Institutional Quality and Bilateral Trade: The Case of Myanmar

By

May Phyo Thu

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Submitted to

KDI School of Public Policy and Management

In Partial Fulfillment of the Requirements

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Abstract

This study examined the impact of institutional quality on bilateral trade between

Myanmar and the selected trading partners between 2000 and 2020. The random effects model

was used to conduct regression analysis and the required secondary data was collected from

the World Development Indicators and World Governance Indicators. Bilateral trade was

considered as the dependent variables and GDP per capita, distance, sanction, and governance

indicators such as government effectiveness, rule of law, control of corruption, political

stability, regulatory quality and voice and accountability were included as independent

variables. The regression results showed that the institutional quality has statistically

significant positive effects on bilateral trade between 2000 and 2020. However, the results

revealed that the institutional quality of Myanmar during the military rule (2000-2010) has

statistically significant negative effects on bilateral trade. The findings suggest that the

government should make great effort to maintain the political stability within the country as a

priority by learning the lesson from the past and to strengthen the institutional framework

onwards.

Key words: Bilateral trade, Institutional quality, Sanction, Democratic Government

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Chapter I: Introduction

1.1 Background

Trade is one of the most important elements influencing nations' economic progress across the world. It also provides opportunities for consumers and to have access to commodities and services that are not available in their own countries. At the same time, trade increases competition and lowers global costs, which helps consumers by increasing their purchasing power, which results in an increase in consumer surplus. Moreover, it addresses the issues of domestic monopoly by allowing foreign enterprises to compete with domestic companies. Knowing the benefits of trade, Myanmar joined the Greater Mekong Subregion (GMS) in 1992 to promote trade and cross-border investment. Other members of the GMS include China, Thailand, Laos, Cambodia, and Vietnam. As a member in the Association of Southeast Asian Nations (ASEAN), Myanmar could capitalize on its unique geographic benefit as an intersection between South and Southeast Asia, which could open new prospects (Thet, 2018).

However, Myanmar has experienced difficulties in boosting its economy. It was once one of Southeast Asia's richest nations, with abundant natural resources putting it on the fast track to development. In 1948, Myanmar achieved independence from Great Britain and became a democratic country. However, in 1962, there was a military coup called the "1962 Burmese coup d'état". The military government isolated Myanmar from the rest of the world, and the country was governed under the martial law for nearly 50 years. Such political instability within the country highly affected the economic development. Consequently, the EU, U.S and OECD countries enacted sanctions on Myanmar (former Burma) after the second military coup in 1988. The U.S. conducted sanctions on Myanmar through visa bans, restrictions on financial services, prohibition of Burmese imported goods, ceasing of investments in and financial assistance to Burma (Martin, 2012). The purpose of sanctions is

to limit the commercial relationship between the importer country and the target country. Accordingly, Myanmar's export to the United States declined to zero and Myanmar textile businesses significantly suffered from the sanctions. Production also declined under the military government control. In 1987, the United Nation declared Myanmar to be a least developed country, despite considerable economic progress in the Southeast Asian region (Chow, 2007).

After this arduous journey towards democracy for decades, Myanmar was able to achieve achieve its democratic transformation in 2010. In 2012, the U.S. and EU eased their sanctions on Myanmar. After the Democratic government took power, Myanmar has acquired the opportunity to achieve economic development by opening the trade sector, attracting foreign direct investment, and effectively regulating the banking sector and reforming numerous administrative structures in the nation. Numerous economic reforms have been made in the trade sector and other important areas. Following the 2010 election, the democratic administration adopted an open-door policy in order to broaden business prospects (Thet, 2018). Myanmar liberalized trade at the same time, expressing a strong desire for free and fair trade with the world. Myanmar has put bilateral trade policies and international trade policies into effect. And its trade patterns changed dramatically since 2010. Such political and economic changes led researchers to analyze the impact of good governance on bilateral trade activities between Myanmar and its trading partners by comparing the period before the democratic transformation (2000 –2010) and the period after the democratic transformation in 2010 onwards (2011-2020).

1.2 The Significance of Study

Even though there were many opportunities for trade diversification and economic growth for Myanmar since 2010, there has been little academic literature on the institutional quality and bilateral trade of Myanmar. There have been studies that focuses on international

trade competitiveness and FDI and investigates foreign trade and economic growth of Myanmar. Yet, this research paper examines how institutional quality affects Myanmar's bilateral trade activities by analyzing the structure and trends of bilateral export and import in Myanmar and for ten years period centered around the democratic transformation in 2010. This study is significant for it is the first of its kind conducted on the two variables of institutional quality and bilateral trade in the context of Myanmar.

1.3 Contribution of the Study

This study explores the structure and trend of Myanmar Bilateral trade activities and analyze the relationship between bilateral trade and institutional quality of Myanmar. It deals with the Myanmar government policymakers, international donor partners, non-governmental organizations, businessmen, and those involved in the trade cycle, providing an in-depth analysis on the impact of institutional quality on bilateral trade. Moreover, this study suggests that policy makers in Myanmar should improve the stability within the country and, enhance the capacity of institution by proving how governance can promote the bilateral trade, business environment and FDI. Finally, the result of the study may be utilized as the recommendations for the evidence-based policymaking of the policy makers, with the aim to promote further cooperation and bilateral trade between countries.

1.4 The Objectives

The primary purpose of this study is to investigate how institutional quality affects Myanmar's bilateral trade, specifically, to examine how good governance could create better trade among trading partners, to analyze the structure and trends of bilateral trade between Myanmar and its trading partners, and to point out the importance of institutional quality for trade.

1.5 Research Questions

- Q1: Does the institutional quality of Myanmar have positive impact on bilateral trade for the whole studied period (2000-2020)?
- Q2: Does the institutional quality of Myanmar have negative impact on bilateral trade for the sanction period (2000-2010)?
- Q2: How does institutional quality affect the trade performance of Myanmar?

1.6 Hypothesis

- H1: Institutions matter for bilateral trade.
- H2: Good governance encourages bilateral trade among countries.

1.7 The Organization of research

This paper is composed of seven chapters. Chapter I describes the background, significance, contribution, objective, research questions and hypothesis. Chapter II discusses Myanmar's trade policy scenarios. Chapter III presents existing literature on institutional quality, bilateral trade and theoretical framework. Chapter IV discusses the method of data analysis and explanation on variables. Next, the results and findings from data analysis are discussed in Chapter V. Finally, Chapter VI concludes with implications and some policy recommendations.

Chapter II: Myanmar Trade Structure and Economic Development

2.1 Market-oriented Period (1988-2010)

Political forces, particularly economic restrictions, have severely affected Myanmar's trade flow since 1962. Oh & Thant (2016) argue that economic sanctions are the main factor distorting Myanmar's trade. After experiencing the military coup with the motto, "the Burmese way to socialism," the country became totally isolated from the world. In 1988, Myanmar adopted the market-oriented economic system, an open market economy, the Foreign Investment Law, import-substitution policies, export-oriented policies and open-door policy.

However, economic sanctions by the U.S., EU and OECD countries created unfavorable conditions for Myanmar. There were no improvements in the living standard of average people, and income from the export could not contribute to the development of the national economy (Oh & Thant, 2016).

As shown in Table 1, the GDP growth rate increased in the early 1990s and 2000s but decreased in late 2000s. The per capita GDP increased only in 2008. According to ADB (2012), between 2000 and 2010, Myanmar's per capita GDP performance was the lowest in Southeast Asia Countries. With the average annual economic growth rate of only 4.7 %, the lowest in the ASEAN during the period. While the export of natural resources including natural gas, oil and timber increased since 2002, this could lead to deforestation, natural resources scarcity and other environmental risk and challenges in future. On the other hand, trade deficits occurred almost every selected period due to the government's "Import First and Export Later system" (Thet, 2018). Agriculture, forest goods, petroleum products, precious stones and minerals were all monitored by State-owned Enterprises, and the official exchange rate was monopolized by the state sector, leaving no room for the private sector to allocate foreign exchange (Thet, 2018). Such monopoly and instability in the foreign exchange market and economic sanction fluctuated the foreign direct investment during the years of 1988 and 2008. As shown in Table 1, the infant mortality rate increased, but there was a reduction in the Human Development Index.

