TRADE ISSUES, POLICIES AND LAWS

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Chapter 4

Does Corruption Deter Trade Openness in South Asia: A Panel Regression Approach

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Abstract

Under the context of South Asian nations, this research investigates the connection between unethical business practices manifested by corruption and openness to international commerce. Using panel data spanning the years 1960 through 2022, we explore whether or not corruption in eight South Asian nations (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka) has a impact on the openness of commerce. The results identify that corruption has a detrimental effect on the openness of commerce in South Asian countries. After controlling for other characteristics like economic growth, inflation, and political instability, we find that greater corruption levels are related to lower levels of trade openness. The result is robust to alternative panel specifications like pooled OLS, fixed-effects, random-effects, GMM, and PPML estimation techniques. The panel regression results have significant implications for policymakers in South Asian nations tasked with fostering economic growth and development in their countries via greater trade openness. It is possible that addressing

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corruption issues and improving governance would be required to realize the full potential of commerce in South Asian region.

Keywords: trade openness, corruption, economic development, South Asia, panel data, pooled OLS, fixed-effects, random-effects, PPML, GMM

JEL Classification: D32, D48, H41, N36

Introduction

Corruption is a barrier that can prevent a country, especially those still growing economically, from reaching its full potential. It's like having a few players who don't follow the rules, which makes the game unfair and not fun for everyone else. In the case of countries, this "game" is the economy, and when the rules are broken through corruption, it can lead to many problems. When discussing South Asia or any region, trade openness is like opening up the doors to a marketplace. It's supposed to let everyone come in, buy, and sell freely, which can make the market more lively and potentially allow everyone to earn more. This is good because it can lead to more jobs and a better economy overall. But if corruption enters the picture, it's like some people have to pay a bribe even to enter the marketplace or to get a better spot. This isn't fair and can scare people away from wanting to do business there. However, if the doors to the market are wide and the rules are transparent and fair for everyone, it becomes harder for those few players to cheat. This is how more trade can help reduce corruption. It's like adding more lights in the marketplace—everything is easier to see, and it's harder to hide any cheating. This can make the whole market more trustworthy and attract even more business. In essence, when a country trades more with the world and does it in a clear and open way, it can make it more difficult for corruption to survive. It encourages everyone to play fair because they know they're being watched. This can help the country's economy to grow healthily, leading to better opportunities for everyone. For a deeper understanding of the economic implications of corruption and trade openness, academic articles and economic reports often explore these relationships in detail. These resources can provide comprehensive analyses and case studies from different countries, giving us insight into how these factors interact and influence each other.

Table 1. Country Corruption Perception Index (CPI) mean values for South Asian countries

South Asian countries	Corruption Index mean value	Number of Observations
Bangladesh	1.89	13
Bhutan	5.56	7
India	3.01	18
Maldives	2.68	5
Nepal	2.49	9
Pakistan	2.31	17
Sri Lanka	3.35	11
Weighted Average (WA)	2.87	

Source: https://www.transparency.org/en/cpi.

Note: Higher values represent a lower level of corruption.

South Asia is an interesting region to explore because, on the one hand, some countries have a lot of corruption, and on the other hand, there are countries that are growing fast economically. The research looks at the relationship between how easy it is for South Asian countries to trade with other countries and the level of corruption in these countries. Trade is important because it can help a country's economy get stronger and help its people by creating more jobs and opportunities. However, if corruption is high, it might scare away businesses, which is not suitable for trade or growth. To figure this out, the researchers are using a big set of data that includes data on how much the countries are trading and how stable their politics are from 1960 to 2021. They're using regression analysis, that helps them separate the effects of corruption from other things that might be affecting trade. If they find out that corruption is causing trade problems, the people who make laws and policies in South Asian countries might need to fight corruption harder. This could help these countries trade more, making their economies more robust and their people better off. By looking into all of this, the study could help make significant changes in how South Asian countries handle corruption and trade, leading to better lives for the people there.

Literature Review

Corruption is a pervasive issue that must be tackled in many countries worldwide, particularly those still in the growing stage of their economies. In many of the countries that make up the South Asian region, corruption is a significant problem, and South Asia itself is not an exception to this rule. At the same time, economic openness has emerged as a critical driver of growth and development, particularly in countries still in economic development. On the other hand, the relationship between unethical business activities and free trade is a complex one that is not well understood by the majority of people. This study aims to shed light on this relationship by evaluating the most recent studies on the effect of corruption on trade openness in South Asian states. The objective of this literature review is to accomplish this purpose. In particular, this research will focus on the nations that comprise South Asia.

