# An Empirical Study on the Open Market Operations (OMO) as a Tool of Monetary Policy of RBI

***Prof. Roshan M.Nadaf, Asst professor, Nehru Arts, Science and commerce college, Hubli**

## Abstract

This paper attempts to study **Open Market Operations** the simultaneous sale and purchase of government securities and treasury bills by **RBIs Monetary policy framework. Open market operations**, or OMOs, are the purchase and sale of G-Secs by **the Reserve Bank of India (RBI)** on the Centre's behalf to streamline money supply and interest rates. In case of excess liquidity in the market, RBI issues these securities via auctions. The Reserve Bank in its latest monetary policy signalled it was moving to easier money policies. It hinted at keeping domestic liquidity in 'neutral' rather than 'deficit' mode. This came as a surprise for the market, as the RBI was focussing on the 'price' of money or interest rates to control inflation. Now, it plans to shift towards the quantity of money (or liquidity). The central bank is expected to aggressively deploy open market operations (OMO) to release money into the market.

The modified RBI Act provides the legislative mandate explicitly to the Reserve Bank of India in order to operate the policy framework of the country. The monetary policy framework aims to set the policy repo rate as per the assessment of the present and developing macroeconomic situation. The agenda also aims at modulating liquidity conditions to adjust the money market rates at/around the repo rates. The repo rate changes spread through the money market to the entire financial system, influencing the aggregate demand – a key factor of inflation and growth. Once the repo rate is declared, the operating structure designed by RBI predicts liquidity management on a daily basis through suitable actions, aiming to anchor the weighted average call rate (WACR) around the repo rate. The operating framework is modified and reviewed depending on the growing financial market and economic conditions, while ensuring uniformity with the financial policy stance. The liquidity management framework was revised significantly in April 2016. The interest rate at which RBI lends long term funds to banks is referred to as the bank rate. However, presently RBI does not entirely control money supply via the bank rate. It uses Liquidity Adjustment Facility (LAF) – repo rate as one of the significant tools to establish control over money supply. Bank rate is used to prescribe penalty to the bank if it does not maintain the prescribed SLR or CRR. A policy set by the finance ministry that deals with matters related to government expenditure and revenues, is referred to as the fiscal policy. Revenue matter include matters such as raising of loans, tax policies, service charge, non-tax matters such as divestment, etc. While expenditure matters include salaries, pensions, subsidies, funds used for creating capital assets like bridges, roads, etc.

*Key words: Open Market Operations, government securities, treasury bills, RBI*

**Introduction**

The main aim of the financial policy is to retain price stability while considering the goal of growth. Stability in price is a necessary prerequisite to sustainable growth. The Reserve Bank of India Act of 1934, in May 2016, was amended to provide a legal basis for the execution of the flexible inflation targeting agenda. The edited RBI Act also provides for the inflation target to be set by the Indian Government, after discussing with the Reserve Bank, once in every five years. The Central Government has mentioned in the Official Gazette 4% Consumer Price Index (CPI) inflation as the target for the period from 5 August 2016 to 31 March 2021, with the higher tolerance limit of 6% and the lower tolerance limit of 2%. The Central Government also notified the following factors that causes a failure to achieve the inflation target:

- The average inflation is over the upper tolerance level of the inflation target for any three consecutive quarters.
- The average rise is less than the lower tolerance level for any three straight quarters.

Before the RBI Act was amended in May 2016, the flexible inflation targeting agenda was administered by an Agreement on Monetary Policy Framework between the RBI and the government of February 20, 2015. The basic link between monetary policy and the economy is through the market for bank reserves, more commonly known as the federal funds market. In that market, banks and other depository institutions trade their noninterest-bearing reserve balances held at the RBI with each other, usually on an overnight basis. On any given day, depository institutions that are below their desired reserve positions borrow from others that are above their desired reserve positions. The benchmark interest rate charged for the short-term use of these funds is called the federal funds rate. The RBI's monetary policy actions have an immediate effect on the supply of or demand for reserves and the federal funds rate, initiating a chain of reactions that transmit the policy effects to the rest of the economy.

