A Project Report on

"A Study on Indian Currency Market and Risk Management on Forex Market"

Submitted to:

Department Of Management Sciences & Research (DMSR)
G. S. College of Commerce & Economics, Nagpur
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Affiliated to:

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

In partial fulfilment for the award of the degree of
Masters of Business Administration

Submitted by:

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Under the Guidance of

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(Academic Year 2023-24)

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CERTIFICATE

This is to certify that **Ms. Vruchita Jagdish Nandagawali** has submitted the project report titled, **"A Study on Currency Market and Risk Management on Forex Market"**, under the guidance of **Prof. Shubhangi Jepulkar** towards the partial fulfilment of **MASTER OF BUSINESS ADMINISTRATION** degree examination.

It is certified that he/she has ingeniously completed his/her project as prescribed by **DMSR – G. S. College of Commerce & Economics, Nagpur (NAAC Accredited "A" Grade Autonomous Institution)** affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

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DECLARATION

I, Vruchita Jagdish Nandagawali here-by declare that the project with title **"A Study on Currency Market and Risk Management on Forex Market."** has been completed by me under the guidance of **Prof. Shubhangi Jepulkar** in partial fulfilment of **MASTER OF BUSINESS ADMINISTRATION** degree examination as prescribed by **DMSR – G. S. College of Commerce & Economics, Nagpur (NAAC Accredited "A" Grade Autonomous Institution)** affiliated to Rashtrasant Tukadoji Maharaj Nagpur university, Nagpur.

This project was undertaken as a part of academic curriculum and has not been submitted for any other examination and does not form the part of any other course undertaken by me.

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Place: Nagpur **Ms. Vruchita Jagdish Nandagawali**

Date:

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CHAPTER - 1

INTRODUCTION

What is Foreign Exchange Market?

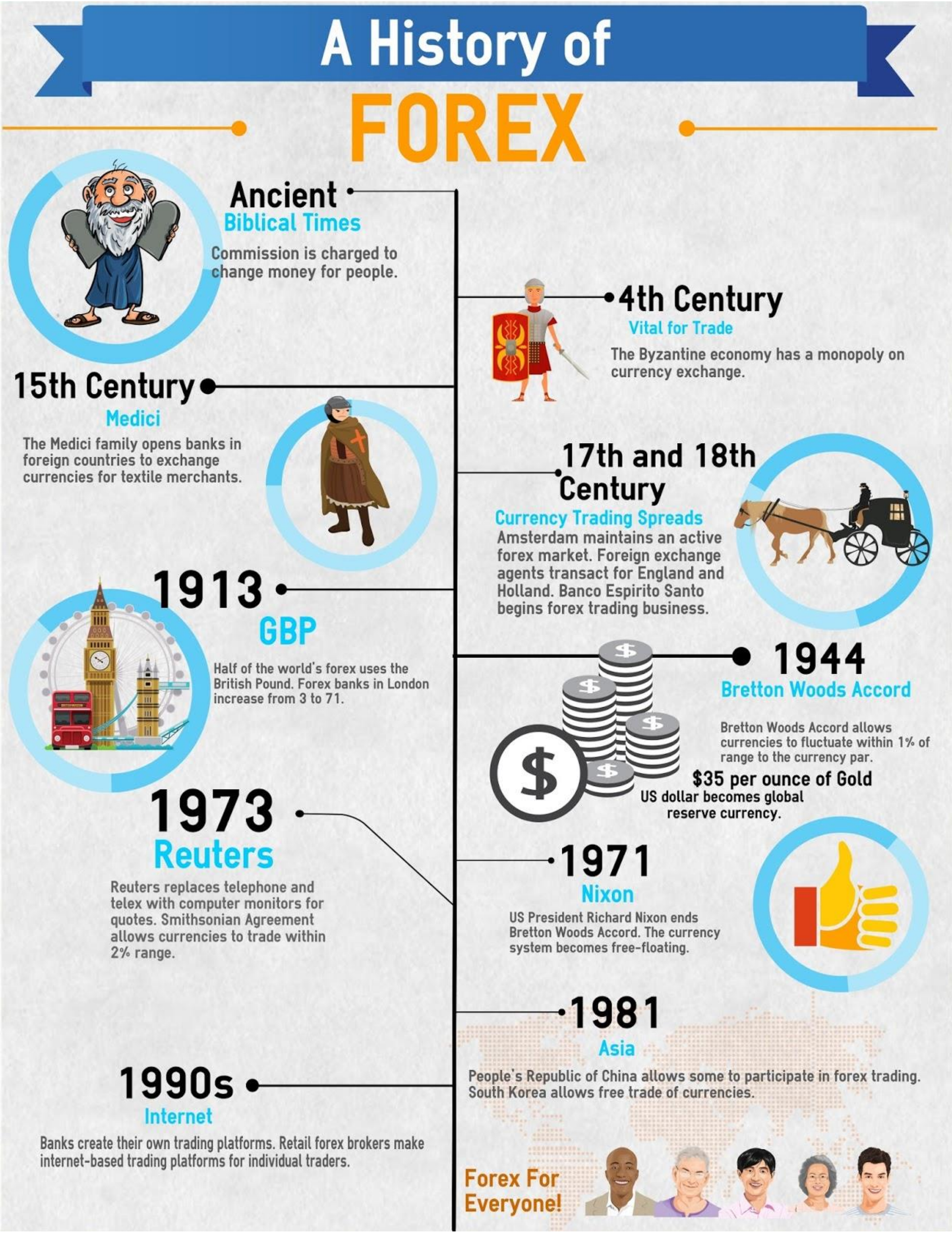
The Foreign Exchange Market is a global decentralized marketplace where currencies are bought and sold. It is the largest and most liquid financial market in the world, with trading volumes exceeding $6 trillion per day. The forex market facilitates international trade and investment by enabling businesses to convert one currency into another.

The forex market operates 24 hours a day, 5 days a week, with trading taking place in major financial centers around the world. The market is driven by various factors, including economic data, geopolitical events, and central bank policies. The exchange rate, which is the value of one currency relative to another, is determined by supply and demand forces in the market.

How does Foreign Exchange Market work?

The foreign exchange market works by facilitating the exchange of one currency for another. Market participants buy and sell currencies to facilitate international trade and investment and speculate on currency price movements. The exchange rate, which is the value of one currency relative to another, is determined by supply and demand forces in the market.

Currency values are influenced by a variety of factors, including economic indicators, geopolitical events, and central bank policies. Transactions in the forex market can take place ver the counter or through electronic trading platforms, and the market operates 24 hours a day, 5 days a week, across major financial centers around the world.



KEY TAKEAWAYS

- The foreign exchange market is an over-the-counter (OTC) marketplace that determines the exchange rate for global currencies.
- It is, by far, the largest financial market in the world and is made up of a global network of financial centers that transact 24 hours a day, closing only on the weekends.
- Currencies are always traded in pairs, so the "value" of one of the currencies in that pair is relative to the value of the other.

Types of Foreign Exchange Market

Spot Market:

This method of transaction is the fastest way to exchange currencies. Spot transaction refers to the exchange or settlement of the currencies by the buyer and seller within two days of the deal without a signed contract. The Spot Exchange Rate is the prevailing exchange rate in the market.

Forward Market:

Forward transactions are future transactions when the buyer and seller enter into an agreement of purchase and sale of currency after 90 days. The agreement is framed on the basis of a fixed exchange rate for a definite date in the future. The rate at which the deal is fixed is termed as Forward Exchange Rate.

Future Market:

Future transactions also deal with contracts in the same manner as forward transactions. However, in the case of future transactions, standardized contracts in terms of features, date, and size should be followed. At the same time, regular forward transactions have flexibility and can be customized. In future transactions, an initial margin is fixed and kept as collateral in order to establish a future position.

Swap Market:

Simultaneous lending and borrowing of two different currencies between two investors are called swap transactions. One investor borrows a currency and repays it in the form of a second currency to the second investor. Swap transactions are done to pay off obligations without suffering a foreign exchange risk.

Option Market:

The exchange of currency from one denomination to another at an agreed rate on a specific date is an option for an investor. Every investor owns the right to convert the currency but is not obligated to do so.

Advantages of Foreign Market:

High Leverage: A forex investor can avail the facility of leverage or loan of up to 20 or 30 times of his/her capacity, for trading in the forex market.

International Trade: Every country has its currency and therefore, to facilitate trade activities between two countries, the forex market is essential.

Trading Option: For the speculators or traders, foreign exchange market is just like other financial markets where they can make money on short term fluctuations in the currencies

Flexibility: We know that the forex market is a twenty-four-seven market, and there is no minimum or maximum limit of the exchange amount. It provides the flexibility of investment or exchange to the traders.

Hedging Risk: The forex market provides for hedging the risk of loss on currency fluctuations while carrying global business operations and trading in foreign currency.

Low Transaction Costs: Since brokers are not very much entertained in the forex market, the transaction cost (called as ‘spread’) charged by the dealers is reasonably low if compared to other financial markets.

Inflation Control: To maintain the economic stability in the country and control situations like inflation, the central bank maintains a forex reserve which consists of currencies of different countries around the world.

