



Issues related to international trade and exchange rate

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Abstract

The exchange rate plays an important role in a country's trade and affects the performance. It can be determined by exogenous shocks or by policy, the relative valuations of currencies and their volatility often have important repercussions on international trade, the balance of payments and overall economic performance of the country. This Research paper investigates the issues related to exchange rates on international trade by analyzing the impact that exchange rate volatility and misalignment have on trade and then by exploring whether exchange rate misalignments affect governments' decisions regarding trade policies. The methodology consists of estimating fixed effects models on a detailed based on secondary data. The findings of this study are generally based on literature in supporting the issues of exchange rate misalignment while disregarding that of exchange rate volatility. This paper also shows evidence supporting the argument that trade policy is used to compensate for some of the consequences of an overvalued currency, especially with regard to anti-dumping interventions and comparison report of latest import export differences of India.

Keywords: international exchange rate, foreign exchange market, issues of exchange rate in international trade, India's foreign trade

Introduction

Economic transactions i.e. exchange of goods and services between two or more than two countries is known as international trade while exchange rate is the price of one country's currency expressed in terms of some other currency. According to (Adeniran, 2014) exchange rate determines the relative prices of domestic and foreign goods, as well as the strength of external sector participation in the international trade. According to Jhingan (2009) foreign exchange rate or exchange rate is the rate at which one currency is exchanged for another.

The recent debate on issues persistent trade imbalances and on the resurgence of non-traditional trade restrictive measures has led to a renewed interest in better understanding the issues related to exchange rates on international trade. In spite of the increasing number of research studies on the topic, on the actual effect of exchange rates on international trade is still an open and controversial question.

The theoretical literature on the issue provides little guidance as the presumption that exchange rates directly affect trade depends on a number of specific assumptions which do not hold in all cases of trade policies. This paper contributes to understanding the issues relationship between exchange rates and international trade by investigating the issues of exchange rate volatility and misalignment on international trade and by exploring whether exchange rate misalignment affects trade policy decisions.

International Exchange Rate

The term international exchange rate, also known as a foreign exchange (FX) rate, which is measured in terms of price of one country's currency in terms of another country's currency. Foreign exchange rates are relative exchange of currency and are expressed as the value of one currency compared to

another. When selling products internationally, the exchange rate for the trading between two trading countries' currencies is an important factor. The Foreign exchange rates, in fact, are one of the most important determinants factors of a country's relative level of economic health, ranking just after interest rates and inflation. International Exchange rates play a vital role in a country's level of trade, which is critical to most every free market economy in the world. Consequently, these exchange rates are among the most watched, analyzed, and manipulated economic measures.

The Foreign Exchange Market

The nations and their economies have become increasingly interdependent; the Foreign exchange market has emerged as a global focal point. With an estimated daily Foreign exchange turnover exceeding \$1 trillion, this is by far the world's largest market. In order to remain competitive in the world economy, it is vital to manage the risk related to exchange of adverse currency fluctuations. In recent scenario, the worldwide trend has been toward the consolidation of markets and currencies, as in the case of the European Economic Union.

The largest users of the Foreign exchange trade market are commercial banks, which serve as intermediaries between buyers and sellers of the currency. Corporations and financial institutions also trade currencies, primarily to safeguard their foreign currency-denominated assets and liabilities against adverse Foreign exchange rate movement. Various Banks and fund managers trade currencies to profit from Foreign exchange rate movements. Individuals also are subject to fluctuating Foreign exchange rates, most commonly when a traveler exchanges his or her native currency for a foreign one before embarking on a business trip or vacation.

