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Foreign Exchange Market and the Asset Approach

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Abstract: ***Exchange rates play a central role in international trade because they allow us to compare the prices of goods and services produced in different countries. A consumer deciding which of two American cars to buy must compare their dollar prices. Households and firms use exchange rates to translate foreign prices into domestic cur-rency terms. Once the money prices of domestic goods and imports have been expressed in terms of the same currency, households and firms can compute the relative prices that affect international trade flows.***
Keywords: Foreign Exchange, Exchange Rate, International Trade, Foreign Currency, FOREX Rate, Assets Approach.

I. INTRODUCTION

Exchange rates are used to compare the international prices of goods and services. It is also used to compare the rate of return on foreign currency-denominated stocks and bonds with the rate of return on domestic assets. In the 1970s, the monetary approach to the balance of payments was emphasized. In this approach, the focus of interest was on the flow of international trade, as an important determinant of exchange. One of the reasons is that the government strictly regulated the international outflow of financial capital until the 1960s. The role of exchange rates in governing international trade imbalances suggests that countries with current trade surpluses need to have valuation currencies and countries with trade deficits need to have devaluation currencies. Changes in these currencies lead to changes in international relative prices that work to eliminate trade imbalances such as surpluses or deficits.
Due to recent financial liberalization, the international trade volume of financial assets has far exceeded the trade volume of goods and services. In addition, countries with a trade surplus may round up their currency values, and countries with a trade deficit may round up their currencies. This is why a new approach to exchange rate determination has been devised. This is known as the asset approach or portfolio balancing approach that describes the actual case. This theory far emphasizes the role of exchange rates as one of the many prices in the global market for financial assets. In this context, we take a closer look at the asset approach to determining exchange rates. The asset approach to currency determination emphasizes the financial markets of assets. The traditional view is that the exchange rate is adjusted to balance the international trade of this product, but the asset approach is that the exchange rate is adjusted to balance the international transaction (flow) of financial assets. I suggest that it be done. The price of products is adjusted slowly compared to the price of financial assets, and since financial assets are traded continuously every day, the change in focus on the asset market in the commodity market is significant. Exchange rates change at any time in line with changes in the supply and demand of financial assets in different countries.

II. REVIEW OF LITERATURE

The asset approach to exchange rate determination emphasises financial markets for assets. Whereas the traditional view is that the exchange rate gets adjusted to equilibrate international trade in goods, the asset approach suggests that the exchange rate gets adjusted to equilibrate international transactions (flows) in financial assets. (Anushree, 2021).
The demand for a foreign currency bank deposit is influenced by the same considerations that influence the demand for any other asset. Chief among these considerations is our view of what the deposit will be worth in the future. A foreign currency deposit's future value depends in turn on two factors: the interest rate it offers and the expected change in the currency's exchange rate against other currencies. (Krugman, 2021).
The traditional approach, the focus is on the behavior of imports and exports and the capital flows between countries. This approach views the exchange rate as the relative price of national output, as opposed to relative price of national monies in the asset market approach. It also assumes that the exchange rate is determined by the conditions for equilibrium in the market for flows of funds as opposed to conditions for equilibrium in the market for stocks of assets as in the asset market approach. The approach emphasizes covered interest arbitrage, along with commercial hedging and speculation in determining the equilibrium exchange rate. The theory is based on a detailed description of the determinants of the demand for and supply of forward and spot exchange necessitated by each of these three operations in the foreign exchange market. (Mensah, 1982).

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You can compare the real returns on dollar-denominated securities with the real returns on euro-denominated securities. The concept that makes this comparison possible is the expected change in the exchange rate. (Evrensel, 2017).

The expected rate of return that savers consider in deciding which assets to hold is the expected real rate of return, that is, the rate of return computed by measuring asset values in terms of some broad representative basket of products that savers regularly purchase. It is the expected real return that matters because the ultimate goal of saving is future consumption, and only the real return measures the goods and services a saver can buy in the future in return for giving up some consumption.(Ethier, 1979).

