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The Impact of Indo-Nepalese Bilateral Trade Trends on Gross Domestic Product in Nepal

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Abstract

This research study intends to explore the impact of Indo-Nepalese trade trends on Nepal's gross domestic product (GDP) by highlighting the India-Nepal trade relationship and trends. Bilateral trade trends refer to the changes in the volume, value, and composition of goods and services exchanged between Nepal and India over time. Economic policies, market demands, and geopolitical relations between countries influence trade trends and GDP impacts. The study uses data from Nepal's National Accounts Section from 1991 to 2020, utilizing ordinary least squares (OLS) regression to estimate growth dependency and determine coefficient elasticity. The finding indicates that Nepal's growing reliance on foreign trade and increased remittances emphasize the need to analyze the impact of imports and exports on the country's economic development. This result has provided an understanding for policymakers in boosting economic growth by directing imports and exports in the right direction.

Keywords: Bilateral trade, trade relationships, growth trends, impact analysis imports, and exports.

Introduction

Nepal is a developing nation that relies significantly on international trade, with a particular dependence on India due to its geographical proximity, shared borders, and deep historical connections. This reliance has shaped Nepal's trade policies and economic resilience, as India remains its primary trade partner. Over 60% of Nepal's trade is conducted with India, heavily influencing Nepal's Gross Domestic Product (GDP) through both exports and imports (World Bank [WB], 2023). Nepal imports petroleum products, machinery, and consumer goods from India while exporting primarily agricultural products, textiles, and

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handicrafts, albeit on a much smaller scale (Asian Development Bank [ADB], 2022).

This dependence on Indian trade and transit routes offers both advantages and risks. On one hand, Nepal benefits from easy access to India's vast market, which supports economic growth, particularly in sectors like agriculture and manufacturing. However, this dependency also brings vulnerabilities, particularly because Nepal relies on Indian ports for imports and exports. Political or logistical challenges, such as border blockades, can severely disrupt Nepal's trade. For instance, the 2015 border blockade resulted in economic losses and inflationary pressures, underscoring Nepal's susceptibility to external pressures due to trade dependency (ADB, 2022; International Monetary Fund [IMF], 2023).

The trade imbalance with India is another issue, largely driven by Nepal's limited industrial capacity, which restricts the potential for high-value exports (Nepal Rastra Bank [NRB], 2023). Although the Nepalese government has encouraged local industries and sought trade opportunities with other countries, India's role in Nepal's economy remains dominant. Nepal has to explore trade diversification strategies to manage this dependency, including strengthening trade relations with China. China is now Nepal's second-largest trade partner and has invested in Nepal's infrastructure development, aligning with Nepal's goal to leverage China's Belt and Road Initiative (BRI) to improve connectivity and expand trade routes (Sharma & Bhattarai, 2022; Shrestha & Rai, 2022). Increased trade with China could lower transportation costs and stimulate growth in sectors with export potential, such as tourism and agriculture. However, Nepal's trade deficit with China remains a concern, necessitating policy adjustments to balance economic gains with trade sustainability.

Theoretically, this study's analysis of Indo-Nepalese trade relations draws from classical economic theories. Smith (1776) emphasized that exporting surpluses helps countries utilize excess production efficiently, while Ricardo (1817) argued that nations should specialize based on comparative advantage to maximize trade benefits. In the 20th century, theorists like Mueller (1918) and Morrison (1983) discussed trade as a catalyst for economic growth, while modern economists such as Romer (1986), Lucas (1988), and Svensson (1998) stressed that technology and trade stimulate productivity through knowledge spillovers. Krugman (1979) also highlighted that trade promotes growth by optimizing resource allocation and achieving economies of scale (Krugman & Obstfeld, 2007).

Empirical studies further support the positive correlation between trade and growth. Edwards (1998) found that trade openness enhances total factor productivity, especially by facilitating domestic technological advancements. Frankel and Romer (1999) demonstrated through instrumental variables that trade openness positively affects national income, while Bahmani-Oskooee (1999) observed a positive link between trade openness and growth across multiple countries. Anoruo and Ahmad (2000) identified a causal relationship between trade openness and growth, and Irwin and Tervio (2001) also supported the trade-growth linkage. Despite some critiques, Rodrik et al. (2002) argued that trade openness could spur growth, depending on a country's economic structure. Other researchers, such as Vamvakidis (2002), found that the significance of this relationship has increased since the 1970s, further validating the impact of trade on growth.

