SJIF Impact Factor (2024): 8.282 Journal DOI: 10.36713/epra0003 ISSN: 2250 – 2017
International Journal of Global Economic Light (JGEL)
Volume: 10 | Issue: 2 |February 2024

COMPARATIVE ANALYSIS OF EXPORT LED AND IMPORT LED GROWTH MODELS: A CASE STUDY OF CHINA AND INDIA

Asha. M. Goudar[1], B. H. Nagoor[2]
[1]*Research Scholar, Department of Studies in Economics, Karnatak University, Dharwad, Karnataka, India*
[2]*Professor, Department of Studies in Economics, Karnatak University, Dharwad, Karnataka, India*

ABSTRACT
This study compares how export-driven and import-driven growth strategies have influenced economic development in China and India. Using data from 1971 to 2021 and ARDL Bound cointegration analysis were used. The objective is to understand which growth strategy is more effective and what it means for overall development. The analysis reveals distinct patterns of export-led and import-led growth in China and India. China's export-led growth model is characterized by its strategic focus on becoming the "world's factory," using abundant labour supply, low production costs, and proactive trade policies to capture a significant share of international trade. In contrast, India's import-led growth model is driven by its reliance on imports to meet domestic demand for crucial commodities, raw materials, and capital goods, as well as its strategic approach to economic liberalization and globalization. The study also explores the implications of export-led and import-led growth strategies on economic development, highlighting the importance of stability, resilience, and innovation in driving sustainable growth. While both models have their strengths and challenges, policymakers need to modify interventions to use their respective advantages and address constraints effectively. Overall, the comparative analysis provides valuable insights into the trade-growth dynamics of China and India, offering policymakers and researchers a deeper understanding of the factors shaping their economic trajectories and the implications for global trade and development. This study contributes to the existing literature by offering a comprehensive analysis of export-led and import-led growth models in the context of China and India. However, further research could explore additional variables and employ more robust methodologies to enhance our understanding of the trade-growth nexus and its implications for economic development.

KEY WORDS: *Export-led, Import-led. ARDL, Bound Co-integration.*

1. INTRODUCTION

India and China have risen as dominant forces in Asia, boasting robust economic capabilities and considerable geopolitical influence. As two of the world's fastest-growing markets, they have involved globalization and become pivotal drivers of global economic growth. Despite India's emergence as a significant economic power, it still lag behind China in many aspects. The divergence in their growth trajectories holds back from varying degrees of openness and the distinct roles played by their manufacturing and service sectors.

The Journey trade performances of China and India from the 1970s present an attractive narrative of distinct paths shaped by diverse economic policies, global integration strategies, and domestic factors. China embarked on a path of economic reform in the late 1970s, gradually transitioning from a centrally planned to a market-oriented economy. This transformation, led by Deng Xiaoping's policy of opening and liberalization, unlocked China's immense potential as a global economic powerhouse. The country leveraged its abundant labour force, strategic geographic location, and proactive trade policies to emerge as the world's manufacturing hub and a leading exporter of goods. Key factors influencing China's trade performance include its strategic focus on export-oriented manufacturing, massive infrastructure development, investment in human capital, and proactive engagement with global markets. The country's accession to the World Trade Organization (WTO) in 2001 further bolstered its integration into the global economy, facilitating increased trade volumes, foreign direct investment (FDI), and technology transfers.

In contrast, India's journey in the 1970s was marked by a period of economic stagnation characterized by bureaucratic controls, protectionism, and import substitution policies. The country faced numerous challenges,

including low productivity, inefficiency, and a lack of competitiveness in the global market. However, the tide began to turn in the early 1990s with the introduction of significant economic reforms aimed at liberalizing the economy, deregulating markets, and promoting export-led growth. These reforms, spearheaded by then-Finance Minister Manmohan Singh, unleashed India's entrepreneurial spirit, attracted foreign investment, and propelled the country onto a path of rapid economic growth. Meanwhile, India's trade performance has been shaped by a combination of factors, including its diverse economic structure, burgeoning service sector, and strategic geographic location. The country's strengths in information technology (IT), pharmaceuticals, and services have positioned it as a global services hub, attracting outsourcing contracts and skilled labour from around the world. Additionally, India's spread and cultural ties have facilitated trade linkages with key markets, contributing to its trade diversification efforts.

