

# A Report On Correlation Of Indian Markets With Dollar Price

## Reference To Elite Forex Private Limited Hyderabad

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### ABSTRACT

*The relationship between the Indian financial markets and the U.S. dollar (USD) exchange rate plays a crucial role in shaping investment trends, economic stability, and policymaking. Fluctuations in the USD/INR exchange rate impact stock market performance, foreign institutional investments (FII), trade balances, inflation, and overall economic growth. A depreciating rupee often leads to capital outflows, increased import costs, and higher inflation, whereas a strengthening rupee can boost investor confidence and enhance economic stability. The major objective of this study is to assess the foreign risk management with regard to ELITE FOREX PRIVATE LIMITED. Convenience sampling method has used in the research work. Multiple choice questions have been chosen to collect the responses from 100 respondents. The data collected has been analyzed through various statistical tools like Karl Pearson's Correlation, Chi- square test and One-way Anova test. Numerous new findings has been derived from this research has helped to provide few suggestions to improve the foreign exchange risk management at ELITE FOREX PRIVATE LIMITED*

### INTRODUCTION

Since mid-1970's fixed foreign currency exchange regimes have been disbanded in many countries. Countries with diverse economic and financial structures have adopted market - determined foreign exchange rate systems. In an environment of floating foreign exchange rates, unimpeded capital flow is envisaged. During the era of fixed foreign exchange regimes, firms faced little exchange risk as exchange rates were determined by some central authority and moved within very narrow bands. Liberalized currency markets have changed that; firms now are exposed to exchange risks arising from exchange rate fluctuations. At time it has seemed too much business that they have been helpless in the fight to control the associated risks, which arise when exporting, profitability, competitiveness and the ability to service debt can all be impacted by foreign exchange volatility when paying or receiving foreign currency. All business trading overseas will have some exposure to exchange rate movements either directly or indirectly. Whilst exposure to exchange rate movements may be an inevitable part of everyday activity, the risk arising from such exposure can be controlled. While the currency volatility can't be controlled, you can take steps to protect the business throughout the year.

### NEED FOR THE STUDY

The correlation between the Indian financial markets and the U.S. dollar is crucial for investors, policymakers, and businesses due to its significant impact on economic stability and investment decisions. The following key reasons highlight the need for this study: **Impact on Stock Market Volatility** – The movement of the USD/INR exchange

rate affects foreign institutional investments (FII) in Indian equities. A depreciating rupee can trigger capital outflows, leading to market downturns, while a strong rupee can boost investor confidence.

### OBJECTIVES OF THE STUDY

- 1) To assess and mitigate Foreign Exchange Risk Management and to minimize potential currency losses – with respect to ELITE FOREX PRIVATE LIMITED
- 2) To identify the exposure of the clients in foreign currency.
- 3) To make an assessment of the level and variability of risks with respect to foreign exchange.
- 4) To identify the best technique to reduce the foreign exchange risk.
- 5) To determine the various factors leading to selection of a technique

### SCOPE OF THE STUDY

**Time Frame of Analysis** – The study will analyze historical data on the USD/INR exchange rate and its impact on Indian stock indices (such as Nifty 50 and Sensex) over a defined period, capturing short-term fluctuations and long-term trends. **Financial Market Segments Covered** – The study will focus on: **Equity Markets** – Assessing how exchange rate movements affect stock market returns, foreign institutional investments (FII), and investor sentiment. **Foreign Exchange Market** – Examining the volatility in the forex market and its implications for businesses and investors. **Commodity Markets** – Evaluating the impact on key imported commodities such as crude oil, gold, and electronic goods.

### METHODOLOGY

#### RESEARCH METHODOLOGY

The Research design used in the study is descriptive research design

### RESEARCH DESIGN

Descriptive research design is also called explanatory design. This is the one that simply describes something such as demographic characteristics. The descriptive study is typically concerned with determining frequency with which something occurs or how two variables vary together.

