

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Economics



Master's Thesis

Economic Impact of Bangladesh garments sector

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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

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Economic Impact of Bangladesh garments sector

Objectives of thesis

The garment industry adequately contributed to Bangladesh's economic prosperity. The researcher intends to explore and interpret the effectiveness and implications of the industry in its entirety and economic bottom lines. Therefore, the underpinned research attempts to investigate the multidimensional impacts of the industry on the economic condition of Bangladesh through a systematic empirical analysis. The researcher will assess and evaluate the impacts of the Bangladesh garment industry on employment, GDP, inflation, export and import indexes and market propositions by evaluating national statistics and industry reports. The researcher is considering the 2000 – 2019 period to identify potential growth opportunities and challenges. The study further aims at describing the current scenario of the garment industry alongside highlighting key challenges, growth opportunities and industry-specific best practices.

Methodology

Nation branding and economic development are extremely complex and sophisticated that concerns a range of abstract concepts and objective-driven activities. Therefore, the researcher has considered a secondary research technique to perform the study while considering subjective opinions and authentic evidence collected from peer-reviewed journals and articles related to the Bangladesh garment industry. The researcher will collect data from relevant journals, articles, Ebooks and online sources. Well-structured descriptive research is considered a suitable design to investigate the topic matter by considering a case study analysis strategy. The researcher expects to generate perceptions, factual and subjective interpretations and detailed understanding by investigating current practices related to Bangladesh's economic dimensions and garment industry information. The underpinned study consists of two distinctive areas: literature review and practical work. To collect adequate secondary qualitative and different literature sources, the researcher used Google Scholar to search and select the most relevant peer-reviewed journals, eBooks, popular articles and national statistics. The researcher will implement vertical and horizontal analysis methods alongside a theme-based narrative analysis method to identify major themes and formulate concise conclusions.

The proposed extent of the thesis

70 – 90 pages

Keywords

Garments, Bangladesh, Textile & clothing's, Apparel, Buyers, Developed countries, Developing countries, Export, Import, Unemployment, GDP

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Declaration

I declare that I have worked on my master's thesis titled "Economic Impact of Bangladesh garments sector" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the master's thesis, I declare that the thesis does not break any copyrights.

In Prague on 31/03/22

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Economic Impact of Bangladesh garments sector

Abstract

The global textile industry evolved with digital transformation, integrated regional economies and high robustness in supply-demand dynamics and controlled trade activities. According to the World Trade Organization (WTO) report, the textile industry was significantly affected by changing consumer behaviours, regulatory compliances and that impacted production and sourcing strategies that shifted the business environment. The Ready-made garment sector remained as the biggest contributor to the economic and sociocultural prosperity of Bangladesh as it managed to reach 80% of the country's export. the RMG sector also become an integral part of the modern-day Bangladesh economy as it employed more than 4.4 million garment workers which represent 40% of the country's industrial labour. However, fluctuating macro-environmental factors and macroeconomic trends combined with changing global competitive landscape, increasing pressure from competitors, and poorly maintained economic infrastructure and worker empowerment programs continue to affect sustainability and continual improvement of the industry. However, globalization of the supply chain continues to facilitate MNCs to thrive and grow in regional markets through systematic outsourcing initiatives while securing lower operations costs, large-scale and sustainable production and seamless acquisitions of human resources and raw materials. This systematic empirical framework described the importance and implications of the RMG sector on Bangladesh's economic development and labour markets while discussing economic, social, and environmental aspects of the industry.

Keywords: Garments, Bangladesh, Textile & clothing's, Apparel, Buyers, developed countries, Developing countries, Export, Import, Unemployment, GDP

Ekonomický dopad bangladéšského oděvního sektoru

Abstrakt

Globální textilní průmysl se vyvíjel s digitální transformací, integrovanými regionálními ekonomikami a vysokou odolností v dynamice nabídky a poptávky a řízených obchodních činnostech. Podle zprávy Světové obchodní organizace (WTO) byl textilní průmysl významně ovlivněn měnícím se chováním spotřebitelů, dodržováním předpisů a to ovlivnilo strategie výroby a získávání zdrojů, které změnilo podnikatelské prostředí. Odvětví konfekce zůstalo největším přispěvatelem k ekonomické a sociokulturní prosperitě Bangladéše, protože se mu podařilo dosáhnout 80 % exportu země. sektor RMG se také stal nedílnou součástí moderní bangladéšské ekonomiky, protože zaměstnával více než 4,4 milionu dělníků v oděvnictví, což představuje 40 % průmyslové pracovní síly země. Avšak kolísající makroenvironmentální faktory a makroekonomické trendy v kombinaci s měnícím se globálním konkurenčním prostředím, rostoucím tlakem ze strany konkurentů a špatně udržovanou ekonomickou infrastrukturou a programy na posílení postavení pracovníků nadále ovlivňují udržitelnost a neustálé zlepšování tohoto odvětví. Globalizace dodavatelského řetězce však nadále usnadňuje nadnárodním společnostem prosperovat a růst na regionálních trzích prostřednictvím systematických outsourcingových iniciativ a zároveň zajišťuje nižší provozní náklady, rozsáhlou a udržitelnou výrobu a bezproblémové akvizice lidských zdrojů a surovin. Tento systematický empirický rámec popisoval důležitost a důsledky sektoru RMG na ekonomický rozvoj Bangladéše a trhy práce a zároveň diskutoval o ekonomických, sociálních an environmentálních aspektech tohoto odvětví.

Klíčová slova: Oděvy, Bangladéš, Textil a oděvy, Oděvy, Kupující, rozvinuté země, Rozvojové země, Export, Import, Nezaměstnanost, GDP

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List of abbreviations

BGD = Bangladesh

BGMEA = Bangladesh Garment Manufactures and Exporters Association

WTO =World Trade Organization

RMG = Ready Made Garments

MNC = Multinational Company

IMF = International Monetary Fund

ISO = International Standard organisation

ILO = International labor organisation

MFA = Multi-Fibre Arrangement

EPB = Export Promotion Bureau

GDP = Gross Domestic Product

USA = United States of America

BSS = Bangladesh Bureau of Statistics

OECD = Organization for Economic Co-operation and Development

LDC = Least developed Countries

BB = Bangladesh Bank

UK= United Kingdom

WB= World Bank

RCA =Revealed Comparative advantage

BKMEA = Bangladesh Knitwear Manufacture's and Exporter's Association

EPZ = Export Processing Zone

HS = Harmonized System

ROI= Rate of Return

1 Introduction

In the twenty-first century, the global commercial landscape is largely influenced by growing cross-border transactions, regional economic integration combined with technological advancements and improved connectivity. While considering such factors, regional countries, especially developing nations, are widely investing, and undertaking national infrastructure development initiatives, bilateral relations with foreign countries and changing consumer demands to attract multinational companies and empower regional businesses. MNCs leverage internationalisation strategies for driving competitive advantage and diversifying revenue streams in a global context through diversifying core business operations in relatively cheaper countries to reduce operational costs and intensified risk and uncertainties. Moreover, saturated markets in developed nations and high operation costs are facilitating developing countries to incorporate industrial and economic growth opportunities. Therefore, going global is becoming fundamentally important for companies to establish their operations in foreign markets and diversify competitive advantages by securing an affordable and sustainable supply chain. As the developing marketplace is highly influenced by regional macro-environmental factors and macro-economic trends, worldwide governments are emphasizing human resources development programs, developing a strong industry ecosystem through multifaceted programs including subsidiary schemes, educational and digital transformation projects and proactive regulatory compliances to maximize the countries' economic prosperity and improve adaptability properties within the highly volatile international trade environment. Such futuristics initiatives are profoundly important in improving nationwide industrial growth and the employment sector.

(Hadi et al., 2013) stated that increased industrial activities and improved labour market capacities have enormous impacts on a nation's economic prosperity and multidimensional stakeholder well-being. These factors also largely contribute to national Gross Domestic Product (GDP) as the definition of GDP is based on national consumption, investment, government spending and export and import activities. Increasing global economic activity, advancements in technologies and transportation infrastructure coupled with relaxed international trade conventions and advanced foreign direct investment policies have been facilitating regional governments to capitalize and sustain economic growth opportunities. International operations and globalization of the supply chain continue to facilitate MNCs to thrive and grow in regional markets through systematic outsourcing initiatives while

securing lower operations costs, large-scale and sustainable production and seamless acquisitions of human resources and raw materials.

However, the Covid19 pandemic has drastically changed the modern-day commercial environment, therefore countries are facing massive roadblocks and uncertainties to put policies to encounter economic fallout caused by the Covid19 pandemic. Meanwhile, prolonged lockdown measures, border closures, travel restrictions and economic downturn are changing market expansion approaches. Moreover, globalization is also being heavily scrutinized and influenced by growing nationalism concepts and protectionism due to growing geopolitical uncertainties and unforeseeable eventualities caused by the pandemic. According to the International Monetary Fund (IMF), the world GDP grew 3.60%, a 5.93% decline from 2019. Bangladesh remained one of the most promising developing countries that contributed extensively to global trade and improved economic growth through sustainable development programs. According to the World Bank, Bangladesh secured a national GDP of \$324.4bn in 2019 which represents .29% of the global economy and is expected to reach \$565bn by 2026. The country also secured a per capita GDP of \$1625.7 (*GDP | Data*, 2021). Despite having a negative trade balance, the country's economy is largely dependent on exports of manufactured goods, especially garments fuelled by increasing industrial activities, availability of low-cost and skilled workforce and relaxed FDI policies. According to the International Finance Corporation, the Bangladesh garment industry has undergone a revolutionary transformation as the industry's annual revenue increased from \$19bn to \$34bn in the last seven years which made Bangladesh the second largest exporter of garments while securing 80% of Bangladesh's total export earnings (Bgmea.com, 2022). The garment industry also employed more than 4.4 million employees, mostly women, who contribute more than 11% of Bangladesh's GDP with better labour regulations and safety conditions. However, poor working conditions, recent catastrophic accidents, unethical sourcing issues, high-carbon industry models and environmental protection insufficiencies combined with a lack of job-specific expertise and limited resources access continue to impose comprehensive uncertainties and stakeholder dissatisfaction. The global garment industry is adequately infused with emerging fashion trends, quality assurance, instantaneous responsiveness and ethical standards, therefore the country needs to create a standardized dialogue of inclusiveness, collaboration and innovation-seeking business landscape to support the mainstream transformation of the underpinned industry while aligning with International Standard Organization (ISO)

policies, the United Nations Sustainable Development Goals and the International Labour Organization (ILO) conventions (Shimu & Islam, 2018).

As the industry plays a pivotal role in maximizing the country's competencies and adaptability properties, conducting a detailed study is academically and professionally important to understand and evaluate the effectiveness and implications of the garment industry on the country's economy and employment sector. This systematic empirical framework attempts to investigate the current context of Bangladesh's garment sector while evaluating industry-specific best practices and procedures through conducting a detailed systematic literature review. The study further provides a detailed overview of the industry's background and financial implications and explains why the garment industry is pivotal to attracting international clothing businesses and improving manufacturing capabilities.

2 Objectives and Methodology

2.1 Objectives

The garment industry adequately contributed to Bangladesh's economic prosperity. The researcher intends to explore and interpret the effectiveness and implications of the industry in its entirety and economic bottom lines. Therefore, the underpinned research attempts to investigate the multidimensional impacts of the industry on the economic condition of Bangladesh through a systematic empirical analysis. The researcher will assess and evaluate the impacts of the Bangladesh garment industry on employment, GDP, inflation, export and import indexes and market propositions by evaluating national statistics and industry reports. The researcher is considering the 2000 - 2019 period to identify potential growth opportunities and challenges. The study further aims at describing the current scenario of the garment industry alongside highlighting key challenges, growth opportunities and industry-specific best practices.

Research Questions:

- What is the importance of garments and world garments for improving the economic condition of Bangladesh?
- What are the multidimensional impacts of the garment industry on Bangladesh's economic landscape and commercial environment?
- What are the challenges faced by the garment industry during the period of 2000-2019?
- What are the key opportunities that are being received by the garment industry due to some specialty in Bangladesh for several years?
- Is there any comparative advantage in the export of garment sector for Bangladesh?

2.2 Methodology

The methodology section provides a chance to researchers to develop and specify an effective research strategy for the completion of the research. In this research, a “descriptive” research design will be tracked by the researcher to explore the multidimensional impacts of the garment industry on the economic stratus of Bangladesh. It is expected that a “descriptive” research design will help the researcher to discuss the present economic status of the garment industry of Bangladesh.

Nation branding and economic development are extremely complex and sophisticated that concerns a range of abstract concepts and objective-driven activities. Therefore, the researcher has considered a secondary qualitative research technique to perform the study while considering subjective opinions and authentic evidence collected from peer-reviewed journals and articles related to the Bangladesh garment industry. The researcher will collect data from relevant journals, articles, eBooks, and online sources. Well-structured descriptive research is considered a suitable design to investigate the topic matter by considering a case study analysis strategy. The researcher expects to generate perceptions, factual and subjective interpretations, and detailed understating by investigating current practices related to Bangladesh's economic dimensions and garment industry information.

The underpinned study consists of two distinctive areas: literature review and practical work. To collect adequate secondary qualitative and different literature sources, the researcher used Google Scholar to search and select the most relevant peer-reviewed journals, eBooks, popular articles, and national statistics. Data has been collected from various online articles and websites which have been related to the Bangladesh's garment sector. For collecting Garments trade data, researcher used HS (harmonized system) 4-digit code. Data has been collected from year of 2010 to 2019. It is because, this research has been focused on the pre-covid period of garment industry of Bangladesh. Researcher did mirror approach for collecting trade data. There were some limitations for finding data The researcher will implement vertical and horizontal analysis methods alongside a theme-based narrative analysis method to identify major themes and formulate concise conclusions.

3 Literature Review

The concept of economic development evolved with the changing dynamics and stakeholder requirements that concerns a nation's centralised efforts to transform national economics into modern industrial economics while considering both quantitative and qualitative improvements. (Sharmin & Khandaker, 2015) mentioned that a country's economic development programs are implemented to create national wealth while solely focusing on community-based approaches and investment policies. Economic development is more than job creation, revenue streams and sophisticated programs, rather it concerns creating a healthy and thriving economic environment for enhancing national interests and shared visionaries and satisfying diversified stakeholders needs. In essence, economic development is fundamentally important to achieving benchmark excellence in international trade and generating greater consistency and reliability in addressing major social issues including unemployment, low wages, supply-demand dynamics, environmental protection, and stakeholder satisfaction attributes. However, (Sharmin & Khandaker, 2015) stated that from a public perspective, regional economic development involves multilayer infrastructure and human resources development programs to upscale economic activities and labour market strengths. Key resources such as financial schemes, innovation-seeking entrepreneurship spirits, strong labour market creations and the development of physical infrastructure are crucial to safeguard the multidimensional wellness of stakeholders (Faruk, 2013). According to the aforementioned study, economic development programs ensure extensive benefits for the betterment and improvement of a distinctive region as it has wide effects on business sustainability, income distribution patterns, employment sector and fiscal solvency. Economic development is considered as a deliberate intervention of a responsible and socially accepted governing body that allows improving the commercial landscape by promoting fiscal stability, sustainability-conscious development plans and greater economic growth. The concept of economic development is fundamentally interrelated with industrial development and the standardization of processes and procedures to lead the country towards sustainability and futuristic growth. In addition, sustained industry-specific economic growth provides profitable business opportunities, improves the local labour market and higher tax revenues that facilitates giving commentary on ethical standards and consistent economic growth. Therefore, national GDP, unemployment rates, legal obligations, inflation rates and industry ecosystem are extensively impacted by nationwide economic development

programs. However, fluctuating macro-environmental factors, attitudinal barriers of stakeholders, limited resource accessibilities combined with poorly maintained regulatory and safety compliances and demographic shifts can create massive uncertainties and disruptions. Moreover, Globalization, technological advancements, and regional economic integration widely reorganized the global economic landscape, therefore, regional governments can consider various approaches to local economic development including business retention and expansion, Business expansion and Business creation.

The underpinned literature review section is segmented into three different parts. The subsection provides a comprehensive overview of the garment industry from International & national perspectives while considering Bangladesh's garment sector. The second section deals with factors and barriers associated with industrial analysis while discussing the principles of international trade and multilayer economic prosperity. The third section theories and methods associated with economic development in the garment industry by considering a handful of economic indexes and regional perspectives.

3.1 Garments

Garment refers to a piece of clothing that is used to decorate human physical appearance and protect human bodies from direct external exposures. The Garment is similar to clothing and is also labelled as apparel which is design-specific and manufactured by fabric and textile materials. As the textile industry evolved with digitalisation and technological advancements, materials used to produce garments changed often while considering the latest market trends, fashion vibes and affordability. Generally, garments are made of natural materials, cellulose fibres, and synthetic fibres along with animal skin and other materials by using distinctive blinding technology. As mentioned by (Shahbaz, 2015) the correlation of humans and garments is inseparable as it concerns subjective opinions, social status, personal comfort, expressions, and aesthetic appeals while selecting and purchasing clothes. Therefore, the supply-demand dynamics of garments and top-notch is always on the upper circuit which created a globally distributed comprehensive industry landscape. However, there is no standardized classification system available for classifying garments, although gender and purpose-based approaches can be considered. However, from an abroad and multifaceted perspective, garments can be segmented into several categories based on key aspects including types of fabrics, season, method of manufacturing, events, applications, length of the garment, age and demographic profiles, sources and shape and style (Jaren

Navarro, 2018). Types of fabrics include knit, woven and non-woven alongside key seasonal clothes including winter, summer, spring, and autumn. Daily life and social events including parties, regular wear, nightwear, and athletic products also have impacts on individuals' selection and using mechanisms. Major manufacturing methods such as readymade, tailored and furnishing methods are widely used to produce a diversified range of garments. In 1983, the Custom Corporation Council established a harmonized system to support international trade, collect and compare industry statistics, facilitate standardization of trade documentation and transmission of data while promoting the correlation between import and export statistics and production capacity (Faruk, 2013).

