Master Thesis

FDI Opportunities providing from China on garment sector in leading economic growth of Bangladesh

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The Graduate School of Hansung University

Major in International Market Analysis

Dept. of International Trade and Economics

Hossain MD Jahid

Master Thesis
Advisor Professor Yoonkyo Cho

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ABSTRACT

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The second-largest manufacturer and exporter of ready-made clothing in the world, Bangladesh's garment industry is highlighted in this thesis, along with the various factors that motivate foreign businesses to invest there. Time series analysis and OLS regression model have both been used to describe and evaluate the Bangladesh clothing industry in great detail. The cost of producing clothing in China is rising daily, making the country's clothing industry unviable today. Bangladesh may thus be the next country where Chinese investors choose to participate in the apparel sector. By providing a thorough examination of the garment industries in Bangladesh, this paper adds to the body of knowledge already available on the subject and aids investors in deciding where to deposit their money to compete effectively, such as Bangladesh's garment industry. In this paper, the researcher will go into great length about Bangladesh's general investment climate, company competitiveness,

opportunities, issues, and solutions related to investment. The broad themes of the discussion and the key conclusions are presented in the conclusion chapter. Additionally, the present study will offer some insightful recommendations to Bangladesh and China to quicken the process of outside investment in the Bangladeshi apparel industry.

Keywords: Foreign direct investment from China on garments industry, Time series data, OLS regression model, FDI involvement on GDP

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Chapter 1: Introduction

1.1: Background of the study

FDI is one of the most important components of international investment which creates a long-standing relationship between the direct stockholder and the enterprise. Direct investment relates the transaction between the investor and the enterprise. FDI shows the transactions among affiliated enterprises, both incorporated and unincorporated. The components of FDI are: 1. Equity capital, 2. Reinvested earnings and 3. Intra-company loans (Borensztein & de Gregario, 2018)

'Foreign Direct Investment - FDI' - The investing employer can also make its distant places funding in a variety of approaches - both with the aid of placing up a subordinate or vice business enterprise in the distant places country, by using gaining shares of an distant places company, or thru a merger or mixed mission (Misztal, 2010).The recognised beginning for a foreign direct investment bond, as defined by the OECD, is 10%. That is, the foreign investor must own at least 10% or more of the voting stock or ordinary shares of the investee company (Vernon, 2016). A sample of foreign direct investment would be an American company taking a common stake in a company in China. Additional example would be a Canadian company situation up a joint venture to grow a mineral deposit in Chile.

To understand foreign direct investment must primary recognize the basic incentives that cause a firm to finance abroad rather than export or outsource Manufacture to national firms. Many researchers have explained foreign direct investments (FDI)'s issues but the main research on the motivations underlying FDI were developed by (Vernon, 2016).

According to data obtained from the Bangladesh Garment Manufacturers and Exporters Association (BGMEA) Members‟ Directory 2004–2005, there are additional than 4,000 companies working in Bangladesh apparel sector where 2,800 firms are positioned in the capital city of Dhaka (Bangladesh Garment Manufacturers and Exporters Association). Majority of the clothing firms in Bangladesh are locally own where around 1% of them working in the export processing zones (EPZs) in the city of Dhaka and Chittagong but more than 63% of EPZ companies have nearly external ownership from nations such as South Korea, China, Japan, UK, USA and Hong Kong. The zone as a whole employments 2.1 million workers, with 53,000 labours in the companies with foreign ownership (Mottaleb, 2017).

As an emerging country, Bangladesh desires Foreign Direct Investment (FDI) for its continuing development procedure. Since independence, Bangladesh is trying to be a proper nation for FDI. In order to speed up monetary growth, Bangladesh opened her economic system in the late Nineteen Eighties to reap the advantages of FDI. In 1989 the authorities set up Board of Investment (BOI). The key objective of which is targeted at attracting and helping investment from in a foreign country. Foreign investors have set up world standard garment units in the export processing zones (EPZs) in which labourers are working in sound environment and getting good salaries. The Bangladesh government has developed EPZs in different parts of the country to woo foreign investments in the 80s and 90s. The protection measures in the factories in the EPZs are global standard. Bangladesh is the second largest supplier of RMG products in the international markets after China said a foreign ministry official of Bangladesh Government.

1.2: Problem statement

Bangladesh has become a popular investment destination due to its low labour rates and low energy costs, as well as its bearable inflation rate, generally stable exchange rate, and investor-friendly custom policies. Over the previous few decades, Bangladesh became more open to FDI policy. These qualities would undoubtedly entice overseas investment. The author will investigate the benefits of FDI in the Bangladeshi garments business, providing much more information to international investors ready to invest in Bangladesh's RMG sector (Wahed & Rahman, 2018).

In Bangladesh's economy, the garment sector business holds a unique role. It is Bangladesh's largest exporting industry, with extraordinary growth over the previous two decades. This thesis will focus on Bangladesh's RMG's opportunities, difficulties, and strategies in the global attempt to attract international investment. Wahed and Rahman (2018) have identified FDI as a key determinant in a country's economic success and prosperity, as well as a means of creating jobs, facilitating the economy, improving the host country's competitiveness, and contributing productivity. The global economy is changing in order to integrate itself in order to fulfil the desired objectives of economic globalization for growth and prosperity for all people in all areas of the world, regardless of geography. Globalization, which is a free market economy, has had a significant impact on economic policies in both industrialized and developing economies, and foreign trade and investment liberalization have become its primary drivers (Rahman, Shahriar and Kea, 2019).

FDI is an important component of international business for many countries; however, Bangladesh is falling behind them. Making FDI a fundamental component of international business is a tall order for

Bangladesh, as there are numerous prospects for economic development through various initiatives. Bangladesh's RMG is now a major market, a top attraction for international business, and is well positioned to handle the expectations ahead and remain competitive in the global RMG market. Bangladesh is predicted to export more than USD $50 billion dollars of garments by 2021, making it the world's second largest exporter. The expanding foreign investment in Bangladesh's textile and apparel sector is one of the primary drivers driving the industry's growth (Rahman, Shahriar and Kea, 2019). Bangladesh's cheap textile labour, strategic location in the Asia pacific countries, and government assistance are just a few of the reasons why the country's textiles and apparel industry is attracting more investment.

But the expectation was become an issue after several accidents occur in the nation. For example, Rana Plaza Tragedy, Ashulia Garments fire incident, Holi Artisan Terrorist attack and fire accidents in several garment factories have decreased the worth of foreign investment from foreign countries where European countries declined to import garment products and invest in garment sectors of Bangladesh. Therefore, garment owners of Bangladesh face problems due to lack of investments from European and American nations. Therefore, garment owners of Bangladesh are urging to collect investments from alternative nations who are looking to invest in the nation by attracting them (Ahmed, 2019). These countries include China, South Korea, UAE and Japan where Bangladeshi garments are seeking opportunities to collect investment from China mostly. Therefore, this report would show significant results which can attract Chinese investors to invest in Bangladeshi Garments industry.

After that, Covid-19 has struck the nation’s exporting opportunities of exporting garment products in Europe and North America where they

declined to receive orders from garment owners of Bangladesh and they cancel many orders and decline foreign investments in the industry that they were supposed to invest. Bangladesh found no other ways without looking opportunities from alternative countries where Asian countries such as South Korea, Hong Kong and China has dealt to help the nation with big investments opportunities. This report would particularly focus on Chinese foreign investments in the garment sector of Bangladesh which can lead economic growth in the nation (Mir et al., 2021).

1.3: Objectives of the study

- To analyze the FDI opportunities providing from China GDP growth of Bangladesh
- To analyze the present situation of the Garments and textile industries of Bangladesh with China.
- To examine FDI opportunities from China in creating employment opportunities of Bangladesh
- To evaluate the FDI opportunities from China in increasing trade balances of Bangladesh

1.4: Research questions

Q1. Is there any role of garment sector of Bangladesh in GDP growth with FDI providing from china?

Q2. Is there any impact of employment opportunities providing from china with GDP growth of garment sector of Bangladesh?

Q3. Is there any impact of GDP growth providing from china with RMG exports of garment sector of Bangladesh?

Q4. Is there any impact of GDP growth in Bangladesh with trade balance of payments in garment sector of Bangladesh?

1.5: Research significance

The contribution of this thesis is to show the involvement of FDI from China in the Bangladeshi garments sector and in the economic growth of Bangladesh so as to know whether the request for more FDI is really acceptable. The thesis contributes in literature where authors, marketers, etc. can easily identify the prospects of the Bangladeshi garments industry by analyzing its current scenario, strengths and weaknesses, and potential competitiveness in the world market. Many developing countries' economies rely heavily on foreign direct investment (FDI) to boost GDP, exports, and domestic investment, all of which lead to total economic growth (Mir et al., 2021). As a result, it is critical for the Bangladeshi government to take appropriate measures to protect potential overseas companies in investing their money in the Ready - made garment industry in Bangladesh.

