Master Thesis

A Dissertation on “Trade effectiveness of clothing and textile industries of Bangladesh with different partner countries: A time series analysis”

2023

The Graduate School of Hansung University

Major in International Market Analysis

Dept. of International Trade and Economics

Miraj Sheikh MD

Master Thesis
Advisor Professor Jaewhak Roh

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– 방글라데시 의류 수출에 대한 파트너 국가와 무역 효과 –

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Submit the above thesis as a master’s thesis

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Approved Miraj Sheikh MD Master Thesis in International Trade and Economics

December 2022

Judge Chair 김정렬 (Sign)

Judge 이동환 (Sign)

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Abstract

A Dissertation on “Trade effectiveness of clothing and textile industries of Bangladesh with different partner countries: A time series analysis”

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Since 1978, Bangladesh has become a significant player in the textile and clothing industry. Approximately 85% of Bangladesh's entire export revenue comes from textiles and clothing. 76% of which comes from the garment industry, which mostly produces knit and woven shirts, tops, pants, skirts, trousers, sweaters, sportswear and numerous other casual and fashion goods. Currently, the sector employs around 1.5 million people, the majority of whom are women from disadvantaged social groups. The workforce includes operatives, assistants, cutting masters, finishers, etc., is crucial to the apparel sector. Bangladesh is blessed with a large, inexpensive labour supply that can be quickly trained and transformed into a skilled or semi-skilled workforce. One benefit of having such a category is that Bangladesh will benefit from it for a long

time in terms of international garment trade. We must implement technological advancements and a suitable working environment in the nation's textile and apparel sector in order to meet the challenges of the global community. I attempted to demonstrate the potential and future of the textile and clothing business in Bangladesh in my report.

Keyword: Textile and clothing sector, trade effectiveness, trade performance and export performance

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Chapter 1 Introduction

1.1 Research background

This section of such economy of Bangladesh is expanding quickly and it provides a unique competitive advantage that enables successful growth into additional strategic markets. The textile and apparel industry which includes everything from twisting to sewing and main street trends is Bangladesh's largest export-generating industry. In Bangladesh's economy, the Ready-Made Clothing sector holds a special place and it is Bangladesh's biggest export sector and has shown incredible growth over the past 25 years. The sector is important for creating jobs and giving the poor people a source of income. The industry employs close to 4 million people directly and far more than 12 million people indirectly (Hasan et al., 2016). The number of production units increased from 200 to 6000 over the past 25 years.

Bangladesh is a nation with a surplus of manpower and it began the industrialisation process by concentrating on cheap labour goods like clothing and textiles. Bangladesh should be able to show that it has a comparative benefit in this industry by given that apparel requires more labour than textile materials where Bangladesh's global market has undergone significant liberalisation over the past eight to ten years as it transitioned from an expensive protective strategy to one that is increasingly export-friendly. Bangladesh has prospects thanks to the Uruguay Agreement which liberalizes textile and apparel exports over a 10 years transition phase. Unfortunately, a number of variables cause ambiguity and pose difficulties for Bangladesh (Joarder et al., 2019):

commercial divergence brought about by trade and investment thing or activity where unique trade ties between trade activities and some non-member nations, protective measures and strict "codes of source" imposed by industrialized nations.

Bangladesh's major export industry is textiles and apparel where for more than 15 years; Bangladesh's garment industry has been able to maintain a momentum of strong growth. Around 85% of Bangladesh's exporting revenues come from clothing and textile sales with garment exports seeing a dramatic increase from 0.2% in 1990 to around 74.8% in terms of the period between 2010 and 2020. At 12%, the real rate of growth of ready-made garment exports was roughly three times faster compared to the GDP during the same timeframe. This has to be regarded as a remarkable record through any standard. Currently, the garment industry contributes around a quarter of productivity improvement and a third of textile sector jobs and nearly a fifth of the nation's average expenditure (Saxena, 2020).

The 2800 RMG industries employ approximately about 1.8 million people which have given benefits to society in the form of an upturn in business growth in industries such as banking, healthcare, public transit, property investment, hotels and tourism as well as containers and reprocessing, consumer products and energy networks. According to a rough calculation, the industry contributes approximately around $2.0 billion in value to the domestic economy. For instance, 80% of clothing items or around $0.5 billion were produced domestically. Additionally, the industry has been crucial to the nation's economic growth (Rahman et al., 2019). Despite the quota's termination in 2004 and it kept showing solid performance, competitive strength, and just as importantly social commitment. RMG's contribution to the economy to Bangladesh is

well-known, respected and appreciated.

1.2 Research problem

In order to reach this goal of becoming an upper-middle-income nation by 2031, Bangladesh must maintain robust export growth over the long term, according to the eighth 5 years Plan. The Bangladeshi economy may face certain difficulties after leaving the LDC classification, especially in the export industry. Bangladesh would lose access to a variety of economic favours and rights that it presently enjoys in its main export markets upon retirement as an LDC increasing the likelihood that it will lose a sizeable portion of its exports in the years having graduated. Bangladesh would consequently have to develop a suitable strategy to address these issues throughout the post-graduation era. Given this context, this paper outlines key aspects of present exports and pinpoints a possible source of exporting risk to aid in the creation of policy frameworks for long-term economic growth.

The sensitivity of a country's trade performance and eventually its capacity to expand economically may result from changes in the economy coming from its global exports because the export of such an industry relies heavily on external consumption. The level of export business focus determines how this outside disruption affects the nation. A restricted exporting market and exporting portfolio increase a country's economic vulnerability to outside disruptions (Haider, 2017). Therefore, an economic model should seek strategies to vary exports in order to increase adaptability to external disturbances and to attain a higher sustained economic growth rate. Differentiation helps to stabilize export revenues and local output which helps governments protect themselves

against negative terms of trade disruptions.

For comparable nations, with the exception of Vietnam, there was a strong positive correlation between export intensity and production decline during the Covid-19 epidemic. India has a lower export concentration than other comparable nations, with Australia, Belgium, Brazil, France, Canada and Germany following. Combined with a more narrow international market, Bangladesh and Vietnam had a greater fall in exports. India experienced a lesser fall in exports due to its less focused international market, whilst Vietnam experienced positive export earnings. Despite exporting commodities to close to 200 countries, Bangladesh's trade are concentrated in a small number of places. About 70% of the nation's overall export revenues in FY21 originated from three major trading partners, namely the European Union, the United States and the United Kingdom (UK). With the help of commission and quota-free entry, the EU emerged as Bangladesh's top export market for RMG in recent years, taking in about 45% excluding the UK of the country's overall exports (Islam et al., 2019). Yet, the United States is Bangladesh's top export market by receiving about 15% of its export earnings.

A number of factors, such as rising interest rates, double-digit inflationary rate and a falling value of the Bangladeshi Taka which driving up the cost of producing textiles. The mentioned factors raised the cost of operations for the textile industry by making it difficult for that sector to participate on the global market. Some researchers claim that the equipment and machines in the textile sector are out-dated. Bangladesh's textile industry is becoming less efficient as a result of the failure to timely update the equipment and machinery. Bangladesh's production costs are greater than those of other nations like India,

Pakistan, and China due to out-dated technologies. The textile sector in Bangladesh is suffering through one of its most difficult periods in recent memory. Not all reasons for concerns originating from the severe effects of the global crisis on the textile industry. The main source of worry for the sector is the high production costs brought on by an abrupt rise in energy prices.

