Economic Analysis of India-Vietnam Bilateral Trade relations

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Abstract- The relations between India and Vietnam have been strengthening in both social and economic aspects. The bilateral trade and investment relations between the two countries are on an upward trend. In this context, the present paper analyses the trade relationship between India and Vietnam and provides an overview of the trade relations. The study also examines simple and compounded growth rate of the study period. The main findings are the compounded annual growth rate (CAGR) of India export to Vietnam was 13 per cent and the compounded annual growth rate (CAGR) of India Import from Vietnam was 29 per cent.

Keywords: India, Vietnam, trade, Exports, Imports. Simple and compounded growth rate.

INTRODUCTION

India and Vietnam have long cordial relationships with one another. The nations had historical roots in the common struggle for freedom from provincial rule and the national struggle for Independence, Vietnam is a partner country of India inside the ASEAN structure and Mekong Ganga system.

Indo-Vietnam Trade

Vietnam possesses the 94th position in FDI value inflows into India with a combined FDI measure of US\$ 7.83 million from April 2000-September 2023. Vietnam occupies central position in India's Act East policy as likewise in the Indo-Pacific system. For the fiscal year 2022-23, bilateral trade reached US\$ 14.69 billion, according to Indian data. Indian products to Vietnam added up to US\$ 5.90 billion, while Indian imports from Vietnam added up to US\$ 8.79 billion. Vietnam wants to use India's expanding market as a means of diversifying its trade. Mobile phones and their components, computers, electronic goods and their components, chemicals, plastics, rubber, coffee, pepper, and cashew are the primary goods that Vietnam exports to India. Iron and steel

products, textile materials, fisheries, corn, pharmaceuticals, pharmaceutical raw materials, and auto spare parts are the main Indian exports to Vietnam.

India's Major Exports

India exported 3,926 commodities to Vietnam in FY23. In FY23, India's exports to Vietnam totalled US\$ 5.90 billion. Engineering goods, valued at US\$ 769.8 million, accounted for the majority of India's exports to Vietnam. Followed by Meat, Dairy and Poultry Items (US\$ 511.4 million), marine items (US\$ 287.1 million), and Natural and Inorganic Synthetic compounds (US\$ 246 million), among others in April-November 2023India's products to Vietnam remained at US\$ 3.52 billion from April-November 2023.

India's Major Imports

India imported 2,302 products from Vietnam in FY23. In FY23, India imported US\$ 8.79 billion from Vietnam. From April to November 2023, India imported US\$ 2.6 billion worth of electrical machinery and equipment, followed by US\$ 522 million worth of iron and steel, US\$ 492 million worth of nuclear reactors, boilers, machinery, and mechanical appliances, US\$ 323 million worth of copper and copper products, and US\$ 305 million worth of inorganic chemicals.

OBJECTIVES OF THE STUDY

The following objectives have been framed to inquire into the research area

- To analyse trends of India's merchandise trade performance with Vietnam during the study period.
- 2. To Compute Simple and Compounded annual growth rate of 2004-2023.

METHODOLOGY

The study mainly covers the period of 20 years, i.e. 2004-2023. Keeping in mind the nature of study, secondary data have been used from the following sources.

- Data on structure of production and structure of trade of nations have been obtained from UNCTAD Handbook of Statistics, &Trade Map
- Data on direction of trade of India as well as Vietnam countries have been obtained from directory of Trade Statistics Year Book, IMF and Key Indicators of Asia and pacific Countries, UN.

India and Vietnam Bilateral Trade Relations

India and Vietnam have been steadily increasing their bilateral trade over the past few years, and the two countries have agreed to look into substantive and practical ways to get their trade goal of USD15 billion done as soon as possible. In 2018, trade between India and Vietnam totalled USD 10.68 billion, and in 2019, it reached USD 11.21 billion. The absolute exchange declined to USD 9.67 billion 2020 because of the Coronavirus episode and ensuing worldwide interruptions. In 2021, bilateral merchandise trade reached USD 13.21 billion due to increased momentum. For the year, Vietnam's total merchandise trade reached USD 730 billion, representing a surplus of USD 12.4 billion and an increase of 23% over the year 2021. The value of Vietnam's imports was USD 359 billion, while the value of its exports was USD 372 billion. The year 2022 likewise seen expansion in trades of business appointments, business to business connections, facilitating travel through non-stop flights, association and help of support of organizations at one another's exchange fairs, displays which added to the development in respective exchange between the two nations

Simple Growth Rate:

The percent change from one period to another is calculated from the formula

$$PR = \frac{(V_{Present} - V_{Past})}{V_{Past}} \times 100$$

Where: PR = Percent Rate $V_{Present} = Present or Future Value$ $V_{Past} = Past or Present Value$

The *annual* percentage growth rate is simply the percent growth divided by N, the number of years.

Compound Growth Rate:

The compound growth rates of India's export and import with Vitenam, have been worked out during Pre-& post strategic agreement period (2004-2023) and also for the different variables used in the study during 2004-2023 CAGR dampens the effect of volatility of periodic returns that can render arithmetic means irrelevant. CAGR is often used to describe the growth over a period of time by the following formula:

Formula

$$CAGR(t_0, t_n) = \left(\frac{V(t_n)}{V(t_0)}\right)^{\frac{1}{t_n - t_0}} - 1$$

- $V(t_0)_{: \text{ start value}}, V(t_n)_{: \text{ finish value}}, t_n t_0$: number of years.
- Actual or normalized values may be used for calculation as long as they retain the same mathematical proportion.
- The CAGR can also be calculated as the geometric mean of 1 plus each year's return (i.e. +3% becomes 1.03 and -2% becomes 0.98), minus 1.