Ready-Made garment is one of Bangladesh's most important businesses; however, its rate of growth in the global market is currently facing significant obstacles. The global crisis, adverse trade policies, high production costs due to rising energy expenses, and other factors could all contribute to these difficulties. Foreign direct investment is a powerful tool for improving an equity country like Bangladesh. FDI has the potential to become a significant vehicle for increasing physical capital, creating jobs, developing productive capacity bettering the capabilities of affordable labor via the switch of science and managerial know-how, and helping in the addition of the countrywide market with the international financial system y. This dissertation examines the current state of FDI in the RMG sector in Bangladesh (Ahmed, 2019).

To enhance FDI in the garment business, the study can help the Bangladeshi government in pushing investment opportunities not just in the textile sector, but also in allied transportation and energy sectors, which will assist raise garment trade volumes. Meanwhile, trade associations are working to improve the sustainability of their corporate environments by educating more competent workers, increasing social compliance, and enhancing cooperation between producers, exporters, and importers and this study can help those associations to take strategic actions (Mir et al., 2021). As China is always among top 5 destinations which invest in the garments sector o Bangladesh every year and the nation is interested to do so, this study can signify the importance of attracting Chinese investors to invest in the industry.

This dissertation is mostly about safeguarding the benefits of foreign investment enterprises in Bangladesh's garments sector. It gives an interesting take for a good sense of the sector's core concerns, as well as a collection of alternative plans for the industry to attract international investment.

1.6: Research gaps

Significant material, datasets, and the use of charts and figures in this dissertation are drawn from a variety of sources, which have been acknowledged. There is no field study of self-observation. Due of a lack of technical skills, time restrictions, and budgetary constraints, it is not practicable. The thesis's analysis is based on past case studies and indirect email communications with employees of Bangladesh's garment industry executives. As a result, there is always a question mark when it comes to trustworthiness and validity (Hossain, 2018). Since the study region is so large, it is difficult to include all relevant information. Multiple obstacles were identified and confronted during the research process. Yet, the

research is unable to address all of them, and several unresolved concerns are thought to require additional research and studies. The issues include a disputed understanding of FDI business productivity, as well as actual export and import operations.

There are various elements that have a good or negative impact on commerce between Bangladeshi exporters and world importers, including differences in environment, culture, language, and communicational patterns. This study has explained the relationship between variables such as GDP growth and inflation while exploring Chinese investments in Bangladeshi garment sector to lead economic growth in the nation. No studies have ever explored the relationship between these two variables while analysing the related topic. Therefore, this gap would be analysed in the study (Hossain, 2018). Another gap was found where no studies have ever explored the relationship between exchange rate and GDP growth while explaining the study of how attracting Chinese investments in the garment sector of Bangladesh can lead economic growth and this study has tried to explain the relationship by identifying gaps in previous researches.

Chapter 2: Literature review

2.1: The garment industry of Bangladesh

According to the Bangladeshi RMG Manufacturers and Exports Association (BGMEA) Members Index 2004-2005, the garment and textile sector employs more than 4,000 people, with 2,800 of them based in the capital city of Dhaka. The woven sector accounts for 65%, the knitted industry 20%, and the rest 15%. Approximately 13% of woven companies also work in the knitting business. All of those are usually the more prolific and larger weaved companies. After researching several management levels of Bangladeshi garment factories, Islam et al. (2019) discovered that the majority of the managers mentioned utility crises including oil / gas shortages, too much reliance on imported raw materials, and suppliers' inefficiency.

Bazlul and Naznin (2018) found that most garments enterprises in Bangladesh are part of bigger international organizations through FDI, however a tiny number of Bangladeshi garment firms have foreign equity due to Bangladesh's industrial regulations, which protect quota allocations of garment export to the United States to domestic firms. Furthermore, international corporations are only permitted to participate in the Bangladesh garment industry if their facilities are located in export processing zones and are not conflicting with subcontracting domestic enterprises that supply to exporting firms with quota access. As a result, practically all FDI enterprises export their entire product line from Bangladesh.

2.2: Trade relations between Bangladesh and China

China is a integral alternate associate of Bangladesh for quite a number reasons. For instance, the country's garment enterprise is closely reliant on

Chinese fabric though neighbourhood producers can grant almost eighty per cent of the yarn required through the knitwear sector. Bangladesh's woven garment makers import almost 60 per cent of all the fabric they require immediately from China as neighbourhood weavers can't grant ample uncooked materials. In total, garb makers in the country supply forty-six per cent of their uncooked substances from China. Bangladesh is additionally dependant on Chinese dyes, chemical substances and capital machinery. The bilateral family members between the two international locations go deeper although as China is now a main export vacation spot in the Asian vicinity for Bangladesh.

China is one of the largest shoppers of garb merchandise in the world. The home market for clothes in China is well worth $350 billion as the centre earnings bracket is expanding, in accordance to estimates from the International Textile Manufacturers Association.

Apparel exports from Bangladesh to China are growing with time as a part of shoppers in the centre profits bracket can't come up with the money for the high-end garment gadgets made in China. This is why they rely on less expensive Bangladeshi products, enterprise insiders said. The value of garb manufacturing in China has long past thru the roof due to a scarcity of professional workforce. This is due to the fact the people select jobs in extra state-of-the-art technological industries instead than the garment sector. The export of quite a number merchandise, specifically clothing products, from Bangladesh to China has grown unexpectedly in latest years following extended demand whilst preferential change advantages are given to nearby exporters.

In fiscal 2018-19, Bangladesh's complete exports to China amounted to $831.20 million whilst it was once $694.97 million simply the preceding year, in accordance to the Export Promotion Bureau.

In the February–July duration of the modern fiscal year, Bangladesh earned $470.20 million via exports to China. Of that total, garment exports accounted for eighty per cent.

"Bangladesh ought to revel in the duty-free advantages for ninety-seven per cent of its goods and reject the APTA for the larger activity of the country," stated Abdur Razzaque, lookup director of the Policy Research Institute.

Yang and Mlachila (2017) used a simple log linear regression model to examine the sound effects of global trade and foreign direct investment on economic progression in South Asian countries such as India, Indonesia, and Pakistan, using secondary data from 1971 to 2005. They discovered that by promoting exports, each country's economic growth would increase. According to Islam et al. (2019), Greenfield investment encourages additional Chinese enterprises to participate in Bangladesh's garment industries; outbound investment relocation and joint ventures with Bangladeshi companies can be profitable tactics.

In an article of Daily Star, Mirdha (2022) explored that instead of negotiating a free trade deal with China, Bangladesh seeks to achieve extra trade benefits as a less developed country (LDC). According to officials from the commerce ministry, he added that the Bangladeshi government do not want to negotiate a Free Trade Agreement with China since it is Bangladesh's major commercial partner. The ministry also expects that Bangladesh would lose a significant amount of revenue each year if the nation signs the FTA. The ministry of trade has indeed accepted China's offer of duty-free imports for 97% of all Bangladeshi items underneath the LDC category, thereby rejecting the benefits Bangladesh would have gotten underneath the Asia-Pacific Trade Deal (APTA). In 2017, China, Bangladesh's biggest bilateral trade partner,

extended trade incentives to several LDCs for up to 97% of their commodities. Those countries that accepted the offer, however, were no longer eligible for APTA subsidies. Due to Bangladesh's tardiness in responding, China will now make a new offer for 95% of the country's commodities (Mirdha, 2022).

Mirdha (2022) also demonstrated in the article that for a variety of reasons, China is an important commercial partner for Bangladesh. The country's apparel industry, for example, is primarily reliant on Chinese materials, despite the fact that domestic producers can supply approximately 80% of the yarn needed for the knitting industry. As local weavers are unable to offer appropriate raw ingredients, Bangladesh's woven garment manufactures import roughly 60% of all fabrics they need straight from China. China provides 46% of the raw materials used by garment manufacturers in the country. Bangladesh relies on Chinese dyes, chemicals, and capital equipment (Mirdha). However, bilateral ties between the two countries are deepening, as China has become a primary export destination for Bangladesh in the Asian area.

