


DOES GOVERNANCE WAX OR WANE THE BILATERAL TRADE OF PAKISTAN? AN APPLICATION OF GRAVITY MODEL

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 04 October 2022</p> <p>Accepted 20 December 2022</p>	<p>Purpose: This paper aims to present an analysis on the effect of governance and its indicators on bilateral exports and bilateral imports of Pakistan with its major trading partner countries separately.</p>
<p>Keywords:</p> <p>Governance; Bilateral Exports; Bilateral Imports; Major Trading Countries.</p> <div data-bbox="172 927 480 1173" style="text-align: center;">  </div>	<p>Theoretical framework: This study has implemented the six indicators of governance for Pakistan and its exporting and importing partners in gravity trade model to demonstrate the influence of governance on bilateral trade.</p> <p>Design/methodology/approach: Indicators of governance (a disaggregate analysis) and a governance index (an aggregate analysis) in a panel data over the period 2000 to 2020 have been analyzed by using panel least square estimation technique.</p> <p>Findings: The findings reveal that the average effect of governance on bilateral exports is positive indicating that in general, the better quality of institutions boosts up the bilateral trade, and the outcome of the institutional quality on trade has “waxed rather than waned” with time. Further, the positive effect of governance on bilateral imports indicates that it is uncomplicated to trade with those trading partners having better institutions.</p> <p>Research, Practical & Social implications: Research, Practical & Social implications: This study suggests that there is a clear need to adopt the practices of good governance, accountability, rule of law, etc. for enhancing bilateral trade and would follow the rules developed by the institutions.</p> <p>Originality/value: This study is an attempt to examine the significance of governance in enhancing the bilateral trade of Pakistan. Findings of the study has elaborated with the economic reasonings that have never been explained in previous researches.</p> <p>Doi: https://doi.org/10.26668/businessreview/2022.v7i6.e805</p>

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A GOVERNANÇA ENCERA OU DIMINUI O COMÉRCIO BILATERAL DO PAQUISTÃO? UMA APLICAÇÃO DO MODELO DE GRAVIDADE

RESUMO

Objetivo: O objetivo deste estudo foi identificar o perfil da pesquisa acadêmica sobre blended learning no mundo e propor uma agenda de pesquisa para o tema.

Referencial teórico: A literatura recente tem relatado bons resultados tanto no desempenho dos alunos quanto na satisfação dos estudantes no blended learning (Dziuban et al., 2004). No entanto, ainda há muito o que investigar e aprender sobre o BL por ser um desenvolvimento recente.

Desenho/metodologia/abordagem: Analisamos o perfil das publicações internacionais sobre blended learning em gestão e negócios de 2001 a 2021. Identificamos quando, quem, onde e o quê foi publicado sobre o assunto, destacando os autores e periódicos de maior impacto com base no índice h e CiteScore (Scopus), além de explorar a cooperação entre países.

Resultados: O volume de pesquisas vem aumentando nos últimos vinte anos, embora existam poucos autores, instituições e periódicos de referência contribuindo para a consolidação do tema e os países que realizam mais pesquisas conjuntas em redes de coautoria respondem pelo maior volume de publicações, autores e revistas de impacto.

Pesquisa, implicações práticas e sociais: Sugerimos uma agenda de pesquisa futura e destacamos as contribuições feitas para a educação executiva e gerencial.

Originalidade/valor: Os resultados indicam que o número de publicações está crescendo, sendo a área de gestão e negócios a que mais contribui, sendo que os países que produzem em coautoria também fornecem mais publicações.

Palavras-chave: Educação Gerencial, Educação Executiva, Análise Bibliométrica, Gestão e Educação Empresarial.

¿CRECE O DECRECE LA GOBERNANZA EL COMERCIO BILATERAL DE PAKISTÁN? UNA APLICACIÓN DEL MODELO DE GRAVEDAD

RESUMEN

Propósito: Este documento tiene como objetivo presentar un análisis sobre el efecto de la gobernanza y sus indicadores en las exportaciones bilaterales y las importaciones bilaterales de Pakistán con sus principales países socios comerciales por separado.

Marco teórico: Este estudio ha implementado los seis indicadores de gobernanza para Pakistán y sus socios exportadores e importadores en el modelo de comercio por gravedad para demostrar la influencia de la gobernanza en el comercio bilateral.

Diseño/metodología/enfoque: Se han analizado los indicadores de gobernanza (un análisis desagregado) y un índice de gobernanza (un análisis agregado) en un panel de datos durante el periodo 2000 a 2020 utilizando la técnica de estimación de mínimos cuadrados de panel.

