

BUREAUCRATIC BEHAVIOUR, AND ITS INFLUENCE TOWARDS COMPETITIVENESS – ANALYSING THE SUPPLY CHAIN OF BANGLADESHI CLOTHING INDUSTRY

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ABSTRACT

Distribution systems are becoming increasingly complex and dynamic in business in the consumer market of clothing or Readymade Garments (RMG) products. There are many exterior influencing elements like political action (PA), country risk (CR), and bureaucratic behaviours (BB) that are influencing the clothing supply chain and posing threats to its competitiveness. A research question has developed to know how BB activities affect competitiveness. Based on this research question, this research aims to determine BB's influence on the competitiveness of the clothing supply chain. Stakeholder philosophies and resource dependence theory have been considered to develop a hypothesis in this study. The Quantitative research method was applied in this study. The data were collected through a field survey. Partial Least Square (PLS) based Structural Equation Modelling (SEM) was used to analyse collected data. Seven hypotheses were developed in this research. Among them, five hypotheses are supported, and two hypotheses are not supported. In addition, mediation test results are not reflected as positive. The findings are discussed in detail in the discussion and implementation part of this study. The clothing (RMG) industry of Bangladesh could implement the result to improve competitiveness.

Keywords: Bureaucratic behaviour, clothing industry, RMG industry, supply chain, competitiveness.

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1. INTRODUCTION

Due to globalization, organizations attempt to deliver their products and services efficiently and effectively to compete in today's global markets. In this regard, it is essential to analyze the various influential factors for designing and coordinating the supply chain (SC) networks to get the best results from the business. The manufacturing business faces vigorous competition concerning quality, cost and time to market. The breezy start of the new century has brought new challenges for firms, industries, and countries. Success in such times demands new perspectives on competitiveness and ability to compete. In today's world, SCM has become a potentially valuable way of securing competitive advantage and later improving competitiveness (Nuruzzaman, 2015). In the clothing sector (RMG), the supply chain management (SCM) of the Readymade Garment (RMG) sector of Bangladesh is incredibly charming because it depends on an oversized variety of foreign raw materials supported by the demand or need of foreign customers (Nuruzzaman, 2014). SCM in Readymade Garments is defined as the synchronization of various organizational behaviors (related to the clothing sector, politics, and government) or the members of the supply chain coordinate and work together with their business partners to meet the buyers' needs and demands (Haque et al., 2022).

A country's economic growth and progress are dependable upon industrialization. This industry required two decades to come into good shape. But still, this industry suffers from insufficient investible capital and low productivity. Under the clothing industry, the readymade garment sector had a hard time in its initial stage. From a modest start in the late seventies, Bangladesh's garment sector (BD) came into prominence in the middle of the eighties (Yunus & Yamagata, 2012). It is Bangladesh's leading and one of the crucial manufacturing sectors involving around 4.5 million people. Bangladesh's economy relies heavily on the garment industry, which generates 80 percent of the country's foreign exchange (Ahsan, 2020; Akter, 2020; Sakamoto et al., 2020; Sen et al., 2020). Bangladeshi economy will jeopardize if this industry loses its competitiveness and market share. The RMG industry plays a pivotal role in developing a healthy Bangladesh economy. The industry contributes 11.2% to the gross domestic product. Bangladesh's market share in global RMG trading is around 6.5%, and the country consistently remained the second largest exporter after the People's Republic of China (Today, 2018). Over the last three decades, the RMG exports have registered a cumulative average growth of 14.8% per annum reaching \$34.2 billion in FY2019 which is 84.2% of the country's total exports (BGMEA, 2020).

It is evidence of having various internal constraints (Chowdhury et al., 2018; Nuruzzaman, 2007) the RMG sector developed surprisingly from 1985. This is because of some external supports like quota facilities through Multi-Fiber Arrangement (MFA), Generalized System of Preference (GSP), and some special favor provided by the developed countries (Ahmed, 2009; Rahman & Anwar, 2007). The facilities like MFA and quotas provided by the World Trade Organization (WTO) ended on January 1, 2005 (Haque, 2009; Nuruzzaman, 2008). Therefore, when all the WTO member countries, including Bangladesh, entered the quota-free market, the RMG industry came under threat (Haque et al., 2022). Through the phasing-out process, Bangladesh was knocked out of such special trade facilities. Hence it is a massive challenge for the RMG sector of Bangladesh to retain its present market share by improving the Supply Chain (SC) competitiveness in the world apparel or clothing market.

