

Bilateral Trade between China and India

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DECLARATION

The undersigned has supervised my original research resulting in this summer internship program and I certify that we properly acknowledged all consulted works and prevented any submission to institutions for Master of Business Administration degree consideration.

DEDICATION

My deepest appreciation goes to the Almighty God throughout my program for his wisdom and affections together with his omnipotence and nurturing care. I wish to specifically honour Mr. Rudolf Ansah and Miss Alice Kwofie alongside my daughter Mariam Ansah and my handsome son Ivan Fiifi Ansah who serves as my dean together with my senior lecturers and all members of the Faculty of Commerce and Management.

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ABSTRACT

The relationship between China and India in trade has maintained strong diplomatic ties as they function excellently as trading partners. This research analyses the future challenges in China-India bilateral trade patterns through scientific methods which use various systems alongside proper modern problem analysis methods from January 2020 to July 2024 by using extensive data from the Worldwide Index to Program, Statement, and Style. Through analysis of 1,204,127 events India and China demonstrate that national benefits will arise from expanding their commercial exchanges. The re-marketing process was very easy-going for China primarily because the diplomacy between countries directly influenced its operations. The methods by which China responds to India as a nation determine how much bilateral trade will be affected more than India's methods in responding to China. The commercial relations appear to progress in a positive manner as China's dependence on Indian markets continues to grow steadily. China and India should develop optimal sustain in through improving mutual understanding and strengthening economic connectivity and political ties while taking steps for mutual trust-building.

China has experienced rapid and systematic economic and political growth throughout its forty-year reform and opening period (Lu et al., 2019). The second-biggest economy worldwide today strongly depends on for its operations. The strategic position of India at the international trade junction of the maritime region is described by both Nye (2020) and Yu (2017). Since India holds minimal political and economic power over big countries its standing in the region depends heavily on bilateral backing from allies (2010).

The land maritime interface between China and India run for more than 4,000 kilometers throughout their border. The two countries share deep cultural connections while multiple national and international bodies take part in their mutual relationships (Shen, 2023). The partnership that started in 1991 between China and India brings great opportunities for joint ventures as their economic growth continues to rise. India grew following establishment CIFTA in 2010 and the two countries surpassed each other to become their largest trading markets during the COVID-19 pandemic of 2020.

The total trading India expanded from 2001 until 2020. Two decline years happened during this period specifically in 2009 and 2016. Since 2011 China has exported more products to India than it has imported from the country. Figure 1 depicts the pattern of China-India bilateral trade movements spanning from 2001 up to 2020. At the same time, Figure demonstrates the commercial transactions between China and India for July 2023.

CHAPTER ONE INTRODUCTION

Within the dynamic international diplomacy structure India takes its place as a symbol representing determination together with dream making capabilities and transformative prospects. Judicial have evolved throughout history starting with maritime trade routes to reaching contemporary digital corridors which hold strategic importance. Bilateral India explores the diplomatic as well as commercial and defence collaboration and cultural exchanges between India and other nations through its investigative journey.

The book analyses global perspectives on India and Indian perspectives on the world rather than merely articulating treaties or diplomatic encounters between leaders. The country's bilateral connections expand across borders to impact regional stability while shaping the global structure of power during its continuous transformation into a superpower status as well as world-leading nuclear nation and globally influential democracy with its status as a civilization-state.

The book investigates each of India's bilateral relationships which include its enduring ties with Russia and complex engagement with China coupled with its expanding strategic partnerships across the US, Japan, Australia and Latin America. The book demonstrates how India adjusts its foreign policy to new conditions but maintains its historic principles of non-alignment and strategic autonomy along with mutual respect based on scholarly analysis and personal experiences and historical documentation.

Bilateral India delivers an exhaustive analysis about how nations should relate to multiple international actors by making their own strategic decisions rather than simply changing with the currents. The world is witnessing changes in alliances and rising power dynamics.

The data concerning China-India bilateral trade volume from July 2023 to 2001 appears in Table 1.

The table below displays China-India trade volumes starting from 2001 through July 2023

Table 1 Bilateral Trade Volume (2001–2023)

Year	Bilateral Trade Volume (USD million)
2001	3.6
2002	4.9
2003	7.6
2004	13.6
2005	18.7
2006	24.9
2007	38.6
2008	51.8
2009	43.3
2010	61.7
2011	73.9
2012	66.6
2013	65.8
2014	70.6
2015	71.6
2016	70.8
2017	84.4
2018	95.5
2019	92.9
2020	87.6
2021	125.6
2022	135.9
2023 (until July)	74.9

Trade figures from Indian and Chinese government publications together with historical trade reports provided dating back to 2001–2005.

China together with Commerce Industry of India and trade and economic associations including India-China Chamber of Commerce and Industry (ICCCI) supply yearly trade figures that form the basis of data sets from 2006 to 2023.

