

## Monetary policy and exchange rate pass-through in India

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**Abstract.** *The paper tests the causality between monetary policy and exchange rate based on data from 1991 onwards as that was when India opened up the economy. According to theory, interest rates are inversely related to exchange rates with the main linkage between them being capital flows. External debt also has considerable effects. The paper uses trend-line and regression analysis to test the impact of various regressors on the dependent variable exchange rate. The paper finds that the monetary policy is not as effective as theory would suggest in its ability to control the exchange rate and that the pass-through from repo rate to exchange rate is not complete. The paper provides suggestions for improving the linkage or pass-through as well as suggest usage of other policies in tandem with monetary policy of RBI for India to achieve the economic objectives for long-term growth as well as tackling potential short-term crises.*

**Keywords:** monetary policy, exchange rate, capital, interest rate.

**JEL Classification:** E52, E43, F31.

## 1. Introduction

Monetary Policy, as we know, is central bank's directives to manage the money supply through its various communications and policies which in turn influence the shape of the economy. There are various tools at the disposal of the Central Bank to influence the Monetary Policy such as interest rates, bank reserve requirements, and the amount of government bonds that banks must hold and such more. The objective of the monetary policy can be set too many things, such as inflation targeting or reducing unemployment and so on. Given the particular objectives, a country's central bank can either pursue a contractionary or an expansionary monetary policy.

However, the monetary policy transmission may not always be effective and lead to the policy objective as desired by the central bank of a country. The process through which general prices, output and the economy as a whole is impacted by a change in the stance of monetary policy by a central bank is referred to as monetary policy transmission. An example of the monetary transmission in India is, let us suppose that the RBI wants to conduct an expansionary monetary policy, in that case, it would lower the interest rates which would boost investment in the economy as the RBI will be able to lend more to commercial banks as interest rates are less and so the commercial banks will be able to pass these benefits on to their consumers which reduces the cost of borrowing which stimulates credit in the economy and thereby, aggregate demand and increase the output. If the public is able to realize the benefits of RBI cutting the interest rate and are able to borrow cheaply then monetary transmission is considered to be effective. The decision of the monetary policy is supposed to effect things such as aggregate demand, price level, the exchange rate and so on. However, this may not always be the case as sometimes the pass-through levels are not up-to the mark.

A lot of economists have in fact argued that monetary policy is incapable of fulfilling the objectives it sets out to achieve. There is a huge outcry amongst economists over the conduct of monetary policy and many new theories are coming out which suggest that fiscal policy is more capable of having the desirable impact on the economy. These views imply the need for studies to be conducted which test the effectiveness of the monetary policy so that other aspects such as effectiveness of fiscal policy can be given a look at. A lot of economists in India as well are suggesting that fiscal policy needs to be more proactive than it is and that the government should not set itself arbitrary fiscal deficit numbers and instead should focus on achieving the policy objectives which the monetary policy is unable to.

Keeping the above context in mind, it is also of common knowledge that emerging economies suffer from incomplete pass through (Bhattacharya, 2011) whether it be interest rate pass through or exchange rate pass through. India is no different when it comes to this as it is one of the leading emerging economies of the world and is growing at a faster rate than most of the other countries. However, it encounters several problems such as unemployment and increasing levels of debt which needs tackling and sorting out.

We have seen over the past few years itself that the Reserve Bank of India, which is vested with the powers to control the monetary policy in India, has continuously been dropping

rates in an effort to boost India's economy which in itself plants the seeds of doubt over the effectiveness of these particular changes in the interest rate on the economy.