In the current business arena, manufacturing industries are under tremendous pressure due to the free market economy, rapid technological development, and continuous customer demand (Li-Ying & Nell, 2020; Islam, et al. 2012). The structure of the Bangladeshi RMG industry is different from other competitors. In addition to that, the supply chain in the CMT (Cutting, Manufacturing, and Trimming) based RMG industry is more complicated than in other competitive countries (Nuruzzaman et al., 2010; Nuruzzaman, 2015). As Bangladesh is highly dependent on imported raw materials, it has to maintain a complicated and long upstream supply chain that takes a long time to process an order (Haque & Hasan, 2018; Nuruzzaman et al., 2010). Despite the problems, Bangladesh may create a remarkable position in the world's total garment export trade by managing the supply chain in terms of mounting closer interactions, better synchronization among the external and internal stakeholders, and reducing lead time (Nuruzzaman, 2014, 2015). The supply chain activities and transformation process by which various components, resources, and raw materials come into a finished product delivered to the end customer.

As competitiveness is the main focus area of this research study, it is defined as the capability to stand in a competitive business environment, whether local or global. However, so many definitions of competitiveness exist in the literature. Horvathova and Mokrisova (2020) define competitiveness as "the immediate and future ability of, and opportunities for, entrepreneurs to design, produce, and market goods worldwide whose price and non-price qualities form a more attractive package than those of foreign and domestic competitors". In most cases, it is the realization of most organizations that to increase organizational effectiveness and enhance competitiveness, SCM is a key strategic initiative (Nuruzzaman, 2015). Again, competitiveness in the supply chain is the way to reduce uncertainty and improve customer service (Eqbal & Ohdar, 2017; Haque et al., 2022). Per M.J. Porter's definition, competitiveness is productivity growth that is replicated in either lesser cost or segregated products that command premium prices (Porter, 1990). In other literature, competitiveness is just like the ability of a firm to design, produce, and market the products better than the competitors, considering the price and non-price qualities (Ajitabh & Momaya, 2004; D'Cruz, 1992; Haque, 2002). Both qualitative and quantitative factors like; infrastructural facilities, various services, uncertainty, customers, suppliers, government, labour pay rates, taxes, exchange rates, and costs of transportation can be considered for analysing supply chain competitiveness (SCC) (Bhatnagar & Sohal, 2005). The SCC of a company is also determined by lead time efficiency, inventory turnover, responsiveness to demand fluctuations, customer service, flexibility, time to market, and quality, according to Bhatnagar and Sohal (Haque et al. 2018, Nuruzzaman, 2015; Bhatnagar & Sohal, 2005, Nuruzzaman & Haque, 2009). However, in this paper, the competitiveness of the RMG industry means the ability to increase the market share competing with the competitors by overcoming impediments, especially threats from the bureaucrats in the supply chain. Not only that but also the focus of this paper will be to analyse the impact of bureaucratic behaviour (BB) over the barriers of supplier's point of view i.e., supply-side barriers (SB) and over the barriers of customers' point of view i.e., demand-side barriers (DB).

Considering the competitiveness issue for making a profit and customer satisfaction, many companies plan to implement SCM (Nuruzzaman, 2015; Nordas, 2004; Haque et al., 2022). However, many researchers have emphasised the adoption of web 2.0 in SCM for gaining advantages (Tarofdar et al., 2019) and given the importance of a technology-driven supply chain to secure competitive advantages (Tarofdar et al., 2019). But here in this research, a different issue like BB has been considered to analyse the supply chain and improve competitiveness. In this study, the authors expect an excellent contribution toward competitiveness for existing and