Despite these successes, both countries face challenges in sustaining their trade performances. China struggles with issues such as rising labour costs, environmental concerns, and trade tensions with major partners, impacting its export competitiveness. India, on the other hand, contends with infrastructure bottlenecks, bureaucratic hurdles, and regulatory complexities, hindering its ability to fully capitalize on its trade potential.

In this background of global economic shifts, the rise of two economic powers, China, and India, has opened different paths of economic expansion in recent decades. While both nations have recognized trade as a fundamental driver of their developmental agendas, their methods and achievements separate notably. This study undertakes a comparative examination of the trade-driven growth paradigms in China and India, shedding light on key variables that shape their respective paths to economic prosperity.

- ***Export-led growth:*** Export-led growth refers to a strategy where a country focuses on increasing its exports as a primary driver of economic development. This approach typically involves producing goods and services for export markets, aiming to generate foreign exchange earnings, stimulate domestic industries, create employment opportunities, and boost overall economic growth. Countries pursuing export-led growth often prioritize policies that promote competitiveness in international markets, such as investment in infrastructure, technology, education, and trade liberalization measures to facilitate trade and attract foreign investment.
- ***Import-led growth:*** Import-led growth, on the other hand, is a strategy where a country relies on imports as a catalyst for economic development. This approach involves importing goods and services to meet domestic demand, spur industrialization, support economic diversification, and enhance productivity. Countries adopting import-led growth policies may prioritize measures such as liberalizing trade barriers, promoting consumption, investing in infrastructure to facilitate imports, and fostering a conducive business environment to encourage the inflow of foreign goods and services.

2. REVIEW OF LITERATURE

A comparative analysis of China and India's trade performances reveals significant differences. China's trade expansion has been accompanied by structural changes and a more diversified export basket, leading to a stronger presence in the US market (Tong 2010, Islam 2014). In contrast, India's trade expansion has not brought about substantial structural changes, and its export performance lag behind that of China (Tong 2010, Kalirajan 2008). The impact of exports and import expansion on economic growth has been found to be more significant in China, which has implemented more efficient reforms (Kumari 2014).

Several studies have explored the impact of export-led and import-led growth models on economic development. Akter(2017) found that both import and export contribute to economic growth in developing countries, with a unidirectional relationship in Bangladesh and a bidirectional relationship in Turkey. Saglam (2018) examined the strategies in European transition economies, concluding that a balance between export-led and domestic-demand-led growth is crucial for sustainable economic growth. Melo (1992) developed models incorporating export externalities and productivity growth, providing a theoretical framework for understanding the success of export-led growth strategies.

A comparative analysis of export-led and import-led growth models in China and India reveals some key differences. Kumari (2014) found that China's more efficient and early reforms led to better economic performance, while India's unidirectional causality from GDP per capita to exports suggests a less robust export-led growth model. Storm (1997) further emphasized the need for policies to raise agricultural output and income to support a manufacturing export-led growth strategy in India. Hye (2012) confirmed the validity of both export-led and import-led growth models in China, with a bidirectional long-run relationship between economic growth

and exports, and between economic growth and imports. Dhawan (1999) also supported the export-led growth model in India, with a long-run equilibrium relationship between real GDP, real exports, and terms of trade.

3. DATABASE AND RESEARCH METHODOLOGY

3.1 Database

The secondary time series data has been covered in the period from 1971 to 2021. Data on GDP, exports, and imports have been collected from UNCTAD. To capture the causal relationship between exports, imports, and economic growth, the technique of regression analysis is used, and the following model is given below.

$$lngdp = \beta 0 + \beta 1 lnExports + \beta 2 lnimports + \varepsilon t$$

1. GDP = Log of Gross Domestic Product(Annual growth rate)
2. EXP = Log of Exports % of GDP

3.IMP=Log of Imports % of GDP

LN= Natural Log

The prefix "LN" represents the time series' natural logarithm. Log transformation can reduce the problem of heteroscedasticity because it compresses the scale in which the variables are measured, thereby reducing a tenfold difference between two values to a twofold difference (Gujarati 1995). where lnGDP is the dependent variable and independent variables are Exports as % of GDP and Imports as % of GDP.β0 is the intercept and ε_t is the stochastic error term. The above equation is a log-linear regression model, where both the dependent and independent variables are in logarithmic form.

