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# Relationship Between Foreign Trade and Foreign Exchange Rate

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#### ABSTRACT

In the current global economic scenario, the impacts of exchange rates on international trade have gained significant attention. This study aims to analyze the effects of exchange rate fluctuations on international trade volumes, patterns, and competitiveness in the present context. By reviewing recent literature and conducting empirical analysis, we assess the magnitude of these impacts on trade in various countries and regions. We investigate the mechanisms and channels through which exchange rates influence trade, considering factors such as exchange rate pass-through, pricing decisions, global supply chains, and trade policies. Moreover, we explore the heterogeneity across industries and sectors, taking into account the influence of technological advancements, digitalization, and shifts in global trade dynamics. Given the heightened volatility and uncertainties in exchange rates, we examine the implications for businesses, policymakers, and market participants, providing insights on managing exchange rate risks and enhancing trade resilience. Our research contributes to the understanding of the evolving relationship between exchange rates and international trade in the current dynamic economic landscape, offering practical implications for decision-makers and stakeholders navigating the complexities of global trade.

Keywords: Exchange rate, International trade, Relationship between Exchanged rate and international Trade, Global trade.

## Introduction

The cost of one currency in relation to another, or exchange rates, is a key factor in determining the dynamics of international trade. Changes in the currency rate have a major effect on trade volumes and competitiveness in the current unpredictable global economic environment, which is caused by a number of variables including supply chain disruptions and geopolitical conflicts. While a stronger local currency can impede exports, a weaker one might boost them. Exchange rate fluctuations also have an impact on international trade laws and supply chains, which has an impact on organizations' cost estimates and strategic choices. In-depth examination combining theoretical frameworks and empirical data is necessary to comprehend this intricate relationship more fully. In order to properly traverse these complexity, researchers seek to comprehensively analyze exchange rate movements and their implications on commerce across various countries and regions.

## **Introduction Of Financial Sector Of India**

- Banking
- Non-Banking Financial Companies (NBFCs)
- Stock Markets
- Insurance
- Mutual Funds
- Digital Payments
- Foreign Investment

## World Financial Market

- Stock Market
- Bond Market
- Foreign Exchange (Forex) Market
- Real Estate Market
- Cryptocurrency Market
- Private Equity and Venture Capital
- Insurance Market

## Problem statement of the study

- Relationship between international trade and exchange rate
- Factors that influence currency exchange rates

- Impact on exchange rate in international business
- Exchange rate effect on EXIM on Company Bases
- Case study: USD / INR & Euro / INR: USD/INR

#### Literature Review

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## Research Methodology

#### Objectives of the study

- Analyses the impact of Indian Imports and Exports on Indian Exchange Rates.
- The topic of the research is the impact of exports and imports on exchange rates in India, it is general study to analyses how the exchange rate fluctuates on exports and imports each year and also effect the country's GDP and economy.
- As a developing country, India has to focus on its export and import business with the aim to bring in globalization and to expand new
  economic opportunities for the country.

## Hypothesis

- **Hypothesis 1**: Inflation over consumer prices has a direct significant impact on devaluation of a currency.
- Hypothesis 2: Exchange rate of a currency has significant impact on the trade balance of the country.

#### Research Methodology:

The study uses secondary and published data from 1991, a significant year in India's economic history, as it marked the beginning of economic reforms aimed at both domestic and external sectors, transforming the nation's economic approach.

## **TECHNIQUES**

Correlation, CAGR and Rate of Percentage method is used to analyses the data. Compound annual growth rate, or CAGR, is the mean annual growth rate of an investment over a specified period of time longer than one year. Correlation is a statistical measure which determines corelationship or association of two variables. Correlation is applied to find out relation between Import and exchange rate and relation between export and exchange rate.

## INDIA'S FOREIGN TRADE

India's GDP grew 7.5% between 2014 and 2019, with exports predicted to reach \$330-340 billion by 2019-20. The country's trade share is

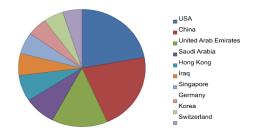
expected to increase from 3% to 2% by 2020. However, slowing GDP growth challenges net FDI and net FPI inflows, making it harder to access foreign savings.

## CURRENT ACCOUNT DEFICIT (CAD)

The CAD to GDP ratio has shown a significant improvement from 2009 to 2014, indicating a stable backup. However, a rise in the CAD/forex ratio suggests a weakening of the safety net, leading to currency depreciation due to the waning strength of the CAD's safety net.

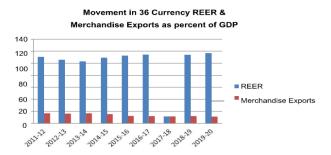
SOURCES OF DATA: Secondary data.