prospective entrepreneurs. A few research (Haque et al. 2018; Nuruzzaman, 2015, 2014; Chowdhury, 2017; Brito et al., 2008; Lam & Postle, 2006; Magder, 2005) have been examined and considered the supply chain competitiveness of the readymade garment or clothing industry. Notably, most studies about textiles and garments are related to growth, strategic, and infrastructural issues. But technical issues like the stakeholders' influence have been given less importance. Several research studies primarily dealt with the applications of ICT and the development of relationships. In the case of Bangladesh, the negative role of bureaucrats creates many problems during the procurement and supply management of garment products (Nuruzzaman, 2014). Most of the research papers (Hossain & Roy, 2016; Kabir et al., 2020; Haque, 2018; Rahman et al., 2020; Nuruzzaman, 2015, 2008, 2007) focus on growth and development, sustainable growth, women empowerment, workers' situations, and other relevant issues. Significant research on supply chain competitiveness in the RMG sector in Bangladesh has not yet been found to face future challenges. This research gap motivated the researchers to examine the following research questions. How the Bureaucratic Behaviour (BB) influence the activities of the clothing supply chain to improve competitiveness?

2. THEORETICAL FRAMEWORK

2.1. Conceptual Framework and Hypothesis Development

The Resource Dependency (RDT) and Stakeholder Theory (ST) concepts are extremely effective and useful, especially in the SC of the RMG industry. RDT and ST theories are used in this research to bring stakeholders and their behaviours together to boost competitiveness and to develop a conceptual model.

According to RDT, enterprises may be dependent and rely on resources given by others to continue growth (Pfeffer & Salancik, 1978). The Resource Dependence Theory (RDT) highlights the importance of collaboration and interdependence. It implies that supply chain members should be interdependent and collaborate to achieve better long-term performance rather than chasing short-term benefits at the expense of others. Companies must also rely on resources from other parties to achieve sustainable development, and they must handle these dependencies with other businesses carefully and professionally (Heide, 1994). In the RDT theory, firms cannot be fully self-sufficient regarding strategically critical resources for survival. Based on resource dependence theory, the supply chain members recognize that dependence can create patience and trust. Accordingly, as the members work together closely in the supply chain, they often become more dependent on each other. Regarding dependence partnerships, RDT theory views them as necessary linkages for companies to reduce the risk associated with their activities (Carter & Rogers, 2008). As a result, RDT has a lot of importance in the supply chain (Nuruzzaman, 2015, 2014; Tarofdar et al., 2019).

Stakeholder theory suggests that businesses create externalities that impact many stakeholders within and outside the company. Stakeholders are externalities that play a role in rising demands on businesses to minimize negative consequences and raise positive impacts (Sarkis et al., 2011). According to stakeholder theory, buyers (customers), suppliers (manufacturers) of raw materials and finished goods, logistics providers, government, bureaucrats, and political agencies are the players in the supply chain. On the other hand, stakeholders are any community or person who

may influence by the achievement of the organization's objectives (Freeman, 1984). Based on the previous literature, stakeholders are individuals or groups in a company that has various interest like material, political, informational, symbolic, or spiritual and are capable of advocating these interests through formal, economic, or political power (Freeman 1984; Holtbrugge et al., 2007). As a result, political parties, bureaucrats, and country-specific issues due to the influential government role become critical success factors in business (Ahsan, 2020; Chowdhury, 2017; Hillman & Wan, 2005; Zoltkowski, 2021). Moreover, Nuruzzaman (2017) talked about many internal and external stakeholders directly or indirectly involved in the RMG supply chain. Consequently, stakeholder theory has emerged as a vital part of the literature on management (Donaldson & Preston 1995). The external stakeholder, bureaucrats, and their behaviour (BB) that comes from the bureaucrats have been used in this study. The government and the bureaucrats always play a significant role in any business process and commercial transaction (Akhter ,2020; Hadjikhani & Hakansson, 1996; Zoltkowski, 2021). Bureaucrats are responsible for executing government decisions by the political leadership and for upholding the control of various amenities provided by the state (Nimir & Palmer, 1982). However, bureaucracy is a behavioral strategy based on professionalism and submission to hierarchies in a typical administrative organization (Friedrich & Cole, 1932). Moreover, bureaucracy is the subdivision of jurisdiction, hierarchy and personnel (Selznick, 1943). Bureaucracy's capability to perform a developmental function depends on the structure and the individual's behavior (Nimir & Palmer, 1982).