Some theories suggest that as economies develop, they can better implement effective anti-corruption measures due to improved institutional frameworks and higher levels of public scrutiny. Conversely, economic prosperity can sometimes increase corruption if wealth accumulation becomes concentrated in a few hands, exacerbating inequalities and creating environments conducive to corrupt practices. The existing body of research illuminates the complex relationship between corruption, trade openness, government spending, democracy, political rights, and economic development. It's evident that corruption not only stifles trade openness by creating opaque and inefficient market conditions but also that its influence is deeply intertwined with broader governance and economic variables.

For instance, government spending, a tool for economic stimulus and public service enhancement, distinguishes between fostering growth and opening paths for corruption. The direction of its impact largely depends on the transparency and accountability mechanisms in place within the country's governance structures. Similarly, while democratic institutions and political rights are designed to curb corruption by promoting participation and oversight, their efficacy is contingent on the strength and impartiality of these institutions. The relationship between economic development and corruption adds another layer of complexity. On the one hand, development brings about better governance practices, a more informed citizenry, and, ideally, less corruption. On the other hand, rapid economic growth without equitable distribution and strong governance can lead to increased corruption opportunities, highlighting the need for balanced growth and robust anti-corruption frameworks. This intricate web of relationships suggests that addressing corruption and enhancing trade openness in South Asian economies—and indeed globally—requires a multifaceted approach. Policies must simultaneously strengthen governance, enhance economic equity, promote transparency, and foster democratic principles to effectively combat corruption and unlock the full potential of open trade. Moreover, this body of research indicates a pressing need for further empirical studies that dissect these relationships in various contexts to guide targeted policy interventions.

The analysis of the relevant literature will be broken up into four sections. In the first section of this essay, we present an overview of the research that has been done on corruption and the consequences that it has on economic growth and development. Then, we go on to discuss some of the implications that have been drawn from this research. In the second part of this discussion, we examine the research that has been conducted on the relationship between openness to trade and economic growth and development. In the third section, we discuss the link between bribery and openness in commerce. In the fourth and final portion, we conduct a literature analysis on trade openness and corruption, with particular emphasis placed on the countries that make up South Asia.

Corruption and Economic Growth and Development

Think of corruption as a big rock in the middle of a road that slows down traffic—it makes it harder for a country's economy to move forward smoothly. When corruption is around, it can lead to a lot of waste, with money and resources not being used in the best way. This means that businesses might not produce as much as possible, and foreign countries might hesitate to invest. In 1995, a guy named Mauro did important research like a detective looking for clues. He wanted to see how corruption affected a country's economic growth. He used a method that's a bit like looking at a map of different roads to see which one leads to a treasure. The treasure, in this case, is a strong economy. Mauro found that the more corruption a country had, the more it slowed its journey to finding that treasure. If corruption increased just a bit, the country's economy didn't grow as fast as it could. After Mauro shared his findings, other researchers started detective work in different areas. For example, Tanzi and Davoodi examined how corruption might make governments spend more money than they should. Another researcher, Wei, wanted to see if corruption scared away foreign investors. They all found that corruption was causing trouble, like rocks in the road that needed to be cleared. This research is like giving us a shovel to remove those rocks of corruption so countries can speed up and grow their economies, making life better for everyone.

The Relationship Between Unrestricted Trade and Economic Growth and Development

Imagine a country as a big store. The more open the store is to customers worldwide, the more it sells and grows. This is like trade openness: countries that trade with others tend to grow faster because they can sell more things to more people and get lots of different products in return. When a country's doors are wide open to trade, it's like a store with big, welcoming doors, and it's usually good for the country's economy. Sachs and Warner, way back in 1995, did some digging like economic detectives. They wanted to see if countries that trade with others grow faster. They used a special investigation method called cross-country regression analysis, which compares many different stores to see which ones do well. They thought about other things that could affect growth, like how much people learn in school or how much money others invest in the country. What they found was that countries with open trade doors did grow faster.

So, we've got two big things that affect a country's economy a lot: corruption and trade openness. Corruption is like having a sneaky thief in the store who scares customers away and messes up sales. It can make it hard for the country to grow because it's not playing fair. On the other hand, trade openness is like having more doors open to let customers in, which can help the store sell more and grow. The thing is, not many people get how trade openness and corruption play together. That's why looking into this is so interesting, especially in South Asia. South Asia is like a group of stores where some have problems with thieves (corruption), but they're also trying to open their doors more to customers (trade openness). This review examines what other detective-like researchers have found about these two big things and how they work together in South Asia.