Now the objectives of the Reserve Bank of India are obviously one, to keep a check on inflation levels whilst stimulating growth and also to control the exchange rate of the economy. Especially in a developing country like India, it is imperative to have a check on the exchange rate levels. An exchange rate too high can result in high devaluation of the currency which may raise inflation and imports might take a hit or an exchange rate too low can cause a large fall in export which stagnates the economy. Thus, it is crucial for the RBI to control the exchange rate of the country via its monetary policy. Higher interest rates ideally increase the value of the currency and decreases the exchange rate. Conversely, lower interest rate decreases the currency's relative value as it is unattractive for foreign investment which increases the exchange rate. As we are aware, India follows a managed floating exchange rate system which means that the exchange rate is decided by market factors but only up-to a certain range, beyond which the RBI tries to intervene. The effectiveness, timeliness of the RBI policy is of extreme importance especially given the amount of people who rely on the exchange rates as India is a developing country vastly reliant on trading. Thus, it is important to test for the causality and effectiveness of the interest rate on the exchange rate especially in the Indian context.

There is a need for a study focusing on the effectiveness of the monetary policy to control the exchange rate especially in an emerging economy like India. Over the past 20 years, an effective link may be established over interest rate and exchange rate and the impact of various other variables on this channel may also be looked at. The effectiveness of monetary policy has always been in question and through this study that particular query can be answered in context of its relationship with exchange rate. Finding out the causality between monetary policy and exchange rate can help provide insights into some important questions like how can the RBI effectively use the interest rate to control the exchange rate. If the impact of interest rate on exchange rate is weak, what are the underlying factors causing the above phenomenon? What can be done to improve the link between interest rate and exchange rate so as to give the RBI a more effective control?

In this context, the present study challenges to analyse the linkage between monetary policy and exchange rate, especially in the context of RBI's policy effectiveness. Also the study tries to assess possible policy measures and suggestions to improve the linkage between RBI's policy rate and exchange rate in India.

## 2. Literature review

Literature in this field more often than not ends up coming to the conclusion that the pass-through is incomplete in India. However, the way they arrive at the conclusion is vastly different and provides one with the knowledge of the existing theory whilst with the understanding that there are numerous different avenues that one can take to test the monetary transmission in India. Pattanaik et al. (2008) examined the effectiveness of an increase in interest rate to impact and defend the exchange rate. In India, in times of extreme pressure on the external value of the rupee, the Reserve Bank of India has traditionally had

a propensity to opt for high interest rates. In its analysis, the paper found that the exchange rate could not be impacted well enough in the long run showing a degree of ineffectiveness of the interest rate's impact on the exchange rate. Capital flows also seemed to have a considerable impact on the channel between interest rate and exchange rate (Chakraborty, 2006). For the years 1993 to 2003, the researcher used quarterly data showing that net capital inflows moved up and down over the years and did not show a pattern as such. The paper also analysed how capital inflows have been trending in India since 1993 to adjustments in the multiple variables especially the real exchange rate. Capital inflows, exchange rate and interest rate all seemed to have a connected relationship. Since it was real exchange rate, inflation too was accounted for. The paper argued that the Reserve Bank of India's intervention had caused co-movement in these variables which reduced the dependency of the exchange rate on the amount of flows of capital which was an interesting insight. The influence of the aforementioned variables showcases the need for the inclusion of these variables when testing monetary policy and exchange rate pass-through in India. A lot of Indian studies regarding this topic take inspiration from the following foreign literatures.

Firstly, Ito et al. (2008) assessed the exchange rate magnitude effect through a sample size consisting of emerging economies and countries in East Asia. It is said that there has been endogeneity of the exchange rate and monetary policy instruments. There is a greater change in import prices than in domestic prices in the countries of East Asia. In contrast to many literatures, Zorzi et al. (2005) conducted a study in which impact of interest rate shocks were taken into account on exchange rate and it was found that a larger pass through existed for emerging markets than in developed countries. This contrast again provides a justification for the need to test for the pass-through in the setting of an emerging economy that this paper aims to do.

In the current scenario existing in the world where we are in a global recession it is also of significance to view the impact of monetary policy after a crisis. Goldfajn et al. (2003) talked about the ability to which monetary policy could stabilize exchange rate especially in the immediate aftermath of a currency crisis. In this context, it focuses on each country which has experienced such a crisis and inferred that potent monetary policy increased the probability of reversing a postcrisis currency undervaluation that an economy might be experiencing and that a tight monetary policy is effective as it reverses the process through normal and graduation appreciation of the home currency.