The Issues of Exchange Rate in International Trade

The results of the companies that operate in more than one nation often must be "translated" from foreign currencies into vehicle currency U.S. dollars. The fluctuation of these Exchange rate make financial forecasting more difficult for these companies, and also have a remarkably effect on unit sales, prices, and costs. As per example, assume that current market conditions dictate that one U.S. dollar can be exchanged for 125 Japanese yen. In this international business environment, an American auto dealer plans to import a Japanese passenger car with a price of 2.5 million yen, which translates to a price in dollars of 20,000 dollar. If that dealer gives commitment of incurred 2,000 dollar in transportation costs and decided to mark up the price of the car by another \$3,000, then the vehicle would sell for 25,000 dollar and provide the dealer with a profit margin of 12 percent. But if the international or foreign exchange rate changed before the deal was made so that one dollar was worth 100 yen—in another words, if the dollar weakened or depreciated compared to the yen—it would play a dramatic role on the business transaction. The dealer would then have to pay the Japanese passenger car manufacturer 25,000 dollar for the passenger car. Adding in the same costs and mark up, the dealer would have to sell the passenger car for \$30,000, yet would only receive a 10 percent profit margin. The dealer would either have to negotiate a lower price from the Japanese manufacturer or cut his profit margin further to be able to sell the vehicle.

According to planning commission members C. Rangarajan and Montek Singh Ahluwalia, from more than a decade since the world abandoned the system of fixed but adjustable exchange rates which was the centre-price of the old Bretton Woods system. That system collapsed in 1973 with no official agreement on what was to replace it, and the major currencies were set afloat in global currency markets. These arrangements, which at first had not official international sanction, were later legitimized by the Second Amendment to the Articles of Agreement of the IMF in 1978, which allowed members to adopt exchange rate arrangements of their choice.

In new system, there is arrangement of which called a "non-system", is characterized by a mix of exchange rate arrangements. Major currencies float relatively freely in global currency markets. The major world countries forming the European Monetary System float as a group against other major currencies and maintain a form of managed floating within adjustable margins against each other. They have defined rules of intervention backed by currency swap arrangements. The developing countries like India, China Pakistan etc have not resorted to independent floating but has either pegged their currencies to one of the major currencies or, increasingly to a basket of currencies.

Whatever the exchange rate arrangements has been adopted globally, all countries face a world in which exchange rates vary considerably and often unpredictably. In last ten years and more that the new system has been in operation, considerable experience has been gained and a degree of consensus has emerged on the functioning of the system and its shortcomings. The main objective of this research paper is to review the main elements of this consensus and to identify the outstanding issues in trade area which remain on the agenda of international and global monetary reform.

Currency Value Factors

There are several of factors which influence international exchange rates. These include all of the following:

1. Relative rates of inflation
2. Comparative interest rates
3. Growth of domestic money supply
4. Size and trend of a country's balance of payments
5. Economic growth (as measured by the gross national product)
6. Dependency on outside energy sources
7. Central bank intervention

A part from these measures of economic activity, the consensus perception of a majority of countries about the overall strength of one country's currency can have a strong association on how that one country's currency is valued.

Some Policy Issues

C. Rangarajan and Montek Singh Ahluwalia have written that the functioning of the floating rate system indicates that the system has not functioned as smoothly as market and major countries had expected. These exchange floating rates have certainly not made the world immune from the adverse consequences of uncoordinated micro-economic policies. On the contrary, inappropriate micro-economic policies are often at the root of the serious misalignments that have emerged under the system. These difficulties focus attention on a number of policy issues that are relevant in designing a better exchange rate system. These issues are.

a) Target Zones

It is very difficult for any country to be confident about how a system of target zones would work in practice. If we look on the one side the proposed width of the zone and the existence of the soft margins which suggests that a significant degree of instability and misalignment would still arise. However the other side implicit commitment to manage the exchange rate by using monetary policy and sterilized intervention can be expected to dampen these tendencies. In effect the "target zone" approach could provide mechanical signals from the exchange markets to domestic policy management to counter any excessive departure of exchange rates from fundamental equilibrium.

b) The Need for Reserves

It is the fact that the demand equations not affected any ways unaffected implies that countries still feel the need for holding owned reserves in spite of the increased access to the capital markets and bank borrowings. It has been seems that the demand for reserves of any country may have been underestimated to the extent that the actual holding of reserves by developing countries in the second period may have been less than the desired holding.