The entire estimation procedure consists of four steps: first, the unit root test; second, the ARDL Bound cointegration test; and third causality test. The fourth one is the Residual diagnostic test.
The following time series are analysed in this study

4. RESULTS AND DISCUSSIONS

4.1 Individual Analysis for India and China

Individual analysis for India and China reveals that the ADF unit root test results, as presented in table 1, indicate that Exports and imports, were not stationary at the level but became stationary at the first difference I (1). However, the GDP remains significant at level I (0) in the case of China and India. Consequently, our time series variables are not integrated into I(2) processes, which must be either I(0) or I(1). This suggests that the ARDL procedure can be appropriately conducted on the time series data to examine cointegration relationships among the variables.

Table 1: Unit-Root Test Results

Variables	Phillips Perron (PP)- Unit Root Test		Conclusion
China	**Level**	**First Difference**	**Stationary**
LnGDP	-4.8068***	-9.8564***	I (0)
LnExports	-0.8577	-6.9416***	I (1)
LnImports	-1.0826	-5.9111***	
India	**Level**	**First Difference**	**Stationary**
LnGDP	-7.5976***	-14.7545***	I (0)
LnExports	-2.1746	-7.3483***	I (1)
LnImports	-2.2473	-5.8411***	I (1)

Source: Eviews-9 Results
Notes: *** Significant level at the 1%.

Choosing the optimal number of lags for variables before estimating the ARDL model commonly relies on the Akaike Information Criterion (AIC), preferred for its robustness compared to the Schwarz Criterion (SC) and Hannan-Quinn (HQ) information criteria. Following the lag order selection criteria, it is concluded that one lag is appropriate for both China and India.

SJIF Impact Factor (2024): 8.282 Journal DOI: 10.36713/epra0003 ISSN: 2250 – 2017
International Journal of Global Economic Light (JGEL)
Volume: 10 | Issue: 2 |February 2024

Results of Bound Testing Procedure

Table 2: Null Hypothesis: No long-run relationships exist

Country	Dependent Variable	Cointegration Hypothesis	F-statistic	Decision
China	GDP	F(GDP/EXP,IMP,)	8.304248	Cointegration
India	GDP	F(GDP/EXP,IMP,)	21.71794	Cointegration
			Significance	
	Bounds	10%	5%	1%
	Lower I(0)	3.17	3.79	5.15
	UPPER I(1)	4.14	4.85	6.36

Source: Author's computation based on EViews -9 results.
Note: *** and ** denote the rejection of the null hypothesis at the 1% and 5% level respectively.

The critical values for the bounds test by Pesaran, Shin, and Smith (2001).
The outcomes of the bound cointegration test, as displayed in Table 2, reveal the rejection of the null hypothesis indicating "no cointegration." Notably, the F-statistic surpasses the upper bound I(1), attaining statistical significance at the 1% level. These results from the ARDL bounds testing methodology confirm the existence of a long-term association between GDP, serving as the dependent variable, and all other explanatory variables examined in the analysis for both China and India.

Estimation of the ARDL Model- the Long run and the Short run Dynamics

Table 3:Estimated Long-Run Coefficients Using: ARDL Model for China

Dependent Variable: GDP				
Variable Error	**Coefficient Std.**	**Std.Error**	**t-Statistic**	**Prob**
LNExports	0.429969	0.723614	0.594196	0.5549
LNImports	-0.478631	0.740966	-0.645955	0.5210
C	2.261578	0.303736	7.445878	0.0000

In Table 3, the long-run coefficients derived from the selected ARDL model show the expected signs. The coefficient associated with Exports (X) is positive yet statistically insignificant, supporting the notion that exports positively impact economic growth (GDP). Specifically, the positive coefficient value of 1.702 indicates that, over the long term, a one-unit rise in exports correlates with a substantial increase in China's GDP. These coefficients provide convincing evidence of China's export-led trade strategy. Similarly, the estimated coefficient for Imports stands at 0.47, also displaying a negative and insignificant relationship. This suggests that, in the long run, a unit increase in imports leads to a 47% decrease in China's economic growth.