Disadvantages of Foreign Exchange Market

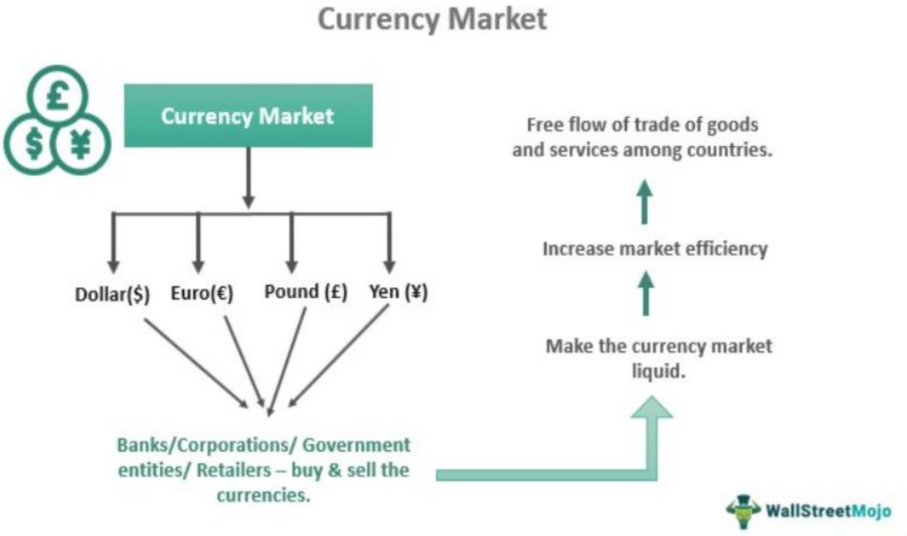
Leverage Risks: Leverage refers to loan in other terms. Forex market initiates the leverage of up to 20 to 30 times the investment capacity of the traders or speculators, which may even lead the loss of the entire amount of the investor.

Counterparty Risks: The forex is highly unregulated with no central authority for currency exchange or trading risk mitigation. Thus, it may encounter the risk of non-fulfilment of the obligations by any of the parties involved in such a contract.

Operational Risks: Since forex is a twenty-four hours market, it is difficult to manage its operations by humans. As a result, the traders and MNCs rely on the algorithms, and trading desks spread, respectively, to safeguard their investment in their absence.

What is Currency Market:

The currency market (also known as the foreign exchange market) is a one-stop marketplace where different currencies can be bought and sold by various participants operating in diverse jurisdictions around the globe. This market plays a very pivotal role in the conduct of international trade and the financial sector.



Currency refers to money, that which is used as a medium of exchange for goods and services in an economy. Before the concept of currency was introduced, goods and services were exchanged for other goods and services under the barter system.

Bartering made it quite difficult to accurately determine the value of any given good or service or track the evolution in the value of a good/service over the course of time. The development of money as a medium of exchange created a much more efficient economy.

By placing a single, monetary value on a good/service, it became much easier to determine its relative value. Currency, thus, became widely used across the globe and facilitated trade between nations.

Origin of Currency

The first usage of currency can be traced back to ancient Egypt. During that time, money was used as a form of receipt that represented an individual’s right to claim grain. It was the first time that currency was utilized as a store of value that was backed by some kind of an asset (in this case, grain).

Fundamentally, the store of value was what provided money with a significant advantage over the barter system. Currency’s value was considered stable because it was created and backed by some governmental authority. This meant that it became much more difficult for individuals to manipulate the value of their goods or services, and it became easier to arrive at a consensus around the value of a good or service.

Various bills and coins introduced as established representations of stores of value that were backed by the government. Each country developed its own currency in accord with the cost of living and standard of living in their respective domains.

Currency Trading (Foreign Exchange)

As a consequence of buying and selling between people or entities in different countries, there was a need for developing a system for exchanging one nation’s currency for another’s. During the 17th and 18th centuries, Amsterdam was home to the world’s first currency exchange market that enabled international buyers to transact their deals in an official manner.

The foreign exchange, or forex, market is now the largest financial market in the world in terms of the value of all the trading done each day – much larger than any of the world’s stock or bond markets. This is because, in order to conduct business worldwide, it is necessary for companies, individuals, and governments to exchange billions in various currencies every trading day. Forex has become an increasingly popular asset class with investors.

Understanding What Is the Currency Market?

Essentially a global, decentralised market that serves as the trading platform for currencies, currency markets are also called foreign exchange markets. In general, the global currency market operates on two levels, as mentioned below.

The Interbank Market

Some of the biggest banks in the world are prominent players in this area of the currency market. These banks exchange currencies with one another in this interbank market, and they conduct large transactions among themselves. This is a special part of the foreign exchange market.

Over-the-Counter Market

This is the section of the currency market in which companies and individuals are allowed to trade in currencies. Anyone can participate in currency trading by means of a broker and an online trading platform.

Basics of Trading in the Currency

In the currency market, buying and selling currencies are always done in pairs. The exchange rate, which is the price of one currency as compared to another, determines the value of these transactions.

Appropriate symbols are used to identify the exact nature of a currency transaction. For instance, the Indian Rupee is represented by INRs, and USDs represent the US Dollar. The deal would be indicated as INR/USD if you wanted to exchange Indian Rupees for US Dollars.

What Are Currency Pairs and How Are They Traded?

There are two separate pieces in a pair of currencies, namely the basic currency and the quotation currency.

- The base currency shall always be expressed as one unit. In India, these currency pairs are the basis for foreign exchange trading. However, there are limited trading hours for foreign exchange on currency futures contracts compared to a global currency market that trades 24 hours per day.
- Generally, the INR is the quote currency, and the USD is the base currency in trades involving Rupees and Dollars. So, when we're writing USD 1 to INR = ₹79, the USD is the base currency, the INR is a reference currency, and ₹79 is the value. In 1 unit, the basis currency is always indicated.

How to Trade Foreign Currency in India?

Remember the points below to understand how to trade currency in India.

- Currency futures and currency options are offered in India by the National Stock Exchange and the Bombay Stock Exchange.
- Though other contracts are starting to catch up, the USD/INR pair is still the most liquid. Specifically, foreign exchange options and currency futures are comparable to the derivative markets for commodities and stocks.
- Currency futures can be traded by traders who wish to take a position on the currency.

You can buy USD INR futures if you expect the US Dollar to rise against the INR. On the other hand, you may sell USD INR futures if you expect India's currency to appreciate. Currency trading margins are also very small compared to the equity and commodity markets.

KEY TAKEAWAYS:

- ➢ The currency market (also known as the foreign exchange market) is a one-stop marketplace where different currencies can be bought and sold by various participants operating in various jurisdictions globally.
- ➢ It is not a single market exchange but a network of global markets that work as per different time zones starting with the Japanese marketplace, followed by Hongkong, Singapore, India, the Middle East (Bahrain), Europe, the United Kingdom, the USA, and Canada and ending with Australia.
- ➢ In it, the buy-side has buyers of foreign currencies and forwards FX contracts. Sell-side has primary dealers in money and originators of foreign exchange contracts, such as large corporations.
- ➢ A currency market exchange involves traders, speculators, arbitrageurs, investors, banks/FI, corporations, etc. Together, they make these markets highly efficient and liquid.

How Does Currency Market Work?

A currency market is a place for trading in the currency where participants belong to various jurisdictions. Market participants enter the markets with different purposes. Together, they make the market more liquid and increase its efficiency. In addition, since the currency market timing is on a clock basis, the currency market provides the international banking system a greater opportunity to handle the current account, and capital account

transactions. As such, these markets are the driving force behind vibrant global economies.

It is important to note here that the currency market is a network of global markets that do not work simultaneously. They work as per different time zones starting with the Japanese marketplace, followed by Hongkong, Singapore, India, the Middle East (Bahrain), Europe, the United Kingdom, the USA, and Canada, and ending with Australia.

Currency Pairs in the Indian Market

In equity, derivatives contracts are available in selected stocks and indexes. Several currencies and pairs are available in the global currency market, but at the Indian exchange, only a few currency pairs are traded. NSE launched its currency platform in August 2008 with only Future contracts. Currency Options were later introduced in October 2010.

In India, currency derivative trading is permitted in currency pairs; USDINR (US Dollar - Indian Rupee), EURINR (Euro - Indian Rupee), GBPINR (Great Britain Pound - Indian Rupee) & JPYINR (Japanese Yen - Indian Rupee) and cross currency pair in EURUSD, GBPUSD and USDJPY.

Currency Futures and Options are available on all the above currency and cross-currency pairs.

INR pairs	Base currency	Quotation currency
USDINR	US Dollar	Indian Rupee
EURINR	Euro	Indian Rupee
GBPINR	British Pound	Indian Rupee
JPYINR	Japanese Yen	Indian Rupee

Cross currency pairs	Base currency	Quotation currency
EURUSD	Euro	US Dollar
GBPUSD	British Pound	US Dollar
USDJPY	US Dollar	Japanese Yen

Risk Management

Foreign exchange risk, also known as exchange rate risk, is the risk of financial impact due to exchange rate fluctuations. In simpler terms, foreign exchange risk is the risk that a business' financial performance or financial position will be impacted by changes in the exchange rates between currencies.

Foreign Exchange Risk, or currency risk, is the potential for financial variations arising from changes in currency exchange rates. In a globalised economy, where businesses and investors frequently cross borders, this risk is an ever-present challenge, demanding astute strategies and keen foresight.