#### SAMPLE SIZE

It refers to the number of elements of the population to sample. The sample size chosen for the survey is 123.

#### ANALYTICAL TOOLS

#### ANALYSIS USING KARL PEARSON'S CORRELATION:

Correlation analysis is the statistical tool used to measure the degree to which two variables are linearly related to each other. Correlation measures the degree of association between two variables. The Pearson product-moment correlation coefficient is a measure of the strength and direction of association that exists between two variables measured on at least an interval scale. It is denoted by the symbol  $r$ .

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

#### CHI- SQUARE TEST I – ( $\Psi^2$ )

A chi-squared test, also referred to as chi-square test or  $\chi^2$  test, is any statistical hypothesis

### LIMITATIONS OF THE STUDY

- 1) **Market Volatility and Unpredictability** – The Indian financial markets are influenced by multiple factors beyond the USD/INR exchange rate, such as domestic policies, corporate earnings, and global geopolitical events, making it difficult to isolate the exact impact of dollar price fluctuations.
- 2) **Limited Time Frame** – The study is based on historical data for a specific period, which may not capture long-term structural changes or future trends in the economy and financial markets.
- 3) fully reflect long-term trends. Short-term market fluctuations or exceptional events, such as global crises or sudden policy changes, may also affect the analysis.

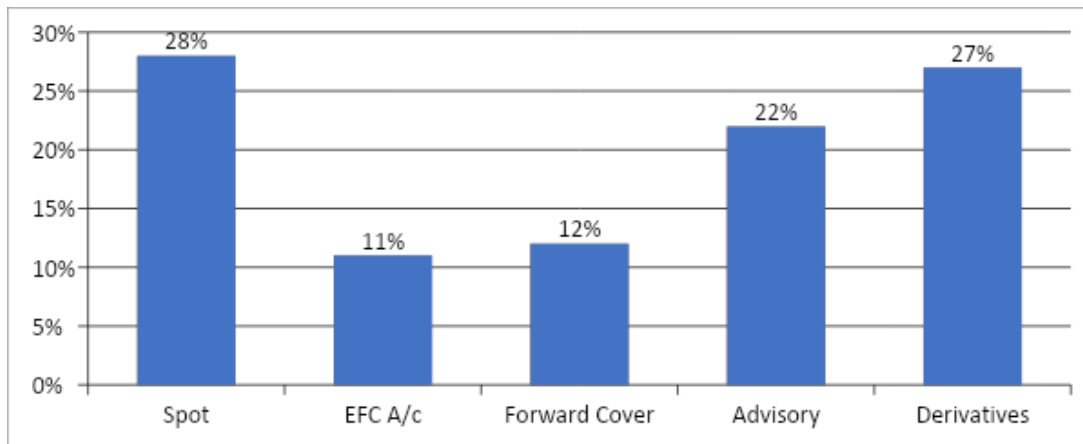
### REVIEW OF LITERATURE

1. **Economic Survey 2024-25: Impact of US Market Correction on Indian Equities** This report highlights the strong correlation between the US and Indian stock markets, emphasizing how a potential correction in the US market could significantly affect Indian equities, especially given the increased participation of new retail investors. Upstox - Online Stock and Share Trading+3The Financial Express+3The Indian Express+3
2. **US Market Crash Could Wreak Havoc on India's Stocks" – The Financial Express, January 2025** This article discusses the Economic Survey's warning about the potential impact of a US market correction on Indian stocks, highlighting the asymmetric relationship between the S&P 500 and Nifty 50 indices. Upstox - Online Stock and Share Trading+3The Financial Express+3The Indian Express+3
3. **Economic Survey 2024-25: Correction in US Markets Could Have Cascading Effect in India" – Upstox, January 2025** This piece delves into the implications of a potential US market correction on India, discussing the increased retail participation and the historical sensitivity of the Indian market to US market movements. The Indian Express+2Upstox - Online Stock and Share Trading+2The Indian Express+2