Resultados: Los resultados revelan que el efecto medio de la gobernanza en las exportaciones bilaterales es positivo, lo que indica que, en general, la mejor calidad de las instituciones impulsa el comercio bilateral, y el resultado de la calidad institucional en el comercio ha "aumentado en lugar de disminuir" con el tiempo. Además, el efecto positivo de la gobernanza en las importaciones bilaterales indica que no es complicado comerciar con aquellos socios comerciales que tienen mejores instituciones.

Investigación, implicaciones prácticas y sociales: Investigación, implicaciones prácticas y sociales: Este estudio sugiere que existe una clara necesidad de adoptar las prácticas de la buena gobernanza, la responsabilidad, el Estado de Derecho, etc. para mejorar el comercio bilateral y seguir las normas desarrolladas por las instituciones.

Originalidad/valor: Este estudio es un intento de examinar la importancia de la gobernanza en la mejora del comercio bilateral de Pakistán. Las conclusiones del estudio se han elaborado con razonamientos económicos que nunca se habían explicado en investigaciones anteriores.

Palabras clave: Gobernanza, Exportaciones Bilaterales, Importaciones Bilaterales, Principales Países con los que Comercia.

INTRODUCTION

Bilateral trade flows play a significant role in economic development. It can enhance specialization, economies of scale, competition, technology transfer, and human capital movement between countries. It is also an important medium of knowledge spillover and resource allocation across borders (Wei, Liu, & Wang, 2006). For decades, the recognition of fundamental sources of trade flows has been a subject of substantial interest to academics. Among the extensive factors that influence trade flows is governance. The performance of governance in trade volume is very critical as previous researchers find out that governance exerts a significant influence on the volume of trade (Yu, Beugelsdijk, & Haan, 2015; Gani & Scrimgeour, 2016). Theoretically, it has been established that governance can have a direct effect on trade flows by the creation of comparative advantage.

Empirical literature in international economics has emphasized on trade barriers other than quotas and tariffs. The unobserved trade barriers are often associated to asymmetric or incomplete information and ambiguity in exchange. Due to incomplete information and incomplete insight, people usually form governance institutions. The influence of governance on transaction costs also received attention in development and economic growth literature (Knack and Keefer 1995; Olson 1996; Hall and Jones, 1999). This literature frames on the assumption that poor governance leads to negative externalities for private transactions and as a result increases the cost of transactions with a negative impact on development and growth (Wei, 2000). We may enhance these debates to bilateral trade because the business transactions between countries involve various systems of governance. The efficiency of the institutions in administrating and securing property rights in business transactions is an important factor in trade. Additionally, the legal rules influence intimate behavioral norms as well as interpersonal trust, which can affect the conventions, rules and regulations, and attitude of doing business. These, as a result, can influence the preferences and risk perceptions in business transactions (Groot and Linders, 2004).

The main emphasis of this research is to demonstrate the effect of governance indicators on the bilateral trade of Pakistan with its major trading partner countries so, it is necessary to take a look at the governance indicators that have been constructed by Kaufmann et al. (2002). Each indicator possesses a specific aspect of governance. We can discuss these indicators as:

Table 1: Indicators of Governance	
Control of Corruption	CC encapsulates the anti-corruption policy. It measures, the irregular payments level in firms and administrations, the degree of corruption in the government organizations the corruption frequency.
Government Effectiveness	GE measures the satisfaction and quality of general public among the services of public, infrastructure, and credibility of governments and bureaucracy. This measure considers as the proxy of government's competence deliver the useful and dynamic policies.
Absence of Violence and Political Stability	VP is the indicator of the politically motivated violence, social, terrorism, controversy and equipped rivalry.
Rule of Law	RL brings the assurance in administrative system, property rights, organized crime, contract imposition of law against violent as well as the judicial self-reliance.
Regulatory Quality	RQ accounts the capability to tackle the system of dishonest competition, the comfort of new business starting, financial freedom, anti-trust policy presence, effectiveness of tax and the existence or absence of the controls of imposed price. enormous protections.
Voice and Accountability	VA measure the degree in which the citizens are capable to take part in selecting their representatives of government, and the civil liberties presence, freedom of speech, human rights, free press and freedom of association