3.2 World Garment Industry

The world garment industry mainly summarizes the type of industry and trading along with the value chain and production of the garment industry. The garment industry contributes to improving the economic condition of many countries. The clothing or garment industry has occupied the third position as the largest manufacturing industry after technology and automotive industry. In 2020, it has been seen that the largest garment exporting nations are Bangladesh (\$28 billion), China (\$161 billion), India (\$18 billion), Turkey, Hong Kong, and Vietnam(*UN Comtrade: International Trade Statistics, 2022*). The world garment industry employs people from various countries to meet customer desires, manage their complex needs, and run their business without any interruptions. According to (Ahmed & Peerlings, 2009), the internal stakeholders of the agreement industry focus on measuring the quality of apparel, inspecting garment patterns, comfort, and adopting the best manufacturing procedures to accomplish the market demand effectively. Technology-driven accommodations and a globally distributed marketplace have facilitated organizations to the dialogue of quality assurance, use of fabrics and ethical sourcing standards under the impression of the Multi-Fibre Arrangement (MFA). As the global marketplace is becoming highly competitive and connected, the role of advanced ICT, strong regulatory compliances and sustainable sourcing policies are becoming more prominent to adjust with the megatrends and market environment factors through improving the design, logistics and niche-specific market expansion. In 2019, the global garment industry secured a value of \$1005bn, while employing more than 90 million people and suppliers. The global textile industry revenue is projected to reach \$1412.5bn by 2028 with a CAGR of 4.4% (Bgmea.com, 2022). Growing sustainability-consciousness amongst diversified stakeholders, fast-paced

changing trends, demographic shifts towards digital platforms and blinding technologies are identified as key drivers. The growing popularity of e-commerce platforms, mobile shopping habits and multichannel distribution processes are also likely to maximize industry lucrativeness. Other key areas including safety and health of individuals, stringent government regulations and quality material sourcing initiatives are becoming more prominent than ever in adding greater value and growth perspectives alongside hygiene and health. Moreover, increasing concerns towards the environment, the use of natural and sustainable fibres combined with ethical standards and cotton raw material-based products have been driving the market direction. In 2019, fashion emerged as the largest application segment with 73.4% revenue growth while the Asia Pacific region remained the largest market covering 47% of global clothing consumption. Global textile companies are establishing ventures in the raw material producing regions due to affordable raw material sourcing, economical labour, treaty agreements and relaxed FDI policies. The US ranked highest in importing garments where China remained the largest exporter followed by Bangladesh. As mentioned by (M. H. Rahman & Siddiqui, 2015), key trends including geotextile, smart textile, waterproof breathable textile, and antibacterial medical textiles are shaping the industry's future. Various prominent companies such as BSL Ltd, Lu Thai textile, China textile Ltd and Paramount Textile have gained enormous reputation and flexibility for their diversified portfolio of clothing equipped with quality assurance and affordable solutions.

3.3 World Trade of Garments

The global textile industry evolved with digital transformation, integrated regional economies and high robustness in supply-demand dynamics and controlled trade activities. According to the World Trade Organization (WTO) report, the textile industry was significantly affected by the Covid19 pandemic that impacted production and sourcing strategies that shifted the business environment. However, globalization of the supply chain continues to facilitate MNCs to thrive and grow in regional markets through systematic outsourcing initiatives while securing lower operations costs, large-scale and sustainable production and seamless acquisitions of human resources and raw materials (Faruk, 2013). A declined demand for apparel and supply chain disruptions significantly affected textile trade volume. In 2019, the global textile export grew by 16.1% and reached \$353bn due to massive growth in the production of PPE kits. Moreover, prolonged lockdown measures,

worsen global economic conditions and restricted consumer spending resulted in a massive 9% fall in 2019 totalling \$448bn, a historic one decade low. According to WTO reports, China, India, and European countries remained the biggest exporters of garments while textile exports from Vietnam, Bangladesh and China gained massive momentum. In 2019, China's market share reached 27% compared to 10.7% of Vietnam. Moreover, developed economies remained the biggest importers of textile goods due to booming middle-class income. The US dropped its market share due to disruptions in production and logistics delays that created large-scale market uncertainties and disruptions.

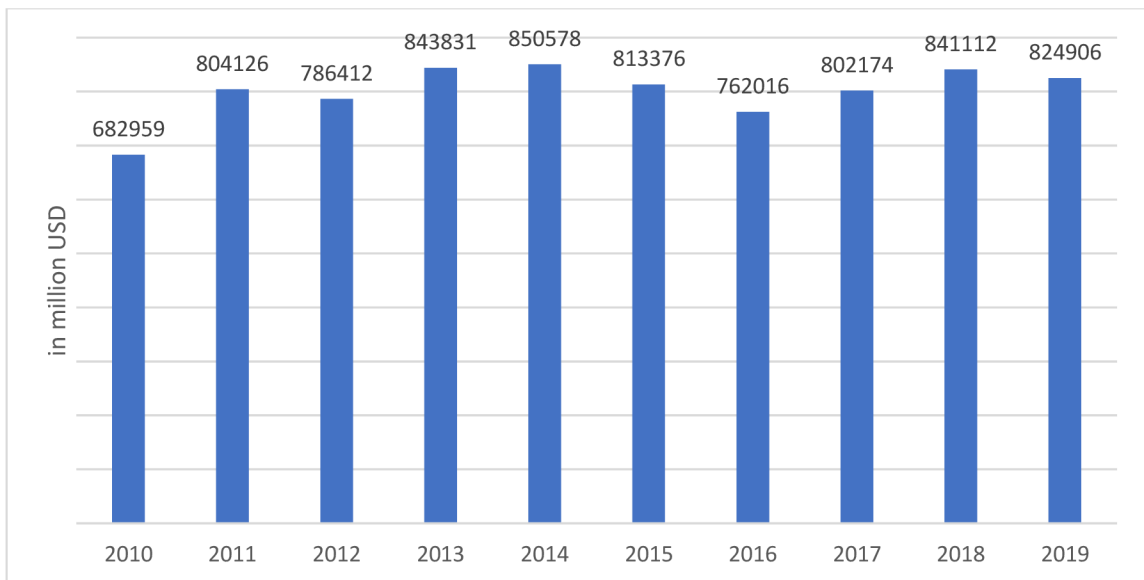


Figure 1: Global Export of Garments
Source: Author own elaboration from world Bank data

As per the information that has been exhibited in the above figure, in 2016, the global export garment businesses have faced losses because the garment exporting amount was reached 762016 million USD, which was 813376.45 million USD in 2015. Besides, at that time, 43% of laborers, who are associated with this garment industry revealed that they got fewer wages and poor working conditions, resulting in a labor crisis (Bgmea.com, 2022). Furthermore, the profit margin for the garment export business was reduced in 2016. Afterward, the internal stakeholders of the world garment industry focus on improving the satisfaction level of employees for which the rate of exporting of garments is growing day by day since 2017.

3.4 The importance of World Trade of Garments

The world trade of garments has not only helped in the financial development of the loping countries such as Bangladesh. It is said that the clothing and the role industry constitutes about 5.7 per cent of the total output in the world at present. It was expected that the trade of clothing and apparel was expected to increase up to 1 US trillion dollars by 2019 (Bgmea.com, 2022). Although, in modern times, it is easy to find modern clothes all over the place. It has been observed that economically advanced countries such as the USA, Europe and Japan are the largest importers of textile. The global textile industry is directed towards supplying the finished products of the textile industry to economically advanced countries. According to the report of the US Department of the Commerce’s Office of Textile and Apparel, the US is still considered to be the largest importer of textile and manufactured garments (Hossain & Islam, 2015). It has been found that developing economic countries are the exporter of garments and textiles. The presence of abundant resources and inexpensive and skilled labourers have helped in providing a big boost to the economy of the developing countries. There is a development of a healthy relationship between the two countries due to the increase in the export and import of the World trade of garments.

The European Union was comparatively higher in terms of exporting garments and textiles in comparison to the other South Asian countries. Yet, China has crossed the European Union and has emerged as one of the leading exporters of the garments and textile industry in the world.

Table 1: Global Export and Garments Export and garments Export

Year	Global Export of Garments (in million USD)	Global Export in total (in million USD)	Garments % of world Export
2010	682959.1926	16840663.29	4.06%
2011	804126.4989	20226610.16	3.98%
2012	786412.3084	20158137.47	3.90%
2013	843830.7801	21026306.81	4.01%
2014	850578.089	20869051.26	4.08%
2015	813376.4556	18256334.69	4.46%
2016	762016.0235	17728021.54	4.30%
2017	802173.6921	19497736.69	4.11%
2018	841112.2079	21379942.83	3.93%
2019	824905.9137	20538351.81	4.02%

Source: authors own elaboration from UN Comtrade database

According to the above-depicted information, the rate of global export garments is increasing year by year which enables the garment industry to accelerate its GDP rate. In 2019, the global exporting rate of Garments has been reached 824905.9137 which was 841112.2079 in 2018. Besides, the rate of percentage of world export has also been accelerated by 4.02% in 2019, which was just 3.93% in 2018. Therefore, it indicates the significant growth of the global apparel industry that has created a positive impact on improving the economic condition of many countries(*UN Comtrade: International Trade Statistics, 2022*).

3.5 The countries that are exporting and importing garments

The country that has ranked top in terms of importing clothes as per the reports of 2020 is the European Union. It is said that the European Union has imported apparel worth around 88 billion US dollars. China is known to be one of the largest exporters of garments and textiles in the world. Several advantages have been countered while understanding the factors that have made China the largest exporter in the world of textiles. The availability of raw materials and the low labour cost are some of the important factors that have made China the largest exporter in the world.

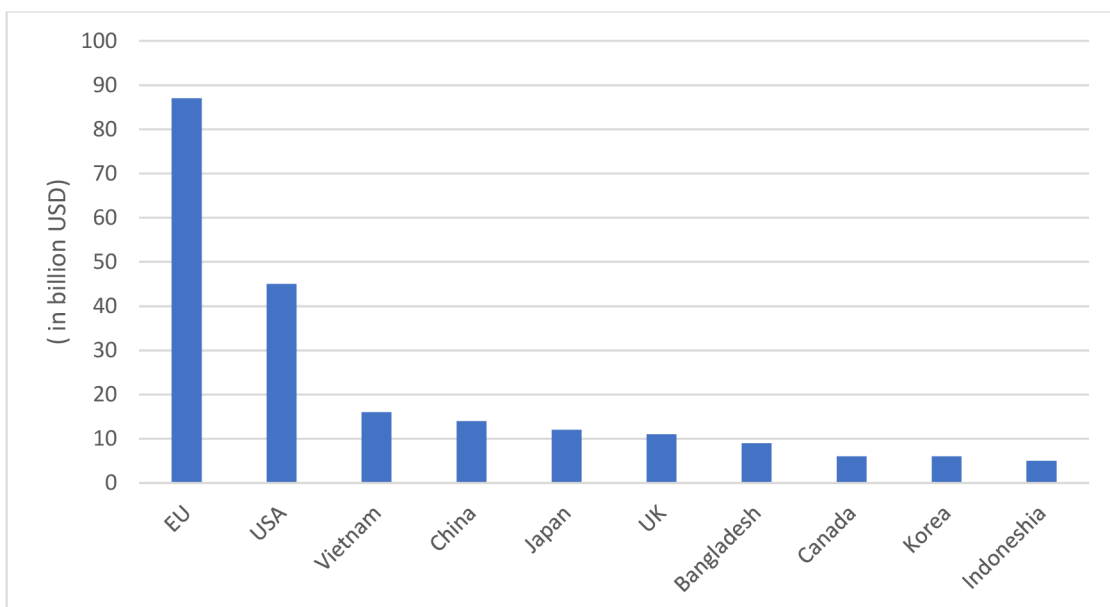


Figure 2: Top 10 Garments importing Countries in year 2020
Source: Authors own elaboration from Statista.com

Economically developed countries such as Japan, USA and UK are known to be the largest importers of garments in the world. The economically advanced countries are known to be the largest importers in the world. They can purchase the products from economically developing countries. Hence, there is a balance in the economic development that is being witnessed in the growth of the developing countries through import and the export of the products. The garment and Textile industry is known to be the backbone of developing countries such as Bangladesh. As per the above figure, it is clearly shown that China has the largest growth in terms of global exporting services. Besides, Germany has occupied the second position in the case of global apparel exporting which exhibits an improved economic status of that country. It is predicted that the marketing share of garment exporting will be grown by 25% by the end of 2025 (Indiantextilemagazine, 2021).

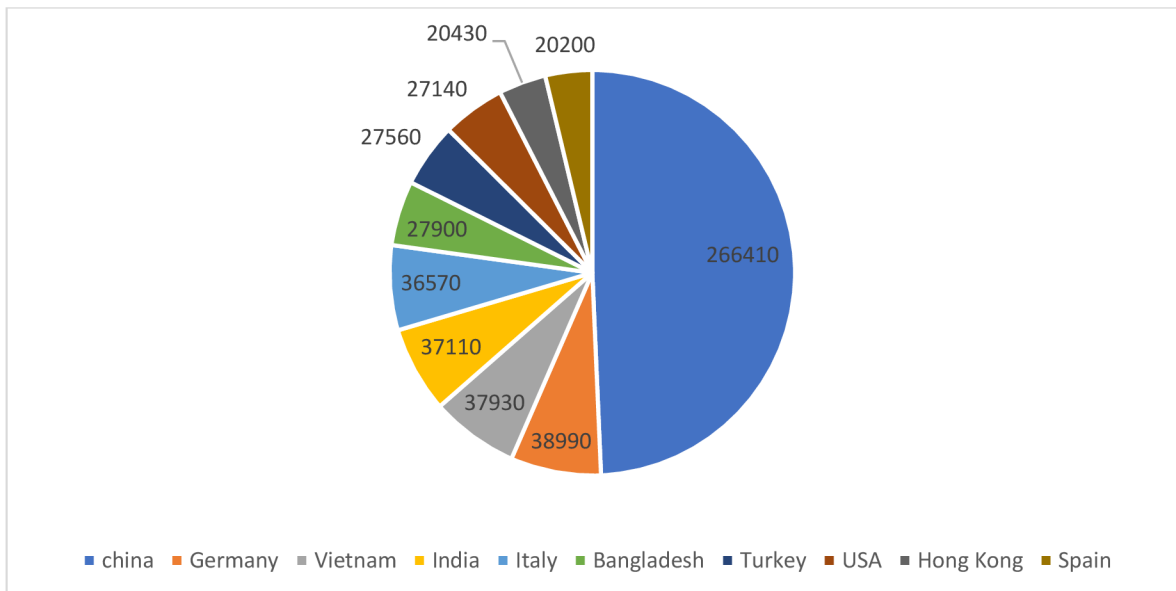


Figure 3: Top 10 Garments Exporting countries in year 2020 (million USD)
Source: Author own elaboration from UN Comtrade database

3.6 Garments industry moving to South Asia

Globalization, the growing popularity of e-commerce sectors and the availability of cutting-edge technologies have facilitated the global garment industry is flourishing and creating a thriving international marketplace crowded with multinational market leaders and regional companies. According to various empirical studies, the Asia Pacific region remained the biggest clothing market for its vast size and a dense population that attracted mainstream European clothing brands to invest and expand in the region (Loto, 2012). Such decisions

and strategic-fit expansion approaches are dominated by low-cost operations policies and seamless access to cheap labour markets. Moreover, the availability of quality and affordable raw materials, a well-structured industrial landscape combined with minimal language barriers and bilateral trade relations among countries have fuelled large-scale transaction-specific investment programs. As mentioned by (Hadi et al., 2013), historically European countries had strong connections with major South Asian countries including India, China, Bangladesh, Vietnam, and other countries since the colonial ages. British, Portuguese, and French garment companies have adequate knowledge and understanding regarding the aforementioned regional markets. Such historical evidence and low-cost overseas production capacity and outsourcing policies are facilitating European companies to maximize product life cycle, enhance global footprints and explore untapped regional markets with strategic-fit approaches and product diversification policies. Although outsourcing of garments is often considered as a prominent solution to secure competitive advantages, the industry is highly criticized for low wages, workplace safety and hygiene issues alongside growing nationalist and protectionism movements. Internationalization strategies remained fruitful for MNCs for their multifaceted benefits ranging from increased business growth, access to the regional talent pool, new market opportunities and low-cost operations to improved brand awareness and integrated supply chain options. Therefore, developing nations are considering multi-scaling initiatives to increase national competitiveness in mitigating the high robustness of supply-demand dynamics and driving industry-specific growth. These contracts and strategic-fit expansion approaches have created comprehensive job and industry growth opportunities in developing countries which widely contributed to reducing poverty rates and unemployment.

Globalization has a strong impact on the various sectors that includes the garment and the textile sector of Europe. The geographical distribution and the production of textile and clothing are dramatically changed over the past 25 years. Therefore, there is a sizable loss that has been witnessed in Europe and North America and on the other hand, there is a growth in Asia and other developing countries. According to the report of the International Labour office, there has been a parallel shift in the production of the garments that has a negative consequence on the wage level and the condition of the worker. Globalization has led to the introduction of the shifting of the textile and garment industry that helps in the promotion of employment, basic rights and the sound working conditions of the workers. China is said to employ around 5.3 million workers in the garment and textile industry. There has been

growth in the clandestine workshop related to the clothing industry. The cheaper labour cost has been one of the major factors in the shifting of the garment industry from European countries to South Asian countries. The present statistics say that around 60 percent of the textile exports are manufactured from developing countries.

The parallel shift of the clothing industry from European countries to South Asian countries. The reason behind the parallel shift of the industry is due to the low wage labour that is available in the South Asian countries. The easy availability of the raw materials will help in the production of the textile industry and the development of the economic situation of the country (Kuruppu, 2018).

3.7 The export of Bangladesh

The trade balance of the country is known as the value of the country that exports goods to the value of the country that imports goods. There is a deficit in the trade when the nation's import exceeds its export during the given time. According to the report, in 2019, Bangladesh exported around 46.4 million dollars which resulted in a negative trade balance of -18.5 billion dollars. The annual GDP of Bangladesh is 8.15% per year in 2019 (Macrotrends, 2022a). The total investment has reached 27.73% of GDP in 2018 and the inflation rate was 5.65 for the year 2019 (Macrotrends, 2022b). Bangladesh's total earnings in 2019 fell to 14.57 per cent, which is 33.60 billion dollars from 39.33 billion dollars. There was a lower shipment of the readymade garment due to the major outbreak of Covid-19. Clothing and hosiery have been one of the major exports and has been the financial backbone of the country. Thus, Bangladesh was able to recover and was considered to be a middle-income country even during Covid 19 outbreak.

