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A SURVEY OF LITERATURE: MONETARY POLICY TRANSMISSION MECHANISM IN INDIA

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ABSTRACT

The literature review is significant in understanding the past evolution and the current state of knowledge regarding the given discipline or subject. However, every research article published by anyone contains certain part of literature review concerned with their respective area of study. The main aim the study is to provide the comprehensive review of literature regarding monetary policy transmission mechanism in India. For this purpose, the paper will be reviewed on the basis of four parameters i.e., variables used, theoretical models used for estimation, methodology and tools used and findings of the study

Keywords: Monetary Policy, Monetary Transmission Mechanism, Money Supply, Inflation etc

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1. INTRODUCTION

The overall complexity of the monetary and financial system has increased domestically as well as globally in the recent times. The growing integration with the world and the economic reforms leading to liberal and global economic environment had compelled the financial and money market to innovate new instruments. Along with the growing technological advancement the individuals that acts as intermediate have reached the new degree of sophistication. As we all know Reserve Bank of India (RBI) was established through RBI Act, 1935 to act as the central bank of the country to dispose of its developmental and regulatory responsibilities. Since its establishment the Reserve Bank of India is delivering its obligations as the monetary authority of India by formulating the monetary policy as per the economic conditions of the country. The monetary policy of a country can be defined as the resolution of the Reserve Bank of India regarding its monetary instruments towards the achievement of its objectives as central bank of the country. On the

other hand, the transmission mechanism of the monetary policy is the process through which the above resolutions regarding monetary policy of the country are being implemented and influence of the same is being realized. The literature review is significant in understanding the past evolution and the current state of knowledge regarding the given discipline or subject. However, every research article published by anyone contains certain part of literature review concerned with their respective area of study. The main aim the study is to provide the comprehensive review of literature regarding monetary policy transmission mechanism in India. For this purpose, the paper will be reviewed on the basis of four parameters i.e., variables used, theoretical models used for estimation, methodology and tools used and findings of the study.

Most of the studies suggest that monetary policy has short term effect on economy. However, there is disagreement on the effect of monetary transmission mechanism on output and inflation. Many theoretical studies have been undertaken in the recent years on the method by which monetary actions are being transmitted.

1.1. GENERAL LITERATURE

The Bernanke and Blinder (1992) used the vector autoregressive model and Granger Causality methods for determining the association among interest rate and federal funds rate and how they affect transmission mechanism. They concluded that the federal funds rate was an important determinant of the monetary transmission mechanism and its effect is partially transmitted through bank loans and partially trough bank deposits.

According to Cover (1992), in USA, the tight monetary policy had more significant effect on output relative to the loose monetary policy as it has been suggested by empirical study undertaken using ordinary least square method.

The study by Ramey (1993) used the Granger Causality and Cointegration technique for studying the significance of the credit channel regarding transmission mechanism and found that the credit channel is insignificant in transmission of monetary policy.

Bernanke and Gertler (1995) used the Vector Autoregression Model for the first time to undertake the empirical work analysing the effectiveness of the monetary policy through the credit channel.

The work by Mishkin (1995) explained monetary transmission mechanisms channels and concluded the importance of understanding the mechanism of monetary policy transmission for the formulation of policy decision in this regard.

Taylor (1995) used the financial cost model to reevaluate the impact of transmission mechanism on real GDP and price at the Scientific Conference on Transmission Mechanism (Symposium on "The Monetary Policy Transmission"). The results demonstrated that the traditional interest rate channel is the most significant channel.

Another work by Mishkin (1996) concluded that the understanding transmission mechanism helped policymakers in general and banks (central banks) in particular to conduct the monetary policy in best possible way for achieving its goals and correcting the mistakes that had been committed in the past.

The study by Clarida, et al, (2000) revealed that increase in the sensitivity of the monetary policy to changes in inflation and output which may lead to longer macroeconomic stability in the country.

As per the findings of Morsink and Bayoumi's (2001) study, the minimum limitations on the impact of monetary shocks on the economy by utilizing the VAR methodology can be imposed. There is a clear benefit to employing the VAR technique, which eliminates the simultaneity issue between monetary policy and macroeconomic variables and the dependency of economic variables on monetary policy, given disagreement over working of the monetary transmission mechanism

The Mishkin (2001) demonstrated that transmission mechanism involves more than just interest rates. It found asset prices are also significant components as well as targeting asset prices is also likely to weaken the respect for central bank's independence because central banks are unable to manage these asset values.