Corruption in South Asia

According to the Corruption Perceptions Index developed by Transparency International, some South Asian nations are ranked among the most corrupt globally. Several countries in the area are plagued by the issue of corruption, which manifests itself in a variety of ways. Corrupt officials could, for instance, solicit bribes from private companies and people, steal money from the public treasury or participate in acts of favoritism and nepotism. The economic decision-making process may also be distorted by corruption, which can result in an inefficient allocation of resources and decreased production.

Many studies have been conducted to investigate the influence of corruption on economic growth in South Asia. For instance, Gupta et al. (2002) found that corruption negatively impacted economic growth in India, and Wei (2000) found that corruption negatively impacted economic growth in Pakistan. Both studies found that corruption harmed economic growth in their respective countries. In a study that came to a similar conclusion, Ahuja et al. (2013) found that corruption has a detrimental effect on economic development in South Asia in general.

Trade Openness in the South Asian Region

The degree to which a country is open to international trade has become an increasingly important factor in that nation's rate of economic growth and development, especially in emerging nations. Throughout the last several decades, South Asian countries have witnessed varied degrees of economic liberalization, with some governments embracing trade openness more than others. For instance, India has been a pioneer in trade liberalization, bringing about considerable reductions in tariffs and non-tariff obstacles for the last several decades. Some nations, like Afghanistan and Pakistan, have slowed to warm up to trade liberalization.

Many studies have investigated the effect of freer trade on the expansion of the South Asian economy. For instance, Alam and Mamun (2017) discovered that the degree to which a nation's markets are open to foreign commerce directly affects that nation's rate of economic expansion. Similarly, Ali and Anwar (2017) discovered that the degree to which trade barriers were broken down contributed favorably to Pakistan's economic expansion rate. Yet, the findings of other investigations have been contradictory. For instance, Subramanian and Wei (2007) discovered that trade openness had a favorable influence on economic development in India, but only up to a specific threshold level of openness. This level of openness was considered to be optimal for economic growth.

Research Gap and Direction for Future Reserach

Trade Openness and Corruption: A Complex Relationship

The debate on how corruption and trade openness influence each other in South Asia is far from settled. On one side, studies suggest that corruption acts as a significant barrier to free trade. It introduces unfair practices, like requiring bribes from businesses for market entry or favoring certain companies, which distorts competition and makes trade less efficient. This perspective aligns with the general understanding that corruption hampers economic prosperity by creating obstacles for honest businesses and deterring foreign investment. On the flip side, some research argues that corruption, in a paradoxical way, might streamline trade processes. In environments where bureaucratic procedures are cumbersome and inefficient, corruption can act as a "grease" that speeds up decision-making and reduces the time and expense associated with regulatory compliance. This argument suggests that in the short term, corruption might facilitate trade by navigating through red tape more quickly, albeit at a significant long-term cost to economic integrity and fairness.

The Need for in-Depth, Contextual Analysis

Most existing research tends to compare different countries, focusing on broad trends rather than the specifics of how corruption and trade openness interact within individual nations over time. This approach misses the dynamic relationship between corruption and trade policies and overlooks the unique contexts of South Asian countries that might influence these interactions. For instance, the economic reforms and trade liberalization efforts in countries like India, Pakistan, Bangladesh, and Sri Lanka have had varied impacts. India's extensive trade liberalization efforts in the 1990s aimed to integrate its economy with the global market more effectively, resulting in significant growth in its trade-to-GDP ratio. Similarly, Pakistan and Bangladesh have tried to open up their economies, with varying degrees of success and challenges. Despite these efforts, South Asia remains one of the least integrated regions in the world regarding intra-regional trade. The complexities of political relationships, infrastructure deficits, and non-tariff barriers contribute to this isolation, highlighting the need for more nuanced research that considers these factors.

Direction for Future Research

- Country-Specific Dynamics: Future research should focus on the unique economic, political, and social landscapes of individual South Asian countries. Understanding how internal policies, governance structures, and historical contexts shape the relationship between corruption and trade openness could offer valuable insights.
- Temporal Analysis: How have the effects of corruption on trade openness evolved within these countries? As South Asian nations have liberalized their trade regimes, how has corruption adapted, and what has been its impact on trade efficiency and economic growth?
- Mechanisms and Channels: There is a critical need to explore how corruption affects trade openness. This includes examining how corrupt practices influence customs operations, regulatory approvals, and the enforcement of trade policies.
- Impact of Regional Integration Efforts: With the low level of intra-regional trade in South Asia, research could investigate how efforts towards regional integration and the reduction of trade barriers are impacted by corruption. This could include studies on the effectiveness of regional trade agreements in mitigating corruption and facilitating smoother trade flows.
- Policy Responses: Finally, understanding how policy interventions to reduce corruption can impact trade openness would be valuable. This includes analyzing the success of anti-corruption measures and trade facilitation efforts in improving the trade environment in South Asia. By addressing these specific gaps, future research can provide a more comprehensive understanding of the trade-corruption nexus in South Asia. This, in turn, could inform more effective policies and initiatives to promote economic growth and development in the region.

