

# Analysis Of Growth And Structural Transformation In International Trade In India

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**Abstract:** The dynamics of growth and structural change in India's foreign commerce are thoroughly examined in this study using structural equation modeling (SEM). It looks at the complex interactions between India's foreign trade performance, trade policy, and important economic indicators. This study uses data analysis to reveal India's present foreign trade environment as well as the elements that influence its development and structural changes. In addition to presenting data-driven policy suggestions to promote sustainable trade development and structural change in the Indian economy, the findings give insightful information for stakeholders and policymakers.

## 1. Introduction

India's foreign commerce environment has seen a major change in recent years. It boasts one of the fastest growing economies in the world and is a major player in international commerce. The dynamics of growth and structural change in India's foreign commerce are examined in this study using a structural equation modeling (SEM) methodology. The objective is to understand the intricate network of variables that affect increased trade and structural changes in the Indian economy. This research aims to offer useful insights into the mechanisms underlying India's trade growth and structural changes by analyzing important economic indicators, trade policies, and trade performance statistics, eventually leading to a greater knowledge of its position in the global trade arena.

## 2. Review Of The Literature

**Bustos, P. (2011).** "Trade Liberalization, Exports, and Technology Upgrading: Evidence on the Impact of MERCOSUR on Argentinean Firms." - Despite its focus on Argentina, this study's conclusions may be useful for understanding how trade liberalization, exports, and technology advancement relate in the context of India.

**Das, P., & Mohapatra, G. (2017).** "Trade Liberalization and Firm-Level Productivity: The Case of India." - Investigates the effects of trade liberalization on Indian company productivity, highlighting structural changes.

**Dreher, A., & Fuchs, A. (2011).** Rugged Aid? The Allocation of Chinese Aid: An Empirical Analysis. - Examines China's assistance distribution, which may have an impact on India's trading relations, particularly in Africa.

**Goldberg, P. K., & Pavcnik, N. (2007).** "Distributional Effects of Globalization in Developing Countries." - Provides information on how income distribution in emerging nations like India is impacted by globalization, especially trade.

**Keller, W., & Yeaple, S. R. (2009).** " Firm-Level Evidence from the US on Multinational Enterprises, International Trade, and Productivity Growth. gives a viewpoint on the function of multinational corporations in global commerce and its effects on productivity and structural change.

**Kohpaiboon, A., & Kimura, F. (2011).** " Discusses the complementarities between globalization, trade, and economic growth that are pertinent for India's structural change in "Globalization and Economic Growth: Empirical Evidence on the Role of Complementarities."

**Krishna, K. (2002).** Discusses the complementarities between globalization, trade, and economic growth that are pertinent for India's structural change in "Globalization and Economic Growth: Empirical Evidence on the Role of Complementarities."

**Mitra, D., & Ural, B. (2009).** "Trade Liberalization, Firm Heterogeneity, and Labor Market Dynamics: Evidence from India." - Examines the connection between India's labor market dynamics, corporate heterogeneity, and trade liberalization.

**Narayanan, K., & Sahu, S. (2004).** " Examines how trade liberalization has affected pay disparity in India and how this has affected structural changes in the labor market. The study is titled "Trade Liberalization and Wage Inequality: Evidence from India."

**Sharma, A. (2015).** "Structural Changes in Indian Economy: Impact of Trade and FDI." - Examines the structural alterations to the Indian economy brought on by trade and FDI.

**Subramanian, A., & Kessler, M. (2013).** "The Hyperglobalization of Trade and Its Future." - Examines the effects of hyperglobalization on India's trading environment and how it affects structural change.

**UNCTAD. (2020).** "Economic Development in Africa Report: Tackling Illicit Financial Flows for Sustainable Development in Africa." - Offers information on India's trading links with Africa, especially in light of questionable money flows.

**UNCTAD. (2021).** "Economic Development in Africa Report: From Regional Economic Communities to the African Continental Free Trade Area." - Talks about the probable effects of the African Continental Free commerce Area (AfCFTA) on Indian commerce with Africa.

**World Bank. (2020).** "India Development Update: Towards a Higher Growth Path." - Provides a summary of India's economic growth and structural change with an emphasis on policy recommendations.

**World Trade Organization (WTO). (2021).** "World Trade Report: Governments and Firms in the Global Marketplace." - Examines how corporations and governments influence global commerce and structural change, providing India-relevant insights.

