

Internationalization as a strategy for small and medium-sized enterprises and the impact of regulatory environment: An emerging country perspective

By

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Abstract

This study focuses on identification, categorisation and comparison of regulatory barriers to internationalisation for the SMEs from an emerging market context. Primary data were collected to develop and validate a structural model to assess the salient regulatory barriers of internationalisation with a particular attention to the SMEs in Bangladesh. Structured questionnaire has been used to collect data from 212 SMEs operating in Bangladesh. The results indicate that both administrative and economic regulatory barriers are significant for the internationalisation of SMEs whereby administrative regulatory barriers are slightly more substantial. This study provides further discussion from both theoretical and methodological aspects. By developing and validating structural model, this study contributes to the literature on small business and regulation with particular attention to the emerging markets.

Keywords: Emerging Market, Regulatory Barriers, Internationalisation, SMEs

1. INTROCUCTION

This study investigates the influence of regulatory barriers to internationalisation in small and medium-sizes enterprises (SMEs) in Bangladesh. SMEs are considered as the engine of economic growth and development irrespective of a country's economic status (Dasanayaka, Kankanamge, and Sardana 2011; Hyz 2011; Lawrence, et al., 2006). However, many of them live a very short life span as most of them fail to reach the growth stage (Hulbert, Gilmore, and Carson 2013). In this context, policymakers and scholars focus on identifying barriers hindering growth and expansion of SMEs (Mendy and Rahman, 2019; Olawale and Garwe 2010; Rahman et al. 2017) and developing variety of supporting institutions and programmes (Al-Hyari 2013).

A degree of influence of regulatory barriers depends on a country's level of development and per capita GDP. According to Serrano and Romero (2014), low-income countries exhibit more regulatory barriers to entrepreneurial activities than high-income countries. Besides depending on a country's level of economic development, a detrimental impact of regulatory barriers is greater in small firms as they have weaker capabilities to cope with this type of barrier than large firms (OECD 2017b; World Bank 2016). In addition, SMEs face more difficulties in lobbying for policies or regulations beneficial to their performance (McLaughlin 2013).

Moreover, weak institutional environment hinders SMEs to create strong competitive advantage both in domestic and international market (Novikov 2014). Consequently, regulatory barriers play a significant role in firms' internationalisation. In particular, SMEs are more sensitive to removing trade barriers than their larger counterparts (WTO 2016). As SMEs in emerging country are more vulnerable to regulatory trade barriers, it is important to give more emphasis on exploring this type of barriers (WTO 2016) and improving the quality of regulatory environment for SMEs (APEC 2015; EC 2008, Novikov 2014, Schou-Zibell and Srinivasa 2010). Therefore, why regulatory institutions matter and how institutional constraints affect SME strategic behaviour is one of the key issues in the current entrepreneurial research (Zhu, Wittmann, and Peng 2012).

Is it the regulatory environment that holds back SMEs from reaping the benefits of

internationalisation? In World Bank's "Doing Business" report, Bangladesh is placed on 129th position in 2013 and 177th position 2018 among around 190 countries. Findings of these reports indicate the possibility that regulatory environment could be a major hindrance to business growth. On the other hand, number one strategy for SME development followed by the SME Foundation in Bangladesh is "strengthening regulatory and legislative framework in favour of SMEs" (Bakht and Basher 2015). Therefore, identification of regulatory barriers is the top priority for providing accurate and adequate information to potential SME entrepreneur to cope with challenges of participation in international trade. Against this background, this paper aims at identifying regulatory barriers SMEs face in internationalisation in an emerging economy like Bangladesh. Contribution of this research is twofold. Firstly, this research addresses a research gap which investigation is felicitous. There are a number of studies on regulatory/institutional barriers to SME internationalisation (APEC 2015; Cardoza et al. 2015; Novikov 2014; World Bank 2016; Zhu, Wittmann, and Peng 2012). However, focuses of these researches are not on regulatory barriers facing Bangladeshi SMEs that engage in international markets. Namely, previous study conducted in the context of Bangladesh, such as Rahman et al. (2017), focus exclusively on socio-economic barriers that SMEs face in entering to international markets while overlooking regulatory barriers of internationalisation. Secondly, findings of this research have policy implication with respect to SME internationalisation especially for emerging economics. Policy makers, informed by research on how institutions created regulatory barriers, can formulate more SME-friendly policies (Zhu, Wittmann, and Peng 2012; Kitching, Hart & Wilson, 2015). It is, therefore, a timely response to examine the impacts of regulatory barriers from an emerging market context. The next section looks at the theoretical framework. This is followed by literature review, methodology, findings, discussion and conclusion.