Table 1: Myanmar's major economic and social indicators for selected years

	1960	1970	1980	1990	2000	2005	2008
GDP growth rate (%)	7.8	5	7.9	2.8	13.7	13.6	3.6
PGDP (\$)	N/A	70	186	68	178	216	479
Exports (\$ millions)	224	132	415	409	1980	3707	6629

Imports (\$ millions)	223	165	785	668	3039	3577	6952
Trade balance (\$ millions)	1	-3.3	-370	-259	-1059	130	-322
Trade/GDP ratio	N/A	N/A	0.19	0.39	0.56	0.61	0.48
Inflation (%)	-16.9	27.9	-0.1	21.9	-1.7	10.7	22.5
Foreign Direct Investment (\$ millions)	N/A	N/A	N/A	280.57	58.15	158.28	205.7
Population (million)	22.2	27.6	33.6	40.8	50.1	55.4	58.8
Life expectancy at birth (years)	44	53	44	51	57	59	60
Infant mortality rate (per 1000)	129	59.8	101	120	107	101	98

Source: WDI and UNDP

Myanmar had a very tough time extending trade and economic relations with the world during the market-oriented period (1988-2010), however, the introduction of open-door policy contributed to some changes and diversity in trade with neighboring countries.

2.2 Democratic Transaction Period (2010-2015)

Myanmar has been implementing a series of economic reforms, both gradual and radical, since 2011, with the goal of speeding up structural changes and broadening economic development. While supporting a free trade policy, the newly democratic transitioning government undertook significant changes in economy, including trade. The government attempted to open the economy more freely and update trade-related legislation by drafting a laws in regards to competition, consumer protection, and comprehensive intellectual property, in order to improve the external sector and accelerate integration into the global economy (Thet, 2018). Myanmar designed the Framework for Economic and Social Reforms (FESR) as a

roadmap to achieve its policy goal of the government in 2012. The FESR focuses on policy goals that will help Myanmar of becoming a developed and democratic country.

The first step was political reform, which began in 2011, aiming to promote national unity and inclusion. In fact, it was the first wave of reforms, that reconciling with political parties and armed ethnic groups, releasing political prisoners, welcoming Myanmar scholars who had been abroad to participate in the country's reforms, and allowing Daw Aung San Suu Kyi's National League for Democracy to register again (Naing, 2013). The government liberalized trade and foreign investments with the aim of integrating more internationally and focused more on the implementation of good and clean governance to become a better public administration.

The government outlined four major goals to promote trade: 1) to support internal and external trade activities for economic development, 2) to improve the commercial efficiency of public and private trading houses, 3) to increase the country's foreign exchange earnings through export, and 4) to encourage cooperative and private entrepreneurs to engage in traderelated activities. Border trade, on the other hand, was institutionalized with the establishment of designated official points of entry, customs, and banking facilities (Thet, 2018).

Table 2 demonstrates that imports have risen over time, and the trade balance has been in deficit since 2010. Although the volume of export rose over time, import climbed in lockstep with export, resulting in a long-term trade deficit. In comparison to previous years, the deficit gap shrank somewhat in 2019.

Table 2: Myanmar Trade Structure (2010-2019)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Exports (in US\$ Mil)	8873.44	8127.87	9053.44	11436.3	11451.9	11431.8	11672.7	13878.8	16694.9	18105.9
Imports (in	4865.89	8571.17	7849.4	12009.1	16231.5	16913.3	15695.7	19253.5	19353.9	18610.9

US\$ Mil)										
Total Trade	13739.3	16699	16902.8	23445.5	27683.3	28345.1	27368.5	33132.2	36048.8	36716.8

Source: WITS

Table 3: Myanmar's Export Structure (2010-2019)

US\$ in Millions

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Consumer goods	61.19	56.97	55.55	56.44	55.29	50.82	45.12	37.54	47.33	39.73
Textiles and Clothing	28.14	25.36	18.06	14.14	7.87	9.3	10.59	9.5	6.14	3.94
Fuels	24.69	21.72	26.67	28.16	42.32	40.2	33.62	24.36	35.91	33.09
Raw materials	17.95	17.81	19.56	16.43	17.21	21.08	27.86	38.18	22.14	11.97
Intermediate goods	17.86	20.94	18.14	21.72	22	21.66	18.97	23.84	30.19	30.76
Vegetable	17.33	15.92	20.75	22.97	24.09	21.4	23.18	25.59	22.63	12.55
Metals	6.21	7.12	6.81	3.67	3.56	2.82	0.94	1.05	0.59	0.6
Animal	5.19	6.32	4.53	4.68	4	3.78	5.82	7.93	6.38	3.63
Stone and Glass	4.59	5.67	2.84	3.67	5.51	9.55	7.23	4.37	14.97	19.48
Capital goods	2.99	4	5.32	4.2	0.16	0.18	0.29	0.24	0.09	0.05
Minerals	0.41	0.18	0.2	0.22	0.21	0.48	0.4	0.33	0.2	0.08
Wood	1.05	1.6	1.7	2.06	2.16	3.63	6.05	22.58	7.46	6.81

Source: WITS

Table 3 shows that consumer goods are the largest export category, followed by textiles and clothing, and fuel. The export of mineral and wood products decreased significantly compared to the previous period. The mineral export decreased sharply in 2010 and 2018, but

slightly increased in 2019. The easing of economic sanction created a favorable condition for Myanmar by improving the industrial sector and increasing the FDI inflows.

Table 4: Myanmar Import Structure (2010-2019)

US\$ in Millions

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Capital goods	4250.9	4618.64	5095.33	4457.74	6284.45	4506.51	3996.6	1798.17	2387.76	1041.21
Consumer goods	7626.38	8333.29	8047.5	6095.13	5231.83	5467.33	3925.1	3044.69	3429.88	1645.76
Intermediate goods	6137.4	5820.65	5270.82	4763.06	4725.72	4587.79	3720.63	2535.45	2426.24	1252.01
Raw materials	595.58	564.64	451.95	317.79	323.12	372.39	247.36	428.08	189.31	41.77
Total import	18610.26	19337.22	18865.6	15633.72	16565.12	14934.02	11889.69	7806.39	8433.19	3980.75

Source: WITS

Due to the creation of Myanmar's industrial sector and the promotion of manufactured goods and exports, as stated in table 4, the level of imports of capital and intermediate goods rose significantly over time.

2.3 Democratic Government Period (2015- 2020)

The National League for Democracy (NLD) won the election held in 2015 and became Myanmar's first civilian government. The new civil government implemented many changes in the domestic and foreign trade and economic sectors. The scale of trade, business activities and foreign direct investment has increased dramatically (see Table 5), owing to the continued economic liberalization efforts and smooth political transition.

Table 5: Foreign Direct Investment, Net Inflows (% of GDP) (2010-2019)

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
FDI Net Flow (% of GDP)	1.749152	4.653556	2.504681	3.875524	3.646894	6.773464	5.334628	7.1551	2.573877	2.173718

Source: World Development Indicator

For better trade performance, the export promotion policy of the democratic public government was developed to explore international markets in order to enhance the export of conventional and final products while utilizing natural and human resources efficiently. The government designed the National Export Strategy with the help of international donor partners. At the same time, according to Myanmar economic outlook by the World Bank (2016), the government made efforts to strengthen the clarity, communication, and credibility of economic policies. The government also expected to reduce pressures on monetary policy for a better fiscal discipline and the expansion of the government securities' market. The government's export policy focused on penetrating the world market through the effective utilization of natural and human resources by producing more value-added items instead of normal export ones.

Moreover, the import policy was developed to import capital goods, construction materials, other essential goods and, sanitary supplies for the wellbeing of the people. In addition, the government promoted export-oriented products and the import of substitute products. In 2016, it became easier to do business in Myanmar, with the removal of many key trade barriers, notably the benefit of the United States' Generalized System of Preferences (GSP) (Thet, 2018).