Types of Foreign Exchange Risk

Transaction Risk: This immediate risk arises from time lags between entering a contract and settling it. For a US company buying French wine, if the euro strengthens against the dollar between order and payment, the wine becomes pricier in dollar terms.

Translation Risk: When consolidating financial statements of foreign subsidiaries, this risk emerges. If a US company's Brazilian subsidiary sees the Brazilian real depreciate, its assets and earnings, when converted, might diminish in dollar terms, potentially affecting the parent company's stock price.

Economic Risk: This long-term risk affects a company's market value. A US tech firm might manufacture gadgets in Taiwan. If the Taiwanese dollar appreciates significantly over the years, production costs might rise, potentially reducing the firm's competitiveness and market value.

Managing Foreign Exchange Risk

Forward Contracts: These are agreements to buy or sell a set amount of foreign currency at a future date for a predetermined price. It's like reserving a currency rate today for a future transaction.

Currency Options: Similar to stock options, they grant the right, but not the obligation, to exchange currency at a set rate, offering flexibility in decision-making.

Natural Hedging: By aligning foreign revenues and costs, businesses can organically offset risks. A company might source materials and sell finished products in the same foreign country, naturally balancing its currency inflows and outflows.

Diversification: Spreading investments across various countries can help mitigate risks associated with any single currency.

Strategies of Risk Management:

- **Hedging:** Hedging is one of the primary risk management strategies in forex trading. It involves taking an offsetting position to an existing exposure to reduce or eliminate the risk of adverse price movements. For example, a company with foreign currency receivables can hedge its exposure by taking a short position in the currency futures market or by entering into a forward contract to sell the currency at a predetermined exchange rate.

- **Speculation:** While speculation involves taking on risk rather than mitigating it, it is still a common strategy in the forex market. Traders speculate on the direction of currency movements based on their analysis of fundamental and technical factors. Speculative trading can be highly profitable but also carries a significant risk of losses.

- **Arbitrage:** Arbitrage involves taking advantage of price discrepancies between different markets to make a risk-free profit. In the forex market, arbitrage opportunities may arise when the same currency pair is priced differently across different brokers or exchanges. Traders can exploit these price differences by buying the currency at a lower price in one market and selling it at a higher price in another market.
- **Volatility:** Volatility refers to the degree of variation in the price of a currency over time. It indicates the extent of price fluctuations and is often measured by statistical metrics such as standard deviation or variance.

CHAPTER – 2

COMPANY PROFILE

RESERVE BANK OF INDIA

The Reserve Bank of India, abbreviated as RBI, is India's central bank and regulatory body responsible for regulation of the Indian banking system. Owned by the Ministry of Finance, Government of India, it is responsible for the control, issue and maintaining supply of the Indian rupee. It also manages the country's main payment systems and works to promote its economic development. Bharatiya Reserve Bank Note Mudran (BRBNM) is a specialised division of RBI through which it prints and mints Indian currency notes (INR) in two of its currency printing presses located in Mysore (Karnataka; Southern India) and Salboni (West Bengal; Eastern India). The RBI, along with the Indian Banks' Association, established the National Payments Corporation of India to promote and regulate the payment and settlement systems in India. Deposit Insurance and Credit Guarantee Corporation was established by RBI as one of its specialized divisions for the purpose of providing insurance of deposits and guaranteeing of credit facilities to all Indian banks.

Until the Monetary Policy Committee was established in 2016, it also had full control over monetary policy in the country. It commenced its operations on 1 April 1935 in accordance with the Reserve Bank of India Act, 1934. The original share capital was divided into shares of

100 each fully paid. The RBI was nationalised on 1 January 1949, almost a year and a half after India's independence.

The overall direction of the RBI lies with the 21-member central board of directors, composed of: the governor; four deputy governors; two finance ministry representatives (usually the Economic Affairs Secretary and the Financial Services Secretary); ten government-nominated directors; and four directors who represent local boards for Mumbai, Kolkata, Chennai, and Delhi. Each of these local boards consists of five members who represent regional interests and the interests of co-operative and indigenous banks.

History:

The Reserve Bank of India was established in 1934, under the Reserve Bank of India Act. Though privately owned initially, it was nationalised in 1949 and since then fully owned by the Ministry of Finance, Government of India.

1935–1949

Reserve Bank of India-10 Rupees (1938), the first year of banknote issue.

The Reserve Bank of India was founded on 1 April 1935 to respond to economic troubles after the First World War. The bank was set up based on the recommendations of the 1926 Royal Commission on Indian Currency and Finance, also known as the Hilton Young Commission. Eventually, the Central Legislative Assembly passed these guidelines as the RBI Act 1934. India was the first colony to have its own central bank.

The original choice for the seal of RBI was the East India Company Double Mohur, with the sketch of the Lion and Palm Tree. However, it was decided to replace the lion with the tiger, the national animal of India. The Preamble of the RBI describes its basic functions to regulate the issue of banknotes, keep reserves to secure monetary stability in India, and generally to operate the currency and credit system in the best interests of the country. The Central Office of the RBI was established in Calcutta (now Kolkata) but was moved to Bombay (now Mumbai) in 1937. The RBI also acted as Burma's (now Myanmar) central bank until April 1947 (except during the years of Japanese occupation (1942–45)), even though Burma seceded from the

Indian Union in 1937. After the Partition of India in August 1947, the bank served as the central bank for Pakistan until June 1948 when the State Bank of Pakistan commenced operations. Though set up as a shareholders' bank, the RBI has been fully owned by the Government of India since its nationalisation in 1949. RBI has a monopoly of note issue.

1950–1960

In the 1950s, the Indian government, under its first Prime Minister Jawaharlal Nehru, developed a centrally planned economic policy that focused on the agricultural sector. The administration nationalised commercial banks and established, based on the Banking Companies Act, 1949 (later called the Banking Regulation Act), a central bank regulation as part of the RBI. Furthermore, the central bank was ordered to support economic plan with loans.

1961–1968

As a result of bank crashes, the RBI was requested to establish and monitor a deposit insurance system. Meant to restore the trust in the national bank system, it was initialized on 7 December 1961. The Indian government founded the funds to promote the economy and used the slogan "Developing Banking". The government of India restructured the national bank market and nationalized a lot of institutes. As a result, the RBI had to play the central part in controlling and supporting this public banking sector.

1969–1984

In 1969, the Indira Gandhi-headed government nationalised 14 major commercial banks. Upon Indira Gandhi's return to power in 1980, a further six banks were nationalised. The regulation of the economy and especially the financial sector was reinforced by the Government of India in the 1970s and 1980s. The central bank became the central player and increased its policies a lot for various tasks like interests, reserve ratio and visible deposits. These measures aimed at better economic development and had a huge effect on the company policy of the institutes. The banks lend money in selected sectors, like agricultural business and small trade companies. The Banking Commission was established on Wednesday, 29 January 1969, to analyse banking costs, effects of legislations and banking procedures, including non-banking financial intermediaries and indigenous banking on Government of India economy; with R.G. Saraiya as the chairman.

The branch was forced to establish two new offices in the country for every newly established office in a town. The oil crises in 1973 resulted in increasing inflation, and the RBI restricted monetary policy to reduce the effects.

1985–1990

A lot of committees analysed the Indian economy between 1985 and 1989. Their results had an effect on the RBI. The Board for Industrial and Financial Reconstruction, the Indira Gandhi Institute of Development Research and the Security & Exchange Board of India investigated the national economy as a whole, and the security and exchange board proposed better methods for more effective markets and the protection of investor interests. The Indian financial market was a leading example for so-called "financial repression" (Mckinzon and Shaw). The Discount and Finance House of India began its operations in the monetary market in April 1988; the National Housing Bank, founded in July 1988, was forced to invest in the property market and a new financial law improved the versatility of direct deposit by more security measures and liberalisation.

1991–1999

The national economy contracted in July 1991 as the Indian rupee was devalued. The currency lost 18% of its value relative to the US dollar, and the Narsimha Committee advised restructuring the financial sector by a temporal reduced reserve ratio as well as the statutory liquidity ratio. New guidelines were published in 1993 to establish a private banking sector. This turning point was meant to reinforce the market and was often called neo-liberal. The central bank deregulated bank interests and some sectors of the financial market like the trust and property markets. This first phase was a success and the central government forced a diversity liberalisation to diversify owner structures in 1998.

The National Stock Exchange of India took the trade on in June 1994 and the RBI allowed nationalised banks in July to interact with the capital market to reinforce their capital base. The central bank founded a subsidiary company—the Bharatiya Reserve Bank Note Mudran Private Limited—on 3 February 1995 to produce banknotes.

2000 - 2009

The Foreign Exchange Management Act, 1999 came into force in June 2000. It should improve the item in 2004–2005 (National Electronic Fund Transfer). The Security Printing & Minting Corporation of India Ltd., a merger of nine institutions, was founded in 2006 and produces banknotes and coins.

The national economy's growth rate came down to 5.8% in the last quarter of 2008–2009[36] and the central bank promotes the economic development.

Since 2010

In 2016, the Government of India amended the RBI Act to establish the Monetary Policy Committee (MPC) to set. This limited the role of the RBI in setting interest rates, as the MPC membership is evenly divided between members of the RBI (including the RBI governor) and independent members appointed by the government. However, in the event of a tie, the vote of the RBI governor is decisive.