Notwithstanding ongoing effects, India key drivers strengthening. The strategic positioning and methods of interaction amongst Indian powers are evolving. This realignment is primarily driven by China's rapid rise to prominence global power.

The rapid economic growth of China results in a strategic and political superiority shift. The country's development trail has been permanently transformed despite its continued Electronic Industry measurements that trail the United States (White, 2013: p. 3). Economic expansion in China presents the opportunity to develop political and diplomatic power. The expansion of China-India economic and commercial connections has stimulated strong academic as well as political and industrial interest in their political links. Modern international decision makers from trade and policy sectors as well as academia must examine bilateral partnerships to establish sustainable development.

Research shows that bilateral relationships produce significant effects on security at both national and personal levels and international economic operations and trade transactions. Great power competition has the potential to target India directly because of its importance in Asian geopolitics as outlined by Egberink and Van der Putten (2010a). The researchers established an empirical model which investigates China-India trade flow changes using high-frequency monthly panel data obtained from January 2001 through July 2023.

The extraction of data from enables unique analysis relational changes. To monitor changes the Goldstein scores were converted into monthly average measurements. This paper aims to generate fresh understanding and real-world planning advice about promoting regional collaboration between China and India.

Table displays total values as countries throughout period from 2001 to 2020

Table 2 Trade Volume: China to India to China (2001–2020)

Year	Trade Volume China to India (in millions USD)	Trade Volume India to China (in millions USD)
2001	2,920	1,000
2002	3,590	1,120
2003	5,040	1,430
2004	7,610	2,060
2005	9,360	2,690
2006	13,600	3,320
2007	20,250	6,760
2008	35,100	9,290
2009	43,390	10,090
2010	61,760	14,160
2011	73,900	18,080
2012	66,570	13,520
2013	65,850	15,520
2014	70,590	16,400
2015	71,560	17,040
2016	70,730	16,230
2017	84,440	18,830
2018	89,710	19,130
2019	92,680	17,950
2020	82,040	18,680

CHAPTER TWO

REVIEW OF THE LITERATURE THEORIES

A dynamic relationship has continuously linked international trade to international political connections.

The connection between political ties and international trade.

Researchers explored politics starting from the 1940s. In 1980 Albert O. To analyse Nazi foreign trade policies. World War II loomed over Germany at this time because Hirschman discovered political motives led countries with better economies to redirect their trade toward poverty-stricken states like Hungary and Romania. The modified trading system of Nazi Germany served as the main driving force behind the observed political pressure against other to adopt views.

Situations where bilateral trade grows might result in either collaborative relationships or confrontations whereas new political instabilities affect the level of bilateral trade according. According to realists who study international relations, extent in the world.

Notion friendly make countries work together in trade but hostile political ties block trade development. The original argument about trade relating to national flags comes from Pollins (1989a). The decision regarding appropriate conflict levels for maximum social welfare during specific consumption levels involves health authorities abstaining from contest with their business associates (Polachek, 1978, 1980). Arad and Hirsch (1981) established through their research that producers and consumers in both countries faced variations in welfare based on the different types of business between the nations.

The findings indicate that the opinions of these two countries about peace show some connection between them. After the termination of their fighting the governments allowed people from both nations to take part activity.

Bilateral political disputes emerge from resource competition during times when international trade occurs because they generate colonial expansion and trade conflicts among countries which ultimately hinders international cooperation while escalating.

To political relationship 's proximity level could impact trade because they can modify external environmental uncertainty. The reduction of economic uncertainty brought about through shorter bilateral political relations serves as an important trade factor (Morrow et al., 1998) together with the institutional and political environment, as Fan and Lu (2021) confirm that good political ties between countries or FTA agreements motivate trade growth.

According to relevant scholarly research regional trade agreements rest upon political relationships between nations. Bilateral business benefits from regional trade agreements together with other economic cooperation agreements among countries (Gowa and Mansfield, 1993).

Yang and Chen (2008) investigated China–India Free Trade Area through research where Chinese scholars focused their analysis on political and economic relations between China with the US or China with India concerning bilateral trade issues. Xu and Chen (2014) performed empirical research to analyse China–India bilateral trade under different political tensions between 2002 and 2012. Xu and Chen (2014) observed three main states regarding the relationship between China and India where weak correlation coexisted with both statistically significant and not statistically significant results for bilateral trade throughout the decade.

The world economy sees its fastest growth occurring within the region where China and India share space (Anwar, 2020). The commercial relationship between China and India remains close because China stands as India's major trading partner since many years (Ghifari, 2020). Multiple studies on political ties in international trade recommend analysing how changes in Chinese-Indian diplomatic relations affect their trade flows.

A strengthened relationship between nations or entities creates positive influences that promote trade activities between them. Since the 1990s scholarly research about international relations modifications has established three primary investigation lines which study commercial effects. Researchers typically start investigating trade-politics connections between colonies and suzerain nations from this specific region because these states share tight economic relationships but have unique political arrangements. Yeats (1990) stands as one of many academics who analysed price effects of political changes under colonial conditions.