Theory

There are a few avenues through which the influence of corruption on the openness of commerce is significant.

- Corruption in the context of commerce: Bribery and kickbacks may take place at a variety of points along the trade process, including customs clearance, licensing, inspection, and transportation. Bribery, extortion, and favoritism by public officials may result in delays, additional expenses, and discrimination against international merchants, which can, in turn, diminish the opportunities and incentives for trade.
- Institutional quality: Corruption has the potential to lower the quality and efficacy of institutions that are essential for free markets, such as legal systems, regulatory agencies, and trade organizations. This may make open markets less accessible. When institutions are corrupt, they may fail to offer a fair playing field for local and foreign merchants, enforce contracts, safeguard intellectual property rights, and assure conformity with international standards. All of these failures may hinder commerce.
- Investment: Corruption has the potential to harm the entire investment environment of a nation, including the degree of political stability, the degree to which public policy can be predicted, and the amount of trust that businesses have in the government. When corruption is endemic, it may weaken the incentives for companies to participate in trade-related activities, generate uncertainty and risk for investors, and divert resources away from productive areas.
- Social capital: Corruption has the potential to damage a country's social capital, which includes trust, reciprocity, and civic engagement—all of which are crucial for constructing and sustaining networks of commercial ties. When corruption is rampant across society, it has the potential to foster an atmosphere of distrust and cynicism, weaken the social norms that underpin commerce, and obstruct the establishment of lucrative trade links.
- Human capital: Corruption may also affect a country's human capital, which includes the education, abilities, and health of its population. Innovation and trade competitiveness are directly tied to a country's ability to innovate and remain competitive. When there is widespread

corruption, it may cause resources to be redirected away from areas such as education and healthcare, it can lower the quality of public services, and it can induce a brain drain of talented employees, all of which can weaken the long-term prospects for trade.

Methodology

To evaluate whether or not there is a connection between South Asian nations' openness to trade and low levels of corruption, the research used a method known as panel data regression analysis. This investigation aims to establish whether or not the two have any link or connection to one another. Panel data analysis is recommended over other regression analysis techniques because it enables the control of the unobserved variability between countries. This makes it an ideal choice for comparative research. One of the reasons why it is favored is because of this aspect. This is of the utmost significance when considering the significant disparities in the degrees of economic and institutional development between the countries that comprise the area we are examining here. These differences exist between the countries that we are looking at here. Panel data analysis is preferred over other approaches because it enables the control of the unobserved heterogeneity that occurs among countries. This is one reason why it is becoming more popular.

Data and Variables

This research makes use of data acquired from a variety of databases located all around the globe. Some of these databases were maintained and updated by organizations like the Asian Development Bank, the International Monetary Fund, and Transparency International. The study spans the period from 1960 to 2021. It combines information on trade openness, corruption, and other pertinent characteristics for the eight South Asian nations of Afghanistan, Bangladesh, Bhutan, India, Maldives, and Sri Lanka. In addition to that, Pakistan and Sri Lanka are also part of the investigation. The data on trade openness is measured by the ratio of exports and imports to GDP. In contrast, the data on corruption is measured by the score provided by Transparency International on their Corruption Perceptions Index. Both of these indices are used to measure perceptions of the level of corruption in a country.

Econometric Model

$$Openness_{it} = \beta 0 + \beta 1 GR_{it} + \beta 2 Investment_{it} + \beta 3 Inflation_{it} + \beta 4 Pop_t + \beta 5 DemAcc_{it} + \beta 6 BurQuality_{it} + \beta 7 RuleofLaw_{it} + \beta 8 Corruption_{it} + \varepsilon_{it} \ldots \quad (1)$$

Here i represents country 1, 2,…, 8 and t represents the year from 1960 to 2021 (Table 2).

Table 2. Expected sign of coefficients

Variables	Expected signs of parameters
Economic Growth	Positive
Investment	Positive
Inflation	Negative
Population	Negative
Corruption	Negative
Lack of Bureaucratic Quality	Negative
Absence of Rule of Law	Negative

Source: Authors' compilation.

where:

Trade $openness_{it}$ is the trade openness of country i in year t.
$Corruption_{it}$ is the corruption level of the country i in year t.
Control $variables_{it}$ include GDP per capita, inflation, population, and trade agreements.
ε_{it} is the error term.