2.4 Trade structure and Policy Reform

International trade restarted in Myanmar after the 1962 parliamentary system was overthrown. The government created an economic plan that heavily promoted a "outward-looking" growth approach with the help of some enlightened communist experts.

During the Military Regime between 1990 and 2010, the economic system focused on "Market oriented economic system". The goal of trade policy is to liberalize domestic and international trade, as well as to stimulate private sector participation in international trade. As a trading tool, the "import first, export later" approach has been used. During this period, the

EU and the US imposed sanctions on Myanmar. During the 2011-2015 Democratization period, there was progress in the economic system, which transitioned from "the Market oriented economic system" into the "Market economic system" (Thet, 2018). Open-door policy was applied, and many foreign direct investments were invited, promoting trade and export. Commercial tax redacted and exempted for export and income tax which are the income from CMP export. On the other hand, the State trading monopolies were abolished. With the political accurring in Myanmar, the EU and US eased the sanctions by reinstating (the EU) and resuming (the US) the GSP.

From 2015 through 2020, the Democratic Transaction Government used the same, "Market Economic System," and implemented a free trade policy and an export-driven growth plan. Despite exporting raw resources, the government concentrated more on promoting the export of value-added and finished products.

Myanmar became a newcomer to international and bilateral trade after the EU eased the sanctions in 2013, taking advantage of trade preferences provided by the EU under the Everything but Arms (EBA), the reform of EU Rules of Origin, free trade agreements, and those CP-TPP members that grant LDCs Duty-Free Quota-Free (DFQF) (UNCTAD, 2019).

According to the UNCTAD (2019), trade gains caused by the GSP, the cornerstone of Myanmar's export success, are unilateral in terms of market access. In fact, Myanmar's LDC GSP advantages are conditional on Myanmar's LDC designation, and the constraints imposed on unilateral preferences by Preference-Giving Countries. Myanmar's EBA beneficiary status has been examined, and the country is expected to escape the LDC status by 2024. During the last triennial review of the LDCs list in 2018, Myanmar met all three graduation eligibility requirements of GNP per capita, Human Asset Index (HAI), and Economic Vulnerability Index (EVI), according to the Committee for Development Policy (CDP) (EVI). Myanmar will

graduate from the LDC classification within three years, by 2024, at the latest, if deemed suitable at the next review in 2021.

Depending on the circumstances of the preference-giving nation, trade advantages is likely to be phased down over a transitional period or immediately after Myanmar graduates from the LDC classification. Now it is time for Myanmar to take into account the maintenance and improvement of the existing trade performance and to concentrate more on bilateral trade and other regional trade agreements in order to soften the loss of unilateral preferences as a result of graduating from the GSP LDC status in future.

Chapter III: Literature Review

3.1 Reviews on institutional quality and bilateral trade

The objective of this part is to review the findings of previous literature in the contexts of bilateral trade and institutional quality, and to investigate their relationships.

Bilateral trade is the exchange of commodities that facilitate trade and investment. Under the agreement of bilateral trade, two nations decrease or remove tariffs, import quotas, export restrictions, and other trade barriers in order to encourage trade and investment. International trade has promoted the bilateral cooperation and relations between exporters and importers (Lynn, 2015). Institutional quality is one of many factors affecting the bilateral trade performance and economic development. There has been a large amount of research conducted on international trade, foreign trade, bilateral trade, and institutional quality in developed and developing economies for decades. Researchers normally use the gravity model with panel data to analyze the impact of institutional quality on bilateral trade (Saputra, 2019; see also Anderson & Marcouiller, 2002; De Groot, Linders, Rietveld & Subramanian, 2004; Mohlmann, Ederveen, De Groot & Linders, 2010; Sheikh & Chaudhry & Akhtar, 2018; Miniesy, 2004; Yarbrough & Yarbrough, 1992).

According to some research, inadequate institutions cause trade barriers and negative effects on per capita income and trade promotions. Low governance quality raises transaction costs, but proper institutional quality has beneficial influence on bilateral trade flows. Furthermore, institutional variation is a key driver of informal trade barriers, and it can limit trade on its own. Some researchers highlight those cultural differences have no significant effect on total trade. Some researchers discovered that institutions play an important role in international trade as the international business environment involves many governance structures and systems. Further details will be discussed below.

Anderson and Marcouiller (2002) conducted empirical research of insecurity and trading patterns. Using the gravity model, they collected the data of the quality of institutions from the World Economic Forum, bilateral import expenditure from the Direction of Trade Statistics by the IMF and other data of population and GDP the World Bank for the period of 1996. This paper only focused on the problem of resistance against trade, without including the political economic capability and the effect of distance on trade in their model. They found that corruption and imperfect contract enforcement negatively affect international trade and inefficient governance causes trade barriers just like tariffs. For the smooth flow of trade, adequate institutional structure is very important for a country.

Similarly, Saputra (2019) looked at the impact of corruption on bilateral trade flows in both developed and developing countries. With panel data, the author also employed the gravity model. For the years from 1995 to 2016, the research examined 19 industrialized nations and 11 developing countries, with the parameters ranging from national income, distance, foreign direct investment, competitiveness, export, import, to corruption. The study found that low levels of internal corruption have positive influence on bilateral trade. The low degree of corruption in underdeveloped nations has more significantly positive effect than developed countries. The analysis also showed that market size and competitiveness influence bilateral

trade activities. It can be assumed that developing countries have a higher corruption rate than developed countries due to the improper institutional structures and systems.

Meanwhile, De Groot, Linder, and Subramanian (2004) focus on the impact of institutional quality on bilateral trade and governance quality similarities. They used the comprehensive dataset on the quality of governance from the World Bank and indicators from 17 different sources constructed by 15 organizations. Furthermore, GDP, geographical distance, adjacency, main languages and religion were used as independent variables and bilateral export as dependent variables. Like the aforementioned research, gravity model was utilized in their research. Low governance quality raises transaction costs, and institutional quality has a substantial influence on bilateral trade flows, according to the findings. Furthermore, the study found that institutional dissimilarity has impact on bilateral trade performance, particularly in the best-performing nations. This paper vividly highlights the roles of institutional quality on bilateral trade performance.

Ggosh (2011) investigated whether intangible trade obstacles such as institutional and cultural distance have an impact on trade performance. The author used 55 countries' trade data from the United Nations for the year of 2000 in his investigation. He used the same model of previous researchers, the gravity model, with the variables of GDP, GDP per capita, distance, culture, adjacency, links, cultural distance, and institutional distance. The results showed that cultural differences have no effect on total trade while trade with homogeneous goods is negatively affected. Moreover, according to the research, highly differentiated items, the substitution impact between trade and FDI is higher.

Furthermore, Sheikh, Chaudhry, Gul, and Akhtar (2018) investigated the institutional drivers of bilateral trade flows and the influence of homogeneity on Pakistan's relations with ECO nations. They used panel data from UN COMTRADE, the World Bank, Penn World Table, and CEPII1, which were collected from 2003 to 2014. They also use the gravity model

but through panel least squares technique, descriptive statistics, and correlation matrix. Unlike the previously mentioned research papers, this one used eight indicators for institutional quality, the "Composite Governance Indicator" and the "Governance Similarity Index," as well as the Kaufmann et al. (2002) indicators of voice and accountability, political stability, government effectiveness, regulatory quality, rules of law, and corruption control. For the institutional homogeneity effect on the level of trade, the variables of institutional homogeneity and quality were used for the examination. Bilateral trade flows as dependent variable and GDP, distance, common borders, total land area and the eight institutional indicators were utilized in the investigation. According to the analysis, the average impact of institutional quality on bilateral trade is positive and the bilateral trade flows have a positive relationship with the governance similarity. The result highlighted that institutional quality and institutional homogeneity influence bilateral trade flows.

