An Economic Evaluation of EUR/INR Exchange Rate: Autoregressive Distributed Lag (ARDL) approach

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Abstract
The behaviour of exchange rate has been an imperative issue in the international financial studies. In fact, exchange rate behaviour is highly inconsistent in short term, its long-term behaviour is believed to be guided by international economic fundamentals. Euro is the second largest currency used at world level for trade and for reserve purpose. Significance of the currency has been increasing year by year as the number of nations joining Euro zone kept on increasing. Here, the author had tried to check the prominent determinants of the currency pair EUR/INR. ARDL model had been applied on quarterly data of 17 years, to check the relationship between the regressor and the regressed. Monetary approach has been adopted by the author to check the determinants of the currency pair of EUR/INR. None of the variables were found to be statistically significant in determining the exchange rate. In earlier studies also, in many instances, monetary approach has failed to show any relevance, which is theoretically very appealing. In this paper no long-run and short-run relationship was observed between the macroeconomic variables and the exchange rate.

JEL Code: E01, E42, E52, F4, F47
Keywords: Monetary Policy, ARDL, Money Exchange Rate, EUR/INR

I. Introduction
UNCOVERING THE PROMINENT determinants of exchange rate has always been a challenge for academicians and market participants. There are many theoretical models developed at international level to analyse the determinants of exchange rate. Till 1970 models assumed of fixed price, with the collapse of Bretton wood monetary system, Jamaica agreement was adopted as international agreement by majority of the countries. Exchange rate were allowed to float, and rates were determined by the flow of respective currency. Flexible-price monetary model was tested and found to be significant in predicting the exchange rate. Frenkel (1976), Mussa (1976; 1979), (Nwafor, 2006) and other have contributed to systematically developing and testing the theory of Flexible-price monetary model. In later

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and monetary steps. There are several occasions of RBI making buying and selling foreign currencies to normalise the movement of currency rate. Capital inflow and outflow is also playing a vital role in exchange rate determination, in the recent past there has been a big surge in the capital flow in India, the flow is volatile and sentimental in nature. To sterilise the impact, RBI is taking corrective measures. In this paper, impact of RBI measures is not checked. Studies can be done on the RBI intervention into the currency pair of EUR/INR, probably the inclusive model could work better. For analysing the exchange rate, market microstructure can also be studied, where Indian rupees and Euros are traded. Indian forex market is decentralised and multiple dealers comprising of spot and derivative market are present in India.

In conclusion, monetary model is insufficient in determining the movement of EUR/INR currency pair, there is no linearity in the relationship. Variables suggested above (Central bank intervention, capital flow, market microstructure) can be included for further study. It is also possible that the behaviour of the currency movement is more consistent with the theory of random walk, a study can be done to check the form of efficiency reflected by the currency movement.

References


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Medeiros O. R. de, (2005), "Order Flow and Exchange Rate Dynamics in Brazil", Universidade de Brasília, Brazil, manuscript.


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OECD, (1983), "The Determinants of Exchange Rate Movements" (OECD Economics Department Working Papers No. 7 OECD, Paris, France


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