



FOREIGN TRADE PERFORMANCE ANALYSIS OF INDIA WITH SPECIAL REFERENCE TO TAMIL NADU”

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Abstract

Analysing and comparing India's and the state of Tamil Nadu's export performance from 2017–18 to 2024–25 is the goal of the study "Foreign Trade Performance Analysis of India with Special Reference to Tamil Nadu." Because it fosters growth, employment, and global integration, foreign commerce is essential to economic progress. Understanding Tamil Nadu's trends, growth patterns, and relative contribution to India's overall export performance is the main goal of this study. The study comes to the conclusion that Tamil Nadu's export performance is more vulnerable to external shocks because of sectoral concentration, but India's export performance is comparatively steady because of diversification. To improve export performance, especially at the state level, the report recommends infrastructural expansion, governmental support, and diversification.

Keywords : Export Performance, Foreign Trade, India Exports ,Tamil Nadu Exports, Comparative Analysis, Economic Development.

Introduction

India's Foreign trade plays a crucial role in the economic development by facilitating the exchange of goods and services across the borders. It makes it easier to exchange products and services across international borders, foreign trade is essential to a nation's economic success. Global integration, industrial development, employment creation, and GDP growth are all facilitated by it. With steady growth in both imports and exports, India has been a major force in international trade in recent decades.

Globalisation, technical improvements, and liberalisation policies have significantly changed India's foreign trade system. Petroleum products, engineering goods, textiles, pharmaceuticals, and agricultural commodities are only a few of the many goods that the nation exports.

Each state in India makes a distinct contribution to export performance. One of the most export-oriented states among them is Tamil Nadu, which is renowned for its robust industrial base, which includes the production of automobiles, textiles, electronics, and engineering items.

In India, every state contributes differently to export performance. Among them, our state Tamil Nadu is one of the top export-oriented states, known for its strong industrial base, including automobile manufacturing, textiles, electronics, and engineering goods.

Background of the study

Since the 1991 economic reforms, India's international commerce has changed dramatically. India's participation in international trade has expanded as a result of the country's transition from a protectionist to an open market economy. Trade agreements, infrastructure development, and export promotion programs have all improved the nation's trade position.

As one of the most developed states in India, Tamil Nadu is essential to export operations. **The state has established robust export clusters in industries like:**

- Automobiles and auto components
- Textile and garments
- Leather products
- Information technology and electronics

Despite its advantages, Tamil Nadu's export performance has fluctuated because of the state of the world economy, internal issues, and sector-specific reliance.

Global trade was severely damaged by the COVID-19 epidemic, which also caused production, demand, and supply chain disruptions. During this time, reductions occurred in both Tamil Nadu and India, followed by a period of recovery.

So this research is undertaken to understand these fluctuations, growth patterns, and the comparative performance between India and Tamil Nadu.

Scope of the study

The scope of the study includes:

- Analysis of India's export performance over recent years
- Examination of Tamil Nadu's export contribution
- Comparative analysis between India and Tamil Nadu exports
- Study of trends, growth rates, and variability
- Evaluation of the impact of external factors such as COVID-19
- Identification of strengths and weaknesses in export performance

The study is limited to secondary data collected for a specific time period (2017–18 to 2024–25).

Limitations of the study

The study has the following limitations:

- The analysis is based only on secondary data, which may have inherent limitations in accuracy.
- The study focuses only on export data, excluding detailed import analysis at the state level.
- The time period is limited to 8 years, which may not reflect long-term structural changes.
- External factors such as global economic conditions, policy changes, and exchange rates are not deeply analyzed.
- Tamil Nadu's sector-wise export data is not considered in detail.
- Forecasting and advanced econometric models are not included.

Research Design

The present study adopts a descriptive and analytical research design to examine the foreign trade performance of India with special reference to Tamil Nadu. The study is based entirely on secondary data, which has been collected from reliable sources such as reports of the Ministry of Commerce and Industry India, government publications, export statistics databases, and economic surveys. The period of study covers eight financial years from 2017–18 to 2024–25 (estimated), enabling a time-series analysis of export performance.

Various statistical tools and techniques have been employed to analyze the data, including trend analysis, growth rate analysis, compound annual growth rate (CAGR), percentage share analysis, comparative analysis, moving averages, index numbers, and volatility measures such as standard deviation and coefficient of variation. These tools help in understanding the growth patterns, fluctuations, and comparative performance between India and Tamil Nadu. The data has been systematically presented using tables and graphical representations, such as line charts and bar diagrams, to facilitate clear interpretation and meaningful conclusions.