Alam (2019) identified in his report that China is among the world's largest purchasers of garment products. According to estimations from the International Textiles Manufacturers, China's domestic clothing trade is valued $350 billion as the middle class grows. 's export from Bangladesh to China seem to be on the rise, since a growing number of middle-income consumers can no longer afford the high-end garments created in China. According to industry insiders, this is why they rely on cheaper Bangladeshi items. The Export Promotion Bureau (2022) explained that Due to a lack of competent labour, the cost of garment manufacturing in China has increased. This is due to the fact that workers choose positions in more advanced technology industries over

those in the garment industry. Following rising demand, Bangladesh has seen a significant increase in the exporting of various products, particularly garment products, to China in recent years, with local exporters receiving preferential trade privileges. the EPB also explored that Bangladesh's overall exports to China in fiscal year 2018–19 were USD $831.20 million, up from USD $694.97 million the previous year (Export Promotion Bureau, 2022).

Alam and Natsuda (2020) analysed in his report that currently, the APTA allows roughly 65 Bangladeshi items for duty-free option to the Chinese market, while the LDC coverage allows more than 5,000 commodities to enjoy the same benefit. After Japan and India, China is expected to be Bangladesh's 3rd Asian export destination, with the country able to deliver more than USD $1 billion worth of commodities. Cambodia and Vietnam are currently benefiting from growing exports to China as a result of favourable trade arrangements with the world's fastest growing country.

India and China are predicted to be the greatest investors among emerging countries by 2030, according to the Press Trust of India (2022), with both the Asian powers contributing for 38% of global gross investment. China and India are predicted to be the top investors among developing countries, with the two nations accounting for 38% of global net investment in 2030. The local newspaper of Bangladesh, known as the Financial Express (2022), reported that Bangladesh's garment exports to China fell by almost 21% during first half of this fiscal year, to Approximately USD 110.39 million from USD $139.81 million the previous fiscal year. According to EPB figures, Chinese garment imports from Bangladesh totalled $506.51 million in 2018–19, up from USD 52.81 million in Fiscal Year 2010–11. According to data, exports fell to

USD $271.28 million in Fiscal Year 2020-21 and US$ 329.96 million in Fiscal Year 2019-20, respectively (The Financial Express, 2022).

When asked about the drop, Abdullah Hil Rakib, director of the BGMEA, said there were 226 garment goods in the HS8 tariff plan for which Bangladesh previously had commission transit under the Asia-Pacific Trading Relationship (APTA). Furthermore, China's recent expansion of goods coverage, which was issued on August 1, 2020, increased RMG scope to 299 in the HS8 digit (Financial Express, 2022). According to an analysis of Financial Express (2022), Bangladesh exported USD millions of $506.5 worth of garment products to China in Fiscal Year 2018-19, with 93 goods enjoying duty-free access. He added that clothing worth USD$198 million would have to pay duty on entrance to China at various MFN rates, bringing the total value of the 93 products to US$308 million.

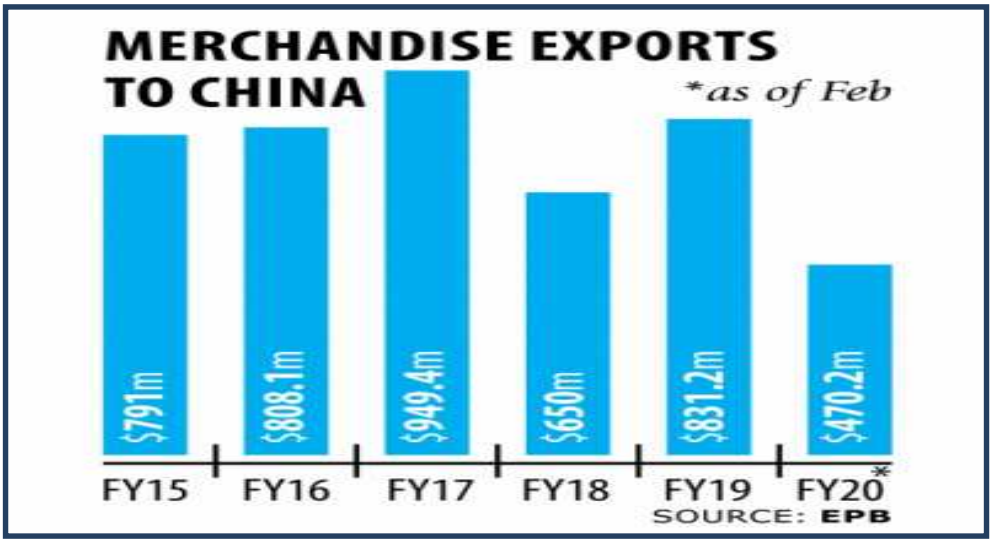

Figure 1: RMG products export to china from 2015 to 2020

2.3: FDI from China in garment sector of Bangladesh

Mottaleb (2017) looked into the factors that influence foreign direct investment and how they affect economic growth of the country. He examined panel data on foreign direct investment streams from 60 low- and relatively low-income countries and discovered that foreign direct investment has a significant impact on third-world economic growth by bridging the gap between domestic investments and acquainting developing countries with cutting-edge technology and management skills.

Hossain (2018) explained that in 2012, Bangladesh experienced a satisfactory FDI. World Investment Report 2012 ranked Bangladesh 16th among 74 FDI-recipient countries with a record $1.13 billion FDI inflow. Shakil & Rahman (2018) elaborated that the spirit of free enterprise and the innovative entrepreneurship are the dominant forces in the economic life of Bangladesh. According to the Bangladesh economic review, in last one decade the GDP growth hardly went down below 6%. A strong domestic demand, high export growth and continued expansion of infrastructural facilities helped to accomplish this accelerated economic growth amidst the fragile pace of global economic recovery. Apart from remittances by expatriate Bangladeshis, the increase in export earnings and decrease in import cost played their role in boosting the reserves (Oxfam, 2012).

Klein & Aaron (2017) found that expatriate Bangladeshis remitted US$14.2 billion in 2012. The amount is 21 % more than 2011 and a record itself. Allowing to The Trade Association of Bangladesh, China and the United States have been long-time, constant trade partners. The capacity and prices of trade are very important with equally countries.

As the trade war accelerates, American vendors are contracting more work orders in Bangladesh in an strength to offset growing tariffs on

goods and chattels industrial in China. According to the Bangladesh Foreign Trade Institute, Bangladesh loved a 6.46 percentage progress in market place share in the U.S. market through the first three quarters of 2018. Chinese investment is growing in Bangladesh. Bangladesh aims at achieving upper middle-income country (UMIC) status by FY 2031. To meet the ambitious goal of Bangladesh, it needs a huge investment. Therefore, Bangladesh is trying to attract foreign direct investment (FDI) from China to develop her infrastructure.1 Beijing expressed its interest in investing in various promising sectors like ports, infrastructure, and energy sectors. As a result, investments have risen faster than before in the last few years (BGMEA, 2022).

2.4: GDP growth and Contribution in Bangladesh from garment sector

According to Sahoo (2018), Bangladesh's Ready-Made Garments sector has experienced rapid expansion since its inception. Over the 1980-87 periods, the annual multiple progress rate of RMG export trades in Indonesia (31.2 percent), and the Dominican Republic (21.1 percent) was higher than that of Bangladesh (81.3 percent). The garments sector accounts for roughly 78 percent of Bangladesh's export profits. In conditions of jobs and foreign profits, this sector has more promise than any other in Bangladesh. According to Khan (2016), Bangladesh excels in the development of low RMG items because it has the potential of making RMG items at a lower labour cost than the rest of the globe. The specialized agencies will oversee strict adherence to building codes and conduct routine inspections. This industry has grown to be one of Bangladesh's most important contributors to the country's economy. World-famous brands such as H&M, Zara, Macy's, Wal-Mart, and others are attracted by low labour costs, sufficient expertise, and growth in the supporting industries.

The Lead Economist of World Bank Bangladesh, known as Hasan (2018), reported that, following the Rana Plaza tragedy, the apparel industry went through a period of structural reforms to provide a safe working environment, compliance, and worker's rights issues. But today the sector is operating well, and confidence in the sector has been restored. He believes that the apparel sector's export earnings are dependent mainly on four to five goods, and that there is no diversity within the apparel sector and that is why export earnings do not keep up with GDP growth. He mentioned that apparel manufacturers believe that a lack of fresh investment as well as price cuts by major brands and stores have harmed export revenues. Despite the fact that there has been progress, its contribution continues in GDP growth to decline. But at the other hand, he points out that, as a result of the stronger regulatory system, investment is inefficient and concentrated in the import-based industry (Hossain, 2018).

2.5: Employment opportunities in the garment sector of Bangladesh

Significant foreign investment from China is strongly encouraged in order to capitalize on competitive advantages. According to Ahmed and Hossain (2018), if Bangladesh cannot assure the safety of its people at work, it will suffer a significant setback at some point in the future because overseas purchasers prefer to acquire products from companies that adhere to employee safety. Following the Rana Plaza accident, Ahmed and Nathan (2014) discovered that a number of foreign purchasers have stepped forward to provide funds to improve workplace safety conditions.