In April 2018, the RBI announced that "entities regulated by RBI shall not deal with or provide services to any individual or business entities dealing with or settling virtual currencies," including Bitcoin.[38] While the RBI later clarified that it "has not prohibited" virtual currencies,[39] a three-judge panel of the Supreme Court of India issued a ruling on 4 March 2020 that the RBI had failed to show "at least some semblance of any damage suffered by its regulated entities" through the handling of virtual currencies to justify its decision.[40] The court challenge was filed by the Internet and Mobile Association of India, whose members include some cryptocurrency exchanges whose businesses suffered following the RBI's 2018 order.

Features of RBI

According to the RBI act 1934 RBI has various features to serve. Some of them include:

1. **Monetary Authority:** It plans and supervises the monetary policies designed for the country. The objective behind this is that every policy should be designed keeping in mind the idea of growth and at the same time should also maintain price stability.

2. **Financial System Supervisor:** It designs the parameters under which all the banks of the country should work. The main aim here is to maintain the trust of the general public in the financial system of the country and provide them services which are cost-friendly.
3. **Foreign Exchange:** All the foreign exchange that happens between the countries is maintained and looked after by RBI. This is done so that easy and smooth foreign trade can happen and also foreign market remains maintained.
4. **Issuer of currency:** RBI is the authority who issues notes, destroys the old notes and decides which currency is fit for circulation among the people. Demonetisation was done after taking advice from RBI and the new notes of 2000 came into circulation.
5. **Development:** various national projects are funded by RBI. It undertakes development of the country as its objective and invests at various places in national interest.

Understanding the Reserve Bank of India (RBI)

Located in Mumbai, the RBI serves the financial market in many ways. The bank sets the overnight interbank lending rate. The Mumbai Interbank Offer Rate (MIBOR) serves as a benchmark for interest rate–related financial instruments in India.

The main purpose of the RBI is to conduct consolidated supervision of the financial sector in India, which is made up of commercial banks, financial institutions, and non-banking finance firms. Initiatives adopted by the RBI include restructuring bank inspections, introducing off-site surveillance of banks and financial institutions, and strengthening the role of auditors

First and foremost, the RBI formulates, implements, and monitors India's monetary policy. The bank's management objective is to maintain price stability and ensure that credit is flowing to productive economic sectors. The RBI also manages all foreign exchange under the Foreign Exchange Management Act of 1999. This act allows the RBI to facilitate external trade and payments to promote the development and health of the foreign exchange market in India.

The RBI acts as a regulator and supervisor of the overall financial system. This injects public confidence into the national financial system, protects interest rates, and provides positive banking alternatives to the public. Finally, the RBI acts as the issuer of national currency. For India, this means that currency is either issued or destroyed depending on its fit for current circulation. This provides the Indian public with a supply of currency in the form of dependable notes and coins, a lingering issue in India.

Reserve Bank of India Departments

The Reserve Bank of India has a number of departments, each of which have a very specific purpose. An entire list of departments can be found on the Reserve Bank of India's site. Some of the key departments within the Reserve Bank of India along with what that department does includes but isn't limited to:

- **Department of Monetary Policy:** Responsible for formulating and implementing monetary policy to achieve price stability and economic growth.
- **Department of Banking Regulation:** Regulates and supervises banks and financial institutions to ensure the stability and efficiency of the banking system.
- **Department of Currency Management:** Manages the issuance and circulation of currency notes and coins.
- **Department of Payment and Settlement Systems:** Regulates and supervises payment and settlement systems to ensure safety, efficiency, and reliability of payment systems in the country.
- **Department of Economic and Policy Research:** Conducts economic research and analysis to provide inputs for policymaking and to monitor economic indicators.
- **Department of Information Technology:** Manages and develops IT infrastructure, systems, and applications to support the operations of the Reserve Bank of India.

Reserve Bank of India Operations

The RBI was originally set up as a private entity, but it was nationalized in 1949. The reserve bank is governed by a central board of directors appointed by the national government. The government has always appointed the RBI's directors, and this has been the case since the bank became fully owned by the government of India as outlined by the Reserve Bank of India Act. Directors are appointed for a period of four years.5

According to its website, the current focus of the RBI is to continue its increased supervision of financial institutions, while dealing with legal issues related to bank fraud and consolidated accounting and attempting to create a supervisory rating model for its banks. Reserve Bank of India.

Reserve Bank of India and Communication

The Reserve Bank of India acknowledges the pivotal role that communication plays in modern central banking. On its website, it emphasizes a collegial approach to monetary policy decision-making. The Reserve Bank of India's communication policy adheres to guiding principles of relevance, transparency, clarity, comprehensiveness, and timeliness with the aim of enhancing public understanding of developments across its various domains.

In its medium-term vision statement titled "Utkarsh 2022", the RBI delineates objectives including excellence in statutory functions, enhanced public trust, increased relevance nationally and globally, transparent governance, modern infrastructure, and a skilled workforce. Strategies to achieve these objectives involve consolidating past gains, leveraging emerging opportunities, and addressing future challenges through tangible, time-bound milestones.

The RBI commits to reviewing its communication policy every three years, reflecting its recognition of communication as a dynamic process crucial for effective central banking operations.

Main Functions of RBI

Main functions are those functions which every central bank of each nation performs all over the world. Basically, these functions are in line with the objectives with which the bank is set up. It includes fundamental functions of the Central Bank. They comprise the following tasks.

1. Issue of Currency Notes: The RBI has the sole right or authority or monopoly of issuing currency notes except one rupee note and coins of smaller denomination. These currency notes are legal tender issued by the RBI. Currently it is in denominations of Rs. 2, 5, 10, 20, 50, 100, 500, and 1,000. The RBI has powers not only to issue and withdraw but even to exchange these currency notes for other denominations. It issues these notes against the security of gold bullion, foreign securities, rupee coins, exchange bills and promissory notes and government of India bonds.

2. Banker to other Banks: The RBI being an apex monitory institution has obligatory powers to guide, help and direct other commercial banks in the country. The RBI can control the volumes of banks reserves and allow other banks to create credit in that proportion. Every commercial bank has to maintain a part of their reserves with its parent's viz. the RBI. Similarly, in need or in urgency these banks approach the RBI for fund. Thus, it is called as the lender of the last resort.

3. Banker to the Government: The RBI being the apex monitory body has to work as an agent of the central and state governments. It performs various banking function such as to accept deposits, taxes and make payments on behalf of the government. It works as a representative of the government even at the international level. It maintains government accounts, provides financial advice to the government. It manages government public debts and maintains foreign exchange reserves on behalf of the government. It provides overdraft facility to the government when it faces financial crunch.

4. Exchange Rate Management: It is an essential function of the RBI. In order to maintain stability in the external value of rupee, it has to prepare domestic policies in that direction. Also, it needs to prepare and implement the foreign exchange rate policy which will help in attaining the exchange rate stability. In order to maintain the exchange rate stability, it has to bring demand and supply of the foreign currency (U.S Dollar) close to each other.

5.Credit Control Function: Commercial bank in the country creates credit according to the demand in the economy. But if this credit creation is unchecked or unregulated then it leads the economy into inflationary cycles. On the other credit creation is below the required limit then it harms the growth of the economy. As a central bank of the nation the RBI has to look for growth with price stability. Thus, it regulates the credit creation capacity of commercial banks by using various credit control tools.

6. Supervisory Function: The RBI has been endowed with vast powers for supervising the banking system in the country. It has powers to issue license for setting up new banks, to open new branches, to decide minimum reserves, to inspect functioning of commercial banks in India and abroad, and to guide and direct the commercial banks in India. It can have periodical inspections an audit of the commercial banks in India.

• Developmental / Promotional Functions of RBI

Along with the routine traditional functions, central banks especially in the developing country like India have to perform numerous functions. These functions are country specific functions and can change according to the requirements of that country. The RBI has been performing as a promoter of the financial system since its inception. Some of the major development functions of the RBI are maintained below.

1. Development of the Financial System: The financial system comprises the financial institutions, financial markets and financial instruments. The sound and efficient financial system is a precondition of the rapid economic development of the nation. The RBI has encouraged establishment of main banking and non banking institutions to cater to the credit requirements of diverse sectors of the economy.

2. Development of Agriculture: In an agrarian economy like ours, the RBI has to provide special attention for the credit need of agriculture and allied activities. It has successfully rendered service in this direction by increasing the flow of credit to this sector. It has earlier the Agriculture Refinance and Development Corporation (ARDC) to look after the credit, National Bank for Agriculture and Rural Development (NABARD) and Regional Rural Banks (RRBs).

3. Provision of Industrial Finance: Rapid industrial growth is the key to faster economic development. In this regard, the adequate and timely availability of credit to small, medium and large industry is very significant. In this regard the RBI has always been instrumental in setting up special financial institutions such as ICICI Ltd. IDBI, SIDBI and EXIM BANK etc.

4. Provisions of Training: The RBI has always tried to provide essential training to the staff of the banking industry. The RBI has set up the bankers' training colleges at several places. National Institute of Bank Management i.e NIBM, Bankers Staff College i.e. BSC and College of Agriculture Banking i.e CAB are few to mention.

5. Collection of Data: Being the apex monetary authority of the country, the RBI collects process and disseminates statistical data on several topics. It includes interest rate, inflation, savings and investments etc. This data proves to be quite useful for researchers and policy makers.