Miniesy (2004), on the other hand, focused on the effects of governance on bilateral trade flows, namely intra-Arab trade. The gravity model and Ordinary Least Squares were used to analyze 186 nations with panel data for the years 1985, 1990, 1995, 1997, and 2000. The six institutional indicators, income inequality, financial development, account restrictions, GDP, population, per capita GDP, distance, free trade agreements, exchange rate, currency union, income growth and convergence, tariff rates and FDI and many other political variables were used in the analysis. The results showed that governance is the most essential and stable element that has a beneficial effect on all trade flows, with the rule of law and corruption control being the most crucial components. This paper used a large body of different variables, unlike the above discussed papers, to test the hypothesis and answer the research questions.

Pollins (1989) investigated the impact of international political contacts on 25 nations' bilateral trade flows from 1960 to 1975. The gravity model was used to test the hypothesis and the analysis showed that political relations of amity and enmity significantly influence the trade

flows. The analysis highlights that nations modify trade connections to meet security and economic welfare goals which should be reflected in a formal political economy of trade.

Alvarez, Barbero, Rodriguez, and Zofio (2018) looked at how national institutional quality influences bilateral sectoral trade flows and if the importance of institutions in trade conditioning has evolved over time. The study was carried out in 186 nations from 1996 to 2012. The sectoral gravity equation was constructed using the new trade theory paradigm. The analysis was conducted using labor competitiveness, sectoral pricing indices, and sectoral gross value added (GVA), employment, distance, adjacency, language, colonial linkages, regional trade agreements, and the institutional quality indicators developed by Kaufmann et al (2010). The findings revealed that the institutional circumstances at the point of destination, as well as the distance between the exporting and importing nations, had a substantial impact on bilateral commerce.

Kuncic (2012) investigated bilateral trade institutional factors in depth, concentrating on issues such as selecting institutional measures (using a new dataset), institutional endogeneity (cleaning the endogenous component), and current gravity trade estimates (controlling for multilateral resistance). For the analysis of the gravity model, data from the World Bank were employed. The findings revealed that nations with similar economic institutions trade more with one another, and while the quality of legal institutions is always helpful to general commerce, it does not, as one might think, determine one's trading partners.

Levchenko (2007) explores the influence of institutional quality on international trade in 177 countries and 389 industries from 1989 to 1998. For both factor endowment and institutional disparities, this study employed the Heckscher-Ohlin paradigm model, which is easily adaptable to international trade scenarios. The researcher applied the Gini coefficient, investment, talent intensity, capital intensity, and raw material intensity, and the findings revealed that institutional inequalities are a significant determinant of trade. Furthermore, as

stated in the study. when two or more separate parties create a production connection, the institutional quality influences the degree of transactional barriers that occur.

All these literatures discussed above explored the relationship between institutional quality and bilateral trade by using the gravity model and proved that institutional quality matters for bilateral trade.

3.2 Theoretical review on the gravity model of trade

In this research, the gravity model of trade is applied to analyze the impact of institutional quality on bilateral trade between Myanmar and its trading partners.

When we look at the history of trade theory, Adam Smith was the first English economist who proposed the absolute advantage theory in international trade activities. In "The Wealth of Nation" (1776), he stated that countries should focus on producing goods with absolute advantage and be involved in international trade for greater advantages (Binh, Duong & Cuong, 2011). However, this theory fails to explain why many countries that no absolute advantage has still benefit from foreign trade. David Ricardo, another economist, answered this question through his comparative advantage theory.

Later, the Hecksher-Ohlin model augmented David Ricardo's simple theory with fundamental factors including capital and, labor, providing insight into the fact that a country will export items whose production heavily relies on abundant factors and import products whose production heavily relies on limited resources. Knowing this basic concept, Levchenko (2007), for from 1989 to 1998, examined the impact of institutional quality on international trade in 177 countries and 389 industries by employing the Heckscher-Ohlin paradigm model.

However, the classical trade theory could not explain the enormous proportion of trade among countries with similar endowments and intra-industrial trade. This led to the rise of new theories which explain global commerce theough the concepts including economies of scale, imperfect competition, and product differentiation, easing the stringent assumptions of classical theory in the process (Binh, Duong & Cuong, 2011).

Recently, many researchers have applied the gravity model of trade, the econometric model in international trade, to examine the puzzling concept of bilateral trade flows. Jan Timber, Dutch economist, applied the gravity model to the analysis of foreign trade flows for the first time. It is notable that the name, "gravity model", is derived from the gravitational force concept. The gravity model's major competitive advantage is its ability to utilize real data to analyze the sensitivity of trade flows for the policy issues we care about.

In general, the gravitational force between two bodies is equal to each of their masses and inversely proportional to the square of their distance (Baier & Standaert, 2020). As a result, bilateral trade flows between two nations are influenced by their economic masses and are inversely proportional to trade costs. The proxies for trade costs are distance, adjacency, common language, colonial links, common currency, island or landlocked, institutions, infrastructures, migration flows, bilateral tariff barriers and so on. The gravity model explains why larger nations trade more than smaller countries, and why trade expenses between trading partners limit trade. In Timbergen's model, trade flow between country A and B, GDP and geographical distance are the variables. According to the literature review, GDP/GNP and distance are the common factors explaining bilateral trade flows using the gravity equation (Miniesy, 2004). Therefore, the basic equation for the gravity model can be generated as follow:

$$X_{ij} = C \frac{Y_i Y_j}{t_{ij}^2}$$

where,

 X_{ij} = trade from i to j

C = constant

 $Y = \text{economic mass} (\sim \text{GDP}, \text{PGDP})$

 $t = \text{trade costs between two countries (} \sim \text{distance, adjacency... policy factors)}$

Based on this concept, this paper investigates the effect of institution quality on bilateral trade by using the gravity model. The gravity framework was chosen because it gives a strong statistical fit for most datasets and can be supplemented by policy variables (Khorana & Zarzoso (2018). Many scholars stated in the literature review that the quality of institutions in both nations has a significant influence in the frequency and intensity of trade costs, while bad institutions impede cross-national trade. Moreover, the studies discussed in the literature review have emphasized that institutional factors do affect the trade and institutions matter for bilateral trade which means countries with good governance could create a good trading environment. By using the gravity model, this paper will study the context of Myanmar with its trading partners to prove the importance of institutional quality for bilateral trade.

After evaluating the findings of previous research, this paper will discuss the methodology with the selection of variables, collection of data and the model specification.

Chapter IV: Methodology

4.1 Data Collection and Selection of Variables

This paper applied panel data for the periods of 2000-2020; 2000 - 2010, before the democratic government and 2011-2020, the period of the democratic government. The analysis was conducted for (30) countries (Appendix 1) and the required secondary data was especially collected from the World Governance Indicators and the World Development Indicators of the World Bank, and the Ministry of Commerce of Myanmar.

Bilateral trade was applied as a dependent variable (outcome variable) to examine the role of good governance in the promotion of bilateral trade in this research. As an independent variable (predictor variable), the institutional quality was used because it is essential for the policy and decision makers to recognize the importance of good governance in order to promote and create an effective international trade activity.

According to the literature review, other factors such as national income, distance, foreign direct investment, competitiveness, language, religion, trade agreements, adjacency, common borders, land areas, landlock and tariff rate are also critical and influence bilateral trade apart from institutional quality. Therefore, some socio-economic variables such as GDP, distance, and dummy variables such as bilateral trade agreements, and economic sanction were considered as control variables in the model.

Since the focus of this research is on the impacts of institutions, we go further into the institutional quality indicators. Voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption, which are developed by Kaufmann et al. (2002), were applied to investigate the institutional quality among selected countries. Each indicator represents a different component of governance excellence. They either represent the political process, the state apparatus's quality and policies, or the government's success. We'll go through each of these indications in turn.