Clark and Kanter (2018) examined the performance levels and concluded that Bangladeshi workers' productivity is not up to current or in line with international standards. According to an empirical study, it is only 1/4 of those of workers of China and the main cause for this is the low

literacy rate. The majority of garment industry in Bangladesh is privately owned, with only about 1% operating in EPZs in Dhaka and Chittagong. However, more than 63 percent of EPZ companies have private equity from regions such as China, South Korea, Japan, the United Kingdom, the United States, and Hong Kong. The industry as a whole employs 2.1 million people, including 53,000 in foreign-owned businesses.

A report of Daily Star where Uddin et al. (2019) identified that roughly four million people are employed in the RMG business, which accounts for over 83% of the country's overall export receipts. While some may see this as a flaw, Bangladesh may use it to its advantage by working collaboratively, creativity, and investment to make the industry the finest in the world. A country that is 83% reliant on a single industry must concentrate on developing next leaders for the garment industry. The clothing business in Bangladesh has to draw the interest of the country's young by demonstrating the vast employment options available in the Ready-Made Garment sector.

Uddin et al. (2019) also added that this might involve putting a greater emphasis on giving young people a fundamental awareness of the industry, such as the numerous levels of employment options available, from store clerks to merchandisers, designers, and product developers, and beyond. Bangladesh must also consider how to establish an education system that would provide future industry leaders for the RMG sector, allowing it to engage at the upper end of the price range and solve the demand for skilled middle management.

2.6: Ready-made garment exports in China from Bangladesh

According to Abdin (2015), the lack of efficient physical infrastructure, professional and sector-specific trained manpower, and regulatory complexity may stymie Chinese and overall investment trends in

Bangladesh. Bangladesh must finish its home work, such as identifying suitable sectors, creating particular project proposals, addressing possible investor companies, and so on, in order to attract a sufficient degree of international investments in Chinese enterprises in the RMG sector.

2.7: The role of Chinese immigrants in economic growth of Bangladesh

Mai (2022) analysed one of the most important variables in determining whether immigration benefits the host nation is its impact on economic growth. The general population's quality of living can increase if the proportion of per-capita economic growth increases as a result of a nation's immigrants. They demonstrated that there are smaller amount lessons on the effects of immigration on per-capita growth than there are on its labour market or fiscal consequences. The majority of studies in this field use cross-country data and find positive results.

Individual country studies have also found positive results where Yamagata (2017) developed the study by choosing the nation such as Netherlands and Anwar (2021) developed the study on immigration effects in economic growth by choosing the nation of France. In terms of nominal gdp (GDP) per worker, Berik and Rodgers (2010) found that the impacts are negative where the result is positive when maximum researchers developed the study to find relationship between economic growth and immigrants. Finally, additional studies show that the impact of immigration on economic growth varies depending upon the nature of immigrants or perhaps the destination country. It's difficult to compare results because of the diverse methodology, nation samples, and time frames employed in previous studies.

Nagata (2020) analysed that it's uncertain whether immigration affects GDP per capita in a negative, positive, or neutral way. Under some

conditions, an increase in employee demand caused by immigration would theoretically cut wages while increasing overall employment and productivity. He added that the partner countries' larger proportion of immigrants amongst some of the working-age population is not unusual. Around 80% of immigrants remain 15 or older around the world, compared to only 58 percentage of the total population. In all groupings of nations excluding low-income countries, immigrants have a greater rate of labour force participation than native-born citizens (Nagata, 2020).

The report of ILO (2022) reported that while a higher labour participation rate could theoretically be compensated by a lower unemployment rate; the workforce ratio of immigrants in middle class and high-income nations is likely to be higher than that of native-born individuals. If foreign-born employees displace native-born workers, the upward impact of immigrants on the share of the population employed, and hence on per-capita wealth, might be dampened or even reversed.

There really is no comprehensive research on the impact of immigration on the capital-labour ratio. In theory, as the labour force rises, the ratio decreases. Firms make investments over time to regain the GDP ratio to a superior stage. Immigrants who contribute or encourage foreign investment into the economy, on the other hand, can counteract the decline in the capital-labour ratio right away. Given these theoretical arguments, as well as the fact that the admission and exit of native-born individuals has a significantly greater impact on labour force rates, it could increase economic growth in many nations for the arrival of immigrants (Billah, 2016).

2.8: Empirical studies on related topic

Razzaque et al. (2019) used a multiple regression analysis with balanced least squares estimates to investigate the relationship between foreign direct investment flows, the exchange rate, and Kazakhstan's economic development. The findings found that foreign investment had a little impact on Kazakhstan's GDP growth. Foreign Direct Investment (FDI) has been a significant aspect of Bangladesh's economic change, corporate liberalisation, and fiscal revenue growth over the last decades, according to Mir et al. (2021).

Additionally, these findings show that size of the market, openness to trade to the global market, and workforce quality are the most important factors of foreign direct investment inflow. The research also revealed that market capacity and communication infrastructure had no impact on the attractiveness of foreign investment to Pakistan. Rakib and Adnan (2015) used extreme limits analysis to examine the data of key trigger variables for foreign investment in Bangladesh. He discovered that both foreign and domestic investment have a significant effect on economic growth. Misztal (2010) used the Vector Autoregressive Model (VAR) to examine the effect of foreign direct investment on Romanian economic growth from 2000 to 2009, and discovered a linear link between foreign direct investment and growth of the economy.

Chapter 3: Research model and Hypothesis testing

3.1: Research model

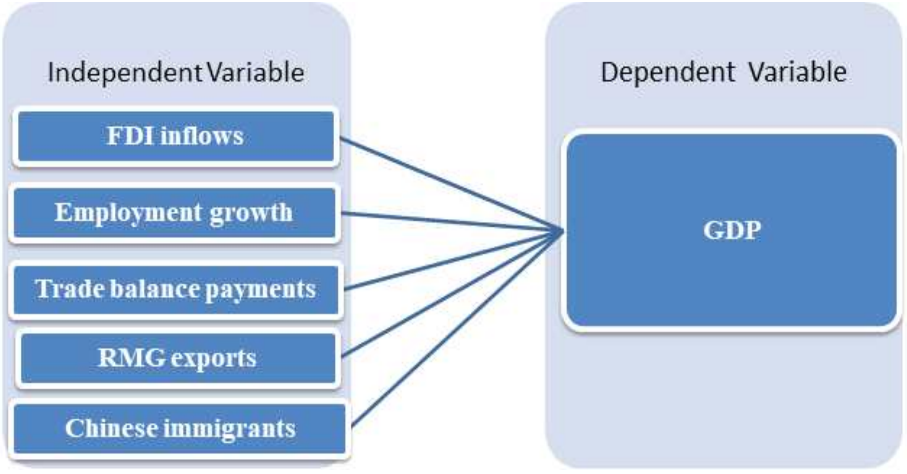

Figure 2: Research model of variable

3.2: Hypothesis testing

H1: FDI from China in garment sector has a positive significant relationship with GDP growth of Bangladesh

H2: Employment growth in garment sector has a negative significant relationship with GDP growth of Bangladesh

H3: Trade Balance payments in garment sector has a positive significant relationship with GDP growth of Bangladesh

H4: RMG export in China has a positive significant relationship with GDP growth of Bangladesh

H5: Chinese immigrants of China has a positive significant relationship with the GDP growth 4

Chapter 4: Methodology

4.1: Research design

This chapter would provide brief information on what type of research design would be applied and used how empirical data and information would be gathered related to the study. To justify the accurateness of the data, research methods and problems should be revealed. The research design chapter would also include information on which research design would be applicable for the study. Therefore, this study has chosen the statistical research design where information would be showed statistically (Cheng et al., 2018). To show data in numerical numbers, the study has established some research approaches and techniques that would be suitable for the methodology.

4.2: Research method

The time series methodology has been applied in the study where a different period of time has been selected for specific years and the study would choose some variables where data would be collected for specific periods. After that, the researcher has applied the unit root test method to check the stationary of data. The regression analysis would be applied in the time series to show that the study is significantly positive or negative. The time series method is used as a tool of studying a collection of data points over a period of time (Jones, et al., 2016). Instead of capturing datasets intermittently or arbitrarily, time series analyzers of the study has collected datasets at constant intervals over a predetermined length of time.