### 3. Statement Of The Problem

This study's central issue, "Analysis of Growth and Structural Transformation in International Trade in India - A SEM Approach," centers on the necessity of having a thorough understanding of the dynamics of India's international trade development and structural transformation. The causes promoting trade expansion, the nature and effects of structural changes within the trade sector, the efficacy of trade policies, and the intricate connections between numerous economic indicators are among the key themes. Additionally, it is vital to ensure the sustainability of trade growth and use these insights to inform policy choices for India's sustained economic development within the context of international commerce.

### 4. Objective Of The Study

- To study about the demographic variables of the respondents.
- To analyse the perception of respondents towards growth and structural transformation in international trade in India.
- To recognize and measure the primary internal and external forces influencing changes in India's trade patterns and overall economic structure.

### 5. Scope Of The Study

- This paper, "Analysis of Growth and Structural Transformation in International Trade in India - A SEM Approach," examines the dynamics of international commerce in India in great detail. It

contains a thorough examination of the variables affecting the expansion of commerce and structural modifications to the trade sector.

- In order to examine the complex links between multiple economic indicators, trade policies, and trade results, the research will make use of structural equation modeling (SEM). India's significant commercial partners and regions are all included in the geographical scope of the study.
- The study will also concentrate on a certain time period to evaluate the development of trade dynamics.
- The report will offer policy suggestions to help stakeholders and policymakers in supporting sustainable trade growth and facilitating beneficial structural changes in India's international trade sector, even if the study's main focus is on empirical analysis.

## 6. Research Methodology:

The analysis of growth and structural transformation in international trade in India is a critical research endeavor that seeks to understand and describe the changes in India's trade patterns, specifically focusing on its growth and structural shifts. To conduct this research, a descriptive approach is chosen, which means the primary objective is to provide a comprehensive overview of the trends and changes in international trade without necessarily establishing causal relationships.

### Methodology Description:

#### Data Collection:

**Primary Data:** This involves collecting data specifically for this research project. It could include surveys, interviews, or field observations. In the context of international trade analysis, primary data might include surveys of businesses engaged in foreign trade, interviews with trade experts, or field observations at ports and customs facilities.

**Secondary Data:** This involves using existing data sources, such as government reports, trade statistics, academic studies, and other publicly available information. In the case of this study, secondary data would be crucial for obtaining historical trade data, policy documents, and economic reports related to India's international trade.

#### Sample Size and Sampling:

**Sample Size:** A sample size of 150 has been chosen for this study. This means that the researchers collect data and analyze a subset of 150 elements (e.g., firms engaged in international trade or trade-related documents).

**Type of Sampling:** Simple random sampling is employed, which means that each element in the population (in this case, businesses or trade-related documents) has an equal chance of being included in the sample. This method helps ensure that the sample is representative and minimizes bias.

#### Tools Used:

**Percentage Analysis:** Percentage analysis is a fundamental descriptive statistical tool that helps in quantifying and comparing proportions or relationships. In the context of this research, it can be used to express the growth or changes in international trade in India as percentages of the total trade volume, providing a clear picture of how trade has evolved over time.

**One-way Analysis of Variance (ANOVA):** ANOVA is a statistical test used to determine if there are any statistically significant differences between the means of two or more groups. In this study, ANOVA could be used to analyze differences in trade patterns and structural transformation among various sectors or regions in India. For example, it might help identify whether there are significant differences in the types of goods traded or trading partners between different regions within India.

Overall, the methodology of this study combines both primary and secondary data collection methods to provide a holistic view of India's international trade. The use of simple random sampling ensures that the sample is unbiased, and the application of percentage analysis and ANOVA helps in describing and understanding the growth and structural changes in India's international trade.

### 7. Limitation Of The Study

- The dependence on historical data and the assumptions made within the SEM model might be a possible restriction of this study's examination of growth and structural transformation in foreign commerce in India.
- The dependability and quality of the data, which may have restrictions in terms of coverage, are what determine how accurate the results will be. Additionally, even though SEM makes it possible to examine complicated interactions, it is still a modeling strategy that makes assumptions that could not accurately reflect all the subtleties of actual trade dynamics.
- Additionally, the study's breadth could not include all potential elements affecting India's commerce, and the results could be affected by outside events or changes in the world economy that weren't taken into account in the model. Despite these drawbacks, the study seeks to offer insightful perspectives on India's trading environment and structural change.