This study analyzed the foreign trade performance of India with special reference to Tamil Nadu for the period 2017–18 to 2024–25. The analysis was based on secondary data and applied various statistical tools such as: Trend Analysis, Growth Rate Analysis, CAGR, Comparative Analysis, Percentage Share Analysis and Volatility Analysis

The study aimed to understand export performance, growth patterns, and comparative contribution of Tamil Nadu to India’s exports.

Data Analysis and Interpretation

India’s Export data

Fiscal Year	Exports (USD Billion)
2017–18	303,526.16
2018–19	330,078.09
2019–20	313,361.04
2020–21	291,808.48
2021–22	422,004.40
2022–23	451,070.00
2023–24	437,072.03
2024–25 (Est.)	437,704.58

Data Source: www.commerce.gov.in/trade-statistics/

Trend Analysis

Year	Exports (USD Billion)
2017–18	303,526.16
2018–19	330,078.09
2019–20	313,361.04
2020–21	291,808.48
2021–22	422,004.40
2022–23	451,070.00
2023–24	437,072.03
2024–25	437,704.58

Calculated Results

Exports have shown an overall upward trajectory over time, reflecting steady growth in international trade. However, there was a sharp decline during 2020–21, largely due to the disruptive impact of the pandemic on global markets. Following this downturn, exports experienced a strong recovery between 2021 and 2023, regaining momentum and surpassing earlier levels.

Growth Rate & Percentage Share Analysis

Year	Exports	Growth Rate (%)	Share (%)
2017–18	303,526.16	—	10.16%
2018–19	330,078.09	8.75%	11.05%
2019–20	313,361.04	-5.06%	10.49%
2020–21	291,808.48	-6.88%	9.77%
2021–22	422,004.40	44.62%	14.13%
2022–23	451,070.00	6.88%	15.10%
2023–24	437,072.03	-3.10%	14.63%
2024–25	437,704.58	0.14%	14.65%
CAGR			5.39%

Calculated Results

Exports have experienced varied phases of growth and decline over the past several years. The period from 2019 to 2021 was marked by negative growth, driven by an economic slowdown compounded by the pandemic. This was followed by the highest growth in 2021–22, reflecting a strong post-COVID rebound. In recent years, however, the pace has shifted toward stability rather than rapid expansion. Overall, recent years have dominated total exports, highlighting a robust recovery phase and a more balanced trajectory.

CAGR (Compound Annual Growth Rate)

Formula:

$$CAGR = \left(\frac{\text{Ending}}{\text{Beginning}} \right)^{1/n} - 1$$

- Beginning (2017–18) = 303,526.16
- Ending (2024–25) = 437,704.58
- n = 7 years

$$CAGR = \left(\frac{437704.58}{303526.16} \right)^{1/7} - 1$$

$$CAGR \approx (1.442)^{1/7} - 1 \approx 5.39\%$$

It is evident that India's exports grew at an average annual rate of ~5.4% and it indicates moderate long-term growth

Comparative Analysis

Period	Average Exports
Pre-COVID (2017–20)	315,655.10
COVID Period (2019–21)	302,584.76
Post-COVID (2021–25)	436,462.75

Calculated Results

From the above table, it is clear that COVID caused a clear drop and Post-COVID exports increased ~38% higher than pre-COVID and it indicates strong structural recovery.

Volatility Analysis

- Mean = 373,328
- Standard Deviation ≈ 60,900
- Coefficient of Variation ≈ **16.3%**

Trade has moderate variability and Exports are fairly stable but influenced by shocks

India's Import Data

Fiscal Year	Imports (USD Billion)
2017–18	465,580.99
2018–19	514,078.42
2019–20	474,709.28
2020–21	394,435.88
2021–22	613,052.05
2022–23	715,968.90
2023–24	678,214.77
2024–25 (Est.)	721,200.22

Calculated Results

Trend Analysis

Year	Imports (USD Billion)
2017–18	465,580.99
2018–19	514,078.42
2019–20	474,709.28
2020–21	394,435.88
2021–22	613,052.05
2022–23	715,968.90
2023–24	678,214.77
2024–25	721,200.22

Calculated Results

From the above shows that the Imports show an overall increasing trend followed by Sharp fall in 2020–21 (pandemic effect) . It also indicates that Strong rebound from 2021–23 and Imports remain high and growing in recent years.