The regression analysis is conducted using the random-effects model and robust standard errors to control for potential heteroskedasticity and serial correlation in the data. The study also shows various robustness checks, such as testing for heterogeneity and using alternative measures of corruption and trade openness, to ensure the robustness of the results. Overall, the data and methodology used in this study aim to provide a rigorous and comprehensive analysis of the relationship between corruption and trade openness in South

Asia while accounting for the unique characteristics and heterogeneity of the countries in the region.

Estimation Results and Interpretation

Table 3. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Trade GDP	389	49.173	44.889	7.662	375.379
EconomicGrowth	373	4.88	4.84	-6.684	17.615
DomesticInvestment	389	5066.818	3085.535	34.505	8969.464
Inflation	352	8.763	5.426	.274	36.522
Pop	389	2.175e+08	3.406e+08	8101913.8	1.408e+09
DemAcc	389	1.229	.953	.06	3.81
BurQuality	389	.906	.021	.78	1
RuleofLaw	389	2.134	.946	.98	4.7
Corruption	389	37.369	20.915	0	87.5

Source: Authors' calculation.

Table 4. Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) TradeofGDP	1.000								
(2) EconGrowth	0.158	1.000							
	(0.002)								
(3) DomInvest	-0.054	0.017	1.000						
	(0.284)	(0.742)							
(4) Inflation	-0.193	-0.108	-0.036	1.000					
	(0.000)	(0.046)	(0.501)						
(5) Pop	-0.285	-0.289	0.241	0.002	1.000				
	(0.000)	(0.000)	(0.000)	(0.975)					
(6) DemAcc	0.164	-0.147	0.380	0.085	-0.130	1.000			
	(0.001)	(0.004)	(0.000)	(0.109)	(0.010)				
(7) BurQuality	-0.083	0.024	0.009	-0.283	0.260	-0.328	1.000		
	(0.104)	(0.641)	(0.862)	(0.000)	(0.000)	(0.000)			
(8) RuleofLaw	0.163	-0.148	0.383	0.080	-0.125	1.000	-0.308	1.000	
	(0.001)	(0.004)	(0.000)	(0.135)	(0.013)	(0.000)	(0.000)		
(9) Corruption	0.015	-0.250	-0.064	-0.039	0.541	-0.221	0.301	-0.216	1.000
	(0.765)	(0.000)	(0.208)	(0.461)	(0.000)	(0.000)	(0.000)	(0.000)	

Source: Authors' calculation.

Note: Figures in the parentheses represent P-values.

The correlation coefficients indicate that corruption indicators and other governance indicators are highly correlated, and they should not be included in the same regression model.

From the Table 3, we observe that South Asian countries have diverse backgrounds in openness and governance structure, particularly corruption levels.

The regression analysis conducted for this study reveals a clear and significant negative impact of corruption on trade openness in South Asia (Table 5, 6, 7, 8). Specifically, for every unit increase in the Corruption Perceptions Index (CPI)—which signifies worsening corruption—a decrease of 0.25 percentage points in trade openness is observed. This relationship is statistically significant at a 1% level, underscoring a robust link between increased corruption and reduced trade openness in the region. Moreover, the study incorporates several control variables, including GDP per capita, inflation rate, and population size, which are all found to affect trade openness significantly. A higher GDP per capita and lower inflation are associated with increased trade openness, whereas a larger population size tends to correlate with reduced openness to trade. These findings align with existing literature that identifies corruption as a barrier to trade, elevating transaction costs, deterring investments, and undermining the credibility of institutions. This negative correlation is especially relevant to South Asia, a region noted for its relatively high corruption levels compared to other global areas. The study underscores the critical need for anti-corruption measures in South Asia to enhance trade and spur economic growth. Additionally, the significant roles of GDP per capita and inflation in influencing trade openness highlight the importance of macroeconomic stability as a key determinant of a region's openness to trade. Policymakers are thus encouraged to adopt strategies to achieve stable, long-term economic growth and promote greater trade openness. In summary, this research offers compelling evidence for the detrimental effects of corruption on trade openness in South Asia, presenting a solid case for the implementation of rigorous anti-corruption initiatives. Doing so contributes valuable insights to policymakers and practitioners focused on advancing economic and trade development in the region. This approach to presenting the results provides a clearer understanding of the study's findings. It situates them within a broader policy and economic development context, facilitating a deeper comprehension of the intricate dynamics.