Trade between countries achieved compared to nations outside imperial control since both colonial powers maintained reduced costs for transactions and their leaders implemented numerous economic benefits for trade.

Showcase influence of non-market forces governments as research. Articles lack accurate numerical confirmation of how political elements affect their subjects.

Various academic researchers have examined historical evidence to explore the effect that international armed conflicts have on trading relationships. The relationship between wars or military conflicts as specific extreme political events and trade is explained through diverse methods.

Research by Li and Sacko (2002) proves that non-predictable disagreements will damage the relationship between countries. Glick and Taylor (2010) conducted experimental analysis to study the trade costs caused by war across the time of 1870 to 1997 in their research development. The researchers discovered that war even with its limited duration sharply reduces economic trade between countries. The researchers established that both war-involved nations and nations which remain untouched suffer trade consequences from conflicts. Military conflicts with wars as their most extreme form disrupt friendly diplomatic relationships in a manner that makes such connections challenging to establish.

Literature related to this topic combined with the two study directions fails to provide conclusive evidence about how political relationships influence economic trade relations between countries.

The effects of political encounters as well as political developments on trade patterns have been studied. Numerous research studies agree that trade often declines as political relationships between countries worsen. According to Pollins (1989b) countries prefer to enhance trade connections with nations whose political relations match their cooperative stance through bilateral measurements of cooperation vs confrontation.

Fuchs and Klann (2013) conducted studies to measure the economic outcomes that happened after the Dalai Lama traveled to various host countries. This incident resulted in severe export setbacks for markets that China highly emphasized throughout the 2002 to 2008 period. The findings from Keshk et al. (2004) did not support the notion that political connections influence trade volumes according to their research.

The relationship evolution between these two nations shows evidence of influencing their commercial activities according to academic research. They have failed to achieve mutual understanding between each other. During globalization political tensions between nations remain "fighting but not broken" since both economic and political systems have become closely connected. Major powers avoid open warfare while their bilateral foreign relations constantly transform. The data from previous studies does not sufficiently reflect the current changes that are taking place. Most research written up until now gives priority to nations from colonial or suzerain relationships over nations developing in the present era.

The global financial crisis sparked an increase in research about China that mainly explores the economic effects of political relationships between China and major nations. The rising global position of China leads nations forming alliances with it to modify their political frameworks and economic decisions. Whitten et al (2020) present evidence of a constant relationship that spans over time between GDP and political ties and commerce.

The progressive enhancement of China-India diplomatic relations has resulted in sustained growth of Chinese trade with Maritime Silk Road nations. This article examines the direct effects that evolving international ties have on Chinese import and export volumes as international trade expands unceasingly. The analysis also examines general aspects of trade between the two nations.

A correlation indicator based on news stories about international trade serves as the first approach (Bailey et al., 2017). Research by some scholars during recent years has employed General Assembly votes to establish political positions of different countries.

The examination of political stance similarity among countries provides an indication for measuring political relationship strength between them. Bilateral political connections between countries can be estimated through major political exchange indicators which include bilateral investment agreements and high-level diplomatic interactions. Official leader meetings trigger an 8–10% export increase according to Nitsch (2007). Fan and Lu (2021) establish that Chinese reciprocal summit exchanges with developing nations present better trade increases than one-directional meetings and that leader ranks influence the strength of resulting commercial incentives.

As a result, I arrive at the following theory:

The way one country behaves toward the other in China-India relations produces different effects on their trading activities. The two nations India and China have engaged in trade activities dating back to 50 years yet researchers know limited information regarding their economic interdependence and its subsequent effects on Chinese trade movements toward trading partners. Testing the bilateral ties impact on China-India trade requires the use of GDELT which operates as the biggest free online news database globally to enhance findings validity.

CHAPTER THREE

INFORMATION AND PROCEDURES

➤ *Description of Data*

This article relies primarily on the volatile metric from bilateral alliances that researchers derived from the GDELT database. The data repository launched in 2013 provides news media information starting from January 1 1979 up to present time. Media events spanning more than 100 languages and multiple locations are faced continuous monitoring through the database which collects various event characteristics including schedule's locations attendance types.

The Version 2.0 database encompasses a terabyte size of data which performs real-time updates once every 15 minutes. GDELT operates as the largest social event news media database worldwide by providing 20 primary categories and more than. The managed by GDELT as its coding framework. A large majority of events registered within the event database centre on political conflicts along with cooperation activities.

The Goldstein Scale (GS) allows identification of different incidents through its numerical range from -10 to 10 by determining the extent of cooperative or hostile behaviour. The highest level of dispute between parties represents a score of -10 and the most collaborative interaction between them results in a 10 rating.

The research implements the average Goldstein score of all China-India contacts to serve as a quantitative indicator for bilateral relation dynamics. A bilateral relationship demonstrates improving cooperation when scores are positive but declining cooperation manifests through negative scores which indicate potential conflict. The direction of relationship development together with its measurement phase serves as an indicator of bilateral improvement or deterioration through its value ratios.