Major exporting countries of Pakistan are the United Kingdom, USA, France, Germany, Italy, Spain, China, Afghanistan, UAE, and Bangladesh. About 60% of Pakistan's exports are going to these countries and 40% to the rest of the world (Pakistan Economic Survey, 2019-20). Pakistan has membership in various trading organizations i.e. Economic Cooperation Organization, South Asian Free Trade Area, World Trade Organization, Shanghai Cooperation Organization, and South Asian Association for Regional Cooperation, etc. (Fatima, Nisar, & Yasmin, 2019). In economic literature, the trade relations, significance, trade barriers, and the effects of various socio-economic factors on the bilateral trade relation of Pakistan with its major trading partners have been established. However, little attention has been laid to the influence of governance and its factors on the bilateral trade flow of Pakistan with its major trading partner countries. Therefore, this research has focused on each governance indicator in the bilateral trade flows of Pakistan separately. To analyze the influence of governance indicators on the bilateral trade flows of Pakistan with its major trading countries, we are going to estimate the gravity equation. The "gravity model of bilateral trade has inspired by the "Newton gravity model" in Physics that demonstrates:

“Two bodies attract each other directly to their product masses and inversely to the square of their distance”

Depicting trade between two nations as an economic analog of the mutual gravitational force between two nations, with their respective GDPs indicating mass. In general, the gravity trade model considers trade between two countries as an increasing function of their incomes and a decreasing function of the distance between them (Frankel and Rose 2002). Empirically the model has been well performed. Among others, studies done by (Helpman and Krugman, 1985; Deardorff, 1998 indicated that classical Heckscher-Ohlin theory of comparative advantage and new trade theories of product differentiation may also provide a theoretical explanation for the bilateral trade gravity model.

Now we will proceed as follows: Section 2 examines the review of related literature. Section 3 discusses the specification of the model. Next highlights the data and methodology. Section 5. explains the findings and discussion. Section 6. evaluates the conclusion and policy implications.

LITERATURE REVIEW

The institutional role as an operator of economic progress is attracting remarkable attention in economic growth literature. Alvarez et al. (2018) examined the extent to which the quality of institutions influences the flows of bilateral trade, in addition, to whether the institutional performance for trade was augmented with time. By taking the data of 186 economies from 1996 to 2012 and applying Poisson Pseudo-Maximum Likelihood estimation methods, the authors concluded that institutional distance and conditions at destination between importing and exporting nations are suitable elements for bilateral trade. By taking the same institutional factors, Sheikh et al. (2018) analyzed their impact on bilateral trade flow for Pakistan with ECO countries over the period 2003 to 2014. Results indicate that the average effect of institutional quality on the flow of trade is positive. Moreover, institutional homogeneity and institutional quality have the dominant influence on bilateral trade flows.

Bojnec and Ferto (2015) analyzed the institutional factors of the agro-food trade by taking data from 29 OECD countries over the period 1995 to 2003. Findings revealed that the impact of institutional quality on the exports of agro-food varies. The institutional good quality decreases the influence on distance, which can encourage the agro-food trade with economic development in importing countries. Further, research that has been regulated by Gani and Scrimgeour (2016) analyzed whether the trade between Asia and New Zealand was influenced by the achievement of governance of Asian economies. Authors observed that in Asian nations

political rights are significantly and negatively linked with exports from Asia to New Zealand. In contrast, the political rights in Asia have no powerful influence on the imports from Asia to New Zealand. This research has concluded that democratic institutions be strengthened to expand the trade between them. Moreover, in a panel study by Francois and Manchin (2013) over the period 1988-2012 for 209 countries, they find out that institutional quality has both negative and positive influences on the flow of bilateral trade. Groot and Linders (2004) posited the institutional determinants of bilateral trade flows for more than 100 nations by considering six indicators of governance. Authors find out that the institutional distinction influences the trade pattern between nations with good institutional quality and those that have low institutional effectiveness. In poor countries, institutional quality has a negative effect. Li and Samsell (2009) demonstrated research on the effect of governance and prosperity to trade among forty-four nations computing for eight-nine percent of the global trade. This research concluded that the countries having rigid obedience to law and order usually trade more than the countries having poor obedience to law and order. Further, a study done by Wu et al. (2012) in the same countries found that the flow of little trade prevails in such nations that have a deficit in the performance of governance.