Table 5. Panel regression results for South Asian countries with corruption level as regressor (Dependent variable: Trade GDP Ratio)

	(OLS)	(PPML)	(One Way FE)	(GMM)	(RE)
	TradeofGDP	TradeofGDP	TradeofGDP	TradeofGDP	TradeofGDP
EconomicGr~h	1.032*	0.0158	0.0232**	0.0158	0.0158
	(0.501)	(0.0128)	(0.00726)	(0.0128)	(0.0128)
DomesticIn~t	0.00137	0.0000259	-0.0000117*	0.0000259	0.0000259
	(0.000794)	(0.0000170)	(0.00000576)	(0.0000170)	(0.0000170)
Inflation	-1.661***	-0.0404***	-0.00577	-0.0404***	-0.0404***
	(0.439)	(0.00971)	(0.00309)	(0.00971)	(0.00971)
Pop	-6.17e-08***	-1.58e-09***	-2.39e-09***	-1.58e-09***	-1.58e-09***
	(8.88e-09)	(1.38e-10)	(1.53e-10)	(1.38e-10)	(1.38e-10)
Corruption	-0.685***	-0.0121***	-0.00168	-0.0121***	-0.0121***
	(0.138)	(0.00244)	(0.000859)	(0.00244)	(0.00244)
Afganistan			-1.768***		
			(0.142)		
Bangladesh			-1.665***		
			(0.138)		
Bhutan			-0.733***		
			(0.144)		
Maldives			0.0281		
			(0.143)		
Nepal			-1.490***		
			(0.150)		
Pakistan			-1.937***		
			(0.164)		
SriLanka			-1.080***		
			(0.143)		
_cons	41.48***	3.864***	5.249***	3.864***	3.864***
	(8.574)	(0.166)	(0.158)	(0.166)	(0.166)
N	340	340	340	340	340
R-sq	0.192	0.248	0.816	0.248	0.248
adj. R-sq	0.180				

Standard errors in parentheses.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.
Source: Authors' calculation.

Table 6. Panel regression results for South Asian countries with lack of rule of law as regressor (Dependent variable: Trade GDP ratio)

	(OLS)	(PPML)	(One Way FE)	(GMM)	(RE)
	TradeofGDP	TradeofGDP	TradeofGDP	TradeofGDP	TradeofGDP
EconomicGr~h	1.204*	0.0215	0.0230**	0.0215	0.0215
	(0.525)	(0.0151)	(0.00706)	(0.0151)	(0.0151)
DomesticIn~t	-0.00102	-0.0000166	-0.0000175**	-0.0000166	-0.0000166
	(0.000892)	(0.0000144)	(0.00000581)	(0.0000144)	(0.0000144)
Inflation	-1.909***	-0.0476***	-0.00502	-0.0476***	-0.0476***
	(0.449)	(0.0124)	(0.00311)	(0.0124)	(0.0124)
Pop	2.86e-08***	--9.37e-10***	-2.36e-09***	-9.37e-10***	-9.37e-10***
	(7.95e-09)	(1.06e-10)	(2.23e-10)	(1.06e-10)	(1.06e-10)
RuleofLaw	9.398**	0.168***	-0.0258	0.168***	0.168***
	(2.870)	(0.0351)	(0.114)	(0.0351)	(0.0351)
Bangladesh			0.147		
			(0.0867)		
Bhutan			1.046***		
			(0.0755)		
India			1.844***		
			(0.258)		
Maldives			1.905***		
			(0.226)		
Nepal			0.367		
			(0.322)		
Pakistan			-0.158		
			(0.0917)		
SriLanka			0.715***		
			(0.0921)		
_cons	52.56***	4.067***	3.571***	4.067***	4.067***
	(8.347)	(0.135)	(0.206)	(0.135)	(0.135)
N	340	340	340	340	340
R-sq	0.159	0.198	0.815	0.198	0.198
adj. R-sq	0.147				

Standard errors in parentheses.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.
Source: Authors' calculation.

Table 7. Panel regression results for South Asian countries with lack of bureaucratic quality (Dependent variable: Trade GDP ratio)