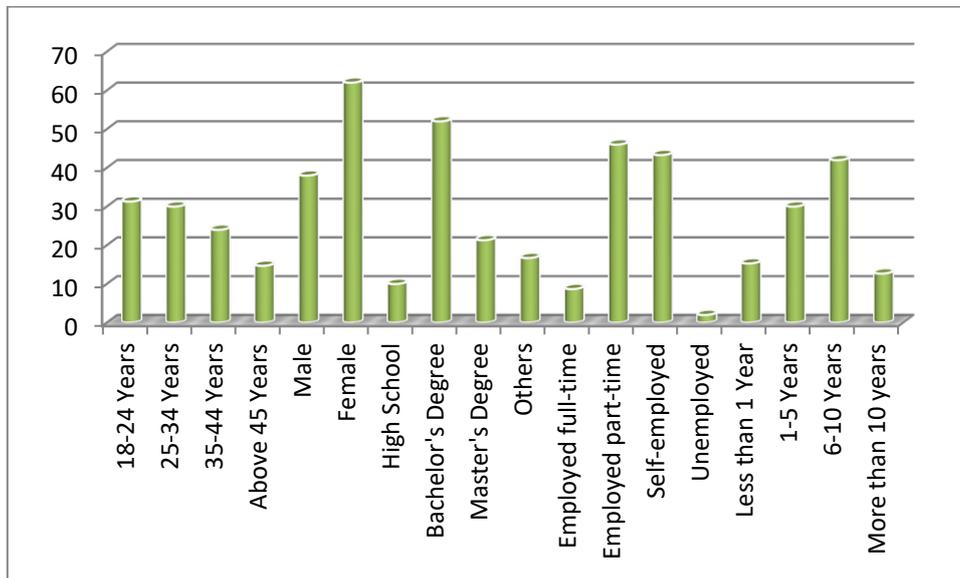
### 8. Analysis And Interpretation

**Table 1:** Demographic variables of the respondents

Demographic variables	Particulars	Frequency	Percent
Age	18-24 Years	47	31.3
	25-34 Years	45	30
	35-44 Years	36	24
	Above 45 Years	22	14.7
Gender	Male	57	38
	Female	93	62
Educational Background	High School	15	10
	Bachelor's Degree	78	52
	Master's Degree	32	21.3
	Others	25	16.7
Employment Status	Employed full-time	13	8.7
	Employed part-time	69	46
	Self-employed	65	43.3
	Unemployed	3	2
Years of Experience in the Field of Economics/Trade	Less than 1 Year	23	15.3
	1-5 Years	45	30
	6-10 Years	63	42
	More than 10 years	19	12.7
<b>Total</b>		<b>150</b>	<b>100</b>

Interesting insights may be gained from the demographic data of the 150 people that participated in the poll. The respondents' ages are pretty well dispersed, with 14.7% of respondents over the age of 45, 31.3% in the 18–24 age range, 30% in the 25–34 age range, and 24% in the 35–44 age range. In terms of gender, women make up 62% of the sample, while men make up the remaining 38% of the participants. In terms of educational background, the majority (52% of respondents) hold a bachelor's degree, followed by master's degree holders (21.3%) and a significant 16.7% of respondents with 'Other' credentials. In terms of employment, 8.7% of respondents work full-time, 46% work part-time, and 43.3% are self-employed. A tiny 2% of the population is unemployed as well. The distribution of experience in economics or trade is pretty even, with 42% having 6–10 years of experience, 30% having 1–5 years, 15.3% having less than a year, and 12.7% having more than ten

years. For properly comprehending and contextualizing the results, it is critical to have a thorough awareness of the sample's variety provided by these demographics.