#### **Data Analysis**



India's top ten trading partners account for over half of its merchandise trade in 2019-20. India has maintained a trade surplus with the US and UAE since 2014-15, while facing a trade deficit with other major partners like China, Saudi Arabia, Iraq, Germany, Korea, Indonesia, and Switzerland. India's trade surplus with Singapore and Hong Kong was followed by a trade deficit in 2018-19.

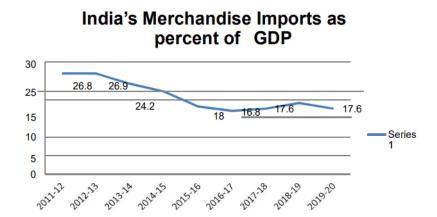
#### MERCHANDISE EXPORTS



The ratio of merchandise exports to GDP has been decreasing, negatively impacting the BOP position. This decline is attributed to global output slowdowns, particularly during 2018-19 and 2019-20. The real exchange rate has also increased. India's integration with the global value chain and government's "Make in India" program have led to an increase in manufacturing exports.

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## MERCHANDISE IMPORTS



An increase in the GDP to merchandise import ratio has a negative impact on India's balance of payments (BOP). But over time, India's ratio has decreased, which has an impact on the BOP position. The imports-to-GDP ratio rises as a result of India's imports being correlated with crude oil prices. China, the US, the UAE, and Saudi Arabia are among the top export destinations. Hong Kong, Singapore, and Korea have all become more significant. Increased GDP growth is less significant for BOP.

## Exchange Rate and Exports

The exchange rate significantly influences economic activity and trade, with fluctuations affecting exports and import prices. Currency strength or weakness impacts domestic economic activity through trade or financial channels. Stability is crucial for macroeconomic stability, and emerging market economies often adopt managed floating exchange rate policies to avoid sharp currency appreciation or depreciation.

Impact of India's import or export on India's exchange rate

YEAR	EXPORTS	IMPORTS	TRADE BALANCE	RATE OFCHANGE (Per cent)		
				EXPORT	IMPORT	
1990-91	18143	24075	-5932	9.2	13.5	
1991-92	17865	19411	-1546	-1.8	19.4	
1992-93	18537	21882	-3345	3.5	19.4	
1993-94	22238	23306	-1068	20.0	6.5	
1994-95	26330	28654	-2324	18.4	22.9	
1995-96	31797	36678	-4881	20.8	28.0	
1996-97	33470	39133	5663	5.3	6.7	
1997-98	35006	41484	6478	4.6	6.0	
1998-99	33218	42389	9171	-5.1	2.2	
1999-2000	36822	49671	12849	10.8	17.2	
2000-01	44560	50536	5976	21.0	1.7	
2001-02	43827	51413	7586	-1.6	1.7	

CAGR = (LONGEST (range)-1)\*100 Exports (1990 t0 2002) = 9.380707

Imports (1990 to 2002) = 9.847342

Rate of Percentage = V2-V1\*100 V1

Exports (1990 to 2002) = 58.6031% decrease

Imports (1990 to 2002) = 53.1733% decrease

India's Export, Import, and Balance of Trade from 2002-03 to 2008-09

Year		Value in Rs. crore	Percentage growth			
	Exports	Imports	Balance of Trade	Exports	Imports	Trade deficit
2002-03	255137	297206	-42069	22.06	21.21	16.27
2003-04	293367	359108	-65741	14.98	20.83	56.27
2004-05	375340	501065	-125725	27.94	39.53	91.24
2005-06	456418	660409	-203991	21.60	31.80	62.25
2006-07	571779	840506	-268727	25.28	27.27	31.73
2007-08	655864	1012312	-356448	14.71	20.44	32.64
2008-09	840755	1374436	-533681	28.19	35.77	49.72

CAGR = (LONGEST)(range)-1)\*100 Exports (2002 to 2009) = 22.1729

$$\begin{split} & Imports~(2002~to~2009) = 29.24969 \\ & Rate~of~Percentage = V2-V1*100~V1 \\ & Exports~(2002~to~2009) = 69.6538\%~decrease \\ & Imports~(2002~to~2009) = 78.3761\%~decrease \end{split}$$

Trade Data for period 2009-10 to 2018-19 (Values in Rs Crore)