Since about 1980, far-reaching changes in the financial system have caused considerable instability in the relationship of money and credit to the economy. In particular, monetary velocities—ratios of nominal GDP (gross domestic product) to various monetary aggregates—have shown frequent and marked departures from their historical patterns, making the monetary aggregates unreliable as indicators of economic activity and as guides for stabilizing prices. Velocities of M1 (currency, checkable deposits and travelers checks of nonbank issuers) and M2 (M1 plus saving and small time deposits and retail-type money market mutual fund balances) have fluctuated widely in recent years, and their average values over the last five to ten years have been much different from their long-run averages . For example, until the late 1980s, M2 velocity had been relatively stable over longer periods, while its short-run movements were positively correlated to interest rate changes. In the early 1990s, however, M2 velocity departed from its historical pattern and drifted upward even as interest rates were declining. Some observers believe that ongoing, rapid financial changes will continue to cause instability in the financial linkages of the economy, undermining the usefulness of money and credit aggregates as guides for policy. Others expect the financial innovation process to settle down, leading to a restoration. The money market—which includes the federal funds market—provides the natural point of contact between the RBI and the financial system. The money market is a term used for wholesale markets in shortterm credit or IOUs, comprising debt instruments maturing within one year.

The market is international in scope and helps in economizing on the use of cash or money. Borrowers who are the issuers of short-term IOUs—generally, the Treasury, banks, business corporations and finance companies—can bridge differences in the timing of receipts and payments or can defer long-term borrowing to a more propitious time. The market allows the lenders—businesses, households or governmental units—to offset uneven flows of funds by allowing them to invest in short-term interest-earning assets that can be readily converted into cash with little risk of loss. They can also time their purchases of bonds and stocks to their particular views of long-term interest rates and stock prices. The main instruments of the money market are federal funds, Treasury bills, repurchase agreements (RPs), Eurodollar deposits, certificates of deposits (CDs), bankers acceptances, commercial paper, municipal notes and federal agency short-term securities (see Figure 2-2 for definitions of instruments). The stock-intrade of the market includes a large portion of the U.S. Treasury debt and federal agency securities.

**Objective:**

This paper intends to explore and analyze how **RBI uses OMO along with other monetary policy tools** such as repo rate, cash. In India, liquidity conditions usually tighten during the second half of the year

## EVOLUTION OF DEBT MANAGEMENT, OPEN MARKET OPERATIONS AND THE GOVERNMENT SECURITIES MARKET

Open Market Operations (OMO) means the buying and selling of government securities in the open market in order to expand or contract the amount of money in the banking system. Purchases inject money into the banking system and stimulate growth while sales of securities do the opposite.

The RBI is authorised to deal in Government securities under Section 17(8) of the Reserve Bank of India Act, 1934. Open market operations (OMO) of RBI comprise outright sale and purchase of securities, Repo and Reverse Repo operations through LAF. While the outright OMO are directed at influencing enduring liquidity, the LAF OMO operations target the temporary liquidity in the system. In addition to the above mentioned monetary policy considerations, OMO were also undertaken through 'switch' operations wherein purchase of gilts of a particular maturity against the sale of another were used to provide liquidity to Government securities and enable smooth conduct of the borrowing programme. Although OMOs had initially served as a key instrument of monetary policy, the persistence of high Government deficits resulting from the shift from fiscal neutrality to fiscal activism from the late 1950s posed serious problems for prudent monetary management, in particular a conflict between the objectives of debt management and monetary policy. Interest rates were administered to contain the interest cost of public debt and statutory liquidity ratio requirements were periodically hiked for easy access to market borrowing. In this regard, the nationalization of banks and the transfer of ownership to the Government provided a captive market for Government securities. Simultaneously, recourse to the RBI was also high, leading to high levels of monetization of the fiscal deficit.

The need to free monetary policy from the fiscal constraint was recognized early. An internal working group proposed to segregate the RBI's debt management function from the monetary management function as early as 1981. The Committee to Review the Working of the Monetary System, 1984 (Chairman: Professor Sukhomoy Chakravarty), in particular, made several recommendations to rekindle OMO as an instrument of monetary policy by limiting the monetization of the fiscal deficit, on the one hand, and developing the market for Government securities, on the other. The Committee on the Financial System, 1992 (Chairman: Shri M. Narasimham) recommended that the statutory liquidity ratio should be used in conformity with the original intention of a prudential requirement rather than a source of financing the public sector.