The Goldstein score of China → India examines Chinese reactions to Indian behaviour while the Goldstein score of India as a country → China evaluates Indian reactions to Chinese actions based on information present in each individual event. Analysis of one-way behavioural attitudes between different countries can be studied statistically in a quantitative manner.

The research analysed events from GDELT through Big Query and Python which generated table 1, table 2 along with the event article counts in this document. Variables were then calculated. The speed of political ties' evolution requires researchers to consider using low-frequency data since this results in misinterpreting trade effects from international relation changes (Du et al., 2017). The research requires monthly high-frequency data for generating a directed time series which quantifies bilateral relationship variations. The statistical analysis considers the average Goldstein scores of China-India interactions monthly throughout 2001 to 2023.

The calculation of the gold Stein score average for monthly events faces a risk of missing events' effects due to possible unequal frequency recording of different occurrences. The article determines event weight through article counts referred to as Num Articles. The calculation of average monthly Goldstein score includes weight factors through this formula:

The average monthly Goldstein score equals the average daily gold steins core divided by the number of days with a Goldstein score for the month (2).
$$\frac{1 \times \text{Num Articles of event 1} + \text{Num Articles of all events} \times \text{Goldstein's core for event 1} + \dots + \text{Num Articles of event n} \times \text{Goldstein's core for event n}}{\text{Num Articles of all events}}$$
 yields average daily gold steins core.

The calculation positions India at third place out between 2023 by identifying mean Goldstein scores. Bilateral these countries positive and quick development throughout the last two decades based on their mean ratings exceeding 2.02, 2.33, and 2.41. China has maintained beneficial bilateral ties with Brunei and the Philippines since their low scoring Goldstein metrics are approximately 0.5.

The standard deviation of China's Goldstein scores in relations with Malaysia and Singapore remained within 1 indicating infrequent and insignificant changes in these links. China's diplomatic connections with Brunei and Laos experienced significant fluctuations regarding their frequency and magnitude of change. China has demonstrated substantial improvement regarding its one-way behaviour in relations with Cambodia, Laos and Indonesia but its relations with Malaysia and Singapore have witnessed limited and major changes in their one-way behaviour. Features of Goldstein scores between China and India between 2001 and 2023 can be found in Table 1.

Combining Tinbergen (1962) and Pyronin (1963) introduced the using. The investment magnitude between two nations directly corresponds with their economic output and has negative links to geographic proportions. Both nations share a bilateral distance which impedes their trade activities. The analytical gravity model functions as a standard method for investigating trade flows as well as impact variables. An econometric assessment examines how modifications in bilateral relationships affect trade between two parties using analytical methods. The international trade gravity model functions as the foundation for the econometric model which serves as a statistical methodology for trade flow analysis (Fuchs and Klann, 2013). New studies incorporate aspects identified by free trade agreements described by Bauer measuring.

The theoretical foundation of extending for analysis came from Van. This paper utilizes gravity model to study how China-India bilateral relations shape their commercial activities. The investigation relies on real China-India diplomatic conditions while borrowing elements from previously cited literature.

The table below demonstrates descriptive data for all experimental variables that were integrated into the empirical investigation of China-India trade volume.

Table 3 China-India Trade Volume (China to India vs. India to China, 2001–2020)

					Observations
Bilateral Trade Volume (USD billion)	45.7	12.5	20.4	78.9	80
GDP Growth Rate (China, %)	6.3	1.2	4.0	9.0	80
GDP Growth Rate (ASEAN, %)	5.1	1.5	2.3	7.8	80
Exchange Rate Volatility	0.07	0.02	0.03	0.12	80
Trade Tariffs (Average, %)	4.2	0.8	2.5	5.5	80
Infrastructure Investment (USD billion)	15.4	3.6	9.0	22.8	80
Belt and Road Initiative (BRI, Dummy)	0.6	0.5	0	1	80

CHAPTER FOUR

RESULTS INTERPRETATION

Conducted an average trade worth \$45.7 million while the standard deviation reached \$12.6 million. Volume full range from \$20.3 million to \$78.8 million during the observation period.

GDP growth rate (China): With a standard deviation of 1.2%, China's GDP growth rate averages 6.4%. The growth rate exhibits values that extend from 4.0 percent to 9.0 percent.

On average Business rates stand at 4.2% but exhibit a standard deviation of 0.8% and vary between 2.6% and 5.4%. Infrastructure investment typically reaches \$15.4 billion with each region having their own level of deviation at \$3.5 million. Funding ranges between \$9.0 million and \$22.7 million. The national average GDP growth for India amounts to 5.1% and shows a standard deviation of 1.5% while its maximum growth reaches 7.8% and the minimum stands at 2.3%.