Since, in this paper we are looking at the Indian context, it is imperative to glance upon studies revolving around south Asian countries. Yunus (2001) investigated the impact or influence of monetary policy on the determination of exchange rate in the South Asian countries. It employs the Johansen cointegration model to test for cointegration. He found that there was a long run relationship between the monetary policy and exchange rate, however monetary policy by itself did not completely determine the exchange rate process and used the cointegrating vectors from the models coupled with ADF tests to reach upon this conclusion in his analysis. Along the same lines, Khan et al. (2016) examined the monetary policy conduct of various south East Asian economies. The paper found that the main objectives for monetary policy in these countries was to control for inflationary

expectations. Many countries especially India with the exclusion of Bangladesh were found to have used the monetary policy stance to also affect the real exchange rate. Foreign interest rates also played an active role in dictating the monetary policy stance of the aforementioned countries.

Coming back to India based literature reviews, D'Souza (2003) investigated the current objectives being pursued by monetary policy which included stabilizing the foreign capital flows by using open market operations. There was also the intention to directly impact the foreign exchange market by attacking the exchange rates so as to allow better integration of India into the world economy. Money supply targets also needed to be revised as import tariffs were reduced and downward price rigidity was present. Samantaraya (2009) developed a unique indicator to gather the exact stance of India's monetary policy in the post-reform era. Monetary aggregates or policy rates were deemed not to be enough to determine a particular stance. The index created gives the impact of monetary policy on many variables of macroeconomics such as interest rate, bank's interest, inflation and output growth and so on. There was instant impact on interest rates with lags on output and inflation which would be expected normally as transmission takes a certain time as well as the degree of pass-through matters as well. Thus, this paper provides a good overview of various economic variables to consider when dealing with monetary policy and exchange rate.

It is also of importance to understand literature which dealt with the impact of monetary policy on exchange rate in the context of India getting liberalized in 1991 such as Hutchinson et al. (2010) that discussed the impact of RBI's monetary policy conduct pre and post liberalization. The paper aimed at ascertaining whether a discretionary monetary policy by the RBI was plausible to be estimated by the normative monetary policy equations like the Taylor's rule and found that output of the economy seemed to be more of a policy objective for the RBI rather than inflation or exchange rates and so on. Ray et al. (1998) analysed the role of the two variables most integral to the study namely the interest rate and exchange rate. The methodology used by the paper is an OLS regression but the fully modified cointegration version of it. A long run relationship between these two variables coupled with price and output is executed and it is deemed that the two variables were endogenously determined by the central bank in the pre-liberalization era and that with the advent of new reforms of 1991, a change in the transmission of monetary policy was to be expected

Now, Bhattacharya et al. (2011) investigated the significance of monetary policy through interest rate pass through into various channels. As has been documented throughout, developing economies have weak financial structures and in the case of India, a large informal sector is present along with it which results in reducing the effects of monetary policy transmission. How so ever, a relatively more complete pass-through of exchange rate was seen to be prevalent. The paper examined the interest rate pass through as well as the exchange rate pass through in an attempt to find the most effective monetary policy transmission. The paper finds that in India, the most influential way of conducting monetary policy is by controlling exchange rate which controls inflation and other economic variables showing definite linkage of the two factors.

Thus, the literatures for the combined study of interest rate and exchange rate largely show a relatively incomplete linkage for emerging economies. There is also considerable impact of capital flows along with inflation in relation with these two variables after review of various pieces of literature.

The importance of a research between interest rate and exchange rate is undoubtedly high especially in a country like India as such studies can help the RBI effectively control a massive parameter such as the exchange rate through the monetary tools at its disposal. Theoretically speaking, higher interest rates should lead to lower exchange rates and vice versa. The model can follow a route such as the RBI increasing interest rate which would increase the capital (portfolio and other kind) which would then increase the value of India's currency which would then decrease exchange rate.