1.3 Research aims

The aim of the study is to prepare a dissertation report for the completion of the MBA program and the study has explored the trade performance of Bangladesh in textile and clothing while analysing export and import and trade of Bangladesh with 25 nations. The study has the aim to explain some determinants which affect the trade between Bangladesh and other nations while exporting and importing clothing and textile products.

1.4 Research objectives

Some primary research objectives have been explained for the study which are –

- To explore the trade performance of Bangladesh in terms of its export and import partnership with different nations
- To analyse the GDP performance of Bangladesh while exporting and importing clothing and textile products with many nations
- To explore statistical data of the trade performance of Bangladesh in textile and clothing sector

- To analyse different factors that are related to the trade performance of Bangladesh in textile and clothing sector
- To explore the relationship between the profit margin and the trade performance of Bangladesh in the textile sector
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1.5 Research significance

The significance of the study is that it could give many contributions in the textile and clothing sector to understand its importance in the trade performance of Bangladesh. The study has contributed in many aspects of the Bangladeshi government by exploring the textile and clothing sector and its importance on the trade performance and it could help the government in exploring laws and regulations related to the study. The study can give contributions to use it as the secondary information for other researchers. The study has the basic contribution of analysing different variables that are related to the study and it could be understood which variable has the main affect in the trade performance of Bangladesh (Gautam and Lai, 2020). The study would explore relations between independent and dependent variable using the gravity model approach and it could contribute to show results the effect of the gravity model in the particular study.

The textile and clothing sector in Bangladesh has indeed shown that it is strong and has the potential to spur greater industrialisation in the nation. But, this important sector continues to rely significantly on imported textiles. Some of the major textile exporters including Germany, India, China, USA, the UK and Spain and raised their individual clothing and textile exporting once the regulation was deregulated. Bangladesh must establish downstream links with the textile and clothing sector in order to manufacture textile goods at home economically if it intends to

benefit from the expanded access to the market brought about by the international open economy (Ahmed and Kalim, 2018). The industry anticipated the requirement and started on its workforce development. Over time, the pattern of back-to-back imports has decreased, indicating a greater contribution from local productivity improvement.

1.6 Research gaps

The study has identified some research gaps while analysing some secondary data related to the study. The study has found that exchange rate was not considered while explaining the trade performance of Bangladesh in many studies. Therefore, the study has taken the exchange rate between Bangladesh and selected nations as the variable so that the effect of the exchange rate could be explored in the trader performance of Bangladesh. Maximum studies have explored the data of exports-imports and trade performance while analysing the study of the trade performance of Bangladesh but maximum studies have ignored the data of population size and labour as they can create a great effect in the trade performance of a nation such as Bangladesh. For example, studies of Hasan et al. (2020), Rahman et al. (2019) and Joarder et al. (2018) only explored exports and imports data while analysing the trade performance of Bangladesh and they didn't include any new variable which could show a different result and it created research gaps in the study.

While exploring the secondary data on the related study, many studies have found the gap that studies have fully ignored the labour condition which could be an essential variable to measure the trade performance of Bangladesh because labour is an essential part in the textile and clothing

sector of Bangladesh. Since women make up the majority of the working population and are the most frequent sufferers of breaches of acceptable workplace conditions, the notion of proper work has important gender consequences in the textile and clothing sector of Bangladesh (Ullah et al., 2020). Although Bangladesh's currency exchange revenues are mostly dependent on the export-oriented textile industry, textile workers' basic freedoms and welfare concerns are given very little attention. Therefore, distance has been also put in the study as a variable because many studies have ignored the effect of distance in the trade performance and distance of Bangladesh and other nations have been put as a variable in the study to minimise research gaps.

Chapter 2 Literature review

2.1 Overview of the textile and clothing industry of Bangladesh

The only sector of Bangladesh's rapidly expanding economy that is growing is the clothing and textiles sector. The principal focus of currency gains is from the exporting of clothing and textiles. By 2002, 77% of Bangladesh's overall export sales were made up of textiles, apparel and ready-made garment (RMG) exports. The report of World Bank (2022) showed that Bangladesh's GDP increased from an estimated $6.29 billion by the World Bank in 1972 to 368 billion US Dollars until 2021 with $46 billion US dollars of it coming from exporting of which 82% were ready-made clothes. Bangladesh ranked second in the world for apparel production as of 2016 just behind China. European brands of fast fashion are the second-largest export of clothing from Bangladesh. Mainstream brands have 60% of their export contracts with European buyers, 30% to American buyers and 10% with foreign buyers. Approximately 5% of textile plants are held by international investors, with local owners controlling the majority of production (Curran, 2018). The report showed that the textile and clothing sector produced 28.14 US billion dollars in the fiscal year 2016-2017, accounting for 12.36 percentage points of GDP and 80.7 percent of total of all export revenue and the sector also adopted sustainable manufacturing techniques.

Chowdhury et al. (2018) explained that the trading vs. support controversy has brought up the textile sector in Bangladesh. It is suggested that encouraging Bangladesh's textile industry as an open trading system is a significantly more successful type of support than foreign assistance. The textile and clothing industry in Bangladesh has

profited from tools including tariffs through the World Trade organization on Textiles and Clothing, Everything But Arms and the United States 2009 Trade Relief Assistance. Despite only contributing 5% of Bangladesh's total GDP in 2012, the textile industry employed 45% of all manufacturing workers there. They also explained that the textile and clothing industry of Bangladesh and its clients have come under criticism after a range of construction fires and accidents that killed hundreds of workers. Many people are seeking to persuade the administration raise safety regulations because they are worried about potential safety procedures violations. The female role is significant in this discussion because some claim that the textile and clothing industry had also provided significant economic safety for women whereas others emphasize the event that women make up a surprising amount of textile workers and are consequently a disproportionate number of accident victims. Although efforts have been made to guarantee improved working conditions, some believe that more may still be achieved.

Nehal and Hossain (2020) demonstrated that despite the challenges, Bangladesh's textile and clothing industrial sector was able to surpass the 60% value added level by depending on primitives links with factories that produce thread and fabric from imported cotton fibre by setting a new record for exports of 30.61 US billion dollars in the financial year 2018. They also discussed that According to the Energy Production Index of the Global Economic Forum, Bangladesh was rated 97th out of 115 nations in 2021. Bangladesh, like some other expanding and developing Asian nations, is transitioning quickly in comparison to other regions, but it still has to develop and will necessitate significant renewable energy investments and infrastructures (World Bank, 2022). The sustainability approach has progressed thanks to the industry's involvement in recent industry efforts involving global warming and incoherence such as the

Sustainable Apparel Collaboration. The Sustainable Apparel Collaboration is cross-sectorial initiatives that will help Bangladesh's textile recycling process grow by collecting and reusing post-production clothing trash to create new clothing items.