Table 4: Error Correction Estimation for Estimated ARDL Model

Cointegrating Form				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(LNExports)	0.237268	0.389294	0.609483	0.5448
D(LNImports)	-0.264121	0.398535	-0.662730	0.5103
ECM(-1)	-0.551827	0.122912	-4.489595	0.0000
Cointeq = RGDP - (0.4300*LNEXPORT -0.4786*LNIMPORTS + 2.2616)				
R2	0.315700			
Adjusted R-squared	0.277683			
F-statistic	8.304248			
Prob(F-statistic)	0.000123			
Durbin-Watson stat	1.955867			

Table 4 shows the short-run dynamic coefficients obtained from the estimated ARDL model, with lag selection determined by the Akaike Information Criteria. In this table, specific attention is given to the estimated lagged error correction term ECM (-1), which registers at -0.551827. Notably, this coefficient is highly significant at the

1% level with expectations being negative, as indicated by the probability value of 0.0000, falling below the 5% significance level. These results strongly suggest the presence of a short-run relationship or cointegration among the variables. The negative value of the lagged error correction term, specifically -0.551827, indicates that approximately 55% of the disequilibrium stemming from shocks in the previous year is corrected and taken back to long-run equilibrium in the current year. This response coefficient offers valuable insights into the adjustment mechanism, highlighting the extent to which short-term imbalances are corrected to achieve long-term equilibrium in the case of China. The estimated cointegration R-square value is 31% for China. Although relatively lower, this underscores that China's export-led economy is influenced not only by the said indicators but also by other significant factors such as infrastructure facilities, the labour force, political dynamics, and domestic policies, among other matters.

China's export-led growth model has been a defining feature of its economic landscape for a considerable period, with exports playing a pivotal role in driving economic expansion. Several factors contribute to China's export-led trajectory over the long term. Firstly, China has strategically positioned itself as the "world's factory," leveraging its abundant labour supply, low production costs, and expansive manufacturing capabilities to become a global manufacturing hub. This competitive advantage has enabled China to capture a significant share of international trade, particularly in labour intensive industries such as textiles, electronics, and consumer goods.

Moreover, China's proactive trade policies, including export promotion initiatives, trade liberalization measures, and preferential trade agreements, have facilitated the growth of its export sector. The government's commitment to promoting exports through tax incentives, subsidies, and infrastructure investments has created an enabling environment for businesses to thrive in the global market. Additionally, China's integration into global supply chains and participation in international trade networks have further fuelled its export-oriented growth. By tapping into global markets, accessing advanced technologies, and fostering collaboration with multinational corporations, China has enhanced its competitiveness and expanded its export capabilities across diverse sectors. Furthermore, China's emphasis on innovation, technological advancement, and product diversification has enabled it to move up the value chain and capture higher-value export markets. Investments in research and development, education, and skill development have facilitated the development of high-tech industries and the production of sophisticated goods, driving export growth and enhancing the country's economic resilience.

Table 5:Estimated Long-Run Coefficients Using: ARDL Model for India

Dependent Variable: GDP				
Variable Error	**Coefficient Std.**	**Std.Error**	**t-Statistic**	**Prob**
LNExports	-1.039745	0.404415	-2.570984	0.0128
LNImports	1.347755	0.422928	3.186723	0.0024
C	0.763989	0.222900	3.427503	0.0011

In Table 5, the long-run coefficients estimated for the ARDL model reveal that a one-unit increase in imports corresponds to a substantial increase in GDP by 134 % in the Indian context, and this relationship is statistically significant, providing robust support for the argument that imports have a positive influence on economic growth (GDP). These findings strongly suggest that India follows an import-led trade strategy, as evidenced by the significant coefficient value. Conversely, the estimated coefficient for exports displays a negative and insignificant relationship with GDP. This indicates that, in the long run, a one-unit increase in exports is associated with a decrease in India's economic growth by 103 %. These results underscore the import-led nature of India's trade strategy and emphasize the importance of imports in driving economic growth, as opposed to exports.

