

Value of Indian Rupee in the currency market and performance of company in India

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Abstract- Countries use their local currency for the domestic transactions inside the economy but when any business crosses the borders of economy, it gets exposed to the international currency market where prices of all the currencies are volatile as per the market force and activities for different reasons. It impacts on the earning of the company which goes beyond the borders. Business transacts with each other, exchanging currencies with the help of international currency market. Where 88% transactions are done in single currency which is dollar, as they swap the currencies with the dollar each time while doing international transaction. As the prices of currencies are decided by the market force, they vary as per the demand. If demand of your local currency is less then price of it will also be less which makes economy export oriented. Whereas high demand and high price of the currency reduce the chances of export from the economy.

This study looks out the trend of the value of Indian rupee in the international currency market and tries to measure the impact of it on the performance of the company that is selected to find out the impact of price on the earning or revenue of the company. Rise or fall in the value of rupee puts the impact in the revenue collected by the company operating on international level. Volatility of the currency can be predicted with the help of regression analysis to improve revenue

Introduction: Current Global currency system is heading towards a multipolar currency system, this change puts impact on the demand and the prices of the currencies world-wide. Indian rupee is not exception for it. In this transformation period, price of Indian rupee is volatile in the currency market. It impacts on the revenue collection and profit of the Indian company. Study focuses on the change in the value of INR against the different majorly used currencies, that are United states dollar, Euro, Great Britain pound, Chinese Renminbi, and Japanese Yen, change in the price of INR in against these selected currencies in the currency market makes impact on the profit and revenue of the companies in the India which are dealing on international level. Study selected companies which are working on international platform since last ten years. Dealing with the countries which trade with the currency basket currencies. Considering the change in the price and change in the earning and profit are studied with the regression analysis method.

Objective-1) To check the impact of volatility of the currency on the revenue of the IT company.

2) To check the impact of volatility of the currency on the Profit of the IT company.

Dependent Variable- Revenue of the IT company.

Independent variable- Volatility of the Indian currency

Dependent Variable- Profit of the IT company.

Independent variable- Volatility of the Indian currency

Hypothesis:

1)Statement of Hypothesis - Change in the price of currency in the currency market put impact on the revenue of the IT company in India.

H0- There is no impact of price of INR in the currency market on the revenue of the IT company in India.

H1- There is impact of price of INR in the currency market on the revenue of the IT company in India.

2) Statement of Hypothesis - Change in the price of currency in the currency market put impact on the Profit of the IT company in India.

H0- There is no impact of price of INR in the currency market on the Profit of the IT company in India.

H1- There is impact of price of INR in the currency market on the profit of the IT company in India.

Scope: Different currencies are used in the different nations for the domestic transactions. When business crosses the border of the nation; it goes through currency market to exchange the value of transaction. Currency Exchange market is the OTC (Over the Counter) market which works 24x 7 through the different exchange boards and different time zones. Like exchange market in the Japan starts first, UK starts after that, and in the last US . While dealing with international transactions exporter and importer of the goods and services needs to consider the exchange rate of the currencies with each other and the Swapping currency. Because it may impact on the revenue of the companies and profit too.

There are many reasons of the fluctuation in the currencies exchange rate some are predictable and some are difficult to predict. Considering maximum of them, international business book their profit. Sometimes revenue of the company increases but profit does not get any impact because of the change in exchange rate. There may be increase in profit due to change in exchange rate which is called as exchange gain and if loss is caused due to change in exchange rate it is considered as exchange loss of the company.

India is progressing towards a developed economy in future. To achieve this goal, every Indian company must engage in value creation and exporting that created value through various products and services to other nations. It will boost the income of the country. Export exposure of the companies can provide foreign currency to the nation and increase the value of the company and strength of the nation. Earning in foreign currencies and converting it into the Indian rupee increases value of Indian rupee in the currency market. When any company goes beyond the national borders to do the business, it has to deal with different currencies. Change in the price of native currency may impact the revenue and profit of the company.

Literature review:

¹“Patterns in Invoicing Currency in Global Trade” By- Boz, E., Casas, C., Georgiadis, G., Gopinath, G., Le Mezo, H., Mehl, A., & Nguyen, T. United State Dollar had dominant role in invoicing of global transactions but actual transactions by united states were very less with rest of the world. Similar case was with Euro too; it is too had increasing invoicing of global transactions of other countries. But now it is decrease in the volume. Euro is used as vehicle currency by Africa. Countries trading with United States Dollar and Euro are facing price issue “Currency-market devaluations: treating gold as a currency” By-Michael Kunkler

In currency Market one currency is always priced in comparison with another currency. To check the volatility of one currency we need another currency to compare with. But sometimes all the currencies devalue, that happens in comparison with gold. Three times this happened after the Bretton woods agreement 89% between 1972 and 1980; 66% between 2005 and 2012; and 25% between 2019 and 2020.