2. LITERATURE REVIEW

2.1 Theoretical framework

Theoretical framework of this study is extracted both from international business and

entrepreneurship development. It pursues to zenith a fit between the intension of crossing boundaries between institutional analysis of the knowledge infrastructure and evolutionary analysis of the knowledge base of an economy (Leydesdorff & Meyer, 2006; Sá, Casais, & Silva, 2019). For internationalisation, choosing the entry mode to foreign market is the most critical knowledge based decision for every firm (Brouthers 2013). To choose the right entry mode, managers and owners need to evaluate the available entry modes considering operating environment as a frame of reference (Javalgi et al. 2011). This is associated with ‘a founding assumption of the Triple Helix model is that knowledge may need to be associated with shared values and norms in order to be fully and effectively utilised’ (Betzold, et al., 2018: 871). Based on the knowledge infrastructure and evolutionary analysis of an economy, SMEs can choose a gradual way to involve in internationalisation as suggested by the Uppsala internationalisation model (Johanson and Vahlne 1990) or rapid way, known as the born-global theory (Knight and Cavusgil 1996) or radical, but late as described in the born-again theory of internationalization (Bell, McNaughton, and Young 2001). The institutional environment must affect whatever pathway among these three dominating approaches SMEs choose to enter into foreign market. Bathelt and Gluckler (2014) state that economic actors are not isolated, but rather are embedded in social environments that constitute meaning through repeated interaction. According to Novikov (2014), institutions are much more than background conditions for a firm.

Institutions not only directly influence firms’ behavior in case of internationalisation but also affect the creation of competitive advantage both in home and foreign markets (Descotes, Walliser, and Guo 2007). In his institutional theory, North (1990) defines institutional framework as the combination of the fundamental political, social and legal ground rules that establish a basis for production and distribution. Similarly, Novikov (2014) notes that institutional framework of a country included different dimensions of natural environment like regulatory dimensions (national government policies), cognitive dimension (shared social knowledge) and normative dimension (value system). Profitability, viability and even survival of SMEs mostly depend on the existing institutional matrix because the quality of the institution can reduce transaction costs and make the economic activities more predictable. In contrast,

institutions could create formal constraints by constitutions, laws and property rights; and informal constraints by sanctions, taboos, customs, traditions and code of conduct (North 1991).

Regulatory barriers are country-specific from the perspective of the institutional theory, because any firm's action is placed in a country-specific institutional setting (Makino, Isobe, and Chan 2004; Novikov 2014). Therefore, findings from a single country may not necessarily be applicable to other countries. Consequently, researchers now shift their focus on the differences in institutional frameworks between economies beyond traditional, industry and resource-based, factors (Lee et al. 2011; Peng, Wang, and Jiang 2008). For instance, combining concepts of resource-based view theory and the institutional theory, Mandrinos and Mahdi (2015) find that firms are not necessarily resource-dependent, but rather institution-dependent and adopting inappropriate practices may hamper firms' internationalisation. It is therefore; necessary to incorporate both push and pull factors (Dawson and Henley 2012). Given these views, this paper seeks to investigate how regulatory issues as a part of institutional environment create barriers to internationalisation in SMEs in Bangladesh.

This paper begins by scanning previous studies following Masurel (2007) with particular attention to regulatory environment. Regulatory environment of business includes information on how the operation of the business is affected by rules and regulations (Dasanayaka, Kankanamge, and Sardana 2011; Urban and Kujinga 2017). According to Kitching, (2019: 296), "... the legal framework is a fundamental and necessary contextual influence on small firm activity and performance, simultaneously imposing constraints and enabling various possibilities for action" (Kitching, 2019: 296)

2.2 Administrative Regulatory Barriers

Administrative activities, ranging from obtaining licenses and credit to start a business including trading across borders to identifying requirements for closing a business, are all important elements of the operating climate for doing business (Schou-Zibell and Srinivasa 2010). Administrative procedures (complicated and/or ambiguous) impede SMEs to enter

into foreign markets. A survey on SME internationalisation conducted by European Commission (2015) found that a complicated administrative procedure is the most common problems faced by SMEs when exporting. Namely, half of the surveyed firms respond that, in case of exporting, administrative procedures are too complicated and 24 per cent of firms indicate this as the major problem they face during expansion to foreign markets. Again, unfamiliar exporting procedures and paperwork is a significant factor that demotivates SMEs to participate in exporting. Cardoza et al. (2015) note that adverse regulatory and inconsistent legal frameworks, inadequate assistance on information and knowledge about markets pose difficulties on SME internationalisation. In addition, inconsistent interpretation or application of rules could be serious impediments for business expansion (Schou-Zibell and Srinivasa 2010).