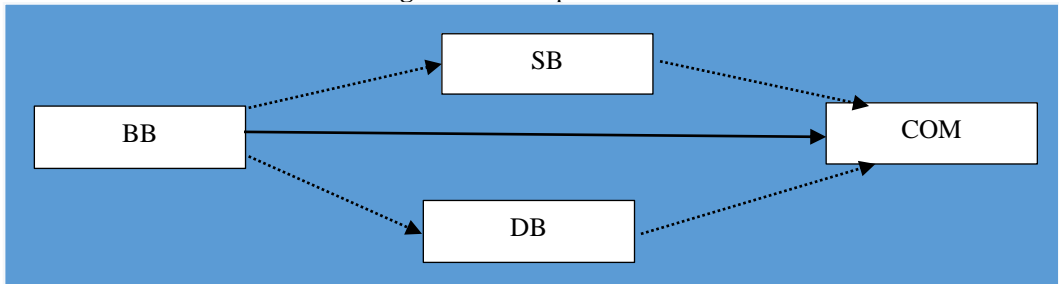
Recently, manufacturing in developing countries has been facing unprecedented competitive pressure generated by new business trends. To cope with this pressure, industries have tried to upgrade their operations using upgraded manufacturing techniques and management systems. Supply chain management (SCM) is one of them. But effective supply chain management integration is becoming an increasingly critical factor for business success. The integration of SC members can significantly support the manufacturing industry in developing countries to face the constantly changing competitiveness scenarios. Even though such cooperation and integration are at an infant stage, some sectors like clothing, textile, and garments industries do not create value as expected (Georgise et al., 2014). Therefore, integration and cooperation among the stakeholders creating barriers in the demand and supply side are the most critical issues to improve competitiveness.

In RMG supply chain, external stakeholders offer numerous supporting services to the internal stakeholders, especially to the suppliers of finished garment products. Major internal stakeholders, namely suppliers, are producers and buyers of the final products. This study has considered "supply-side barriers" and "demand-side barriers". The supply-side barriers (SB) have weaknesses due to poor infrastructures, long lead time, lack of commitment and trust, immense pressure from buyers, bargaining power, threats of substitute suppliers from another country, lack of collaboration and government support (Ahsan, 2020; Nuruzzaman et al., 2010; Nuruzzaman, 2015). The demand side barriers (DB) obstacles by the buyers which play antagonistic roles in maintaining an efficient supply chain. Barriers are created through the order and lead time process, complaints from human rights, and changed conditions from suppliers and governments (Ahsan, 2020; Akhter, 2020; Nuruzzaman et al., 2010; Adhikari & Weeratunge, 2007). In Bangladesh, the CMT (cut, make, and trim) based manufacturers in RMG industries depend on buyers' wants. Manufacturers failed to create powerful brands to attract. This business also relies on fabric suppliers, raw materials and other accessories providers (Haque et al., 2018). So, dependency on resources is the supply-side barrier. Suppliers of many organizations are engaged in the RMG

sector. Based on the cycle view of the supply chain, these organizations are involved in various exchanges considering the scarcity of raw materials and dependency. When an organization is faced scarcity of vital resources, RDT shows that actors would strive to form connections with others to gain the resources they require (Frooman, 1999). This strategy may improve competitiveness (COM) by lowering dependency. Therefore, resource dependence theory (RDT) has been considered.

However, the above two theories are considered because of their applicability and extensive social system. These theories are frequently used in SCM and developing countries' perspectives. These theories developed from the broader aspects of political economy theory, which emphasises bureaucrats and their behaviour. Thus, BB considers antecedent elements to measure industry competitiveness through supply chain analysis. Therefore, a conceptual model has been developed (Figure 1) for this study. In this proposed model (Figure 1), the actions of external stakeholders (BB) can help to reduce cost and lead time in the process of dependency on the RMG supply chain. In that case, external stakeholders (BB) influence the internal stakeholders' factors (SB) which derive from suppliers & demand side barriers (DB). It will improve the competitiveness (COM) of the supply chain of concern industry.

Figure 1: Conceptual Model



Source: Developed by the researchers.

After lifting MFA, RMG industry is endangered of losing businesses. Therefore, the objectives are to explore the competitiveness of Bangladesh’s clothing industry to face the present challenges where bureaucratic behaviour (BB) has been considered as an influential external stakeholder.

Hypotheses development:

Considering the above discussion and the conceptual model, the following hypotheses are proposed (Table 1).

