

THE ROLE OF INTERNATIONAL TRADE IN FUELING INDIA'S ECONOMIC GROWTH

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ABSTRACT

Classical and neoclassical economists have termed international trade as an 'engine of economic growth.' This paper examines the intricate relationship between international trade, foreign direct investment (FDI), and economic growth in India over a 22-year period. Through extensive data analysis and statistical methods, it investigates the connections between GDP, exports, imports, and FDI, shedding light on their profound impact on India's economic development. Key findings include strong positive correlations between exports, imports, and GDP, highlighting their pivotal roles in India's growth. The study also underscores the importance of FDI as a driver of economic expansion. Recommendations include strategies to enhance export competitiveness, diversify markets, improve trade infrastructure, and support small and medium-sized enterprises. The research emphasizes the central role of international trade in India's economic landscape and offers valuable insights for policymakers and stakeholders.

Keywords: GDP, export, import, FDI

INTRODUCTION

International trade and Foreign Direct Investment (FDI) play vital roles in India's economic growth and development. India, with a population of over 1.3 billion and a rapidly growing economy, considers international trade as a cornerstone for progress. India's historical engagement in trade, dating back to the ancient Silk Route, has evolved into a prominent global trade presence, making it the world's sixth-largest economy. India's diverse exportable goods and services, such as textiles, IT services, pharmaceuticals, and agriculture products, have propelled its international market presence.

Classical and neoclassical economists have termed international trade as an 'engine of economic growth.' They believe that trade contributes to both static and dynamic gains. It enables specialization, allowing countries to produce what they are most efficient in, leading to increased consumption beyond domestic production capacity.

The Asian Development Bank (ADB) predicts India's economy will grow by 7.5 percent in FY2022 and 8 percent in FY2023. This growth is attributed to public infrastructure spending, private investment, and improved labor market conditions. The government's production-linked incentive program in FY2022 is expected to boost the industrial sector.

FDI has been a significant driver of India's economic development. Foreign companies invest in India to benefit from incentives such as tax breaks and lower labor costs, leading to technology transfer, job creation, and other benefits. India has attracted record levels of FDI, with major sectors including computer software and hardware, automobile manufacturing, and construction. Prominent source countries for FDI include Singapore, the United States, Mauritius, and the Netherlands.

India's attractiveness for FDI has been further enhanced by factors such as corporate tax cuts, simplified labor laws, and reduced FDI restrictions. The low-skill manufacturing sector is particularly promising for FDI.

The Indian government has introduced policies to attract FDI, including easing regulations across various industries, improving the ease of doing business, and offering incentives. These measures have bolstered India's position as a major global FDI hub.

The Foreign Trade Policy (FTP) 2015-20 aims to promote exports, create jobs, and enhance value addition within India. It includes schemes and incentives to support trade, services exports, and merchandise exports, as well as measures to facilitate trade.

In summary, international trade and FDI are crucial drivers of India's economic growth and development. The government's policies and initiatives to attract FDI and promote trade have contributed to India's emergence as an attractive destination for international investors. India's diverse economy and favorable business climate make it a key player in the global economic landscape, poised for continued growth and development.

LITERATURE REVIEW

The literature review synthesizes findings from a range of studies examining the intricate interplay between GDP, exports, and imports, with a particular focus on India and the SAARC (South Asian Association for Regional Cooperation) region. Here are the key takeaways from these investigations:

Mehta (2015) conducted an extensive analysis spanning the years from 1976 to 2014 to explore the relationship among

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GDP, exports, and imports in India. Employing various statistical methods, the study identified co integration among these economic variables, suggesting a lasting equilibrium relationship.

Vanshika Chauhan (2020) investigated the connection between exports and economic growth, with a unique focus on the world's top five exporting economies. GDP served as the primary measure of growth. This study stood out for its broader perspective compared to single-economy-centric research.

Nagesh Kumar et al. (2006) highlighted the potential significance of the India-ASEAN partnership as a building block for wider regional economic cooperation in Asia. This underscores India's pivotal role in regional economic dynamics.