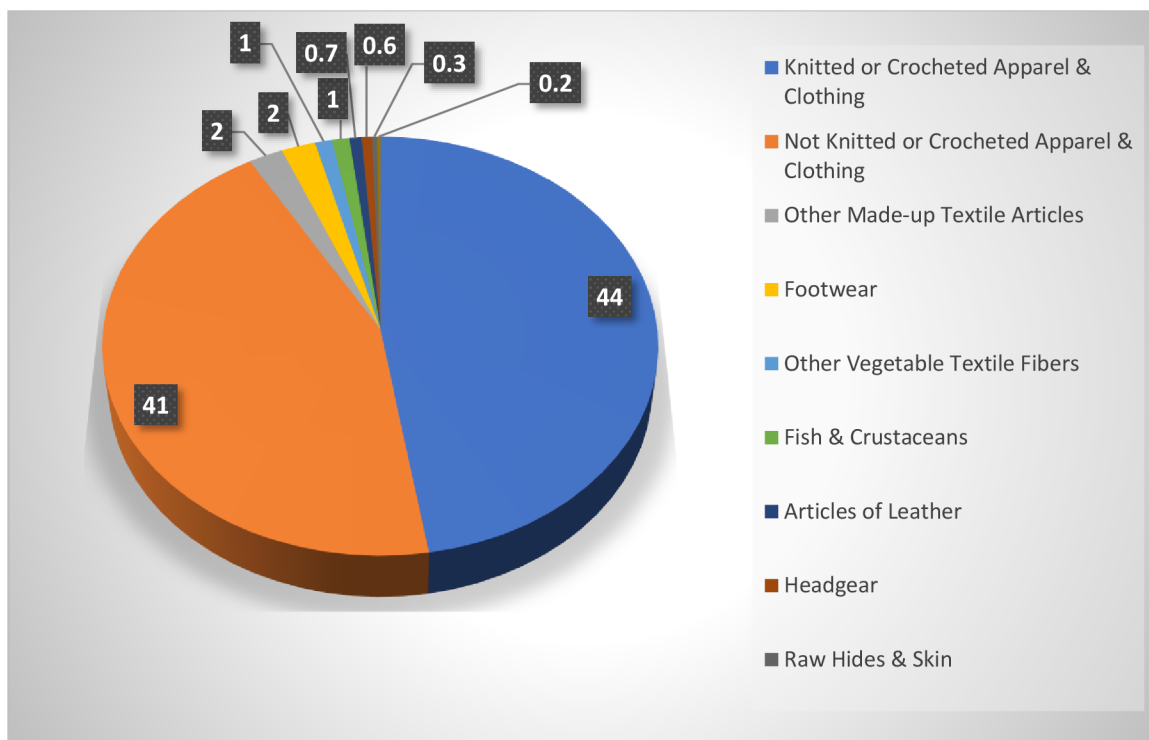


Figure 4: Top 10 Exporting Products of Bangladesh in year 2020(value in %) Source: Author own Elaboration from Bangladesh Bureau of Statistics

The figures that have been portrayed have shown the relative development in the growth of the exports of the goods that Bangladesh is specialized in. Textile and ready-made garments are some of the important items that Bangladesh has been exporting and have been doing well when it comes to GDP and the inflation rate. Although, there was a significant decrease that has been observed during the Covid-19 period. Yet, the country was able to manage the losses that have incurred and have been standing as the middle-income country in the world.

3.8 Bangladesh garments Industry Overview

Bangladesh's garment industry remained at the forefront of its remarkable economic and socio-cultural progress since its independence in 1971. The industry continues to remain the largest exporter of ready-made garments (RMG) and a prominent source of foreign exchange in recent decades. According to the national statistics, Bangladesh secured revenue streams of \$34bn in 2019 compared to \$19bn in 2012 and \$5bn in 2005 by exporting RMG products in more than 60 countries (Mukherjee *et al.* 2019). The industry grew at a CAGR of 7% between 2011 to 2019 which made Bangladesh the second-largest garments exporter with the RMG sector exports accounting for 84% of Bangladesh's exports (Bgmea.com, 2022). According to WTO reports, the incorporation of technological advancements, the

modernisation of production facilities and the integrated industry ecosystem have made adequate improvements in efficiency and workers' safety. According to the Bangladesh Chamber of Commerce, the transformation of the Bangladesh RMG sector from an unstructured industrial landscape to an organised and integrated supply chain was catalysed by rigorous government interventions, high robustness in supply-demand dynamics and a series of catastrophic workplace tragedies. Workplace accidents in Bangladesh took more than 1000 lives that received global attention and criticism that resulted in order cancellations, labour market fluctuations alongside ethical implications. Key incidents including the 2012 Tazreen Factory fire and the 2013 Rana Plaza factory collapse had made global headlines that forced mainstream countries to withdraw preferential tariff agreements. However, active participation from national governments and initiatives regarding factory safety and value chain responsibility helped to restore Bangladesh's lucrative exposures in the global apparel-sourcing industry. Key initiatives including Accord on Fire and Building Safety in Bangladesh, the RMG Sustainability Council and the Alliance for Bangladesh Worker Safety assured a decade of rapid growth through the closure of unsafe and bottom-tier companies and scaling up safety and security protocols and in-house capabilities(M. K. Islam et al., n.d.).

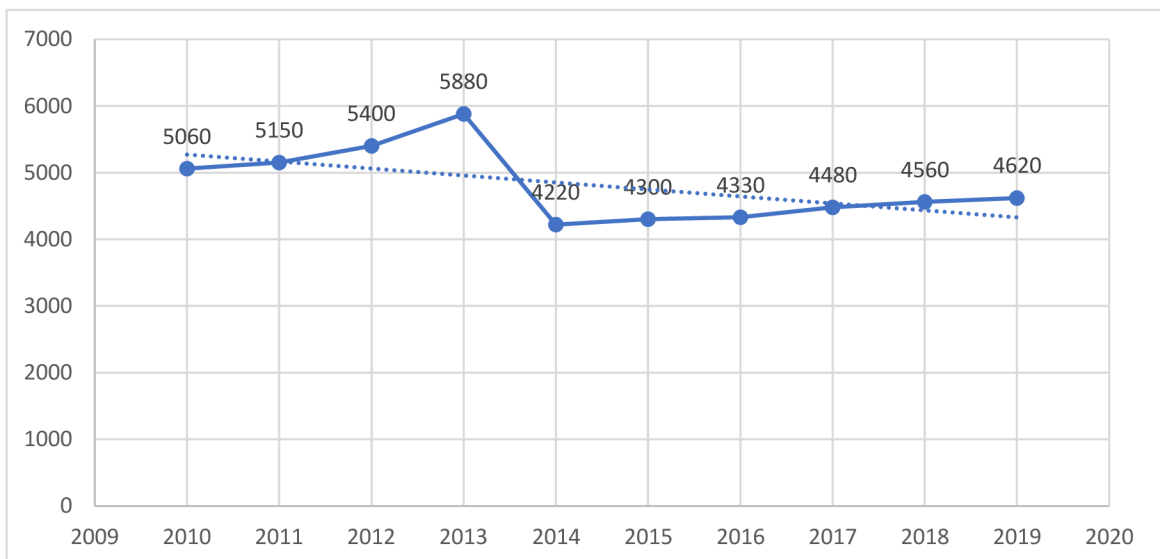


Figure 5: Number of Garments Factories in Bangladesh
Source: Author own elaboration from statista.com

The figures above have portrayed the increase in the number of garment factories that have not only improved the employment of the country by an increased foreign exchange. There

has been a place of employment for the people of Bangladesh. Therefore, it is expected that the number or the rate of unemployment in the country is expected to go down. The rise of the number of garment factories has helped in the rise of the economy of Bangladesh(Statista.com, 2022).

3.9 Bangladesh Garment Industry and International Trade

Since its independence in 1971, Bangladesh has established itself as a promising commercial hub for the global textile industry. Adequate growth in economic development, remarkable labour market strengths and social progress towards sustainability and inclusion have facilitated the gain of adequate global attention that resulted in large-scale overseas production expansions. As an export economy, the Bangladesh garment industry is widely recognised for its readymade garment industry (RMG) which contributed a large portion to the national economic growth. The RMG sector of Bangladesh accounted for 84% of Bangladesh's exports fuelled rapid growth and modernization of the industry (Bgmea.com, 2022). In the last 7 years, the country made an impressive position in exporting garments across 90 countries. However, changing fashion trends, Covid19 consequences alongside ethical sourcing coupled with low-carbon business operations threatened Bangladesh's position within the global textile supply chain. Moreover, the 2012 Tazreen Factory and 2013 Rana Factory catastrophic incidents that took the lives of 1000 people made global headlines and led the same international buyers not sourcing products from Bangladesh. However, the RMG sector achieves benchmark excellence since the incidents through undertaking factory safety, value chain responsibility programs such as Accord on Fire, the Alliance of Bangladesh Worker Safety and the RMG Sustainability Council. It can be reflected that, Bangladesh is a relatively low economy country, with a per person economic output of \$1,190 in financial year 2016 (FY2015; Bangladesh's fiscal year ends on June 30) that was much lower than the South Asian standard of \$1,533. Throughout that time, yearly population development reached 5.6 percent. From FY1996 to FY2015, real GDP per capita increased at a pace of 4.0 percent per year. During the same time period, every year. This was a slower rate of growth than in neighbouring countries. Nonetheless, it reduced the prevalence of poverty from 72.2 percent in 1992 to 43.7 percent in 2010. From FY2006 to FY2015, real GDP growth averaged 6.2 percent each year. Manufacturing (which accounts for 9.1% of the total) and the fastest growing industry was services (5.9%)(*Bangladesh GDP*, 2020). Bangladesh and multinational textile as well as garment companies has implemented

new approaches and had a significant impact in the areas of construction and safety regulations. The 2013 Accord on Fire and Building Safety in Bangladesh (accord) and the 2013 Alliance for Bangladesh Worker Safety (alliance) have made this possible (alliance). In collaboration with the government, the ILO has initiated a similar effort. As of March 16, 2016, the three initiatives have inspected 3,582/10 of the 3,778 designated open and market factories¹¹, according on an examination criterion decided upon by the ILO, agreement, and alliance. Examinations culminated in the closure of 39 factories and the partial closure of 42 others as a consequence of the investigations.

The Initiatives helped to increase the RMG sector from \$14.6bn in 2011 to \$33.1bn in 2019 with a 7% CAGR while increasing global market share up to 6.7%. However, the growing strengths of other mainstream South Asian countries such as India, China and Vietnam continue to affect the country's economic strength. The country is currently focusing on customer diversification, supplier management, workforce performance and industry sustainability to achieve benchmark excellence. US and European countries remained the biggest importers of Bangladesh RMG sector although largely affected by imported fabrics and ethical standards (*UN Comtrade: International Trade Statistics*, 2022). Therefore, companies are using cutting-edge technologies and skill-based employment opportunities to make a fundamental shift towards a demand-based industry and sustainable sourcing environment through investing in digitisation, renewable energy, automation, and industry 4.0 technologies to address environmental issues and social issues.

3.10 The importance of Bangladesh Garments

The textile industry of Bangladesh is known as the single source of development in the economic situation of the country, especially for a country like Bangladesh. One of the major principal sources of foreign earnings is known to be the export of textiles and garments in Bangladesh. Hence, Bangladesh is known to be the second-largest apparel exporter in the western fast fashion brand. For the last 25 years, the garment industry of Bangladesh is known for being the key export division and the main source of foreign exchange. It is said that Bangladesh generates about 5 million dollars' worth of products every year by exporting the garments that they manufacture. Moreover, the textile and garment industry of Bangladesh provides employment opportunities to 3 million people among them 90 percent are women (Bgmea.com, 2022). It has proved that the garment industry of Bangladesh has

proved to be beneficial for the economy of the country. Therefore, it is said that the Textile and garment industry is the key to the growth of the developing country. Moreover, there are employment opportunities that are provided to the citizens of Bangladesh that bring revenue through the medium of exports in the country for economic growth.

Table 2: Garments Share in Bangladesh Export's (Values are in Million USD)

Year	Export of RMG	Total Export of Bangladesh	% of RMG's to Total Export
2001	4859.83	6467.3	75.14
2002	4583.75	5986.09	76.57
2003	4912.09	6548.44	75.01
2004	5686.09	7602.99	74.79
2005	6417.67	8654.52	74.15
2006	7900.8	10526.16	75.06
2007	9211.23	12177.86	75.64
2008	10699.8	14110.8	75.83
2009	12347.77	15565.19	79.33
2010	12496.72	16204.65	77.12
2011	17914.46	22924.38	78.15
2012	19089.73	24301.9	78.55
2013	21515.73	27027.36	79.61
2014	24491.88	30186.62	81.13
2015	25491.4	31208.94	81.68
2016	28094.16	34257.18	82.01
2017	28149.84	34655.9	81.23
2018	30614.76	36668.17	83.49
2019	34133.27	40535.04	84.21
2020	27949.19	33674.09	83

Source: BGMEA

From above table, it is clear that more than 70% of export are RMG of total Export. It has been increasing from year 2001 till 2019. In year 2001 75% of Export were from Garments sector which is around 4859.83 million USD where total export was 6467.3 million USD. The table above illustrates the importance of the Garments sector of Bangladesh in the economy of Bangladesh.

3.11 Competition in the International Apparel Markets

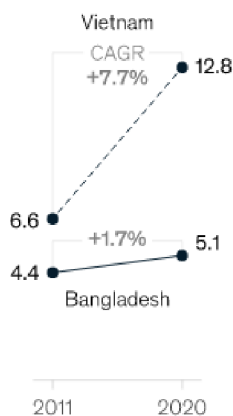
According to the Bangladesh German Chamber of Commerce and Industry reports, the exports of the RMG industry increased from 4.7% to 6.7% between 2011 to 2019 and

doubled revenue streams.(Akter, 2017) mentioned that the country has faced massive competition from other developing countries including India, Vietnam, China, Malaysia and Turkey to become a global destination as an attractive and cost-efficient apparel-sourcing market. The growth of market share has increased significantly in the US and European markets. According to the WTO reports, Bangladesh is losing its international market shares, especially in the US and European markets to other countries including Vietnam and China. Vietnam remained the major competitor in the US and European countries due to its new preferential trade agreements with the US government and European Union. The value of imported apparel from Bangladesh in the US grew from \$4.4bn in 2011 to \$5.1bn at the end of 2019 in contrast to Vietnam's \$6.6bn to \$12.8bn. The CAGR of US imports from Bangladesh remained 1.7% in the period 2011-2020 in comparison to 7.7% of Vietnam. However, the European market remained a major contributor to Bangladesh RMG exports as the value of imported apparel reached €12.5bn at the end of 2019 from €6.8bn in 2011 with a CAGR of 7% in contrast to €1.4bn revenue growth of Vietnam within the same market(UN Comtrade: International Trade Statistics, 2022).

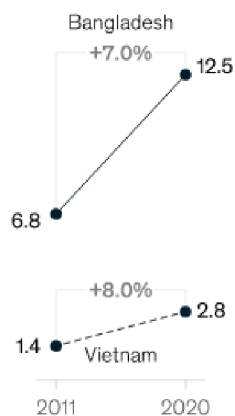
Growth of apparel imports from Vietnam is outperforming imports from Bangladesh.

Apparel import value

United States, \$ billion



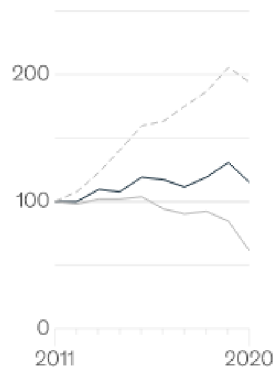
Europe (EU27), € billion



Apparel import value, index (2011 = 100)

— Bangladesh — Vietnam — China

United States



Europe (EU27)

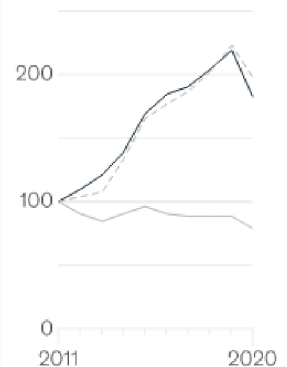


Figure 6: International Market of Apparel

Source: McKinsey Analysis

3.12 The speciality of Bangladesh Garments

Bangladesh is known to be the top 10 leading readymade garment producers in the world in 2019. It has the second largest readymade garments in the world according to the statistics. It employs around 3 million workers and 90 percent of the workers are female. The speciality of garment manufacturing in Bangladesh that has been countered by most of the researchers is that it is known to be the hub of low wage garment manufacturing units. Hence, there is an increase in profitability has been witnessed. Moreover, Bangladesh is known to have the largest apparel recycling in the world. It is said that the fashion industry of Bangladesh does work with some of the most famous fashion designers in the world. The quality of the manufactured clothes in Bangladesh attracts retail companies that have a lower manufacturing cost. Moreover, Bangladesh is known to be enjoying duty-free market access or reduced the tariff rate for the apparel that will be exported. The biggest destination of the readymade manufactured garments in Bangladesh is the European Union. A report in 2019 says that there are around 4.62 thousand garment factories have been witnessed in Bangladesh ((*BGMEA | Export Performance*, n.d.)).

The table below that is being observed, shows that there is an increase in the garment manufacturing units in Bangladesh that have helped in the economic development of the country. There is a parallel growth that has been observed in the woven garment, knitwear and RMG. Hence, the table shows that there is a steady growth in the garment and the title industry in Bangladesh in comparison to other South Asian countries.