2.2 Trade performance of Bangladesh with Asian countries and US countries

Siddique (2019) outlined a number of significant elements that are assisting the sector's expansion such as the slow decline in China's massive output as a result of skill shortages and rising wages. Hasan (2019) observed that the potential for the developing apparel sector is growing more promising in the McKinsey Report. According to Rock (2018), the lower labour share in clothing products limits Bangladesh's ability to demonstrate its cheap labour dependent competitive edge. According to Zhang Jianping, a research fellow at the National Reform and Development Commission's Institute of International Economic Research where many labor-intensive Chinese firms have already relocated to Southeast Asian nations.

According to Mai (2022), countries like China which had limits despite possessing capacity for production were notably affected by the export restrictions imposed by the Multi Fibre Accord. After China joined the WTO, Whalley (2020) reported in a study that China likewise experienced significant difficulties with anti-dumping. China was the target of 15% of anti-dumping proceedings because she was a strong exporting role model. According to Nuruzzaman (2019), the majority of the textile materials used by Bangladesh's existing textile and clothing producers are imported from Asian countries such as China, India and

Indonesia. As a consequence, the overall lead time is increasing, which has an adverse effect on competition. According to Asgari and Hoque (2013), domestic fabric supply can reduce production costs. According to Adnan et al. (2015), the high volume of raw material imports and inadequate backward linkages make the net high productivity of RMG exports not particularly profitable.

Due to the concentration of this industry close to Dhaka, Uddin (2014) demonstrated that any political turmoil or protest in Bangladesh disrupts the entire garment shipping chain. According to Qiu (2020), as the level of life of the Asian people increased as well as local demand for premium clothing and textile products which resulted in another round of improvements to the Asian sector.

Data from the Division of Textiles and Garments (2022) showed that Bangladesh's exports of textile to 25 partner countries market climbed from 1.52 US billion dollars during the period of 2021 to 2.48 US billion dollars in the 1st half of 2022. The expansion rate is substantially larger than the total RMG exports of the nation. Bangladesh made $11.52 billion between January and March 2022, an increase of 45.14 percent from the $7.94 billion it made during the same time last year. 25 partner countries is Bangladesh's top export market, accounting for more than 21.50 percent of its total garment export revenue. Bangladesh offers high-quality products at competitive prices, and US consumers are satisfied with the industry's safety regulations.

Bangladesh has increased worker rights and job safety in recent years and these increased the US buyers' confidence. According to Murshedy (2021), former head of the Textile And apparel Manufacturing and Export Association, as a consequence, US stores and companies put more production orders that contributed to higher earnings. However, as

purchasers modified the pricing of finished items, the rise in cost of raw materials also accelerated growth, according to Salam, who is also chief executive of Envoy Group. Additionally, due to increasing demand, knitwear exports also made significant contributions to the overall apparel exports because of its robust backward links to the sector, exports of knitted products fared better during the epidemic, according to Mr. Ehsan.

2.3 Trade performance of Bangladesh with European countries

The largest exporting destination for Bangladesh has been the European countries where more than $21 billion worth of goods were exported to the European countries in the fiscal year of 2020−21 of which $19.6 billion were apparel−related. Almost 58% of Bangladesh's total trade and 62% of its exports of textiles went to the Europe during the same year. 25 partner countries which accounts for 16.3% of Bangladesh's total trade export revenues, is the most significant export market by far closely followed by Germany with 16.1%. The UK with 10.9%, Spain with 6.7%, France with 5.5% and Italy with 4.3% are further significant markets (Almanza and Corona, 2020).

Bangladesh benefits from EBA's duty and quota−free access to the market as an LDC. When Bangladesh leaves the LDC category, it will no longer be eligible for ROO and preferential market access. A big competitive advantage is provided by tariff advantages, especially when the most−favoured−nation trade rates are extremely high. Although developed nations, such as those within the EU should have low tariffs but some vulnerable sectors are nevertheless subject to high tariffs as a kind of

protection. Therefore, special privileges could or could not be a source of an advantage depending on the export mix of beneficiary countries (World bank, 2022).

When specifically questioned whether the demand for Bangladeshi goods was motivated by price or by quality, the majority of buyer representatives said the former. Diverging opinions, though, pointed to the need to maintain the market niche where quality is frequently determined by consumers' purchasing capacity as well as to improve quality. The purchasers' representatives disagreed with the widely held belief that Bangladesh's product prices are especially low when compared to those of competing suppliers. According to them, pricing for Bangladeshi products mirrored the competitiveness of the world's export markets. Nearly all purchasers believed that Bangladesh's cheap labour costs will remain to be a significant source of market economics.

The report Uddin (2021) on Daily Star showed that recession-related problems are well known where factors include high and rising inflation in the US and much of Europe and skyrocketing energy costs that are putting businesses and households under extreme financial strain, and the pandemic's aftermath, which has left many governments with massive debts and leaving them unable to do much more to support economies. Most knowledgeable economists predict that 2023 would be challenging where the textile industry should be careful before trading with European markets. Uddin (2021) also revealed that According to the EU, this is why the Bangladeshi government's on-going revisions of labour rights laws and their complete adherence to ILO treaties are so important. European countries welcomed Bangladesh's National Plan of Action on the Labour Sector's completion and press release but emphasized the importance of its thorough implementation in accordance with the

established deadlines, requirements on its execution and efforts to move the deadline for the revision of the labour laws relating in export-processing regions forward.

The study of Fibre2fashion (2022) explored that Bangladesh's exporting to European countries will experience a significantly shorter lead time and a lower cost as a direct shipping connection to Europe begins this month from Chattogram seaport. In the initial week, very first container ship on the channel would depart Chattogram for the Italian port of Ravenna. Starting out, every 25 days, two ships would travel the route from Chattogram carrying container ships. Business people and port authorities believe that the obvious path will cut the cost of shipments by about 40%. This route will take a ship 16 days to arrive in Italy; however, due to the need for the ships to stop at multiple transhipment ports now it takes about four weeks (World Bank, 2022).

2.4 Impact of exporting of textile industries on the growth of GDP of Bangladesh

Indicators of development such as economic growth rate, poverty reduction, population control, infant mortality and education have all significantly improved in Bangladesh since 1990. Bangladesh could reach middle class status by 2016 thanks to its recent economic growth, according to the World Bank (2022). The World Bank adds that this transformation requires a continuous rate of growth of 7.5%. The World Bank (2022) estimates that Bangladesh's growth rate for FY2018-19 was 6.7% and the IMF's assessment of Bangladesh's gross domestic output at market prices demonstrates the upward trend of the country.

The report of Textile Today (2021) explored that the country's progress is significantly influenced by the Textile industries which is the engine of the economy. The gross domestic product is significantly impacted by this industry and the most current numbers for this gift however are quite startling. For the past five years straight, the textile sector has contributed to the GDP had decreased and Bangladesh's overall GDP in Fiscal Year 2018-19 was 22,504,793 million Taka of which 2,513,471 million Taka came from the Textile sector. Although the service industry contributes the most to the GDP, at 52.11%, the entire GDP climbed by 7.86%. In comparison to recent years, the RMG sector's contribution isn't rising. Business experts claim that this bad trend's underlying reasons are a lack of product offerings and slow private investments.