Sandeep Kaur (2010) delved into the concept of convergence in India's exports to SAARC countries. The study unveiled evidence of convergence with several SAARC nations, indicating a diminishing gap between actual exports and estimated export potential. This has significant implications for India's trade dynamics within the SAARC region.

Vilakshan (2011) explored the policy priority of financial inclusion in various countries, including SAARC nations, with a specific emphasis on microfinance initiatives.

Irum Shaheen (2013) critically assessed the reasons behind SAARC's comparatively slower development when compared to well-established organizations like the European Union (EU). Understanding these challenges is crucial for SAARC's future growth.

Das R. U (2009) argued in favor of regional economic integration in South Asia and provided insights into the challenges and opportunities facing SAARC nations in their pursuit of higher economic growth.

Sawhney and Kumar (2008) evaluated the political-economic and strategic advantages of deeper integration in South Asia from India's perspective. They contended that recent global developments presented an opportunity for SAARC to play a more prominent role.

Jayanta Roy (2005) analyzed the impact of the South Asian Regional Trade Agreement (SAFTA), highlighting the opening up of South Asian countries to trade with the rest of the world. The study noted increased dynamism in economic growth in the region.

Elizabeth Krueger et al. (2004) examined the impact of the South Asia Free Trade Agreement (SAFTA) and found that it had limited potential to significantly boost intra-regional trade among its member states. This underscores the challenges in fully realizing the agreement's benefits.

Suman Sharma (2001) scrutinized India's policies and objectives concerning SAARC within the broader framework of regional cooperation in Asia, considering

India's central role in the region.

Hariharan and Jebaraj (2003) explored trade between SAARC and other Asian countries, emphasizing the need for closer trade links within the region.

A series of studies conducted between 2000 and 1992 discussed facilities for trade and investment in SAARC nations, underlining the potential benefits of regional cooperation in these areas.

Mahendra P. Lama et al. (2000) delved into improving energy, transport, and communication infrastructure among SAARC nations, with a focus on cooperation in the energy sector—a pivotal area for trade transactions and regional development.

Studies conducted by Madaan et al. (1999-1996) and Gulati (1996) examined the trade intensity of SAARC nations, reaching varying conclusions about the growth of intra-regional trade. These studies considered factors like interdependence in the context of global trade.

A series of studies conducted between 2004 and 2008 analyzed trade scenarios between SAARC member countries. They observed that the formation of SAARC encouraged India's exports to SAARC countries and witnessed an upward trend in member countries' exports to the world. This suggests that regional cooperation can stimulate trade growth.

In summary, these studies collectively provide valuable insights into the complex relationship between GDP, exports, and imports in India and the broader canvas of SAARC regional cooperation. They underscore the potential for economic growth and development through trade, collaboration, and deeper integration within the region.

STUDY OBJECTIVES

1. Explore the relationship between exports and economic growth.
2. Examine the connection between imports and economic growth.
3. Assess how exports influence economic growth over a 21-year period.
4. Investigate how imports impact economic growth during the same timeframe.
5. Identify strategies to improve exports in select nations.

SCOPE OF THE STUDY

This study examines the influence of exports and imports on economic growth using 22 years of data collected from secondary sources like the World Bank website and academic journals such as ProQuest, Google Scholar, and JSTOR. Statistical analysis was conducted using SPSS

software, employing correlation and regression techniques to investigate the relationships between GDP (the independent variable) and exports and imports (the dependent variables).

ANALYSIS

1. Correlation between Export and GDP of India from 2000 to 2021

Correlation between Export and GDP of India from 2000 to 2021 Table No-1.1: Correlation between Export and GDP of India from 2000 to 2021

Table 1 Correlation between Export and GDP

		Export	GDP
Export	Pearson Correlation	1	1.000**
	Sig. (2-tailed)		<.001
	N	22	22
GDP	Pearson Correlation	1.000**	1
	Sig. (2-tailed)	<.001	
	N	22	22

** Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient of 1.000 between Export and GDP reflects a perfect positive linear relationship in India’s economy. As exports increase, GDP follows suit proportionally. This correlation is highly significant ($p < 0.001$) and reliable, indicating that export performance strongly influences economic growth. Policymakers can focus on export-oriented strategies to foster economic expansion. Businesses in the export sector can make

more confident investment decisions. To maintain accuracy in policy formulation and forecasting, data quality assurance is crucial, given the precision of this correlation. This finding highlights the central role of exports in India’s economic dynamics and resilience.