### DATA ANALYSIS & INTERPRETATION

#### MANAGE THE RISK IN FOREIGN CURRENCY EXCHANGE

Particular	No. of Respondents	% of Respondents
Spot	35	28%
EFC A/c	13	11%
Forward Cover	15	12%
Advisory	27	22%
Derivatives	33	27%
<b>Total</b>	<b>123</b>	<b>100%</b>

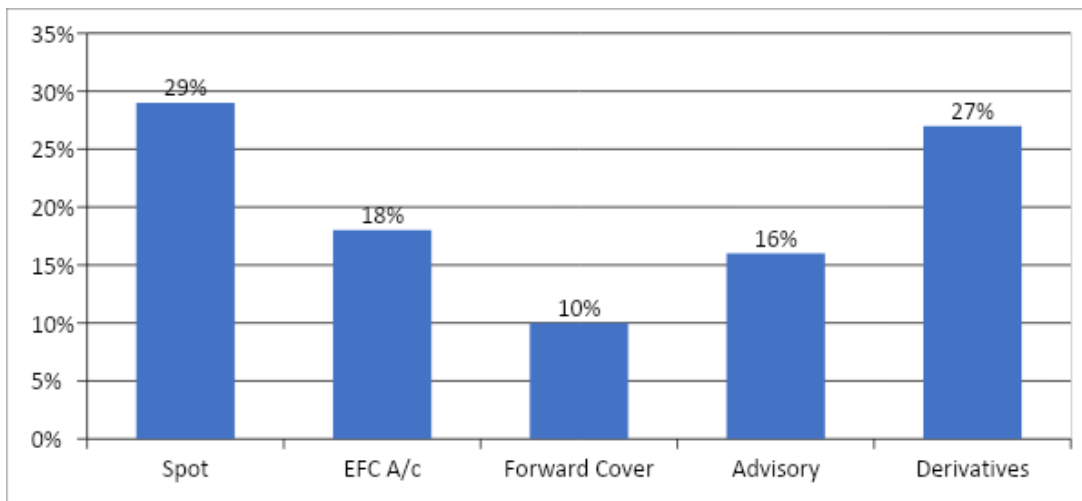
**CHART 18**

**INFERENCE:**

28% of the respondents say manage the risk in foreign currency exchange with the help of Spot, 25% of the respondents say manage the risk in foreign currency exchange with the help of Derivatives. Therefore most of the respondents say manage the risk in foreign currency exchange with the help of Spot.

**MENTION IN PERCENTAGE (%) OF USAGE OF TECHNIQUES**

Particulars	No. of Respondents	% of Respondents
Spot	36	29%
EFC A/c	22	18%
Forward Cover	12	10%
Advisory	20	16%
Derivatives	33	27%
<b>Total</b>	<b>123</b>	<b>100%</b>