Table 1: Hypotheses

BB → SB	H1a	BB has a positive influence on SB
BB → DB	H1b	BB has a positive influence on DB
SB → COM	H1c	SB has a positive influence on COM
DB → COM	H1d	DB has a positive influence on COM
BB → COM	H2	BB has direct influences on the COM
BB → SB → COM	H3a	SB positively mediates between BB and COM
BB → DB → COM	H3b	DB positively mediates between BB and COM

3. RESEARCH METHODOLOGY

In this quantitative study, the survey method applies to conduct investigations among RMG companies in Bangladesh. Dhaka city was chosen as the sampling area due to the dense RMG industries availability in this region. Most of the industries located in Dhaka city are 100% export oriented. Only BGMEA (Bangladesh Garment Manufacturers and Exporters Association) listed companies were considered for data collection. Hence, a purposive sampling technique applies to collect data. A structured questionnaire was designed to explore the essential factors and test the relationships among the constructs. The questionnaires were fine-tuned via several revisions and a pilot test. The closed-ended questions were adapted in the survey from previous research studies. All the items under each construct were measured using a 5-point Likert-type response scale from strongly disagree to agree strongly. Top-level and mid-level management of the relevant RMG companies received the survey questionnaires through personal and HR contacts. HR helped to distribute questionnaires to the pertinent managers of the concerned organizations. Hence a convenience sampling procedure was applied in this study to select the respondents (Creswell & Clark, 2007; Malhotra, 2004).

Twenty-one RMG companies out of seventy did not participate in the survey, and 157 questionnaires were unanswered by the respondents among 400 distributed questionnaires. Hence, there was a 60.77% response rate in the survey. These numbers were considered adequate for analysis and reporting (Babbie, 1990), in which 243 respondents returned the filled-up questionnaire to the researcher. Smart PLS statistical software (version 3) uses to analyse the data. The sample size is appropriate where scholars advised that PLS is suitable for studies with small sample sizes (Barclay, et al., 1995; Gefen et al., 2000). Hence, the bootstrapping technique in PLS has been used to amplify the sample size for better estimation. The structural equation modelling technique was used to assess the hypothesized model.

4. DATA ANALYSIS AND RESULT

The survey data were examined and analysed using the SEM method. The SEM was used to validate the effects of stakeholders in the clothing (RMG) supply chain and the competitiveness model that was developed in the theoretical framework (Figure 1). After analysing, figure no. 2 in Appendix 1 illustrates that model. From the conducted survey, 243 respondents' questionnaires were finalized in this study. Data were collected for 31 items by these questionnaires. Nonetheless, one formative and three reflective constructs were considered in this research, and six items for one formative construct and 25 items for three reflective constructs have been considered for data collection. In this analysis, PLS has been designed to accommodate both formative and reflective constructs (Barclay et al., 1995). Therefore, PLS-based SEM has been used in this analysis. Generally, PLS performs model assessment in two sequential stages.

- i) Assessment of measurement model
- ii) Assessment of structural model

4.1. Measurement Model

The PLS graph was first used to analyse the measurement model, followed by confirmatory factor analysis. Then the model was assessed and evaluated the clothing (RMG) supply chain attributes in terms of reliability (items loading and composite reliability), convergent validity, and discriminant validity (Fornell & Larcker 1981). We must distinguish between reflective and formative measuring approaches in order to evaluate the reflective and formative constructs (Hair & Sarstedt, 2011). The first phase in the analysis is to assess the measures' reliability and validity, taking into account particular criteria related to the formative and reflective measurement models. The composite reliability value is used to evaluate the construct's dependability. All of the constructs in the measuring model have a composite reliability of more than 0.70 (Table 2). It is backed by Nunnally and Bernstein (1994), who proposed an acceptable threshold.

The convergent validity test was assessed by looking at the item loadings inside the constructs and the item correlation (Anderson & Gerbing, 1988). All the reflective constructs had adequate item loadings in the predicted direction (see table 2), with an appropriate critical ratio and degree of significance (i.e., range between 0.568 - 0.989). According to Hair et al. (1998), loadings more than 0.3 are significant, greater than 0.4 are significant, and greater than 0.5 are highly significant. Indicator loading should be more than 0.70, according to Hair et al. (2011). We removed the entries (items) DB4, DB5, COM1, COM2, COM4, COM6, and COM7 and reran the PLS to get the lowest allowable (minimum acceptable) value of Average Variance Extracted (AVE). The AVE cut-off value is more than 0.5 (Hair et al., 2011).