2. Correlation between Import and GDP of India from 2000 to 2021

Table 2 Correlation between Import and GDP

		Import	GDP
Import	Pearson Correlation	1	.950**
	Sig. (2-tailed)		<.001
	N	22	22
GDP	Pearson Correlation	.950**	1
	Sig. (2-tailed)	<.001	
	N	22	22

** Correlation is significant at the 0.01 level (2-tailed).

In the provided correlation table, the Pearson correlation coefficient for Import and GDP is 0.950**, signifying a strong positive linear relationship. This correlation is highly significant ($p < 0.001$) with a sample size of 22.

The interpretation reveals that as imports increase, GDP tends to rise correspondingly. Policymakers and businesses should note this robust association, emphasizing the economic importance of monitoring and managing import levels to foster growth and stability.

Table 3 Correlation between FDI and GDP

		GDP	FDI
GDP	Pearson Correlation	1	.876**
	Sig. (2-tailed)		<.001
	N	22	22
FDI	Pearson Correlation	.876**	1
	Sig. (2-tailed)	<.001	
	N	22	22

** Correlation is significant at the 0.01 level (2-tailed).

3. Correlation between FDI and GDP of India from 2000 to

Direct Investment (FDI) increases, Gross Domestic Product (GDP) tends to increase, underscoring FDI's role

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 ^a	1.000	1.000	.00000

a. Predictors: (Constant), GDP

2021

as a driver of economic growth.

The Pearson correlation coefficient between FDI and GDP is 0.876**, indicating a strong positive linear relationship. This correlation is highly significant ($p < 0.001$) with a sample size of 22. In essence, as Foreign

Regression analysis between Export and GDP of India from 2000 to 2022

Table 4 Model Summary of Regression analysis between Export and GDP

Table 5 ANOVA of Regression analysis between Export and GDP

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15435806.347	1	15435806.347		b
	Residual	.000	20	.000		
	Total	15435806.347	21			

a. Dependent Variable: Export

b. Predictors: (Constant), GDP

Table 6 Coefficients of Regression analysis between Export and GDP

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.000	.000					
	GDP	1.000	.000	1.000			1.000	1.000

a. Dependent Variable: Export

Table 7 Collinearity Diagnostics Regression analysis between Export and GDP

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	GDP
1	1	1.890	1.000	.06	.06
	2	.110	4.143	.94	.94

a. Dependent Variable: Export

The provided data describes a regression model with Export as the dependent variable and GDP as the independent variable. The model exhibits a perfect fit (R-squared of 1.000), implying that GDP explains all variance in Export. Unfortunately, p-values for statistical significance are absent. The ANOVA table suggests overall significance, but specific details depend on undisclosed F-statistics and p-values. Coefficients reveal that GDP has a strong

positive influence on Export. Collinearity diagnostics indicate perfect collinearity between the constant term and GDP. In summary, while the data implies a perfect relationship between GDP and Export, the absence of p-values limits the assessment of statistical significance.

Regression analysis between import and GDP of India from 2000 to 2022

Table 8 Model Summary of Regression analysis between import and GDP

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.950 ^a	.903	.898	67.93611

a. Predictors: (Constant), GDP

Table 9 Anova of Regression analysis between import and GDP

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	859323.194	1	859323.194	186.189	<.001 ^b
	Residual	92306.312	20	4615.316		
	Total	951629.506	21			

a. Dependent Variable: Import

b. Predictors: (Constant), GDP

Table 10: Collinearity Diagnostics Regression analysis between import and GDP

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	GDP
1	1	1.890	1.000	.06	.06
	2	.110	4.143	.94	.94

a. Dependent Variable: Import

The data showcases a regression model where Import is the dependent variable and GDP is the independent variable. This model demonstrates a strong fit (R-squared 0.903), signifying that about 90.3% of Import's variance is explained by GDP. The adjusted R-squared, at 0.898, adjusts for degrees of freedom. The standard error of the estimate, 67.93611, represents the average difference between observed and predicted Import values.