- "Voice and Accountability" refers to citizens' capacity to choose their government and
 hold it accountable for the acts it does. This number considers different aspects of the
 political process as well as judgments of media independence. It reflects whether
 individuals and businesses can avoid government arbitrariness and impose good
 governance when necessary.
- "Political stability" refers to the projected risk of the government being destabilized or toppled by unlawful intervention or excesses of violence against individuals and property. These characteristics are extremely harmful to policy continuity and the economic environment's stability.
- 3. "Government effectiveness" refers to the quality of government contributions. It indicates the bureaucracy's perceived quality and independence, among other things. This demonstrates the government's capacity to design and implement sound policies.

- 4. The term 'Regulatory Quality' refers to the quality of policies that have been executed. It considers the perceived frequency of policies that stifle the market mechanism, as well as excessive regulation of world trade and business development, and therefore accurately represents the transaction costs incurred as a result of government intervention in private trade.
- 5. The term 'Rule of Law' refers to the legal system's quality. It reflects society's perceived achievement in maintaining fair and predictable social and economic standards. It primarily focuses on the legal system's quality and the enforceability of contracts.
- 6. The term "corruption control" refers to the extent to which public-private relations are "lawless" or unjust. It is used in conjunction with regulatory quality and rule of law metrics to show how inadequate governance affects economic interaction. Corruption, like regulatory interference, increases transaction costs by introducing a "third-party" to private transactions. The random and unpredictable character of corruption adds to the expenses of business.

4.2 Model specification

In accordance with current empirical studies on the variables that impact bilateral trade flows, the gravity model is used to investigate the effect of institutional quality on bilateral trade between Myanmar and (30) trading partners from 2000 to 2020. The basic form of this model accepts that trade between countries is proportional to their size and inversely proportional to their distance. The bilateral trade from country i to country j, $BILAT_{ijt}$ are explained by GDP, geographical distance, and some dummies bilateral trade agreements, and sanction period. The basic form of model for a year is specified as follows:

$$X_{ij} = \beta_0 + \beta_1 GDP_i + \beta_2 GDP_j + \beta_3 DIST_{ij} + \beta_4 A_{ij} + \mu_{ij}$$
 (1)

Where GDP_i is the GDP of exporter and GDP_j as importer, DIST is the distance of the two capitals. A_{ij} represents any other factors that prevent or create trade between the two countries and μ_{ij} is the error term.

When we estimate the gravity model of trade with panel data, the model has included time dimension (Khorana & Zarzoso (2018). In line with this concept, the equation (1) is specified with the institutional quality indicators and time dimension as below:

$$\begin{split} LnBILAT_{ijt} &= \beta_0 + \beta_1 lnGDP_{it} + \beta_2 lnGDP_{jt} + \beta_3 lnDist_{ij} + \beta_4 BdT_{ijt} + \beta_5 SANCT_t + \\ &+ \beta_6 GE_{it} + \beta_7 GE_{jt} + \beta_8 PS_{it} + \beta_9 PS_{jt} + \beta_{10} RQ_{it} + \beta_{11} RQ_{jt} + \\ &+ \beta_{12} RL_{it} + \beta_{13} RL_{jt} + \beta_{14} VA_{it} + \beta_{15} VA_{jt} + \beta_{16} CC_{it} + \beta_{17} CC_{jt} + \\ &+ \beta_{18} GEXsanct_{it} + \beta_{19} RQXsanct_{it} + \beta_{20} RLXsanct_{it} + \beta_{21} VAXsanct_{it} + \\ &+ \beta_{22} CCXsanct_{it} + \beta_{23} PSXsanct_{it} + \varepsilon_{ijt} \end{split}$$

Where i and j denote the exporting and importing country, t denotes time, and the variables are defined as follows:

 $BILAT_{ijt}$ is the nominal value of bilateral trade between i and j at time t;

 GDP_i and GDP_j are GDP_s per capita of i and j;

 $DIST_{ij}$ is the bilateral distance between country i and j;

 BdT_{ijt} takes the value of 1 if countries i and j belong to the same border trade agreement;

 $SANCT_t$ is the sanction period (2000-2010) assuming the value of 1 for this period;

GE is the government effectiveness both for Myanmar and the partner country;

PS is the political stability;

RQ is the regulatory quality;

RL is the rule of law;

VA is the voice and accountability;

CC is the control of corruption;

 $GEXsanct_{it}$ is the government effectiveness of Myanmar during the sanction period (2000-2010);

 $PSXsanct_{it}$ is the political stability of Myanmar during the sanction period (2000-2010); $RQXsanct_{it}$ is the regulatory quality of Myanmar during the sanction period (2000-2010); $RLXsanct_{it}$ is the rule of law of Myanmar during the sanction period (2000-2010); $VCXsanct_{it}$ is the voice and accountability of Myanmar during the sanction period (2000-2010);

 $CCXsanct_{it}$ is the control of corruption in Myanmar during the sanction period (2000-2010). \mathcal{E} is the error term.

Institutional quality indicators measure the level of subjective institutional quality of selected countries. The coefficients are expected to be positive as the better institution quality, the more productive bilateral trade will be. The data is collected from the World Governance Indicator database.

GDP per capita represents the consumption and productivity of the exporting country and trading partners which determines the trade flows among them. It also represents that the market size of the country and the coefficient of GDP is expected to have the positive sign as the trade flows increase with the increased GDP per capita of the countries. The data is from the World Development Indicator database.

Distance refers to the transportation cost of bilateral trade. Typically, the larger the distance between the two countries, the more transportation cost will be. The coefficient of distance is expected to turn out with negative signs. The figures are obtained from the Great Circle Distance between capital cities.

The dummy sanction refers to the period of economic sanction. Myanmar was under economic sanction by the U.S., EU and OCED countries for the period of 2000 to 2010 and it has had high effects on the trade and economic development of Myanmar. It is one of the

prominent variables for this analysis.

Chapter V: Finding and discussion

After explaining the data collection, selection of variables in the analysis and model specification, this chapter discusses the findings of the descriptive statistics and regression analysis.

5.1 Descriptive Statistics

The table below provides the mean, standard deviation, minimum, and maximum values of government effectiveness, political stability, regulatory quality, rule of law, voice and accountability, control of corruption in Myanmar and its thirty trading partners during the studied period.

Table 6: Descriptive Statistics

	(1)	(2)	(3)	(4)	(5)
VARIABLES	N	mean	sd	min	max
GDP per capita of Myanmar (ln)	630	6.331	0.930	4.506	7.298
GDP per capita of Partners (ln)	628	9.588	1.476	5.966	11.42
Distance (ln)	630	8.499	0.873	6.354	9.691
Border Trade Agreement	630	0.167	0.373	0	1
Institutional quality (Myanmar)					
Governance effectiveness for Myanmar	570	-1.364	0.201	-1.618	-0.976
Political Stability for Myanmar	570	0.277	0.970	-2.810	1.760
Regulatory Quality for Myanmar	570	-1.734	0.568	-2.344	-0.744
Voice and Accountability for Myanmar	570	-1.695	0.528	-2.233	-0.797
Rule of Law for Myanmar	570	-1.389	0.265	-1.740	-0.887
Control of Corruption of Myanmar	570	-1.230	0.418	-1.673	-0.565
Institutional quality (partners)					
Government effective of Partners	570	0.913	1.019	-2.085	2.437
Political Stability for Partners	570	-1.136	0.201	-1.674	-0.805
Regulatory Quality for Partners	570	0.791	1.070	-2.530	2.261
Rule of Law for Partners	570	0.783	1.035	-1.715	2.096
Voice and Accountability for Partners	570	0.473	1.082	-2.313	1.801
Control of Corruption of Partners	570	0.813	1.185	-1.589	2.470
Sanction Period (2000-2010)					
Sanction	630	0.524	0.500	0	1
Government effectiveness during sanction period	570	-0.885	0.841	-1.752	0
Regulatory Quality during sanction period	570	-1.143	1.088	-2.344	0
Rule of Law during sanction period	570	-0.843	0.804	-1.740	0

Voice and Accountability during sanction period	570	-1.122	1.067	-2.233	0
Control of Corruption during sanction period	570	-0.821	0.785	-1.673	0
Political Stability during sanction period	570	0.153	0.735	-2.676	1.760

Source: Author's calculation

Table 6 presents the summary of data used in this study. The focus of this research is on the governance indicators. Note that the indictor values range from -2.5 and +2.5. Values near -2.5 indicates bad governance while values close to 2.5 represent excellent institutional quality. As we can see, the governance indicators of Myanmar range between -1 and 0. According to the data, the average institutional quality of the partner countries is better than Myanmar.