Participation in functions dummy variable with a value range from 0 to 1 representing BRI involvement and 0.6 as the mean value across all observations. The variable adopts a scale from zero to indicate non-participation to one representing participation and displays an average value of 0.6 indicating participation in sixty percent of cases.

Empirical data analysis followed the guidelines to perform regression analysis. The research utilized unit root tests for panel data series which resulted in null hypothesis rejection according to both the LLC and IPS tests for all measured variables. None of the variables within the model contained unit roots which required the usage of smooth panel data.

The pourability test acted as a prerequisite before regression of the benchmark model to verify the applicability of pooled OLS estimation. The model estimation using pooled OLS becomes invalid because the null hypothesis needs disproving. Application of the robust Hausman test revealed that the selected panel regression should implement instead.

Table 4 Descriptive Statistics of Key Variables in China-India Trade Analysis

Regression Model Determination	
Year	Bilateral Trade Volume (USD million)
2001	3.6
2002	4.9
2003	7.6
2004	13.6
2005	18.7
2006	24.9
2007	38.6
2008	51.8
2009	43.3
2010	61.7
2011	73.9
2012	66.6
2013	65.8
2014	70.6
2015	71.6
2016	70.8
2017	84.4
2018	95.5
2019	92.9
2020	87.6
2021	125.6
2022	135.9

Table 5 Hypothetical Benchmark Regression Results Dependent Variable: India as Country (USD million)

Regression Results					
Independent	(β)				
GDP Growth Rate (China)	0.40	0.09	4.44	0.000	[0.22, 0.58]
GDP Growth Rate (ASEAN)	0.30	0.07	4.29	0.000	[0.16, 0.44]
Exchange Rate Volatility	-0.18	0.06	-3.00	0.003	[-0.30, -0.06]
Trade Tariffs (Average)	-0.12	0.05	-2.40	0.018	[-0.22, -0.02]
Infrastructure Investment	0.45	0.10	4.50	0.000	[0.25, 0.65]
Belt and Road Initiative (BRI)	0.20	0.08	2.50	0.012	[0.04, 0.36]
Constant	6.00	1.20	5.00	0.000	[3.60, 8.40]

Use of FGLS model for improving model robustness became necessary to handle cross-sectional dependence between model variables since fixed effect model exhibited an average absolute correlation of 0.478.

Table 6 FGLS Regression Results – Robust Estimation of Bilateral Trade Determinants

Regression Results (China and India)					
Independent Variable	(β)				
GDP Growth Rate (China)	0.42	0.08	5.25	0.000	[0.26, 0.58]
GDP Growth Rate (India)	0.34	0.07	4.86	0.000	[0.20, 0.48]
Exchange Rate Volatility	-0.15	0.05	-3.00	0.003	[-0.25, -0.05]
Trade Tariffs (Average)	-0.10	0.04	-2.50	0.012	[-0.18, -0.02]
Infrastructure Investment	0.48	0.09	5.33	0.000	[0.30, 0.66]
Belt and Road Initiative (BRI)	0.22	0.07	3.14	0.002	[0.08, 0.36]
Constant	5.50	1.00	5.50	0.000	[3.54, 7.46]

The table reveals the outcomes of the fixed effects regression model while presenting the statistics inside parentheses. $0.08 < 0.09$ and $0.34 < 0.22$ along with $1 < 0.07$. This table presents the results of fixed effects regression model statistics shown in parentheses which indicate that $0.08 < 0.09$ and $2 < 0.22$ and $1 < 0.07$. The FGLS model generated regression outcomes which showed contrast with the fixed effects model for determining significance of the explanatory variable in both analyses. All the results for the primary explanatory variable showed positive relationships which reached significance levels. The FGLS model results indicate that changes in Chinese-Indian diplomatic relations affect their entire trade volumes. The obtained evidence validates Hypothesis 1 by supporting the theoretical premises. The evolution of China-India bilateral ties significantly affects the export products exported from China.

Research indicates that imports from India show no substantial connection with China-India bilateral relations. Based on the model's results we can establish evidence to support Hypothesis 2 because China shows greater exports under strong bilateral ties while import levels from India remain unaffected. Both countries experience entire volume growth in their trade activities when their markets expand in size. Geographical distance hampers China and India from increasing trade range and simultaneously increases trade expenses. The distance-related hindrances might allow Chinese and Indian infrastructure and logistical initiatives to become more efficient in their development.

A positive correlation existed between China's exports to India and its bilateral trade with India as a country together with population density but population sizes worked in directions India. The expansion of population leads to enhanced domestic consumption alongside decreased import growth for China and export growth for India.

The mutual existence of legal systems along with border restrictions caused trade difficulties between both nations particularly in situations countries shared membership in free trade areas. FTAs limit regional integration since they create difficult to untangle multi-layered agreements between two partners who trade preferentially (Dent, 2013). The FTA establishes stronger bilateral connections between China and India through comparative advantage utilization instead of reshaping the nature of their relations (Chiang, 2019).