Table 3: Bangladesh's Apparel Export to World (Value in million USD)

Year	Woven	Knit	Total RMG
2000	3376.49	1448.22	4824.71
2001	3162.28	1432.72	4595
2002	3076.28	1573.4	4649.68
2003	3398.84	1850.36	5249.2
2004	3686.78	2532.62	6219.4
2005	3689.6	3210.48	6900.08
2006	4544.83	4388.67	8933.5
2007	4608.4	4741.93	9350.33

2008	5655.5	6223.42	11878.92
2009	5695.88	6194.61	11890.49
2010	7067.34	7787.26	14854.6
2011	9252.8	9961.67	19214.47
2012	10117.43	9670.71	19788.14
2013	12052.3	11448.68	23500.98
2014	12421.26	12162.7	24583.96
2015	13805.44	12797.26	26602.7
2016	14931.33	13736.95	28668.29
2017	14673.99	14538.94	29212.93
2018	16681.04	16245.84	32926.88
2019	16630.64	16441.74	33072.38

Source: BGMEA.com

3.13 Major Industry-specific Challenges

The supply-demand dynamics of the Bangladesh RMG industry remained highly volatile in the last two decades due to fluctuations in macro-environmental factors, labour market standards and bilateral trade relations based on preferential tariff agreements. To tackle these demand challenges alongside growing safety and security measures and improved workplace conditions, a range of initiatives including infrastructure development, policy and administration reforms alongside the diversification of supply chain networks and products have been made nationwide. These initiatives combined with improved social awareness and training facilities facilitated Bangladesh diversifying customers and products, optimizing supply chain and workflows, and strengthening sustainability and compliances. (Ali & Islam, 2010) mentioned that large-scale transformation towards sophisticated and value-added services, international market penetration and diversification of customer countries are widely recognised as prominent strategies that fuelled the RMG sector's growth and performance. The country successfully reached more than 60 countries; however, the EU (62% export value) and the US (18%) remained the leading markets for ten RMG industries. Although dependency in the traditional US markets is reduced in recent years due to ever-

increasing national Apparel markets and increased exports to non-traditional markets including Africa, South Asian countries, and the Middle East. Diversification of product portfolio into emerging segments including synthetic fibres, outerwear, tailored products, lingerie, and laser finishings alongside additional investment in manufacturing units increased production capacity and outsourcing diversity. These shifts into new segments are fuelled by upgrading preferential rules in the EU tariff agreements, changing consumer demands and vertical integration of the industry supply chain with improved lead times, and dominating product variety. However, Sharma (2015) claimed that these products are yet to receive mainstream attention due to limited factory capabilities and sophisticated production facilities derived from limited capital expenditures and financial constraints throughout the selected period. According to WTO reports, traditional products including T-shirts, sweaters and trousers remained at the frontline of the country's RMG exports. According to the EU tariff agreement reports, Bangladesh's top 10 RMG products secured 55% of total export value in 2019 while the t-shirt segment valued around 20% of the country's total export value. (Shimu & Islam, 2018) claimed that palpable pricing pressure, highly volatile SME performance and lack of competitive quality assurance strategies compounded already-existing operational and functional challenges. Although, (M. K. Islam et al., n.d.) mentioned that mainstream manufacturers are investing in automated factories, product improvement and digital transformation initiatives alongside sustainability-conscious development programs to ensure strategic management and innovation-seeking entrepreneurship practices.

The cotton t-shirt remains the iconic product for Bangladesh sourcing, despite price pressure.

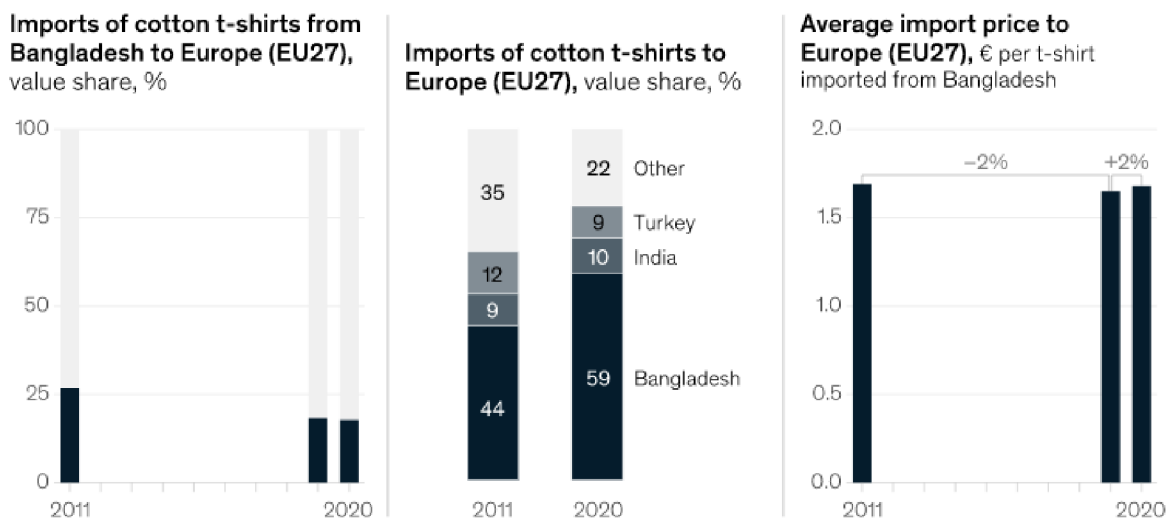


Figure 7: Import of Cotton T-Shirt

Source: Mckinsey Analysis

Bangladesh's garment industry is also highly exposed to worker empowerment and inequality issues that increase disruptions and stakeholder conflicts throughout the entire supply chain. Low wages, limited ICT based training programs, fair career progression and fundamental employment rights remained volatile resulting in expensive law lawsuits, low demands from international customers and increased safety issues. By turning into Compliance, factory and occupational safety and transparency, the industry is showing promising futuristic advancements while creating comprehensive upskilling opportunities and gender diversity within the industry. According to the World Bank report, Bangladesh scored 100 in the Logistics Performance Index in 2018 compared with 79 in 2010 (Liu *et al.* 2019). However, the report highlighted that Vietnam improved its position from 53 in 2010 to 39 in 2018 by restricting the country's international transactions and market penetration. Companies are widely investing in green factories that build more integrated and workplace conditions safer aiming to scale-up sustainability and continual improvement. The majority of RMG market players are actively participating in the country's sustainability and climate change agenda through the Circular Fashion Partnership. According to the WTO reports, the Global Organic Textile Standard has certified more than 1500 Bangladesh RMG companies resulting in increased sustainability and multilayer stakeholder participation to scale up recycling of production waste, minimize industry footprints and avoid labour exploitation

complexities. Poorly maintained industry provisions, in-house workplace standards coupled with Infrastructure unavailability, transportation and energy storage and digitisation infrastructure are imposing massive roadblocks(M. M. Islam et al., 2013).

According to the aforementioned analysis, a strategy-for industrial transformation through structural changes and a sustainable sourcing model can facilitate a fundamental shift towards a demand-based and futuristic industry ecosystem. To secure adequate competitive advantages, the industry must widely focus on sustainable development and advanced technologies to ensure greater benefits including improved flexibility and responsiveness, environmental sustainability, worker welfare and innovation-seeking entrepreneurship spirits. Adequate investment in cutting-edge technologies including artificial intelligence, IoT, analytics and information technologies alongside upskilling, vertical and horizontal supply chain management and automation programs can unlock enormous opportunities and transparency. As regulations and ethical governance continue to become an integral property of modern-day commerce, the Bangladeshi RMG sector must ramp up R&D pipelines alongside technical materials and functional innovation to stay comprehensively competitive and reasonable. Adequate focus on innovative fibres, new technologies and product diversification Initiatives alongside the circular economy and operational improvements can trigger the mainstream transformation of the underpinned industry. The Bangladeshi government also needs to reorganize FDI policies and attract FDI-backed companies through multi-country corporations and bilateral trade relations as well as R&D infrastructure, workforce development and funding initiatives to enhance attractive exports and industry lucrativeness(Jaren Navarro, 2018).

3.14 Key Sustainability Challenges of Bangladesh Garment Industry

The Bangladesh garment industry is growing exponentially for large-scale RMG exports, improving domestic markets and product diversification efforts leveraged by small and large enterprises. Sustainability remained a prominent barrier to the industry expansion due to changing ethical standards, sustainability-conscious development initiatives alongside standardization of stakeholder well-being and eco-friendly credentials. The study identified that maintaining social, environmental, and economic responsibilities are becoming more difficult for manufacturing companies due to unstructured industrial landscape, compliance issues, unavailability of standard production capacity and poorly maintained workforce welfare programs. (Dey & Awal, 2017)commented that unskilled labour market, highly

volatile supply chain alongside growing environmental concerns and poorly regulated worker safety and security protocols have compounded already-existing operational and reputational values of the RMG sector that are causing massive uncertainties and disruptions including order cancellations, workplace tragedies, exploitation of labour markets and resources consumptions. (A. Rahman, 2015) mentioned that key environmental consequences including higher carbon footprints, wastewater with effluents, excessive usage of toxic chemicals and fossil fuel consumption remained major barriers to minimising environmental consequences of the RMG sector's growth. As fast fashion and just-in-time manufacturing principles become more prominent, companies across the industry value chain have limited capabilities in leveraging sustainable supply chain options including green retailing, sustainable manufacturing, eco-friendly credentials, green distribution, and ethical consumptions. (Kuruppu, 2018) mentioned that lack of proactive provisions, well-structured worker empowerment and welfare programs alongside unavailability of strategic-fit approaches and resources utilisation schemes widely affected social sustainability and wellness of workers that increased turnover issues, absenteeism, and arbitration rates. Such issues combined with complex labour union arrangements, gender equality and inclusiveness issues and limited upskilling opportunities and complex wage structure also continue to affect economic and social prosperity. As the industry employed more than a 4.4million people in 2019, unstructured industrial ecosystem and labour market fluctuations and violation of national and international standards and procedures also profoundly affect transparency, credibility, and accountability of the underpinned industry (Alam et al. 2017). Workers' rights, production facility standards, regulatory compliances and sustainable sourcing models violations and mismanagement significantly impacted standardisation and transparency of the industry that affected oversea product demands, sourcing, and supply chain issues. Use of child labour, significant wage gaps, engagement of women workers alongside discrimination and in-house malpractices including favouritism, misinformation, internal politics, biased rewarding and recognition schemes alongside health and safety hazards have remained major sustainability issues affecting productivity, accountability, and efficiency of Bangladesh RMG industry.(Akter, 2017) pointed out that government interventions and trustworthiness among supply chain players remained highly volatile and uncategorised com-compounding stainability issues and eventually risk exposures and sociocultural deprivation.

Table 4: Major Factory incident since 2010 in Bangladesh

Name of the factory	Location	Time	Cause	Death	Injury
Tazreen Fashions Ltd	Dhaka	2012	Fire	112	300
Section Seven Garments	Chittagong	2012	Fire	0	50
Crescent Leather Ltd	Savar	2012	Fire	0	16
Vision Apparels Ltd	Savar	2012	Fire	0	100
BD Hechong Gazipur	Gazipur	2012	Fire	0	15
Pacific Blue Jeans	Savar	2012	Fire	0	24
NRR Fashion Ltd	Narayanganj	2012	Fire	0	5
AKH Stretch Garment	Beribadh	2012	Fire	1	50
Active Composite Ltd	Ashulia	2012	Fire	0	50
Nasa Basic Limited group	Ashulia	2012	Fire	0	20
Cotton Club Limited	Gazipur	2012	Fire	0	6
Bonded Fashion	Tongi	2012	Fire	0	30
New Age Apparels	Ashulia	2012	Fire	0	5
Sagar Garments Ltd	Uttara	2012	Fire	0	5
Ither Tex Ltd	Savar	2012	Fire	0	40
Ananta Knitwear Ltd	Ashulia	2012	Fire	0	10
Epic Garments Ltd	Narayanganj	2012	Fire	0	15
Smart Export Garments	Dhaka	2012	Fire	8	50
Rana Plaza	Dhaka	2012	Building Collapse	1132	2400
Aswad Composite Mills Ltd	Dhaka	2012	Fire	7	50
Pacific Jeans 2000	Chittagong	2012	Fire	0	35
Abonti Colour Text, Unit 2 (Crony Group)	Narayanganj	2012	Fire	0	50
Smart Export Garment	Dhaka	2012	Fire	7	15
Envoy Garments	Ashulia	2012	Fire	0	100
A Factory of Nisa Group	Comilla	2012	Fire	1	2
Kang Book BD Limited	CEPZ	2013	Fire	0	5
GM Garments Factory	Gazipur	2013	Fire	0	3
Tung Hai Sweater Limited	Mirpur	2013	Fire	7	0
Bandu Design Ltd	Ashulia	2013	Fire	0	20
Uni Garment	Chittagong	2013	Fire	0	14
Arba Textile Ltd	Ashulia	2013	Fire	0	10
Nakano International Co. Ltd	Ishwardi	2013	Fire	0	7
JK Group Factory	Savar	2013	Fire	0	10
Sicily Garments	Dhaka	2013	Fire	0	3
Aswad Composite Mills	Gazipur	2013	Fire	10	50
Riyad Dying	Gazipur	2013	Fire	0	15
Aman Spinning Mills Ltd	Ashulia	2013	Fire	0	25
Mondol Group's Garment Factory	Ashulia	2013	Fire	0	15

Green Leaf Apparel	Dhaka	2014	Fire	0	1
Karnaphuli Knitting Siddique Knitting Fashion and Park International Ltd	Chittagong	2014	Fire	2	0
Za Sweater Factory	Dhaka	2014	Fire	0	4
Syntax Industries Ltd	Savar	2014	Fire	0	2
S S Sweater Ltd	Gazipur	2014	Fire	0	10
Mayer Doha	Dhaka	2014	Fire	1	3
Amina Exports Wear Limited	Dhaka	2014	Fire	0	10
Mega Yarn Dyeing Mills Limited	Gazipur	2014	Boiler Brust	1	4
Kader Synthetic and Compact Spinning Mill	Gazipur	2015	Fire	0	4
Supreme Jute and Knitex	Ashulia	2015	Fire	0	4
Tampako	Tongi	2016	Boiler Brust	34	70
Amin Dyeing	Narayanganj	2016	Fire	5	0
Matrix Sweaters Ltd	Choydana	2016	Fire	5	0
Tanaz Fashions Ltd	Gazipur	2016	Fire	10	0
Momo Tex Panchdona	Narshingdi	2016	Fire	15	3
Beacon Knitwear Limited	Gazipur	2016	Fire	50	0
Continental group	Ashulia	2016	Fire	25	0
Ideal Textile Mill	Munshiganj	2017	Fire	0	6
Multifabs Limited	Gazipur	2017	Fire	20	13
Mipur Embroidery Factory	Dhaka	2018	Fire	3	0
Sadid Sourcing East	Dhaka	2018	Fire	2	1
RN Spinning Mill	Cumilla	2019	Fire	0	0
Keya Spinning Mill Ltd	Dhaka	2019	Fire	0	0
15 Garment Scrap Warehouses	Gazipur	2019	Fire	0	0

Source: BGMEA.com

Poor wages and unsafe working conditions remained one of the major sustainability issues in Bangladesh. Workers receive the lowest wages in comparison to western countries and competitive nations including Vietnam, India, and China. Although Kagy (2014) commented that low wages and Production costs attracted foreign investors and increased production volumes, it brought massive uncertainties to diverse workers to sustain their life against higher inflation rates, growing material costs and expenses. The country witnessed massive shortfalls in maintaining minimum wages. In 1994, the minimum wage for garment workers was €8.3 (930 takas) which increased to €15 (1662 Taka) in 2006. However, active participation of labour unions, massive worker outrages and the temporary shutdown of production houses forced the wage board to raise minimum wages to 3000 Taka (€27) per

month in 2010 based on the demand for 5000 Taka (€45). However, the RMG sector faced massive criticism and uncertainties due to the engagement of child labour, exploitation of women workers and low wages which was again updated with €50 per month (Cowgill et al., n.d.). Such wage issues increased workplace vulnerabilities and complexities that forced the Ministry of Labour and Employment to revise and rearrange wage scales according to the international labour organization conventions and minimum standards. As high living costs, growing inflation rates, economic downturn and job securities continue to impact the psychological and economic well-being of workers, working excessive overtime has remained a silent killer of the country's mainstream labour market. (Shahbaz, 2015) mentioned that the RMG sector's workers are compelled to work overtime to meet high demands and to earn extra money for a better living. As 56% of the country's workforce are female, these issues coincide with sustainable living and working balance. Poor work-life balance and workplace prejudices also become major barriers to industrial sustainability. Although the Bangladesh Labour Law 2006 set 8 hours per day and six working days in a week, the majority of workers work for a minimum of 60 hours per week in contrast to standardized 48 working hours weekly. Bangladeshi garment workers do an average of 76 hours per week which are extremely high and physically demanding that increased physical and psychological health issues among workers. According to the current labour law, companies must pay salary 7 working days of completion, these regulations are widely violated by factories that increase burnouts and arbitration rates which eventually halt production and cause distribution delays and disruptions. The underpinned study also found that Bangladesh workers only received 30% of the RMG sector net profits in comparison to 50% of net profits in other mainstream counties (*Monthly Wages*, 2018).

(Ahmed & Peerlings, 2009) commented that the success of the Bangladesh RMG industry is largely influenced by the large-scale participation of women workers. In 2004, the industry engaged 1.4 million women workers within 1.8 million garment workers which also remained the same over the last two decades. According to the Bangladesh RMG industry reports, women workers represent 80% of Bangladeshi garment workers. Therefore, labour exploitations, workplace harassment alongside low wages and unsafe working conditions remained profoundly challenging to ensure sustainable development. Lack of adequate education alongside peer pressure, economic conditions, and unavailability of job-specific skills force women to work in the RMG sector with low salaries and benefits. These factors combined with poverty, family conflicts and divorce drive women workers to work with low

salaries which limit their social capabilities and potential growth opportunities and promotions.

mention that Bangladesh garment industry remained one of the worst records in terms of safety and workplace security due to poor infrastructure development, security risk management and limited in-house capabilities to address fire prevention and control measurements. According to a report published by the Bangladesh Fire department, between 2006 and 2009 more than 430 garment workers died in 213 factory fires which increased overall production costs, cancellations of orders, and workers' safety and health issues (M. M. Islam et al., 2013). In 2010, 79 workers died due to extreme factory accidents which are even amplified by the growing number of building collapses and fires (M. M. Islam et al., 2013).

According to the analysis, the researcher identified that sustainability issues including labour exploitations, poor workplace conditions coupled with already-existing industrial challenges and changing consumer behaviours and demand robustness widely recognised as major barriers to sustainable development. Mostafa & Klepper, (2016) mentioned that sustainable industrialisation involves a long-term process of transformation and goal-oriented visions that adequately contribute to wealth creation, social development and environmental well-being. According to the triple-bottom-line approach, economic profits must comply with social and environmental needs that allow leveraging standardized dialogue inclusiveness and industry-wide collaboration towards sustainability and digital transformation. The underpinned study findings revealed that in terms of sustainability, the Bangladesh RMG sector is far behind expected measures and global industry standards (Rahman,2013). Although the industry become fruitful in terms of economic achievements, employment opportunities and diversity of product portfolios, sociocultural and environmental issues are widely restricting the country's RMG sector to attract niche-specific overseas customers due to ethical sourcing issues and poorly maintained regulatory compliances and sustainable practices.