As Myanmar was under sanctions during the half of the studied period, between 2000 and 2010, the mean value of the institutional quality during this sanction period is worth highlighting because I assume that the sanction and the institutional quality during the military government ruling period didn't contribute to the bilateral trade development of Myanmar. Therefore, the 'economic sanction dummy' is included in the analysis and as we can see in the table, during this sanction period, the mean values do not change significantly, still ranging between -1 and 0. After reviewing the trend of institutional quality indicators, the paper conducts a regression analysis to better understand on the impact of governance on bilateral trade.

5.2 Result of the regression analysis

Prior to performing the regression, it is important to carry out the Hausman test to make a good choice between fixed effect and random effect models. It turns out that the random effects model is the preferable ones, as indicated by the Hausman test results in Figure 1. Therefore, It makes sense to leave partner dummies out of the regression.

Fig 1: Hausman test result

	Coeffi	cients ——		
	(b) fixed1	(B)	(b-B) Difference	<pre>sqrt(diag(V_b-V_B)) Std. err.</pre>
	Tixedi	random1 	Difference 	Sta. err.
reg_m	1.680296	1.675273	.0050225	.017673
reg_p	6311026	5727702	0583324	.2317954
pol_m	0865029	1132641	.0267611	.0514478
pol_p	16807	1726916	.0046216	.0182281
sanct	-2.109886	-2.071266	0386199	.0999191
regxsanct	-1.202272	-1.183716	0185554	.0462342

b = Consistent under H0 and Ha; obtained from xtreg.
B = Inconsistent under Ha, efficient under H0; obtained from xtreg.

Test of HO: Difference in coefficients not systematic

$$chi2(6) = (b-B)'[(V_b-V_B)^{-1}](b-B)$$

= 0.44
Prob > chi2 = 0.9984

After testing the preferable model, the correlations of variables were tested in the STATA software. The result shows that the governance variables are highly correlated with each other. This brings our attention to the "multicollinearity" problem in the regression which can cause the estimated coefficients not to be largely insignificant. Thus, instead of including many governance variables in one regression, the regressions are conducted separately. As my interest is to point out the impact of institutional quality of Myanmar on the bilateral trade during the sanction period, it mainly examines the coefficients of governance variables of Myanmar, comparing the whole studied period and sanction period.

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¹ In this section, I will include only the table of the regression for the government effectiveness variable while the results of the rest selected variables are described at the appendix section.

Table 7: Regression Analysis

	(1)
VARIABLES	Bilateral Trade
Regulatory quality of Myanmar	1.6753***
	(0.1436)
Regulatory quality of Partner	-0.5728**
	(0.2646)
Political stability of Myanmar	-0.1133
	(0.1720)
Political stability of Partner	-0.1727
	(0.2538)
Sanction period	-2.0713
	(1.4216)
Regulatory quality during sanction period	-1.1837*
	(0.6583)
Constant	6.3250***
	(0.5652)
Observations	570
Number of id	30
Country RE	YES
Year RE	YES

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Source: Author's calculation

As we can see in Table 7, the result of the regression for the regulatory quality variable shows that the regulatory quality of Myanmar during the studied period positively affected the bilateral trade with the significance level of 1% from 2000 to 2020. However, the coefficient of regulatory quality during the sanction period is negatively significant with 10% level. The findings indicate that a 1% increase in regulatory quality increases the bilateral trade by 1.7%. The findings show that the regulatory quality of Myanmar has improved under the democratic government period.

The government effectiveness of Myanmar (see Appendix 3) has positively significant impact on the bilateral trade by about 3.4% with the significance level of 1% during the studied period. Within the half of the studied period between 2000 and 2010, Myanmar was imposed with economic sanctions by the West. The government effectiveness of Myanmar during this

sanction period negatively affected bilateral trade with the significance level of 1%. It can be implied that 1% increase in government effectiveness increases bilateral trade by 3.4%. The government effectiveness of Myanmar has improved since 2010.

The regression result of the rule of law (see Appendix 4) shows that if rule of law of Myanmar increases by 1%, the bilateral trade will be increased by 4% with the significance level 1%. However, during the sanction period, rule of law negatively affected on the bilateral trade by 5.4% with 1% significant level. Therefore, it can be deducted that the quality of rule of law in Myanmar has also improved since 2010.

The regression of control of corruption (see Appendix 5) highlights that if the control of corruption increases by 1%, the bilateral trade of Myanmar will be increased by 2.2% with the significance level 1%. However, the control of corruption during the sanction period has negative impact on bilateral trade by 1.8% with 1% significant level. From the result, we can imply that the democratic government has accelerated the control of corruption within the country between 2010 and 2020.

In addition, the regression result of voice and accountability indicator (see Appendix 6) shows that 1% increase in voice and accountability increases the bilateral trade by 2% with the significance level 1%. On the other hand, voice and accountability's coefficient during the sanction period shows the negative sign by 2.4 % with the significance level 5%...

Unlike the previous results of governance indicators, the regression result of the political stability (see Appendix 7) in Myanmar decreases bilateral trade by 0.3% with the significance level 5% between 2000 and 2020. However, during the sanction period, the result shows that 1% increases in political stability promotes bilateral trade by 0.1% but insignificantly. It can be assumed that there may be other factors that influence the impact of the political stability on bilateral trade of Myanmar.

After reviewing the results of all the institutional quality indicators, we can conclude that the institutional quality of Myanmar improved during democratic rule, compared to the period of military government rule. Moreover, the institutional quality of Myanmar has positive impact on bilateral trade throughout the selected period. However, according to the Hausman test result, null hypothesis cannot be rejected.

5.3 Discussion

This research explores the impact of institutional quality on bilateral trade between Myanmar and the selected thirty countries by using the gravity model for the period of 2000-2010. A large amount of previous literature claim that the more efficient institutional quality is, the more productive bilateral trade will be. They also argue that weak and unstable institution negatively damage the trade performance, limits the trade creation and diversification, and discourages the private sector, firms, and enterprises' development.

The descriptive analysis shows that all institutional quality indicators except political stability had positive impact on bilateral trade during the whole selected period (2000-2020) in Myanmar. But the mean value of indicators is between -1 and 0 compared to the measure range of -2.5 and +2.5, indicating that the overall institutional quality of Myanmar is too weak. On the other hand, the mean value of institutional quality of partner countries is good and encourage the bilateral trade because overall mean value of indicators is mostly between 0 and 1, and the maximum range is +2.4. The results of the regression analysis show that the institutional quality has significant positive impact on and increases bilateral trade. However, the result of the Hausman test indicates that we cannot reject the null hypothesis.

To obtain a more specific impact result of institutional quality on bilateral trade, the selected period was controlled by the economic sanction dummy because from 2000 to 2010 is

the period governed by the military with the economic sanction, and from 2011 to 2020 is the period of democratic government.

With the economic sanction dummy (1 == 2000-2010; 0 == 2010-2020) included, in the analysis, the results of the regression show that the institutional quality of Myanmar negatively affected bilateral trade during the sanction period. Still, the mean value of the indicators remains the same between -1 and 0. However, the coefficient of political stability is significantly negative between 2000 and 2020 whereas it is insignificantly positive during the sanction period.

In that case, how does the institutional quality affect the bilateral trade of Myanmar? This question is answered by examining the periods before (2000-2010) and after (2011-2020) the democratic transition.

5.3.1 During 2000-2010

Since the mid-1990s, Myanmar's economy encountered various challenges in regards of financial problems, balance of payments barriers, lack of energy and the drastically reduction of foreign direct investment (Than, 2001). This situation continued for many more years, which is not helpful for trade activities. Most scholars agree that Myanmar's military government failed to consider the country's growth potential due to the lack of continuous and inclusive economic reforms.