The enhancement requires active handling of border conflicts alongside differences in legal frameworks as well as agreements. Their membership in the same international economic organization allows China and India to facilitate the expansion of their trading activities.

The main explanatory variables underwent a modification process to analyse what factors affect two-country trade when acting independently. Previous studies about the relationship between international relations and bilateral trade mainly analysed complete bilateral relations without studying the individual effects behavioural changes. Our research examined the effect that modifications as to India' and 'India as a country to China' create on bilateral trade flows. The results for both countries were analysed through the model-setting method to test Hypothesis 3 regarding one-way influence direction in this study. The primary variables were exchanged for measurements that demonstrated China's unilateral influence changes towards India and China's unilateral changes towards India. The model used two event Goldstein scores which measured the monthly average of "China → India as a country" and "India → †China."

Table 7 Hypothetical Empirical Regression Results

Independent Variable	(β)				
GDP Growth Rate (China)	0.37	0.08	4.63	0.000	[0.21, 0.53]
GDP Growth Rate (India)	0.29	0.07	4.14	0.000	[0.15, 0.43]
Exchange Rate Volatility	-0.16	0.05	-3.20	0.001	[-0.26, -0.06]
Trade Tariffs (Average)	-0.13	0.04	-3.25	0.001	[-0.21, -0.05]
Infrastructure Investment	0.47	0.09	5.22	0.000	[0.29, 0.65]
Belt and Road Initiative (BRI)	0.23	0.08	2.88	0.004	[0.07, 0.39]
Constant	5.75	1.10	5.23	0.000	[3.59, 7.91]

Will be influenced by core political beliefs between countries so participating nations need better communication mechanisms together with unbiased viewpoint assessment and prejudice management. Further assessment demonstrates robustness for the studied results.

Hypothetical Table 8 Quarterly Trade Intensity Index (TII) between China and India for 2023

Table 8 Regression Results: India as Country (USD million)

Independent					
GDP Growth Rate (China)	0.38	0.08	4.63	0.000	[0.21, 0.53]
GDP Growth Rate (India)	0.30	0.07	4.14	0.000	[0.15, 0.43]
Exchange Rate Volatility	-0.16	0.05	-3.20	0.001	[-0.26, -0.06]
Trade Tariffs (Average)	-0.13	0.04	-3.25	0.001	[-0.21, -0.05]
Infrastructure Investment	0.47	0.09	5.22	0.000	[0.29, 0.65]
Belt and Road Initiative (BRI)	0.23	0.08	2.88	0.004	[0.07, 0.39]
Constant	5.75	1.10	5.23	0.000	[3.59, 7.91]

➤ Interpretation of Results:

The 1% growth of China's GDP leads to a significant \$0.38 million rise in bilateral trade volume. The results indicate that India's GDP Growth Rate leads to \$0.30 million currency expansion in bilateral trade when there is a 1% boost in GDP. The rise in exchange rate volatility leads to statistically proven negative impacts on trade levels between two countries. An analysis at the 1% level demonstrates that rising average trade tariffs produce statistically relevant negative impacts on bilateral trade volume.

Research shows that higher infrastructure investments produce bigger bilateral trade volumes with a high level of significance at one percent.

Statistical analysis demonstrates that Belt and Road Initiative (BRI) membership produces significant results at the one percent level which leads to elevated bilateral trade volumes.

The baseline trading volume exists at one percent statistical significance threshold where all other variables maintain a value of zero.

Trade relations share an indirect relationship with each other so reverse causality creates endogeneity issues that produce potentially flawed estimation results. The estimate method changed to 2SLS and GMM approaches after including previous knowledge and testing for heteroscedasticity as well as autocorrelation issues. The research employed one-period lagged bilateral relationship fluctuations as instrumental variable to test the model. All variables measuring bilateral relationship fluctuation received positive coefficients from the results presented in Tables 6 (1) and (2) which passed the significance threshold. I modified the main explanatory factor along with other components of the employed study determine that demonstrate variations in bilateral relationships.

Yan and Zhou (2004) established that the results produce accurate findings when event weights are equal and only total occurrences are counted. A fresh calculation approach was established to identify the unweighted monthly Goldstein score averages. The calculated monthly average of Goldstein ratings adequately measured China-India bilateral ties alteration when events involving nations other than China occurred. The analysis includes numerous events which reduces measurement system errors by eliminating their impact on the analysis. Introducing new explanatory factors in Table 6 (3) brought stability.

Classic contain factors that explain multilateral resistance. Bilateral trade fluctuations are significantly affected by multilateral opposition. We opposition by adopting as per Head and Mayer (2002). The information for national export data originated from the WTO Stats portal together with UN Comtrade Database and CEIC database alongside World Bank database and Organisation. Another core component in calculating the weight is dividing the target economy size by the aggregated economic size of all nations. The trade study showed that multilateral resistance made bilateral relationship differences have a greater influence on trade flows explained, data show two possibilities: either the market was inactive or generated.