Studies specifically focused on developing countries provide additional insights.

Dollar (1992) and Sachs and Warner (1995) observed higher growth rates in open economies, particularly in developing countries. Similarly, Harrison (1996) showed that developing economies that embraced openness experienced faster growth. Spilimbergo et al. (2000) emphasized that openness benefits developing countries by improving access to intermediate and high-tech imports. Dollar and Kraay (2002) demonstrated that trade openness positively affects income distribution in developing economies. In line with these findings, Alcalá and Ciccone (2004) and Rassekh (2007) highlighted that trade openness supports growth in developing countries, which often benefit from global market integration. Chang et al. (2009) further noted that openness enhances economic performance, supporting developing nations' access to diverse international markets.

The positive link between trade openness and economic growth has been further examined by scholars such as Villaverde and Maza (2011) and Busse and Königer (2012), who associated globalization with increased growth and income convergence globally. Saha et al. (2017) confirmed that GDP growth drives trade activities in countries like Pakistan, while Wickramarachchi (2019) showed that the GDP of importing countries significantly affects export potential, as seen in Sri Lanka's trade history. Sharma and Bhandari (2005) underscored export growth's importance for Nepal's economy, recommending a balanced approach to export promotion and import substitution.

Building on these insights, the present study seeks to answer how trends in Indo-Nepalese bilateral trade have impacted Nepal's GDP from 1991 to 2020, employing regression analysis with imports and exports as independent variables and GDP as the dependent variable. The study may reveal that both imports from and exports to India play a significant role in shaping Nepal's economic trajectory, with exports positively contributing to GDP. Nonetheless, the persistent trade deficit remains a challenge, exacerbated by Nepal's limited export base.

These literatures will underscore the importance of bilateral trade with India for Nepal's economic growth, while also highlighting the risks of relying predominantly on a single trading partner. For Nepal, diversification strategies are essential to mitigate these risks. By expanding trade with other countries and enhancing domestic industries, Nepal can build a more resilient economy capable of weathering regional and global economic shifts.

This study also will offer policymakers critical insights into leveraging bilateral trade with India and China as a catalyst for economic development. Addressing the trade imbalance, reducing reliance on a single trading partner, and fostering a supportive environment for local industries will be key to promoting long-term growth. Nepal's path forward depends on strategic initiatives that leverage trade for economic development while navigating the challenges posed by dependency and trade imbalances.

Methods and Materials

The study adopted a positivist research paradigm and quantitative design to conduct an economic analysis, focusing on trade volumes, GDP, and related indicators. Data were sourced from credible secondary resources, including the National Statistical Office (NSO), World Bank (WB), and International Monetary Fund (IMF), spanning the period from 1991

to 2020. The primary objective was to examine the relationships between imports, exports, and GDP growth as key economic variables. Additionally, the study incorporated supplementary information from academic journals, working papers, reports, empirical studies, books, articles, and other unpublished resources to enhance the robustness of the analysis.

Data Analysis Techniques

To analyze the impact of import and export trends on GDP, the study employed an ordinary least squares (OLS) regression approach in three distinct stages:

In the first stage, the analysis aimed to understand the effect of exports on GDP, treating GDP as the dependent variable and exports as the independent variable. The model quantified this relationship as follows:

$$\text{LnGDP}_t = a_0 + a_1 \text{LnExpind}_t + u_t \dots\dots\dots (1)$$

The second stage evaluated the influence of imports on GDP, similarly with GDP as the dependent variable and imports as the independent variable. This relationship was expressed as:

$$\text{LnGDP}_t = a_0 + a_1 \text{LnImpind}_t + u_t \dots\dots\dots (2)$$

Finally, the study examined the cumulative effect of exports and imports on GDP to capture the aggregate impact of bilateral trade on economic growth. The combined model was represented as follows:

$$\text{LnGDP}_t = a_0 + a_1 \text{LnExpind}_t + a_2 \text{LnImpind}_t + u_t \dots\dots\dots (3)$$

Where α_0 measures the conditional mean, α_1 , and α_2 are the coefficients of the representative variables, and u_t the error terms over the 't' period.