All currencies devaluation can happen considering gold as common anchor. Gold should be treated as the Insider in currency market and not as one element of commodity market

Whole currency market devaluation should be considered as devaluation of whole world currency system because problem in one currency will effect on their currencies contagiously. Currencies

were pegged with gold originally. Devaluation of global currency 89% in 1972 may be caused by OPEC contract of Petro dollar, 66% devaluation can be caused by global slow down of 2008 sub-prime crisis, and last 25% devaluation is caused by Covid -19 as per my view. “A Critical Evaluation of International Value of Indian Rupee and its Impact on Indian Economy” By Seema Although strengthening of INR is good for certain industry others may find loss because of it. It will be gain for entire economy.

With the help of FDI & FII India can develop infrastructure to boost the speed towards third largest economy in the world.

This study happened between 2004 to 2011.

Even though basic things remain same but Depreciation of Indian rupee happened over the long run time. This study did not consider long run volatility; rupee has been depreciated against the dollar.

“Impact of Currency Redesign on Nigeria's Small and Medium-Sized Enterprises”

El-Yaqub Ahmad B1, Ibrahim Musa1, Sule Magaji1, and Ashemi Baba Ali2

Currency redesign means Currency swap transaction with partner currency. How the currency swap is affecting the small and medium enterprise? Author is saying that currency redesign does not affect on profitability of small and medium sizes enterprises.

Today's global system is working on the basis of USD based transaction. For most international transactions we need to pass through the USD. Currency swap that is redesign of currency provide transaction with stability currency value. Currencies don't face loss because of unnecessary appreciation of dollar against all the currencies.

Methodology: Different types of research are available, like 1) Evaluation research to determine whether research has met its set goal or not. 2) Descriptive research describes population, situation or phenomenon it studies everything about research problem except reason why it exists.

3) Analytical research involves critical thinking skills and evaluation of facts related with the research problem.

4) Applied research refers to scientific studies and try to solve practical problems.

5) Fundamental research is done out of curiosity or interest about scientific question to expand the knowledge system

6) Qualitative research deals with the phenomenon which is difficult or impossible to quantify in numbers.

7) Quantitative research is systematic empirical investigation by statistical and mathematical techniques.

8) Conceptual research is the research which is conducted by observing and analysing already present information on selected area.

9) Empirical research is the type of research which use verifiable evidences to reach to research outcome. It solely relies in the evidences collected by scientific data collection methods.

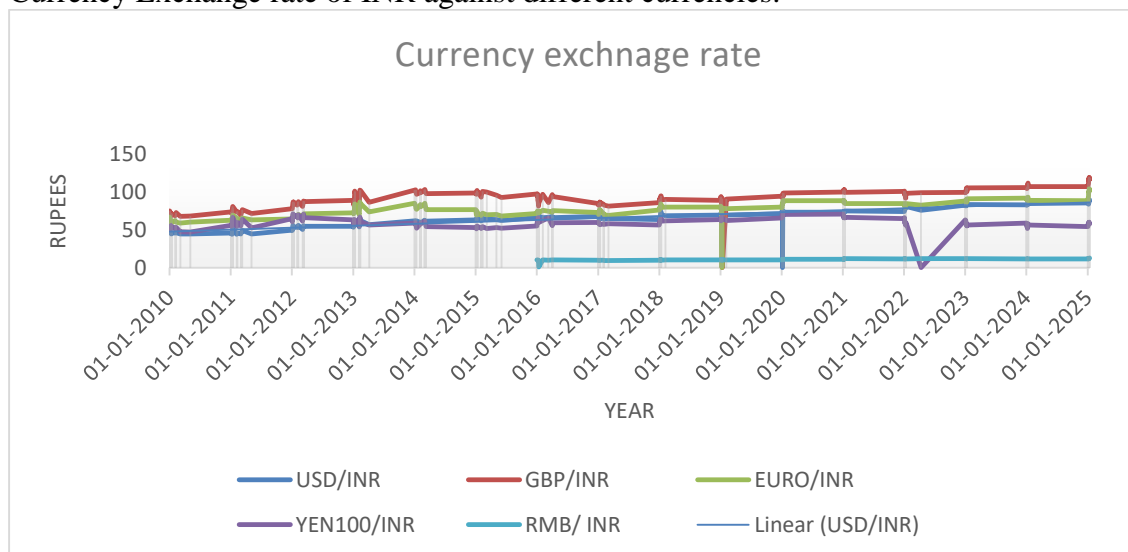
Out of above methods this study taken place few methods of above listed methods are used in the research Quantitative research, evaluation research, descriptive research, fundamental research, conceptual research, empirical research.

Correlation analysis method has been used to see the relationship between price of INR in the currency market and revenue and profit of the selected company.

Limitations: 1) Time factor- change in exchange rate is not steady, it is always volatile because of the different reasons, different global conditions like war impacts on the international trade and the exchange market it may cause certain currencies to increase demand and it may cause certain currencies to reduce the demand. This impacts on the profit margin of the trading business.
 2) companies in the different sector has different impact of the price fluctuations in the currency market it is dependent on the how much business is dependent on the import for the business and how much you export and in which country.
 3) Currency in which Currency swap is taking place price of that currency also affect on the revenue and profit of the company.
 4)Time, Geopolitical situation, currencies involved, Type of transaction, hedging technique etc all is volatile and needs to understand different trends in it.