**Fig 1:** Comparison between socio-economic variables of the respondents and Years of Experience in the Field of Economics/Trade

H<sub>01</sub>: No relationship exists between socio-economic variables of the respondents and Years of Experience in the Field of Economics/Trade

**Table 2**

	Years of Experience in the Field of Economics/Trade	N	Mean	SD	F	Sig
Trade Growth and Structural Changes:	Less than 1 Year	23	2.06	0.497	17.767	.000
	1-5 Years	45	2.45	0.410		
	6-10 Years	63	2.60	0.606		
	More than 10 years	19	3.20	0.433		
	Total	150	2.55	0.597		
Trade Policies and Impact:	Less than 1 Year	23	2.05	0.391	.570	.636
	1-5 Years	45	1.92	0.465		
	6-10 Years	63	1.96	0.402		
	More than 10 years	19	1.95	0.339		
	Total	150	1.96	0.412		
Factors and Relationships:	Less than 1 Year	23	2.45	0.370	2.377	.072
	1-5 Years	45	2.68	0.448		
	6-10 Years	63	2.55	0.312		
	More than 10 years	19	2.47	0.487		
	Total	150	2.57	0.395		

The null hypothesis (Ho1) states that there is no relationship between these socio-economic variables and years of experience in the field. The analysis is presented in a tabular form, and I'll provide an interpretation based on the level of significance (Sig) and mean values:

**Trade Growth and Structural Changes:**

For respondents with less than 1 year of experience, the mean Years of Experience is 2.06.

For those with 1-5 years, the mean is 2.45.

For 6-10 years, it's 2.60.

For more than 10 years, it's 3.20.

The F-statistic is 17.767, and the p-value (Sig) is less than 0.001 (0.000), indicating a highly significant relationship between years of experience and the perception of trade growth and structural changes. The mean values increase as years of experience increase, suggesting that more experienced individuals tend to perceive a greater impact on trade growth and structural changes.

**Trade Policies and Impact:**

For respondents with less than 1 year of experience, the mean Years of Experience is 2.05.

For those with 1-5 years, the mean is 1.92.

For 6-10 years, it's 1.96.

For more than 10 years, it's 1.95.

In this case, the F-statistic is 0.570, and the p-value is 0.636. This means there is no statistically significant relationship between years of experience and perceptions of trade policies and their impact. The mean values do not show a consistent trend with years of experience, further indicating the lack of a significant relationship.

**Factors and Relationships:**

For respondents with less than 1 year of experience, the mean Years of Experience is 2.45.

For those with 1-5 years, the mean is 2.68.

For 6-10 years, it's 2.55.

For more than 10 years, it's 2.47.

The F-statistic is 2.377, and the p-value is 0.072. This suggests a marginal level of significance, meaning there might be a weak relationship between years of experience and factors related to trade and relationships. The mean values show some variation, but it's not as consistent as in the first case.

**9. Findings**

- 61.3% of the sample's respondents, or the bulk of those polled, are between the ages of 18 and 34.
- At 62%, women make up the majority.
- In terms of education, the majority (52%) have earned a bachelor's degree.
- 30% of the sample has 1–10 years of experience in the field of trade or economics.
- There is a highly significant relationship between years of experience and the perception of trade growth and structural changes.
- There is no significant relationship between years of experience and perceptions of trade policies and their impact.
- There is a marginal level of significance, indicating a potential, but not strong, relationship between years of experience and factors related to trade and relationships.

**10. Suggestion**

- For a thorough examination, the information supplied on the demographic factors and how they affect views is helpful. It would be good to investigate probable causes for the observed disparities in perceptions, particularly with relation to "Trade Growth and Structural Changes," in order to improve the interpretation further.
- The fundamental causes affecting these impressions may be discovered using qualitative research techniques like interviews or open-ended survey questions.
- A further investigation of these elements and how they connect to years of experience might also give a more nuanced insight given the unique nature of the "Factors and Relationships" perception.

- These extra qualitative and quantitative components would make the analysis of the data richer and more thorough.

## 11. Conclusion

In conclusion, our study of the survey respondents' demographic characteristics reveals some significant patterns. A sizable percentage of responders are female, between the ages of 18 and 34, and have bachelor's degrees. In addition, most participants have between one and ten years of expertise in the field of trade or economics. The study contends that experience significantly influences respondents' attitudes, notably in the area of "Trade Growth and Structural Changes," where those with more experience have a tendency to have a more favorable opinion. However, the effect of experience on opinions about "Trade Policies and Impact" seems to be less prominent, and its effect on opinions about "Factors and Relationships" is barely noticeable. These results provide insightful information into the intricate interactions between demographic variables and professional experience in influencing people's perceptions of the field of trade and economics, which can be useful in identifying and addressing particular problems or opportunities in this area.

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