Table 6: Error Correction Estimation for Estimated ARDL Model

Cointegrating Form				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(LNExports)	-1.170519	0.463315	-2.526399	0.0144
D(LNImports)	1.517269	0.492173	3.082798	0.0032
ECM(-1)	-1.125775	0.128987	-8.727832	0.0000
Cointeq = RGDP - (-1.0397*LNEXPORTS + 1.3478*LNIMPORTS + 0.7640)				
R2	0.537778			

Adjusted R-squared	0.513016
F-statistic	21.71794
Prob(F-statistic)	0.000000
Durbin-Watson stat	1.998254

The table 6 presents the short-run dynamic coefficients derived from the estimated ARDL model, with lag selection based on the Akaike Information Criteria. Of particular significance is the estimated lagged error correction term ECM (-1), which is observed to be -1.125775. This coefficient is highly significant at the 1% level and aligns with expectations by being negative, with a probability value of 0.0000, indicating its significance. These findings strongly suggest the existence of a short-run relationship or cointegration among the variables. Specifically, the negative value of the lagged error correction term, -1.125775, suggests that approximately 112% of the disequilibrium arising from shocks in the previous year is corrected and restored to the long-run equilibrium in the current year. The reported R-square value of about 53% indicates that the exogenous variables adequately define the model for GDP. This response coefficient offers valuable insights into the adjustment process, shedding light on the extent to which short-term imbalances are corrected to attain long-term equilibrium in the case of India.

In India, the import-led growth phenomenon can be involved in several factors that distinguish its economic landscape and development trajectory. Firstly, India has historically relied on imports to meet its domestic demand for crucial commodities, raw materials, and capital goods that are not sufficiently produced domestically or are of higher quality and cost-effectiveness when sourced from international markets. This dependency on imports has been particularly sectors such as energy, technology, machinery, and industrial inputs, where India lacks sufficient domestic production capacity or technological prowess.

Secondly, India's import-led growth can also be attributed to its strategic approach to economic liberalization and globalization. Since the early 1990s, India has pursued a policy of trade openness and integration with the global economy, dismantling barriers to imports and fostering a conducive environment for foreign trade and investment. This approach has facilitated access to a wide range of imported goods and services, enabling Indian businesses to enhance their competitiveness, drive innovation, and meet evolving consumer preferences.

Furthermore, India's import-led growth is closely linked to its role as a major consumer and importer of crude oil and petroleum products. Given its limited domestic oil reserves and growing energy needs, India heavily relies on imports to meet its energy requirements. This dependence on imported oil not only fuels economic activities but also drives demand for related industries, such as transportation, manufacturing, and petrochemicals, contributing significantly to overall economic growth.

Additionally, India's import-led growth reflects its evolving comparative advantages and specialization patterns in the global economy. As India transitions from traditional agriculture-based activities to modern, technology-driven industries, imports play a crucial role in facilitating the attainment of advanced technologies, capital equipment, and specialized inputs that are essential for upgrading domestic production processes, enhancing productivity, and fostering industrialization.

Pairwise Granger Causality

Tables 7 and 8 present the results of the causality analysis, which is crucial for examining and verifying causality relationships among the variables under consideration. These outcomes provide insights into the direction of causality among the variables, indicating whether the relationship is unidirectional, bidirectional, or neutral.

The results of Pairwise Granger Causality in China reveal that LNEXPORTS Granger causes GDP, while GDP does not Granger cause exports. This indicates a unidirectional causality. Conversely, in India, the null hypothesis has been rejected, suggesting that imports cause GDP, while GDP does not cause imports, indicating a unidirectional causality as well.