6. Publication of the Reports: The Reserve Bank has its separate publication division. This division collects and publishes data on several sectors of the economy. The reports and bulletins are regularly published by the RBI. It includes RBI weekly reports, RBI Annual Report, Report on Trend and Progress of Commercial Banks India., etc. This information is made available to the public also, at cheaper rates.

7. Promotion of Banking Habits: As an apex organization, the RBI always tries to promote the banking habits in the country. It institutionalizes savings and takes measures for an expansion of the banking network. It has set up many institutions such as the Deposit Insurance Corporation-1962, UTI-1964, IDBI-1964, NABARD-1982, NHB-1988, etc. These organizations develop and promote banking habits among the people. During economic reforms it has taken many initiatives for encouraging and promoting banking in India.

8. Promotion of Export through Refinance: The RBI always tries to encourage the facilities for providing finance for foreign trade especially exports from India. The Export-Import Bank of India (EXIM Bank India) and the Export Credit Guarantee Corporation of India (ECGC) are supported by refinancing their lending for export purpose.

• **Supervisory Functions of RBI**

The reserve bank also performs many supervisory functions. It has authority to regulate and administer the entire banking and financial system. Some of its supervisory functions are given below.

1. Granting license to banks: The RBI grants license to banks for carrying its business. License is also given for opening extension counters, new branches, even to close down existing branches.

2. Bank Inspection: The RBI grants license to banks working as per the directives and in a prudent manner without undue risk. In addition to this it can ask for periodical information from banks on various components of assets and liabilities.

3. Control over NBFIs: The Non-Bank Financial Institutions are not influenced by the working of a monitory policy. However, RBI has a right to issue directives to the NBFIs from time to time regarding their functioning. Through periodic inspection, it can control the NBFIs.

4. Implementation of the Deposit Insurance Scheme: The RBI has set up the Deposit Insurance Guarantee Corporation in order to protect the deposits of small depositors. All bank deposits below Rs. One lakh are insured with this corporation. The RBI work to implement the Deposit Insurance Scheme in case of a bank failure.

• Reserve Bank of India's Credit Policy

The Reserve Bank of India has a credit policy which aims at pursuing higher growth with price stability. Higher economic growth means to produce more quantity of goods and services in different sectors of an economy; Price stability however, does not mean no change in the general price level but to control the inflation. The credit policy aims at increasing finance for the agriculture and industrial activities. When credit policy is implemented, the role of other commercial banks are very important. Commercial banks flow of credit to different sectors of the economy depend on the actual cost of credit and arability of funds in the economy.

Foreign Exchange Management Act 1999

The Foreign Exchange Management Act, 1999 also known as FEMA is an enactment which deals primarily with the provisions relating to cross-border trade and payments thereof. It defines the procedures, formalities, dealings of all foreign exchange transactions in India. FEMA has been introduced as a replacement for earlier Foreign Exchange Regulation Act (FERA) because it didn't fit in with post-liberalisation policies. FEMA head office is known as Enforcement Directorate and is situated in heart of city of Delhi.

The Central Government of India formulated an act to encourage external payments and across the border trades in India known as the Foreign Exchange Management Act. FEMA (Foreign Exchange Management Act) was introduced in the year 1999 to replace an earlier act FERA (Foreign Exchange Regulation Act). FEMA was formulated to fill all the loopholes and drawback of FERA (Foreign Exchange Regulation Act) and hence several economic reforms (major reforms) were introduced under the FEMA act. FEMA was basically introduced to de-regularize and have a liberal economy in India.

Objectives of FEMA

The main objective for which FEMA was introduced in India was to facilitate external trade and payments. In addition to this, FEMA was also formulated to assist orderly development and maintenance of the Indian forex market.

FEMA outlines the formalities and procedures for the dealings of all foreign exchange transactions in India. These foreign exchange transactions have been classified into two categories — Capital Account Transactions and Current Account Transactions.

Under the FEMA Act, the balance of payment is the record of dealings between the citizen of different countries in goods, services and assets. It is mainly divided into two categories, i.e. Capital Account and Current Account.

Capital Account comprises all capital transactions whereas Current Account comprises trade of merchandise. Current Account transactions are those transactions that involve inflow and outflow of money to and from the country/countries during a year, due to the trading/rendering of commodity, service, and income.

The current account is an indicator of an economy's status. As mentioned above the balance of payment comprises current and capital accounts, the remainder of the Balance of Payment is Capital Account, which consists the movement of capital in the economy due to capital receipts and expenditure. Capital account recognises domestic investment in foreign assets and foreign investment in domestic.

Applicability of FEMA Act

FEMA (Foreign Exchange Management Act) is applicable to the whole of India and equally applicable to the agencies and offices located outside India (which are owned or managed by an Indian Citizen). The head office of FEMA is situated in New Delhi and known as Enforcement Directorate. FEMA is applicable to:

- Foreign exchange.
- Foreign security.
- Exportation of any commodity and/or service from India to a country outside India.
- Importation of any commodity and/or services from outside India.
- Securities as defined under Public Debt Act 1994.
- Purchase, sale and exchange of any kind (i.e. Transfer).
- Banking, financial and insurance services.
- Any overseas company owned by an NRI (Non-Resident Indian) and the owner is 60% or more.

- Any citizen of India, residing in the country or outside (NRI).

The Current Account transactions under the FEMA Act has been categorized into three parts which, namely-

- Transactions prohibited by FEMA,
- The transaction requires Central Government's permission,
- The transaction requires RBI's permission.

IMPORTANT PROVISIONS OF FEMA ACT 1999:

1. FEMA allows free transactions on current account subject to reasonable restrictions that may be imposed. (Section 5)
2. RBI controls over capital account transactions. (Section 11)
3. It allows Control over realization of export proceeds. (Section 7 and 8)
4. It allows dealing in foreign exchange through authorized persons like authorized dealer or money changer, AD Category banks etc. (Section 10)
5. It provides appeal provision including Special Director (Appeals) (Section 17)
6. It is governed by Directorate of enforcement. (Section 36)
7. FEMA recognized the possibility of Capital Account convertibility. (Section 6)

The violation of FEMA is a civil offence. (Section 13)

Important FEMA Guidelines and Features

Under FEMA, all forex-related offences are civil offences instead of FERA (Foreign Exchange Regulation Act), where all of the offences were considered criminal offences. The other features are as follows:

- FEMA applies only to Indian residents in India. It does not apply to Indian citizens residing outside India. The application criteria are that the person or entity must be resident in India during the previous financial year for 182 days or more.

- FEMA authorised the Central Government to impose restrictions and supervise three things related to foreign exchange- payments or receipts made to any person outside India.
- FEMA also specifies the areas that require specific permissions of the Reserve Bank of India (RBI) or the government, like dealing in foreign exchange.
- FEMA has classified the foreign exchange transactions into two categories – Capital Account and Current Account.

Capital Account and Current Account – The purpose of the capital account is to adjust the assets and liabilities of individuals outside India to persons residing in India. Thus any transaction that results in a change of the overseas assets and liabilities in India of an Indian residing outside India or transactions overseas of a person residing in India will be considered under the capital account. All other transactions fall under the category of the current account.

The penalty for non-compliances to be charged is up to thrice the sum involved in such contravention or up to Rs 2 lakh. The penalty may extend up to Rs 5,000 for each day post the first day during which the contravention proceeds. Hence, all companies and Indian residents who transact overseas must ensure adherence to the laws under FEMA.

The Rules: Decoding the Basic Guidelines of FEMA

The Foreign Exchange Management Act (FEMA) stands as a beacon in India's financial landscape, guiding the nation's foreign exchange activities. Introduced in 1999, it has been pivotal in shaping India's global economic engagements. Let's delve deeper into its fundamental guidelines:

1. **Regulation of Foreign Exchange Transactions**

- **Authorised Channels**: FEMA mandates that all foreign exchange transactions be routed through authorised persons. As of 2022, there are more than 2,500 authorised dealers (ADs) licensed by the Reserve Bank of India (RBI) to handle foreign exchange.

Example: If a startup in Mumbai wishes to pay for software services from the US, the payment must be processed through these ADs, ensuring transparency and compliance.

2. **Mandatory Reporting:** Significant foreign exchange transactions, be it a hefty investment or a sizable trade deal, must be reported to the RBI. In June 2023, India reported foreign exchange reserves worth over USD 600 billion, highlighting the scale of operations under FEMA's purview.

3. **Directives on Foreign Direct Investment (FDI)**

- **Sectoral Caps:** FEMA provides clear guidelines on FDI limits across sectors. For instance, the aviation sector has a 49% FDI cap, while the telecom sector allows up to 100%.

- **Repatriation Norms:** While India attracted FDI worth USD 71 billion in the Financial Year 2022-23, FEMA ensures that profits and dividends from such investments can be sent back to the investor's home country, following specific procedures.

4. **Property Transactions for NRIs and PIOs**

- **Buying Property**: While NRIs and PIOs can purchase residential and commercial properties in India, agricultural land is off-limits. In 2018, property investments by NRIs stood at a staggering USD 10.2 billion. Example: An NRI based in London can buy an apartment in Bangalore but cannot purchase farmland in Punjab.

- **Selling Off**: While selling property, the funds, especially if they're to be sent abroad, must adhere to certain conditions, ensuring the money is clean and accounted for.

