

## **An empirical research analysis of fluctuations in foreign exchange rates, and its impact on balance of payment status of India's foreign trade.**

*Padmini*

S.V. Associate Professor  
Department of Economics  
University College of Arts  
Tumkur University,  
sugoomuth@gmail.com

### **Abstract**

Indian rupee at what rate can be exchanged to internationally accepted standard currency US dollar can be called as Exchange rate. Indian rupee can be traded only within the country. If India has trade relation with other foreign countries, such as USA, UK, France, Germany, Japan. India require US dollar, UK Pound, France Franc, German Mark, and Japan Yen to have trade relations with export trade and import trade or at least US Dollar to trade with other foreign countries as other foreign countries accept their domestic currencies or even US dollar. Research Methodology: Overall objective of the study: To examine the performance and prospects of India's foreign trade policy Objectives of the study: 1) To examine the fluctuations in exchange rates related to Indian Rupee with US dollar. 2) To examine export list and import list of India's foreign trade, 3) To examine the balance of payment status of India's foreign trade. Nature and source of data: The present empirical research study conducted with the help of primary as well as secondary data. Secondary data base obtained through Reserve Bank of India publications, Centre for Monitoring Indian Economy (CMIE), Economic Survey, Foreign Trade Review. Primary data obtained through questionnaire and personal interview with export-oriented industries in Tumkur district in Karnataka. India's foreign trade increased substantially over a period. Exchange rate fluctuations, volatility noticed, experienced related to Indian rupee against internationally accepted standard currency US Dollar during the year 2025 in the months of January, February, March, April, May, June, July, August 2025. Within a short point of time, pertaining to cross sectional data fluctuations of rupee depreciation in certain dates of the months January, February, March, April, May, June, July, August 2025 noticed. against US dollar observed. Special drawing rights SDR of Indian Rupee exchange rate has been recorded highest during 2018-19 and the same has been recorded lowest during the year 2019-20.

**Key words:** *Exchange rate, Export value, Import value, Special Drawing Rights (SDR), Balance of Payments.*

## Introduction

### Foreign Exchange Rate

Indian rupee at what rate can be exchanged to internationally accepted standard currency US dollar can be called as Exchange rate. Indian rupee can be traded only within the country. If India has trade relation with other foreign countries, such as USA, UK, France, Germany, Japan. India require US dollar, UK Pound, France Franc, German Mark, and Japan Yen to have trade relations with export trade and import trade or at least US Dollar to trade with other foreign countries as other foreign countries accept their domestic currencies or even US dollar.

### Review of literature

. Akram, Q. Farooq; Brunvand, Kari-Mette; Lok shall, Raymond (2003). "Real equilibrium exchange rates". Norge's Bank Occasional Papers. **32**.

Di Bella, Gabriel; Lewis, Mark; Martin, Aurélie (2007). "Assessing Competitiveness and Real Exchange Rate Misalignment in Low-Income Countries". IMF Working Paper. **201**.

Dufrenot, Gilles J.; Yehoue, Etienne B. (2005). "Real Exchange Rate Misalignment: A Panel Co-Integration and Common Factor Analysis". IMF Working Paper. **164**.

Edwards, Sebastian; Frankel, Jeffrey A. (2009-02-15). Preventing Currency Crises in Emerging Markets. University of Chicago Press. ISBN 9780226185057. Retrieved 7 September 2019.

5.Jongwanich, Juthathip (2008). "Real exchange rate overvaluation and currency crisis: evidence from Thailand". Applied Economics. **40** (3): 373–382. doi:10.1080/00036840600570961. S2CID 154735648.

6.Peters, Will. "Find the Best British Pound to Euro Exchange Rate". Pound Sterling Live. Retrieved 21 March 2015.

### Research Methodology:

#### Overall objective of the study:

To examine the performance and prospects of India's foreign trade policy

#### Objectives of the study:

To examine the fluctuations in exchange rates related to Indian Rupee with US dollar.

To examine export list and import list of India's foreign trade.

To examine the balance of payment status of India's foreign trade.

#### Nature and source of data:

The present empirical research study conducted with the help of primary as well as secondary data. Secondary data base obtained through Reserve Bank of India publications, Centre for Monitoring Indian Economy(CMIE), Economic Survey, Foreign Trade Review. Primary data obtained through questionnaire, personal interview with export oriented industries in Tumkur district in Karnataka.