S. No	Year	Exports	%Growth	Imports	%Growth	Trade Balance
1	2009-2010	8,45,534	0.57	13,63,736	-0.78	-5,18,202
2	2010-2011	11,36,964	34.47	16,83,467	23.45	-5,46,503
3	2011-2012	14,65,959	28.94	23,45,463	39.32	-8,79,504
4	2012-2013	16,34,318	11.48	26,69,162	13.8	-10,34,844
5	2013-2014	19,05,011	16.56	27,15,434	1.73	-8,10,423
6	2014-2015	18,96,348	-0.45	27,37,087	0.8	-8,40,738
7	2015-2016	17,16,384	-9.49	24,90,306	-9.02	-7,73,921
8	2016-2017	18,49,434	7.75	25,77,675	3.51	-7,28,242
9	2017-2018	19,56,515	5.79	30,01,033	16.42	-10,44,519
10	2018-2019(QE)	23,14,429	18.29	35,48,004	18.23	-12,33,575

CAGR = (LONGEST)(range)-1)\*100 Exports (2009 to 2019) = 8.965077

$$\begin{split} & Imports~(2009~to~2019) = 8.147663 \\ & Rate~of~Percentage = V2-V1*100V1 \\ & Exports~(2009~to~2019) = 63.4668\%~decrease \\ & Imports~(2009~to~2019) = 61.5633\%~decrease \end{split}$$

Table: Export and USD exchange rate in India

Year	Exports	Import	USD Exchange
2000-01	44560.3	50536.5	45.6844
2001-02	43826.7	51413.3	47.6919
2002-03	52719.4	61412.1	48.3953
2003-04	63842.6	78149.1	45.9516
2004-05	83535.9	111517.4	44.9315
2005-06	103090.5	149165.7	44.2735
2006-07	126414.1	185735.2	45.2495
2007-08	162904.2	251439.2	40.2607
2008-09	185295.0	303696.3	45.9933
2009-10	178751.4	288372.9	47.4433
2010-11	251136.2	369769.1	45.5626
2011-12	305963.9	489319.5	47.9229
2012-13	300400.6	490736.6	54.4099
2013-14	314415.7	450213.6	60.5019
2014-15	310352.0	448033.4	61.1436
2015-16	262291.1	381007.8	65.4685
2016-17	275852.4	384357	67.0720
2017-18	303526.2	465581	64.4549
2018-19	330078.1	514078.4	69.9229
2019-20	313361.0	474709.3	71.3212

Compilation and calculation. (r-correlation)

Correlation between Export and Exchange Rate (r)=0.733745

Correlation between Import and Exchange rate (r) =0.688355

## **Findings**

- Foreign trade has been essential to India's economic growth. India imported finished goods and exported raw materials while under
- India used to export raw materials, but as foreign trade developed, the country's export volume fluctuated.
- During the study period of 2001 to 2010, it was discovered that India is currently in a position to benefit from both a favorable demand and an alluring price scenario in the worldwide marketplaces.
- During the study period of 2001 to 2010, the composition and trend of India's foreign trade showed that the country's economy is
  diversifying and that both traditional and non-traditional commodity exports are becoming more significant.
- One of the primary sources of foreign exchange that contributes significantly to the creation of foreign exchange is India's exports. Other foreign exchange sources include foreign portfolio investments and foreign direct investment (FDI).
- Specific regulations govern the foreign trade of India. Under the many rules that govern import and export into India, exporters are
  eligible for several perks, such as Duty Drawback. The exporters can compete in the very competitive global market thanks to these
  advantages.
- A number of institutions and organizations, including the Ministry of Commerce, the Promotion Council, commodity boards, the
  Federation of Export Organization, chambers of commerce and industries, the Textile Committee, and the Indian Investment Centre,
  are mentioned as being active in export promotion initiatives in India. Government Trade Missions: Export Credit Guarantee
  Corporation, National Small Industries Corporation, Director General of Commercial Intelligence and Statistics, Office of the Director
  General of Foreign Trade, Export Promotion Boards, etc.

- It has been discovered that at least 40% of exporters use EXIM Bank's financial support and consulting services. Many exporters use
  private export agencies and organizations to provide export services, such as appointing an export agent in another nation and
  handling formalities like paperwork and procedures.
- To help with export-oriented production, the government offers a number of opportunities for the import of capital goods. With the
  help of these facilities, exporters can lower their manufacturing costs and raise their cost competitiveness on the international market.
  Utilizing imported capital goods also makes it easier to produce higher- quality commodities that can be export.

### Conclusion

The study finds a poor relationship between inflation, GDP growth, and India's exchange rate. Exchange rate changes and GDP growth are not directly correlated, but monetary and fiscal policies have a direct impact on India's economic growth, especially when it comes to government revenue and economic expansion. In the short term, changes in nominal exchange rates can affect international trade flows and influence pricing. The sensitivity of exporters and the increased volatility of exchange rates may have a greater effect on manufacturing exports from emerging countries. India's export performance improved after the reform, with a change in the mix and value of exports. Still, India's share of world exports is less than anticipated. India's entry into new markets and its impressive performance in the engineering products, textile, and gem and jewelry categories are the main causes of the development boom.

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