To ensure the robustness of the findings, statistical tests were conducted to evaluate the significance and efficacy of the models. The study employed: t-tests to determine the statistical significance of each regression coefficient, assessing the impact of exports and imports on GDP individually and collectively. The F-test evaluated the overall significance of the models, providing a measure of the model's explanatory power concerning Nepal's GDP growth. The Coefficient of Determination (R^2) and Adjusted (R^2) metrics quantified the proportion of total variation in GDP explained by trade variables, offering insights into the model's predictive accuracy.

Results and Discussion

Historical Overview of Indo-Nepal Bilateral Trade

Indo-Nepal trade relations have a long history rooted in geographic proximity, cultural ties, and mutual economic reliance. Since the 19th century, trade with India has been integral to Nepal's economy, shaping the country's economic landscape (Kumar, 2000). The Treaty of Peace and Friendship signed in 1950 facilitated a free and open trade environment between the two nations, eliminating barriers for goods, services, and people (Ministry of Foreign Affairs, Nepal, 2022). This treaty fostered economic interdependence, positioning India as Nepal's main trading partner, particularly for essential imports like fuel and

manufactured goods (Pant, 2018).

In the 1960s and 1970s, Nepal sought to diversify its trade by building diplomatic and economic relations beyond India, especially with China. However, India's geographic advantage maintained its status as Nepal's dominant trade partner (Bista, 2005). The Indo-Nepal Trade Treaty of 1996 further cemented these ties, granting Nepal duty-free access to the Indian market for specific products while allowing limited trade autonomy (Adhikari & Bohara, 2020).

However, trade relations have faced occasional strain due to political issues and economic disparities. For instance, the 2015 border blockade significantly impacted Nepal's economy, prompting renewed efforts toward trade diversification and self-sufficiency (Sharma, 2016). Despite these challenges, India remains Nepal's largest trade partner, reflecting Nepal's strong economic dependency (NRB, 2023). Trade with India, though essential, has resulted in a significant trade deficit for Nepal, given the imbalance in exports and imports. Recently, Nepal has emphasized improving infrastructure and diversifying its exportable goods to foster trade resilience and equity (Thapa, 2021).

Efforts to address trade imbalances have also been bolstered by the South Asian Free Trade Area (SAFTA), which aims to promote regional trade by lowering tariffs and easing trade restrictions (Sharma, 2022). Additionally, Indian investments in Nepal's infrastructure and hydropower sectors are expected to enhance export capacity and support Nepal's economic growth (ADB, 2022). Thus, Indo-Nepal trade relations represent a complex interdependency, shaped by historical treaties and strategies while seeking diversification in response to regional challenges that impact Nepal's GDP and economic policies.

From 1991 to 2020, Indo-Nepalese trade witnessed significant shifts due to economic liberalization, policy adjustments, and regional trade agreements. Nepal's economic deregulation in the early 1990s paved the way for trade expansion with India, with Nepal gradually reducing trade barriers and aligning its policies with India's market (Nepal Rastra Bank, 2021). By the 2000s, trade volumes surged under SAFTA, which facilitated preferential tariffs and easier access to each other's markets, benefiting Nepal's exports of agricultural products and small-scale industries (ADB, 2021).

Despite these advances, Nepal's trade deficit with India remains high, as imports of essential goods, petroleum, and machinery outweigh exports, which are primarily agricultural products, textiles, and more recently, hydropower (World Bank, 2020). This trade imbalance stems from Nepal's limited industrial capacity, which restricts high-value exports (Sharma & Bhattarai, 2019). Overall, Indo-Nepalese trade trends underscore economic integration and dependency, influencing Nepal's economic policies, infrastructure investments, and growth trajectory.