India's Export to Vietnam:

The table 1.1 below shows the share of India's Export to Vietnam during the 2004-2023. It had been observed during the 2004 the value of India's Export to Vietnam commenced from US\$534.85 Million had increased to a maximum of US\$ 8116.92 million during the year 2017.

Table 1.1 India's Exports to Vietnam

Year	Exports	Simple Growth rate
2004	534846	
2005	633465	18%
2006	874098	38%
2007	1241477	42%
2008	1812607	46%
2009	1833500	1%
2010	2475596	35%
2011	3466525	40%
2012	3658160	6%
2013	5987614	64%

2014	6526524	9%
2015	5330982	-18%
2016	5956938	12%
2017	8116919	36%
2018	6715614	-17%
2019	5512870	-18%
2020	4500549	-18%
2021	6638390	48%
2022	5880778	-11%
2023	5652211	-4%

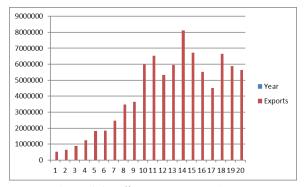


Figure 1.1 India's Exports to Vietnam

However during the post strategic agreement period the export had consistently increasing from 2004 to 2014 in term of value of export was US\$534.85 to US 6526.52 million. Thereafter, there was upward and downward trend of India's Export to Vietnam with rest of the study period. The average export during the study period was US\$ 4167.48 million, the simple annual growth rate during the study period had been positive as well as negative, but the lowest growth rate was marked as 1% during 2009 in terms of value was raised from US\$ 1812.61 million to US\$ 1833.51 and the highest rate was registered as 64 %, in terms of value increased from US\$ 3658.16 million to US\$ 5987.61 million during 2012 to 2013. Whereas the negative growth rate is the lowest -4% had declined in terms of value US\$ 5652.21 from US\$5880.78 million in from 2022 to 2023 the highest negative growth was-18% in terms of value US\$4500.55 from US\$ 5512.87 the decline of such negative value in 2019 to 2020. The compounded annual growth rate (CAGR) of India export to Vietnam was 13 per cent.

Table 1.1 India's Imports from Vietnam

Year	Imports	Growth rate
2004	73208	
2005	127378	74%
2006	159826	25%
2007	153134	-4%

2008	371605	143%
2009	442906	19%
2010	993512	124%
2011	1554280	56%
2012	1945485	25%
2013	2826668	45%
2014	2781693	-2%
2015	2681722	-4%
2016	3105465	16%
2017	4140090	33%
2018	7246953	75%
2019	7446093	3%
2020	5564634	-25%
2021	7075315	27%
2022	9004743	27%
2023	9639146	7%

India's Import from Vietnam:

The table 1.2 below shows the share of India's Import from Vietnam during the 2004-2023. It had been observed during the 2004 the value of India's Import from Vietnam commenced from US\$73.20 Million in year 2004 had increased to a maximum of US\$ 9639.14 million during the year 2023 However during the post strategic agreement period the import had consistently increasing from 2017 to 2023 in term of value of Import was US\$4140.09 to US 9639.14 million. Thereafter, there was upward and downward trend of India's Import from Vietnam. The average Import during the study period was US\$ 3366.69 million, the simple annual growth rate during the study period had been positive as well as negative, but the lowest growth rate was marked as 3% during 2019 in terms of value was raised from US\$ 7246.95 million to US\$ 7446.09 and the highest rate was registered as 143 %, in terms of value increased

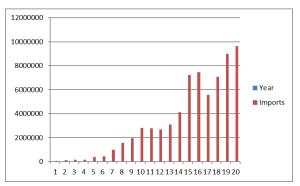


Figure 1.1 India's Imports from Vietnam

from US\$ 153.13 million to US\$ 371.60 million during 2007 to 2008. Whereas the negative growth rate is the lowest -4% had declined in terms of value US\$ 2781.69 from US\$2826.67 million in from 2013 to 2014 the highest negative growth was -25% in terms of value US\$5564.63 from US\$7446.09 the decline of such negative value in 2019 to 2020. The compounded annual growth rate(CAGR) of India Import from Vietnam was 29 per cent.

CONCLUSION

In recent years, the bilateral relationship between India and Vietnam has grown significantly with a common focus on trade, investment and security issues. This paper examines the Indo- Vietnam bilateral relationship and computed simple and compounded annual growth rate. The findings based on simple and compounded growth rate analysis show that India's exports are less intense than imports with Vietnam during 2004—2023, and Vietnam's exports are more intense than imports with India since 2017. Moreover, using the Multilayer Perception Network, the study explores that the host country's GDP and exchange rate have a significant impact on the bilateral exports of both India and Vietnam. The findings provide policy insights from the perspective of trade relations to address trade balance issues, along with achieving economic growth by using exchange rate as a policy variable.

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