Adedoyin et al. (2020) investigated the relationship between trade and governance as well as migration in 23 European countries from the period 1998-2017 by using the GMM estimation technique. Findings revealed that migration is inversely associated with trade while the relation between trade and governance is negative. Authors favored that the authorities in European Union improve and review the managerial institutions to enable growth in the export sector. Kujala and Aaltonen (2020) analyzed the aspects of governance in inter-organizational project systems. To analyze the governance in the project system an analysis framework was generated. This framework was applied to examine the approaches of governance used in the project of infrastructure with a compact method of the delivery project to clarify the applicable validity of the structure. The framework ranked governance in six directions: setting goals, monitoring, decision making, rewarding, capability building, and planning. Authors find out that focal management might have a symbolic role in governance design. Further, Dankumo et al. (2020) examined the influence of governance on trade in Sub-Saharan African countries. The authors used panel data for the period 1996 to 2017 and employed Pooled Mean Group approach to estimate the results. Findings revealed that corruption did not influence the trade but political instability decreases the trade level. On other hand, income, population growth, and expenditures of government raise trade.

In these studies, various aspects of governance have been discussed that exhibited alternative results of governance and its factors on trade patterns but all studies indicated expected signs for the variables of the basic gravity model. Very limited studies have been done on the effect of governance on Pakistan's bilateral trade flows with its major trading partners. Hence, this study is unique in the sense that it estimates the effect of all indicators of governance on bilateral exports and imports with their economic reasons separately.

MODEL SPECIFICATION

The following models have used to estimate the factors of governance and governance index on bilateral trade flows of Pakistan with its major trading partner countries. Bilateral exports and bilateral imports are used as dependent variables while GDPs of Pakistan (j) and trading partners (i), distance, and governance factors are used as independent variables. In order to avoid the issue of multicollinearity, each factor of governance is used separately.

Model 1: Voice and Accountability (VAC)

$$\ln(Z)_{ij} = \alpha_0 + \alpha_1 \ln(GDP_i) + \alpha_2 \ln(GDP_j) + \alpha_3 \ln(DIST_{ij}) + \alpha_4 (VAC_i) + \alpha_5 (VAC_j) + \varepsilon_{ij} \quad (1)$$

Model 2: Political Stability (PS)

$$\ln(Z_{ij}) = \alpha_0 + \alpha_1 \ln(GDP_i) + \alpha_2 \ln(GDP_j) + \alpha_3 \ln(DIST_{ij}) + \alpha_4 (PS_i) + \alpha_5 (PS_j) + \varepsilon_{ij} \quad (2)$$

Model 3: Government Effectiveness (GE)

$$\ln(Z_{ij}) = \alpha_0 + \alpha_1 \ln(GDP_i) + \alpha_2 \ln(GDP_j) + \alpha_3 \ln(DIST_{ij}) + \alpha_4 (GE_i) + \alpha_5 (GE_j) + \varepsilon_{ij} \quad (3)$$

Model 4: Regulatory Quality (RQ)

$$\ln(Z_{ij}) = \alpha_0 + \alpha_1 \ln(GDP_i) + \alpha_2 \ln(GDP_j) + \alpha_3 \ln(DIST_{ij}) + \alpha_4 (RQ_i) + \alpha_5 (RQ_j) + \varepsilon_{ij} \quad (4)$$

Model 5: Rule of Law (RL)

$$\ln(Z_{ij}) = \alpha_0 + \alpha_1 \ln(GDP_i) + \alpha_2 \ln(GDP_j) + \alpha_3 \ln(DIST_{ij}) + \alpha_4 (RL_i) + \alpha_5 (RL_j) + \varepsilon_{ij} \quad (5)$$

Model 6: Control of Corruption (CC)

$$\ln(Z_{ij}) = \alpha_0 + \alpha_1 \ln(GDP_i) + \alpha_2 \ln(GDP_j) + \alpha_3 \ln(DIST_{ij}) + \alpha_4 (CC_i) + \alpha_5 (CC_j) + \varepsilon_{ij} \quad (6)$$

Model 7: Governance Index (WGI)

$$\ln(Z_{ij}) = \alpha_0 + \alpha_1 \ln(GDP_i) + \alpha_2 \ln(GDP_j) + \alpha_3 \ln(DIST_{ij}) + \alpha_4 (WGI_i) + \alpha_5 (WGI_j) + \varepsilon_{ij} \quad (7)$$

Where:

Z_{ij} = Bilateral Exports (EX_{ij}) or Bilateral Imports (IM_{ij}) between Pakistan and partners.

DATA AND METHODOLOGY

In this study panel data of Pakistan and its major trading partner countries have used for the period 2000 to 2020. The PLS estimation technique is used to estimate all the models. Data for the variables have been obtained from the UN COMTRADE database, World development indicators, and the world governance index.