SJIF Impact Factor (2024): 8.282 Journal DOI: 10.36713/epra0003 ISSN: 2250 – 2017
International Journal of Global Economic Light (JGEL)
Volume: 10 | Issue: 2 |February 2024

Table 7: Pairwise Granger Causality Tests China

Null Hypothesis:	F-Statistic
LNExports does not Granger Cause LNGDP	3.09411*
LNGDP does not Granger Cause LNExports	1.53160
LNImports does not Granger Cause LNGDP	0.33160
LNGDP does not Granger Cause LNImports	1.72512
LNImports does not Granger Cause LNExports	3.53956**
LNExports does not Granger Cause LNImports	1.80982

***Note:** and * indicate significance levels at 5% and 10%*

Table 8:Pairwise Granger Causality Tests -India

Null Hypothesis:	F-Statistic
LNExports does not Granger Cause LNGDP	2.13410
LNGDP does not Granger Cause LNExports	3.27068**
LNImports does not Granger Cause LNGDP	2.74692*
LNGDP does not Granger Cause LNImports	0.67724
LNImports does not Granger Cause LNExports	1.70562
LNExports does not Granger Cause LNImports	6.87725***

Note:,** and * indicate significance levels at 1%,5% and 10%*

Table 9: Results of Diagnostic Tests

Test Statistics	**China**	**India**
	P-Value	
LM Test Serial correlation	0.9132	0.9667
ARCH Test	0.2180	0.6602
RESET	0.1500	0.1765

The table 9 validates that the ARDL model for both China and India successfully passes several diagnostic tests, indicating that the model possesses the desired econometric properties and is suitable for reliable interpretation. The Breusch-Godfrey (1978) serial correlation LM test, used to assess the presence of Serial Autocorrelation, reveals that the residuals are not serially correlated. This is evidenced by the P-value being greater than the 5% level of significance, leading to the acceptance of the null hypothesis (indicating no serial correlation) and affirming that the model exhibits no serial correlation.

Furthermore, the test for Heteroskedasticity (ARCH test) indicates that the residuals do not exhibit heteroskedasticity issues. The P-value is greater than the five percent level of significance resulting in the non-rejection of the null hypothesis (suggesting no ARCH effect), indicating that the model is free from any ARCH effect.

Additionally, the Regression Specification Error Test (RESET) (Ramsey, 1969) for functional form confirms that there is no misspecification in the model. The null hypothesis (No power in non-linear combinations - No misspecification) cannot be rejected, as the P-value exceeds the 5% level of significance, indicating no misspecification in the model due to non-linear combinations.

SJIF Impact Factor (2024): 8.282 Journal DOI: 10.36713/epra0003 ISSN: 2250 – 2017
International Journal of Global Economic Light (JGEL)
Volume: 10 | Issue: 2 |February 2024

Considering these diagnostic tests, it is concluded that the ARDL model exhibits no serial correlation and no ARCH effect. This underscores the robustness and reliability of the model for analysis and interpretation.

Stability of Estimated Model

For further testing of the stability of the model, the CUSUM and CUSUM Square test are performed.