Trends Analyses from 1991 to 2020

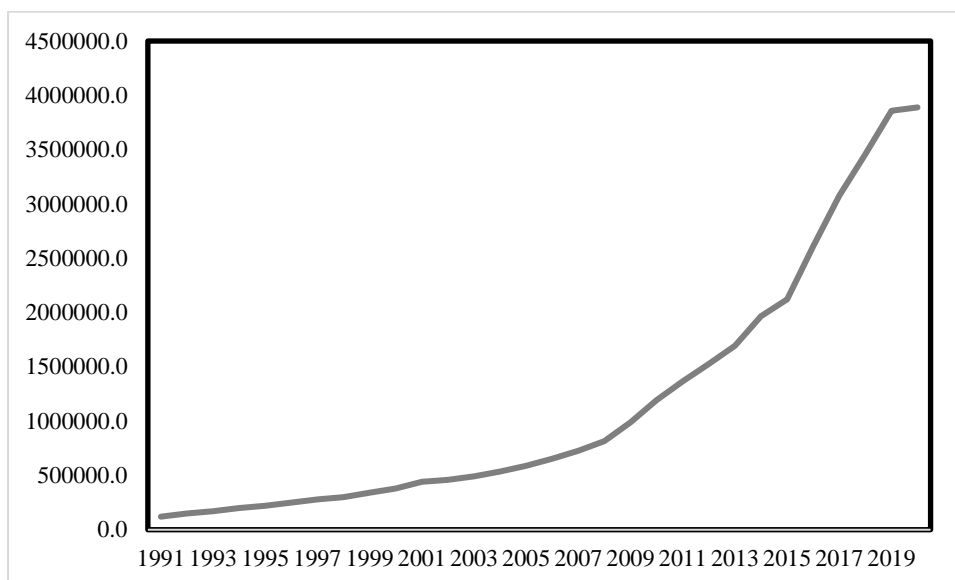
GDP Trends

The GDP trends from 1991 to 2020 show significant growth, with the volume rising from 100,000 million in 1991 to around 4,500,000 million in 2020. This shows an upward trajectory with some fluctuations, highlighting periods of rapid growth, particularly in the

early 2000s and 2010s, possibly due to economic reforms or recovery phases. External factors including political stability, natural disasters, and global economic shifts likely influenced these changes. Line graph (1) shows upward trends, providing a clear view of Nepal's economic growth over the three decades.

Graph 1

GDP Trend Line from 1991 to 2020



Note. Graph (1) measures fiscal years on the x-axis and GDP values on the y-axis.

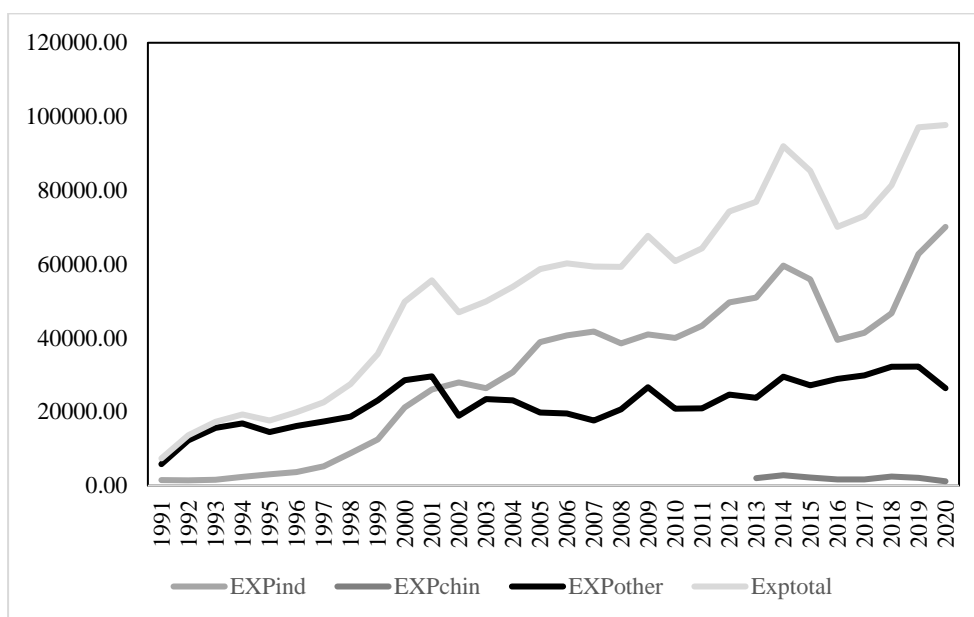
Graph (1), further, visualizes that Nepal's GDP grew consistently from 1991 to 2020, influenced by economic policies, development initiatives, and external conditions. Further analysis could reveal key growth drivers and challenges during stagnation periods, providing deeper insights into Nepal's economic progression over these decades.