RESULTS AND DISCUSSIONS

Governance Effect on Bilateral Exports of Pakistan with Major Exporting Countries

Table. 3 exhibits the PLS estimates of governance and the basic gravity model for exporting countries. The coefficients of the gross domestic product of exporting countries are positive and highly significant in all models. The higher GDP of exporting countries means that they have a higher capacity for purchasing goods from international markets due to their high-income level so the bilateral exports of Pakistan can raise due to the rise in GDP. On the other side, the gross domestic product of Pakistan shows a negative relationship with bilateral exports in all models. This relation is significant in all models except model 1. The reduction in bilateral exports even due to the rise in GDP_j might be due to the fewer product quality and not following the rules and regulations set by the exporting countries for trade. Findings by Chen et al. (2008) and Sheikh et al. (2018) have proved the positive signs for GDP_i while Parasai (2014) and Bojnec and Ferto (2015) estimated the negative signs. The coefficient of distance is negative and highly significant in all seven models. The higher distance among the trading countries can raise the cost of transportation which might reduce the level of trade. All the empirical studies done on the gravity model have found a negative relationship between distance with trade volume.

The coefficients of voice and accountability are significant and positive for both Pakistan and major exporting countries of Pakistan which means that the bilateral exports of Pakistan boost up through the active VAC system in Pakistan as well as exporting countries. The reason is that via freedom of expression, free media and a fair election system in these countries will cause favorable governance, more awareness and appropriate actions of policies will enhance the bilateral exports of Pakistan and bilateral imports of major exporting countries of Pakistan. The findings of De Groot et al. (2004), Sheikh et al. (2018), and Alhassan and Payaslioglu (2020) also confirm the positive sign of VAC.

Political stability shows a significant and positive sign for exporting countries while a negative and insignificant sign for Pakistan. Countries with having absenteeism of violence and terrorism & having stable governments can provide a secure and safe environment for the

foreign investor that might enhance the level of trade. The negative sign of PS_j for Pakistan might be the expression that the exporting countries can take the edge of the social unrest, armed conflicts as well as political violence in Pakistan. Moreover, the political crises entail higher spending of government in order to forestall the peace and provide for the desires of people suffering the burden of political unrest. The second reason might be the improper policies implementation and lack of institutional structure. Our results are based on the studies of De Groot et al. (2004), Alvarez et al. (2015) and Alhassan and Payaslioglu (2019).

Table 3. PLS Estimates of Governance and Basic Gravity Model for Exporting Countries

Regressors	Dependent Variable: $\text{Log}(EX_{ij})$						
	Disaggregated Analysis				Aggregated Analysis		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C	10.0585 (0.0000)	8.4595 (0.0000)	9.7654 (0.0000)	9.2409 0.0000	8.8865 0.0000	8.7042 0.0000	8.8547 0.0000
LOG(GDP _i)	0.4070 0.0000	0.3770 0.0000	0.3799 0.0000	0.3557 0.0000	0.3760 0.0000	0.3904 0.0000	0.3796 0.0000
LOG(GDP _j)	-0.0472 0.4205	-0.1096 0.0000	-0.1480 0.0963	-0.0806 0.0000	-0.0806 0.0000	-0.1485 0.0940	-0.1704 0.0644
LOG(DIST _{ij})	-0.9652 0.0000	-0.7057 0.0000	-0.8504 0.0000	-0.8175 0.0000	-0.8452 0.0000	-0.8304 0.0000	-0.8579 0.0000
VAC _i	0.1795 0.0036	--	--	--	--	--	--
VAC _j	0.6996 0.0010	--	--	--	--	--	--
PS _i	--	0.0595 0.0292	--	--	--	--	--
PS _j	--	-0.0535 0.3855	--	--	--	--	--
GE _i	--	--	0.1488 0.0456	--	--	--	--
GE _j	--	--	-0.6121 0.0875	--	--	--	--
REG _i	--	--	--	0.2196 0.0000	--	--	--
REG _j	--	--	--	-0.1507 0.4823	--	--	--
RL _i	--	--	--	--	0.1857 0.0000	--	--
RL _j	--	--	--	--	-0.5175 0.0716	--	--
CC _i	--	--	--	--	--	0.1389 (0.0284)	--
CC _j	--	--	--	--	--	-1.2382 (0.0124)	--
WGI _i	--	--	--	--	--	--	0.4544 (0.0217)
WGI _j	--	--	--	--	--	--	-3.8841 (0.0201)