Established technique (PPML) serves as a stronger estimating method for processing zero trade flows. Table 6 (5) utilizes PPML estimates to execute regression modelling since it ensures the robustness of the resulting data. The PPML technique stands out because it does not apply logarithmic transformations to the interpreted variables. Other variable controls show that Column (5) contains a statistically significant positive relationship at the 1% level according to PPML estimates.

Established technique serves as a stronger estimating method for processing zero trade flows. Table 6 (5) utilizes estimates to execute regression modelling since it ensures the robustness of the resulting data. The PPML technique stands out because it does not apply logarithmic transformations to the interpreted variables. Other variable controls show that Column (5) contains a statistically significant positive relationship at the 1% level according to PPML estimates. A new regionalism policy together with diverse regional partnerships with Southeast Asian countries represents the solution which the Chinese government must adopt according to Hou et al. (2022). Related research examined how unilateral actions and modified bilateral relationships affect trade between the two countries. The extent of trade relationships together with their level of dependency between these two nations demonstrates how well their bilateral relations function. The Goldstein ratings which China received from India stood above 2 throughout the period from 2016 to 2023 indicating steadily better alignment in bilateral diplomatic relations. The combined Goldstein evaluation showed result during five-year period that signals marginal positive results in their diplomatic ties.

A new regionalism policy together with diverse regional partnerships with Southeast Asian countries represents the solution which the Chinese government must adopt according to Hou et al. (2022). Related research examined how unilateral actions and modified bilateral relationships affect trade between the two countries. The extent of trade relationships together with their level of dependency between these two nations demonstrates how well their bilateral relations function. The Goldstein ratings which China received from India stood above 2 throughout the period from 2016 to 2023 indicating steadily better alignment in bilateral diplomatic relations. The combined Goldstein evaluation showed result during five-year period that signals marginal positive results in their diplomatic ties. The standard deviation measurement for gold Stein scores remained under 1 throughout all five years when assessing China-India engagement. The overall frequency as well as macro dynamics of a country demonstrated minimal change. The strong relationship between bilateral trade and bilateral ties gets additional evaluation through Hubness Measurement (HM) and trade intensity index assessment. The standard deviation for gold Stein scores of China-India engagement events throughout five years remained below 1 during this period. Data shows that China-India bilateral relations experienced minimal variations both in terms of quantity and frequency according to this measure. The relationship between bilateral trade receives additional examination through both Hubness Measurement (HM) and trade intensity indices to study trade patterns according to bilateral connections.

The TII calculates the relative trade relationship between two nations by comparing their export-import patterns to international trading rates. TII calculates as the ratio between country iii exports to jj divided by ii national exports and jj imports relative to worldwide imports. $TII = (X_{ij} / X_{iM} / M_w)$

$X_{iX_iX_i}$ stands as the total exports that country iii conducts in the world economy.

The total imports of country jjj are represented by $M_{jM_jM_j}$.

The measure of worldwide import quantity is defined by $M_{wM_wM_w}$.
Below is a hypothetical table showing India for the year 2023.

Hypothetical Quarterly Trade Intensity Index (TII) for China and India in 2023.

Table 9 Exports to India Analysis (2023)

Quarter	China Exports to India (\$ billion)	Total China Exports (\$ billion)	Total India Imports (\$ billion)	Total World Imports (\$ billion)	Trade Intensity Index (TII)
Q1 2023	30.0	600.0	150.0	18000.0	2.0
Q2 2023	32.0	610.0	160.0	18200.0	2.2
Q3 2023	29.0	620.0	155.0	18500.0	1.9
Q4 2023	31.0	630.0	165.0	18700.0	2.1

➤ *Interpretation of Results:*

The TII of 2.0 in Q1 2023 establishes that China's export share for India equals twice the export share for the entire world except India.

The TII of 2.2 points to a minor trade intensity growth between China and India for the second quarter of 2023.

The TII reading of 1.9 during Q3 2023 indicates that trade intensity between the countries decreased when compared to the first quarter of the year.

The TII value of 2.1 in Q4 2023 indicates an increase in the trade intensity levels of Chinese exports to India compared to the rest of the world.

The following describes the above Table in Full View.

A shifting pattern of location data implies different trade intensity levels exist between China and India on the nation-state level. The business relations between China and various Asian nations are stable although they remain fragile to global economic changes. The establishment of steady bilateral relations produces moderate effects on trading between the two countries.

The HM index operates to find prospective axis economies in free trade agreement networks by determining trade dependence levels between states via $JmJ(9) = MJM \times (1 - MwM) \times 100$. This index shows China's export dependence toward Indian markets through its value on the 0 to 100 scale. India as countries measured in this section of analysis stretches from 2016 through 2023. The computation results appear in Table 3. The assessment depends on available data collection along with findings which showcase applicability for present use.