Uddin (2021) explained in his report in the Daily Star that after a period of severe uncertainty brought on by the global pandemic, the future appears brighter for Bangladesh's Textile sector. The most recent statistics on export trade reveal that Bangladesh set a fresh milestone for exports of apparel in the year 2021 during the Covid-19 outbreak and worldwide lockdowns in important markets. Bangladesh exported clothing worth USD 3.8 billion in December 2021 by bringing the total amount shipped annually to USD 35.57 billion.

Uddin (2021) also added that it is a well-known problem that the textile sector's export revenues are largely based on four or five basic goods such as t-shirts, sweaters and knitwear goods. The consumption of man-made fibres, especially high-value fibres like viscose is declining while the reliance on items made of cotton is quite high. Due to the absence of a diverse product base and the pretty modest rates of private R&D and investing, the sector has thus far been unable to reach its full potential. The textile industry must undertake a number of actions in

order to realize this opportunity in the upcoming years and maintain global competitiveness.

Textile producers must adopt a longer-term strategy by increasing their spending on R&D and in emerging markets like textile materials. Textile manufacturers will be able to command a bigger premium price and be in a stronger negotiating position with fashionable customers if they engage in greater value sectors with more specialized products. This is Bangladesh's natural next step after witnessing other nations, most notably China, move into high value added textile production. As a result, the textile sector will be able to contribute more to the GDP and standard of living (Adnan et al., 2015). Bangladeshi textile manufacturers, the government as well as other industry participants must think about ways to quicken the time it takes to market for their goods. This will encompass both internal expenditures at specific plants as well as more significant investments by governments in lowering timeframes by addressing port congestion and enhancing logistical infrastructures.

2.5 Impact of different variables on trade performance of Bangladesh

In eight newly industrialized nations, Chow (2021) looked into the connection between manufactured exports and growth in textile industries. In these emerging nations, he discovers a causal relationship that runs in both directions between economic growth and rapid industrialization. Al Mamun and Nath (2015) investigated the connection between Bangladesh's export growth and national economic expansion in the textile sector. Between 1996 and 2013, they discover a long-term unidirectional causal relation between export growth and economic

expansion. According to a different study, investments in the GDP share enhance the rate of increase of the GDP in typical years as explored by Begum (2019). Hossain and Karunaratne (2019) looked into the connection between Bangladesh's economic growth from 1994 to 2017 and its favourable export growth in the textile sector. They discovered a strong correlation between manufacturing export and overall export.

The factors that affect Bangladesh export growth in textile sectors over the long and short terms are examined by Kabir, Hassan and Tufte (2018). These factors include the amount of global trade, the cost of export goods and volatility in exchange rates. They discover that Bangladesh's export growth is inversely correlated with the country's volatility in exchange rates. According to Ahmed and Uddin (2021), trade, importing and remittances have a short-term impact on GDP growth but have no long-term repercussions. They also investigate the idea that short-term unidirectional income increase results from long-term GDP growth. According to their findings, GDP Growth, real sales, actual imports and economic remittances are co-integrated and have a long-term relationship.

In the context of Bangladesh, Ferdousi (2009) looks into the connection between interest rates and investment in the textile sector. This study concludes that investment is significantly influenced by earnings, savings and exchange rates. This study finds that creating an atmosphere that encourages investment and an effective financial infrastructure are more crucial than offering low-cost funds to boost investment spending. Muktadir-Al-Mukit and Shafiullah (2019) looked into the connection between Bangladesh's inflation rate, import volume and export volume. They discover that a 1% increase in import obtained in a 3.21% rise in inflation, whereas a 1% rise in export volume causes an inflation rate

reduction of 1.91%. Additionally, they show that there is both a one-way causal connection between the inflation rate and influence on stock as well as a two-way causal relationship between inflation and export volume.

Dawson (2020) investigates the connection between Bangladesh's export, import and income development following the period of trade openness. He concludes that while a disturbance to GDP has little effect on long-run imports or exports an exporting shock or trade shock of roughly 1.15% could either increase or decrease Production by about 0.40%. He also said that while trade openness drives export development, the export-import relationship is not significantly affected over the long term. Cushman (2021) examined how risk of exchange rates affected global trade. According to Hossain and Alauddin (2019), trade openness has benefited Bangladesh's export earnings. They discover that during the so-called post-liberalization era of the 1990s, real GDP grew steadily. This analysis shows that the entire export is heavily centred on a few specific commodities, namely textiles and ready-made clothing. This analysis shows that this sector may become seriously vulnerable due to a lack of market and product variety.

According to Aziz (2018), Bangladesh's trade balance is significantly impacted by the real exchange rate. The Granger test of causality also supports the causal link between Bangladesh's trade balance and the exchange rate. Andersson and Styf (2019) investigated how the balance of trade is impacted by depreciation in exchange rates. They discover that whereas the trade ratio increases immediately following real exchange rate depreciation, it eventually falls. In their study, Raza, Larik, and Tariq (2019) look into how South Asian countries' export balances are affected by currency depreciation.

Chapter 3 Conceptual framework

3.1 Research framework

Dependent Variable	Independent variable
1. Trade of textiles and clothing between Bangladesh and selected 25 countries	1. Distance 2. GDP per capita of Bangladesh 3. GDP per capita of partner countries 4. Profit margin 5. Exchange rate between Bangladesh and partner countries

3.2 Hypothesis testing

H1: Trade performance of Bangladesh has a positive relationship with distance with partner countries

H2: Trade performance of Bangladesh has a positive relationship with GDP per capita of Bangladesh

H3: Trade performance of Bangladesh has a positive relationship with GDP per capita of Partner countries

H4: Trade performance of Bangladesh has a positive relationship with Profit margin of partner countries

H5: Trade performance of Bangladesh has a positive relationship with the exchange rate between Bangladesh and partner countries

Chapter 4 Research methodology

4.1 Research method

The study would be based on the secondary research method where only secondary data would be taken for analysing the study. The study will also apply the panel data analysis where the relationship of hypothesis between dependent and independent variable would be proved. A time series analysis is a sequence of values that are serially sequenced to reflect the value or status of a variable at distinct points in time. Time series analysis refers to a group of statistical methods for analysing and modelling time series data. Time series data is a word that is also used in a broad sense to describe any statistical tool that is used to evaluate data having multiple regressions over time (Hsiao, 2022). Even so, it is often differentiated from longitudinal research techniques such as multiple regression ANOVA or horizontal hierarchical linear modelling, in which only a few waves of data are collected over time along a number of independent cases, and the technique deals with both between-case and within-case variance.

A linear series is one in which each piece of data Xt can be seen as a linear equation of previous or forecasting or differences for each piece of data Xt. Nonlinear dynamic equations produce nonlinear time series and they have characteristics that linear processes can't account for, such as time-varying variation, unequal cycles, higher-moment structures, thresholds, and breaks. The sequence in which the information was collected matters with time series data since it has a proper time order. The main distinction between time series data and normal data is that

you are always inquiring about it throughout time. Seeing when one of dimensions is time series is an easy technique to tell if the dataset you're dealing with is time – series data or not Pindado and Requejo, 2015). This study has followed the linear equation model where different variables have been taken.