#### Researchable questions:

What are the fluctuations of exchange rates of India's foreign trade.

What are the items in Indian export list and import list of India during the year 2025.

What is the balance of payment status of India's foreign trade.

### Statement of the problem

India's balance of payments showed that import value greater than export value. Except 1950-51, 1974-75 and 1977-78 remaining all the years Indian economy has experienced unfavorable balance of payment condition. In this context, the present study titled an empirical analysis of fluctuations in foreign exchange rates, export value, import value, balance of payment status of India's foreign trade has been taken up.

### Research gap

There have been studies conducted on India's foreign trade. In this study during 2025 items in the export list, items in the import list, balance of payment status, current account, capital account over a period examined. In addition, Exchange rate of Indian Rupee compared to Internationally accepted standard currency US dollar systematically and scientifically tested and verified by incorporating statistical tests.

### Scheme of presentation

Chapter 1 deals with Introduction

Chapter 2 deals with Review of literature

Chapter 3 deals with Research methodology and database

Chapter 4 deals with Results and Discussion with special reference to Exchange rates fluctuations, Export value, Import value and balance of payments status of Indian Economy.

Chapter 5 deals with Summary, Conclusion, Suggestions, Recommendations and Area of Further Research

### Limitation of the Study

The export list and import list of Indian economy, exchange rate of Indian rupee against Internationally accepted standard currency US dollar took only the years 2024-25, 2025.

Results and Discussion with special reference to Exchange rates fluctuations, Export value, Import value and balance of payments status of Indian Economy.

In this chapter Exchange rates fluctuations, Export value, Import value and balance of payments status of Indian Economy.

**Table 1 : Exchange rate of Indian rupee to US Dollar during January 2025**

Date	US Dollar to Indian Rupee
<u>January 1, 2025</u>	1 USD = 85.578 INR
<u>January 2, 2025</u>	1 USD = 85.804 INR
<u>January 3, 2025</u>	1 USD = 85.786 INR
<u>January 6, 2025</u>	1 USD = 85.681 INR
<u>January 7, 2025</u>	1 USD = 85.803 INR
<u>January 8, 2025</u>	1 USD = 85.922 INR
<u>January 9, 2025</u>	1 USD = 85.921 INR
<u>January 10, 2025</u>	1 USD = 86.195 INR

<u>January 13, 2025</u>	1 USD = 86.651 INR
<u>January 14, 2025</u>	1 USD = 86.540 INR
<u>January 15, 2025</u>	1 USD = 86.444 INR
<u>January 16, 2025</u>	1 USD = 86.599 INR
<u>January 17, 2025</u>	1 USD = 86.582 INR
<u>January 20, 2025</u>	1 USD = 86.246 INR
<u>January 21, 2025</u>	1 USD = 86.452 INR
<u>January 22, 2025</u>	1 USD = 86.473 INR
<u>January 23, 2025</u>	1 USD = 86.468 INR
<u>January 24, 2025</u>	1 USD = 86.185 INR
<u>January 27, 2025</u>	1 USD = 86.437 INR
<u>January 28, 2025</u>	1 USD = 86.628 INR
<u>January 29, 2025</u>	1 USD = 86.641 INR
<u>January 30, 2025</u>	1 USD = 86.639 INR
<u>January 31, 2025</u>	1 USD = 86.697 INR

It is clear from the above table that exchange rate of Indian rupee to US dollar during the month of January 2025 in different dates showed fluctuating trend ranging from 1 USD = 85.578 INR on January 1<sup>st</sup> 2025 to 1 USD = 86.697 INR on January 31<sup>st</sup> 2025. Average USD to INR exchange rate in January 2025 has recorded \$1 = ₹86.277.