Exports Trends

Nepal's export trends from 1991 to 2020 provide insights into its trade dynamics, especially with neighbouring countries India, China, and other international markets. These export volumes have risen from 20,000 million in 1995 to around 215,000 million in 2020. Exports to India constitute a substantial portion of Nepal's total exports, with steady increases from 1995 to 2020 and significant growth leading up to 2020, highlighting India as Nepal's largest bilateral trading partner. Meanwhile, exports to China have grown from about 1,000 in 1995 to 5,000 in 2020, showing a strengthening trade relationship, though it remains smaller than India. Export trends to other nations have been less stable, with fluctuations over the years, reflecting some growth periods and stagnation in others. These export trends are also visualized by a multiple-line graph (2), showing the variations in trade with India, China, and other international markets over the years.

Graph 2

Export Trends of Nepal from 1991 to 2020



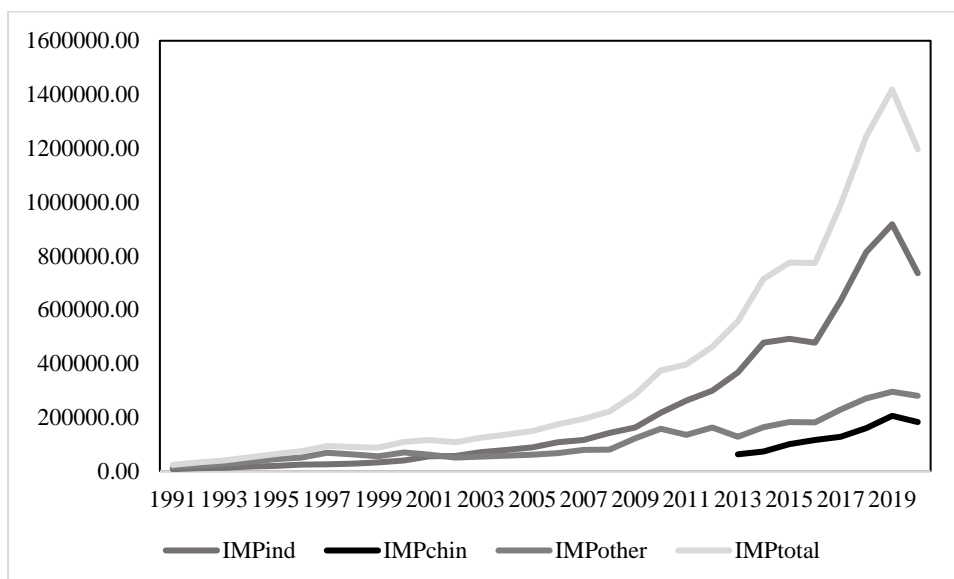
Note. Graph (2) measures years on the x-axis and export values on the y-axis

Graph (2) illustrates the growth trends from 1991 to 2020, revealing a robust growth trajectory for Nepal's exports, particularly to India, which remains the dominant market for Nepalese goods. The increasing exports to China also highlight the potential for expanding trade relationships. However, the variability in exports to other countries indicates a need for strategic initiatives to enhance trade diversification beyond its two largest neighbours. Further analysis could shed light on the specific products driving these trends and the economic factors influencing trade dynamics.

Import Trends

The import trend of Nepal at the same period illustrates the country's growing reliance on foreign goods and the dynamics of its trade relationships, particularly with neighboring countries like India and China. Over the years, total import volumes have risen significantly, increasing from approximately 250,000 million in 1995 to around 1,500,000 million in 2020. Imports from India constitute a major portion of Nepal's total imports, showing a consistent upward trend throughout this period. This growth underscores India's role as Nepal's primary trading partner, providing a substantial share of imports. Similarly, imports from China have also seen notable increases, rising from about 40,000 million in 1995 to approximately 200,000 million in 2020. This trend indicates that China's influence on Nepal's economy is growing, highlighting the need for strengthened trade policies between the two nations. In contrast, import trends from other countries have been more variable, exhibiting fluctuations with some years marked by growth and others by stagnation. In addition, these trends are depicted in a multiple-line graph (3).

Graph 3

Import trends of Nepal from 1991 to 2020

Note. Graphs (3) measure years on the x-axis and export values on the y-axis.