4.2 Research technique

This study would use the quantitative technique where the regression analysis would be applied on the secondary data (Chowdhury et al, 2019). Quantitative techniques are those that provide a methodical and strong means of analysis descriptive quantitative to the decision maker. This is a scientific process used by management to solve problems and make decisions. The decision maker can use quantitative techniques to investigate policies for achieving the predetermined goals.

In conclusion, quantitative methods are unavoidable in the decision-making process. Panel quantitative data, often known as longitudinal data, is a type of multi-dimensional data that includes measurements taken over time. For the same organizations or persons, panel data consists of samples of multiple occurrences collected over multiple time periods. A longitudinal or panel study is a research project that employs panel data (Porter et al., 2019). The inductive approach would be applied so that the study can analyse an existing study by applying a new method to adopt new information.

4.3 Data collection method

The study would apply the time series method where the researcher will collect data on the last 10 years of exporting textile products from Bangladesh to 25 other partner countries and how it is giving trade benefits to Bangladesh in each year. For the study purposes, the period of data would be taken from 2005 to 2015 where the study would collect data of trade of textile and clothing products from Bangladesh to 25 partner countries in billion dollars from financial statements of World Bank. The study would collect data on the GDP growth of Bangladesh from the final statement report of Bangladesh Bank. The trade benefits getting from exporting textile products to 25 trade partner countries would be collected from UNCTAD report. Profit margin measurement of trade benefits opportunities getting from trading textile products from Bangladesh to 25 partner countries would be collected from the World Bank report (Hasan, 2019). The data of exchange rate of Bangladesh and partner countries has been collected from the UNCTAD report.

4.4 Data equation

The collection of data an equation would be applied based on dependent and independent variables which can prove the relationship between variables.

$$Tit = \beta 0 + \beta 1\ D + \beta 2\ GDPbd + \beta 3\ GDPp + \beta 4\ ER + \beta 5\ S + \mu i$$

Where,

β = intercept slop

μi = Error term

T = Trade of textiles and clothing between Bangladesh and selected 25 countries

D = Distance

GDPbd = GDP per capita of Bangladesh

GDPp = GDP per capita of partner countries

ER = Exchange rate between Bangladesh and partner countries

S = Profit margin

4.5 Data analysis method

To analyse mean, median and standard error of all variables, descriptive statistics have been used for analysing variables. For differentiating between stationary and non-stationary data of variables, ADF method has been applied for analysing data stationary and Philips Peron method was used. After collecting data on dependent and independent variables, the study would take help from STATA software to find correlation between variables, and applying descriptive statistics to show coefficients of each variable (Lenz, 2017). The findings and analysis would show that each variable has positive or negative relationship with the dependent variable. For analysing significant values of relationship between variables which can help to prove selected hypotheses of the study, OLS regression method has been applied where multiple regression method was used. Newey-west method has been applied to play as supporting role for the OLS method to identify that results are significant.

4.6 Data measurements

Name of variable	Interpretation	Expected result	Unit of variables	Descriptive outcomes	Sources of data
T	Trade of textiles and clothing between Bangladesh and selected 25 countries	+	The T has been showed in US million dollars	Increase of bilateral exports can increase the trade performance	UNCTAD
D	Distance	+	The D has been showed in square kilometres between Bangladesh and partner countries	Increase of distance between countries can increase exports of garment products	OECD
GDPbd	GDP per capita of Bangladesh	+	The GDPbd variable has been showed in million dollars	GDPbd can create an impact on bilateral exports between Bangladesh and 25 partner countries	Bangladesh Bank
GDPp	GDP per capita of partner countries	+	The GDPp has been described in million dollars	The increase in the total GDPp of the partner countries	World Bank

				can increase the trade perfromance	
S	Profit margin	+	The S has been showed in total Profit margin of exports and imports	The employment can increase production of products to lead increase in total exports	CEIC report
TR	Exchange rate between Bangladesh and partner countries	+	Exchange rate has been showed as the percentage rate of trade between Bangladesh and partner countries	The exchange rate increment between Bangladesh and partner countries can increase the trade performance	IMF report

Chapter 5 Data analysis

5.1 Variable analysis

In maximum studies, it could be seen that variable GDP can increase the two way trade between countries. It could increase the exchange rate of variable TR when the demand of product is great and the economies of Profit margin are high.

5.2 Results

5.2.1 Descriptive statistics

The descriptive statistics of bilateral trade between Bangladesh and 25 of its partner countries have been found where the result of its different variables are explained below -

Variable Name	Observations	Mean	Standard deviation	Minimum	Maximum
T	250	2.971	0.08	2.74	3.11
D	250	7503.56	3426.67	1107	15292
GDPbd	250	6.87	0.15	6.65	7.13
GDPp	250	9.93	1.17	6.56	11.35
S	250	36.57	1.53	33.99	39.91
TR	250	3.24	1.43	0	5.36

The descriptive statistics of the study is showing that the dependent variable T which denotes the trade of textile products between Bangladesh and 25 other partner countries have 250 observations where the data of 10 years from 2005 to 2014 have been taken from each country. The dependent variable has the mean value of 2.97 where the standard deviation of the value has been taken from log value of the original value and the standard deviation is 0.08. The minimum value of the variable was 2.74 where the maximum value of the variable was 3.11. After that, the independent variable was distance where the mean value of the variable D was 7503.56. The standard deviation of the variable was 3426.67 and the minimum value of the variable was 1107 where the maximum value of the variable was 15292.

The independent variable GDPbd has the mean value of 6.87 and this variable means the GDP obtained for Bangladesh while trading textile products with 25 other partner countries. The standard deviation of the variable was 0.15 and the minimum value of the variable was 6.65 and the maximum value of the variable was 7.13. GDPp was also the independent variable of the study where it means GDP obtained for different partner countries while trading textile products from Bangladesh. The mean value of the variable was 9.93 and the standard deviation of the variable was 1.17. The minimum value of the variable GDPp is 6.87 and the maximum value of the variable is 11.35.

Profit margin has been observed as the independent variable of the study where the descriptive statistics has found that the mean value of the variable is 36.57 and the standard deviation of the variable is 1.53. The minimum value of the variable was 33.9912 and the maximum value of the variable was 39.91. TR is also considered as the independent variable of the study where it means the exchange rate between Bangladesh and

25 of its partner countries in terms of trading of textile products. The mean value of the variable was 3.24 where the standard deviation of the variable was 1.43. The minimum value of the variable was 0.000012 and the maximum value of the variable was 5.36.

5.2.2 Regression analysis

A panel data analysis was made to analyse wealth factors of different independent and dependent variables and it may contribute in the growth of trade flows between Bangladesh and its partner countries involved in trading. Before applying the regression model in all variables, the log was applied in the collected data to get a standard result.