During the period of 2000-2010, the ruling military government pursued an agriculture-based economic strategy and market-oriented economic system to improve socioeconomic conditions of the country, rejecting the assertions of Western countries and advocates for democracy. Despite the sanctions imposed by the Western governments, Myanmar was able to improve substantial economic growth and its foreign relations in trade sector with the ASEAN Community. It could be suggested that these sanctions encouraged Myanmar to have more

trade activities and closer relationships with China, Russia and other neighboring countries in Southeast Asia. China, Thailand and India became the three greatest trading partners for Myanmar, without imposing any sanctions (Andreasson, 2008). Myanmar's trade relation with the U.S used to be rather active before the sanctions but after the sanctions, the imports from U.S absolutely dropped. Alternatively, the military government made more effort on continuing trade with neighboring countries through trade diversion during the economic sanction period (2000-2010). Trade activities were not reduced by the economic sanction of Western countries and the sanction just encouraged more trade activities with neighboring countries. The military government could diversely trade with neighboring countries apart from the Western countries.

Affecting the government through sanctions was totally difficult because the West was not the largest source for the production and trade for Myanmar at that time. Sometimes, sanctions are less effective when the more corrupt the target government is, and repressive governments, such as Myanmar's, neglect the country's poor and suffering people. The military government remained self-sufficient and independent from the outside world because Myanmar's natural resources are large enough to meet the needs of its (Andreasson, 2008). The leaders made money through the rent seeking activities and corruption rather than production and services.

The military government prioritizes its security more than anything, which ends up damaging the country's economy and society, leading political instability over many years. According to Hendrix & Noland (2015), the dominance of State Economic Enterprises (SEEs) and politically affiliated enterprises in the financial sector and economy has created many barriers against trade activities and fair competition. They also argue that the integration of SEEs into the state budget from the State Fund Account (SFA) absolutely worsened Myanmar's private sector development and the encouragement of more trade activities. Historically,

Myanmar needed urgent reform on institutions. Yet, the military government made the institutional quality of Myanmar poor. For example, the senior positions in line ministries were appointed by generals and retired military officers. The military government persistently caused the higher centralized and top-down form of decision-making and policy implementation, the propagation of ministerial appointments and the standardization of background education (Hendrix & Noland, 2015).

During the military governing period from 1962-2000, trade agreements were made between Myanmar and other eleven countries from Asia (see Appendix 2), but the enforceability of these agreements was quite inactive. Moreover, border trade agreements and Memorandums of Understanding were also made between Myanmar and some of its trading partners during this period, which were encouraged by forming the Joint Trade Commission, Border Trade Committee and Joint Border Trade Committee between Myanmar and these countries. However, the fruits of these meetings and agreements are quite invisible and ineffective. Some agreements and contracts are no more compatible with the future exchange rate, market trend and economic policy. Due to the sanction, Myanmar could not extend its foreign trade with the rest of the world except Asia.

Another significant point is that throughout the military rule (2000-2010), the citizens never had an opportunity to choose their central government and local governments. Media freedom rights were totally lost at that time. Citizens could not freely express their preferences, rights, and make demands to the government and consequently, the country could enjoy very limited development outcomes. The Tatmadaw (the military's) incursion into the powers of the state steadily altered and undermined government institutions throughout the country's first prolonged period of military control (1962-2000) (Mangan & Egreteau, 2018). In addition to government failure, Myanmar has repeatedly depleted the social sectors of resources, resulting in worsening human development results. The health-care infrastructure is still in shambles,

with a scarcity of qualified personnel. All these unfavorable situations made the institution less effective on trade activities of Myanmar between 2000 and 2010.

5.3.2 During 2011-2020

After the transaction to the democratic government in 2010, during the democratic transition period from 2011-2020, the government has made many intensive reforms in various sectors. The government has conducted a large number of regulatory and institutional reforms for the openness of the country's economy, trade and its development. The government report of trade policy review on Myanmar by the World Trade Organization (WTO, 2020) stated that Myanmar has eased many restrictions on investment, liberalized trade in goods and services, integrated and engaged at the multilateral level with more diversification, modernization, facilitation and sustainable development. The 2020 Trade Policy Review reported by the Secretariat stated that the import and export licensing regimes reduce trade barriers by moving the positive list to negative list. The import licensing was waived for 1,900 tariff lines, and export licensing was waived for 983 tariff lines.

Moreover, the revised Myanmar Companies Law (2017), the Arbitration Law (2016) and the Insolvency Law (2020) reflect the modernized regulatory framework for company productivity and the improvement of business sustainability. The democratic government designed the Myanmar Sustainable Development Plan (MSDP) (2018-2030) based on the UN's Sustainable Development Goals for "a more prosperous, peaceful and democratic Myanmar" (WTO, 2020, p-4). Also, during the pandemic period, the government designed the COVID-19 Economic Relief Plan (CERP) to remedy the COVID-19 outbreak impact on the economy.

At the meanwhile, the government established special economic zones (SEZs) to promote manufacturing sectors, and small and medium enterprises development by enacting the Special Economic Zone Law in 2015 with the aims to attract the foreign investment, provide an enabling business environment and encourage the competitiveness among enterprises.

On the other hand, the government has promoted the transparency and accountability in all government agencies, conducted tax reforms by enacting the Specific Goods Tax Law (2016), the Income Tax Law (2016) and the Tax Administration Law (2019), reformed the investment regime, competition regime, and enacted specific laws for banking services, adopting advanced technology services, intellectual property rights during this democratic transition period. Such regulatory and institutional reforms significantly promote the trade and investment of Myanmar.

Additionally, the Anti-Corruption Commission was formed under the 2013 Anti-Corruption Law in 2014 and has taken actions on the corruption cases to control the corruption effectively. To reduce the internal conflict and maintain the political stability within the country, the government made the Nationwide Ceasefire Agreement with the ethnic armed groups in 2015 for better peace building and national dialogue.

At the 2015 multi-party election in Myanmar, the citizens could select their government and the people selected government governed the country for 2016-2020. According to the World Bank's Press Freedom Index, for the years 2010 through 2020, Myanmar achieved an average annual growth rate of 1.76 percent.

Such institutional reforms have created significant progress on the whole business environment. According to WTO (2020), Myanmar's "starting a business" category in the World Bank Doing Business Ranking improved from 189 in 2014, 152 in 2018 and up to 70 in 2019 significantly, and Myanmar's trade has risen from approximately 42 percent of GDP in 2013/14 to almost 50 percent in 2018/19 (See Fig 1, 2 and 3). Moreover, the foreign direct investment (FDI) had increased from 1.7% in 2010, and 6.7% in 2015 to 7.2% in 2017 (See

Fig 4). These improvements reflect that good institutional quality creates positive development in various sectors.

Therefore, the findings shows that the institutional quality has positive effect on bilateral trade throughout the studied period, except the political stability indicators which shows the negative sign.