Now the question of whether such an outcome can actually occur in a country like India will be seen later in the paper. The review of literature tells us that India has had incomplete pass through whether it be of interest rate or exchange rate. Though, interest rate pass through is considerably weaker in India (Ansari, 2014). Thus, one could say that the expected outcome of the model would be that there is a weak linkage between interest rate and exchange rate. The addition of variables such as inflation and debt could show us their degree of impact in the process of monetary policy transmission to the exchange rate.

### 3. Research methodology

This paper uses secondary data and attempts to complete a comprehensive quantitative analysis. Along with the regression analysis, a trend-line analysis between the exchange rate and repo rate will be conducted to establish a concrete relation between the two most prominent variables of the study the trend-line analysis, using the same model, is carried out through the software of Tableau. The regression analysis is carried out through the usage of the software E-views.

The variables used for the analysis are:

- Exchange rate – It is the *dependent* variable as we need to test the effectiveness of monetary policy for it.

The following variables are the *independent* variables in this analysis:

- Repo rate – It is naturally taken as this is the tool through which the RBI controls the interest rate and attempts to achieve its objectives via this rate. The data for repo rate is only from the year 2000 onwards. Therefore, for the years 1991-2000 bank rate numbers are used as proxy for the repo rate.
- Inflation – The level of correlation as we are aware between exchange rate and inflation is very significant. The proxy used for inflation is WPI i.e. the wholesale price index and averages are calculated to obtain data for an annual basis.
- External Debt – The degree of impact external debt has will be a significant factor as the rate of exchange rate always gets impacted by the degree of government debt and repayments over the years.

- Capital Flows – As mentioned an increase in interest rate by RBI should increase capital inflows which in turn influences the exchange rate. The proxy for capital flows used is the foreign capital inflow for each year as that gives an idea of the trend of capital inflows for the sample size taken.

The model used for the analysis of the dependent and the independent variable is the Dynamic Ordinary Least Square model as this model is more effective than the normal OLS and FMOLS as it takes into account the leads and lags in the model. It is less biased than the other two models.

The model equation of the DOLS is given below

$$y_t = X_t' \beta + D_{1t}' \gamma_1 + \sum_{j=-q}^r \Delta X_{t+j}' \delta + v_{1t}$$

$y_t$  is the dependent variable and  $X_t$  in the above is the explanatory variable or the independent variable. In our study, as discussed above we have four explanatory variables. The lags and leads,  $q$  and  $r$ , are used to nullify the long-term correlation and also make the stochastic error term independent of the regressors in the model and hence the term summation of change in  $X_t$  augments the cointegrating regression using the leads and lags.

Based on the literature review, the cointegration test used will be the Johanssen- Julius Cointegration model. Along with the cointegration test, a unit root test will also be performed which is the Augmented Dickey-Fuller test which is one of the most popular unit root tests and allows for a higher order autoregressive model and tells us whether the equation is a 'spurious regression'. Using the dynamic OLS model is a new take on this very widely studied topic.

### 3.1. Period of study and sources of data

The data sample is for the years 1991 to 2019 as taking this sample provides a period lengthy enough to run an authentic regression analysis. The data is collected from The Reserve Bank of India's database for the given period of study and changes are made to the data at hand wherever deemed necessary in accordance to the regression equation.

## 4. Empirical results

The significance of the year 1991 when it comes to India can be easily contextualized. This was the year when India officially opened up its economy. Though India had shown tendencies of an open economy or a pro-business economy in the 80's as well, the official turnaround was in 1991 only under the guidance of Dr. Narsimha Rao and Dr. Manmohan Singh. Since this paper aims to test the relation and causation of monetary policy and exchange rate, it makes sense to take data from 1991 onwards only as that was when exchange rate came into prominence naturally. The coefficient observed from running the regression model will let us know the degree of effectiveness of changes in the monetary policy on the exchange rate and provide us with imperative insights on the effectiveness of

monetary policy and whether some policy changes are required or not especially considering the recent slowdown prevalent in the economy of India.

