should look at how these global decisions impact things like foreign investment, currency exchange rates, and investor behavior in India.

## REFERENCES

### Academic and Research References

1. **Mishkin, F. S. (2007).** *Monetary Policy Strategy*. MIT Press.  
► Explains the theory behind central bank actions and their impact on financial markets.
2. **Bernanke, B. S., & Kuttner, K. N. (2005).** "What Explains the Stock Market's Reaction to Federal Reserve Policy?" *Journal of Finance*, 60(3), 1221–1257.  
► Influential paper on monetary policy and equity market reaction—useful for event study methodology.
3. **Christiano, L. J., Eichenbaum, M., & Evans, C. L. (1999).** "Monetary Policy Shocks: What Have We Learned and to What End?" *Handbook of Macroeconomics*, Vol. 1A, Elsevier.  
► Covers econometric modeling of monetary policy shocks.



4. **Patra, M. D., & Kapur, M. (2012).** “Alternative Monetary Policy Rules for India.” *IMF Working Paper No. 12/118*.  
► Discusses India-specific monetary policy strategies.
5. **Singh, B. (2011).** “Monetary Policy Transmission in India: A Peep Inside the Black Box.” *RBI Working Paper Series, DEPR WP No. 11/2011*.  
► Empirical analysis on how policy rates impact various sectors in India.

## Data and Official Sources

6. **Reserve Bank of India (RBI)** – <https://www.rbi.org.in>  
► Monetary Policy Committee (MPC) meeting minutes, repo rate history, RBI bulletins, Financial Stability Reports.
7. **Ministry of Finance, Government of India** – <https://www.finmin.nic.in>  
► Union Budget documents, Economic Surveys.
8. **National Stock Exchange of India (NSE)** – <https://www.nseindia.com>  
► Historical Sensex/Nifty data, sectoral indices.
9. **Trading Economics** – <https://tradingeconomics.com>  
► Long-term series for bond yields, exchange rates, inflation, and interest rates.
10. **Bloomberg & Reuters**  
► Market reactions, policy expectations, investor commentary. (*Mention only if you accessed data or headlines from these platforms.*)

## Other Helpful Sources

11. **World Bank – Global Economic Prospects & WDI Database**  
► Macroeconomic indicators and comparisons.  
<https://data.worldbank.org>
12. **IMF – International Financial Statistics & Article IV Consultations on India**  
► Broader view of India’s monetary policy in the global context.  
<https://www.imf.org>
13. **Economic Times, Mint, Business Standard** (*for event narratives & market reactions*)  
► Use to support real-time market commentary or investor sentiment during key monetary events.

## Appendices

### I List of All RBI Policy Events (2015–2025)

#### 2015–2016: Starting Inflation Targeting

- In 2015, the RBI decided to focus on keeping inflation under control, aiming for a target of 4% (plus or minus 2%).
- To help with this goal, the RBI set up the **Monetary Policy Committee (MPC)** in 2016, which meets regularly to decide interest rates.

#### 2016–2017: Demonetization and Liquidity



- In November 2016, ₹500 and ₹1,000 currency notes were banned, which caused a large amount of cash to flow into banks.
- The RBI worked on managing this sudden rise in liquidity and making sure the financial system stayed stable.
- During this period, the repo rate (the interest rate at which RBI lends to banks) was lowered from 6.50% to 6.00% to support growth.

### 2018–2019: Controlling Inflation

- As prices started rising, the RBI changed its policy to control inflation.
- The repo rate was raised to 6.50% in 2018 to help reduce inflation.
- In early 2019, as inflation came down again, the RBI changed its tone and reduced the repo rate back to 6.00%.

### 2020–2021: COVID-19 Crisis

- During the pandemic, the RBI made borrowing cheaper to help businesses and people.
- The repo rate was brought down to a record low of 4.00% in May 2020.
- RBI also gave support through tools like **TLTRO** (special loans to banks) and allowed delays in loan repayments to ease financial stress.

### 2022–2023: Tackling High Inflation

- In May 2022, the RBI started raising interest rates again to fight rising prices.
- The repo rate increased step by step:
  - 4.40% (May 2022)
  - 4.90% (June 2022)
  - 5.40% (August 2022)
  - 5.90% (November 2022)
  - 6.25% (December 2022)
- Another hike to 6.50% came in February 2023, marking six straight increases.

### 2024–2025: Balancing Growth and Inflation

- In December 2023, the repo rate stayed unchanged at 6.50% as the RBI tried to reduce inflation while helping the economy grow.
- The **Cash Reserve Ratio (CRR)** was cut by 50 basis points (0.50%) to 4.00%, to push more money into the banking system.
- In February 2024, the RBI decided not to change rates and said it would stay watchful.
- By May 2025, with inflation expected around 4.5%, the RBI began considering lowering rates again to support growth.

### Glossary – Simple Definitions

#### 1. Monetary Policy

Decisions made by the RBI to control the money supply and interest rates to keep prices stable and support the economy.

#### 2. Repo Rate

The interest rate at which the RBI lends money to banks for short periods. Lower repo rates make loans cheaper.

**3. Reverse Repo Rate**

The rate at which banks keep their money with the RBI. It helps absorb extra money from the system.

**4. Monetary Policy Committee (MPC)**

A group of six people who meet every two months to decide RBI's interest rate and other monetary policies.

**5. Inflation**

When prices of goods and services go up over time, reducing what your money can buy.

**6. Fiscal Policy**

The government's decisions about taxes and spending to guide the country's economy.

**7. 10-Year G-Sec Yield**

The return you earn on government bonds that mature in 10 years. It reflects how investors feel about long-term inflation and growth.

**8. Sensex**

A stock market index that shows how 30 large companies listed on the Bombay Stock Exchange (BSE) are performing.

**9. INR/USD Exchange Rate**

The value of the Indian Rupee compared to the US Dollar. It moves based on trade, investments, and policies.

**10. Liquidity**

How much cash or easy-to-use money is available in the system. More liquidity often means lower interest rates.

**11. Transmission Mechanism**

How RBI's policy changes (like rate cuts) move through the banking system and affect the economy—such as loan interest rates and spending.

**12. Yield Curve**

A chart that shows the interest rates of government bonds over time. Normally, longer-term bonds offer higher returns.

**13. Basis Points (bps)**

Used to measure changes in interest rates. 1 basis point = 0.01%. So, 25 bps = 0.25%.

**14. Event Study**

A method used to study how a specific event (like an RBI announcement) impacts the price of assets like stocks or bonds.

**15. Abnormal Return**

The extra return (profit or loss) that happens due to a special event, beyond what was expected.

**16. Volatility**

How much prices move up or down in a market. More movement means more uncertainty.

**17. Policy Stance**

The RBI's approach to monetary policy—whether it's trying to boost growth (accommodative), stay balanced (neutral), or control inflation (hawkish).

**18. Central Bank Communication**

All the ways RBI talks to the public—like speeches, reports, or announcements—to give signals about future actions.

**19. Spillover Effects**

When changes in one country (like US interest rates) affect another country's economy or financial markets.

**20. Capital Flows**

Money that moves between countries for investment, like foreign companies investing in Indian stocks or bonds.