The returns on deposits traded in the foreign exchange market depend on interest rates and expected exchange rate changes. In order to decide whether to buy a euro or a dollar deposit, one must calculate the dollar return on a euro deposit.The demand for foreign currency assets depends not only on returns but on risk and liquidity. There is no consensus among economists about the importance of risk in the foreign exchange market. Most of the market participants that are influenced by liquidity factors are involved in international trade. Payments connected with international trade make up a very small fraction of total foreign exchange transactions.(Bana, n.d.).

The short-run equilibrium value of the exchange rate is determined, along with the interest rates, by demand and supply in the market of financial assets. This asset market or portfolio balance approach to exchange rate determination is particularly well suited to a study of two-tier exchange market. One can view the financial exchange rate as a relative asset price. It is among the variables that equilibrate asset markets, and it is determined in the short run in those asset markets.(Ma, 2006).

All else equal, individuals prefer to hold those assets offering the highest expected real rate of return. Our later discussions of particular assets will show, however, that "all else" often is not equal. Some assets may be valued by savers for attributes other than the expected real rate of return they offer. Savers care about two main characteristics of an asset other than its return: its risk, the variability it contributes to savers' wealth, and its liquidity, the ease with which the asset can be sold or exchanged for goods. 1. Risk. An asset's real return is usually unpredictable and may turn out to be quite different from what savers expected when they purchased the asset, 2. Liquidity. Assets also differ according to the cost and speed at which savers can dispose of them.(Mouna and Anis, 2016).

The risk premium is shown to depend on budget deficits, current account imbalances, and official foreign exchange intervention. Observed forward premiums have been small relative to the changes in exchange rates that have occurred since March 1973. By itself, that fact does not necessarily imply that exchange rate changes have been predominantly unexpected, since risk premiums may be large. However, the interpretation presented here of the empirical evidence, using the portfolio-balance model, suggests that the risk premiums can explain only a small proportion of the discrepancies between forward premiums and observed changes in exchange rates.(Prasad and Suprabha, 2015.)

A model is developed in which current account imbalances can be 'financed' through transfers of bonds denominated in either currency. The reduced form links the current spot rate to the expected future spot rate via a risk premium, which depends on the global currency mix of outside assets that governments impose on private portfolios through budget deficits and interventions and on the global distribution of private wealth among regions with different portfolio preferences. An iterative procedure generates rational expectations forecasts of the dollar-mark rate which perform somewhat better than forward rates in predicting monthly changes in the spot rate.(Thoenissen, 2006).

III. RESEARCH METHODOLOGY

A. Title of the Study

The title of the study is "Forex Rate and Asset Approach"

1) Research Objectives

The research objectives are as follows:

a) To get an overview of the factors that influence forex rates

b) To get a knowledge about the factors influencing the demand of foreign currency assets.

2) Statement Of The Problem

1) *Forex Rates:* Forex rates/ foreign exchange rates is the price of the currency of a particular country stated in the terms of another country's currency.

2) *Foreign Currency Assets:* The central bank holds assets such as bonds, bank notes, treasury bills and other government securities on reserve in foreign currencies are foreign currency assets. These assets are held so that the central government agency can ensure that they have backup reserves in case there is devaluation of money or becomes insolvent.

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3) *Asset Management:* Asset management refers to a systemic approach to develop,operate, maintain, upgrade and dispose of the assets in a way to realize the full value of the assets in a cost effective manner. It is basically management of investments on behalf of others.
4) *Forex:* Forex/ foreign exchange is the trading of one currency to the other currency.

B. Scope

The scope of this research covers the factors that influence foreign exchange rates. The study focuses on the assets that the company holds and how the forex rates depend upon it. The research is based on the relationship between assets and the forex rates.

1) Research Questions

The research questions were as follows:

a) What is the basic relationship between assets and the foreign exchange rates?
b) What are the factors that influence the rates of forex?

2) *Type of Research:* The type of research is descriptive. The approach of the study is theoretical and it covers the main theoretical aspects of foreign exchange markets and asset management.