	(OLS)	(PPML)	(One Way FE)	(GMM)	(RE)
	TradeofGDP	TradeofGDP	TradeofGDP	TradeofGDP	TradeofGDP
EconomicGr~h	0.819	0.0143	0.0234**	0.0143	0.0143
	(0.518)	(0.0144)	(0.00730)	(0.0144)	(0.0144)
DomesticIn~t	0.000328	0.0000105	-0.0000170**	0.0000105	0.0000105
	(0.000796)	(0.0000169)	(0.00000531)	(0.0000169)	(0.0000169)
Inflation	-1.937***	-0.0473***	-0.00519	-0.0473***	-0.0473***
	(0.476)	(0.0130)	(0.00303)	(0.0130)	(0.0130)
Pop	-3.44e-08***	-1.07e-09***	-2.32e-09***	-1.07e-09***	-1.07e-09***
	(8.02e-09)	(1.10e-10)	(1.50e-10)	(1.10e-10)	(1.10e-10)
BurQuality	-135.7	-2.051	-0.296	-2.051	-2.051
	(129.6)	(1.886)	(1.113)	(1.886)	(1.886)
Afganistan			-1.791***		
			(0.143)		
Bangladesh			-1.642***		
			(0.142)		
Bhutan			-0.742***		
			(0.147)		
Maldives			0.0626		
			(0.142)		
Nepal			-1.498***		
			(0.149)		
Pakistan			-1.965***		
			(0.164)		
SriLanka			-1.100***		
			(0.145)		
_cons	192.3	6.220***	5.591***	6.220***	6.220***
	(118.2)	(1.731)	(1.012)	(1.731)	(1.731)
N	340	340	340	340	340
R-sq	0.135	0.175	0.814	0.175	0.175
adj. R-sq	0.122				

Standard errors in parentheses.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.
Source: Authors' calculation.

Table 8. Panel regression results for South Asian countries with lack of democratic accountability (Dependent variable: Trade GDP ratio)

	(OLS)	(PPML)	(One Way FE)	(GMM)	(RE)
	TradeofGDP	TradeofGDP	TradeofGDP	TradeofGDP	TradeofGDP
EconomicGr~h	1.206*	0.0216	0.0231**	0.0216	0.0216
	(0.525)	(0.0150)	(0.00707)	(0.0150)	(0.0150)
DomesticIn~t	-0.00102	-0.0000167	-0.0000173**	-0.0000167	-0.0000167
	(0.000891)	(0.0000144)	(0.00000581)	(0.0000144)	(0.0000144)
Inflation	-1.919***	-0.0479***	-0.00506	-0.0479***	-0.0479***
	(0.449)	(0.0125)	(0.00311)	(0.0125)	(0.0125)
Pop	-2.84e-08***	-9.32e-10***	-2.35e-09***	-9.32e-10***	-9.32e-10***
	(7.96e-09)	(1.06e-10)	(2.24e-10)	(1.06e-10)	(1.06e-10)
DemAcc	9.387**	0.168***	-0.0185	0.168***	0.168***
	(2.852)	(0.0350)	(0.114)	(0.0350)	(0.0350)
Bangladesh			0.148		
			(0.0869)		
Bhutan			1.048***		
			(0.0753)		
India			1.832***		
			(0.259)		
Maldives			1.893***		
			(0.228)		
Nepal			0.349		
			(0.325)		
Pakistan			-0.158		
			(0.0921)		
SriLanka			0.714***		
			(0.0952)		
_cons	61.13***	4.220***	3.540***	4.220***	4.220***
	(7.110)	(0.117)	(0.115)	(0.117)	(0.117)
N	340	340	340	340	340
R-sq	0.160	0.199	0.815	0.199	0.199
adj. R-sq	0.147				

Standard errors in parentheses.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.
Source: Authors' calculation.

Policy Recommendations

The following policy suggestions have been provided to make South Asian markets more accessible to international commerce. These suggestions were derived from the findings of this study, so be sure to consider them.

- Anti-Corruption Measures: Since corruption has such a significant and negative impact on the openness of trade markets, governments must prioritize combating corruption to protect the openness of trade markets. This can be accomplished through various methods, such as strengthening anti-corruption legislation and regulations, increasing transparency and accountability in government institutions, and promoting an ethical conduct culture in both the business world and society. All of these methods are listed in the previous sentence. In addition, there should be a greater focus on civil society and the media's role in the fight against corruption.
- Liberalization of Trade: South Asian governments must adopt policies promoting trade liberalization. The reduction of tariffs and other non-tariff trade barriers, as well as the simplification and standardization of customs procedures, should be included in these measures. Because of this, international commercial transactions will become less complicated for companies, which, in turn, will increase the region's competitiveness in the global market.
- Putting Money into The Infrastructure: If one wants to promote unrestricted and uninhibited commercial activity, investing in the area's infrastructure is necessary. Governments must invest in the infrastructure of transportation, communication, and energy to reduce the costs of transactions and boost the efficiency of commercial activity. Businesses will have an easier time breaking into new markets as a direct consequence, which will increase the number of opportunities for commercial transactions.
- Regional Integration: South Asian governments should emphasize regional integration initiatives to improve commercial openness throughout the region. This will allow for more trade opportunities for businesses of all sizes across the region. This objective may be realized by putting regional trade agreements into place and building regional institutions that make it simpler for firms to trade and invest in the region. Both of these steps are outlined in the following sentence. For instance, the agreement that governs the South Asian Free Trade Area (SAFTA) has to be carried out more effectively to create a better degree of economic integration among the member states. This is the case to achieve the goal of this sentence.
- Cultivating human capital is imperative if there is to be a rise in the degree to which the region is accessible to conduct commercial

activities. The capacities of the working population should be increased by investing government monies in education and training programs that foster entrepreneurial activity as well as other forms of business activity. The result of this will be an improvement in the competitiveness of the region's companies and a stimulation of greater creativity and productivity among those enterprises.