After performing the Augmented Dickey Fuller test using the AIC (Alkaine Information Criteria) on all the variables in the model, it was found that all of them were stationary

**Table 1.** Results from ADF test tabulated

Variable	T-stat	Probability
Exchange Rate	-4.76142	0.0007
Repo Rate	-4.028365	0.0049
External debt	-6.262509	0
WPI	-6.557076	0
Capital	-8.111367	0

**Source:** Computed.

The null hypothesis for each of these variables was the presence of a unit root and as can be ascertained from the t statistic scores as well as probability (all below 0.05) that the null hypothesis can be rejected for each of the above cases. The t statistic scores are less than the t critical scores at the 1%, 5% and 10% level which rejects the null hypothesis. Therefore, all the variables used to conduct the analysis are found to have stationarity.

**Table 2.** Results from cointegration test

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None*	0.697602	70.37438	69.81889	0.0451
At most 1	0.503128	38.08203	47.85613	0.2984
At most 2	0.329539	19.19763	29.79707	0.4788
At most 3	0.258175	8.403302	15.49471	0.4233
At most 4	0.012513	0.339981	3.841465	0.5598

\* Denotes rejection of the hypothesis at the 0.05 level.

\*\* MacKinnon-Haug-Michelis (1999) p-values.

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level.

**Source:** Computed.

**Table 3.** Results from cointegration test

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.697602	32.29234	33.87687	0.0763
At most 1	0.503128	18.88441	27.58434	0.4235
At most 2	0.329539	10.79432	21.13162	0.6678
At most 3	0.258175	8.063321	14.26460	0.3723
At most 4	0.012513	0.339981	3.841465	0.5598

\* Denotes rejection of the hypothesis at the 0.05 level.

\*\* MacKinnon-Haug-Michelis (1999) p-values.

Max-eigenvalue test indicates no cointegration at the 0.05 level.

**Source:** Computed.

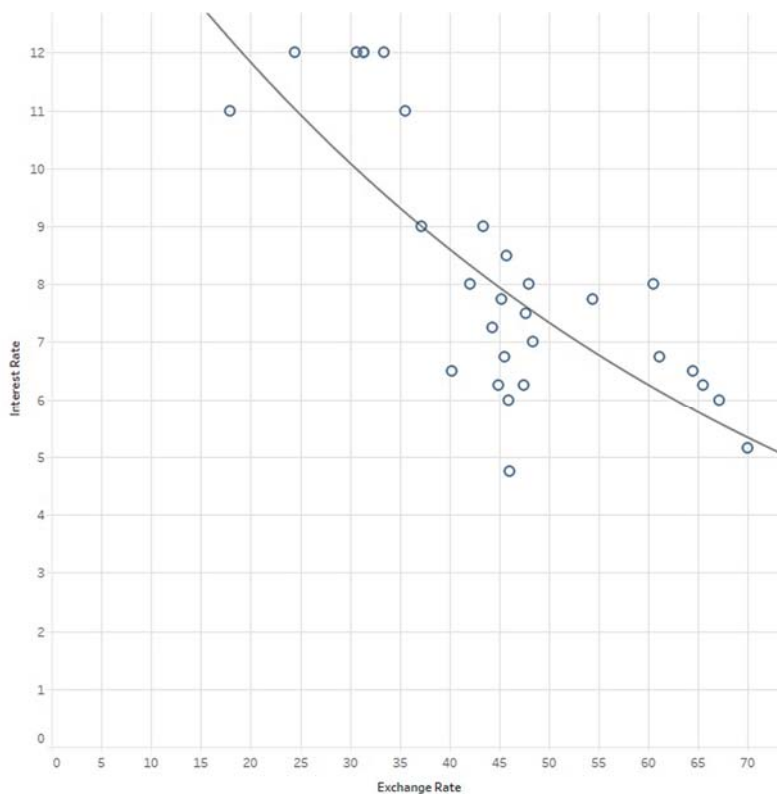
The Johanssen- Julius cointegration test was also performed using all the variables in the model, though the model this paper enlists corrects for any cointegration or endogeneity present in the variables. The cointegration results have shown that in the maximum