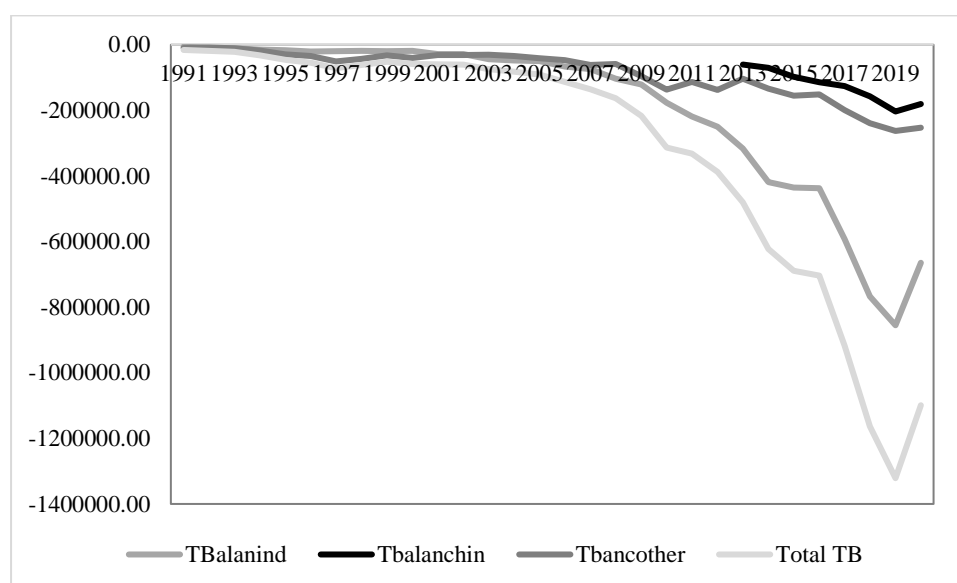
Graph (3) illustrates the growth trends for imports from 1991 to 2020, indicating robust growth trends, particularly from India, its dominant source. The rising imports from China also highlight the potential for expanding trade relationships. However, the variability in imports from other countries underscores the need for strategic initiatives to enhance trade diversification. Further analysis could offer insights into the specific products driving these trends and the economic factors influencing Nepal's trade dynamics. This variability suggests the importance of diversifying Nepal's import sources to reduce dependency on its immediate neighbors.

Trade Balance Trends

The trade balance trends of Nepal from 1991 to 2020 have provided critical insights into the country's economic interactions with its trading partners, particularly India and China. The trade balance, a key indicator of a nation's economic health, reflects the difference between exports and imports. Over the years, Nepal's total trade balance has consistently shown a negative trend, indicating a trade deficit that grew from approximately negative 160,000 million in 1995 to about negative 800,000 million in 2020. The trade balance with India has also been negative, worsening from approximately 240,000 million in 1995 to increasingly larger deficits in subsequent years. This data underscores India's role as a major trading partner, with imports consistently exceeding exports. Similarly, the trade balance with China has exhibited a negative trend, increasing from around 300,000 million in 1995 to more substantial figures later on, indicating that imports from China have outpaced exports, further contributing to the overall trade deficit. The trade balance with other countries has also been negative, though less pronounced than with India and China, exhibiting fluctuations with some years showing smaller deficits and others larger negative balances. The overall trade balance situations of Nepal is shown in multiple-line graph (4).

Graphs 4

Trade Balance Trends of Nepal from 1991 to 2020



Note. Graphs (4) measure years on the x-axis and trade balance values on the y-axis

Graph (4) illustrates the trends in trade balances from 1991 to 2020, showing a persistent trade deficit, particularly with its major trading partners, India and China. The increasing trade deficits highlight the challenges faced in balancing imports and exports. These results are crucial for understanding Nepal's overall trade dynamics and underscore the need for diversification in trade relationships. The study suggests a necessity for strategic economic policies, enhancing export capacity, and reducing dependency on imports from two neighbours. Further analysis suggests identifying the specific sector's contribution to the trade deficit and potential avenues for improvement.

Impact Analysis of Indo-Nepalese Bilateral Trade

Descriptive Statistics

The descriptive statistics of bilateral trade between Nepal and India (1991-2020), detailed in Table (1), show key statistical measures such as mean, median, maximum, minimum, standard deviation, skewness, kurtosis, and other relevant metrics for GDP, exports to India (Expind), and imports from India (Impind).