4.3: Research approach

To apply the research approach, it could be quantitative or qualitative or mix research approach could be applied. To get correct answers for research problems and questions, the study should choose a correct approach between the quantitative or qualitative method. Therefore, the quantitative approach has been selected in the study where the purpose of the approach is to find research answers such as "how" and "why" and results of the study would be obtained through using techniques (Shafi, 2020). The quantitative approach would be more relevant to get research answers of some factors for Bangladesh in getting FDI opportunities from China in the textile industry of the country.

The study would be based on the quantitative technique where statistical approach has been selected to analyse the study. The quantitative technique is the best method to show highly potential results of a study.

Some instruments of successful exports and imports between China and Bangladesh should consider in finding different factors. Using the qualitative approach would help the study to get some statistical numbers but interpreting the textile industry of Bangladesh is essential for the study to get correction information on how to get FDI opportunities in China.

4.4: Research technique

In order to get the results and, its impact whether positive or negative by taking data of numerous time intervals also identify the bond of these two variables either this is weak or not. Since time series analysis is a specific way of analyzing the sequence of data points collected over an interval of time and it is also helpful for the organization to understand the underlying causes of trends and systemic patterns over the time (Ostrom, 2017). Businesses can use time series modeling to estimate the

probability of an event occurring when they evaluate data at regular intervals. Predictive analytics includes time series forecasting. It can reveal likely data changes, such as volatility or cyclic behavior, allowing for greater analysis of data factors and better forecasting.

4.5 Data collection method

For this research the data of 25 years (1995-2019) will be taken and evaluated by focusing the factors (independent variables) economic growth by the Country FDI on garments sector, Trade Balance and Employment Opportunities. These two linear trends will be tested as in a methodology by taking the data on yearly basis. For collecting data on FDI variable, the study has taken assistance from the report of Bangladesh Bank. To collect data on GDP growth of the nation, the study has collected data from the World Bank report. The report of Bangladesh Bank has also helped to collect data on employment growth opportunities (Zhang et al., 2011). Total RMG exports in China and trade balance of payments have been collected from the report of UNCTAD. World Bank report has assisted to collect data Chinese immigrant's population per year for developing the study.

4.6 Data analysis method

Time series with linear trend, Yt= a+bt+et.

Time series with Nonlinear trend, Log (Yt)=a+bt+et.

Therefore, linear trend line has been chosen for the study where the equation for the study is given below -

$$GDP = \beta 1 + \beta 2\ FDI + \beta 3\ EG + \beta 4\ TB + \beta 5\ TE + \beta 6\ CI + \mu$$

Here,

GDP = GDP Growth in the garment sector

β = Intercept of slope

FDI = Foreign Direct Investment in garment sector

Employment growth = Employment growth in the garment sector

Trade Balance = Balance of export-import trades from garment sector

TE = Total RMG export of garment products in China from Bangladesh

CI = Chinese immigrants of China

μ = Error term

To analysis data, different software was used where STATA 14.2 software has been used for measuring the stationary of data and unit root testing. The software was also used to analyse the regression analysis of the study. Microsoft Excel was used to measure the descriptive statistics of variables where mean; SD and median etc. of particular variables were explained in this study.

4.7 Data measurements

Table 1: Description of variable

Variable name	Interpretation	Expected sign	Value in units	Theoretical abbreviation analysis	Data sources
GDP	GDP growth in Bangladesh from exporting garment products		Unit in current US dollars	The increase of total GDP would indicate more opportunities for foreign investments	World Bank report

FDI	FDI inflows in Bangladesh in the garment industry from China	+	Unit in current US dollars	FDI can increase more economic growth	Bangladesh Bank report
EG	Employment growth opportunities in Bangladesh in the garment sector	+	Growth percentage per year	Employment growth increases means more opportunities in economic development	Bangladesh Bank report
TB	Trade balance of payments from exporting and importing garment products from China	+	Unit in current US dollars	Increase in trade balances means economic growth for Bangladesh	UNCTAD report
TE	Total RMG exports to China	+	Unit in current US dollars	Increase in RMG exports means increase in trade balances	UNCTAD report
CI	Chinese immigrants population size	+	Unit in percentage growth per year	Increase of Chinese immigrants would provide more economic development	World Bank report

Chapter 5: Data analysis

5.1: Descriptive statistics

The below table has summarized the statistical value of each variable by describing them in their unit name and finding their value of mean, median, standard deviation, minimum and maximum value. Therefore, the mean value of GDP variable is 1613.20 and median value is 1034.83. The standard deviation of GDP is 1054.21 and the minimum and maximum value of the variable is 723.11 and 4530.22 respectively. The FDI variable has the mean value of 331.85 and the median value of the variable is 301.56. The standard deviation of FDI is 73.50 where the minimum value of FDI is 221.22 and the maximum value is 492.46. The employment growth has been showed in percentage growth for each year where the mean of the variable is 3.32 and the median of the variable is 3.27. EG has the standard deviation of 0.78 and the minimum value of EG variable is 1.22 where the maximum value is 4.95 (World Bank, 2022).

Trade benefits is considered as the variable which showed as Unit USD dollars for each year where the mean of the variable is −154.36 which indicates that Bangladesh doesn't get trade benefits while trading garment products with China as Bangladesh imports rawer materials of garment products than exporting products. The median of the variable is −167.22 and the standard deviation of the variable of 51.21. The maximum value of TB variable is −75.22 where the minimum value of TB is −232.82. TE means the total exports of garment products in China where the value is showed in US dollars. The mean value of TE is 129.68 and the median

of TE is 44.32 where the standard deviation is 151.15. The maximum value of TE variable is 506.51 and minimum value is 23.22 (World bank, 2022).

Chinese immigrants are also considered as a variable which has a relationship with GDP growth of Bangladesh and it has been showed in the unit of total population. The mean value of the variable is 3.93 and the median value of Chinese immigrants is 3.42. The standard deviation of the variable is 1.90 where the maximum value of the variable is 7.59 and the minimum value of the variable is 0.30.

Table 2: Descriptive statistics of variable

Variable name	Units	Mean	Median	Standard deviation	Minimum	Maximum
GDP	In US Dollars	1613.20	1034.83	1054.21	723.11	4530.22
FDI	In US Dollars	331.85	301.56	73.50	221.22	492.46
EG	In percentage growth	3.32	3.27	0.78	1.22	4.95
TB	In US Dollars	−154.36	−167.22	51.21	−232.82	−75.22
TE	In US Dollars	129.68	44.32	151.15	23.22	506.51
CI	In total population	3.93	3.42	1.90	0.30	7.59

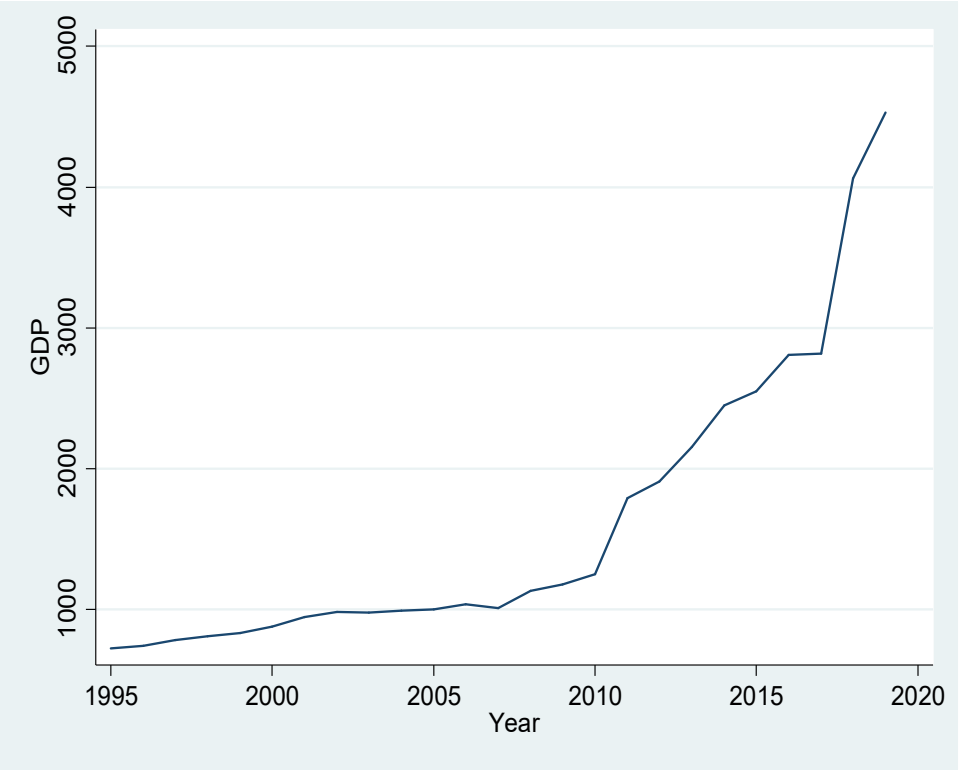

Figure 3: GDP growth from 1995 to 2019

5.2: Testing of Unit root

5.2.1 Stationary or non-stationary testing using ADF method

To check the stationary or non-stationary of all hypotheses, the Dickey-Fuller testing would be conducted. Most of the time series univariate models contain trend behaviour. This trend behaviour occurs because of the non-stationary behaviour of the series. Moreover, the presence of non-stationary also affects the regression models by making them spurious. So, in order to resolve the problem of spuriousness, it is important to perform the unit root tests to determine the stationarity.

