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1.0 Introduction

The study tried to explain the apparent reason for the difficulty to forecast exchange rate movements concerning the monetary model, the Mundell-Fleming model and the Dornbusch model and its extensions. The basic monetary model can well explain the fluctuation of limited short period exchange rate fluctuations only (Flood & Hodrick, 1984). For the longer term exchange rate fluctuations, we have depended on the other models like Mundell-Fleming model or Dornbusch model. Mundell –Flemming model follows the Keynesian era, and it is very useful for both fixed and floating exchange rates.

2.0 Description of these models and their usefulness to forecast exchange rate movements

The devaluation effect on the monetary model is increased competitiveness domestically, creating a temporary balance of the surplus resulting increase in reserve till devaluation rate equals money supply rate. Finally, the higher domestic rate with cheaper domestic currency with a competitive exchange rate backs balance of payment (León-Ledesma & Mihailov, 2011). If the authorities prevent money stock correction to its initial level by increasing domestically generated supply (DC), then sterilisation will be working only in the short run. The longer policy will sustain with greater credit component of the post-expansion money stock, and reserve backing will be small resulting fixed interest rate fall as speculators will sell the currency. Interest rates increase under floating exchange rates in the monetary model (Engel, n.d.).

The simple monetary model of a floating exchange rate is based on three assumptions, e.g. aggregate supply curve is vertical. It is still relevant for medium to long term forecasting. The demand for the money balances is a stable function of some macroeconomic factors. PPP is obtained at all times. If the money supply is increased from one level to another level, there is

the same effect will be observed in the aggregate demand for money. In this was PPP is preserved in the monetary model. The supply of money will increase floating interest rates. The exchange rate is measured at the foreign price level where in equilibrium supply of money stock will be same for the demand. Prediction of monetary model is that home currency will depreciate when the money stock increase or domestic real income decrease home or fall in foreign prices. Income and foreign price increases under floating exchange rate (Lam, et al., 2008).

In the M-F model, the pure floating exchange rate can be established only if the balance of payment is in equilibrium at all times. In this model proposition, the money supply can be increased when there is a depreciation of exchange rate happens, or there is the increase of income, or there is fall in interest rate under the certain portion of fixed capital, or if there is an improvement in the current account due to the balance of payment. For another proposition of M-F model for the fixed exchange rate, money supply increased for short run and long run for different reasons. In the short run, if the capital is not entirely mobile, there will be fall in interest rate, a rise in income, decline in the balance of payment irrespective of current or capital account. In the case of the long run, there will be a fall in the foreign currency reserve, and there will be no change of other parameters e.g. interest rate, income and balance of payments.

Most of the variation in the exchange rates cannot be explained by the commercial model, and M-F model as both of these models ignores the role of expectations. In monetary model monetary variables and prices are less volatile than the exchange rate. The flaws of the M-F model are that it only holds well in the short run for fixed prices and flow equilibrium. This was the need for evaluation of Dornbusch Model which is hybrid the two and includes expectations. Dornbusch Model rests on the idea that real market adjustment is slow

compared to very rapid financial market changes. Dornbusch Model includes short run properties of the Keynesian model and long-run properties of the monetary model (Bailliu & King, 2005).

Empirical observation shows that financial markets more rapidly adjust shocks compared to goods markets for overshooting. The liquidity effect for short run fixed rate prices, any nominal change in the money supply will change the real balances which require further interest rate adjustments for the money clearance. Prices are fully adjusted in the long run by the return of all real variables to their initial shock level with the exception is that nominal exchange rate at equilibrium level can be predicted by the Monetary model.

3.0 Discussions

The advantage of Mundell-Fleming model is that it allows the assessment of fiscal impact and the monetary policy for the exchange rate. But this model is not as useful for its complexity as it requires different variables to be predicted to establish the model to conclude. Flexible price model allows monetary policy impact on the exchange rate, and it correctly predicts the direction of change. In the flexible price model, the assumption of uncovered interest rate parity and PPP exists which is the contrast that both cannot hold good at a time (Mačerinskienė & Balčiūnas, 2013). Sticky monetary price model claims that the exchange rates are more volatile than the other macroeconomic factors and PPP hold good in the long run on this model. In the sticky price model the reason and effect of overshooting are doubtful as it cannot be predicted that how long the overshooting prevails, there is the chance of delayed overshooting or no overshooting at all. Finally, the overshooting is not the sufficient cause to explain the volatility of the exchange rate (Mačerinskienė & Balčiūnas, 2013).

4.0 Critical Analysis of the evidence from the previous study

The seventies empirical exchange rate model is investigated to study; they are fitted out of the sample (MEESE & ROGOFF, 1983). The authors tried to compare the accuracy from the out of the sample forecasting from the various exchange rate models based on structure and time series. The authors claimed that they the random walk, model or any estimated model between 1-12 month horizons for the exchange rates and weighted currency exchange rates. The structural model, including flexible and sticky price monetary model, performed poorly despite forecasting them on the actual realised values of future explanatory variables. The reason behind the poor performance of the structural models can be equation biases, error in sampling, movements of stochastic or mis specifications. It can be more accurate if one takes into account the non-linearity. Macroeconomic models are useful to analyse more complex and realistic in setting dispersed information for the heterogeneous investors and is very useful short-term dynamics which give the superior forecast for the time horizon one day to 1 month (Bailliu & King, 2005). In the light of macroeconomic perspective, it is very important to understand what the driving forces of currency are because reasons for exchange rate fluctuations has different implications in the economy as per monetary policy reactions. The study also finds that the macroeconomic fundamentals of these models cannot successfully explain and forecast the exchange rate movements. Though macroeconomic assumption based models are rigid, micro-based models are flexible. There are huge evidence in support of microeconomics empirical studies established short period exchange fluctuations. The study also claimed that consumer behaviour is also determining factors to predict long-term exchange rate movements. Exchange rates at the forecast horizon more than one year beat the random walk, but it is still inappropriate for the shorter horizon. Though these models are satisfactory, it cannot be considered for benchmarking. Those models are useful recently which consider inflation and fundamentals are good for commodity currency predictors only

and linked with exchange rates as these are compatible with the asset-price model (León-Ledesma & Mihailov, 2011). In a flexible price model based on assumptions of uncovered interest rate parity and PPP holds good, but in practice, two parties cannot be held at a time, and the only one can hold in the long run. So, if the key assumptions appear invalid, then the model becomes wrong. Besides the above reasons as discussed, there are some other obstacles observed almost all the models due to inappropriate data, forecasting of independent variables beforehand forecasting exchange rate, and unrealistic wrong assumptions (Mačerinskienė & Balčiūnas, 2013).

5.0 Conclusions

Exchange rate forecasting is beneficial if it helps to predict the risk associated with it. The study is approached fundamentally citing the works of the various researchers and given emphasis on the Mundell-Fleming model and the Dornbusch model and its extensions. Exchange rate movements are based on the financial drawbacks more than trade. Hedging currency risk makes the exchange rate forecasting more difficult, and it is truly dependent on the consumer behaviour. Though there are poor performances of the different models based on the time horizon, some of them are very useful for the short or long run. With the help of the two models as discussed above, it reveals the models are highly dependent on the time horizon, equilibrium or disequilibrium position, dynamics of the money supply, demand and supply gap, and validity of macroeconomic factor forecasting assumptions.

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