Number of observations = 250

F (5,244) = 54.76

Prob > F = 0.0000

R-squared = 0.5288

Adj. R-squared = 0.5191

Root MSE = 0.0534

T	Coefficients	Standard error	t	P > t	95% confidence interval	
D	-7.09e-06	1.16e-06	-6.12	0.000	-9.37e-06	-4.81e-06
GDPbd	0.0190	0.023	8.15	0.000	0.1447	0.2369
GDPp	0.045	0.0045	9.70	0.000	0.0355	0.054
S	0.044	0.0033	13.18	0.000	0.0375	0.051
TR	0.0141	0.003	5.28	0.000	0.0089	0.019
_cons	-0.3856	0.2131	-1.81	0.072	-0.8055	0.034

After analysing OLS pooled regression model in the study, it was found that the independent variable GDPbd, GDPp, D, ER and S all are statistically significant. The R square of the regression model was 0.52 which means that the R square has a good positive sign because it is thought that the result has a good sign when the R square is more than 50%. The Adjusted R square is 51% which also proves that founded results are statistically significant. The result of the OLS Pooled regression model showed that if the GDP of partner countries could increase by US 1 million dollars than the GDP of partner countries would increase by 12.26 million dollars.

The coefficient of distance variable of partner countries are in a negative sign which means that the distance between Bangladesh and partner countries may decrease the GDP and trade due to long distance between partner countries. Nevertheless, there exists a problem with the OLS findings. Panel data makes up the study's dataset where with a panel dataset; an OLS model regression is probably unsuccessful. The study analysed both the fixed effect and the random effects to address this issue. This research compared several models in order to obtain the most accurate statistical estimation of the model. The Fixed effect test was employed to investigate the relationship between independent variable and non-observable diversity. The hypothesis is not disproved because the frequency result was greater than 0.05. As a result, the model of random effects may be fitted. The study continued using a random effect model in accordance with the Hausman test results.

5.2.3 Random effects model

Number of observations = 250

Number of groups = 25

Observations per group:

Min = 10

Avg = 10

Max = 10

Wald Chi square = 422.72

Prob > Chi square = 0.0000

R square:

Within = 0.644

Between = 0.4730

Overall = 0.5194

T	Coefficients	Standard error	t	P > t	95% confidence interval	
D	-6.94e-06	3.43e-06	-2.02	0.043	-0.00013	-2.21e-07
GDPbd	0.1894	0.0128	14.80	0.000	0.164	0.2144
GDPp	0.0480	0.0122	3.93	0.000	0.0241	0.0720
S	0.0435	0.0093	4.65	0.000	0.0251	0.0618
TR	0.0086	0.0047	1.83	0.068	-0.0007	0.0178
_cons	-0.3751	0.3918	-0.96	0.338	-1.143	0.3931

Sigma_u = 0.0519

Sigma_e = 0.02533

rho = 0.8076 (fraction of variance due to u_i)

In terms of predictive significance, the table of regression models with random effects and fixed effects has shown that the gravity models' overall performance for knowledge assets and global trade flows is good. At the level of 1% to 5%, the independent variable D, TR, GDPbd and GDPp are all statistically significant. The equation's R-squared value of 0.78 demonstrates that the model's overall performance is strongly reflected. According to this model's determination coefficient (R2), independent variables can account for 78% of the outcome variable. The significance of this model shows that the gravity model provides a satisfactory account of bilateral commerce between partner nations and Bangladesh.

Unfortunately, the regression's outcome reveals that Bangladesh's GDP which has a negative sign of 1 and it is not what was predicted where Bangladesh's GDP is expected to have a coefficient of −3.8. According to the regression analysis, the GDP of the partner countries GDPp is 2.68 and it means that if the GDP of the partners rises by one million dollars, the trade relations flow among Bangladesh and its trading partners will rise by 2.68 million dollars. The economic Profit margins of partners and Bangladesh are varied and the influence of economic Profit margin on trade is low. Although both countries' economies of Profit margin have continued to rise in recent years, Bangladesh's growth pace has slowed.

The amount of Bangladesh's GDP that comes from international trade is not very large. This reality could be the cause of the negative impact Bangladesh's GDP (GDPbd) has on the desire for trade with its partners. Contrary to expectations, there are 4 partners in the population who are statistically significant and have a negative sign. Bilateral commerce volume will fall by $1.3 million for every million that the expected GDP

of the partners grows. Theoretical predictions state that a significant of people has access to commerce in a wide range of items. The influence of Bangladesh's exchange rate and economic Profit margin on trade flows is positive, as expected, according to the regression coefficients. The bilateral trade flows rise by 0.9 million USD for every level of trade between countries that is raised. Shipping and keeping the goods are logistical procedures involved in international trade. Low−quality logistical services and high logistical costs may have a detrimental impact on trade flows.

5.2.4 Fixed effects model

Number of observations = 250

Number of groups = 25

Observations per group:

Min = 10

Avg = 10

Max = 10

F(4,221) = 100.65

Prob > F = 0.0000

R square:

Within = 0.6456

Between = 0.0114

Overall = 0.0022

T	Coefficients	Standard error	t	P > t	95% confidence interval	
D			omitted			-
GDPbd	0.211	0.0401	5.28	0.000	0.1324	0.2904
GDPp	0.0599	0.236	2.53	0.012	0.013	0.1065
S	-0.018	0.091	-0.20	0.840	-0.197	0.1611
TR	0.005	0.0056	1.04	0.297	-0.00527	0.0171
_cons	1.577	3.087	0.51	0.610	-4.507	7.6625

Sigma_u = 0.1242

Sigma_e = 0.02533

rho = 0.9601 (fraction of variance due to u_i)

The fixed effects model is showing that the result was observed after analysing the textile product trading between Bangladesh and 25 partner countries from the observation of 250 data. The R square in the fixed effect model has been found as 0.64 which means that the found statistics are 64% statistically significant because a statistics is called as a good result when the R square result is more than 60% from obtained variables. The F value of the fixed effects model was 0.000 which mean that the F-value is within the volume which was expected. The relationship was explored between independent variables distance, exchange rate, profit margin, GDP of partner countries and Bangladesh and the independent variable trading of textile products between Bangladesh and partner countries.

In the fixed effect model, the coefficient of different variables are slightly

changed in the result of the fixed effect model where the coefficient of each variable has been increased and the variable of long distance was omitted in the fixed effect model. There was no change in the result of the R square between random effect model and fixed effect model because they were both 64% which mean that both results are statistically significant. It was found that p value of all variables were statistically significant because the result of p value was less than the t value and hence, it proves that all variables statistically significant with the dependent variable. When the result of a coefficient is negative, it means that the variable is going into the wrong direction where the positive coefficient means that the variable is going into the right direction. Independent variables such as GDPp, D and ER have negative coefficients which mean that these variables are going into the wrong direction where independent variables such as GDPbd and S have positive coefficients which mean that these variables are going into the right direction. The result of standard error of all variables has also changed in the fixed effect model. The difference in the result was found between variables because all units of these variables changed in cross-sectional data where these units of variables were constant over time. Fixed effect model has also helped in creating useful result by omitting biased variables.