There are several unit root tests like Dickey-Fuller unit root tests, Augmented Dickey Fuller (ADF), Phillips Perron (PP) unit root tests and

many more. In my paper I consider the standard ADF unit root test to determine the stationarity. The ADF unit root test considers the presence of unit root under null hypothesis, alongside the other that here is no unit root in the series.

Stationary testing of GDP

Table 3: ADF stationary testing of GDP

Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
−3.349	−4.380	−3.600	−3.240

Therefore, according to the ADF method, the data of GDP is stationary as the value is more than critical value at 10%.

Stationary testing of FDI variable

Number of obs = 25

Table 4: ADF stationary testing of FDI

Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
−4.194	−4.380	−3.600	−3.240

Therefore, according to the ADF method, the data of FDI is stationary as the value is more than critical value at 5% and 10%.

Stationary testing of EG variable

Number of obs = 23

Table 5: ADF stationary testting of EG

Test Statistic Z(t)	First difference	1% Critical Value	5% Critical Value	10% Critical Value
−4.313	−1.72	−4.380	−3.600	−3.240

Therefore, according to the ADF method, the data of EG is stationary as the value is more than critical value at 5% and 10%.

Stationary testing of TB variable

Number of obs = 22

Table 6: ADF stationary testing of TB

Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
−3.534	−4.380	−3.600	−3.240

MacKinnon approximate p−value for Z(t) = 0.04

Therefore, according to the ADF method, the data of TB is stationary as the value is more than critical value at 10%.

Stationary testing of TE variable

Number of obs = 24

Table 7: ADF stationary testing of RMGE

Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
− 3.348	−4.380	−3.600	−3.240

Therefore, according to the ADF method, the data of TE is stationary as the value is more than critical value at 5% and 10%.

Stationary testing of CI variable

dfuller ci,

Number of obs = 24

Table 8: ADF stationary testing of CI

Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
−3.810	−4.380	−3.600	−3.240

MacKinnon approximate p−value for Z(t) = 0.0161

Therefore, according to the ADF method, the data is stationary as the t statistic value of the variable CI is higher than critical value at 5% and 10%.

5.2.2 Stationary or non−stationary testing using Philips Perron or PP method

Stationary testing of GDP variable

Number of obs = 23

Newey−West lags = 1

Table 9: PP method stationary testing of GDP

	Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
Z(rho)	−18.025	−17.200	−12.500	−10.200
Z(t)	−3.646	−3.750	−3.000	−2.630

MacKinnon approximate p−value for Z(t) = 0.0049

By applying the Philips Perron unit root testing, the data is stationary as the test statistic value of GDP variable is higher than 1%, 5% and 10% critical value.

Stationary testing of FDI variable

Number of obs = 23

Newey-West lags = 1

Table 10: PP method stationary testing of FDI

	Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
Z(rho)	-39.511	-17.200	-12.500	-10.200
Z(t)	-7.533	-3.750	-3.000	-2.630

MacKinnon approximate p-value for Z(t) = 0.0000

By applying the Philips Perron unit root testing, the data is stationary as the test statistic value of FDI variable is higher than 1%, 5% and 10% critical value.

Stationary testing of EG variable

Number of obs = 23

Newey-West lags = 1

Table 11: PP method stationary testing of EG

	Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
Z(rho)	-20.374	-17.200	-12.500	-10.200
Z(t)	-3.913	-3.750	-3.000	-2.630

MacKinnon approximate p-value for Z(t) = 0.0019

By applying the Philips Perron unit root testing, the data is stationary as the test statistic value of EG variable is higher than 1%, 5% and 10% critical value.

Stationary testing of TB variable

Number of obs = 23

Newey-West lags = 1

Table 12: PP method stationary testing of TB

	Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
Z(rho)	-28.675	-17.200	-12.500	-10.200
Z(t)	-7.881	-3.750	-3.000	-2.630

MacKinnon approximate p-value for Z(t) = 0.0000

By applying the Philips Perron unit root testing, the data is stationary as the test statistic value of TB variable is higher than 1%, 5% and 10% critical value.

Stationary testing of TEvariable

Number of obs = 23

Newey-West lags = 4

Table 13. PP method stationary testing of RMGE

	Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
Z(rho)	-18.116	-22.500	-17.900	-15.600
Z(t)	-3.778	-4.380	-3.600	-3.240

MacKinnon approximate p-value for Z(t) = 0.0000

By applying the Philips Perron unit root testing, the data is stationary as the test statistic value of TE variable is higher than 5% and 10% critical value.

Stationary testing of CI variable

pperron D_ci

Number of obs = 23

Newey-West lags = 2

Table 14: PP method stationary testing of CI

	Test Statistic Z(t)	1% Critical Value	5% Critical Value	10% Critical Value
Z(rho)	-25.209	-17.200	-12.500	-10.200
Z(t)	-6.403	-3.750	-3.000	-2.630

MacKinnon approximate p-value for Z(t) = 0.0000

By applying the Philips Perron unit root testing, the data is stationary as the test statistic value of CI variable is higher than 1% critical value, 5% critical value and 10% critical value.

5.3 Results of regression analysis

5.3.1 Multiple regression analysis using OLS method

Table 15: OLS regression Statistics

Regression Statistics	
Multiple R	0.99
R Square	0.99
Adjusted R Square	0.98
Standard Error	131.13
Observations	25.00

Table 16: OLS regression result

(GDP)	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	728.08	330.86	2.20	0.04	35.59	1420.58
X Variable (FDI)	4.57	0.90	5.07	0.00	2.68	6.45
X Variable (EG)	-279.93	41.08	-6.81	0.00	-365.91	-193.95
X Variable (TB)	2.53	0.90	5.07	0.01	0.59	4.46
X Variable (TE)	3.72	0.44	8.54	0.00	2.81	4.64
X Variable (CI)	52.32	22.03	2.38	0.03	6.22	98.43

The result of multiple regression analysis in OLS method is showing that all variables are statistically significant with the dependent variable except for Chinese immigrants which means that the relationship between Chinese immigrants and GDP growth of Bangladesh are not statistically significant. The regression statistics is showing that the result of multiple R is found as 0.99 which is a positive result and the result of the value of R square is 0.99 where the adjusted R square is 0.98 which are also considered as good result for the study. The R square value is 0.99 which indicates that 99% of variability has been observed in the target model which has explained in the regression model. As the value of R square is higher in the study using OLS regression model, it indicates that more variability has been explained by the model.

The standard error of the regression model is 131.13 which indicate the average distance that was observed values of variables which are fallen from the line of regression model. Therefore, 131.13 of observed values have fallen from the regression line. In the regression model, 25 data year periods have been observed from the period of 1995 to 2019. The OLS regression model showed coefficients, standard error, t value, p value and lower and upper value at 95% confidence interval to test the hypothesis of each variable. The value of a regression model indicates whether each

variable and the predictor variables have a favorable or unfavorable relationship.

A positive coefficient shows that the consideration as the independent variable tends to rise when the frequency of the dependent variable rises. A negative coefficient indicates that the dependent variable in the regression model tends to drop as the increase in the independent variable. Therefore, only independent variable FDI has negative coefficients where other variables such as GDP, EG, TB, TE and CI have positive coefficients which indicate that FDI would drop when the frequency of the dependent variable such as GDP would rise.

5.3.2 Multiple regression analysis using Newey-west standard error model
Number of obs = 25

F(5, 19) = 282.56

Prob > F = 0.0000

Table 17: Newey-west error model multiple regression analysis result

GDP	Newey-West Coef.	Std. Error	t statistic	P>|t|	[95% Conf. Interval]	
FDI	4.57	0.93	4.92	0.00	2.62	6.51
TB	2.53	0.85	2.98	0.01	0.75	4.30
EG	-279.93	58.52	-4.78	0.00	-402.41	-157.45
TE	3.72	0.62	6.02	0.00	2.43	5.01
CI	52.32	19.09	2.74	0.01	12.37	92.28
_cons	728.085	318.94	2.28	0.03	60.54	1395.62

The Newey-West model of regression analysis has been showed in the study which is almost similar to the OLs regression model. But this model doesn't evaluate R square or standard error data rather it shows probability of variables. The model can also evaluate the estimated value

of statistics. Here, the F value of the statistics from the observation of 25 periods showed the value of 282.56 where the probability of the value is 0.000. The coefficient value of OLS regression method and Newey-West estimation model is same but it can be seen that a change has happened in the p value of TB variable which was 0.05 in OLS regression but it is 0.01 in Newey-West regression method.