According to the aforementioned inductive thematic analysis, the economic growth and prosperity of Bangladesh are highly dependent on the RMG sector as 80% of Bangladesh's exports consists of RMG products. The contributions of the RMG sector is remarkable as they facilitated stabilise Bangladesh's GDP growth since 2000 with an average CAGR of 6% (Alamgir & Banerjee, 2019). The underpinned study identified that lack of proactive provisions and compliances with material usage and toxic chemicals remained major barriers

as the majority of factories do not establish ETP in effluent treatment which compounded already-existing worker health issues and catastrophic consequences due to high amount of water and raw material waste. Such activities increased pollution and contamination issues as the industry continue to shift towards synthetic fibres and cotton instead of organic cotton. Ahmed (2004) mentioned that the industry barely follows and capitalise on recycling and reusing mechanisms that are restricting them to recover and reusing waste materials to manufacture new products with greater economic and ecological wisdom. The study also found that the growing number of factory accidents and fire outbreaks significantly impacted foreign investors to reconsider trade contracts and policies to cope with ethical uncertainties and order delays. These issues alongside demand for low-carbon business operations and improved worker empowerment and welfare requirements worsen social aspects of the industry. Khanna (2011) highlighted that poor work-life balance and living conditions, growing inflation rates, low-wage labour engagements and gender inequalities are widely shaping industry lucrativeness and exposures to international criticism and market uncertainties. Although, the exploitation of child labour is largely reduced after the Harkin Bill of the United States since 1992 (Ahmed, 2004). Moreover, major challenges including energy shortages, a growing number of building collapses and informal trade union engagements continue to affect the economical, socio-cultural, and socioeconomic status of the country.

3.15 Problems in the Bangladesh Garment Industry

The RMG sector is the main source of foreign exchange of Bangladesh since the early 2000s while covering 80% of the country's exports and employing 40% of total industrial workers (Kagy,2014). However, the industry is facing massive uncertainties due to growing sustainability issues, increasing the capacity of competition and nationalistic trade policies leveraged by regional governments. However, Higher attention to Workers' Rights and Standard Production Facility regulations have been triggering massive shifts towards more safe and calculated business practices and market penetrations as the Bangladesh Government continue to focus on developing the necessary infrastructure and bilateral trade relations with developed nations across the horizon. However, the sector become an integral property of the modern-day Bangladesh economy through improving export earnings, employment opportunities and secondary impacts such as the growing popularity of SMEs and the number of informal businesses across the country while employing innumerable unskilled and uneducated women workers. The Bangladesh RMG sector is a 100% export-oriented industry that exports 35 types of garments in more than 65 countries and become an international economic competitor in the international garment industry. Mostafa & Klepper (2018) mentioned that country is lacking in developing the necessary infrastructure and regulatory compliances to cope with work conditions, wages and worker benefits that have wide-ranging impacts on productivity, quality assurance, timely distribution and ethical standards. The country also imports a large section of raw materials like cotton, thread colour and chemicals, however higher dependencies, growing supply chain and logistics complexities combined with high import and transportation costs and low-quality raw materials widely affected sustainability and economic well-being of the RMG sector. In addition, higher engagement of unskilled labours, lack of adequate training and skill development facilities and improper working conditions also affect quality assurance programs. Rahman (2013) claimed that the industry is highly informal, therefore, lack of managerial insufficiencies and knowledge-oriented decision-making capabilities continue to affect the economical and reputational excellence of the industry. Key issues including autocratic approaches from investors, incompetent ports and limited flexibility in manufacturing methods are widely affecting supply-demand dynamics and efficiency to deliver quality products within agreed parameters.

Despite having strong support from the World Bank and foreign investors, the country is struggling to provide necessary loans and financial assistance to the RMG sector.

Complicated taxation initiatives and custom duties alongside delayed in services and poorly maintained communication channels across the industry ecosystem. According to Alam et al. (2017), the international RMG industry demand is gradually becoming diversified as more than 120-130 products are on demand. The country manages to deliver only 12-15 types of garments which is significantly low in comparison to its main competitors including India, China, Vietnam, and South Korea. The country also struggling to maintain unit Labour costs. According to the WTO reports, it only costs 11 cents to produce a shirt in Bangladesh in comparison with 26 cents in India and 79 cents in Sri Lanka which is also diminishing returns and profit margins (Ahmed & Nathan, 2016). The country also faced enormous challenges to cope with an aggressive pricing structure leveraged by key competitors including India, China and Vietnam that are affecting competitive advantages in the global market.

3.15 The way exporting and importing can eradicate unemployment

Unemployment is known as the individuals who are unable to find jobs, these groups are unable to get a proper job. Export promotion is known to reduce unemployment, especially in economically developing countries such as India and Bangladesh. Export agencies focus on the promotion efforts on sectors where the country might get a competitive advantage. The agencies focus on the high labour market friction and the reason behind the increase of unemployment. Export growth is known to be the ultimate objectivity of economic policy. It has been found from the recent study of Geneva that export has increased the promotion of budgets that are associated with the higher GDP per capita in all the countries (Sharmin & Khandaker, 2015). There is a major effect on the GDP of the country of exporting and importing that helps in eradicating unemployment. The question that has arisen is whether export and import increase the employment rate of the country. There is an increase in the rate of employment in the firm and the country that is associated with the export of the materials (Dey & Awal, 2017). The aggregate of the country has a higher employment rate than those who are associated with the reporting of the products. There is an increase in the employment rate of the country. Hence, export helps in eradicating unemployment from the country, especially for the developing countries.

There was a parallel shifting of the trade and garment industry from the European Union to the South Asian countries, there has been a major unemployment that has been noticed in

the European countries. Exports have a strong connection with the employment of the country. Hence, the employment has strongly shifted to the South Asian countries from the European Union.

3.16 The Impact of import and export of garments in GDP of Bangladesh

The relationship that has been observed between imports and unemployment is it increases the relative skill-intensive products. Thus, it reduces the skilled unemployment rate of skilled workers. The relationship that has been established between the import, export and GDP are the money that are spent on imports leaves the economy that in turn decreasing the economy of the country. There has been a remarkable economic and social progression in Bangladesh in recent decades. Even after the economic setback of Covid 19, Bangladesh was able to recover and has been considered as the middle-income country in the world. The mainstay of the economic status of Bangladesh is the ready-made garment industry, which counts for 84 percent of the largest garment export in the country (Hadi et al., 2013). Although, there have been various tragedies that have to be tackled by Bangladesh. Yet, the country was able to make headlines for the positive news. The textile industry has been able to pick up the economy of the country. There has been a forecast for the GDP growth of Bangladesh from 7 % to 9 % 10 years ago (*Bangladesh GDP*, 2020). There has been a double in the RMG exports from 14.6 billion dollars in 2011 to 33.1 billion dollars in 2019. Annual compound growth has been observed. The global garment export has been increased by the Bangladesh garment market. There has been an increase in the global garment from 4.7 to 6.7 percent and considerably Bangladesh is known to be the second textile exporter in the world.

The pictures have proved the massive rise in the graph of the garment industry in Bangladesh that has helped in the doubling of GDP in the country. There has been double the growth of the GDP of the country. The factors such as the low wage labourer and skilled labourers have been one of the major factors that have made Bangladesh one of the second-largest exporters of garments. (Macrotrends, 2022b)

3.17 Modern Theory of Trade

The modern theory of international trade is known as the extension of the general equilibrium theory of value. There is a difference in the factor prices in the cause of international trade('Modern Theory of International Trade', 2018) . The modern theory of trade is known as the perfect competition that returns to the scale. There are pragmatic approaches that are

taken by the industry. They emphasize the monopoly and the economic scale of the market. Market imperfection is known as the basic approach of the modern theory of trade. Moreover, market imperfection arises from the specific advantage that is enjoyed by the organizations. Moreover, there is an advantage that has been observed in the modern theory of trade that includes the several innovations of superior technology, there is access to the capital that is required by the organization. Control of the distribution system happens to be one of the most important parts of the modern theory of trade. The control must be divided among all the employees of the industry. Different products are available for the people and superior management helps in the overall development of the industry in the country. It helps in the GDP growth of the specific country('Modern Theory of International Trade', 2014)

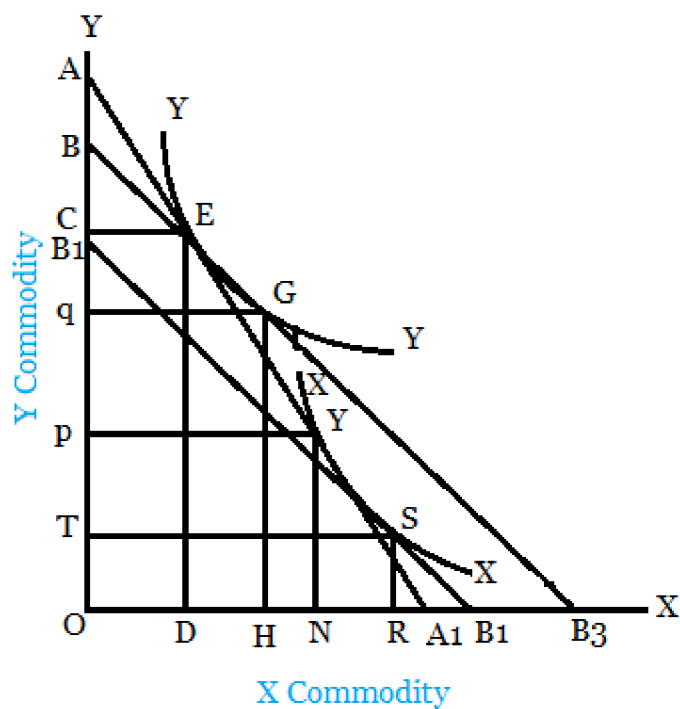


Figure 7: Modern theory of trade

The innovation in technology in the textile industry in Bangladesh has helped in the development of textile and garments in Bangladesh. Therefore, Bangladesh can become the second second-largest product in the world. Various factors are associated with the modern theory of trade that helps in increasing the GDP rate of the country. Hence, the modern theory of trade is pretty useful in the case of the textile industry in Bangladesh.

3.18 Philip's Curve

According to the explanation of the economist, Philip's Curve is known as the graphical representation between the rate of unemployment and the rate of change of money wages. There is a major connection that has been observed between the rate of inflation and the rate of unemployment in the economy of Bangladesh. The theory has encouraged in the development of the difference that has been established between the unemployment gap and the unemployment rate in the long-run equilibrium. There is a major economic development that has been witnessed in the past three decades from 2007 to 2017. The casual study of the inflation rate in Bangladesh has been focusing on utilization and integration. There is a strong relationship that has been observed in Bangladesh (*Phillips Curve*, 2022)

3.19 The unemployment of Bangladesh

Unemployment is known as the underutilization of the supply of labour. Various causes work such as there is a demand from the side of the employer, workers, and the supply side. When there is a reduction in demand and an increase in the high-interest rate, the global recession. The unemployment rate of Bangladesh in 2019 was reported to be approximately around 5.3 per cent, there was a steady unemployment rate of Bangladesh around 4.3 per cent (Macrotrends, 2022c). Unfortunately, by the end of 2021 according to the report of trade economics global the unemployment rate has reached 6 per cent. Unemployment has been considered one of the major issues in Bangladesh. There are almost 10.6 million labourers that are present in the country. Almost 11.8 million unpaid helpers are present in the country. The rate of underemployment has been reported as 20.3 percent in Bangladesh. Hence, underemployment and unemployment have been one of the major issues that have been considered in the unemployment data of Bangladesh.

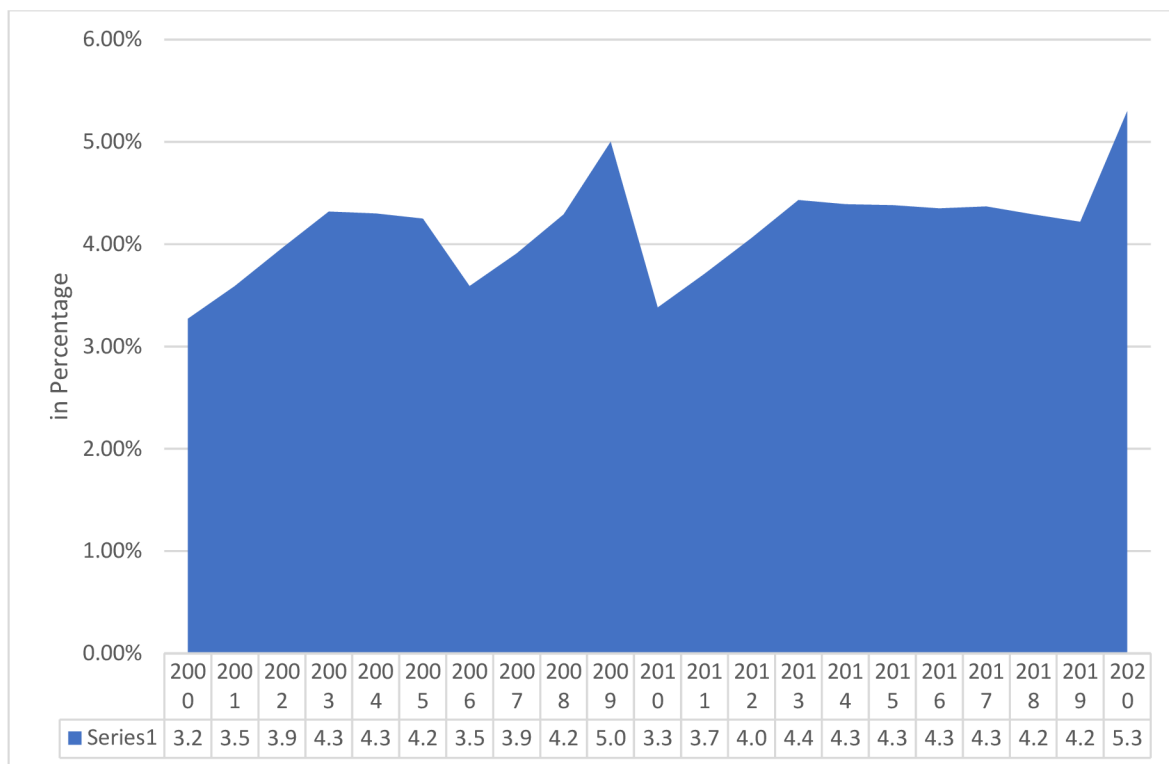


Figure 8: Unemployment rate of Bangladesh
Source: Author own elaboration from BBS

There has been a major disturbance that has been observed in the employment rate in Bangladesh over the years. Although there was a decrease in the rate of unemployment, the number has been pretty high. The textile industry of Bangladesh is considered to be one of the major exporters to economically strong countries. Unemployment has a different story when it comes to the rate in 2018. Major steps are required to be taken to eradicate unemployment from middle-income countries like Bangladesh shortly (Bangladesh, Unemployment Rate, 2022)

3.20 The GDP of Bangladesh

GDP is known to capture the economic situation of the country. Bangladesh is considered to be one of the developing countries in the world, almost one-third of the people live in extreme poverty. According to the report, Bangladesh has reported around a GDP growth rate above 5 percent due to the development of the macro and the garment industry (Jaren Navarro, 2018). It is said that three-fifths of Bangladeshi are employed in the agricultural sector. The biggest challenges that have been observed are poverty and overpopulation and the slow implementation of the economic reforms in Bangladesh. Therefore, it is important, the challenges that are faced by the country require to be mitigated. Therefore, the GDP rate

of Bangladesh can only be improved by mitigating the issues that have stopped the economic growth of Bangladesh. According to Trading Finance general equilibrium forecasts and researchers, Bangladesh's GDP is predicted to reach 350.00 USD billion by the end of 2021. According to our linear regression, Bangladesh's GDP will develop approximately 400.00 USD billion in 2022 and 430.00 USD billion in 2023 in the long run (*Bangladesh GDP, 2020*).

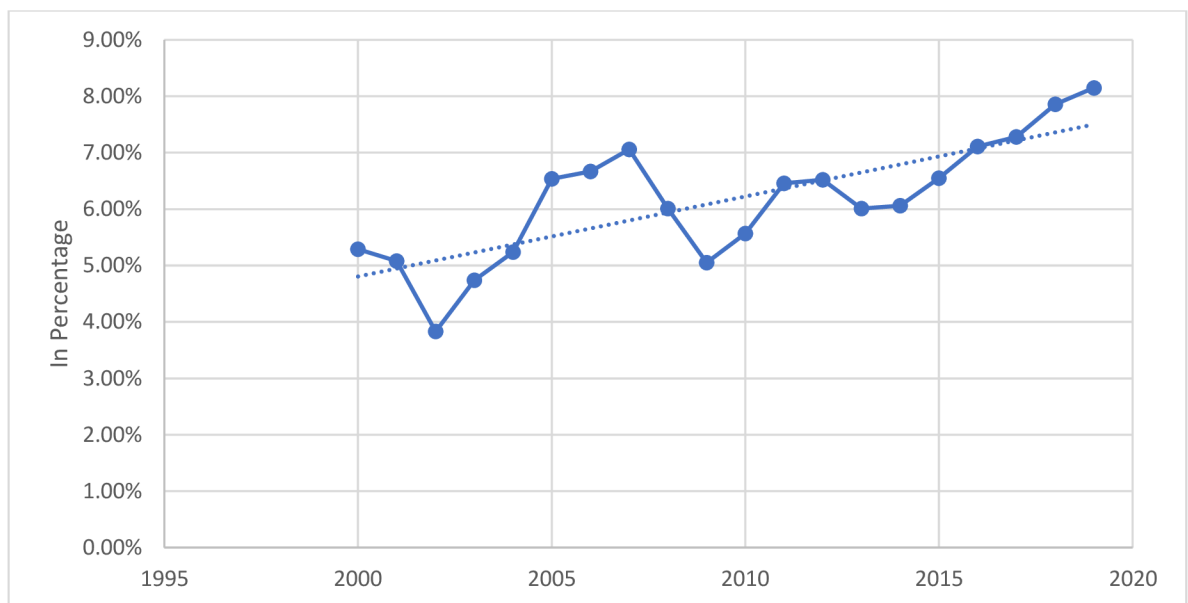


Figure 9: GDP of Bangladesh

Source: Author own elaboration from BBS

Although the GDP rate of Bangladesh has never been impressive, the country was trying to improve the situation. The textile industry and the macro industry have been some of the major factors that were helping in pulling up the GDP rate of the country. The country has incurred losses after the hit of Covid-19 when there was no shipment of ready-made garments. There was a pretty loss and dip in the GDP rate of Bangladesh that hurt the economy of Bangladesh. Yet, the country was still considered as the middle-income country in the world.