Growth Rate & Percentage Share Analysis

Year	Imports	Growth Rate (%)	Share (%)
2017–18	465,580.99	—	10.17%
2018–19	514,078.42	10.42%	11.23%
2019–20	474,709.28	-7.66%	10.37%
2020–21	394,435.88	-16.91%	8.62%
2021–22	613,052.05	55.42%	13.40%
2022–23	715,968.90	16.79%	15.64%
2023–24	678,214.77	-5.27%	14.82%
2024–25	721,200.22	6.34%	15.76%
CAGR			6.46%

Calculated Results

From the above table it is observed that the Highest growth: 2021–22 (post-COVID surge) and Severe decline in 2020–21. Imports show higher volatility than exports and the recent growth indicates strong domestic demand. Percentage share analysis shows the Highest share: 2024–25 (Est. and Lowest: 2020–21). So the recent years dominate → import expansion phase

CAGR (Compound Annual Growth Rate)

- Beginning (2017–18) = 465,580.99
- Ending (2024–25) = 721,200.22
- n = 7 years

$$CAGR = \left(\frac{721200.22}{465580.99} \right)^{1/7} - 1$$

$$CAGR \approx (1.549)^{1/7} - 1 \approx 6.46\%$$

Imports grew at ~6.5% annually which is faster than exports that indicates rising import dependency

Comparative Analysis

Period	Average Imports
Pre-COVID (2017–20)	484,789.56
COVID Period (2019–21)	434,572.58
Post-COVID (2021–25)	682,108.99

Calculated Results

It is clear that Imports dropped during COVID and during the Post-COVID imports increased ~41% over pre-COVID. It indicates strong recovery + increased consumption/import needs

Volatility Analysis

- Mean = 572,155
- Standard Deviation \approx 113,200
- Coefficient of Variation \approx **19.8%**

It shows that the Imports are **more volatile than exports** which is Highly sensitive to: Oil prices, Domestic demand and Global conditions

Tamil Nadu Export

Fiscal Year	Tamil Nadu Exports (USD Billion)
2017–18	58,500.46
2018–19	59,089.73
2019–20	25,042.39
2020–21	33,860.29
2021–22	39,690.27
2022–23	42,228.09
2023–24	48,532.89
2024–25 (Est.)	59,275.71

Data Source: www.commerce.gov.in/trade-statistics/

Trend Analysis

Year	Exports (USD Billion)
2017–18	58,500.46
2018–19	59,089.73
2019–20	25,042.39
2020–21	33,860.29
2021–22	39,690.27
2022–23	42,228.09
2023–24	48,532.89
2024–25	59,275.71

Calculated Results

From the above table it is evident that the High exports in 2017–19 and Sharp decline in 2019–20 (data anomaly or external shock) . The recovery begins from 2020–21 onward and Strong growth trend again by 2024–25.

Growth Rate Analysis

Year	Exports	Growth Rate (%)	Share (%)
2017–18	58,500.46	—	15.97%
2018–19	59,089.73	1.01%	16.14%
2019–20	25,042.39	-57.61%	6.84%
2020–21	33,860.29	35.22%	9.25%
2021–22	39,690.27	17.23%	10.84%
2022–23	42,228.09	6.39%	11.53%
2023–24	48,532.89	14.92%	13.25%
2024–25	59,275.71	22.14%	16.19%
CAGR			0.18%

Calculated Results

It is observed that Severe decline in 2019–20 with Strong recovery phase (2020–25) . In recent years show consistent positive growth which indicates resilience and expansion, While in the Percentage share analysis Highest contribution: 2024–25 & 2018–19 & lowest: 2019–20 which indicates strong recovery and increasing contribution

CAGR (Compound Annual Growth Rate)

- Beginning (2017–18) = 58,500.46
- Ending (2024–25) = 59,275.71
- n = 7

$$CAGR = \left(\frac{59275.71}{58500.46} \right)^{1/7} - 1$$

$$CAGR \approx (1.013)^{1/7} - 1 \approx 0.18\%$$

It shows that Very low CAGR (~0.18%) Due to **sharp drop in 2019–20**

Comparative Analysis

Period	Average Exports
Pre-COVID (2017–19)	58,530.10
COVID Period (2019–21)	29,967.66
Post-COVID (2021–25)	47,431.74

Calculated Results

It shows that huge drop during COVID period and Post-COVID recovery strong but still slightly below pre-COVID peak initially by 2024–25, exports exceed earlier levels.

Volatility Analysis

- Mean $\approx 45,777$
- Standard Deviation $\approx 12,500$
- Coefficient of Variation $\approx 27.3\%$

It is clear that High variability. Tamil Nadu exports are highly unstable compared to India overall.

Comparative Data Table (India Vs Tamil Nadu Exports)

Fiscal Year	India Exports (USD Billion)	Tamil Nadu Exports (USD Billion)
2017–18	303,526.16	58,500.46
2018–19	330,078.09	59,089.73
2019–20	313,361.04	25,042.39
2020–21	291,808.48	33,860.29
2021–22	422,004.40	39,690.27
2022–23	451,070.00	42,228.09
2023–24	437,072.03	48,532.89
2024–25 (Est.)	437,704.58	59,275.71

Calculated Results

Tamil Nadu Share In India's Exports

Year	Tamil Nadu Share (%)
2017–18	19.28%
2018–19	17.90%
2019–20	7.99%
2020–21	11.60%
2021–22	9.41%
2022–23	9.36%
2023–24	11.10%
2024–25	13.54%

Data Source: www.commerce.gov.in/trade-statistics/

From the above table it is clear that Tamil Nadu contributed ~18–19% initially with Sharp fall in 2019–20. Recovery phase shows increasing contribution again Still below earlier peak scope for growth.