5. **Banking Directives for NRIs**

- **Types of Accounts**: FEMA outlines the rules for NRI accounts like NRE, NRO, and FCNR. As of 2020, deposits in NRE accounts alone surpassed USD 130 billion.

- **Loan Provisions**: While NRIs can take loans against their deposits, there are restrictions. For instance, the loan amount cannot be used for relending or agricultural activities.

6. **Offences and Their Repercussions Penalties**: Non-compliance with FEMA can be costly. In 2019, penalties worth INR

CHAPTER - 3

LITERATURE REVIEW

"YOU CAN MAKE A KILLING IF YOU GUESS RIGHT. That's the allure. A $5,000 trade to buy the euro and simultaneously sell the dollar, entered the afternoon of July 10 and leveraged 100 to 1, had soared to $12,850 just 24 hours later, after the euro rose nearly two U.S. cents on the news that mortgage giants Fannie Mae and Freddie Mac were teetering on the brink. AND IF YOU GET IT WRONG? You can lose all your money." The above vignette gives a gist about scope of profit making in currency trading using technical analysis which though not an easy task conjecturally speaking isn't even one which cannot be mastered with thorough knowledge and discipline. Also, a lot depends on the financial behavior of a particular participant (Hilton, 2001). Mastery is required as the risk involved is considerably high. (Bredin et al., 2004) "The sample studied (1990–1998) represents a period where the foreign exchange rate risk represented an important part risk. This research represents the first part of a comprehensive study which will analyse the risks faced by firms/banks in the Irish market. The study focuses on the foreign exchange market, which was certainly faced with a high degree of volatility over the early part of the study period." The preferred risk-reward ratio differs individual to individual and is highly influenced by the personality traits and risk perception of an investor as explained by (Chitra et al., 2011) be it any security – Currency, Commodity, Equity etc. The Foreign Exchange Market the Foreign Exchange market stands alone as the largest and most liquid markets in the world with trillions being traded daily. Open 24 hours a day, five days a week, this asset class is available to everyone from national banks and international corporations to the individual day trader. The market tops $4 trillion in average daily turnover (McFarlin, 2010). He also points out that trading in Foreign Exchange means exchanging one currency in return of another either to hedge impending risk due to exposure in a specific currency or to profit from exchange rate movements.

The currency can be traded either in the Spot Market, Forwards/Futures market, ETF"s or Options Market. It was found that recently the spot market dominates price discovery (Rosenberg, 2009). Till date, many traders mostly trade certain currencies vs. the U.S. dollar only. That restricts the trades to dollar fundamentals, sometimes at the expense of the fundamentals of the other side of the trade. Traders can even expand their opportunities by trading cross pairs where in US Dollar has been used as a vehicle currency (Chelkowski, 2010). Glen Arnold et al. in the book Corporate Financial Management have highlighted that in the Foreign Exchange market most of the trades are between banks for speculation rather than for underlying export or import. The results of the study done by (Ramcharran, 2000) signify this as it shows a strong relationship between the trading income of banks and exchange rate volatility. But those trades that are done against genuine exposure can affect the following entities: 1. Receipts for Export 2. Payment of Imports 3. Valuation of foreign assets and liabilities 4. Long-term viability of overseas operations 5. Feasibility of a foreign project Additionally, even if one does not trade in Foreign Exchange Market directly, the value of any currency in terms of another can sometimes affect the market you watch more than any other variable (Murphy, 2004). Believers of random-walk theory say that investors can't beat the stock market because news travels too rapidly. When a new bit of information emerges, investors react to it almost instantly, bidding a stock's price up or down until it reaches a new equilibrium. Therefore, the only things that the market hasn't taken into account are things that haven't happened yet. Those events are, by definition, random. Thus, in other words, they believe that any amount reasoning cannot help in predicting the market (Coy, 1999).

But those who do reason they do it either fundamentally or technically. These are the ones who believe that an informationally efficient market reflects relevant information fully and promptly (Liu, 2007). And some do it really well, Investigation of an index of returns on professionally managed currency funds showed that over the 1990-2006 period, currency fund managers earned excess returns averaging 25 bps per month using 4 distinct styles of currency trading - carry, trend, value, and volatility. The study also inferred that Trend strategies have celebrated an unexpected revival (Levich et al., 2008). Forecasting Markets - Fundamental Factors versus Technical Indicators Fundamental analysis is a method of evaluating securities by attempting to measure the intrinsic value of a stock. Fundamental analysts' study everything from the overall economy and industry conditions to the financial condition and management of companies. On the other hand, technical analysis is the evaluation of securities/assets by means of studying statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value but instead use charts to identify patterns and trends that may suggest what the security will do in the future. (Venkatesh et al., 2011) and (Talati, 2002) One type of technical Analysis - Elliott Wave Theory claims that the movement of the stock market could be predicted by observing and identifying a repetitive pattern of waves thus helping the trader and investor to reduce risk and maximize profit (Dharmaraj et al, 2011). Same are the uses of any other type of technical analysis tool. In other words, technical analysis focuses exclusively on the study of market action while fundamental analysis focuses on the underlying economic forces of supply and demand that cause prices to move up or down or stay the same. In accepting the premise of technical analysis, one can see why technicians believe their approach is superior to the fundamentalists. If the fundamentals are reflected in market price, then the study of those fundamentals becomes unnecessary (Murphy, 1999).

Technical Analysis Technical analysis is a constantly evolving emerging science because quantitative methods for evaluating price movement to make trading decisions have now become a dominant part of current market analysis. Detecting new trends early using mechanical trading rules in technical analysis is one of the techniques that professional traders use to make abnormal returns above the benchmark return of the passive buy-and-hold policy (Azizan et al., 2010). Rationale of Technical Approach of Forecasting Most technical chartists concur that much of what we call Technical Analysis today has its origins in theories first proposed by Dow around the turn of the century. Dow Theory still forms the cornerstone of the study of technical analysis, even in the face of today's sophisticated computer technology, and the proliferation of newer and supposedly better technical indicators (John Murphy, 1999). (Krishnan et al., 2009) very clearly indicate that technical analysis is profitable in currency trading in foreign exchange spot market, which is proven by the fact that all the four currency pairs, six-time frames and ten indicators under consideration yielded trading profits in foreign spot market. (Bettman et al., 2009) state that, "Testing confirm the complementary nature of fundamental and technical analysis by showing that, although each performs well in isolation, models integrating both have superior explanatory power." In another paper (Caginalp et al., 1998) evidence is provided that traders are influenced by price behavior in short term. The results of the study conducted by (Okunev et al., 2003) indicates that the potential exists for investors to generate excess returns in foreign exchange markets by adopting a momentum strategy using the moving average rules identified in this paper. It is not at all apparent that foreign exchange markets operate in an efficient manner and that returns are determined entirely by fundamental information. In fact, very simple technical rules can generate quite significant returns beyond those that can be explained by transactions costs or risk. (Venkatesh et al., 2011) inferred that at shorter horizons there exists a skew towards reliance on Technical Analysis, while the skewness moves towards fundamental analysis for long term Investments. Trend strategies applied to currencies show the best results over medium-term rebalancing cycles of 3–6 months (Mettler et al., 2010).

(Middleton, 2005) also cites that trend trading remains a dominant style of managing currencies. People still keep on raising doubts about the trending of the currency market and whether charts can be used to forecast future movements. The profitability of technical currency trading has been declining since the late 1980s (Schulmeister, 2008). There is evidence that there are lower returns from trend-trading than before, but the recent trading profits for exotic currencies are still attractive (Pukthuanthong et al, 2007). Japanese Candlestick as a Technical Analysis Tool: (Steve Nison,2001) in his book on Japanese candlestick techniques mentions that Japanese Candlestick technique is a versatile tool that can be fused with any other technical tool, and will help improve any technician's market analysis. Some researchers (Northcott, 2009) provide a warning that candlesticks should never be used alone to make a trading decision. They don"t show enough about the rest of the price activity, and their interpretation often depends on the trend they are in. One should determine the overall market position using conventional technical indicators before entering into a trade. Candlesticks work best at indicating reversal points when the price is overbought or oversold, in which case they can help with the timing of your entry. In this situation, a Doji candle indicates that no one is in charge, neither bulls nor bears, so the trend is neutral. Individual candlesticks such as the hanging man and hammer formations display a wealth of information and can indicate the probability of a one-day reversal, but there is also the possibility that they could simply be outliers, so patterns made of multiple candlesticks can offer confirmation that the reversal is real (McMahon, 2007). There are hundreds of named candlestick patterns, but many traders choose a few that seem to work best for them in the markets they trade. The successful interpretation of them all comes back to the basic ideas expressed above (Northcott, 2009). Which of these are best suited for the Indian market is what this paper intends to find out. Also, whether the Japanese Candlestick work in the Indian Currency market by itself, or do they need support of Western Technical Indicators and Fundamental factors is another aspect that will be interrogated.

Technical Analysis in Indian Context Though the basic tenets of trading using any technical indicator should generally remain the same, it may at times vary depending upon the convertibility of a currency and maturity of the market. For India it may depend on things like the trends in inflows of foreign capital into the country. It is also known that, Reserve Bank of India often prevents the exchange rate appreciation associated with rising capital inflows by accumulating foreign exchange reserves and foreign investments (Singh et al, 2010). Similarly, Reserve Bank of India at times also prevents depreciation. It is thus necessary to study the Candlestick Charting Techniques in Indian context and develop suitable strategies as at this point of time India is still in the transition stage to fuller openness (Chakravarty, 2011).