eigenvalue test no traces of cointegration was found. However, in the trace test it is seen that one co-integrating equation had been found at the 0.05 level which is in a way a positive aspect as the variables are of the same field but as has been mentioned already, the prevalent cointegration will be corrected by the model in application.

The trend line analysis performed between the two most pertinent variables in the paper i.e. interest rate and exchange rate provided interesting insights as can be seen from the illustration below

**Figure 1.** Trend line between exchange rate and repo rate



The trend-line analysis shows that there is an inverse relationship present between interest rate and exchange rate which exemplifies the basic theory that an increase in interest should decrease exchange rate and vice-versa. A linear trendline was not used as that would not have given the realistic picture. Using an exponential trendline signifies the relationship but at the same time shows that the pass-through is not as complete as it should be. However, a trendline is not a significant enough measure to conclude the relationship between the given variables which brings us to the results of the regression analysis which are as follows:

**Table 4.** Results from running DOLS regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
REPO_RATE	-0.455331	0.401708	-1.133488	0.2863
EXTERNAL_DEBT	0.000280	4.90E-05	5.723528	0.0003*
WPI	0.012203	0.020147	0.605694	0.5597
CAPITAL	-9.01E-05	3.06E-05	-2.943440	0.0164*
C	15.20599	7.326829	2.075385	0.0678
R-squared	0.991723	Mean dependent var.		46.43623
Adjusted R-squared	0.977007	S.D. dependent var.		10.49333
S.E. of regression	1.591140	Sum squared resid.		22.78553
Long-run variance	2.991012			

\* Significant at 5%.

Source: Computed.

The above results from the regression analysis show a very high R-square value which shows the goodness of fit for a regression model and the high value proves the capability and the appropriateness of the model in the sense of the ability of regressors to explain the changes in the dependent variable (exchange rate) collectively as a whole. The coefficients tell us the degree as to which exchange rate changes with a change in the independent variable. The signs associated with the variables are as expected according to the theory. The negative coefficient between repo rate and interest rate are as expected. Similarly, with capital (capital inflows) the negative sign is in accordance to the theory that higher capital inflows would lead to decrease in exchange rate due to appreciation in the domestic currency. As far as external debt and inflation is concerned, increase in WPI and external debt would cause a rise in exchange rate as they are factors that tend to induce depreciation in the home currency. However, the repo rate and WPI values are not significant even though the signs are in accordance. External debt and capital have significant coefficients at the 5% level implying that the p value obtained was less than 0.05 thereby making them significant.

The coefficients value obtained also paint an interesting picture. The -0.45-coefficient value implies that the pass-through effect from RBI's monetary policy to the exchange rate is incomplete and that there is scope for improvement. The really low value of capital implies that maybe the influx of foreign direct investment in influencing the exchange rate is not as significant as initially thought out to be or maybe the usage of foreign direct investment as proxy does not paint the reality of capital flows in India. The inflation rate influences the exchange rate more than India's external debt though both factors cannot be ignored in their role especially external debt which had a significant value. External debt directly impacts a country's forex reserves and thereby influences a country's ability to borrow and import which impacts the exchange rate. Thus, these are the observations and inferences drawn from the analysis conducted in the paper.

### Conclusion and policy suggestions

The extensive development of India's financial markets especially the domestic financial markets have resulted in the RBI relying more on the interest rate in comparison to any other policy tool to dictate India's monetary policy stance (Mohanty, 2012). Thus, it becomes imperative to study the effectiveness of the monetary policy transmission and in

this study, the transmission to the exchange rate. After the discussion and analysis done in the paper, it is sufficing to say that there exists a linkage between the interest rate and exchange rate. The direct trend line analysis and regression analysis shows there is a definite correlation between the two variables and as theory suggests, causation to go along with it as well.