Government effectiveness is another indicator of governance quality that captures the ability of a state to formulate and implement sound policies, deliver public goods and services effectively, and reinforce the rules consistently. In our analysis, the coefficient of government effectiveness of exporting countries explores a significant and positive association with bilateral exports which recommends that superior quality of services, formulation of policy and their implementation, and the commitment of the government to these policies generate a good environment for the transactions of exchange and business leading towards the trade cost reduction and bilateral exports increment. While the coefficient of government effectiveness in Pakistan is negative and significant revealing the inability of the government workforce, the inefficiency of bureaucrats, and the government's action of unrestricted power might have a rigid effect on the processes of production and prohibit the speed and level of trade. Our results are following the studies of Gani and Scrimgeour (2016) and Soeng and Cuyvers (2018). Regulatory quality measures the ability of the government to devise and enforce sound governance and policies. In our estimations, the coefficient of regulatory quality of exporting countries is positive and significant. It might be due to the fact that the countries possess a stable structure for the formulation of policies in order to raise the level of development of public and private sectors and boost up the trade level. On the other side, the coefficient of regulatory quality of Pakistan indicates negative and insignificant. The reason is that in Pakistan it might be a lack of such policies and their implementation that can enhance the public and private sectors. The findings of Sheikh et al. (2018) also exhibits negative sign while the studies of De Groot et al. (2004), Alvarez et al. (2015) and Soeng and Cuyvers (2018) explore positive signs.

Rule of Law basically addresses the cooperation among institutions and citizens that assist in administrating this cooperation and the power of laws can matter for investment and raise economic activities. Rule of law for exporting countries is statistically significant and positive suggesting that the countries having proper laws of property rights, effective policies, and appropriate imposition of laws against crimes and courts maintains safe law and order condition for the domestic as well as overseas investors that inspires the trade level. The coefficient of rule of law for Pakistan has a negative and significant sign. The negative sign of RL_j entails that the advancement in RL might harm openness. This finding is against the expectations but identical to the findings of Gani and Scrimgeour (2016) and Adedoyin et al. (2020). On the other side, studies by Li and Saamsel (2009), Alvarez et al. (2015) and Sheikh et al. (2018) indicate positive signs.

In developing countries, corruption is responsible for the decline of comparative advantage that depends on labor-intensive activities heavily. In our estimations, the coefficient

of control on corruption for exporting countries is positive and significant depicting that when a country has control of corruption, it possesses sufficient infrastructure so that all the procedures associated with administration, governance as well as trade will be operated effectively and efficiently. Surprisingly, the coefficient of control on corruption for Pakistan shows negative and significant relation with bilateral exports asserting that corruption is a “lubricant” of trade in Pakistan. This reinforces the hypothesis of “greasing the wheel” which contended that corruption promotes trade by enabling the circumvention of difficult regulations. Even the competitors of the hypothesis recognized that the greasing impact of corruption is possible only in such countries that have bad structures of institutions. Hence, the control of corruption in these countries generates friction on trade and interrupts trade. Studies of Meon and Kekat (2004), De Jong and Bogmans (2011), Faruq (2011), and Soeng and Cuyvers (2018) explored positive signs of CC while Aidt (2009), Meon and Weill (2010), Alhassan and Payaslioglu (2019) argued that CC have a negative impact on trade.

Good governance lies at the heart of both the legitimacy and efficiency of mutual decision-making. In our estimations, the coefficient of the World Governance Index of major exporting countries is positive and significant having a value of 0.45. It means that 1% rise in WGI_i can raise the bilateral exports by 0.45%. The coefficients of all the indicators of WGI_i explored the positive results that’s why the average effect is also positive indicating that in general, the better quality of institutions and reduction of transaction costs boost up the bilateral trade, and from a dynamic aspect, the outcome of the institutional quality on trade has “waxed rather than waned” with time. De Groot et al. (2004) also revealed positive signs for governance indicators. Surprisingly, the coefficient of governance of Pakistan reveals negative and significant relation with bilateral exports indicating that 1% rise in governance in Pakistan can reduce bilateral exports by 3.88%. The reason for this negative relationship may be that less developed countries like Pakistan are poor countries and their people do not follow the laws, rules, and regulations. They are accustomed to breaking the rules and following their own ways of working in which they feel comfortable. In such situations, when the institutions start working efficiently and impose various restrictions i.e. taxation, quality of goods, proper packing, weight, and checking on borders as well as hygienic products, they sometimes refuse to follow these restrictions. As the major exporting countries of Pakistan are mostly developed countries and they do not compromise on these regulations hence the exporters might prefer to sell the products in their own country instead of exporting. This might lead to the reduction of bilateral exports.