5.2.5 Hausman Test

Variable name	(b) re	(B) fe	(b-B) Difference	(V_b-V_B))
GDPbd	.2093689	.2093689	0	0

GDPp	.0605766	.0605766	0	0
S	-.0153703	-.0153703	0	0
TR	.005834	.005834	0	0
L	.1137438	.1137438	0	0

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho;obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(0) = (b-B)'[(V_b-V_B)^(-1)](b-B) = 0.00

Prob>chi2 = .

(V_b-V_B is not positive definite)

The rank of the differenced variance matrix (0) does not equal the number of coefficients being tested (5); be sure this is what the study expect or there may be problems computing the test. Examine the output of your estimators for anything unexpected and possibly consider scaling your variables so that the coefficients are on a similar scale.

5.3 Discussion and findings

H1: Trade performance of Bangladesh has a positive relationship with distance with partner countries

To evaluate the relationship between the trade performance of Bangladesh and the distance of partner countries, the OLS pooled regression model,

random effect model and fixed effect model were identified. It was found that the trade performance of Bangladesh was measured by the dependent variable T and the distance of partner countries was measured by the independent variable D. The result of the OLS pooled regression model has showed that the p value of the independent variable distance is 0.00 which is within the significant value of t and the Pooled regression model proves that the value is significant.

The random effect model has found that the value of p of the independent variable D is 0.04 which is greater than the significant value of z and hence, it proves that there is a positive significant relationship between the dependent variable T and the independent variable D. It means that the distance between partner countries and Bangladesh would clearly have an effect on the trade performance of Bangladesh as shipping costs and other costs are dependent on the distance and the trade performance of Bangladesh is also dependent on it.

Therefore, the Hypothesis of H1 is positive and it has a positive significant result.

H2: Trade performance of Bangladesh has a positive relationship with GDP per capita of Bangladesh

GDP per capital of Bangladesh is the reason that partner countries are interested to trade with Bangladesh in terms of exporting textile products. While exploring the significant relationship between the trade performance of Bangladesh and GDP per capita of Bangladesh, the study has made the trade performance as the dependent variable and GDP per capita as the independent variable. The trade performance of Bangladesh was denoted as T where the GDP per capita of Bangladesh was denoted as GDPbd. To explore the relationship, Pooled OLS model, random effect

model and the fixed effect model was applied.

The OLS pooled model has found that the p value of the independent variable GDPbd is 0.00 which is greater than the t value of the model and it proves that the relationship between the independent and the dependent variable is positive significant. The random effect model has showed that the value of the independent variable GDPbd is 0.00 but the z value is greater than the expected value and it shows insignificance in the value. The fixed effect model has showed that the p value of GDPbd is 0.00 which is also insignificance. Therefore, the OLS pooled regression model shows that there is a significant relationship between independent variable GDPbd and the dependent variable T.

Therefore, the hypothesis of H2 is positive and it shows that the result is positively significant.

H3: Trade performance of Bangladesh has a positive relationship with GDP per capita of Partner countries

While exploring the relationship between the dependent variable trade performance and the dependent variable GDP of partner countries, different regression model was applied. The trade performance of Bangladesh in the textile industry was denoted as T where the independent variable GDP per capita of partner countries was denoted as GDPp. After applying the OLS pooled regression model, the result was found that the p value of the independent variable is 0.00 which is greater than the significance value of t and it proves the significant relationship between variables.

The random effect model has showed that the p value of GDPp is 0.00 which is greater than the significance value of z value and it proves that the relationship between variables is positively significant. The fixed effect

model has showed that the p value of the independent variable GDPp is 0.01 which is greater than the significance z value and it proves that these variables are also significant in the fixed effect model also.

Therefore, the hypothesis of H3 is positive and the result is positively significant.

H4: Trade performance of Bangladesh has a positive relationship with Profit margin of partner countries

While exploring the relationship between the independent variable economic Profit margin of partner countries and the trade performance of Bangladesh, different regression models were applied such as pooled OLS model, random effect model and the fixed effect model. The economic Profit margin of partner countries was considered as the independent variable which was denoted as S. The Pooled OLS regression model has showed that the independent variable S has the p value of 0.00 and it is greater than the significance value of t which proves that the variable of S is positively significant with the value of T.

The result of random effect model has showed that the independent variable S has the p value of 0.00 which is greater than the z value and hence, it proves that the variable is positively significant. The result of fixed model has found that the independent variable S has the p value of 0.84 which is greater than the expected value of z and it also shows that variables are significant with each other. Therefore, economic Profit margin of partner countries is significant in terms of the Pooled regression model.

Therefore, the hypothesis of H4 is positive and the result is positively significant.

H5: Trade performance of Bangladesh has a positive relationship with the exchange rate between Bangladesh and partner countries

The study has explored the relationship between the trade performance of Bangladesh and the exchange rate between Bangladesh and partner countries. The trade performance of Bangladesh was denoted by T variable which was dependent and the exchange rate was denoted by ER which was the independent variable. Different regression models were applied to prove the positive significant relationship between variables. Therefore, it was explored the effect of exchange rate in the trade performance of Bangladesh. It shows that when the exchange rate will increase, it will increase the trade performance.

OLS pooled regression model has showed that the independent variable ER has the p value of 0.00 which is greater than the expected value of t value and it proves that those variables are positively significant with each other. The random effect model has found that the independent variable ER has the positive relationship with the trade performance of Bangladesh because it has the p value of 0.07 and it is greater than the significance level of z and it shows a positive significant relationship between variables T and ER.

Therefore, the hypothesis of H5 is positive and it shows positive significant result between variables.

Chapter 6 Conclusion and Recommendations

6.1 Conclusion

The textile industry has developed as Bangladesh's biggest and most important contributor to job creation, revenue and foreign earnings, and economic growth. However, a number of problems, including poor infrastructure, a shortage of resources and supporting policies, ineffective management, and a lack of industrial integration, have hindered the textile and clothing sector from reaching its full potential. Bangladesh's economy can accomplish its growth dream and get closer to being a middle-income economy by addressing these elements through joint efforts. Bangladesh's textile and clothing sector has achieved remarkable success in addressing growth concerns, particularly in diversifying clients and products, enhancing supplier and worker performance, and bolstering compliance and sustainability over the last decade. While handling the additional challenges of the crisis and the great deal of power of apparel-sourcing market, it's important taking a deeper look at the essential parts in each of these sectors and considering what's needed to expand on it.

Diversifying customer countries and moving to more complicated goods and significance services have been major strategies for the sector's growth over the last decade. The success that Bangladesh's textile and clothing industry is experiencing in broadening and updating its product offerings was emphasized by many source officials that the study collected data for this research. For example, there are now more capacities to create synthetic fibre clothes, as well as more complicated products like outerwear, fitted items, and lingerie, as well as new colours, patterns, and laser clean lines. Changes in origin criteria for favourable trade with 25

partner countries and 24 other partner countries have aided entrance into such new areas, enabling for using imported fabrics. There has also been an increase in supply chain vertical integration, resulting in more suppliers being capable of offering project duration less than the normal 90 days.