5.4: Analysis and Discussion

H1: FDI from China in garment sector has a positive significant relationship with GDP of Bangladesh

The coefficient of FDI is positive with the value of 6.52 and standard error is 1.39 where the t statistic value is 4.69. To prove the hypothesis between variables of FDI from china in garment sector and GDP growth of Bangladesh, OLS regression model was used where the p value was fewer than 0.05 which indicates that the dependent variable GDP is positively significant with the independent variable FDI. The Newey-west model also showed that the p value of FDI is fewer than 0.00 which shows that FDI has a positive significant relationship with GDP.

Therefore, the hypothesis of the study H1 is significant.

H2: Employment growth in garment sector has a negative significant relationship with GDP of Bangladesh

The variable of employment growth opportunities was used in the OLS regression which showed the result of coefficient of EG variable is negative with the value of -316.03 and the standard error is 60.30. To identify the relationship between independent variable EG and dependent variable GDP, the OLS multiple regression analyses that the p value of EG variable is less than 0.05 and it proves the positive significant relationship between two variables EG and GDP. The model of

Newey-West estimation error model also showed a positive significant relationship between dependent variable GDP and independent variable EG as the p value of EG is less than 0.05. Generally, employment growth is positive impact on GDP but in my research shows the negative impact on GDP because Chinese garments in Bangladesh are more focusing on Chinese workers rather than Bangladeshi workers. So every year Chinese workers are increasing which are positive for GDP but employment of Bangladeshi workers is decreasing year by year. Also there have some inequality with salaries between local and Chinese immigrants for that people show less interest in working on garments industry.

Therefore, the hypothesis of the study H2 is significant.

H3: Trade Balance payments in garment sector has a positive significant relationship with GDP of Bangladesh

The coefficient value of the variable of trade balance payments of export-import trade between China and Bangladesh show positive result in coefficients where its value is 2.07 and the standard error of the variable is 1.01. The p value in the multiple regressions shows significant value as it is less than 0.05 and it also proves that there is a positive significant relationship between independent variable TB and dependent variable GDP. The Newey-West estimation model also showed that the bond among two variables such as TB and GDP have positive significant relationship as the p value is less than 0.05.

Therefore, the hypothesis of the study H3 is significant.

H4: Total RMG export in China has a positive significant relationship with GDP of Bangladesh

The coefficient value of total RMG exports to China has a positive

coefficient as the value is 4.33 where the standard error of the variable is 0.59. The OLS regression model showed that there is a positive significant relationship between independent variable TE and dependent variable GDP where the dependent variable has a positive relationship with dependent variable as the p value is less than 0.05. The Newey-West model presented that there is a significant positive relationship between two variables GDP and TE where the p value is not as much of than 0.05 and the model is positively significant.

Therefore, the hypothesis of the study H4 is significant.

H5: Chinese immigrants of China has a positive significant relationship with the GDP of Bangaldesh

The Chinese immigrants have been considered as the independent variable of economic growth where the coefficient of the variable is 52.32 which are positive and it means that this value would fall when the GDP would increase. The standard error of the value is 22.03 and the t statistic value is 2.38. The OLS multiple regression model has showed that there is a positive significant relationship between independent variable CI and dependent variable GDP growth as the p value of CI variable is less than 0.05 and the value is 0.03. The Newey-West model also found a positive significant connection between variable CI and variable GDP where the p value is 0.01 which is also lower than the significant value 0.05. Therefore, both regression models showed that these two variables of GDP and CI have positive significant relationship.

Therefore, the hypothesis of the study H5 is significant.

Chapter 6: Conclusion and Recommendations

6.1: Conclusion

According to a 2011 McKinsey report, Bangladesh will overtake China as the top sourcing nation within next 5 years. Bangladesh is currently the world's second-largest producer of apparel. Easy access to markets in both the developing as well as developed globe is helping this industry earn more money. Bangladesh's affordable labor force, cheap production costs, and strong investment rate of return make it a particularly appealing country in the modern world. To gain advantages in this industry from different portion of the globe the investors came to Bangladesh and invested in garments industry. Bangladesh is indeed a key location of investors of China, in 2014 Bangladesh had received 29.4 million US Dollar capitals in the garment business from China which is 37 percent greater than other years (UNCTAD, 2022). This sum is increasing yearly and China announced in 2010 that Bangladeshi exports to its market would be exempt from quotas and taxes; this announcement is one of the reasons contributing to a rise in investment flows. Another significant factor is that China's garment industry is no longer viable due to rising production costs.

Bangladesh's largest industry sector, the garment and textile business, is the pillar of the country's economy. This sector accounts for over 78 percent of all exports and 16 percent of the nation's GDP. Currently, Bangladesh has more than 3.5 million workers and 5600 recognized factories. The government continues to provide producers with assistance so that this industry can grow, and it also grants particular benefits to international investors. International investors invest in this industry to take advantage of all the benefits with no problems. Foreign investors

will be assisted in setting up factories in Bangladesh through the Bangladesh Board of Investment (BOI), the BEPZA and BGMEA (Bangladesh Bank, 2022). The competitiveness of Bangladesh's garment exports is significantly influenced by price level and capital inflows. Both the domestic and overseas markets are seeing strong demand. This industry is entirely focused on exports, hence labor or land costs are not the primary factors influencing investment decisions.

In order to strengthen infrastructure, good governance, monetary policy, labor skill, and other connected areas, the Bangladeshi government needs also take some action. But overall, Bangladesh's garment industry is quite competitive right now, and there are plenty of prospects to increase export earnings. Chinese businesses can take advantage of these significant chances to establish their factories and meet Chinese demand. In addition to China, they can export goods from Bangladeshi market to all countries with relatively simple market access. Additionally, both nations may profit from this procedure (BGMEA, 2022).

6.2: Recommendations

After this level of political volatility, Bangladesh's GDP grew by 6.1 percent in 2018. Therefore, by making some efforts, it is easy to rise above 8.0. Bangladesh offers excellent prospects in the apparel and textile industries. If Bangladesh can overcome the identified typical obstacles to investing in this industry, it might become the world's top export industry in the future, with numerous benefits for Bangladesh. After much deliberation, the study has some recommendations for Bangladesh to enhance and speed up the influx of investment into the garment industry –

- According to experts, political instability is the primary barrier to investment in Bangladesh which also reduces consumer price index

in the nation. This is the burden of economic development of the country as well as that of foreign direct investment. According to some experts, there is little correlation between CPI and FDI activity. On the question of whether political stability will draw FD from CPI, the result of the study found conflicting results. However, a lot of businesses view political unrest as a significant impediment to FDI. CPI, according to the study is a significant factor influencing FDI activity in emerging markets (UNCTAD, 2022). In order to create a peaceful and prosperous nation, the Bangladeshi government should be more serious in their political actions so that it could not create an impact on FDI and CPI of the nation.

- Bangladesh currently holds the position of 30 in Transparency International's rankings. However, it was ranked as the most corrupt nation in 2005 and it is improving in this segment and the government needs to do more to fight corruption. All official documents and database data must first be converted to digital form in order to reduce corruption. It is feasible to lessen the inflation rate by the assistance of current technologies. Bangladesh has a sizable population, with young people making up 60% of the total. However, the primary issue is that the cheap employment force is inexperienced and less productive due to a lack of education and sufficient training. Government should pay more attention to these important areas, and this unskilled labor might become a valuable resource by receiving training and education.
- Investors find Bangladesh's inadequate infrastructure system to be a particularly unpleasant subject. Bangladesh needs to focus more on enhancing its infrastructure as a whole. In addition to wanting to

build a direct railway line across Myanmar, Beijing is interested in developing a deep water port in Chittagong. In order to expand Bangladesh's infrastructure, Bangladeshi Government should consult China, come to a resolution, and accept the support. The cost of transportation between the two nations might be significantly reduced by establishing a direct train connection between Chain and Bangladesh.