Table 1

Descriptive Statistics for GDP, EXPIND, and IMPIND in Million Figure

Measures	GDP	Expind	Impind
Mean	1162425	31122.65	226229.3
Median	621747.9	38736.3	97909.3
Maximum	3888700	70108.89	917922.2
Minimum	120370.3	1450	7323.1
Std. Dev.	1160763	20681.68	266041.1
Skewness	1.207956	-0.09862	1.262386
Kurtosis	3.214126	1.899813	3.401625

Jarque-Bera	7.353096	1.561644	8.169719
Probability	0.02531	0.458029	0.016826
Sum	34872759	933679.4	6786880
Sum Sq. Dev.	3.91E+13	1.24E+10	2.05E+12
Observations	30	30	30

Note. GDP = Nominal Gross Domestic Product of Nepal, Expind = Export to India, Impind = Import from India, from the National Statistical Office of Nepal in 2022/23.

Table (1) provides insightful descriptive statistics on the bilateral trade between Nepal and India, revealing that the average GDP of 116,242.5 significantly exceeds both exports (31,122.65) and imports (226,229.3), indicating a strong economic output relative to trade figures. The median values suggest that the high mean GDP is influenced by outliers, as evidenced by the substantial difference between the maximum and minimum GDP, which reflects a wide range of economic performance. While exports and imports also display considerable variability, their ranges are not as extreme as those of GDP. The high standard deviation in GDP points to significant variability in economic output, whereas exports and imports show variability to a smaller degree. Positive skewness in GDP and imports indicates that a few high values pulled the mean upward, while negative skewness in exports suggests a more symmetrical distribution. The kurtosis values reveal that GDP and import distributions are peaked (leptokurtic), while exports are flatter (platykurtic). Significant Jarque-Bera statistics for GDP and imports imply deviations from normality, whereas exports do not show significant deviations. Overall findings conclude these statistics underscore the disparities in economic output and trade figures, indicating areas for further exploration concerning economic policy implications and strategies.

Correlation Analysis

Table (2) summarizes the correlation coefficients among GDP, 'Expind', and 'Impind' in their exponential forms.

Table 2

The Correlation Coefficients of the LnGDP, LnExpind, and LnImpind

Variable	LnGDP	LnExpind	LnImpind
LnGDP	1	0.8645	0.9957
LnExpind	0.8645	1	0.891
LnImpind	0.9957	0.891	1

Table (2) indicates a strong positive correlation coefficient of 0.8645 between GDP and exports to India, suggesting growth in exports and GDP from 1991 to 2020, reflecting a robust trade relationship. Furthermore, the correlation coefficient of 0.9957 between GDP and imports from India suggests that imports significantly influence GDP, indicating that higher imports are closely linked to increased economic output. Additionally, a correlation coefficient of 0.8910 reveals a strong positive relationship between exports and imports. This suggests that as exports to India rise, imports from India also tend to increase, demonstrating a complementary trade dynamic.

Regression Results

Initially, the regression analysis aimed to investigate the relationship between exports to India (LnExpind) and GDP (LnGDP), focused on the finding from equation (1) result.

$$\text{LnGDP}_t = 6.398669 + 0.716670\text{LnExpind}_t$$

Std. Error = 0.7830 0.0787

t = 8.17146 9.102288

p = 0.000 0.000

With R-squared = 0.747410, Adjusted R-squared = 0.738389, Standard Error of Regression = 0.532182, F-statistic = 82.85165, and Prob. (F-statistic) = 0.0000

The findings indicate a robust positive correlation between exports to India and GDP, with a coefficient of 0.716670. This suggests that a 1% rise in exports correlates with a 0.716670% increase in GDP. The significant, R-squared (0.744), t-statistic (9.102288), and low p-value (0.000) further validate this relationship.

The subsequent regression analysis focused on imports from India (LnImpind) to GDP (LnGDP), resulting in the findings presented in equation (2).

$$\text{LnGDP}_t = 5.133938 + 0.724673\text{LnImpind}_t$$

Std. Error = 0.147592 0.012734

t = 34.78168 56.90804

p = 0.000 0.000

With R-squared = 0.991428, Adjusted R-squared = 0.991122, Standard Error of Regression = 0.098037, F-statistic = 3238.525, and Prob. (F-statistic) = 0.000

The regression analysis indicates a robust positive correlation between imports from India and GDP, with a coefficient of 0.724673. This suggests that a 1% rise in imports is linked to a 0.724673% increase in GDP. The high R-squared (0.9914), high t-statistic (56.90804), and p-value (0.0000) underscore the statistical significance of this relationship.