**Progress in the 1990s**

The financial liberalization adopted in the 1990s with the overarching objective of reaping the benefits of competitive efficiency underscored the need to recast the monetary policy framework in tune with the increasing market orientation of the economy. This required, ipso facto, a shift from relatively direct instruments of monetary control such as reserve requirements and credit controls to indirect instruments such as OMOs, which could work in consonance with the process of price discovery.

Liquidity expansion/contraction through OMOs was envisaged as an integral element of RBI's monetary policy dispensation. The stage for OMOs was set by allowing the Discount and Finance House of India to deal in dated Government securities in April 1992 and issuing Government paper through the auction process in June 1992. The RBI created an Internal Debt Management Cell as an independent unit with effective from October 1, 1992. The RBI also decided to set up a new institution - the Securities Trading Corporation of India - dedicated to the development of a secondary market for Government securities.

**What is OMO?**

Open market operations are conducted by the RBI by way of sale or purchase of government securities (g-secs) to adjust money supply conditions. The central bank sells g-secs to suck out liquidity from the system and buys back g-secs to infuse liquidity into the system. These operations are often conducted on a day-to-day basis in a manner that balances inflation while helping banks continue to lend. The RBI uses OMO along with other monetary policy tools such as repo rate, cash reserve ratio and statutory liquidity ratio to adjust the quantum and price of money in the system.

**Why is it important?**

In India, liquidity conditions usually tighten during the second half of the financial year (mid-October onwards). This happens because the pace of government expenditure usually slows down, even as the onset of the festival season leads to a seasonal spike in currency demand. Moreover, activities of foreign institutional investors, advance tax payments, etc. also cause an ebb and flow of liquidity.

However, the RBI smoothens the availability of money through the year to make sure that liquidity conditions don’t impact the ideal level of interest rates it would like to maintain in the economy.

Liquidity management is also essential so that banks and their borrowers don’t face a cash crunch. The RBI buys g-secs if it thinks systemic liquidity needs a boost and offloads them if it wants to mop up excess money.

The cental bank’s signal that it will move to a ‘neutral’ liquidity stance from a ‘deficit’ stance, hints at more liquidity in the system in future. This could arm banks with more funds for lending, and lead to softer interest rates in the economy. This is good news for both businesses as well as individuals.

However, large open market purchases by the RBI can give the government a helping hand in its borrowing programme and are frowned upon for this reason. In April 2006, the RBI was barred from subscribing to primary bond issues of the government. This was done to put an end to the monetisation of debt by the Reserve Bank. However, that didn’t stop the process. With rising fiscal deficit, the RBI has been criticised for accommodating larger government debt by way of OMO. The RBI’s roadmap on OMO matters to you because liquidity has a bearing on both interest rates and inflation rates. The fact that the RBI wants to maintain ample liquidity in the system, hints that it is now less worried about inflation and is keen that banks should transmit lower rates to borrowers.

As banks have been citing tight liquidity as a key constraint to lowering lending rates, this is good news for your home loan, car loan and other EMIs.

**What are advantages of investing in Government Securities in OMO?**

The G-Secs are issued in form of interest-bearing dated securities which have:

- Zero risk of default
- Fixed rate of interest
- Fixed maturity period
- Carry half-yearly interest payments
- Issued at face value
- No TDS reduction on interest payment

**How purchase and sale of Government Securities under OMO benefit the investors?**

The price of government securities are usually linked to the existing rate of interest. If the rate of Interest rises, price of government securities falls and vice-versa. Investors can get substantial profits when they buy securities when interest rates are high and sell securities at high prices when interest rate falls.