#### Exchange Rate of the Indian Rupee vis-a-vis the SDR, USD, GBP, DM and JPY (FY, annual average and end-year rates)

Year	SDR Average	SDR End year	USD Average	USD End year	GBP Average	GBP End year	DM/EUR Average	DM/EUR End year	JPY Average	JPY End year
2012–13	83.0262	81.4764	53.2112	54.2323	85.9713	82.3209	70.0693	69.5438	65.8530	57.7600
2013–14	92.2602	92.7790	60.5019	60.0998	98.3058	99.8498	60.4026	58.8300	81.1745	82.5765

2014–15	90.7955	86.3431	61.1436	62.5908	98.5731	92.4591	55.8266	52.1100	77.5209	67.5104
2015–16	91.3452	93.4510	65.4685	66.3329	98.7260	95.0882	54.5934	59.0600	72.2894	75.0955
2016–17	92.6156	87.9763	67.0720	64.8386	87.6897	80.8797	62.0350	57.9600	73.6087	69.2476
2017–18	90.8989	94.8065	64.4549	65.0441	85.5129	92.2846	58.1822	61.5400	75.4378	80.6222
2018–19	98.0361	96.0273	69.9229	69.1713	91.7865	90.4756	63.0468	65.5200	80.9580	77.7024
2019–20	53.7511	51.2563	74.5321	73.2365	99.9785	100.0524	84.6404	80.2459	81.2654	81.2256
2020–21	55.0003	54.2485	73.2256	74.5692	100.0256	101.5623	88.3686	86.2500	82.1101	79.2231
2021–22	92.8908	94.5521	82.44	82.76	101.81	99.55	86.59	84.65		

**Source:** Board of Governors of the Federal Reserve System (US)

**Lowest exchange rate in 2025:** 84.2197 INR, **Highest exchange rate in 2025:** 87.8915 INR, **Average exchange rate in 2025:** 86.1451 INR

**Table 8**

**Details about Imports from India**

India Imports from India	Value	Year
Pearls, precious stones, metals, coins	\$5.60B	2024
Machinery, nuclear reactors, boilers	\$139.39M	2024
Organic chemicals	\$137.44M	2024
Works of art, collectors' pieces and antiques	\$117.59M	2024
Electrical, electronic equipment	\$117.27M	2024
Aluminum	\$93.43M	2024
Articles of iron or steel	\$88.07M	2024
Inorganic chemicals, precious metal compound, isotope	\$80.67M	2024
Ships, boats, and other floating structures	\$78.36M	2024
Optical, photo, technical, medical apparatus	\$56.20M	2024
Plastics	\$41.90M	2024
Vehicles other than railway, tramway	\$38.94M	2024
Mineral fuels, oils, distillation products	\$33.86M	2024
Miscellaneous chemical products	\$27.72M	2024
Fish, crustaceans, molluscs, aquatics invertebrates	\$18.02M	2024
Oil seed, oleagic fruits, grain, seed, fruits	\$16.95M	2024
Coffee, tea, mate and spices	\$15.91M	2024
Pharmaceutical products	\$13.58M	2024
Commodities not specified according to kind	\$12.59M	2024
Zinc	\$12.06M	2024
Iron and steel	\$11.58M	2024
Other made textile articles, sets, worn clothing	\$10.16M	2024
Copper	\$9.44M	2024
Railway, tramway locomotives, rolling stock, equipment	\$8.91M	2024
Articles of apparel, not knit or crocheted	\$8.56M	2024
Tanning, dyeing extracts, tannins, derivatives, pigments	\$7.72M	2024
Rubbers	\$6.26M	2024
Edible vegetables and certain roots and tubers	\$5.46M	2024
Vegetable textile fibers not specified elsewhere, paper yarn, woven fabric	\$4.62M	2024
Furniture, lighting signs, prefabricated buildings	\$4.19M	2024
Miscellaneous edible preparations	\$4.12M	2024
Carpets and other textile floor coverings	\$3.99M	2024
Meat, fish and seafood preparations	\$3.95M	2024
Residues, wastes of food industry, animal fodder	\$3.76M	2024
Arms and ammunition, parts and accessories	\$3.40M	2024
Essential oils, perfumes, cosmetics, toileteries	\$3.02M	2024
Tobacco and manufactures tobacco substitutes	\$2.89M	2024
Miscellaneous manufactured articles	\$2.86M	2024