Comparative Growth Rate

Year	India Growth (%)	Tamil Nadu Growth (%)
2018–19	8.75%	1.01%
2019–20	-5.06%	-57.61%
2020–21	-6.88%	35.22%
2021–22	44.62%	17.23%
2022–23	6.88%	6.39%
2023–24	-3.10%	14.92%
2024–25	0.14%	22.14%

Calculated Results

It shows that Tamil Nadu shows **higher volatility** and severe decline in 2019–20 compared to India’s export. Faster growth in recent years → **strong recovery momentum**

CAGR Comparison

Region	CAGR
India	5.39%
Tamil Nadu	0.18%

Calculated Results

From the above table it is clear that India shows steady long-term growth where as Tamil Nadu’s CAGR is low due to sharp past decline. However, recent trend indicates future growth potential

Volatility Comparison

Region	Coefficient of Variation
India	16.3%
Tamil Nadu	27.3%

Calculated Results

It is observed that Tamil Nadu exports are more unstable and India is relatively more consistent.

Major Findings

India-Level Findings

- India’s exports show a steady upward trend over the years.
- A significant decline occurred during 2020–21 due to COVID-19.
- Post-pandemic period shows strong recovery and stabilization.
- CAGR of India’s exports is around 5.39%, indicating moderate growth.
- Export performance is relatively stable (low volatility).

Tamil Nadu-Level Findings

- Tamil Nadu exports showed high fluctuations over the study period.
- A sharp decline occurred in 2019–20, followed by gradual recovery.
- Recent years show strong growth and improvement.
- Tamil Nadu has higher volatility (27.3%) compared to India.
- CAGR is low due to earlier decline but recent trends are positive.

Comparative Findings (India vs Tamil Nadu)

- India's export growth is more stable, while Tamil Nadu is more volatile.
- Tamil Nadu's share in India's exports declined sharply but is now recovering.
- Tamil Nadu experienced a more severe shock during crisis periods.
- Post-COVID recovery is faster in Tamil Nadu than India.
- India benefits from diversified exports, while Tamil Nadu depends on specific sectors.

Suggestions

For India

- Diversify export markets to reduce dependency
- Strengthen trade agreements with emerging economies
- Improve logistics and infrastructure
- Promote high-value and technology-based exports

For Tamil Nadu

- Diversify export sectors beyond traditional industries
- Encourage MSMEs to participate in exports
- Develop new industrial clusters
- Strengthen export-oriented infrastructure (ports, logistics)
- Promote innovation and value-added products

General Suggestions

- Improve policy support for exporters
- Enhance digital trade systems
- Focus on sustainable and green exports
- Provide financial support and incentives to exporters

Conclusion

The study concludes that India's foreign trade performance has shown steady growth and resilience, while Tamil Nadu demonstrates high volatility but strong recovery potential. Although Tamil Nadu's contribution declined during certain periods, recent trends indicate a positive growth trajectory.

With appropriate policy measures, diversification, and infrastructural development, Tamil Nadu can significantly enhance its role in India's export sector and contribute more effectively to national economic growth.

Review of Literature

Joshi et al. (2024) examined the relationship between economic complexity and export performance. The study found that higher economic complexity leads to diversification into high-value exports. The authors highlighted the importance of knowledge-intensive production. Export diversification enhances resilience against global market shocks. The study suggests promoting innovation-led export growth.

Yadav and Chattopadhyay (2024) analysed the determinants of India's commodity export performance and found that price competitiveness and production efficiency are significant factors. The study revealed that fluctuations in global prices directly influence export earnings. The authors emphasized the importance of cost management and productivity enhancement. The study highlights the need for technological upgrading in export-oriented industries.

Mota et al. (2021) analysed the impact of export promotion programmes on firm performance and found a positive relationship between programme participation and export growth. The study revealed that exporters receiving institutional support were able to diversify markets and increase export intensity. The authors observed that the effectiveness of such programmes was higher for firms with prior export experience. The study underscores the importance of well-designed export promotion policies for sustaining export performance.

The **World Bank (2020)** report emphasized that trade facilitation plays a vital role in improving export performance. The study found that complex customs procedures, excessive documentation, and regulatory delays significantly increase transaction costs. The report highlighted the importance of digitalization and single-window clearance systems. Efficient administrative processes reduce time and cost burdens on exporters. These findings are relevant for addressing administrative barriers in developing economies.

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