Governance Effect on Bilateral Imports of Pakistan with Major Importing Countries

The coefficients of GDPs for both Pakistan and major importing countries are positive and significant in all models. This implies that with the rise in GDPs of both countries their purchasing power also increases due to high income, better infrastructure and fewer barriers to trade. Chung et al. (2013) and Tay (2018) also showed positive signs for this relationship. Distance also confirms a negative relationship with bilateral imports in all models supporting the arguments of Tinbergen, (1962); Poyhonen, (1963) and Bergstrand, (1985) “the further the distance between the trading partners countries, the lesser will be the bilateral trade between them”. The coefficients of voice and accountability of both exporting and importing countries are positive and significant but the magnitude of VAC_j is greater than the VAC_i . Their positive signs suggest that the participation of citizens in a democracy, acknowledgment of human rights as well as freedom of the press, and freedom of expression in both Pakistan and trading partner countries can enhance the bilateral imports of Pakistan. Our results are robust to Gani and Scrimgeour (2016) and Alhassan and Payaslioglu (2019).

Political Stability is a barometer of politically derived violence, social unrest, terrorism as well as armed conflicts. In our analysis, the political stability of importing countries depicts a positive and insignificant link with bilateral imports that might be due to the fact that the high political stability and the greater violence in importing countries lead to the rise in bilateral imports of Pakistan. While the coefficient of political stability is negative and insignificant for Pakistan affirming that a 1% rise in PS_j can reduce the bilateral imports by 0.17%. This inverse relationship between bilateral imports and PS_j suggested that the improvement in Pakistan’s political rights can increase their production capacity and hence reduce their reliance on imports. Further, the poor attainment of democratic freedoms in Pakistan may deliver a regressive influence on Pakistan’s bilateral imports.

Table 4. PLS Estimates of Governance and Basic Gravity Model for Importing Countries

Regressors	Dependent Variable: Log(IM _{ij})						
	Disaggregate Analysis						Aggregate Analysis
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C	2.3344	5.1467	0.9072	5.7092	5.5030	-3.0456	-1.5696
	0.0051	0.0001	0.0668	0.0000	0.0000	0.0000	0.0389
LOG(GDP _i)	0.5767	0.8303	0.3534	0.8688	0.8828	0.3954	0.4047
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
LOG(GDP _j)	0.3233	0.1157	0.3360	0.1808	0.1502	0.4162	0.3643
	0.0000	0.0727	0.0000	0.0008	0.0138	0.0000	0.0000
LOG(DIST _{ij})	-0.8768	-1.4215	-0.5845	-1.5393	-1.6028	-0.2336	-0.4518
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
VAC _i	0.4573	--	--	--	--	--	--
	0.0000	--	--	--	--	--	--
VAC _j	0.6529	--	--	--	--	--	--
	0.0146	--	--	--	--	--	--
PS _i	--	0.0883	--	--	--	--	--
	--	0.4677	--	--	--	--	--
PS _j	--	-0.1701	--	--	--	--	--
	--	0.1038	--	--	--	--	--
GE _i	--	--	1.1288	--	--	--	--
	--	--	0.0000	--	--	--	--
GE _j	--	--	-0.5573	--	--	--	--
	--	--	0.0084	--	--	--	--
REG _i	--	--	--	0.2085	--	--	--
	--	--	--	0.0561	--	--	--
REG _j	--	--	--	1.0122	--	--	--
	--	--	--	0.0203	--	--	--
RL _i	--	--	--	--	0.1848	--	--
	--	--	--	--	0.0583	--	--
RL _j	--	--	--	--	-0.3488	--	--
	--	--	--	--	0.5396	--	--
CC _i	--	--	--	--	--	0.5224	--
	--	--	--	--	--	0.0000	--
CC _j	--	--	--	--	--	-0.5893	--
	--	--	--	--	--	0.0021	--
WGI _i	--	--	--	--	--	--	1.9440
	--	--	--	--	--	--	0.0000
WGI _j	--	--	--	--	--	--	-3.0723
	--	--	--	--	--	--	0.0041

The government effectiveness coefficient is positive and highly significant for major importing countries. The reason for this positive relationship is that the countries possess efficient government policies, immense quality of civil and public services that are free from political pressure, proper structure of policies, and their implementation through honest spirit inspire the trade level. While the coefficient of government effectiveness in Pakistan shows

negative and significant relation with bilateral imports elaborating that the credibility of the government, infrastructure, effective bureaucracy, and satisfaction of people with services of the public can enhance the confidence of people in public goods and services and decrease their dependence on foreign goods that reduce the bilateral imports of Pakistan.