India Imports from India	Value	Year
Aircraft, spacecraft	\$2.84M	2024
Articles of leather, animal gut, harness, travel good	\$2.82M	2024
Lac, gums, resins	\$2.63M	2024
Articles of apparel, knit or crocheted	\$2.61M	2024
Cotton	\$2.50M	2024
Printed books, newspapers, pictures	\$2.36M	2024
Edible fruits, nuts, peel of citrus fruit, melons	\$2.03M	2024
Tools, implements, cutlery of base metal	\$1.96M	2024
Cereals	\$1.70M	2024
Paper and paperboard, articles of pulp, paper and board	\$1.69M	2024
Glass and glassware	\$1.66M	2024
Milling products, malt, starches, inlin, wheat gluten	\$1.58M	2024
Miscellaneous articles of base metal	\$1.54M	2024
Beverages, spirits and vinegar	\$1.53M	2024
Manmade filaments	\$1.51M	2024
Raw hides and skins (other than furskins) and leather	\$1.50M	2024
Nickel	\$1.47M	2024
Stone, plaster, cement, asbestos, mica or similar materials	\$1.46M	2024
Base metals not specified elsewhere, cermets.	\$1.44M	2024
Special woven or tufted fabric, lace, tapestry	\$1.39M	2024
Manmade staple fibers	\$1.27M	2024
Vegetable, fruit, nut food preparations	\$1.22M	2024
Dairy products, eggs, honey, edible products	\$1.17M	2024
Salt, sulphur, earth, stone, plaster, lime and cement	\$1.05M	2024
Fertilizers	\$1.04M	2024
Wood and articles of wood, wood charcoal	\$1.04M	2024
Soaps, lubricants, waxes, candles, modelling pastes	\$911.55K	2024
Footwear, gaiters and the like,	\$854.11K	2024
Animal, vegetable fats and oils, cleavage products	\$730.12K	2024
Impregnated, coated or laminated textile fabric	\$640.06K	2024
Ceramic products	\$622.05K	2024
Albuminoids, modified starches, glues, enzymes	\$619.58K	2024
Bird skin, feathers, artificial flowers, human hair	\$617.84K	2024
Wadding, felt, nonwovens, yarns, twine, cordage	\$548.68K	2024
Toys, games, sports requisites	\$533.29K	2024
Silk	\$481.79K	2024
Ores slag and ash	\$449.95K	2024
Clocks and watches	\$427.13K	2024

India Imports from India	Value	Year
Wool, animal hair, horsehair yarn and fabric	\$422.18K	2024
Knitted or crocheted fabric	\$318.54K	2024
Musical instruments, parts and accessories	\$313.82K	2024
Headgear and	\$250.88K	2024
Cereal, flour, starch, milk preparations and products	\$239.86K	2024
Live trees, plants, bulbs, roots, cut flowers	\$114.62K	2024
Cocoa and cocoa preparations	\$90.33K	2024
Tin	\$67.55K	2024
Sugars and sugar confectionery	\$66.83K	2024
Products of animal origin	\$48.59K	2024
Vegetable plaiting materials, vegetable products	\$37.19K	2024
Pulp of wood, fibrous cellulosic material, waste	\$32.16K	2024
Manufacturers of plaiting material, basketwork	\$25.17K	2024
Cork and articles of cork	\$3.61K	2024
Lead	\$778	2024
Umbrellas, walking-sticks, seat-sticks, whips	\$5	2024
Furskins and artificial fur, manufactures	\$26.09K	2023
Photographic or cinematographic goods	\$1.81K	2023
Explosives, pyrotechnics, matches, pyrophorics	\$909	2023

**Table 9**

**Details about Export Value, Import Value, Balance of Payments status of Indian Economy**

india	Last	Previous	Highest	Lowest	Unit	
Balance of Trade	-18.78	-21.88	0.71	-37.84	USD Billion	[+]
Current Account to GDP	-0.70	-2.00	2.30	-4.80	percent of GDP	[+]
Current Account	13500.00	-11457.00	19083.03	-31857.18	USD Million	[+]
Exports	35.14	38.73	44.57	0.06	USD Billion	[+]
Imports	53.92	60.61	69.95	0.12	USD Billion	[+]
External Debt	736300.00	717900.00	736300.00	96392.00	USD Million	[+]
Terms of Trade	147.30	147.00	147.30	61.90	points	[+]
Foreign Direct Investment	7173.00	8743.00	19150.00	58.00	USD Million	[+]
Capital Flows	-81.00	-137.00	766.97	-822.33	USD Million	[+]
Remittances	23211.00	23573.00	23573.00	5999.10	USD Million	[+]
Tourist Arrivals	742000.00	916000.00	1225672.00	2820.00		[+]
Gold Reserves	880.00	879.60	880.00	357.75	Tonnes	[+]
Crude Oil Production	608.00	607.00	813.00	463.00	BBL/D/1K	[+]
Terrorism Index	6.41	6.32	8.12	6.32	Points	[+]