Therefore, it is important to ease the burden that regulations impose on business because it can significantly reduce operational costs and create a more attractive environment for SMEs internationalisation (NCC 2015; Schou-Zibell and Srinivasa 2010). Following Gongeta (2016), countries are working to reduce paperwork, bureaucracy and administrative burdens to comply with the Regulatory Fitness and Performance Programme (REFIT). Given the above discussion, it can be hypothesized that

H1: Internationalisation of SMEs and Administrative Regulatory Barriers are positively related to political instability (H1a), legal procedural barriers (H1b), corruption (H1c) and inadequate legal support (H1d)

2.2.1 Political instability

Political instability is considered as one of the biggest barriers to SMEs growth (ILO 2015). In a survey of World Bank (2014), political instability was placed among top five barriers for SME growth. Slightly less than one third of firms surveyed (31.2%) identify political instability as a serious problem for their growth and expansion. Similarly, Harvie, Narjoko, and Oum (2010) report home country political instability to be ranked seventh by the participants of a survey on constraints faced by SMEs at the time of expansion to foreign market. Even in developed economics, SMEs feel less confident due to instable political decision (Gough 2016). Sometimes, a political goal takes priority over economic

efficiency, particularly in emerging economies, which reduces the chance of taking business opportunities (Buckley et al. 2007). Therefore, there is still a question on how political environment will shape the next stage of SMEs growth in the international marketplace (Cardoza et al. 2015). ‘Hartal’, a form of political instability, has a history of civil disobedience against colonialism in South Asian countries, but Bangladesh witnessed a dramatic increase of ‘Hartal’ in the last decades (Chawdhury 2016). With the volatile nature of political conditions in Bangladesh, following hypothesis is proposed:

H1a: Political instability as administrative regulatory barriers has a negative impact on Bangladeshi SMEs’ participation in international trade.

2.2.2 Legal procedural barriers

Not only regulations itself but also regulatory procedure affects SMEs decision to enter into international markets. By categorizing SMEs’ internationalisation barriers as internal and external, Roy, Sekhar, and Vyas (2016) found that legal procedural barriers showed the most significant obstacle for SMEs internationalisation. Each country has its own legal procedural pattern that affects both private and business activities (Rahman et al. 2017). In ‘Doing Business’ report, the World Bank (2013) compared laws and regulations with traffic lights, though designed for preventing traffic congestion but can create an acute problem if a red light lasts for an hour. Likewise, lots of regulations are formulated to facilitate SMEs to export but SMEs entrepreneurs struggle with export documentation because they are cumbersome and complex (Roy, Sekhar, and Vyas 2016). In measuring environment for doing business, the World Bank considers ease of trading across borders along with other issues like starting a business, getting credits, enforcing contracts etc. Redundant procedures add both time and cost to the documentary complicity in case of trading across border, particularly in emerging economies (World Bank 2016). Given the above discussion, it can be hypothesized that

H1b: Legal procedural systems as administrative regulatory barriers have a negative impact on Bangladeshi SMEs’ participation in international trade.

2.2.3 Corruption

Corruption is another major barriers SMEs face in expanding market growth (ILO 2015). In the World Bank's survey on SME in 2014, corruption ranked as a second among top five constraints facing by SMEs in developing countries. The problem becomes severe as the firm size gets smaller. Sometimes, it becomes very difficult for SMEs to encounter or bypass corrupt local parties. Corruption not only affects firm-level performance but also individual-level performance. Johnson, LaFountain, and Yamarik (2011) found a causal relationship between corruption and growth of output per worker.

Impact of corruption on the quality of business regulation is present in all but stronger in the volatile political setting (Breen and Gillanders 2012). Similarly, Johnson et al. (2014) noted that corruption is always bad and harmful for business growth and affects severely countries with fewer regulations (i.e. developing countries). According to Rasheed (2005), political instability is the result of corruption, inflationary trends, and great foreign debts. Corruption and political instability are both severe in Bangladesh. Hence it is pertinent to consider corruption as regulatory barriers for SMEs internationalisation in Bangladesh. Accordingly, following hypothesis is proposed.

H1c: Corruption as administrative regulatory barriers has a negative impact on Bangladeshi SMEs' participation in international trade.