C. Data Collection Method

1) *Secondary Data:* Secondary data is the data collected by someone else for their research which could be used by the other researchers for similar research topics. The research is focused mainly on the theoretical aspects of foreign exchange market and also approaches the aspect of assets. The secondary data is being used for qualitative research. The secondary data used are from articles, blogs, research papers and other sources.
2) *Time Span of the Study:* The time span spent on the research was almost 20 days
3) *Limitations of the research*
a) *Data Constraint:* The data on the internet about the foreign exchange rates and asset approach were not completely available and most of the data was not so descriptive in nature. Also the available data was not relevant to the research topic.
b) *Time Constraint***:** The time available for the research was 20 days and conducting research in such a short period of time affects the accuracy of research.

IV. ANALYSIS AND INTERPRETATION

Direct and Indirect Effect of Exchange Rate of US Dollar on Explanatory Variables

Name of variable	FII	GDP	Inflation	Forex Reserves	International Trade	Exchange Rate of US Dollar
FII	-0.192	0.016	0.092	-0.298	1.105	.724*
GDP	-0.158	0.020	-0.042	-0.328	1.376	.868**
Inflation	-0.056	-0.003	0.316	-0.035	-0.210	0.013
Forex Reserves	-0.127	0.015	0.025	-0.450	1.072	.534*
International Trade	-0.148	0.019	-0.046	-0.336	1.435	.924**

Source: Secondary data **p <0.01, *p<0.05

It is seen from the above Table 4.56 is that among the explanatory variables, the variable GDP showed higher positive direct effect on the dependent variable of Exchange Rate of US Dollar and higher positive indirect effect on Exchange Rate through International Trade. The International Trade variable showed higher positive direct effect on Exchange Rate and higher positive indirect effect through GDP and Forex Reserves. Hence, the variables like GDP and International Trade are substantially important contributing variables for the dependent variable on the Exchange Rate of US Dollar.

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Table 4.57
Direct and Indirect Effect of Exchange Rate of Euro Dollar on Explanatory Variables

Name of variable	FII	GDP	Inflation	Forex Reserves	International Trade	Exchange Rate of Euro Dollar
FII	-0.199	0.030	0.089	-0.020	0.872	.773**
GDP	-0.164	0.037	-0.041	-0.022	1.087	.897**
Inflation	-0.058	-0.005	0.306	-0.002	-0.165	0.076
Forex Reserves	-0.132	0.027	0.024	-0.030	0.846	.735**
International Trade	-0.153	0.035	-0.045	-0.022	1.133	.948**

Source: Secondary data **p <0.01, *p<0.05

From the above Table 4.57, it can be observed that among the explanatory variables, GDP shows higher positive direct effect on Exchange Rate of Euro-Dollar and high positive indirect effect on Exchange Rate through International Trade, whereas, International Trade showed higher positive direct effect on Exchange Rate and also shows that higher positive indirect effect through FII, GDP and Forex Reserves. It is clear that the Exchange Rate of the Euro Dollar is a substantially important positive contributing factor on GDP and International Trade.

Table 4.58
Direct and Indirect Effect of Exchange Rate of Japanese Yen on Explanatory Variables

Name of variable	FII	GDP	Inflation	Forex Reserves	International Trade	Exchange Rate of Japanese Yen
FII	0.286	0.951	-0.038	-0.131	-0.285	.784**
GDP	0.235	1.155	0.017	-0.143	-0.355	.910**
Inflation	0.083	-0.154	-0.130	-0.015	0.054	-0.162
Forex Reserves	0.190	0.841	-0.010	-0.197	-0.276	.548*
International Trade	0.220	1.108	0.019	-0.147	-0.370	.830**

Source: Secondary data **p <0.01, *p<0.05

It can be observed from the above Table 4.58 that among the explanatory variables FII shows positive direct effect on Exchange Rate of Yen and indirect effect through Exchange Rate of Yen and GDP and Forex Reserves. On the other hand, GDP shows higher positive direct effect on Yen currency, and positive indirect effect through Exchange Rate on FII and Forex Reserve. Hence, it is clear that the Exchange Rate of Yen has substantially significant positive contributions towards FII and GDP variables.