**Why should one invest in Government Securities?**

- Investing in Government Securities provides return in form of interest
- G-Secs offer maximum safety
- They can be retained in book entry, thus, preventing the need of safekeeping and can also be held in physical form
- They can be sold in secondary market easily to meet cash requirement
- They can be used as collateral for borrowing funds in repo market

**Open Market Operations and the Government Securities Market**

The ability of the RBI to deploy OMO as a tool of monetary management in the 1990s was sharpened by the parallel development of the Government securities market and marketisation of debt management. With the switchover to borrowings by the Government at market-related interest rates through the auction system in 1992, the reduction in statutory liquidity requirements (SLR) to the statutory minimum of 25.0 per cent in October 1997 and the abolition of automatic monetisation by the replacement of ad hoc Treasury Bills by a system of Ways and Means Advances effective April 1997, it was possible to move towards greater market orientation in Government securities.

The RBI moved from a regime of de facto 'privately fixed private placements' (the pre-1992 period of ad hoc Treasury Bills) to 'market-driven private placements'.

**Table 1: Operating Procedures of Liquidity Management: Major Paradigms**

| **Central Bank/Country** | **Operating Target** | **Dissemination of estimate of Liquidity Forecast** | **Instruments** | **Frequency of Market Operations** | **Eligible Counter parties** | **Eligible Collateral** |
|---|---|---|---|---|---|---|
| **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| European Central Bank | No official operating target | Weekly | OMO, repos, marginal lending facility and deposit facility | One per week plus an additional one per month, on regular basis | Credit institutions meeting certain operational requirements | Both marketable And non-marketable private and public instruments |
| Japan | Current account balances | Daily | OMO, repos, complementary lending facility | More than one per day | Major players in the market | Both private And public instruments |
| USA | Federal funds rate | Daily | Discount rate, OMO, repos, changes in required reserve ratios (rarely used) | Typically one per day | Primary dealers | Direct obligations of the government or those fully guaranteed by federal government agencies. |
| India | No official target | No | OMO, repos, CRR, Bank | Repo daily, outright | Banks & PDs in the LAF, | Only Central Government |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | Rate, reverse repo rate | transactions need based | otherwise no restrictions | papers accepted so far |

Within the latter phase, the emphasis was on taking private placements with a view to offloading in the market when liquidity conditions stabilize. In more recent years, however, primary acquisitions through private placements have been 'warehoused' to smoothen volatility. This indicates that marketisation of Government's borrowing programme is nearly complete. These measures have significantly empowered the conduct of monetary policy. Further reforms in the Government securities markets have resulted in the rationalization of the Treasury Bills market, increase in instruments and participants, elongation of the maturity profile, creation of greater fungibility in the secondary market, institution of a system of Delivery versus Payment (1995), strengthening of the institutional framework through primary dealers (1996) and more recently, the creation of the Negotiated Dealing System (NDS) (2002) and the Clearing Corporation of India Limited (CCIL) (2002) and enhanced transparency in market operations. Clarity in the regulatory framework has also been established with the Notification under the Securities Contract Regulation Act (2000).

Further developments in the Government securities market hinge on the legislative changes consistent with modern technology and market practices, especially with the institution of the Real Time Gross Settlement System, integration of payment and settlement systems for Government securities and standardization of practices with regard to manner of quotes, conclusion of deals and code of best practices for repo transactions. More money in the markets is welcome. But it is important that open market operations are in sync with the stated monetary policy.

## Conclusion

Need for reorienting OMO arises from the fact that the integration of financial market segments is far from complete. Financial sector reforms undertaken since 1992-93 have brought in greater operational autonomy for banks and non-bank financial institutions, freeing of interest rates, introduction of financial innovations in various markets, development of new segments and opening up of the economy through a cumulative process of liberalisation of the exchange and payments regime and underlying policies for current and capital flows. Indian financial markets, however, continue to be characterised by segmentation in terms of maturity, liquidity and risk, asymmetric integration and lack of depth.

Even within the Government securities market, integration across tenor is as yet. Pressures of surplus liquidity, in particular, have often ended up distorting the yield curve. The narrowing of yield spreads in the 2-year to 10-year residual maturity segment (from 183 basis points to 63 basis points) and in the 10-year to 20-year segment (from 95 basis points to 77 basis points) during September 2001 to May 2020 made the yield curve in India one of the flattest internationally then.

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