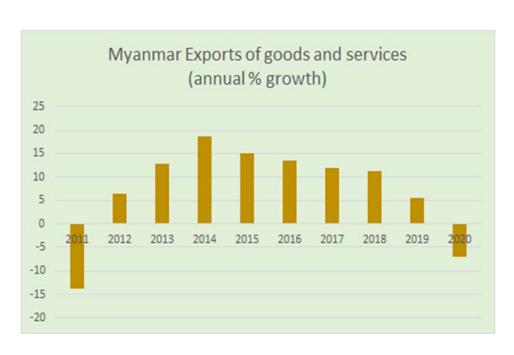
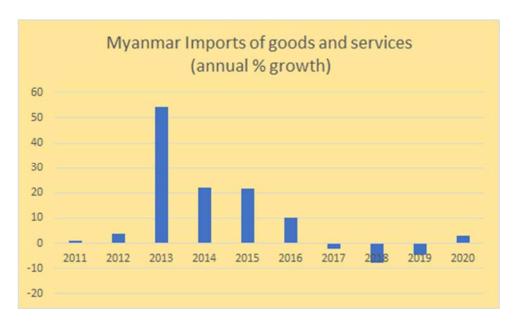


Fig 2: Myanmar exports of goods and services (2011-2020)

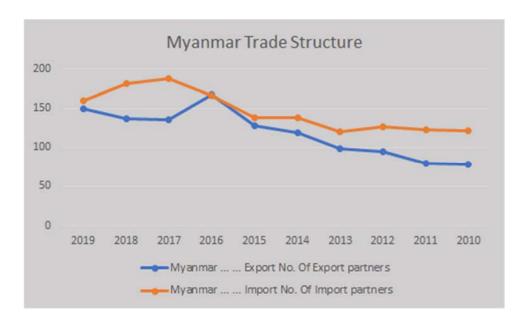
Source: World Bank

Fig 3: Myanmar imports of goods and services (2011-2020)



Source: World Bank

Fig 4: Myanmar trade structure (2011-2019)



Source: World Integrated Trade Solution

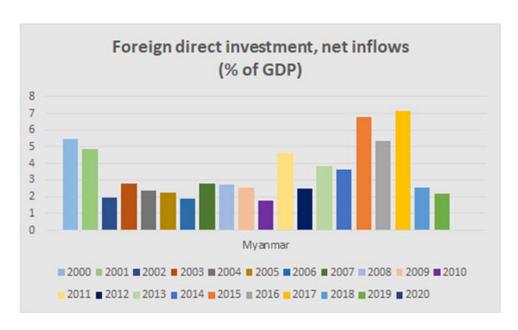


Fig 5: Foreign direct investment, net inflows (% of GDP) (2011-2019)

Source: World Bank

Chapter VI: Conclusion and Recommendation

This research investigates the impact of institutional quality on bilateral trade in the context of Myanmar and its (30) trading partners for a 20-year period (2000-2020).

For the sanction period (2000-2010), the results of the regression analysis provide that political stability has a positive insignificant impact on bilateral trade. However, the rest of the governance indicators are statistically negatively significant for bilateral trade. Overall, the mean value ranges between -1 and 0, reflecting that the institutional quality in Myanmar has negative impact on bilateral trade during the military governing period.

For the whole studied period (2000-2010), the results of the regression analysis provide that all institutional quality indicators except political stability have statistically significantly impact on bilateral trade. However, the mean value is still between -1 and 0 compared to the measured value of -2.5 and +2.5. Overall, we can say that the institutional quality of Myanmar between 2000 and 2020 is bad but had a statistically significantly positive affect on bilateral

trade. During the democratic rule (2011-2020), the institutional quality expanded not only trade structure but also the foreign direct investment and doing-business situation of Myanmar. However, according to the Hausman test result, null hypotheses are not rejected.

Myanmar had been governed by the military, being isolated from the rest of the world, for more than 50 years and had suffered economic sanction by the U.S., EU and other OECD countries for many years. Consequently, the political instability and weak institution before 2010 still had influence on the democratic period. Therefore, the government should address the "instability" within the country as a priority.

Moreover, it can be implied from the findings that, among the institutional quality indicators, political stability is very important for trade and economic development of Myanmar. The better political stability, the more increase in bilateral trade. Therefore, the government should make great effort to maintain political stability within the country, learning the lesson from the past. Moreover, the mean value of the institutional quality indicators is too low compared to the measured value throughout the studied period. It reflects that the institutional quality of Myanmar is still weak. Thus, the government should keep reforming the institution and make it strong and stable onwards.

The stronger Myanmar's and trading countries' institutional frameworks are, the more bilateral trade would grow. Low institutional quality raises transaction costs for exchanging goods and services, resulting in lower trade. As a result, industrialized nations with strong and effective institutional mechanisms trade more, whereas developing countries with a low-quality and inefficient institutional framework trade less. The most important and constant component that has a positive impact on all trade flows is governance, with political stability, rule of law and corruption control being the most important components.

This study has a limitation. Among the institutional quality indicators, the coefficient of political stability was found to be statistically significant negative in relation to the bilateral

trade. Due to time limitation, this research didn't address this issue and its potential causes.

Such limitation opens door for further research.

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APPENDIX 1: List of Countries

- 1. Australia
- 2. Belgium
- 3. Bangladesh
- 4. Brazil
- 5. Canada
- 6. China
- 7. Denmark
- 8. France
- 9. Hong Kong SAR, China
- 10. Indonesia
- 11. India
- 12. Ireland
- 13. Italy
- 14. Japan
- 15. Korea, Rep.
- 16. Malaysia
- 17. Netherlands
- 18. New Zealand
- 19. Pakistan
- 20. Philippines
- 21. Poland
- 22. Singapore
- 23. Spain
- 24. Sweden
- 25. Switzerland
- 26. Thailand
- 27. United Arab Emirates
- 28. United Kingdom
- 29. United States
- 30. Vietnam

APPENDIX 2: List of Trade agreements

No.	Countries	Dates
1.	Myanmar – Sri Lanka	7-11-1963
2.	Myanmar – South Korea	30-9-1967
3.	Myanmar – India	27-5-1970
4.	Myanmar – China	19-11-1971
5.	Myanmar – Bangladesh	3-8-1973
6.	Myanmar – Pakistan	18-5-1976
7.	Myanmar – Thailand	12-4-1989
8.	Myanmar – Viet Nam	13-5-1994
9.	Myanmar – Loas	8-5-1995
10.	Myanmar – Philippine	15-10-1997
11.	Myanmar – Malaysia	9-6-1998

Source: Ministry of Commerce, Myanmar

APPENDIX 3: Regression Analysis for Government Effectiveness

	(1)
VARIABLES	Bilateral Trade
govef_m	3.3585***
	(0.3238)
govef_p	0.0940
	(0.2495)
pol_m	-0.3043*
	(0.1785)
pol_p	-0.5595**
	(0.2602)
sanct	-4.8575***
	(0.8773)
govefxsanct	-3.0701***
	(0.6158)
Constant	7.5388***
	(0.6743)
Observations	570
Number of id	30
Country RE	YES
Year RE	YES

APPENDIX 4: Regression Analysis for Rule of Law

(1)
Bilateral Trade
4.0091***
(0.3827)
-1.3168***
(0.2954)
0.0917
(0.1816)
-0.8414***
(0.2569)
-8.0688***
(1.1538)
-5.4459***
(0.7635)
8.6683***
(0.6875)
570
30
YES
YES

APPENDIX 5: Regression Analysis for Control of Corruption

	(1)
VARIABLES	Bilateral Trade
corr_m	2.2105***
_	(0.2187)
corr_p	-0.1759
	(0.2385)
pol_m	-0.2451
	(0.1787)
pol_p	-0.3641
	(0.2797)
sanct	-2.3014**
	(1.0428)
corrXsanct	-1.8012***
	(0.6813)
Constant	5.6419***
	(0.5564)
Observations	570
Number of id	30
Country RE	YES
Year RE	YES

APPENDIX 6: Regression Analysis for Voice and Accountability

	(1)
VARIABLES	Bilateral Trade
voice_m	2.0400***
	(0.1840)
voice_p	-0.2791
	(0.2501)
pol_m	-0.1926
	(0.1672)
pol_p	-0.5062
	(0.3115)
sanct	-4.4533*
	(2.4492)
voiceXsanct	-2.4851**
	(1.1488)
Constant	6.0163***
	(0.5527)
01	550
Observations	570
Number of id	30
Country RE	YES
Year RE	YES

APPENDIX 7: Regression Analysis for Political Stability

	(1)
VARIABLES	Bilateral Trade
pol_m	-0.3879**
	(0.1906)
pol_p	-0.5432**
	(0.2631)
o.pol_m	-
o.pol_p	-
sanct	-1.0717***
	(0.1073)
polXsanct	0.1013
	(0.1071)
Constant	3.4324***
	(0.4768)
Observations	570
Number of id	30
Country RE	YES
Year RE	YES