6.3: The contribution of the study

The study has been developed to show the relationship between Bangladesh and China in terms of exporting garment products and how Bangladesh could get economic benefit from exporting garment products in China. This study has contributed for the Bangladeshi government by showing some positive results that it could develop the economy of Bangladesh. Many studies have been developed on trading between Bangladesh and China in overall sectors but this study has specifically mentioned the garment sector though China is a competitor of Bangladesh in terms of the garment industry in the global market. This study has taken some new variables which were not signified in other research studies of the related topic (BGMEA, 2022). For example, Chinese immigrants have been taken as the independent variable in the study which was not analysed in other studies and this study has contributed by showing how Chinese immigrants can create positive impact on the garment sector by leading economic growth of Bangladesh.

The variable of total exports have been taken in many studies while exploring trade relationship between Bangladesh and China but this study has contributed by taking the total exports of garment products where other studies have analysed overall exports. Time series analysis has been selected as the methodology of the study because it can show different

causes of trends and systematic patterns of data over different periods. By using visualizing data of different periods, researchers can understand from the study why seasonal trends have occurred and they can analyse deeper into why these trends have occurred. The ADF Test (Augmented Dickey Fuller Test) has been used in the study because it is a typical statistical test for determining whether or not a time series is stationary. When examining the stationary of the variables of a series, it is among the most frequently applied statistical tests. To prove that the ADF method was correct, another unit root testing has been applied such as Philips Peron method which is also widely recognised method to test stationary or non-stationary of data. To analyse the regression and significance of selected hypothesis, OLS regression has been used because it is the most simple and common technique used by researchers to analyse the significance level of variables and testing the hypothesis. For proving that OLS regression model was correct, another regression model of Newey-West standard error model was applied because this model has some similarity with OLS regression method. It is believed that this study would contribute for researchers who want to see that exporting products in China has positive effect for Bangladesh or not.

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Appendix 1) Data collection

GDP growth in the garment sector for the last 25 years in Bangladesh with China

Year	GDP growth (In million US dollars $)	Year	GDP growth (In million US dollars $)
1995	723.11	2008	1130.71
1996	741.73	2009	1179.45
1997	781.70	2010	1250.93
1998	810.45	2011	1791.04
1999	830.33	2012	1910.03
2000	877.42	2013	2152.71
2001	945.22	2014	2449.10
2002	981.22	2015	2549.71
2003	976.02	2016	2809.22
2004	991.33	2017	2815.14
2005	998.01	2018	4061.1
2006	1034.83	2019	4530.22
2007	1009.34		

Foreign direct investment in the garment sector for the last 25 years in Bangladesh with China

Year	FDI in garment sector (In million US dollars $)	Year	FDI in garment sector (In million US dollars $)
1995	221.22	2008	324.73
1996	247.03	2009	310.88
1997	253.46	2010	368.74
1998	255.82	2011	371.55
1999	261.11	2012	382.51
2000	277.31	2013	417.03
2001	271.73	2014	391.40
2002	286.09	2015	402.41
2003	281.73	2016	431.03
2004	296.33	2017	441.94
2005	291.81	2018	492.46
2006	297.37	2019	418.92
2007	301.56		

Employment growth in the garment sector for the last 25 years in Bangladesh with China

Year	Employment growth (In million employed people numbers)	Year	Employment growth (In million employed people numbers)
1995	2.72	2008	3.39
1996	2.77	2009	3.42
1997	3.79	2010	3.5
1998	2.85	2011	3.64
1999	2.89	2012	3.82
2000	2.93	2013	4.92
2001	2.98	2014	4.95
2002	3.02	2015	4
2003	3.07	2016	4.02
2004	3.11	2017	4.1
2005	3.16	2018	2.13
2006	3.27	2019	1.22
2007	3.32		

Balance of export-import trades in the garment sector for the last 25 years in Bangladesh with China

Year	Trade balance payments (In million US dollars $)	Year	Trade balance payments (In million US dollars $)
1995	-111.32	2008	-167.22
1996	-189.34	2009	-157.32
1997	-173.22	2010	-145.22
1998	-184.32	2011	-135.33
1999	-200.12	2012	-96.88
2000	-183.23	2013	-87.43
2001	-232.83	2014	-91.22
2002	-210.99	2015	-95.68
2003	-231.91	2016	-98.76
2004	-214.39	2017	-102.45
2005	-188.23	2018	-94.46
2006	-213.54	2019	-75.22
2007	-178.30		

Total RMG export growth of garment products from Bangladesh to China in the last 25 years

Year	Total exports (In million US dollars $)	Year	Total exports (In million US dollars $)
1995	23.22	2008	47.31
1996	25.81	2009	44.32
1997	27.43	2010	52.81
1998	29.43	2011	79.14
1999	31.65	2012	112.88
2000	33.11	2013	181.54
2001	34.82	2014	303.94
2002	35.01	2015	305.68
2003	37.22	2016	341.11
2004	39.34	2017	391.60
2005	44.01	2018	426.14
2006	46.82	2019	506.51
2007	41.22		

Exchange rate with US dollars for Bangladesh and China in the last 25 years

Year	1 US dollars to Bangladesh i Taka	1 US dollars to Chinese Yuan	Year	1 US dollars to Bangladesh i Taka	1 US dollars to Chinese Yuan
1995	40.12	8.32	2008	69.89	6.83
1996	41.32	8.34	2009	76.34	6.83
1997	42.22	8.31	2010	81.81	6.80
1998	43.28	8.28	2011	79.01	6.54
1999	44.31	8.28	2012	77.57	6.39
2000	43.89	8.28	2013	77.33	6.21
2001	46.90	8.28	2014	77.75	6.21
2002	49.08	8.28	2015	78.60	6.24
2003	52.14	8.28	2016	78.12	6.73
2004	58.16	8.28	2017	79.22	6.63
2005	57.75	8.28	2018	84.31	6.27
2006	55.80	7.95	2019	83.37	6.72
2007	62.35	7.68			

Inflation rate of Bangladesh in the last 25 years

Year	Inflation rate (In percentage)	Year	Inflation rate (In percentage)
1995	10.30	2008	8.90
1996	2.38	2009	5.42
1997	5.31	2010	8.14
1998	8.40	2011	11.40
1999	6.11	2012	6.22
2000	2.21	2013	7.53
2001	2.01	2014	6.99
2002	3.33	2015	6.19
2003	5.67	2016	5.51
2004	7.59	2017	5.70
2005	7.05	2018	5.54
2006	6.77	2019	5.59
2007	9.11		

Chinese immigrant's percentage growth of China in the last 25 years

Year	Number of Chinese immigrants	Year	Number of Chinese immigrants
1995	0.3	2008	2.9
1996	2.38	2009	3.42
1997	2.31	2010	2.14
1998	2.4	2011	4.4
1999	4.11	2012	6.22
2000	2.21	2013	7.53
2001	2.01	2014	3.99
2002	3.33	2015	6.19
2003	5.67	2016	5.51
2004	4.59	2017	5.7
2005	2.05	2018	5.54
2006	2.77	2019	7.59
2007	3.11		

국 문 초 록

- 방글라데시의 경제 성장을 이끄는 의류 부문에 대한
중국으로부터의 FDI 기회 -

한 성 대 학 교 대 학 원
국 제 무 역 경 제 학 과
국 제 무 역 시 장 전 공
호 세 인 자 히 드

세계에서 두 번째로 큰 기성복 제조 및 수출국인 방글라데시 의류 산업은 외국 기업이 그곳에 투자하도록 동기를 부여하는 다양한 요인과 함께 이 논문에서 강조됩니다. 시계열 분석 및 OLS 회귀 모델은 모두 방글라데시 의류 산업을 매우 자세히 설명하고 평가하는 데 사용되었습니다. 중국의 의류 생산 비용이 매일 상승하고 있어 오늘날 중국 의류 산업이 생존할 수 없게 되었습니다. 따라서 방글라데시는 중국 투자자들이 의류 부문에 참여하기로 선택한 다음 국가가 될 수 있습니다. 이 논문은 방글라데시 의류 산업에 대한 철저한 조사를 통해 해당 주제에 대해 이미 사용 가능한 지식을 추가하고 투자자들이 방글라데시 의류 산업과 같이 효과적으로 경쟁하기 위해 자금을 어디에 예치할지 결정하는 데 도움을 줍니다. 이 논문에서 연구원은 방글라데시의 일반적인 투자 환경, 기업 경쟁력, 기회, 문제 및 투자와 관련된 솔루션에 대해 자세히 알아볼 것입니다. 토론의 광범위한 주제와 주요 결론은 결론 장에서 제시됩니다. 또한, 본 연구는 방글라데시 의류 산업에 대한 외부

투자 프로세스를 가속화하기 위해 방글라데시와 중국에 몇 가지 통찰력 있는 권장 사항을 제공할 것입니다.

[키워드] : GDP 에 대한 외국인 직접투자 참여, 시계열 분석, OLS 회귀 모델