Data collection: Data is collected of the company working on international level since last 15 years and dealing with different currencies. Revenue of that company for last fifteen years is compared with the price of Indian rupee in the currency market against the different selected companies (Currency basket currencies) Secondary data is collected from various sources 1) Audited Annual reports of the company on Ministry of corporate affairs website by government of India. Currency data is collected from the various government’s website of finance departments. This study took place to see the relationship of fluctuation in the currency market in the price of INR on the revenue and profit of the company on the yearly basis. Study selected the company in the Information technology sector that is Tata consultancy Services which is in the business since many decades and importing technology and exporting the consultancy solutions in different countries study considered the countries in which currency basket currencies are used for trade. currency basket currencies are USD, EURO, GBP, JPY, CNY. These five currencies are the most traded currencies in the international trade, 88% trade is taking place in USD In last 15 years remaining trade is handled in different currencies. Proportion is very less. Still trade in other currencies has been increasing gradually, which is sign of further change in the global currency system. Appropriate results in the study needs to measure perfect impact of volatility in the currency market part of volatility in INR and how it is putting impact on the profitability and revenue of the selected company for the pilot study.

Currency Exchange rate of INR against different currencies.



Data about the revenue and the profit of IT company for the period of 2010 to 2024 is shown in the form of graph.

Exchange rate of INR and Revenue and profit of TCS				
		Dependent variable	Independent variable	Dependent variable
Year	Name of the subsidiary	Revenue in Millions	Average INR Currency basket Avg currencies/INR	PAT Subsidiary
2010	Tata consultancy services	30,028.920	44.46899167	7,000.640
2011	Tata consultancy services	37,324.510	46.38225833	9,068.040
2012	Tata consultancy services	48,893.830	51.74128333	10,413.490
2013	Tata consultancy services	62,989.480	56.92015833	13,917.310
2014	Tata consultancy services	81,809.360	60.95309167	19,163.870
2015	Tata consultancy services	94,648.410	58.44183333	19,852.180
2016	Tata consultancy services	1,08,646.210	48.535625	24,291.820
2017	Tata consultancy services	1,17,966.000	46.59915	26,357.000
2018	Tata consultancy services	1,23,104.000	49.97108333	25,880.000
2019	Tata consultancy services	1,46,463.000	52.70425	31,472.000
2020	Tata consultancy services	1,56,949.000	52.56846667	32,340.000
2021	Tata consultancy services	1,64,177.000	54.99566667	33,388.000
2022	Tata consultancy services	1,91,754.000	55.11991667	38,327.000
2023	Tata consultancy services	2,25,458.000	57.194825	42,147.000
2024	Tata consultancy services	2,40,893.000	58.65600833	46,585.000

Checking Hypothesis: For checking the hypothesis first data needs to be defined properly. As this is the pilot project only one company is to be taken as a pilot study and compare its data with the different variables. Data used is the historic data for last 15 years about the company and currency. Hypothesis 1 is showing result as below. Statement of Hypothesis - Change in the price of currency in the currency market put impact on the revenue of the IT company in India



Pearson correlation $r=0.87$ which shows strong negative correlation between price of INR in the currency market and revenue of the company. There is statistically significant relationship between them. Statistically significant relationship at 5 % level. $t=5.8$ and $df=13$ and $R^2 =.75$ means 75% of variation in the price of INR can be explained. In 2017 price of INR increased significantly but revenue continues to increase with same pace. It might be confounding factors that impacted on price.

Interpretation: Revenue of TSC reported increasing with the weakening Rupee in the market it might be Exchange gain rather than real earning by core business.

Thus, Alternative hypothesis is accepted here H_0 -There is relationship of price of INR in the currency market with the revenue of the IT company in India.

Now check the second Hypothesis: Checking the relationship of price of INR with the Profit of the IT company working Multiple countries in the world. Using Correlation analysis

Statement of Hypothesis - Change in the price of currency in the currency market put impact on the Profit of the IT company in India.

Pearson's $r \approx 0.83$ Showing strong positive correlation between both. As Rupee depreciated PAT increased significantly till 2014. As $t=5.0$ data is statistically significant

$R^2 \approx 0.69$, Means 69% of the variation in the dependent (PAT) are represented by Change in value of INR. Thus, Alternate hypothesis is accepted H_1 - There is impact of price of INR in the currency market on the profit of the IT company in India.

In comparison with both the hypothesis we can see that, Relationship of PAT is Weaker than the Revenue with the Price of INR in the currency market.

Conclusion: Price of the INR in the currency market is the one of the impacting factors on the Revenue and profit of the IT company in the India. But revenue has more aligned with the price of INR than the profit of the company is aligned. There might be tax and legal compliance policy of the different countries the IT companies are working putting impact on the profit.

Suggestions: 1) There are two types of market trends predictable Market trends and unpredictable market trends. This study presents some trends in the market if the situation repeats we can predict them about the price of rupee in the currency market. Companies can reduce the loss and increase profit by understanding market trends about the price of INR in this study.

2) Currency wise Revenue and Profit of the company change as per the rules of the local government related with business. Considering those rules in strategies will make positive impact on the profit.

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