Smets and Wouters (2002) have demonstrated as to how monetary shocks via interest rate changes impact investment, consumption, and output in the Eurozone.

According to Angeloni et al. (2003), the interest rate channel is the primary mechanism of transmission in many European nations and the most significant channel in many of these nations. The various credit and financial channels might be unable to express their roles in the economies where interest rates do not play a dominant role.

The Arestis and Sawyer (2006) realized that the drastic change in the approach of monetary policy during the recent decades as this new approach gives more emphasis on interest rate and ignores the money supply as the target and instruments. It concluded that the main objective of monetary stance is to control components of aggregate expenditure and consequently the inflation.

According to Chong et al., (2006) all economic sectors experience monetary transmission at different rates. It found that the effects of tight monetary policy take longer time to manifest than those of expansionary monetary policy.

The work of Kleimeier and Sander (2006) studied the effectiveness of transmission mechanism by differentiating between the anticipated and unanticipated monetary policy shocks. The result of the above study showed that the transmission mechanism works better if the changes in the interest rate can be predicted with substantial accuracy.

The Raghavan and Silvapulle (2007) employed the structural vector autoregressive model for determining monetary transmission in Malaysian economy and it has undergone the dramatic change in the post-crisis period which means that during the pre-crisis period, the monetary policy was more effective in influencing the output, prices, interest rate and enhance during post-crisis period any monetary stock has the significant impact.

According to research by Boivin et al. (2010), investment is impacted by the conventional channel, which is the interest rate channel.

According to Taylor and Williams (2010), the basic interest rate rule continues to be effective in implementing monetary policy. They found that more research is necessary to take in to account the many economic contexts and models that exist around the globe, particularly the global link in monetary policy.

A comparative study which was undertaken by Acosta-Ormaechea and Coble (2011) concluded that in the economies which have well established inflation targeting regimes like Chile and New Zealand, the interest rate channel is more effective whereas the countries like Peru and Uruguay which were new to inflation targeting regimes still have exchange rate channel as dominant.

The Endut et al., (2015) used the structural vector autoregressive model for analysing the relative significance of the monetary policy transmission channels in United States. The result of their study showed that the credit channel had higher significance as compared to the monetary channel before 1970s and that the monetary channel resumed more importance than the credit channel after 1970s.

The work by Fu and Liu (2015), found that the monetary and credit channels of monetary policy were the main determinants of the adjustment in the corporate investment. They observed that the speed of the adjustment was higher during loose monetary stance relative to tight monetary policy.

The study of Choi et al., (2023) examined the varied effect of transmission mechanism using industry specific data. The study revealed that the credit channel, interest rate channel has the larger effect on output relative to the other channels of transmission mechanism.

2. STUDIES SPECIFICALLY FOR INDIA

Ray et al., (1998) showed the justification for re- opening of transmission channels by providing evidence that the interest rates and exchange rates became more relevant in post-reform period for implementation of the monetary policy. They found that in the post-reform period, the interest rate and the exchange rates fluctuations were endogenously associated.

Several researches investigated the monetary transmission mechanism problem for India. Few studies supported both the bank credit and interest rate channels, with majority of studies supporting the former (Aleem, 2010; Das, 2015) or the latter (Singh and Kaliranjan, 2006; Kapur and Behera, 2012, Bhoi et al., 2017).

According to Kannan et al., (2001) the interest rate, exchange rate and credit are just a few of the channels through which monetary policy is communicated in India. They found that by combining the influence of these channels, the MCI could provide more information and could be able to explain in a better manner as to how monetary policy responds to actual economic events.

Nachane and Lakshmi (2002) examined influence of monetary stabce on output and prices in India using Granger's Causal lags and causal coherency concepts. They found that in general, narrow money (M1) and broad money (M3) appear to be performing drastically different roles in the Indian setting as broad money (M3) influences prices and modifies output while narrow money (M1) influences output and modifies prices.

According to Singh and Kalirajan (2003), who used the Granger Causality to test and analyse the Reserve Bank of India's monetary policy transmission effectiveness on the final targets and suggested that Reserve Bank of India should concentrate on using price base instruments and not on the quantity-based instruments like cash reserve ratio (CRR) and Statutory Liquidity Ratio (SLR).

AL - Mashat (2003) supported the idea that transmission mechanism was operated through the interest rate as well as exchange rate channel in India using quarterly data from 1980 to 2002 using a Structural Vector Autoregression (SVAR) framework.