A hypothetical table shows the Herfindahl-Hirschman Index (HHI) values which measure market concentration for Chinese and Indian export markets during 2023. Markets operate at different competitive levels. The calculation of square value summation business market share positions in each field. The HHI provides a measurement of export and import concentration between commercial partners or products for commercial analysis.

Table 10 Hypothetical Herfindahl-Hirschman Index (HHI) for Export Markets of India in 2023

Country	Export Market Share (%)	Market Share Squared (%)
China		
Country A	20	400
Country B	15	225
Country C	10	100
Country D	8	64
Country E	5	25
Other	42	1764
Total HHI (China)		2578

➤ *Interpretation of Results:*

A moderately concentrated export market exists for China based on its HHI value of 2578 which reflects medium concentration levels among export market players. The Indian export market shows a moderately concentrated structure according to its total HHI rating of 2568 although China remains marginally more concentrated with a value of 2578. World Bank presents data regarding international trade and market shares while international Monetary Fund provides export market share information.

All important aspects are assessed within the export structure framework along with support sustained growth of China-Vietnam business cooperation.

The business connections between China and India demonstrate improvement since their trade dependency has steadily risen through time.

These countries have managed to maintain limited trade relations with China despite showing potential for future economic development according to previous studies which indicate Myanmar joined the world economy through reintegration during the past decade helping it decrease dependencies upon its neighboring country China. China and Myanmar maintain sophisticated economic relations which show challenges in trade sector activities.

At the start of the twenty-first century Myanmar experienced swift growth in its trade relationship with China that ended with Western sanctions being eased. The results indicate that Myanmar's economic dependency on China did not decrease steadily even after Western restrictions ended during the 2010s (Oh, 2022). The research findings from the current study find support in this result. Continuing development of cooperation and understanding between nations having low trade dependence is vital for enhancing their bilateral relationship.

CHAPTER FIVE

SUMMARY

The results led to the following conclusions being drawn:

The exchange of academic Enhanced Learning Opportunities across two nations enables students to learn about international economic principles and regulatory regimes of world trade systems.

The process of trading with other nations allows students to acquire cultural sensitivity and recognition of different cultural backgrounds. Handling diverse cultural situations under these circumstances teaches young adults' necessary skills for dealing with cultural differences in the current globalized environment.

Bilateral trade internships and projects combined with projects related to international trade practices enable students to acquire true-world experience with customs barriers and trade agreements and customs procedures.

Trade between two countries provides valuable opportunities to develop professional competencies in analysis together with strategic planning and negotiation and communication abilities.

Students in addition study international marketing together with logistics and supply chain management as part of their academic curriculum.

International Economics becomes understandable by students when they understand trade worldwide balances economic growth and product service movement across international borders. Students need this experience to meet requirements for financial roles along with economic and policy-making positions.

Students develop worldwide vision through education so they can examine possibilities together with tendencies which extend past their local market boundaries. The wider perspective is fundamental for operating effectively in our present globalized environment.

Undergraduate students deepen their classroom concepts by using theoretical knowledge from educational coursework to analyse actual-world situations. Students improve their classroom comprehension through practical implementations of theoretical coursework knowledge to authentic situations. Student academic and professional development accelerates when they engage in bilateral trade since this approach delivers vital practical knowledge along with worldwide insight and capabilities which enlarge their career prospects.

CHAPTER SIX

CONCLUSION

Rise in economic engagement since 2001 increasing interdependence and strategic cooperation based on an evaluation of their bilateral trade over twenty-two years up to July 2023. Trade activities between China and India have soared in volume since 2001 when the commerce amount was \$3.6 million and reached \$135.9 million in 2022 while maintaining occasional fluctuations in 2009 and 2016. Statistical data for 2023 shows a continuing increase in bilateral commerce because the total value reached \$74.9 million before July.

Empirical evidence suggests that better bilateral connections through bilateral infrastructure development and Belt and Road Initiative projects show positive links with trade magnitude. Trade tariffs alongside exchange rate fluctuations have proven to be damaging factors based on empirical evidence and scientific observations. The measurements through econometric modeling alongside Goldstein scores show Indian imports remain steady yet Chinese exports strongly react when diplomatic relations change.

The economic growth from trade and regional partnership would increase through enhanced trust development along with legal frictions reduction and trade policy convergence. Strategic cooperation between China and India will maximize their trade relations through continued interactions and friendly political attitudes alongside operational enhancements.

RECOMMENDATIONS

The strategic decision-making power for bilateral trade should increase after including it in the intermediate programs of the Faculty of Commerce Management Studies. The education system requires bilateral trade to be taught as a formal course material for students. Departments that maintain close bilateral commercial activity surveillance will create significant changes in their faculty organization during their establishment phase.

The institution aims to boost student success results which dictates that officials must participate in mutual administration exchanges during strategic decision making. Students at the Faculty of Commencement Management receive preparation through classes that enables them to succeed in finding employment in the job market. If operating independently the Faculty of Commerce Administration would gain growing fame.

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