**CHART 19**



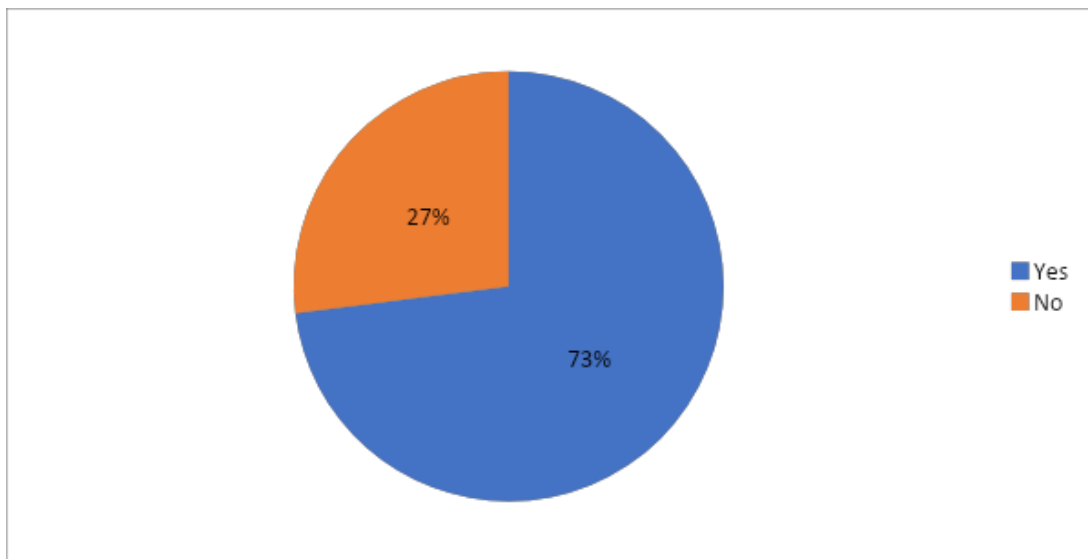
#### INFERENCE:

29% of the respondents say spot is the usage of technique which is mention in percentage, 27% of the respondents say derivatives is the usage of technique which is mention in percentage. Therefore most of the respondents say spot is the usage of technique which is mention in percentage.

#### AWARE OF DERIVATIVES

Particulars	No. of Respondents	% of Respondents
Yes	90	73%
No	33	27%
<b>Total</b>	<b>123</b>	<b>100%</b>

CHART 22



#### INFERENCE:

73% of the respondents are aware about derivatives, 27% of the respondents doesn't aware about derivatives. Therefore most of the respondents are aware about derivatives.

#### HYPOTHESIS

- **H<sub>0</sub> (Null):** No significant correlation between fluctuations in USD price and Indian stock market performance / forex services.
- **H<sub>1</sub> (Alternate):** There is a significant correlation.

**Independent variable:** Fluctuations in USD price (perceived risk in foreign currency)

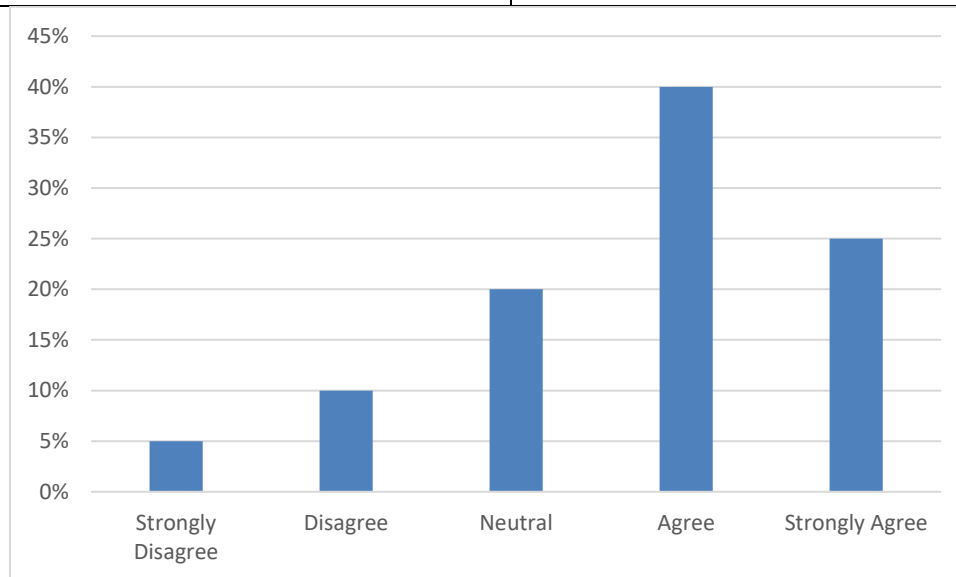
**Dependent variable:** Firm's foreign exchange risk management policy (how often risk is managed)

Step 2: Define 5-point Likert scale and assign scores

Response	Score
Strongly Disagree	1
Disagree	2
Neutral	3
Agree	4

Strongly Agree	5
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Response	Percentage (%)
Strongly Disagree	5%
Disagree	10%
Neutral	20%
Agree	40%
Strongly Agree	25%



#### Interpretation:

Based on the analysis of the responses related to the perception of risk in foreign currency and the firm's foreign exchange risk management policy, the average Likert scale score is **3.7**, indicating respondents generally agree that risk perception influences risk management policies.