The RBI (2004) concluded that output and inflation were significantly and negatively impacted by a bank rate shock.

According to Pandit et al., (2006), there is a bank lending channel, however small banks were more negatively impacted than major banks.

A study by Singh and Kalirajan (2007) used the cointegrated vector autoregression with generalised restrictions to determine impact of interest rate channel during post-reform period. Their results showed that interest rate channel was dominant channel in understanding the long-run and short-run dynamics of the monetary transmission in India.

The study of Ghose (2009) used the vector autoregression model to examine monetary policy transmission mechanism on the Indian industrial sector. They concluded that the response of an industry varies across the industries based on their size and working capital employed.

According to Mitra et al., (2010), in low-income economies, the credit channel (bank lending channel) plays a more important role in monetary transmission due to lack of development in financial sector. They realized transmission of monetary policy from bank (central bank) to the final targets, are sometimes inadequate and unpredictable due to institutional limitations and concentration of banking system.

Bhaumik et al., (2010) provided support for the bank lending channel and noted that it performed better during a period of tight monetary policy than during an era of easy monetary policy, based on bank data from 2000 to 2007.

According to Patra and Kapur (2010), the interest rate effects the inflation with the lag of seven quarters whereas the aggregate demand and output is being affected after three quarters. They argued that Indian economy is progressively becoming more integrated with the global economy and undergoing substantial structural changes, which have continuous effect on monetary transmission.

A Study by Dhal (2011) used vector autoregression model for analysis of the monetary policy effect on use-based industries and argued contractionary monetary policy effects output in the economy through capital goods and consumer durables than any other industry.

The work by Singh (2011) used the vector autoregressive model for estimating the asymmetries in the monetary transmission to the financial market in India. The study found that there exist the strong asymmetries in the transmission of monetary policy to the financial market as is shown by the existence of transmission lags and hence appropriate liquidity management is significant for improving the transmission mechanism.

Pandit and Vashisht (2011) demonstrated the credit channel for India and other developing market economies using a panel regression approach.

Bhattacharya et al., (2011) discovered that monetary transmission in India had a weak rate of interest channel and a significant exchange rate channel. On the other hand, Khundrakpam and Jain (2012) found weak evidence for exchange rate channel along with strong evidence for the interest rate, credit, and asset price channels when using the SVAR framework for the period 1996: Q1 to 2011: Q1.

Khundrakpam (2012) used the structural vector autoregressive model on quarterly data from 2000 Q1 to 2011Q1 for analysing the influence of monetary policy on consumption and investment (aggregate demand) and argued that the growth of aggregated demand was being adversely affected by any increase in the interest rate and the interest rate channel plays more significant role in the monetary policy transmission as compared to the exchange rate channel.

The study of Sengupta (2014) used the vector autoregression technique to analyze the significance of the different channels of the monetary transmission and found that the bank lending channel was still a significant route for communicating the monetary stance in India.

A work of John et al., (2018), found that India's monetary policy transmission is negatively imposed by the declining asset quality of banking system in India.

According to Benerjee et al., (2018), there was poor and sluggish transmission via bank lending and interest rate channels.

The study by Dua (2020) had explained the monetary policy framework and different channels of transmission mechanism in India. Above study tried to explain the evolution and limitations of the monetary transmission process since the inception of monetary policy committee.

Chakravarty (2021) studied monetary transmission in financial market in India using vector autoregressive approach. The above study showed monetary policy transmission is faster in money market as compared to the instruments of long maturity and the policy rates has adverse effect on the Sensex of the country.

The Chattopadhyay and Mitra (2023) used the dynamic panel data regression to study the monetary policy transmission in India under base rate and marginal cost lending rate and found monetary policy transmission was much higher during the MCLR regime as compared to base rate system.

3. CONCLUSION

With the use of Sims's (1980) Vector Autoregression (VAR) model, monetary policy analysis framework has gained significant popularity since 1990. The most of the early researches in the global literature have used aggregate time series data to look at the transmission of monetary policy. For the past thirty years or so, many researches have frequently used data at the individual bank level to assess the impact of bank-specific features and to evaluate the efficacy of different monetary transmission methods. However, regarding the methodology employed for the estimation of effect of monetary policy transmission mechanism, the most of the work employed the vector autorepression model. The main reason behind this was that in case of multivariate time series analysis all the variables can be studied systematically through the vector autoregression modelling.

CONFLICT OF INTERESTS

None.

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