india	Last	Previous	Highest	Lowest	Unit	
Weapons Sales	34.00	7.00	153.00	0.00	SIPRI TIV Million	[+]

### Major Top 10 Imported Products in India (2025):

By the year 2025, the Indian import basket is saturated with essential commodities and high-demand goods that serve industries, energize homes, and satisfy many daily needs.

#### 1) Petroleum Fuels and Oils

- **Import Value and Share:** Approximately US\$220.6 billion, accounting for 31.4% of total imports.
- **Primary Sources:** Russia, Iraq, Saudi Arabia, and the United Arab Emirates.
- **Usage in India:** Important in energy production, transportation, and industrial activities.

#### 2) Electrical Machinery and Equipment

- **Import Value and Share:** Around US\$84.9 billion, representing 12.1% of total imports.
- **Key Components Imported:** Integrated circuits, smartphones, solar panels, and other electronic devices.
- **Major Exporting Countries:** China, Vietnam, and South Korea.

#### 3) Gems and Precious Metals

- **Import Value and Share:** Approximately US\$83.3 billion, making up 11.9% of total imports.
- **Cultural and Economic Significance:** Vital for India's jewelry industry and cultural practices, especially during festivals and weddings.
- **Primary Sources:** Switzerland, the United Arab Emirates, and South Africa.

#### 4) Machinery Including Computers

- **Import Value and Share:** About US\$61.6 billion, accounting for 8.8% of total imports.
- **Types of Machinery Imported:** Industrial machines, agricultural equipment, and IT hardware.

- **Leading Exporters:** Germany, the United States, and Japan.

#### 5) Organic Chemicals

- **Import Value and Share:** Approximately US\$26 billion, representing 3.7% of total imports.
- **Applications in India:** Used extensively in the pharmaceutical, agricultural, and manufacturing sectors.
- **Top Exporting Countries:** China, the United States, and Singapore.

#### 6) Plastics and Plastic Articles

- **Import Value and Share:** Around US\$21.9 billion, making up 3.1% of total imports.
- **Types of Plastics Imported:** Polyethylene, PVC, and other polymers.
- **Usage in Indian Industries:** Widely used in packaging, construction, and consumer goods.
- **Major Exporters:** China, Germany, and the United States.

#### 7) Iron and Steel

- **Import Value and Share:** Approximately US\$17.7 billion, accounting for 2.5% of total imports.
- **Demand Drivers:** Essential for infrastructure development and the automotive industry.
- **Primary Sources:** South Korea, China, and Japan.

#### 8) Animal and Vegetable Fats & Oils

- **Import Value and Share:** Around US\$17 billion, representing 2.4% of total imports.
- **Types of Oils Imported:** Palm oil, soybean oil, and sunflower oil.
- **Usage in India:** Crucial for the food industry and household consumption.
- **Leading Exporters:** Indonesia, Malaysia, and Ukraine.

#### 9) Optical, Technical, and Medical Apparatus

- **Import Value and Share:** Approximately US\$13.7 billion, making up 1.9% of total imports.
- **Types of Equipment Imported:** Diagnostic tools, surgical instruments, and laboratory devices.
- **Applications in India:** Used extensively in healthcare and research sectors.
- **Top Exporting Countries:** Germany, the United States, and Japan.