In large economic scale official intervention in exchange markets also shows the continued need for holding reserves. It is estimated that official intervention under floating rates might have been even greater than under fixed rate. According to the annual report of the Deutsche Bundesbank, interventions in the market were of the order of DM 18 billion in 1980, DM 21 billion in 1981 and DM 7 billion in 1982. Further data in this regard have been provided in a recent IMF study.

c) Implications for Developing Countries

There are number of issue which is extremely relevant in a world of floating rates in which large variation of exchange rate which are likely over the medium-term is the currency composition of external debt. Since it is in number of cases it is impossible to hedge over long periods, developing countries must ensure that the composition of their foreign assets and liabilities is such as to minimize risk. In general it is seen that diversification in the currency composition of debt with due allowance to interest rate differentials.

d) Coordination of Macro-Economic Policy

Whether the system of exchange rate is floating, fixed or a combination of the two, on the basis of these we can predict that there is no way that a country can insulate itself from external factors. It will be illusion to think that the floating rate system provides an escape route.

This lack of insulation is a big reason of being interdependence of any country on another one. These interdependent affects the domestic economy policies. Due to these a satisfactory exchange rate system can emerge only if macro-economic policies of the major industrial countries are stable, mutually consistent and conducive to satisfactory performance of the world economy. In year 1978 amendment to the IMF Articles recognizes this and enjoins the member countries to 'endeavour to direct its economic as well as financial policies towards the objective of fostering orderly economic growth with reasonable price stability'.

Literature Review

Research studies found adverse effects of exchange rate volatility on trade (Ethier, 1973; Clark 1973; Baron, 1976; Cushman, 1983; Peree and Steinherr, 1989) ^[18, 10, 6, 14] subsequent studies report very small impacts (Franke, 1991; Sercu and Vanhulle, 1992) ^[22]. According to Taylor (2001) Sees exchange rate as a transmission mechanism in policy-evaluation models, it serves as arbitrage equation relating the interest rate in one country to the interest rates in other countries.

More recent studies which refined quantitative methods resulted in more scepticism about causality of short-term exchange rate volatility on international trade (Clark, Tamirisa and Wei, 2004; Teneyro, 2006) ^[11]. In summary, the relationship between the two variables is most likely driven by underlining long-term trade policy credibility rather than the short-term causality (Klein and Shambaugh, 2006; Qureshi and Tsangarides, 2010). In addition of it the relation between volatility and international trade could be driven by reverse causality, in which trade flows help stabilize real exchange rate fluctuations, thus reducing exchange rate volatility (Broda and Romalis, 2010) ^[9]. In any case, there are several reasons why volatility is often not a critical issue for international trade and trade policy. One particularly compelling argument is that the risks associated with volatile exchange rates are softened by the increasing number of financial instruments available (e.g. forward contract and currency options) which allow firms to hedge against these risks (Ethier, 1973) ^[18]. Another critique is related to the presence of sunk cost in exporting (Krugman, 1989; Franke 1991) ^[22]. The higher the fixed costs of the exports are, the less responsive firms (and therefore international trade policy) are to exchange rate volatility. All this makes exchange rate volatility less of a critical issue for international as well as global trade. In modern cross-border

transactions firms often decide to hedge against the risk in the exchange rate or to bear the cost associated with possible exchange rate fluctuations as part of their export policy.

The second aspect of the issue related to exchange rates and international trade pertains to currency misalignments. The influence of currency misalignment on international trade is largely driven by its impact on relative import prices (Mussa, 1984; Dornbusch, 1996) ^[16]. An undervalued currency, whether determined by exogenous shocks or by trade policy, increases the competitiveness of the export- and import-competing sectors at the expense of consumers and the Non-tradable sector (Frieden and Broz, 2006). In this regard, the issue of misaligned currency on prices are similar to those of an export subsidy and import tax. The literature on the topic provides a great amount of evidence on how responsive trade flows are to changes in relative prices consequent to movements in exchange rates (Hooper and Marquez, 1995; Bernard and Jensen, 2004). Apart from it in the case of volatility, there are a number of issues that greatly complicate the relationship between exchange rate misalignment and international trade (Staiger and Skyes, 2010). The particular issues is related to the part of the undervaluation or overvaluation of the exchange rate is often absorbed by firms which do not fully adjust their price in the destination country (Goldberg and Knetter, 1997). Related to the presence of irreversible sunken costs of entry which act as powerful incentives for firms to stay in the market even when there is substantial undervaluation of the importer currency (Baldwin, 1988; Froot and Kemperer, 1989) ^[5, 25]. The vertical integration and the issue of production networks (the presence of a large share of imported inputs) make currency misalignment less important (Zhao and Xing, 2006).