However, as seen in the paper the degree of pass-through of the monetary policy conducted by the RBI to the exchange rate is not as complete as one would imagine. There seems to be a certain amount of inefficiency when it comes to the ability of RBI to impact the exchange rate. In fact, a less than half change is seen in the exchange rate with a change in interest rate. Now, there could be several underlying factors that could cause this discrepancy. One of them could be a result of the amount of forex reserves in the country. In recent years, the RBI has taken large amount of short-term foreign debt which as of now amounts to 57% of forex reserves (Source: RBI) with the RBI which proves that the foreign reserves at hand are depleting continuously with the result being a bleak future when we have to pay off the debt. This along with the external debt impacts the exchange rate separately and may counter the effect a change in interest rates will have. As we all know that in recent times, RBI has been continuously been cutting interest rates, now more so than ever, but its impact on exchange rate is not as well pronounced. Now a reduction in interest rates is considered to be expansionary monetary policy as it would be considered to boost investment in the economy and output but at the same time the amount of capital flows is impacted negatively which hampers the economy. Our current account deficit (CAD) is largely plugged by foreign international inflow and FDI with them constituting as much as 1% of our CAD (Source: CMIE) so a flight of capital means an increase in current account deficit which weakens India's position as an economy. Now a possibility of reduction in capital flight should decrease the value of currency and that in turn should increase exchange rate to help exporters in the economy but as analysis suggests that this pass through from interest rate to the exchange is not seen so it could be said that the monetary policy employed in the Indian context is quite ineffective much to the dismay of RBI. Review of literature suggests that the lag on effects of monetary policy is lesser than that of fiscal policy so in a crisis especially one we are experiencing now, monetary policy would have been quite effective to resolve the economic issues that are being experienced such as low output and GDP growth.

However, monetary policy is not very effective and that means maybe as a country, India should give a stronger look towards expansionary fiscal policy especially in the form of government spending and not be bogged down by a specific target number to maintain the fiscal deficit especially at a time when inflation is not at worrying levels. At the same time some measures that could be taken by the RBI to improve the effectiveness of monetary policy to the exchange rate would be to decrease the amount of debt burdened by the forex reserves as that acts as a deterrent to the capability of India to control the exchange rate by buying or selling the rupee and allows foreign circumstances to dictate the value of the exchange rate especially the US as the Indian rupee is held against the dollar. A high level of debt coupled with low reserves makes the exchange rate vulnerable to outside pressure and their demands. These pressures would only increase the current account deficit which is harmful for the economy.

The reason to ensure effective transmission of monetary policy to the exchange rate can be to use the interest rate to impact the exchange rate which in turn can control inflation in the economy. Hence on one side, monetary policy can be used to control inflation via the exchange rate as exchange rate pass-through to inflation is high according to a lot of studies and on the other side expansionary fiscal policy can be implemented to boost output and demand. Therefore, for both to work in tandem, it is imperative of RBI to improve its ability to control the movement of the exchange rate and not allow it to get influenced by external factors.

#### Limitations and scope for further research

There were limitations that were encountered during the conduct of the study. The most important being the fact that repo rate began only in the 2000 so bank rate had to be used as proxy for the years before which may have led to fluctuations in the results. Another inhibiting factor according to the results may have been the usage of foreign direct investment as proxy for capital inflows.

There is scope for further study as various other models can be implemented to prove the causation between the repo rate and exchange rate. A shorter period of study could be taken with focus on the fluctuations year by year which may give a better insight into the reasons behind the effectiveness/ineffectiveness of monetary policy. The current scenario where a pandemic has pushed the world into global recession opens up new avenues of studies to be conducted to see and test the effectiveness of the monetary policy amid this crisis and in the aftermath as well.

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