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Table 4.59
Direct and Indirect Effect of Exchange Rate of Pound Sterling on Explanatory Variables

Name of variable	FII	GDP	Inflation	Forex Reserves	International Trade	Exchange Rate of Pound Sterling
FII	-0.400	-0.437	0.168	-0.299	1.414	0.447
GDP	-0.329	-0.531	-0.077	-0.328	1.761	0.495
Inflation	-0.116	0.071	0.581	-0.035	-0.268	0.232
Forex Reserves	-0.265	-0.387	0.045	-0.451	1.371	0.314
International Trade	-0.308	-0.509	-0.085	-0.337	1.836	.597*

Source: Secondary data **p <0.01, *p<0.05

The above Table 4.59 denotes the direct and indirect effect of Exchange Rate of Pound Sterling. It is clear that among the explanatory variables International Trade shows higher positive direct effect on Exchange Rate of Pound Sterling and higher positive indirect effect through Exchange Rate on GDP and Forex Reserves. It is found that the Exchange Rate of Pound Sterling has a more direct impact on GDP and Forex Reserves.

Table 4.60
Direct and Indirect Effect of Nifty Index on Explanatory Variables

Name of variable	FII	GDP	Inflation	Forex Reserves	International Trade	Nifty Index
FII	0.228	0.426	-0.025	0.353	-0.181	.800**
GDP	0.175	0.555	0.023	0.395	-0.274	.874**
Inflation	0.058	-0.129	-0.099	0.017	0.085	-0.069
Forex Reserves	0.140	0.380	-0.003	0.577	-0.206	.887**
International Trade	0.145	0.531	0.029	0.415	-0.286	.834**

Source: Secondary data **p <0.01, *p<0.05

It can be observed from Table 4.60 that there is a direct and indirect effect between the Nifty Index for the period of 2004 to 2014. It is seen from the above table that among the explanatory variables, the variable International Trade shows higher positive direct effect on the dependent variable of Nifty Index and positive indirect effect on Nifty Index through Inflation and Forex Reserves. The variable GDP shows positive indirect effects through Inflation and Forex Reserves. The variable Inflation also has positive direct effect on Nifty Index; Forex Reserves showed positive direct effect with Nifty Index and positive indirect effcet on other explanatory variables. Hence, the variables like Inflation, Forex Reserves, and International Trade are substantially important contributing variables for the dependent variable of Exchange Rate. This gives an Nifty Index directly contribute towards FII, GDP, International Trade, and Forex Reserves.

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V. CONCLUSION

Exchange rate is the price of a currency in terms of another currency, this enables comparability between the countries' development. Depreciation and Appreciation of a currency in the global market influences the cost of import and export drastically and further also influences the countries' future development/growth. Good growth potential of a country in turn drives the growth and appreciation of a currency which further tends to show an uptrend on the rate of return of that currency and that increased rate of return motivates the banks and financial institutions to further invest in the currency and drive the rates even higher. This shows an interlinked relationship between the country's reputation, its currency's price,the currency's rate of return and the investments the country receives from foreign.

It appears that the portfolio balance method is more preferred and accurate than the monetary approach as the basic assumptions of monetary approach are doubtable i.e perfect substitutability of assets internationally. In such cases the exchange rate is viewed as being determined by relative supplies of domestic and foreign bonds and money. Whereas, the portfolio balance method assumes the international assets are imperfect substitutes of each other due to varying rate of return and an array of other factors. The reason is that investors relate forex risk with currency denominated bonds and as the supply of domestic bonds rises relative to foreign bonds, there will be an increased risk premium as the domestic bonds will cause the domestic currency to depreciate in the spot market. If that spot market exchange rate depreciates today and the expected future spot price remains unchanged, the expected rate of appreciation over the future increases or the expected rate of depreciation over the future decreases.

Since prices of goods adjust slowly rela-tive to prices of financial assets and financial assets are traded continuously every day, the shift in emphasis from goods market to assets markets has important implications. Exchange rates will change any day as supplies and demands for financial assets of different nations change. Thus, equilibrium in the market is essential for a stable economy. Equilibrium in the forex market occurs when the rate of return on foreign currencies are equal to the returns on the domestic currency. This ensures smooth development of the world. Naturally, whenever any particular currency shows better returns, that would be favoured by institutions and thus more heavily invested into.