Table 2: Measurement Model I

Reflective Constructs	Items	Loadings	t-statistics	CR	AVE
SB	SB1	0.6885	15.96	0.915	0.519
	SB2	0.7124	15.02		
	SB3	0.7618	19.85		
	SB4	0.6856	17.54		
	SB5	0.6650	15.00		
	SB6	0.7417	19.35		
	SB7	0.7663	31.23		
	SB8	0.7506	28.24		
	SB9	0.7020	20.62		
	SB10	0.7257	16.78		
DB	DB1	0.7645	15.82	0.801	0.507
	DB2	0.7969	25.26		
	DB3	0.7359	17.89		
	DB6	0.5167	5.75		
COM	COM3	0.6829	14.56	0.798	0.500
	COM5	0.7489	16.43		
	COM8	0.6015	9.12		
	COM9	0.7817	22.40		

The square root of the AVE and the cross-loading matrix was employed to examine discriminant validity in this study, as indicated by Barclay et al. (1995). According to Barclay et al. (1995), a model has appropriate discriminant validity if the square root of a construct's AVE is greater than its correlation with other constructs. The findings presented in Table 3, along with the square roots

of the AVEs. The off-diagonal components represent the correlations among the latent variables in table 3 and through this table, it has been confirmed that the discriminant validity is achieved.

Table 3: Measurement Model II (Square Root of AVE)

	BB	SB	DB	COM
BB	1			
SB	0.422	0.720		
DB	0.535	0.416	0.712	
COM	0.405	0.328	0.369	0.707

The measures' discriminant validity has also been double-checked (Barclay et al., 1995). The cross-loading analysis revealed that all items loaded higher on the measured construct than on the model's other constructs (Barclay et al., 1995).

4.2. Indicators Weight for Formative Items

Table 4 shows the weight and loading for each formative construct component or item, along with the t-value. It is discovered that four of the formative item weights have significant t-values, but two do not. As a result, BB3 and BB5 were removed from the analysis. However, all of the components were crucial when it came to loading. Hair et al. (2011) further stressed the need for all weight and loading facets to have significant t-values to preserve all the formative construct components. A multicollinearity test undertakes for the formative constructs. Low collinearity among the items is important for ensuring stable estimates (Mathieson et al., 2001). The variance inflation factor (VIF) scores for each item under the formative construct were computed to see whether there was multicollinearity. PLS-based latent variables were used for the computation. The IBM SPSS 21 statistical software was used to run a regression analysis with the PLS construct scores as the dependent variable and the items as independent variables (Andreev et al., 2009). The following table-4 and the represented results show that all the VIF scores are below 5. This value also supports by the recommended maximum threshold of 10. It is also recommended by Mathieson et al. (2001) and Hair et al. (2011) as it is below the maximum level of 5. Therefore, all the formative items are retained except BB3, and BB5. These two items were deleted to reduce the construct level error variance (MacKenzie et al., 2011).

Table 4: Measurement Model III

Formative construct	Items	weight	t-statistics	Loading	t-statistics	VIF (Multicollinearity)
BB	BB1	0.2247	2.21	0.6276	8.25	1.326
	BB2	0.4222	4.44	0.7850	12.62	1.447
	BB4	0.4883	5.30	0.7658	12.19	1.190
	BB6	0.2457	2.41	0.6251	6.98	1.243

4.3. Structural Model

The competitiveness model examines to measure exploratory power and the significance of paths (path coefficients) among the constructs. This process was used to assess the structural model (Hoyle, 1999). The structural model is used to put the hypothesized relationships to the test. To test the hypotheses, the bootstrap approach was used. Table 5 summarizes the data for path

coefficients and *t*-statistics. All of the key hypotheses were supported, including H1a, H1b, H1c, H1d, and H1e. The r^2 values of the endogenous constructs, according to Santosa and Chan (2005), can be used to assess the proposed model's nomological validity or explanatory power. Calculating the coefficient of determination (r^2) of the endogenous constructs was used to determine the model's explanatory power or nomological validity (Santosa & Chan, 2005). The minimum r^2 should be 0.1, according to Falk & Miller (1992). Again as per Santosa et al., a reasonable r^2 value is 0.1. In this study, three endogenous constructs have r^2 values that are higher than the requirement, according to the calculations.