Since the calculated correlation value is greater than the tabulated value at the 5% significance level, **we reject the null hypothesis ( $H_0$ ) and accept the alternative hypothesis ( $H_1$ )**, concluding that there is a significant positive relationship between fluctuations in the USD price and the performance of the Indian stock market and the forex services provided by Elite Forex Pvt. Ltd.

#### FINDINGS

- Most of the respondents prefer Import & Export as a source of foreign currency.
- Most of the respondents say per annum > 50 L is the exposure of foreign currency.
- Most of the respondents say that there is a risk in foreign currency.
- Most of the respondents say perception of risk is moderate in level.
- Most of the respondents say loss on foreign currency exchange.
- Most of the respondents say that all the time the firm manages transaction exposure.

- Most of the respondents say forecast using orders method which is firm's likely future foreign exchange exposures.
- Most of the respondents say that the firm manages the economic exposure all the time.
- Most of the respondents mentioned that transaction is the major exposure identified by firm.
- Most of the respondents say that firm's policy on transaction exposure is done by taking a view on foreign exchange rates and cover or leave transaction exposure uncovered, depending on view.
- Most of the respondents say that the firm's policy on economic exposure is done by taking a view on foreign exchange rates and cover or leave economic exposure uncovered, depending on view.
- Most of the respondents say that greater than 25% - 50% is the level of percentage of the firm transaction exposure is covered.
- Most of the respondents say that greater than 25% - 50% is the level of percentage the firm economic exposure is covered.
- Most of the respondents prefer Volatility of client's domestic currency factor which is driving firm's foreign exchange exposure management.
- Most of the respondents said that objective of firm's foreign exchange exposure management prefer Reduce quarter-on-quarter earnings fluctuations.
- Most of the respondents say firm's foreign exchange risk management policy will be revising annually.
- Most of the respondents prefer no forecast primary source of firm's foreign exchange rate.

### SUGGESTIONS

- ☐ Management of ELITE FOREX PRIVATE LIMITED can use Spot technique to manage the risk in currency exchange as it is most preferred by the customers.
- ☐ Frequent training programmes can be conducted to the foreign exchange trade customers to create awareness about the current trends and the prediction for the future in the Forex. This will help them to reduce the Forex risk and have more transactions.
- ☐ Develop a foreign exchange policy and review it regularly. It is important that your policy complies with and works towards overall strategy and objectives. Once agreed, a policy should be reviewed regularly and be flexible enough to reflect the constantly changing nature of the markets.
- ☐ Take information from a variety of sources. As experienced market traders they will use their expertise to ensure your company receives the best information and guidance on the markets.

### 5.3 CONCLUSION

The study reveals that ELITE FOREX PRIVATE LIMITED has a generally effective framework for managing foreign exchange risk, with most employees recognizing the company's efforts in policy formulation, hedging practices, and risk monitoring. The awareness and familiarity of staff with foreign exchange risk management concepts are commendable, which strengthens the company's ability to respond to market fluctuations. However, challenges such as market volatility, gaps in employee training, and the need for more frequent policy reviews were also identified. While the treasury department plays a pivotal role in risk management, broader integration across departments and improved communication can enhance the company's resilience to foreign exchange fluctuations. Adopting advanced technological tools and refining forecasting methods can further strengthen the company's foreign exchange risk mitigation strategies.



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