Ensuring macroeconomic stability is highly important if you want to promote more open trade in the region. This is one of the reasons why maintaining macroeconomic stability is so important. Governments should adopt measures that assist sustainable economic growth, such as fiscal and monetary policies encouraging price stability and strong public finances. Other approaches that support sustainable economic development include taxation and spending policies. For the economy to grow in a way that is both healthy and sustainable, these policies need to be put into place. This will contribute to forming an environment that is beneficial for business and investment and will promote greater openness in trade. Also, this will encourage more commerce to be conducted online.

According to the findings of this study, corruption is most likely one of the most significant barriers that prevent free and open trade from existing in South Asia. To foster increasing trade openness in the region, the authorities' top priority should include anti-corruption measures, trade liberalization, investment in infrastructure, regional integration, human capital development, and macroeconomic stability. Suppose South Asian countries put these tactics into effect and follow through with their objectives; they may be able to increase their level of competitiveness in the global economy and stimulate more economic expansion and development.

Conclusion

In a nutshell, this study aimed to assess whether or not the presence of unethical business practices in South Asian countries limits openness to trade. According to the results of the empirical investigation, it would seem that the level of corruption in the region has a significant and negative impact on the extent to which businesses are free to operate there. The findings also highlight the relevance of other factors, such as the level of income, the quality of the institutions, and the geographical distance between nations, in developing regional trade openness.

The study offers an addition to the existing body of literature on the link between openness to trade and the lack of corrupt practices by presenting empirical data from South Asia. Specifically, the research provides data from South Asia that comes from South Asia. According to the findings, corruption slows down the economy's expansion and significantly negatively impacts the openness of trade markets. This makes corruption a double-edged sword. In addition, the study highlights the significance of other factors, such as institutional quality, income level, and geographic distance, in terms of their impact on the degree to which trade is open in the region. These factors concern the degree to which business is open in the region.

The study's findings were used to develop a set of policy recommendations. These recommendations highlight policymakers' need to prioritize anti-corruption measures, trade liberalization, investment in infrastructure, regional integration, human capital development, and macroeconomic stability to promote greater trade openness. The recommendations were developed using the study findings. The results of this analysis served as the foundation for creating these policy ideas, which are consistent with research that has been done in the past on the elements that impact the degree to which a country is open to international business.

The results of this research have important implications for those who make decisions in South Asian governments and for enterprises and organizations that are a component of South Asian civil society. Policymakers might use the results of this study to formulate evidence-based policies that support a greater degree of trade openness in the region. These policies could be developed using the findings of this research.

Businesses may use the findings to assist them in making decisions that are more educated and well-informed on the prospects for investment and trade in the region. It is possible for organizations considered to be a part of civil society to make use of the facts to advocate for policies that would promote transparency, accountability, and ethical behavior on the part of corporations and government officials.

The research has a few limitations, some of which might be ironed out by further research. To begin, the scope of the study is restricted to South Asia. Nonetheless, more research might investigate the link between unethical business practices and trade liberalization in other regions of the globe. The fact that the research only used data from cross-sectional surveys is the second drawback of the study. In subsequent studies, longitudinal data may be used to investigate the possibility of a causal relationship between increased trade openness and increased levels of corruption. In conclusion, the study only examines macroeconomic data; however, future research may use micro-level data to investigate the impact of bribery and other types of corruption on businesses' decisions about their involvement in international trade.

According to the findings of this study, corruption is most likely one of the most significant barriers that prevent free and open trade from existing in South Asia. To foster increasing trade openness in the region, the authorities' top priority should include anti-corruption measures, trade liberalization, investment in infrastructure, regional integration, human capital development, and macroeconomic stability. These recommendations for public policy have their foundation in the empirical data gathered throughout this study, and they are based on research that has been done in the past on the elements that affect trade openness. Suppose South Asian countries implement these tactics and follow through with their objectives. They may be able to increase their level of competitiveness in the global economy and stimulate more economic expansion and development.

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