ANOVA indicates the model's statistical significance, with substantial variance explained (859323.194) and a significant F-statistic ($p < 0.001$). Regression coefficients show a significant GDP coefficient ($p < 0.001$), emphasizing GDP's notable impact on Import.

4. Regression analysis between FDI and GDP of India from 2000 to 2022

Table 11 Model Summary of Regression analysis between FDI and GDP

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.876 ^a	.768	.756	8.78093

a. Predictors: (Constant), GDP

Table 12 ANOVA of Regression analysis between FDI and GDP

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5091.192	1	5091.192	66.029	<.001 ^b
	Residual	1542.096	20	77.105		
	Total	6633.289	21			

a. Dependent Variable: FDI

b. Predictors: (Constant), GDP

Table 13 Coefficients of Regression analysis between FDI and GDP

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.797	4.104		-.194	.848		
	GDP	.018	.002	.876	8.126	<.001	1.000	1.000

a. Dependent Variable: FDI

Table 14 Collinearity Diagnostics of Regression analysis between FDI and GDP

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	GDP
1	1	1.890	1.000	.06	.06
	2	.110	4.143	.94	.94

a. Dependent Variable: FDI

The data presents a regression analysis with GDP predicting FDI. The strong correlation ($R = 0.876$) indicates a robust relationship. GDP explains 76.8% of FDI variance. The model is significant (F -statistic = 66.029, $p < .001$). The coefficient for GDP (0.018, $p < .001$) signifies that higher GDP relates to increased FDI. No multicollinearity issues are detected. In summary, GDP significantly predicts FDI, explaining 76.8% of its variance, with a statistically significant model.

CONCLUSION

This study investigates the relationship between international trade and economic growth in India using 22 years of data encompassing exports, imports, and Gross Domestic Product (GDP). Employing correlation and regression analyses, it aims to uncover the connections between these international trade variables and GDP while proposing potential strategies for enhancing

exports in specific countries. Here's a condensed overview of the study's key findings and implications:

1. Exports and Economic Growth: The correlation analysis reveals a perfect positive linear relationship (correlation coefficient of 1.000**) between exports and GDP. This indicates that as exports increase, GDP also increases, signifying the pivotal role of exports in India's economic growth. The steady growth in exports over the years has significantly contributed to the expansion of India's economy.
2. Imports and Economic Growth: The correlation analysis indicates a strong positive linear relationship (correlation coefficient of 0.950**) between imports and GDP. This implies that as imports rise, GDP tends to increase as well. Imports play a vital role in supporting domestic production and driving economic growth. The surge in imports mirrors the growing demand for goods and services in India,

thereby contributing to overall economic development.

3. **Impact of Exports on Economic Growth:** The regression analysis underscores a perfect relationship between GDP and exports, with GDP accounting for all the variance in the dependent variable. This implies that changes in exports have a direct influence on economic growth. The absence of p-values hinders assessing the statistical significance of the model and its coefficients. However, the robust relationship between exports and GDP suggests that augmenting exports can positively impact India's economic growth.
4. **Impact of Imports on Economic Growth:** The regression analysis highlights a strong positive relationship between GDP and imports. The regression model, featuring GDP as the independent variable, elucidates approximately 90.3% of the variance in the dependent variable. The statistically significant coefficient for GDP implies that GDP fluctuations significantly affect imports. Consequently, economic growth stimulates demand for imported goods and services, further fueling overall economic expansion.
5. **Strategies for Enhancing Exports:** Based on these findings, identifying strategies to bolster exports in specific countries becomes imperative. Potential measures include trade promotion initiatives, fostering international collaborations, improving trade infrastructure, offering financial incentives, and conducting market research to unearth emerging opportunities. By prioritizing export diversification, enhancing product quality, and expanding market reach, India can tap into new markets and amplify its export performance.