Table 5 demonstrates the direction of each relationship, the loadings on each relationship (the value on the arrow), and *t*- values for each hypothetical link. The r^2 values for each dependent construct (the value under the circles) are shown in figure 1 in the appendix. The strongest r^2 value is that of demand-side barriers (DB). The model explains 28.7% of the variance in DB, and 17.8 % of the variance in SB. Overall the model explains 21.4% of the variance in competitiveness. The result also indicates that 21.4% of the explanatory power of competitiveness is through SB, and DB. 28.7% of DB is due to BB, and 17.5% of SB is due to BB.

Table 5: Structural Model

Link or path	Hypotheses	Path Loadings	<i>t</i> -statistics	Comments
BB → SB	H1a	0.422	7.23	Supported
BB → DB	H1b	0.535	10.83	Supported
BB → COM	H2	0.248	3.41	Supported
SB → COM	H1c	0.151	2.12	Supported
DB → COM	H1d	0.174	2.05	Supported

Table 6: Mediation Effect

Hypotheses	Relationship	β	SE	<i>t</i> -value	<i>p</i> -value	Comments
H1a	BB → SB	0.148	0.154	1.741	0.547	Not supported
H1d	DB → COM	0.259	0.366	1.524	0.585	Not supported

4.4. Mediation Effect

This study proposed a mediation model that mainly assessed the relationship between bureaucratic behaviour and competitiveness. This study examined the direct, indirect and total effects to assess the mediation effect of the supply-side barrier (DB) and demand-side barrier (DB) on competitiveness by the impact of BB. A series of steps is required to assess the mediating effect. According to Hair et al. (2017), the indirect effect should be the first indicator assessing the mediation effect as they concluded that there is no mediation effect if the indirect effect is not significant. Table 6 presents the '*t*' statistic and *p*-value of the indirect effect. Based on the results, it is clear that there is no mediation effect of both the supply side barrier ($\beta = 0.148$, $t = 1.721$, $p > 0.05$) and demand side barrier ($\beta = 0.259$, $t = 1.524$, $p > .05$) on competitiveness. Hence, H3a and H3b were not accepted.

5. DISCUSSION

The structural equation model explains the joint effects of all constructs used in the model. It describes the level and degree of external stakeholders' impact on the internal stakeholder's factors and barriers to the RMG supply chain. The study found that as an external stakeholder, bureaucratic behaviours positively influence competitiveness via barriers of internal stakeholders and directly to the competitiveness of the clothing or RMG industry of Bangladesh.

Hypotheses H1a and H1b were developed to measure the relationships among BB, SB and DB. H1a was hypothesized that BB has a positive influence on the SB, and for H1b, it was hypothesized that BB has a positive impact on DB. It means that when bureaucrats act positively, SB and DB will be reduced thoroughly, and those barriers mentioned above will decrease when BB affects negatively. This research study has supported these two hypotheses.

The hypotheses H1c and H1d were developed to measure the relationships among SB, DB and COM. These associations are predicted to be favorable, as when barriers (SB and DB) are reduced and suppliers and purchasers become more efficient, COM will correspondingly rise. As a result, analyses supported these two hypotheses. Hypothesis H2 was developed to measure the relationships between BB and COM. According to previous studies, supply chain, competitiveness and BB has a significant influence. Thus, BB directly influences competitiveness, and hypothesis H2 is supported. As assumed in hypotheses H1c, and H1d, the SB, and DB also affect competitiveness. In general, the respondents of the firms express their opinions about improving competitiveness through establishing good relations among the stakeholders and enhancing positive bureaucratic behaviour. They also emphasised establishing an effective supply chain and efficient management with the help of government bureaucrats.

Supply-side obstacles or barriers are the flaws (Ahmed, 2009) in the Supply Chain (SC) that impede the development of competitiveness in the clothing industry. Poor infrastructure, lengthy lead times, a lack of commitment and trust, price pressure, weak negotiating power, customers' flexibility to pick other suppliers from another nation, and a lack of collaboration are all examples of these impediments (Berg et al., 2011; Halder & Kim, 2012; Nuruzzaman, 2015, 2014, 2010; Sultana et al., 2011). Suppliers' barriers include insufficient backward linkage industries, low-value item production, import reliability, irrational lead time, low foreign direct investment, inadequate energy supply, poor transportation and port facilities, worker conflicts, low salaries, poor government policy, lack of training, poor tactics, inefficient middle management and poor communication (Bhattarai et al., 2021; Islam et al., 2012).