Bangladesh's textile and clothing industry has contributed strides in diversifying its customer base in addition to investing and responds to shifting demand nature of the global apparel market. However, despite a decline in reliance on the US, Europe (62% of total export) and the United States (18% of total export) remain the largest customer markets for Bangladesh's textile business. There is space to expand exporting to unconventional markets, especially while traditional markets' clothes retail sales are declining. The sector's second big difficulty seems to have been distance between countries and the trading gap between partner countries and Bangladesh. Wage payment digitization has risen and employment rights have improved significantly. Today, there is a stronger emphasis on female representation and also up skilling and career advancement chances. However, improvement has really been gradual and COVID-19 has brought attention and maybe worsened the terrible situation of many Bangladeshi garment workers.

6.2 Recommendations

- Bangladesh and 25 partner countries and 24 other partner countries has limited transport facilities and they should build multi-model transport facilities for exporting textile and clothing products so that buyers of partner countries could transport products in different routes such as shipping, airplanes or other vehicles etc. To reduce costs of

transportation, Bangladesh and partner countries should create a transportation channel which would incur low costs for transporting products in terms of the distance between nations (Mai, 2022). Low cost of transportation could increase economic benefits for both countries where partner countries can get textile and clothing products at relatively lower prices and Bangladeshi garment owners could get huge profit benefits. Infrastructure facilities could be given to American buyers so that they become interested in buying garment products from Bangladesh.

- Bangladesh should continue to urge from the government of partner countries to maintain GSP facilities as it has been closed down due to some political issues between two countries. GSP facilities could decrease tariff rates for Bangladeshi textile and clothing owners while exporting products. Production should be continued at large basis so that buyers of partner countries could find the availability of products in the market. But new product ideas should be generated in a continuous form so that buyers of partner countries don't become bore by buying same products for consequent times. Therefore, textile and clothing industries of Bangladesh should not limit their human resource management by hiring workers and they should maintain training and development process in the workplace so that workers can show their talents and creativity in the market (Asgari and Haque, 2013). Designing new products could generate more customers of the market in partner countries and it could lead to generate more exports level for Bangladesh.
- BGMEA has always requested textile and clothing owners that

they should increase efficiencies of employees and workers as employment has a positive relationship in increasing of exports of textile products. Many buyers of partner countries cancel orders from Bangladeshi textile industry as they have seen corruption and political unrest in the country and it is the responsibility of owners and associations to create a trade supportive environment in textile and clothing industries and remove corruption and corrupted people from the workplace of these companies.

- Bangladeshi government authority should create an investment friendly fiscal policy and regulation so that the buyers of partner countries become interested on invest in the textile sector of Bangladesh. It could also erase burden from existing investors who have invested in the textile sector. Bangladeshi government can decrease interest rates for foreign investors as more investments in the sector could lead to more economic growth. Many foreign buyers have left the ownership of textile companies of Bangladesh as they believe that Bangladeshi owners in the industry have no concerns over health and safety issues of workers after some big accidents of Rana Plaza, Tazrin clothing and fire incidents in many textile and clothing companies of Gazipur. Therefore, textile company owners of Bangladeshi should be careful of looking at safety issues of employees in buildings and factories of textile and clothing companies to ensure foreign buyers that there is no risk for building collapse, fire incidents and they have limited risk of wasting their investments (Chow, 2021) .

6.3 The contribution of the study

The contribution of the study is that it can show more opportunities for the textile and clothing sector of Bangladesh by identifying new directions for exporting textile and clothing products in 25 selected partner countries. The study has major contributions in analysing different factors which can grow the economic development of Bangladesh within few years. 25 partner countries was a major export destination of Bangladesh in terms of exporting textile and clothing items but some issues has changed the event where partner countries are looking for alternatives in terms of importing textile and clothing products. The contribution of the study could be found by the Bangladeshi government who can analyse findings of the study to detect which are major contributors in economic growth from exporting textile and clothing products in partner countries. This study has also used time series analysis as it is a simple method to conduct the quantitative method and the time series analysis has given an overview of textile and clothing products exports from Bangladesh year by year. Data was collected for different variables and 10 years of data was observed for 25 selected partner countries and it is a major contribution for using longitudal panel data analysis as no other studies have taken such a big data for related topic and updated data were taken for the period of 2005 to 2015 where no major studies have been developed after 2010 on the topic.

This study has contributed by showing positive relationship between distance of the market of partner countries and exporting textile products in 25 partner countries which means that Bangladeshi textile and clothing owners would increase their opportunities of exporting textile and clothing products in 25 partner countries when the people of 25 partner countries is increased because more people would increase more demands

of textile and clothing products. This study has also showed positive relationship between economic Profit margin and trade performance of textile and clothing products which refer that more economic Profit margin would increase exports of textile and clothing products as the production would increase from the increasing number of economic Profit margin. This study has also found positive significant among the GDP of Bangladesh and the trade performance of textile and clothing products which proves that the change in the GDP rate in Bangladesh can effect on the increasing or decreasing number of textile and clothing products in the market of 25 partner countries. Also, a positive relationship was found among exchange rate and the trade performance of textile and clothing products and it means that increasing ratings in the exchange rate could increase exports of textile and clothing products from Bangladesh.

ADF method was used in the study which contributes in checking the stationary of data and to support the ADF method, Philips Peron method was also used to double check the stationary of data. It contributes in proving the data validity and reliability in the study where it was checked that all data of variables were stationary in the study. The pooled OLS regression model has helped the study to find significant value which proves the hypothesis testing and it showed positive relationship between all variables as multiple regression method was used by applying fixed effect model and the random effect model. Therefore, this study has contributed to show that Bangladesh should continue exports its textile and clothing products in the market of partner countries as Bangladesh has vast opportunities in the market and it could lead to major economic contribution for the nation.

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국 문 초 록

방글라데시 의류 수출에 대한 파트너 국가와 무역 효과

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1978년 이래로 방글라데시는 직물과 의류 산업에서 중요한 역할을 하고 있다. 방글라데시의 전체 수출 수입의 약 85%는 직물과 의류에서 나온다. 그 중 76%는 니트와 직조 셔츠, 상의, 바지, 스커트, 바지, 스웨터, 스포츠웨어 및 기타 수많은 캐주얼 및 패션 상품을 생산하는 의류 산업에서 나온다. 현재, 그 분야는 약 150만 명의 사람들을 고용하고 있으며, 그들 중 대다수는 사회적 약자인 여성들이다. 작업자, 보조자, 재단사, 마무리사 등이 포함된 인력은 의류 부문에 중요하다. 방글라데시는 빠르게 훈련되고 숙련되거나 반숙련된 노동력으로 전환될 수 있는 크고 저렴한 노동력 공급의 축복을 받았다. 그러한 범주를 갖는 것의 한 가지 이점은 방글라데시가 국제 의류 무역 측면에서 장기간 혜택을 받을 것이라는 것이다. 우리는 국제사회의 도전에 부응하기 위해 우리나라의 섬유 및 의류 분야에서 기술 발전과 적절한 작업 환경을 구현해야 합니다. 나는 보고서에서 방글라데시 섬유 및 의류 사업의 잠재력과 미래를 보여주려고 시도했다.

【주요어】: 섬유 및 의류 부문, 무역 효과, 무역 실적 및 수출 실적