The study underscores the robust positive relationships between exports, imports, FDI, and economic growth in India. These findings affirm the pivotal role of international trade in India's economic development. Proactive measures such as promoting FDI and exports are vital to harness the economic potential fully. By formulating apt policies and strategies, India can solidify its global market standing and leverage international trade to facilitate sustained economic growth and development.

LIMITATIONS

Several limitations in this study must be acknowledged:

1. Data collection relied solely on secondary sources, not primary ones.
2. The sample size is limited, potentially affecting the study's generalizability.
3. The study's timeframe spans only 22 years from 2000 to 2021.

4. It primarily focuses on real economic indicators, overlooking social indicators' contributions to the growth process.
5. The study concentrates on international trade, disregarding internal trade's contributions to growth.

In conclusion, international trade, encompassing exports, imports, and FDI, exerts a substantial influence on India's economic growth. The study's findings underscore the significance of embracing and enhancing international trade to foster economic development. This necessitates a nuanced approach involving well-thought-out strategies, proactive policies, and robust international collaborations to harness the full potential of international trade for India's growth and prosperity. However, the study acknowledges its limitations, such as data sources and the study's relatively short timeframe, which may warrant further investigation and analysis in the future.

RECOMMENDATIONS

1. **Enhance Export Promotion Initiatives:** The Indian government should bolster export promotion initiatives like trade fairs, export incentives, and market development programs. These measures can help Indian exporters access global markets, build networks, and enhance competitiveness.
2. **Diversify Export Markets:** India should diversify its export destinations to reduce reliance on a few markets. Exploring emerging economies and developing regions can mitigate risks tied to economic downturns in specific countries and enhance export resilience.
3. **Improve Trade Infrastructure:** Strengthening trade infrastructure, such as transport networks, logistics, and customs processes, is vital for efficient and cost-effective trade. Investments in modernizing ports, airports, and transport corridors can reduce trade barriers and boost India's export competitiveness.
4. **Promote Research and Development:** Encouraging research and development in export-oriented industries can lead to high-value products and technologies. This can help Indian exporters move up the value chain, enhance product differentiation, and gain a competitive edge globally.
5. **Strengthen SME Support:** Small and medium-sized enterprises (SMEs) are crucial in India's export sector. Providing targeted support like access to finance, technology upgrades, and capacity-building can enhance their export capabilities and contribute to overall export growth.
6. **Foster Trade Collaboration:** Actively seeking and nurturing trade collaborations with other countries

can open new opportunities for Indian exporters. Bilateral and regional trade agreements, partnerships, and joint ventures can facilitate trade, reduce barriers, and improve market access.

7. Invest in Skill Development: Enhancing the skill levels of the export-oriented workforce is vital. Investments in vocational training, skill development initiatives, and industry-academia collaborations can ensure the workforce meets international standards.
8. Promote Export Quality and Standards: Emphasizing adherence to international quality standards and certifications can enhance the reputation and competitiveness of Indian exports. Support and guidance for meeting quality and compliance standards can expand market opportunities and build trust with international buyers.
9. Facilitate Access to Finance: Ensuring easy, affordable access to finance for exporters, especially SMEs, is essential. Streamlining export credit facilities, reducing interest rates, and offering export financing schemes can support exporters in scaling up and entering new markets.
10. Continuous Monitoring and Evaluation: Regularly monitoring and evaluating export promotion policies and programs are crucial to assess effectiveness and make necessary adjustments. Ongoing assessments of export performance, market trends, and changing global dynamics can identify emerging opportunities and challenges for India's international trade.

Implementing these recommendations can fortify India's position in the global marketplace, boost export competitiveness, and drive sustained economic growth through international trade.

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