Regulatory Quality usually indicates the extent to which the policies of government inhibit or enhance the activity of markets as the regulation of business is a fundamental interdependent policy for trade. In our estimations, the coefficients of regulatory quality for Pakistan and importing countries are positive and significant. These findings may be a reaction to the fact that in the trade context in heterogeneous or differentiated commodities, like services or manufactures, importers take an extensive part of risk in form of non-payment in the transactions of bilateral trade. Under such circumstances, for trade in differentiated goods, the informal institutions, i.e. trust are more fundamental for which the quality might be non-contractible and less visible for courts too. Results are in line with Guiso et al. (2009), Yu et al. (2015), and Alvarez et al (2018). Rule of Law exhibits a positive and significant association with bilateral imports having a value of 0.18 illustrating that if the importing countries are stronger rule-based it will lead to a rise in the bilateral imports of Pakistan. On the other hand, the coefficient of rule of law for Pakistan has a negative and insignificant sign indicating that through the proper judicial system and contract enforcement can strengthen the level of production which can make Pakistan less dependent on imports that's why the bilateral imports of Pakistan reduce by the increase in rule of law.

The coefficient of control on the corruption of importing countries has a highly significant and positive influence on bilateral imports depicting that the low level of trading partners' corruption will raise the imports significantly. The improvement in the corruption severity in trading partner countries will enhance the activities of bilateral imports in a better way. Compare to the activities of exports, the activities of imports look more responsive to the behavior of corruption. While the coefficient of control on corruption for Pakistan is negative and significant. This negative relation might be due to the fact as Pakistan got control on corruption their domestic production increased due to proper management and implementation of laws that enable them to produce goods and services domestically that lead to the reduction of bilateral imports. Briggs (2013) and Saputra (2014) favors for positive relation while Sheikh et al. (2018) favors for negative relation among them.

The governance indicator for importing countries explores a positive and highly significant relationship with bilateral imports with the value of 1.94 arguing that 1% rise in governance can raise the bilateral imports by 1.94%. This might be due to the fact that the better

quality of institutions in importing countries improves bilateral trade and this finding is reinforced when the institutional distance with exporters raises in the favor of importing countries. The findings also support the hypothesis that it is uncomplicated to trade with those trading partners having better institutions. Our findings are also confirmed by Alvarez et al. (2018). On the other hand, the governance of Pakistan explores a negative and significant association with bilateral imports possessing a value of -3.07 showing that 1% rise in governance can reduce bilateral imports by 3.07%. The reason for this negative relation might be that by implementing proper rules and laws, judicial independence, enforcement of the law against organized and violent crime, controlling on corruption, ensuring political stability and regulatory quality, and enhancing government effectiveness, the unequal wealth distribution may reduce and e production level may rise through high domestic and foreign investment which may lead Pakistan towards the self-reliance, as a result, the level of bilateral imports can reduce.

CONCLUSIONS AND POLICY RECOMMENDATIONS

The basic aim of this research is to evaluate the effect of governance and its factors on the bilateral trade flow of Pakistan with its major trading partner countries through the gravity trade model. Panel data of 15 major trading countries of Pakistan over the period 2000-2020 has been used. Models have been estimated through the panel least square estimation technique. The estimations of the effect of governance indicators on bilateral exports show that voice and accountability for both Pakistan and exporting countries have a positive association with bilateral exports and other indicators i.e. political stability, government effectiveness, regulatory quality, rule of law, control on corruption and governance of exporting countries also have a positive relation with bilateral exports exploring that the better quality of institutions of exporting countries reduces the transaction costs that can boost up the bilateral trade. On other hand, these indicators for Pakistan exhibit a negative relationship with bilateral exports showing that the efficient working of the institutions consists of various restrictions i.e. quality of goods, proper packing, and weightage can annoy the traders and they prefer to sell their products in their own country rather exporting, so the level of bilateral exports reduces.

Additionally, political stability, government effectiveness, rule of law, control on corruption and governance index for importing countries indicating a positive relationship with bilateral imports while these indicators for Pakistan have a negative relation with bilateral imports. Conclusively, the positive effect of governance on bilateral exports and imports of partner countries but negative effect on Pakistan's bilateral exports and imports suggesting that

along with the implementation of good governance, there is need in Pakistan to adopt the practices of rule of law, voice and accountability and regulatory quality etc. by the people seriously, as the efficient working of the institutions will be successful if people would follow the rules made by them, and do production and trade according to rule and regulations developed by the institutions.

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