CHAPTER - 4

RESEARCH METHODOLOGY

RESEARCH DESIGN:

1. Exploratory Research

Exploratory Research:

- In exploratory design first collect the information about research
- Understand Foreign Exchange Market
- About Indian Economy
- Then Collection of Secondary data from, Books, Magazines, Websites etc.

DATA COLLECTION:

Quantitative:

Gather historical data on currency exchange rates, volatility indices, and other relevant market indicators from reputable financial databases.

Qualitative:

Conduct with experienced forex traders, financial analysts, and risk management professionals. Design open-ended questions to explore their perspectives on currency market risks and risk management strategies.

Target Population: The collection of elements or objects that process the information sought by the researcher and about which inferences are to be made.

Elements: Currency market and Risk management

Sampling Unit: Indian Foreign Exchange

Sampling Frame: A representation of the elements of the target population. It consists of a list or set of direction for identifying the target population.

Research Instruments: Secondary Data, Websites, Books and Magazines

Research Methodology

Research methodology carried out for this study can be of two types:

Primary Data:

Primary data refers to original data collected directly from the source. It is data that has not been previously collected, processed, or interpreted by anyone else. This type of data is typically gathered through methods such as surveys, interviews, experiments, observations, or direct measurements.

- As our research is based on secondary data, so this part is not relevant for the project.

Secondary Data:

The secondary data information is mostly taken from books and other website etc.

Books Name:

- "Currency Trading for Dummies" by Kathleen Brooks and Brian Dolan, Published in 2011.
- "A self-study Guide to Becoming a Successful Currency Trader" by Abe Confabs.
- "Survive and Thrive in the Forex Market" by Brian Dolan, Published in 2010.
- International financial management- Prasanna Chandra
- International financial management- P.G. Apte

Websites:

- Wikipedia
- Investopedia
- www.google.com
- www.mecklai.com

Magazines:

- Forex Journals
- DALAL STREET INVESTMENT JOURNAL

News Paper:

- The Economic Times
- Business Line

4.1.1 PROBLEM STATEMENT

"A Study on Indian Currency Market and Risk Management on Forex Market" Despite the growth of the Indian currency market, there's a dearth of comprehensive studies on its dynamics and risk management practices in the forex market. This knowledge gap impedes effective risk mitigation strategies for market participants, hindering optimal decision-making and potentially exposing them to significant financial losses.

4.1.2 NEED OF THE STUDY:

- The main purpose of doing this project was to know about currency market & how to manage the risk in forex market.

- It helps traders understand the complexities of the Forex market, including factors influencing currency fluctuations.

- It enables the development of effective risk management strategies, essential for minimizing potential losses.

4.1.3 OBJECTIVES OF THE STUDY:

1. To study Forex market & Risk management in general as well as in forex market.
2. To have a knowledge of different types of forex market.
3. To study various risks in the Forex market as well as volatility in Forex market.
4. To study various strategies of risk management.

4.1.4 HYPOTHESIS OF STUDY:

Hypothesis (H0) - Null hypothesis

Identifying patterns and influences on currency movements, does not lead to more informed trading strategies and decision-making.

Hypothesis (H1) - Alternative hypothesis

Identifying patterns and influence on currency movement, leading to more informed trading and decision-making.

Hypothesis (H0) - Null hypothesis

The exchange rates do not minimize currency risk, providing business, investors and does not improve financial performance and investment returns.

Hypothesis (H1) – Alternative hypothesis

The exchange rates minimize currency risk, providing business and investors and improving financial performance and investment returns.

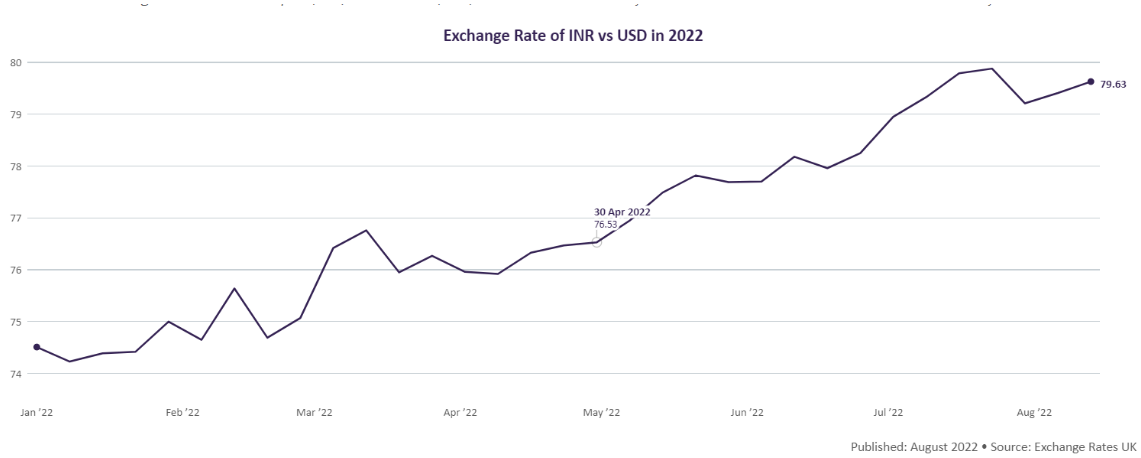
4.1.5 LIMITATION OF STUDY:

- The study is confined just to the foreign exchange risk but not the total risk.
- It does not take into consideration all Indian companies foreign exchange risk.
- The hedging techniques are studied only which the company adopted to minimize foreign exchange risk.

CHAPTER - 5

DATA ANALYSIS & INTERPRETATION

The average exchange rate in 2022 was 76.89 INR, and the current exchange rate is at 79.15 INR on August 16, 2022
The Indian Rupee has depreciated over the first seven months of 2022 by almost 6%, and 44% of corporate ECBs are not hedged against currency swings, according to the RBI most recent financial stability report
The best exchange rate for Indian Rupee (INR) to US Dollar (USD) was 80.064 INR on July 18, 2022, and the worst was 73.81 INR on January 12, 2022

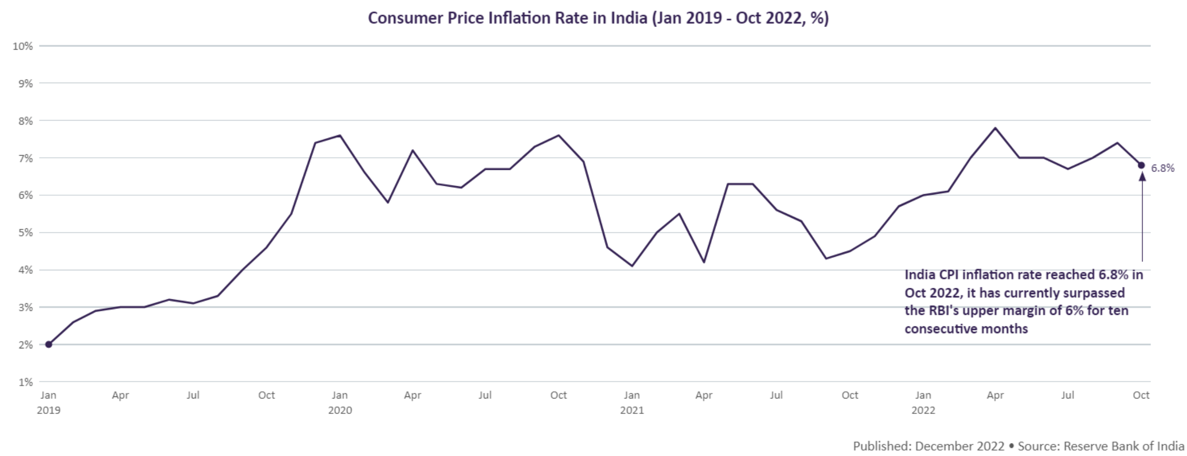


Exchange Rate in India in 2022

The Indian rupee (code: INR) is the official currency of India. The rupee is subdivided into 100 paise (singular: paisa), though as of 2019, coins of denomination of 1 rupee is the lowest value in use. The issuance of the currency is controlled by the Reserve Bank of India. Due to a perfect storm of global headwinds, the Indian rupee has been subject to significant selling pressure in recent weeks and is predicted that this pressure will continue to affect the currency in the months ahead. The Reserve Bank of India intervened to stop the decline, and it only recovered after it had already touched record lows by falling more than 80 to the dollar level twice in July.

INR and USD

The Indian rupee has recently plumbed record lows and at least twice exceeded the 80 rupees to one dollar mark in July. Only until the Reserve Bank of India (RBI) intervened to stop the decline did the rupee begin to recover. Since then, it has gained some ground, and in August, it was trading at about 79.06 to the dollar. In a written statement to parliament at the end of July, Finance Minister Nirmala Sitharaman justified the devaluation of the rupee as being caused by external factors. The ongoing war between Russia and Ukraine, rising crude oil prices, and tightening global financial conditions are just a few of the major global causes that have contributed to the Indian rupee's decline against the dollar.