The final issue on the relationship between exchange rates and trade explored here regards the issue related to exchange rate misalignments on trade policy. The rationale is that the stance of the exchange rate may directly as well as indirectly affect governments' decisions regarding other policies, especially those affecting international trade. The literature related to this topic on this topic is more limited and largely focused on contingency measures. Most of the studies find that long periods of overvalued exchange rates are often associated with an increase in the use of protectionist trade policies, especially anti-dumping (Frieden, 1997; Knetter and Prusa, 2003; Irwin, 2005; Oatley, 2010) ^[23]. Trade policy may be used to compensate for some of the issues of an overvalued currency. Domestic firms that lose competitiveness as a result of a real exchange rate appreciation may lobby for restrictive rules on trade policies. In practice, disputes over exchange rate policies among trading partners could foster an increase in domestic political pressures and unilateral action on trade (Copelovitch and Pevehouse, 2010). In general terms, countries may also be using trade policy as a substitute for exchange rate overvaluation, so as to deal with issues related to persistent disequilibria in the trade balance. Exchange rate, interest rate and other macroeconomics indicators remain an important focal point of discourse in the International finance as well as in developing nations, which is prerequisite for economic development (Adeniran, 2014).

Objective

To study the Issues related to international trade and exchange rate.

Measurement of exchange rate and trade policy variables

Although there is voluminous literature on exchange rate volatility, there is no consensus on how to measure it. Volatility measures vary from simple deviations from an average level, to more sophisticated econometric estimations following co-integration methods (Lothian and Taylor, 1997).

India’s Foreign Trade: March 2018

According to report of DGCI&S for Merchandise; for Services RBI Exports during 2017-18 are at US \$ 302.84 Billion registering a growth of 9.78 per cent in dollar terms vis-à-vis 2016-17 and exports during March 2018 were valued at US \$ 29.11 Billion as compared to US \$ 29.30

Billion during March 2017 exhibited negative growth of 0.66 per cent. This report implies that growth is negative in the month of March 2018 in comparison of same month of last year. While imports during March 2018 were valued at US \$ 42.80 Billion (Rs 278296.95 crore) which was 7.15% higher in Dollar terms and 5.75% higher in Rupee terms over the level of imports valued at US \$ 39.95 Billion (Rs. 263155.49 crore) in March 2017. This data implies that import is increasing in the same month in comparison of the same month of last year.

As RBI’s Press Release dated 13th April 2018, the trade deficit for March 2018 was estimated at US \$ 13.69 Billion as against the deficit of US \$ 10.65 Billion during March 2017.

Table 1: India’s foreign Trade for April –March 2017-18

	Merchandise (P)		Services* (P)		Merchandise + Services (P)
	Values in USD billions	% Growth	Values in USD billions	% Growth	Values in USD billions
Exports	302.84	9.78	175.31	17.63	478.15
Import	459.67	19.59	105.65	19.74	565.32
Trade Balance	-156.83	44.54	69.66	14.56	-87.17

Source: DGCI&S for Merchandise; for Services RBI

Empirical strategy

The estimating framework for assessing the effect of exchange rate volatility and misalignment consists of an econometric model where a set of fixed effects controls for all the determinants of trade flows normally included in gravity model specifications. The association between exchange rate appreciation and trade policy is similarly explored with a fixed effects model.

Conclusion

Research paper indicates that exchange rate volatility is probably not a major policy concern. From the perspective of enhancing trade, the issues related to lower volatility are indirect, and originate from long-term exchange rate commitments such as currency unions and pegged exchange rates rather than short-term exchange rate fluctuation. The limited importance of exchange rate volatility is possibly related to the increasing the availability of financial instruments to hedge against exchange rate risks (e.g. forward contract and currency options) and to the increasing share of intra-industry trade.

Suggestion

Policymakers on must be pay attention to exchange rates of their own countries and those of other countries as the issues of currency misalignments on international trade is considerable. This indicates that countries should monitor their exchange rate relative not only to that of their trading partners but also in relation to that of their competitors.

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