Fig: CUSUM and CUSUM of Square for GDP Model for China

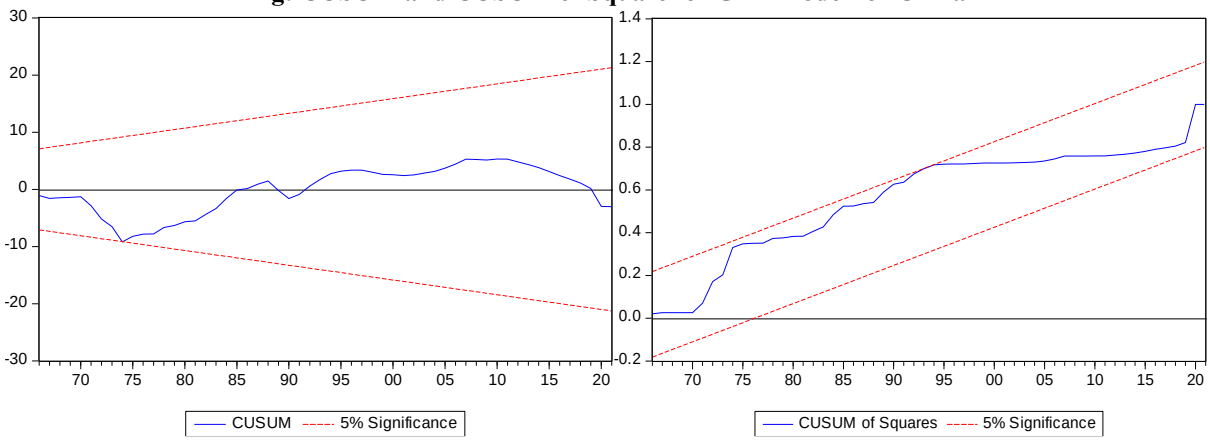
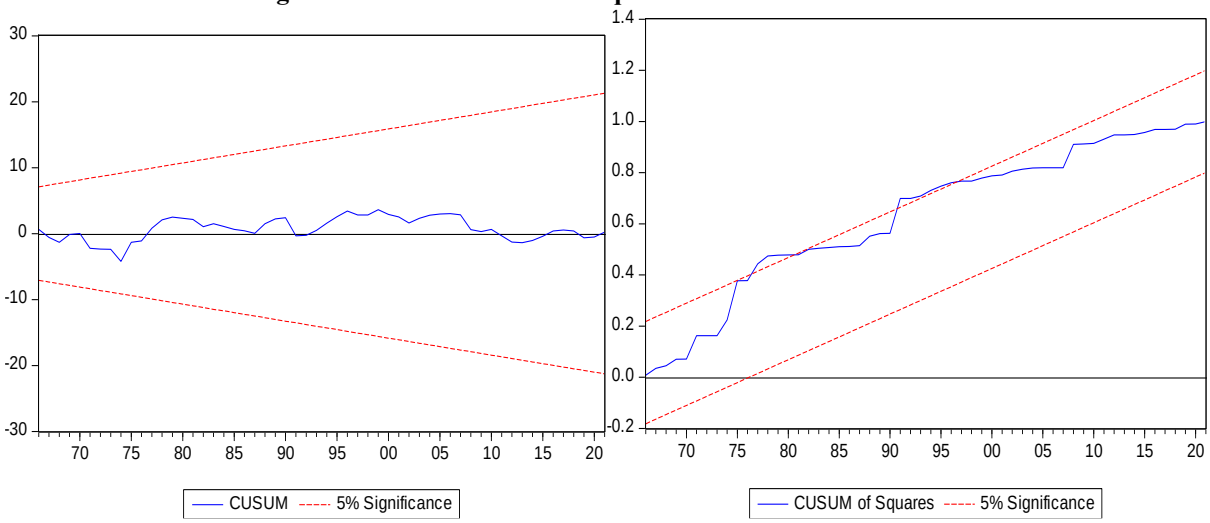


Fig: CUSUM and CUSUM of Square for GDP Model for India



To evaluate the stability of the results obtained from both the long-run and short-run parameter estimations in the ARDL model with error correction, by employing stability tests based on the approach outlined by Pesaran and Pesaran (1997). Specifically, by utilising the cusum (CUSUM) and cusum of squares (CUSUMQ) statistics introduced by Brawn et al. (1975). These statistics are calculated recursively and plotted against breakpoints to assess the stability of the model over time.

According to the practice, if the plotted points for the CUSUM and CUSUMQ statistics fall within the critical bounds of a 5% significance level, the null hypothesis asserting the stability of all coefficients in the given regression cannot be rejected. The CUSUM and CUSUMQ points, used to check the stability of the short-run and long-run coefficients in the ARDL error correction model, are depicted in the figures. The analysis reveals that both CUSUM and CUSUMQ statistics remain within the critical bounds of the five percent significance level for China. However, for India, while the CUSUM remains stable, the CUSUM of Squares indicates instability at the 5% significance level.

This suggests that, for China, all coefficients in the ARDL error correction model are stable, supporting the null hypothesis of stability. Conversely, for India, although most coefficients remain stable, there is instability

indicated by the CUSUM of Squares. These findings are essential to consider when interpreting the reliability and robustness of the estimated coefficients within the framework of the ARDL model for each respective country

CONCLUSION

In conclusion, the ARDL-bound cointegration analysis investigates the relationship between exports, imports, and economic growth in China and India. Through this comprehensive examination, several key insights emerge, offering valuable implications for policymakers, economists

Firstly, the analysis emphasizes the significance of exports and imports as drivers of economic growth in both China and India. While China exhibits a strong export-led growth pattern, with exports significantly influencing GDP growth, India showcases an import-led growth path, where imports play a crucial role in driving economic expansion. This divergence highlights the unique economic strategies and structural characteristics of each country, emphasizing the importance of tailored policy interventions to leverage their respective strengths and address challenges.