Finally, the joint regression analysis of both exports and imports with GDP produced the results outlined in equation (3).

$$\text{LnGDP}_t = 5.213069 - 0.091081\text{LnExpind}_t + 0.795922\text{LnImpind}_t$$

Std. Error = 0.128840 -0.027408 0.024063

t = 40.46147 -3.323123 33.07624

p = 0.000 0.026 0.000

With R-squared: 0.993916, Adjusted R-squared: 0.993466, Standard Error of Regression: 0.084106, F-statistic: 2205.587, and Prob. (F-statistic): 0.000.

The combined regression model reveals that the coefficient for exports is negative (-0.091081), suggesting that, when controlling for imports, an increase in exports corresponds with a decrease in GDP. This finding points to potential complexities in the interaction between exports and GDP. Conversely, the positive and significant coefficient for imports

(0.795922) reinforces the strong link between imports and GDP, highlighting imports as a key driver of economic activity. The high R-squared of 0.993 suggests a strong model fit, suggesting that predictors offer a genuine explanatory power rather than inflating the R-squared artificially (Wooldridge, 2020), and further confirming the model is robust and interpretable.

Overall, the regression analyses underscore significant relationships between exports, imports, and GDP in Nepal's trade with India from 1991 to 2020. While exports alone show a positive association with GDP, this effect turns negative when both exports and imports are analyzed together, hinting at nuanced trade dynamics. The strong positive relationship between imports and GDP further suggests that imports play a central role in Nepal's economic growth within its bilateral trade framework with India.

The study's findings highlight a complex but meaningful relationship between Indo-Nepalese trade and Nepal's economic growth, with GDP significantly influenced by trade activities. Notably, a positive correlation exists between GDP and exports to and imports from India, reflecting trade's impact on Nepal's economy. A 1% increase in exports to India correlates with a 0.7167% GDP rise, while a 1% increase in imports yields an even higher 0.7247% increase in GDP. Shrestha and Pandey (2023) underscored these similar figures, emphasizing that Indo-Nepalese bilateral trade has substantial economic benefits for Nepal.

Despite these gains, Nepal's chronic trade deficit with India presents a persistent challenge—the country imports far more than it exports. This dependency creates vulnerabilities, especially during geopolitical tensions, as seen during the 2015 border blockade, which disrupted Nepal's trade routes and underscored its economic dependence on India. A similar view was highlighted by Sharma (2021) that such dependency has limited Nepal's economy and raises concerns for sustainable growth as continuing to strain the trade imbalances.

To address these issues, Nepal could benefit from diversifying its trade relationships beyond India, particularly by strengthening ties with China, an increasingly prominent trade partner. Trade diversification could help stabilize Nepal's economy, fostering local industry and reducing dependency on a single partner. Improving trade policies and infrastructure are essential steps toward a more balanced and resilient trade environment. The study suggests that policy reform and diversification could help Nepal leverage the advantages of trade, while also minimizing the risks associated with a concentrated trade portfolio (Thapa, 2022).

These findings highlight, that despite Indo-Nepalese bilateral trade supporting Nepal's GDP growth, reliance on Indian imports and trade deficits pose significant challenges. Strategic diversification, enhanced trade agreements, and infrastructure development are necessary for sustaining long-term economic stability. Such initiatives would not only strengthen Nepal's position in international trade but also promote a more sustainable economic trajectory.

Conclusions

This study on Indo-Nepalese bilateral trade trends and their impact on Nepal's GDP from 1991 to 2020 highlights key insights into the economic interdependence between Nepal

and India. The analysis shows a strong positive correlation between GDP and exports to and imports from India, underscoring the central role of trade in Nepal's economic development. Although exports have a positive relationship with GDP, the effect becomes more complex when imports are included, suggesting that a high reliance on imports has affected economic stability.

The findings suggest that Nepal should diversify its trade relationships beyond India to reduce vulnerabilities tied to dependence on a single trade partner. Initiatives to support local industries, enhance trade policies, and address trade deficits are vital for sustainable growth. Moreover, the study stresses the need for regional trade agreements and infrastructure improvements to increase Nepal's export capacity. Policymakers are encouraged to adopt strategies that use trade as a driver for growth while mitigating trade imbalances. Overall, this research has provided an understanding of Nepal's bilateral trade dynamics with India and their influence on the economic path.

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