3.21 The inflation rate of Bangladesh

The inflation rate increases when people spend more money and are aware of the fact that it will be less valuable in future. The inflation rate increases the GDP in a short time and thus there is an increase in business. The inflation rate begins with the shortage of products or services in the market that overall leads to an increase in the price and the overall cost of the

products (Oktanisa, 2020). The inflation rate of Bangladesh has projected at around 5.30 in 2022 and 5.40 in 2023 as per the econometrics model. The current inflation rate of Bangladesh has stood at 5.54 percent which is lower than 5.69 percent in 2018 (Bgmea.com, 2022). There has been an increase in the customer price index that has climbed to 7% in 2019. The reason behind the increase in the inflation rate in Bangladesh is there is an increase in the price of the thighs and there is a great demand for them in the global market. There has been an unprecedented level of shipping charges and constraints observed in the supply. These are some of the major reasons that have been countered to be pretty high.

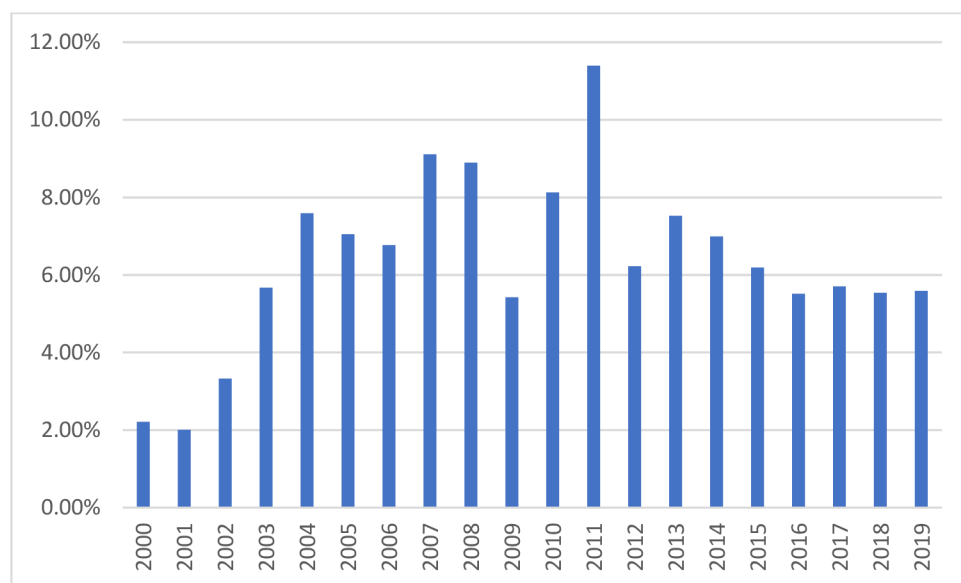


Figure 10: The Inflation rate of Bangladesh
Source: Author own elaboration from BBS

The major changes in the prices and the increase in the supply of raw materials have increased the rate of inflation in countries like Bangladesh. Although, steady steps are being taken by the country to improve the inflation rate that has been observed in the graph. It is important to meet the unprecedented level of shipping and the constraints that have been observed in the supply of the material (Bangladesh Inflation, 2022).

3.21 RCA

Comparative advantage can Favour a country, a group of countries, or a regional bloc when analysing the benefits of international trade. The Revealed Comparative Advantage (RCA) is one of the most effective techniques to evaluate comparative advantage by any product, industry, country, or region around the world market. Liesner was the first to introduce the concept of RCA, which is used to assess how in comparison to the rest of the world, how

competitive is the country in exporting a specific product. Later, Balassa developed it further. Balassa (1965, 1971, 1977) published and finally RCA technique was examined for manufacturing sectors and across industries.

Comparative advantage in trade enhances greater economic welfare by increasing the efficiency with which scarce resources are used. RCA measurement can be used effectively to determine comparative advantage in trade, such as trade specialization patterns, trade patterns, and international trade advantage. According to the Heckscher–Ohlin theory, a country's comparative advantage is determined by its relative factor endowment across nations, and trade influences relative factor prices both within and across nations.

The RCA Balassa Index (1965), at the Harmonized System (HS) 6–digit level, is used by the researcher to analyse the comparative advantage of Bangladesh's garment export sectors as well as potential apparel products. Its goal is to determine the relative position of exporting sectors and products, particularly apparel products from Bangladesh, in the global market, as well as to investigate export potential in the respective markets with major competitors. The RCA index is an important investigative tool for determining comparative advantage over time. It provides information on the top competitor countries' trade movement in terms of comparative advantage over a given time period. Many studies have been discovered to use the concept of RCA by using export data. Balassa (1977) examined the pattern of comparative advantage for various countries from 1953 to 1971. The evidence supported the idea that research-intensive products keep the product cycle going even after they are traded. This thesis also measured the standard deviation of RCA indices to examine the relationships between size and export diversification over time (*ScienceDirect*, 2017).

4 Practical Part

According to the aforementioned literature review, Bangladesh's garment industry has wide-ranging impacts on the country's national GDP, commercial and economic growth as well as sociocultural and socioeconomic status. Through this theme-based practical analysis, the investigator intended to identify major themes, patterns and trends associated with the Bangladesh garment industry. The researcher has considered a handful of market analysis tools including SWOT analysis, Pestle Analysis, Trend Analysis, and analysis of Porter's Generic Model Matrix to evaluate the Bangladesh garment industry. To effectively analyse the industry lucrativeness, performance and competitive landscape, the researcher has divided the practical part into three categories: introduction of the Bangladesh garment industry and economic impact analysis and multilayer market analysis of the underpinned industry. Based on a detailed analysis of macro-environmental and macroeconomic trends, the researcher will provide extensive recommendations to improve the industry's lucrativeness, financial and operational excellence, and improved exposures in a global context. For the past 20 years, Bangladesh's garment industry seems to have been a major export sector and a major source of foreign cash.

4.1 Economic Impacts of the Bangladesh Garment Industry

Since its independence in 1971 Bangladesh has gone through several political and social instabilities till 1991. Although Bangladesh has established itself as a lucrative commercial hub for the international textile sector. After the effective initiative by the government to stabilize the political and social situation of the country, economic development and remarkable labour market strength has evolved throughout the end of the 20th century. The social progress towards sustainability and solicitation of inclusive measures gained the adequate attention of Global Business to the government-industry of Bangladesh. Exporting garments currently produces roughly \$5 billion in revenue for the government each year. About 3 million people are employed in the business, with 90% of them being women.

It has been reported that in 2019 the government-industry has employed more than 4.4 million people and secured an impressive amount of revenue worth \$ 34 billion full stop, and it has also become the second-largest garment exporter of the world only next to China. Bangladesh's garment industry is known for its RMG or Readymade Garment Industry. The readymade garment industry itself contributes around 84% of the country's total export. The

Rapid modernization and growth of the industry have been one of the main reasons behind the success. In the last two decades, Bangladesh has seen impressive growth in exporting garments across 100 countries (Bgmea.com, 2022). However, the outbreak of the Covid-19 pandemic along with the Global economic recession has posed some critical threats in the present export promotion of the government-industry of Bangladesh. In this regard, the alliance of Bangladesh Worker Safety and the RMG Sustainability Council has played a crucial role in securing safety and valuation responsibility programs within the export framework of the country.

The above initiative by the government and Industrial Management helped to increase the RMG sector of Bangladesh from \$14.6bn in 2011 to about \$33.1bn in 2019 with a CAGR of 7% with the increasing share in the global market up to 6.7%. However, the other South Asian nations such as India, Indonesia, and Vietnam continue to affect the country's economic growth through growing strength. The present focus of the Bangladesh garment industry is on diversification of its potential customer-supplier management and workforce performance with the support of Sustainable industry practices to obtain the benchmark of Excellence. Regarding the export of garments in Bangladesh, the US, and European countries remained the biggest importer of the RMG sector. Although it has been also reported that the exports of garments have been affected by ethical standards and imported fabrics. In this regard to mitigate this issue, companies are now focusing on using cutting-edge Technologies and skill-based employment opportunities to create a fundamental change towards our demand-based industry from a supply-driven economy. It has also been proposed to create a sustainable Sourcing and procurement environment through greater investment in digitization automation, renewable technology, and Industry 4.0 Technology to adhere to the present environment and ecological issues.

Regarding the textile industry of Bangladesh, it could be argued that the garment industry is solely responsible for the development in the overall economic situation of the country. This industry has remained the biggest source to earn Foreign Direct Investment or FDI to the overall revenue of the country. In the first fashion brand of Western markets, Bangladesh is known to be the second-largest apparel exporter. It has been identified that for the last 25 years the industry is known for being the primary division of export and main source of

foreign exchange to the country. Around 5 million dollars' worth of products is generated by Bangladesh every year through the export of the governments that are manufactured by the domestic industry of the country. Moreover, the employment opportunities of Bangladesh are greatly dependent on its textile and garment industry. Around 3 million people are employed in the textile and government industry and among them, women constitute around 90% of the total workforce. So, it could be argued that the garments and textile industry have played an important role in reducing the gender gap in the workforce of the country and increasing social equality within the demographic picture of the country. As a developing Nation and large textile hub, Bangladesh has produced several opportunities through the medium of exports to contribute to the economic growth of the country. In the recent study, it has been reported that Bangladesh has surpassed India in per Capita income graph which is a remarkable accomplishment in recent times, and it is possible due to the development of the RMG industry in the country.

The massive rise in the exports of RMG products within the garment and textile industry of Bangladesh help in the doubling of Gross Domestic Product or GDP in the country. Due to the Surge in textile exports, the GDP of the country has doubled than its previous number. There are various factors including the low wage labour and skilled labourers have been one of the major factors in this accomplishment of Bangladesh to be the second-largest exporter of garments. It could be seen from the above chart that the last 10 years have been very critical for the growth of GDP and GNI of the country. The per capita income has been increased by 230% by the year 2020-21. It could be regarded as one of the greatest economic impacts of a single industry on the economic situation of the country. In this case, the garment industry of Bangladesh has served the role of an economic game-changer to develop the country's overall demographic picture in the Global aspect (Bgmea.com, 2022).

Table 5: Major Export Potential Exporting Garments Products of Bangladesh

HS-code	Product level	% Of these Products	Total values from year 2010-2019(in million USD)
610910	T-shirts, cotton	25.38%	46786.11
620342	Men's or boys' trousers	25.27%	46586.11
611020	Jerseys, pullovers, cardigans, waistcoats, Cotton	12.25%	22585.39
611030	Jerseys, pullovers, cardigans, waistcoats, man-made fibres	10.05%	18531.78
620520	Men's or boys' shirts of cotton	9.73%	17930.69
610510	Men's or boys' shirts of cotton, knitted	4.54%	8376.92
610462	Women's or girls' trousers, knitted	4.24%	7814.24
611120	Babies' garments	3.27%	6019.22
610990	T-shirts, textile materials	2.82%	5198.09
620630	Women's blouses & shirts of cotton	2.05%	3772.39
620349	Men's trousers & shorts of cotton	0.39%	716.76
	Total	=	184317.68

Source: Author own elaboration from UN comtrade database and (Kabir et al., 2021)

4.2 Bangladesh garments Export to the World

Bangladesh has exported around 27949.19 million USD in total to the world in year 2020. Bangladesh major exporting partner country were the USA which is the highest contributor of Bangladesh's export value with 6249 million USD in year 2020. Bangladesh exports garments products to Germany with the value of 5929 million USD which is the 2nd largest contributor to Bangladesh's foreign trade of garments. Bangladesh garments exports to the United Kingdom, Spain France, Poland, Italy, Netherlands, Canada, and Japan with the value of 3642 million, 3076 million, 3211 million, 1543 million, 1781 million, 1334 million, 1296 million, and 1169 million USD in 2020 respectively.

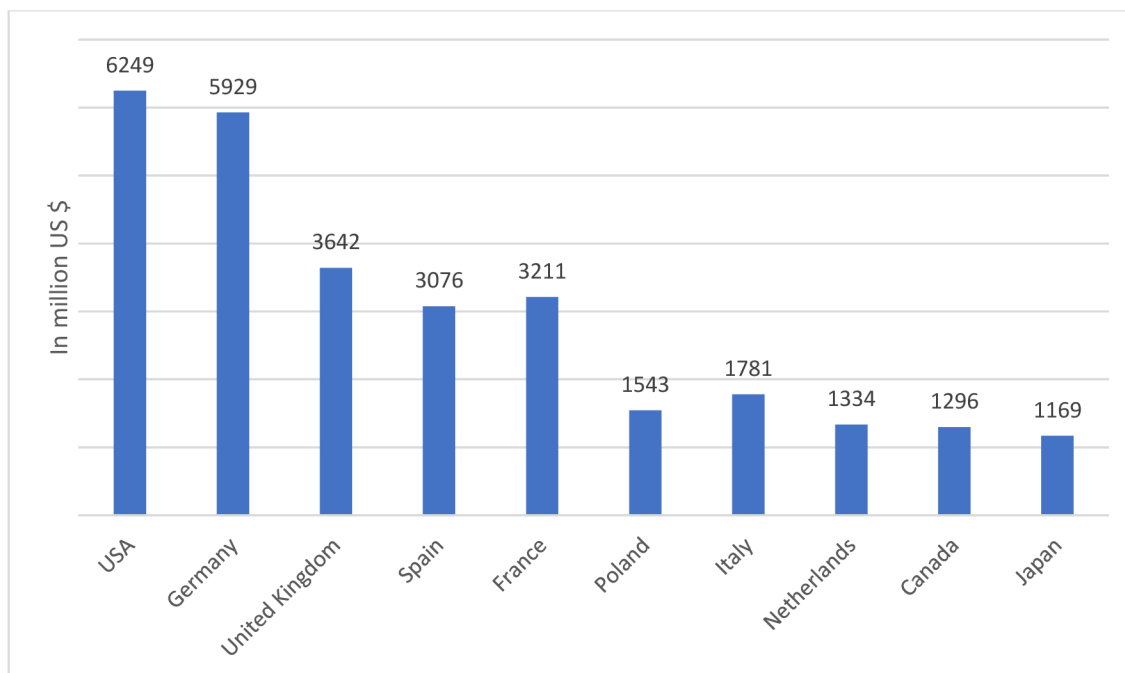


Figure 11: Top 10 garments Exporting Partner of Bangladesh in year 2020
 Source: Author own elaboration from un comtrade database

Among these major exporting countries, the United States and Germany contributed the highest value of Bangladesh's foreign export earnings in year 2020.

The exporting trend from Bangladesh to USA is significantly increasing year by year. In year 2010 the total export values to USA were around 4100 million USD. It was increasing till 2016, then there was sudden drop to the export to USA and started to increase since 2017 and the trend is increasing gradually.

The 2nd largest exporting partner Germany had around 3000 million USD in year 2010. It is increasing rapidly since 2010, even in 2017 it has crossed USA and became the largest export partner of Bangladesh in the Garments sector. In year 2018 it has the highest export value amount around 7800 million USD which is the highest in Bangladesh garments history. The export with Germany has a sudden drop in the year 2019 and in year 2020 it has lost its 1st position as an export partner of Bangladesh.

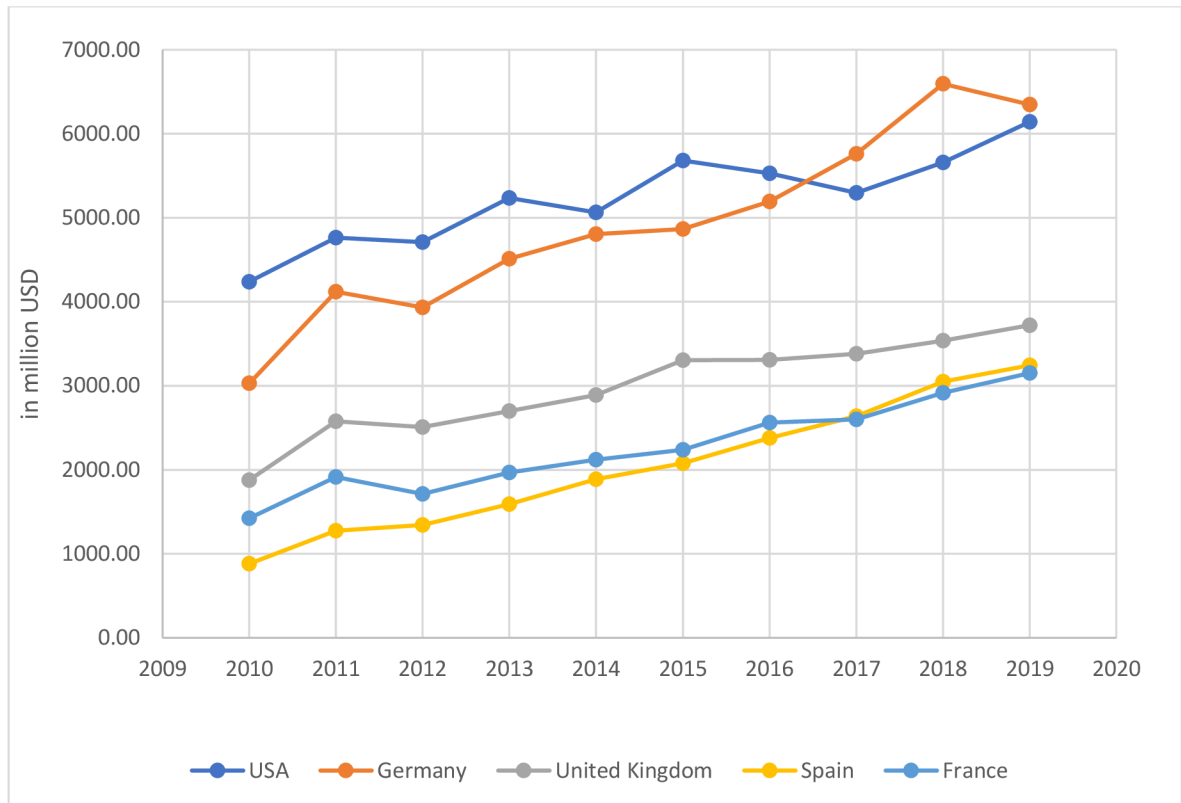


Figure 12: Export trend with top 5 Exporting Partner countries from year 2010-2019
 Source: Author own elaboration from un comtrade database

The export to UK were 2000 million USD in year 2010 and gradually increasing till year 2019. The trade value in the garments sector with UK were around 3900 which is almost doubled in 10 years.

The top three countries have major portion of garments import form Bangladesh. Spain and France also a huge amount of Import from Bangladesh. The export value from Bangladesh to France in year 2010 was around 1000 million USD where Spain had around 1500 million USD. In year 2019, the trend is increasing, and the exporting values were around 2200 million USD with both countries.

It shows the great trade relationship between Bangladesh and those countries. The export values for Bangladesh with these countries are increasing year by year.