Furthermore, the findings underscore the dynamic nature of the relationship between trade and economic growth. While exports and imports exert considerable influence on GDP in the long run, the short-run dynamics reveal adjustments and interactions, reflecting the difficulty of global trade dynamics, domestic policies, and external shocks.

Additionally, the analysis identifies several innovative factors that contribute to the trade-growth nexus in China and India. These include infrastructure development, technological advancements, human capital investments, and institutional reforms. By fostering an enabling environment for trade, enhancing competitiveness, and promoting innovation, policymakers can harness these factors to sustain economic growth and foster inclusive development.

Moreover, the analysis highlights the importance of stability and resilience in trade-growth relationships. While China demonstrates robust stability across all coefficients, indicating a consistent and reliable trade-growth nexus, India faces challenges related to instability, particularly in the context of the CUSUM of Squares. Addressing these stability concerns requires targeted policy interventions, structural reforms, and proactive measures to mitigate risks and uncertainties.

Innovative approaches such as digitalization, green technologies, and sustainable practices offer promising avenues for enhancing the resilience of trade-growth dynamics and fostering long-term prosperity. By embracing innovation, fostering collaboration, and adapting to evolving global trends, China and India can navigate challenges, capitalize on opportunities, and chart a path towards sustainable and inclusive economic growth.

In essence, the ARDL bound cointegration analysis provides valuable insights into the intricate relationship between exports, imports, and economic growth in China and India. By understanding the underlying dynamics, addressing stability concerns, and embracing innovation, policymakers can formulate informed strategies to promote trade-led development, enhance competitiveness, and foster shared prosperity in the years to come.

REFERENCES

1. *Akter, M., & Bulbul, N. (2017). Comparative Analysis Between Export-Led Growth and Import-Led Growth: A Study on Developing Eight (D-8).* International Journal of Economics, Finance and Management Sciences, 5, *204.*
2. *Dhawan, U., & Biswal, B.P. (1999). Re-examining export-led growth hypothesis: a multivariate cointegration analysis for India.* Applied Economics, 31, *525-530.*
3. *Goudar. A, Nagoor. B.: Exploring the Nexus between International Trade Dynamics and India's Economic Growth, International Journal of Economics, Business and Management Studies(EBMS) ISSN:2347-4378*
4. *Hye, Q.M. (2012). Exports, imports and economic growth in China: an ARDL analysis.* Journal of Chinese Economic and Foreign Trade Studies, 5, *42-55.*
5. *Islam, S. (2014). A Comparative Analysis of the Export Performances of China and India: Evidence from US Imports.* International journal trade, economics and finance, 5, *305-311.*
6. *Kalirajan, K., & Singh, K.P. (2008). A Comparative Analysis of China's and India's Recent Export Performances.* Asian Economic Papers, 7, *1-28.*
7. *Kumari, D.S., & Malhotra, N. (2014). Trade-Led Growth in India and China: A Comparative Analysis.*
8. *Melo, J.D., & Robinson, S. (1992). Productivity and externalities : models of export led growth.* Journal of International Trade & Economic Development, 1, *1.*

9. *Pesaran, M.H., & Shin, Y. (1999). An Autoregressive Distributed Lag Modeling Approach to Co-integration,. Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium, Strom, S. (ed.) Cambridge University Press.*
10. *Pesaran, M.H., Shin, Y., & Smith, R.J. (2001).Bounds testing approaches to the analysis of level relationships. Journal of Applied Econometrics.16(3), 289–326. doi:10.1002/jae.616. hdl:10983/25617*
11. *Sağlam, Y., & Egeli, H.A. (2018). A Comparison of Domestic Demand and Export-led Growth Strategies for European Transition Economies.* Foreign Trade Review, 53, *156 - 173.*
12. *Storm, S. (1997). Domestic constraints on export-led growth: a case study of India.* Journal of Development Economics, 52, *83-119.*
13. *Tong, S.Y. (2010). Comparing Trade Performance of China and India.*