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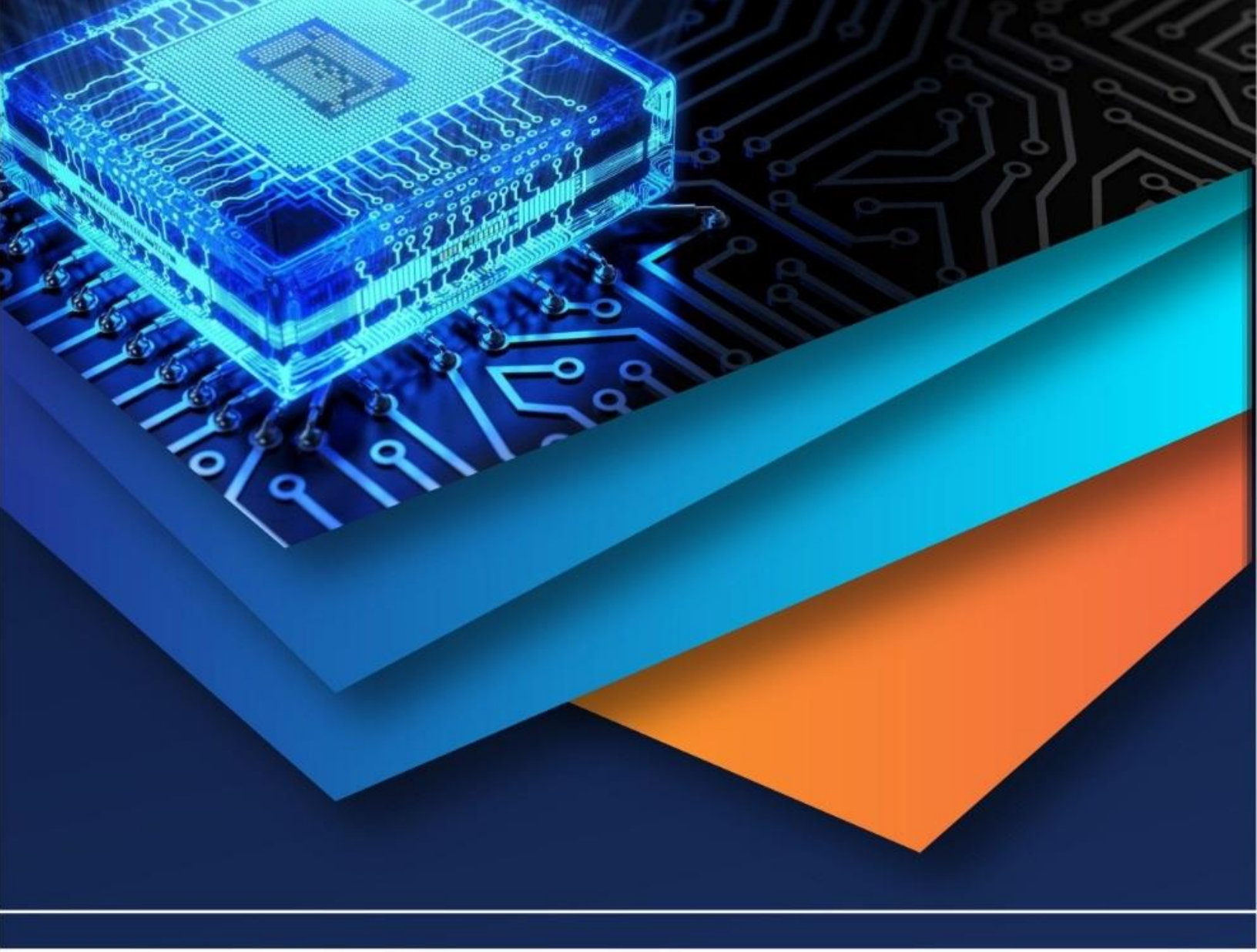

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