These hurdles obstruct the increase of competitiveness and any encouragement to achieve competitiveness in the supply chain. Pressure for a shorter lead time, retaining commitment, and providing employees' rights are examples of the impediment (Berg et al., 2011; Nuruzzaman et al., 2009; Kale, 2007). Furthermore, different types of conditions and regulations imposed by the local government (Adhikari & Weeratunge, 2007; Nuruzzaman et al., 2010, 2009); compliance issues; and pressures to raise workers' wages and offer a good working environment, reduce prices, and shorter lead time are buyers-side barriers (Rahman & Anwar, 2007; Claeys & Brachet, 2008; Hossain et al., 2012; Rahman, 2005; Rahman & Hossain, 2010)

The suppliers of Bangladeshi clothing have some strengths, and side by side; they have many weaknesses related to the supply chain. Such inefficiencies make the whole supply chain impractical in exporting final products to the buyers. Bangladeshi suppliers mainly face unavailable raw materials, lack of infrastructure, and unprofessional behaviour in various supply chain activities. They must import most fabrics from abroad which is also a buyer's garments market. To import raw materials and export finished goods, suppliers need much-supporting assistance from the bureaucrats, i.e., the government officials, which are very important in the upstream and downstream supply chain. These include documentation, various types of permission, support from a financial authority, port services and import-related regulations. Bureaucrats are also liable to bargain with foreign governments to convert the regulations in exporters' favour. They can also play an essential role in solving multiple issues and disputes between buyers and suppliers. Therefore, bureaucratic behaviour and initiatives are significant in making an efficient RMG supply chain. Thus, BB helps reduce cost, time, and communication & relationship gaps among the stakeholders.

6. CONCLUSION

Production sits at the bottom of the clothing value chain, even though it is the company's most crucial and challenging aspect. Bangladesh performs the lowest value retention tasks as a manufacturer in the global value chain. RMG business has long been known for its price competitiveness, but minimum wage remains the lowest among our rivals. Only wage competitiveness cannot assure a viable supply chain having existing constraints. Accordingly, an uninterrupted supply chain and adequate planning increase market share. In the context of the clothing business and its supply chain in Bangladesh, this research used a theoretical and empirically investigate and evaluate the linkages between bureaucratic behaviour, demand-side, supply-side (barriers) and competitiveness. Bureaucratic behavior shows a significant impact on supply and demand difficulties and competitiveness. Finally, the external stakeholder BB plays its role positively toward the efficiency of the supply chain, the clothing industry will undoubtedly be able to increase its competitiveness. Therefore, this study recommends the result for the improvement of competitiveness for the Bangladeshi clothing industry and any developing nations.

7. MANAGERIAL AND THEORETICAL IMPLICATION

The clothing sector is not in a competitive position for weaker coordination among the stakeholder and, more specifically, those external stakeholders who are usually not considered in the supply chain. In the Bangladeshi clothing business for the supply chain manager, it would be a good lesson that the government-backed bureaucrats are also important stakeholders in the clothing supply chain. The behavior of those stakeholders has a direct and indirect impact on competitiveness. Considering this finding, the managerial implication is that the framework presented in this article suggests increasing competitiveness for external stakeholders. Bureaucrats are not a negligible group in the improvement of competitiveness. The result has shown that the supply and demand side barriers and the bureaucrats' side are also considered for the success of clothing companies. In Bangladesh, bureaucrats are directly related to providing some services or paper (different types of certificates) to clothing companies. So, their role in the Bangladeshi clothing supply chain is very important to improve competitiveness. Besides the contribution of managerial aspects, this

study also contributes to the body knowledge of ST and RDT. The study findings linked with the assumption of Stakeholders and Resource Dependency theories. In a developing country like Bangladesh, the inclusion of bureaucratic behavior is a new perspective for the clothing business. Finally, an expected outcome is revealed through improving coordination and relationship: competitiveness. Thus, this study finding is a contributory extension in theory. It is a new logical connection between a condition and its outcomes.

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APPENDIX

Figure 2: Competitiveness Model