#### 10) Aircraft and Spacecraft

- **Import Value and Share:** Around US\$12.6 billion, accounting for 1.8% of total imports.
- **Importance for India:** Supports the country's defense and aviation sectors, contributing to technological advancements.
- **Major Exporters:** The United States, France, and Russia.
- **Top Countries from Which India Imports the Most (2025):**
- **Table 10**
- **Details about Direction of Foreign Trade related to Ranking of Imports from Various Countries:**

Ranking	India imports from the following countries	India imports value (Approx)
1	China	\$121 billion
2	Russia	\$67 billion
3	United States	\$42 billion
4	United Arab Emirates	\$37 billion
5	Saudi Arabia	\$34 billion
6	Iraq	\$29 billion
7	Indonesia	\$24 billion
8	South Korea	\$19.6 billion
9	Japan	\$18.7 billion
10	Switzerland	\$18.5 billion

The above table illustrates the top 10 countries from which India imports goods, along with the respective import values. India imports from China, Russia, United States, United Arab Emirates, Saudi Arabia, Iraq, Indonesia, South Korea, Japan and Switzerland in this sequence.

### **Summary and Conclusion:**

India's foreign trade increased substantially over a period. Exchange rate fluctuations, volatility noticed, experienced related to Indian rupee against internationally accepted standard currency US Dollar during the year 2025 in the months of January, February, March, April, May, June, July, August 2025. Within a short point of time, pertaining to cross sectional data fluctuations of rupee depreciation in certain dates of the months January, February, March, April, May, June, July, August 2025 noticed. against US dollar observed.

Special drawing rights SDR of Indian Rupee exchange rate has been recorded highest during 2018-19 and the same has been recorded lowest during the year 2019-20.

### **Suggestions and Recommendations**

1. Central Government, Ministry of External Affairs should take appropriate measures to increase rupee value against internationally accepted standard currency US dollar.
2. The items from Export list should be increased to get more export value.
3. The items from Import list should be decreased to reduce import value. Then only it is possible to expect favourable balance of payment conditions, and it is possible to expect more enhanced foreign exchange earnings which is urgent need of the day for Indian economy as performance of External sector has its impact on overall development of Indian Economy.
4. Exporters should be aware about the Central Government facilities and they can utilize appropriately.
5. Importers can think about the establishment of domestic production units within the Country and can take Central Government, Ministry of External Affairs support to fulfil the requirements of the Indian people.
6. Export promotion policies and import substitution measures should be more strengthened to enhance the performance of India's foreign trade.

### **References**

1. Gande Sri Sai Vaibhav: A Study on Impact of Exchange Rate Fluctuations on Indian Exports, International Journal for Multidisciplinary Research (IJFMR) E-ISSN: 2582-2160.
2. Dr. Vijay Gondaliya: the impact of exports and imports on exchange rates in India International Journal of Banking, Finance & Digital Marketing, Vol.1, Issue 1, Jul-Dec, 2015, pp 01-08, ISSN: 2455-MUZZ [www.arseam.com](http://www.arseam.com)

3. Mr. Akash S : A study on impact of foreign exchange rate fluctuation on indian foreign trade, IJEMR – May 2023 - Vol 13 Issue 5 - Online - ISSN 2249–2585 Print - ISSN 2249-8672
4. Tom Jacob, Rincy Raphael and Ajina V.S: Impact of Exchange Rate and Inflation on the Export Performance of the Indian Economy: An Empirical Analysis
5. Vijay D. Joshi, Sukanta Kumar Baral, Free Lancer: Changes in Exchange Rates and its implications on India, May 2023, Indira Gandhi National Tribal University, 6. Volume 167, November 2023, 114156
6. Madan Lal , Satish Kumar , Dharen Kumar Pandey <sup>c</sup>, Varun Kumar Rai , Weng Marc Lim: Exchange rate volatility and international trade, Journal of Business Research.
7. Dr. Mahjabin Banu<sup>1</sup> Ms. Ruchika Malhotra: The impact of exports and imports on exchange rates in India, Anusandhan the Research Repository of GIBS, Volume 4, Number 1, December 2021.
8. Troy Segal: How Currency Fluctuations Affect the Economy, May 31, 2025
9. Imroz Mansuri: A study on impact of exchange rate movement on exports and imports of India, The Journal of Oriental Research, Madras, Vol 0022-3301, June 2021
10. **Dionisie Schmidt, Universitas Airlangga, Indonesia:** Impact of Exchange Rate Fluctuations on Global Trade and Economic Stability, Opinion Article: 2024 Vol: 23 Issue: 5, Journal of International Business Research (Print ISSN: 1544-0222; Online ISSN: 1544-0230 ).