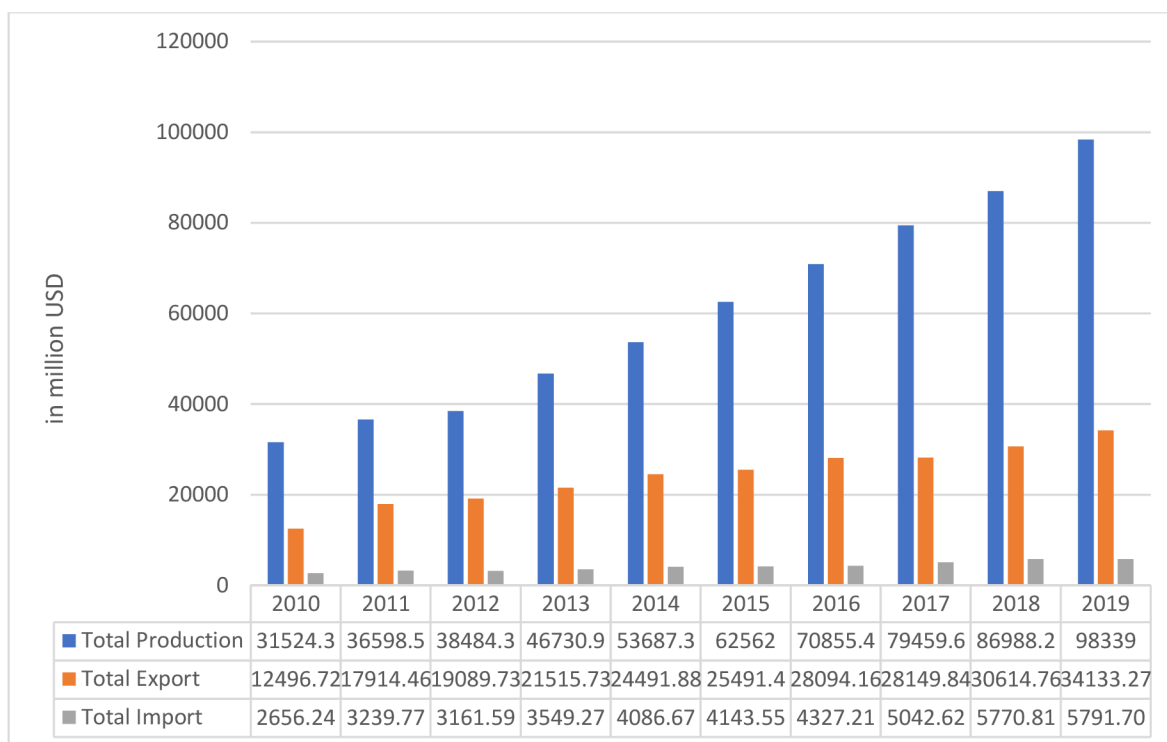


Figure 13: Total Production, Export & Import of Bangladesh Garments sector in year 2010-2019

Source: author own elaboration from Euromonitor.com and Un comtrade database

Bangladesh has impressive development in the production trend in garments sector. In year 2010, it has produced around worth 31524 million USD garments products which is almost tripled in year 2019 amount is worth 98339 million USD. The production trend is increasing rapidly but, exporting rate is increasing gradually that means the consumption of local garments product is increasing. It shows the development of production in Bangladesh garments industry.

Bangladesh exports almost more than 40% of its total production. The export values were 12496.72 million USD in year 2010 which turned to 34133.27 million USD in year 2019.

Bangladesh garments has more than 80% of share in total exports of the country. But as the production trend is increasing more faster than exports that means Bangladeshis are consuming local garments more and more.

Bangladesh not only imports garments but only imports from other countries. China is the biggest supplier for Bangladesh. Import is not that much in comparison with production and export, but it has significant value. Bangladesh has imported around 2656 million USD in year 2010 which was 5791.70 million USD in year 2019

4.3 Bangladesh Garments import partner countries

Bangladesh has imported around 2550 million USD in total to the world in year 2020. Bangladesh has the highest number of imported garments products from China which is around 1703 million USD in year 2020. Overall, about 70% of Bangladesh's total garment imports were from China in year 2020, totalling 1703.888 million USD. Hong Kong export to Bangladesh around 339.274 million USD on garments, which was 5 times less than China. India Exported twice as much clothing as Korea export to Bangladesh, at \$153.68 million and \$82.41 million, respectively. Finally, a similar amount of clothing was imported from Vietnam, Sri Lanka, and Thailand, with Turkey purchasing the least amount of clothing for Bangladesh.

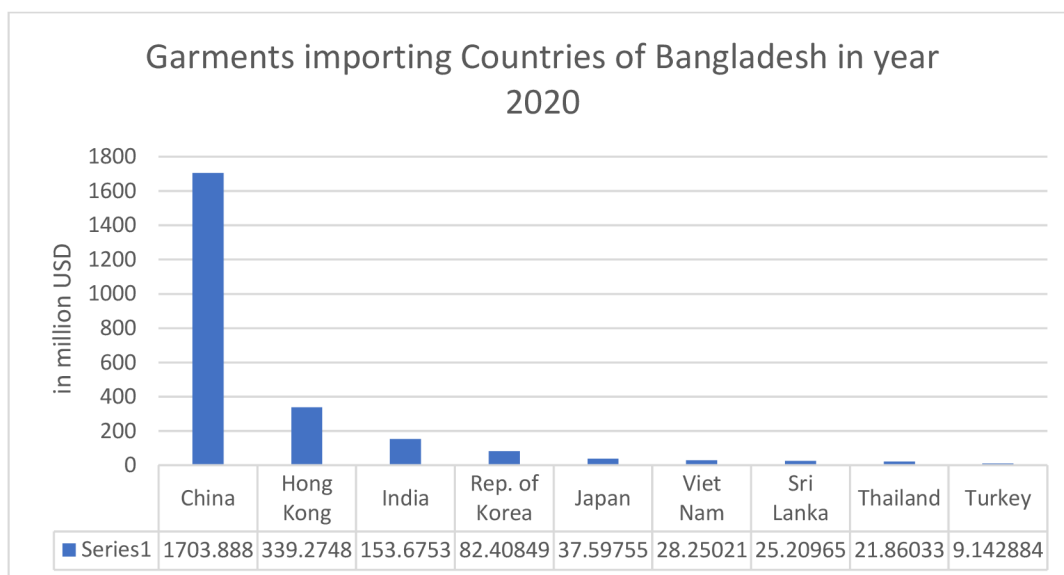


Figure 14: Top garments Importing countries for Bangladesh
Source: Author own elaboration from un comtrade database

The import trend from China is Significant in the garments sector. The import value was around 590 million USD in year 2010 and which is almost tripled in year 2019, amounted around 1720 million USD. China is the biggest supplier for Bangladesh in the garment sector. Also, dominating in the world Garment sector. Because of good trade relation and availability of cheapest raw garments material with higher quality, Bangladesh has the highest import from China in Garments Sector.

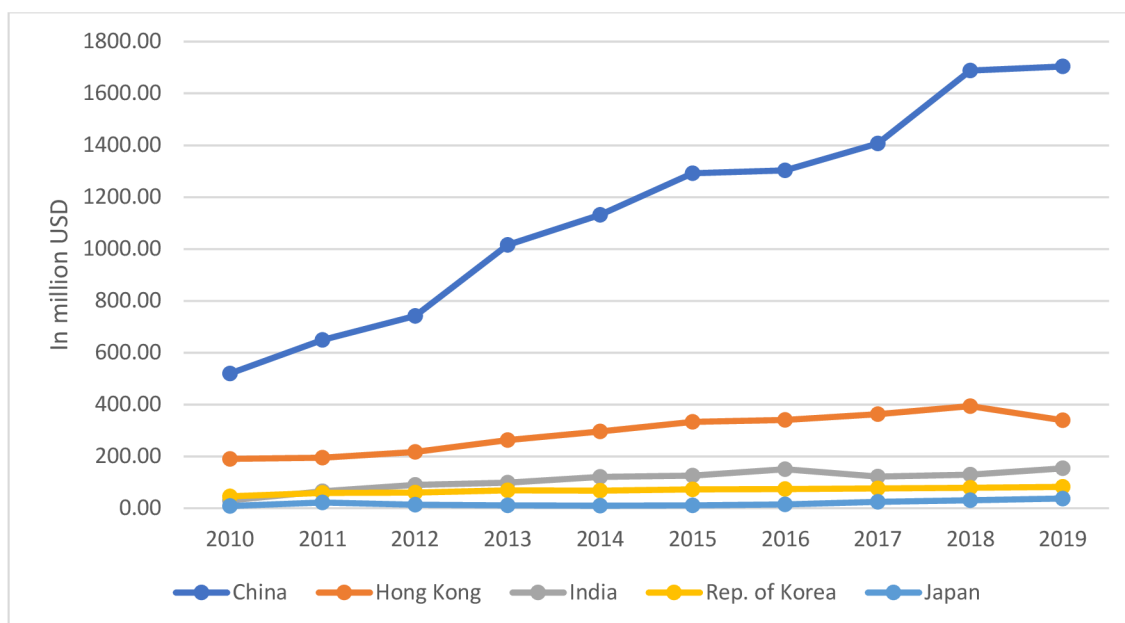


Figure 15: Import trend with top 5 partners
 Source: Author own elaboration from un comtrade database

Hong Kong is the second highest importing partner for Bangladesh. Bangladesh imported around 200 million USD in year 2010 and in year 2019 it's turned into around 390 which doesn't have any significant changes in last decades.

Bangladesh also imports from India, Republic of Korea, Japan, and others. The Imports from these countries are almost parallel.

4.4 Multilayer Analysis of the Bangladesh Garment Industry

4.4.1 RCA Analysis

The RCA index was used to assess Bangladesh's comparative advantage in the garment sector export. The following formula is used based on the Balassa Index:

$$RCA = \frac{(X_{ij} \div X_j)}{(X_{wj} \div X_{sw})}$$

Here,

X_{ij} = Bangladesh's export of Garments to the world market.

X_i = Bangladesh's total export to the world markets

X_{wj} = World exports of Garments to the world markets

Xw = World total exports to the world markets.

Table 6: RCA data from year 2010-2019

Year	Total Garments Export of Bangladesh	Total Export of Bangladesh	Global Export of Garments	Global Export of World
2010	12496.72	16204.65	682959.19	16840663.29
2011	17914.46	22924.38	804126.50	20226610.16
2012	19089.73	24301.9	786412.31	20158137.47
2013	21515.73	27027.36	843830.78	21026306.81
2014	24491.88	30186.62	850578.09	20869051.26
2015	25491.4	31208.94	813376.46	18256334.69
2016	28094.16	34257.18	762016.02	17728021.54
2017	28149.84	34655.9	802173.69	19497736.69
2018	30614.76	36668.17	841112.21	21379942.83
2019	34133.27	40535.04	824905.91	20538351.81
Total	241991.95	297970.14	8011491.16	196521156.6
Average	24199.195	29797.014	801149.12	19652115.66

Source: Author own elaboration from Un comtrade database and BGMEA

If the value of this index is greater than 1, a country has a comparative advantage in that commodity or industry; if the value is less than 1, a country has a comparative disadvantage in that commodity or industry.

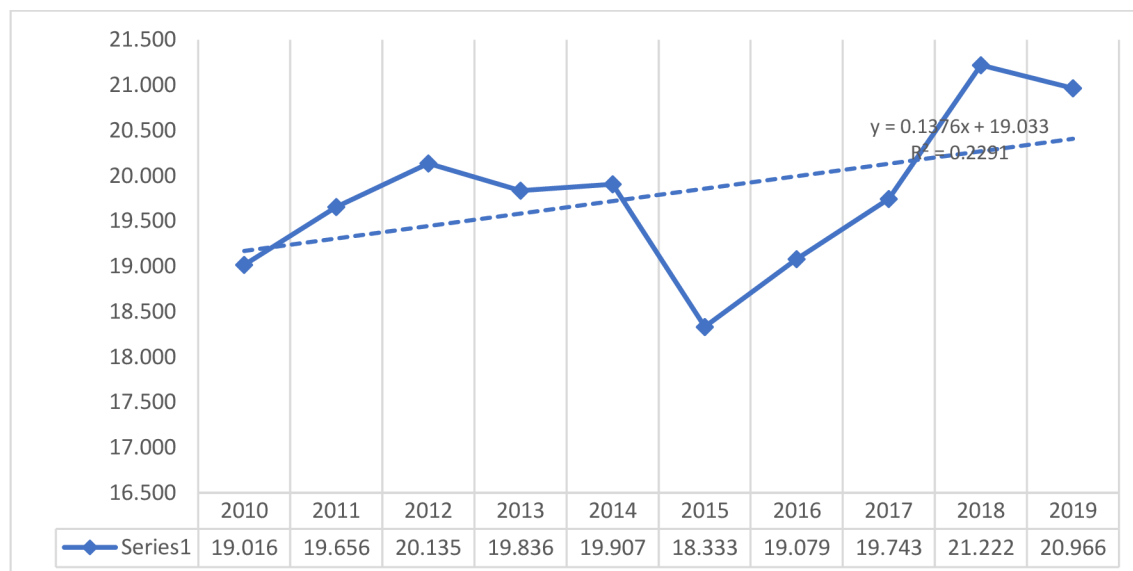


Figure 16: RCA of Bangladesh Garments Export

Source: Author own elaboration from UN comtrade database

From the above chart it is clear that Bangladesh has higher comparative advantage in the Export of garments Sector. In 2010 it was 19 and creasing till 2014. There was a sudden fall

in 2015, which explain the Export of the Bangladesh garments were decreased compared to the global Export of the Garments. It has suddenly jumped in year 2018, which indicates the greater increase in the Bangladesh Garments Sector.

The thesis also evaluated the RCA of the Garments sectors from 2010 to 2019. Changes in trade patterns can be attributed to an initial endowment of human capital as well as industry-specific changes in labor productivity and labor cost. Trade liberalization has resulted in a greater specialization of larger OECD economies in industries with a higher return to scale. The paper used the Harmonized System (HS up to 4–digit level) to analyse the competitive advantage of various clothing products in Bangladesh from 2010 to 2019. Furthermore, it revealed that Bangladesh's comparative advantage in clothing products increased from 19 to 21 during this time period.

This section categorizes Bangladesh's and the world's major export potential sectors and products at the HS 6-digit level. This section also emphasizes the comparative advantage based on a measure of export volume. Bangladesh's greatest export potential sector is apparel, where the country has a comparative advantage.

4.4.2 PESTEL Analysis

Political Analysis

- Lack of democratic practices.
- Critical lack of rule-based administration.
- Corruption and terrorism.
- Various confrontations among political parties.

Economic Analysis

- Reduction in economic disparities.
- Large economic contribution.
- Stands at first position contributing 10% to the national GDP.
- Reduction in poverty and hunger index.
- Large-scale industrial growth and employment opportunities.

Social Analysis

- Women empowerment has been obtained in both the private and public sectors.

- A large contribution to population control.
- Children are getting an education.
- Economic solvency of females has been obtained.
- Life expectancy has increased.

Technological Analysis

In contrast to other big technological giants in the global market, Bangladesh is not so advanced. The use of obsolete technologies is still a reality due to the expensive amount of ultra-modern technology. Although the duty-free import of required machinery and technology is given by the government, the operational and fixed costs are increasing. If it is available in the local market, it would be a great relief for the industry (Haider, 2007).

Environmental Analysis

The ecological impact of the textile and garment industry on the environment of Bangladesh is not very good considering the poor waste management and recycling program of the industry. The issue regarding improper drainage systems is still a major problem for this reason. There is a critical lack from the side of the government to take initiative concerning waste management in Dhaka City. Apart from it, noise and air pollution are consequences of this industrial output (M. K. Islam et al., n.d.).

Legal Factor

There has always been encouragement from the governmental side to improve the operation of the industry. There have been several companies that are established in this regard. But in recent years, some legal and compliance issues have been identified by some companies to draw the attention of the government. There are some issues regarding proper wages and remuneration with the work safety and work environment. To mitigate this issue government has intervened in the situation.

4.4.3 Trend Analysis

The graphical representation of total export and RMG export has been illustrated based on sales estimates from year 2010-2019.

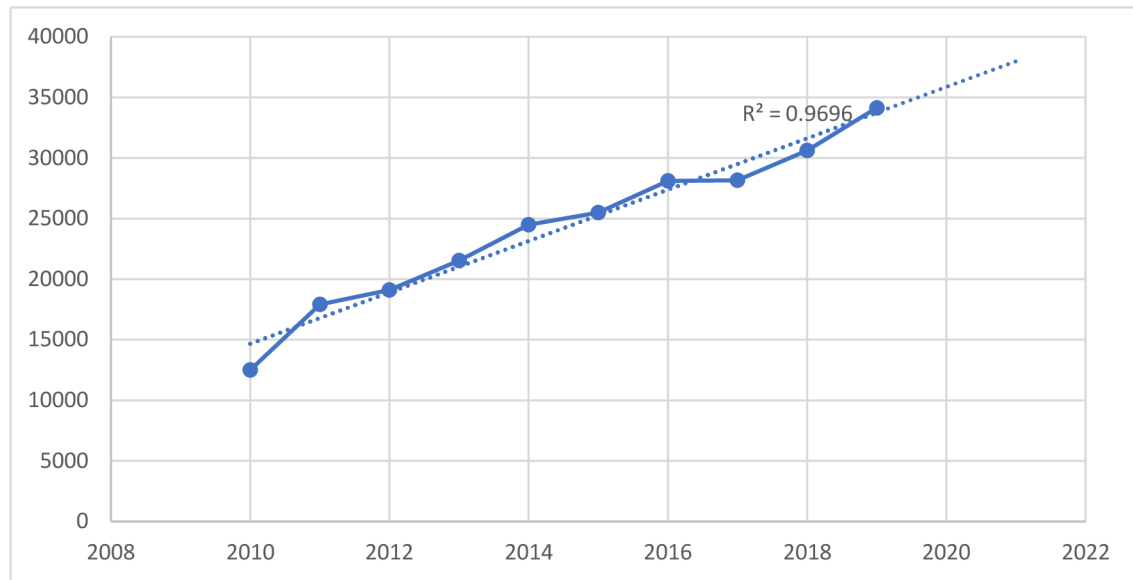


Figure 17: Bangladesh Garments Export trend
Source: Author own elaboration from BGMEA 2020

From the above figure it is evident that there are various increasing trends of both the RMG export and overall export in different segments throughout the year 2010-2019. In the present graphical representation, the mentioned 10 calendar years have been observed as an observation period. It has been reported at the beginning of the observation that the export of RMG products has been low along with the overall export (BGMEA | *Export Performance*, n.d.). It is also very significant to identify that both the Exports are very close to each other through which the dependency of total export on the export of RMG products could be identified. Then gradually the gap between both the Exports has declined with the increase in RMG export and the decreasing dependency trend of total export on RMG export. Through this trend analysis, it is easily visible that the earnings to export have increased to a significant number and that is evident from the other sectors as well. This graph shows how the massive growth in total and RMG export has remained sustained throughout the last decade. From the above trendline, it is predicted the Export of Garments will increase rapidly in upcoming years.