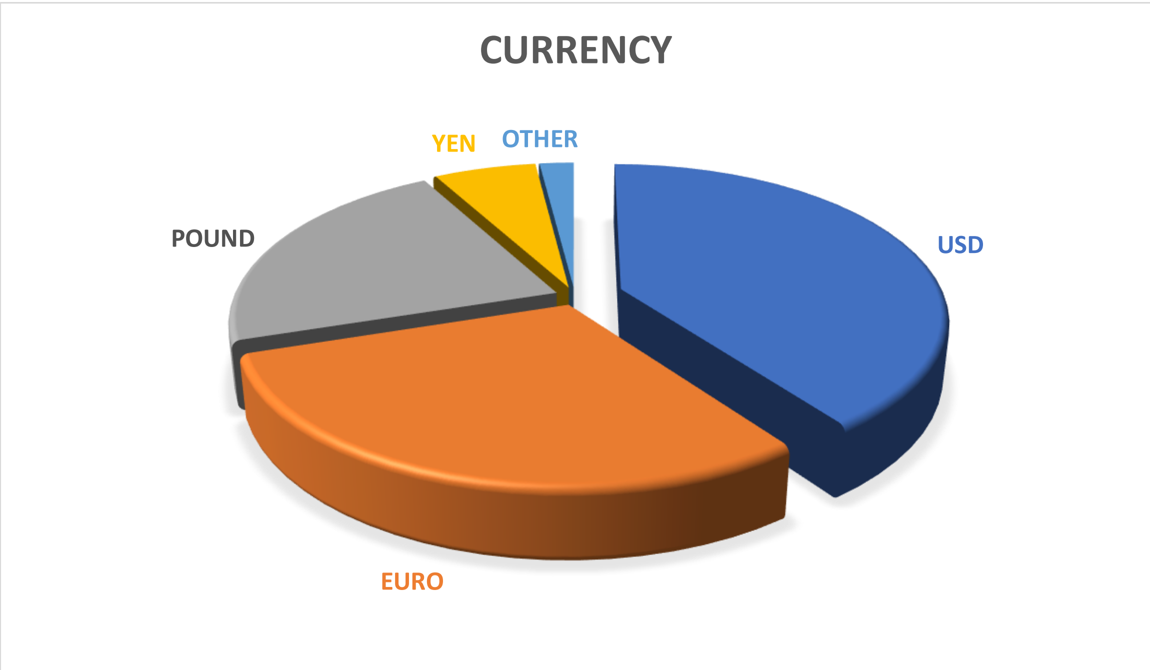


India, the third-largest oil importer in the world, is particularly affected by the rising energy prices since it typically pays for its oil in dollars. The cost of purchasing oil increases as the rupee declines. Due to India's exposure to rising energy prices, the rupee has depreciated more than 5% against the dollar year-to-date. Since March, when Russia's invasion of Ukraine started, there has been a "significant spike" in Russian oil shipments to India, and New Delhi appears to be planning to purchase even more cheap oil from Moscow.

Generally, a weaker currency serves as a pressure release valve to restore external stability by raising the cost of imports and increasing the profitability of exports. The RBI is expected to slow the rate hikes in September compared to the 50-basis point increase in August. A weak rupee and a record-high trade deficit reduced anticipation of a dovish pivot even though inflation slowed.

1. **Percentage % of investment of currency**

	Percentage (%)
USD	36
EURO	32
POUND	22
YEN	10
OTHER	0

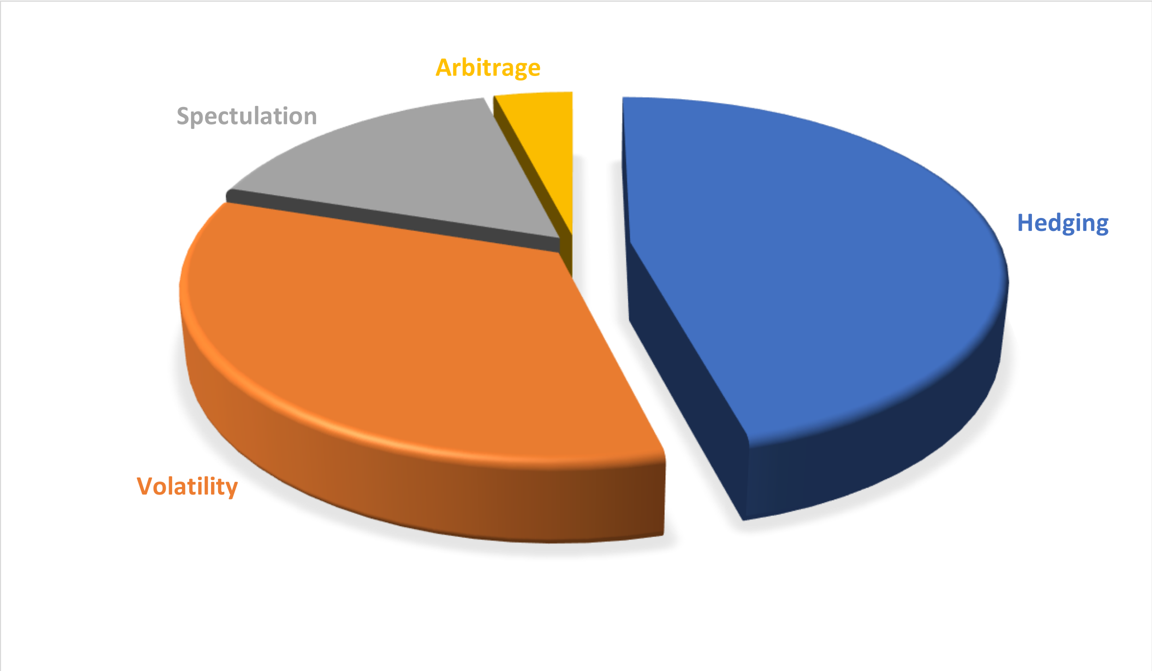


Interpretation:

The analysis of the study states that the investment preferred in USD is 36%, the investment preferred in EURO 32%, the investment preferred in POUND 22%, and the investment in YEN 10%. So, the maximum precent of investment is done in USD DOLLER that is 36%.

2. **Risk management strategies in Foreign Exchange**

Objective	Percentage (%)
Hedging	46
Volatility	34
Spectulation	16
Arbitrage	04



Interpretation:

In the risk management strategies, the maximum percent of strategies hedging which include matching revenues and expenses in the same currency, thereby reducing exposure. is used by 46%, the number of preferred investments in volatility strategies which are market fluctuations is about 34%, the speculation which is assumption strategy is preferred by 16%, Arbitrage which is profit price deviation strategies the preferred investment 04%.

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FINDINGS & SUGGESTIONS

1) The study has concluded that Indian Foreign exchange market does not exhibit weak form of market efficiency.

2) The study has also proved that the growth and development symbolizing the best 'Made in India' and 'Make in India' has a tremendous profit for the Indian foreign exchange market

. 3) Banks, dealers, commercial companies, investment management firms, and hedge funds make up the foreign exchange market in India.

4) The evolution of India's foreign exchange market can be connected to the country's exchange rate regulations, which have shifted from a par value system to a basket-peg and then to a managed float exchange system over the last few decades.

Liberalization has transformed India's external sector and a direct beneficiary of this has been the foreign exchange market in India. From a foreign exchange-starved, control-ridden economy, India has moved up to a position of $150 billion plus in international reserves with a confident rupee and drastically reduced foreign exchange control. As foreign trade and cross-border capital flows continue to grow, and the country moves towards capital account convertibility, the foreign exchange market is poised to play an even greater role in the economy, but is unlikely to be free from RBI intervention any time soon.

The foreign exchange market transfer purchasing power between the countries involved in the transaction through credit instruments like bank draft and telephonic transfer. It also provides credit for foreign trade. Bills of exchange with maturity period of three months, and are usually used for international payments. The foreign exchange market also provides the hedging function which is to avoid losses that might be caused due to exchange rate variations in the future.

CHAPTER - 7

CONCLUSION

The study conclude that the Indian Currency Market & Risk Management on Forex Market have various dealers, with banks being the most dominant. Foreign bank is facilitated by exchange banks, which have various branches in a variety of nations. The foreign exchange market is a worldwide market where different country's currencies are exchanged. The Indian Foreign Exchanged Market is not under the jurisdiction of a single authority, such as an international agency or a government.

Governments (through their central banks) and commercial banks are the main players in this market. The Reserve Bank of India (RBI) has intervened in the Indian Foreign Exchange Market to maintain liquidity in case of an economic crises., Indirect intervention using interest rates has also played an increasingly important role in the RBIs Foreign Exchange Policy.

The Foreign exchange market has no physical address. It is an electronically linked network. The 'exchange market' are available all over the world through their branches and correspondents. The Foreign Exchange Market is not restricted to any given country or a geographical area. Thus, the foreign exchange market is the market for a national currency (foreign money) anywhere in the world, as the financial centres of the world are united in a single market.

Hypothesis (H0) – Null hypothesis

Identifying patterns and influences on currency movements, does not lead to more informed trading strategies and decision-making is rejected.

Hypothesis (H1) – Alternative hypothesis

Identifying patterns and influence on currency movement, leading to more informed trading and decision-making is accepted.

Hypothesis (H0) – Null hypothesis

The exchange rates do not minimize currency risk, providing business, investors and does not improve financial performance and investment returns is rejected.

Hypothesis (H1) – Alternative hypothesis

The exchange rates minimize currency risk, providing business and investors and improving financial performance and investment returns is accepted.

CHAPTER - 8

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