4.4.5 Porter's Generic Model Matrix

		Competitive Advantage	
		Low cost	Differentiation
Broad Target		Cost Leadership strategy	Differentiation strategy
Narrow Target		Cost focus strategy	Differentiate Focus strategy

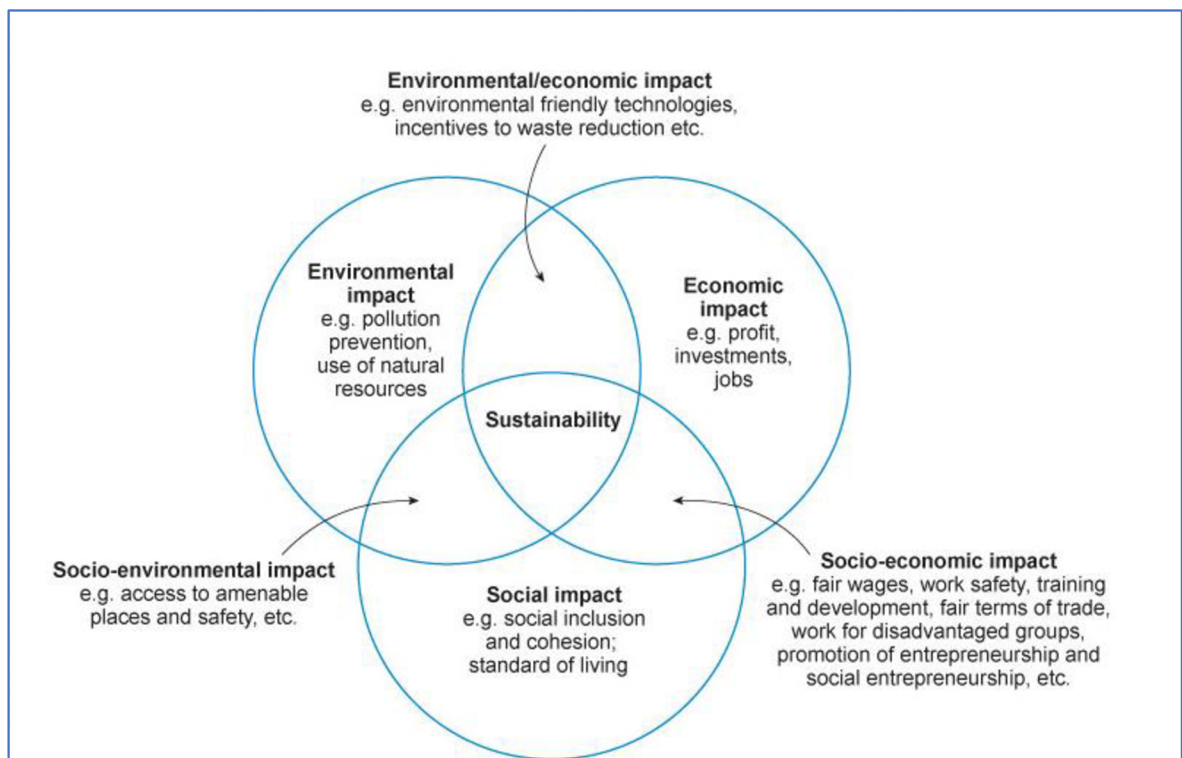
Porter's Generic Model Matrix

In the present context Porter's Generic Model suggests that it is very important for any industry or company to follow one of the above strategies to obtain an upper hand in the competitive market. Regarding the garment and textile industry of Bangladesh, it is identified that the cost leadership strategy has been followed. It is the primary reason behind the performance of the industry even at the time of the international economic recession. There are various markets where economic distress has impacted usually but due to the successful implementation of cost leadership Bangladesh has successfully gained economic growth in the last two decades. But to keep this cost leadership model sustainable for a long period is very difficult due to continuous price hikes of raw materials and power in other markets of the world. But it is very impressive that Bangladesh can do this due to its cheap labour availability (Porter's Generic Strategies, 2022).

4.4.6 Triple Bottom Line Approach

Triple bottom line (TBL) and sustainability are two inseparable constructs that cater to the successful and seamless integration of social, environmental, and economic responsibilities and duties to create an effective ecosystem. (Hossain & Islam, 2015) commented that the fundamental purpose of sustainable development remained at the forefront of futuristic advancements, responsible resources utilization and environmentally friendly innovations. Triple bottom-line provides a comprehensive framework for measuring implications and

performance of businesses based on economic, social, and environmental lines. As Bangladesh's garment industry widely depends on European and US markets which are driven by the values and beliefs of sustainability, it has become a mandate for the RMG industry to balance several factors to create a sustainable society and economy while enhancing and preserving the natural environment. Therefore, positive implications on the three bottom-lines and strategic management of responsibilities are fundamentally important to establish stability and strengthen nation-wide economic infrastructure and transitions. Akter (2017) commented that in contrast to the Bangladesh RMG sector, the economic line refers to the impacts of RMG exports practices on the Bangladesh economic system. Economic lines tied with the growth of the industry as well as exports and high robustness in supply-demand dynamics that positively contribute to the sustainability of the underpinned sector including improvement of physical infrastructure, new ventures, higher productivity, and profitability alongside higher ROI and CAGR (Yunus & Yamagata, 2012). Social sustainability encompasses fair regulations, labour practices and community development initiatives that facilitate establishing economic stability and community development programs.



The three impact components of sustainability and their interconnections

Source: (The 3 Pillars of Corporate Sustainability - Greenly, 2022)

In contrast, the Bangladesh garment industry remained significantly important to maximize social inclusion and large-scale transformation as it widely empowered regional businesses along with creating new job opportunities, entrepreneurship practices and economic opportunities. Environmental sustainability includes managing, maintaining, and controlling consumptions, waste management and carbon emissions while implementing adequate and policy-driven waste reduction and green supply chain practices (The Triple Bottom Line, 2020). Bangladesh's RMG sector is undergoing concurrent changes in terms of sustainable development as changing regulations, labour market and production standards combined with active government interventions and techno-centric development and worker welfare programs continue to improve industrial competencies and adaptability properties. These practices coupled with climate change initiatives and green supply chains are likely to change industry dynamics in the upcoming years.

4.7 SWOT Analysis

Internal Factors	Strength	Weaknesses
	<ul style="list-style-type: none"> ● 78% export-oriented sector. ● Cheapest labour costs. ● Poverty alleviation. ● Low price energy. ● FDI is welcomed and has low bank interest. 	<ul style="list-style-type: none"> ● Unskilled labour. ● High dependency on raw materials from foreign countries. ● The gender gap in the workforce. ● Communication gap.
External Factors	Opportunities	Threats
	<ul style="list-style-type: none"> ● Alternative market sector against China. ● Promotion of skilled labourers. ● Newmarket. ● Utilization of unused HR. 	<ul style="list-style-type: none"> ● Political unrest and instability. ● Global economic stagnation. ● Import of inefficient machines. ● The competitive market of Latin America and the Caribbean.

5 Results and Discussion

As discussed above it is concluded that increased cross-border operations, development cooperation, technical improvements, and enhanced connectivity are all influencing the international business scene. To promote multinational firms (MNCs) and strengthen regional enterprises, nearby states, particularly emerging countries, are heavily spending and conducting local infrastructural expansion efforts, diplomatic partnerships with global regions, and shifting customer expectations. Saturation marketplaces in industrialized nations, as well as high operating expenses, make it easier for undeveloped nations to take advantage of technological and commercial development prospects. As a result, globalization has become increasingly crucial for businesses to develop activities in new places and broaden their comparative edge by establishing a cost-effective and long-term supply chain. Economic growth has changed in response to shifting circumstances and consumer demands, with a focus on transforming the provincial economy into new manufacturing systems while considering both theoretical and practical advances. Strategic industrial initiatives are conducted with a specific emphasis on society techniques and financing decisions to generate regional prosperity. Bangladesh's clothing sector made a significant contribution to the country's economic growth. The investigator had to investigate and assess the company's overall efficiency and ramifications, as well as its financial bottom margins. Financial growth is critical for attaining standard quality in commercial transactions and improving stability and dependability in tackling significant social concerns such as poverty, falling pay, supply relations, ecological regulation, and shareholder happiness. Sustainable prosperity is defined as the intentional involvement of a competent and generally recognized ruling body that provides for the improvement of the industrial environment by supporting monetary sustainable development, sustainable expansion plans, and increased economic expansion. Economic improvement is inextricably linked to technological improvement and the standardization of systems and operations to guide the nation toward long-term viability and progress. Furthermore, prolonged manufacturing economic development creates successful business prospects, strengthens the regional labor marketplace, and increases government income, all of which make it easier to focus on moral values and continued economic expansion. Since the epidemic has radically altered the current economic landscape, countries are confronted with numerous hurdles and difficulties in developing legislation to deal with the financial impacts of the pandemic. However,

market growth strategies are evolving as a result of protracted shutdown tactics, frontier bans, immigration limitations, and the economic crisis. With a deficit overall industry, the nation's financial system is mostly reliant on manufacturing output, particularly clothes, which are fuelled by increased industry activity, the presence of limited and qualified labor, and looser foreign direct investment rules. The industry has been driven by the usage of organic and ecological textiles, as well as high principles and textile material goods. The development of the business is being shaped by geosynthetics, digital fabric, water-resistant fabric, and antimicrobial medicinal textiles. Digital change, sustainable national economy, especially increased resilience in procurement relationships with restricted stock market have all helped to shape the worldwide fabric sector. Globalization has a significant effect on a variety of industries, including Europe's clothing and fabric industries. Fabric and apparel manufacturing, as well as their allocation pattern, have evolved considerably over time. Globally has resulted in the clothing and fabric sector moving, which aids in the development of jobs, basic freedoms, and safe workplace circumstances for employees. Bangladesh is noted for having the nation's biggest garment recovery facility. Bangladesh's clothing business is believed to collaborate with several of the nation's most well-known fashionistas. it is concluded that the application of the standard economic efficient market hypothesis is recognized as the contemporary concept of global commerce. In the case of global trade, usually is a variation in component pricing. Market imperfections develop as a result of the companies' distinct strengths. There comes a benefit that has already been noticed in the contemporary ideas of commerce that incorporates various improvements of higher technologies, and that is accessibility to the money that the organization requires. Controlling the distributing network is among the main essential aspects of current economic relations. The importance of rising returns to magnitude in global financial theories capitalist structure has an impact on the system. The main essential aspect of the modern trade policy is an initial entrance into the industry, which strengthens the group's position in contrast to the industry's dominant corporation. Bangladesh's clothing sector has a broad range of effects on the gross domestic product of a country, industrial and financial progress, and cultural and societal standing. To examine the Bangladesh textile industry, industry research methodologies such as PESTEL analysis, SWOT evaluation, Market analyzation, Competitive Landscapes analysis, Porter, and Generalized Modelling Decision matrix were used. Building expansion, regulatory and support changes, as well as the diversity of logistics systems and commodities, have all been implemented across the country. The

prosecutor was tasked with looking into and evaluating the company's general efficiency and implications, as well as its financial bottom lines. Financial growth is crucial for achieving standard quality in business transactions as well as boosting stability and dependability in addressing major social issues such as poverty, declining pay, supplier relations, environmental control, and shareholder satisfaction. Sustained affluence is described as the deliberate participation of a professional and well recognised ruling body that supports financially sustainable development, sustainable growth plans, and greater economic expansion in addition to enhancing the business climate.

It is recommended that Factories must look after their employees. A company's top goal as an operator must be to preserve its workers' safety. If the company stays available, the administration must ensure that all personnel, especially women or migrant laborers, who are disadvantaged in workplace choice, are involved in avoiding the transmission of coronavirus. Industrial employees must also be able to wipe the thoroughly with soaps and warm in sanitation services. Hand sanitizer units must be readily accessible in the plant so that employees can use them regularly. Facemasks must be provided to employees and made essential for them to wear at work. Individuals who are ill or looking for those who are ill must be sent back to prevent infecting other manufacturing laborers.

It is also recommended that Companies must protect the cash flow. Companies are frequently forced to shut down activities due to a shortage of stability management or financial problems, particularly during tough moments. Regardless of how much it takes for distribution systems to back to full, companies, including those that had been in commercial straits before the epidemic, might probably be required to take measures to maintain a steady cash circulation as the crisis unfolds. As a result, controlling financial flow should be a top responsibility for companies for them to remain operating amid interruptions in international supplier networks.

Factories must also think about how they may cut labor expenses to minimize the need for redundancies. If it is required to prevent the company from closing down, managers might grant diminished leave. Manufacturers should speak with their financial institution to learn how they have adapted their operations to meet the requirements of the customers during the recession. They must speak with their financial institution to learn how companies have adapted their products to meet the requirements of their customers.

Factories must stay in contact with their most important partners-Workers are the greatest significant shareholder category for businesses. They must not consider people for lightly, as the company's workforce will perform an essential part in the following months. Manufacturers must ensure that their operations are open so that all key info about exporting is communicated. Companies must also proactively include a varied collection of employees and company officials in the debate, encouraging everyone to come up with suggestions about how to maintain the factory running and profitable when commerce resumes. For manufacturers, keeping a good customer is critical. Manufacturers must demonstrate their desire to maintain their processes running.

To achieve high levels of labor creation, high job growth must be accompanied by maximum output development. Industrial production development must be stronger for large power development to be associated with high-income growth. All sectors with growth prospects require a regulatory environment that is impartial. Bangladesh's economy has undergone systemic reform, as seen by the reduction in the garment industry's percentage of overall production as well as the growth in the proportions of manufacturing and activities. It is the trend of systemic reform that is predicted to occur in tandem with economic expansion.

It is recommended that factories must take advantage of spare periods to improve their personnel. The extra time might be utilized to improve worker abilities, which is anything that is sometimes overlooked due to demands of daily activities. Gaining the skills of the staff, given the labour-intensive structure of the industry, can significantly lower costs and improve productivity, resulting in improved profitability through a term. As need recovers and marketplaces stabilize, spending availability on improving the company's staff in an equitable approach can help companies are becoming more viable over the term.

Manufacturers can contact their neighbourhood clothing affiliation for recommendations on appropriate learning components and organizations to seek assistance from. The Workplace Development Toolbox was built expressly for aiding firms in international supplying networks to increase efficiency, profitability, and workplace circumstances by improving manufacturing technologies and industrial processes containing a variety of instalments for businesses.

Due to swings in macroeconomic surroundings, job market norms, and international economic ties founded on tariff concessions treaties, the production characteristics of the Bangladeshi RMG sector have stayed highly unpredictable. A variety of projects, such as building facilities, strategy, and government policy changes, as well as the diversifying of

production connections and goods, have already been fully implemented to address these market obstacles, as well as increased reliability and protection indicators and enhanced employment circumstances. Bangladesh was able to expand consumers and goods, optimize distribution networks and processes, and boost durability and guidelines thanks to these measures, which were complemented with increased social consciousness and education centers.

6 Conclusion

As previously said, more cross-border operations, development collaboration, technological advancements, and improved connectivity are all having an impact on the international business environment. Nearby governments, particularly rising countries, are heavily investing in and implementing local infrastructural expansion initiatives, diplomatic alliances with global areas, and shifting customer expectations in order to promote multinational businesses (MNCs) and strengthen regional enterprises. Market saturation in rich countries, as well as high operational costs, making it simpler for developing countries to take advantage of technology and commercial development opportunities. As a result, businesses are increasingly relying on globalisation to expand their operations in new locations and broaden their competitive advantage by developing a cost-effective and long-term supply chain.

Since the early 2000s, the RMG industry has been Bangladesh's main source of foreign cash, accounting for 80 percent of the country's exports and employing 40 percent of the country's total industrial workers. However, the business is facing significant uncertainty as a result of expanding sustainability concerns, increased competing capacity, and regional governments' use of nationalistic trade policies. However, as the Bangladesh government continues to focus on developing the necessary infrastructure and bilateral trade relations with developed nations across the horizon, increased attention to workers' rights and Standard Production Facility regulations has triggered massive shifts toward more safe and calculated business practices and market penetrations. Bangladesh's economic growth and prosperity are heavily reliant on the RMG sector, which accounts for 80 percent of the country's exports.

The idea of economic development has evolved in response to changing dynamics and stakeholder demands relating to a nation's concentrated attempts to turn national economics into industrial economics while taking both quantitative and qualitative improvements into account. The initiative of economic development of a country are implemented in order to generate national wealth while focusing entirely on community-based methods and investment policies. Furthermore, economic development is about building a healthy and vibrant economic environment for improving national interests and shared aspirations, as well as meeting the demands of a diverse set of stakeholders. To protect the multifaceted economy, key resources such as innovation-seeking entrepreneurship spirits, financial

schemes, the development of physical infrastructure, and robust labour market creations, are critical.

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8 Appendix

RCA Calculation:

Year	Total Garments Export of Bangladesh	Total Export of Bangladesh	Garments % of Bangladesh's Export	Global Export of Garments	Global Export of world	Garments % of World's Export	RCA
2010	12496.72	16204.65	77%	682959.19	16840663.29	4.06%	19.0161
2011	17914.46	22924.38	78%	804126.50	20226610.16	3.98%	19.6564
2012	19089.73	24301.9	79%	786412.31	20158137.47	3.90%	20.1354
2013	21515.73	27027.36	80%	843830.78	21026306.81	4.01%	19.8363
2014	24491.88	30186.62	81%	850578.09	20869051.26	4.08%	19.9066
2015	25491.4	31208.94	82%	813376.46	18256334.69	4.46%	18.3331
2016	28094.16	34257.18	82%	762016.02	17728021.54	4.30%	19.0792
2017	28149.84	34655.9	81%	802173.69	19497736.69	4.11%	19.7431
2018	30614.76	36668.17	83%	841112.21	21379942.83	3.93%	21.2224
2019	34133.27	40535.04	84%	824905.91	20538351.81	4.02%	20.9657
Total	241991.95	297970.14		8011491.16	196521156.6		
Average	24199.195	29797.014		801149.12	19652115.66		19.7894