2.2.4 Inadequate legal support

Complex and lengthy legal procedures and unavailability of legal support hinder SMEs to engage in international business. According to Boisot and Meyer (2008), both a poor regulatory procedure and the lack of public assistance programs are holding SMEs back to expand into foreign markets. In a survey conducted by European Commission (EC 2015), 33 per cent of the respondents pointed that not knowing the rules is a major problem when exporting. Therefore, it can be said that though the rules are available to facilitate SMEs, there is still an inadequate support in providing legal advices. Put simply, an inadequate support in case of providing information about market and consumers presents a stumbling block for SMEs regarding foreign market expansion. Similarly, less support about policies and regulations affects SMEs decision to expand internationally (Al-Hyari 2011) and many supporting programs like privacy law, e-signature and knowledge acquisition law are needed by SMEs (Al-Hyari, 2013). In a similar manner, 19% of the firms interviewed in

the European Commission's survey (EC 2015) mentioned that information on rules and regulations would help SMEs to expand their activities into international market. Despite the importance of adequate legal support for internationalisation of SMEs, this issue still remains underexplored (Okpara and Kabongo 2010). Considering the given situation, the present paper proposes the following hypothesis:

H1d: Inadequate legal supports as administrative regulatory barriers have a negative impact on Bangladeshi SMEs' participation in international trade.

2.3 Economic regulatory barriers

For SMEs, decisions related to economic matters are foiled by a range of demand and supply-side obstacles (Irwin and Scott 2010; OECD 2017a). According to Gongeta (2016), financial regulatory framework fabricates a number of hurdles for SMEs. For example, compared to large firms, SMEs are less capable of producing a sophisticated financial statement (OECD 2013). Bergthaler et al. (2015) argues that the treatment of individual defaulters is more sadistic in case of unincorporated SMEs. Sometimes their personal property becomes liable for many years beyond liquidation of the business.

One of the biggest hurdles that SMEs face at the time of internationalisation is the economic cost of engaging into international markets. As stated by OECD (2017b), formalities like conformity assessment procedure and cost of engaging in international market are fixed and often the same regardless of firm size and revenue. Similarly, high rate of tariff, complex and inefficient custom procedures, problems related to tax and taxation might also become obstacles for SMEs while entering into a foreign market (OECD 2015; WTO 2016). Therefore, SMEs should decide to enter international markets after exploring the nature of economic regulatory requirements. Excessive economic regulations regarding these matters should be taken into consideration for regulatory reform of the SME sector. For example, Korea has decreased the unreasonable economic regulations by 10 per cent in 2014 (OECD 2017b). Considering these findings, the present paper focuses on how non-preferential custom duty, no-preferential tax, inflation and risk

associated with foreign exchange affect decision of Bangladeshi SMEs in case of foreign market expansion. Given the above discussion, it can be hypothesized that

H2: Internationalisation of SMEs and Economic Regulatory Barriers are positively related to non-preferential custom duty (H2a), non-preferential tax (H2b), higher inflation (H2c) and foreign exchange risk (H2d)

2.3.1 Non-preferential custom duty

Custom duty as economic regulations can undermine SME participation in international trade. Barriers related to customs include uncertainty of duties, unnecessarily complex tax regulations, behavior of custom authority, customs red tape etc. (Gerwin 2015; OECD 2017a). According to WTO (2016), not only SMEs but also large firms perceive high tariffs as a major obstacle to trade and impact of tariff on trade largely depends on firm size. Compared to large firms, impact of custom duty or tariff is more burdensome for SMEs due to their limited capability to overcome them (Rensmann 2017). Holzner and Peci (2011) found that custom decision was one of the most important obstacles SME encounter, particularly those who face frequent changes in over-complicated laws and regulations. The Ministry of European Affairs and Foreign Trade (2013) pointed out that high or changing level of customs tariff and problems encountered in custom procedure as significant barriers to SME internationalisation. Accordingly, the Transatlantic Trade and Investment Partnership (TTIP 2014) highlighted that even a small change in a product's cost as a result of custom duty may led to a loss of sale for SMEs. In addition, trade theorists have started to explore the benefits of incorporating SMEs in a country's trade policy (Costinot, Rodriguez-Clare, and Werning 2015).

To provide special benefits to SMEs to participate in trade, both developed and developing countries are including SME-related provisions in their Regional Trade Agreements (RTAs) (by 65 per cent and 31 per cent respectively, WTO 2016). However, Bangladesh has a limited number of SME-focused trade agreements and need a SME supportive trade policy for easier exports and imports (Bakht and Basher 2015). Based on the above discussion, it can be said that custom duty might represent critical barriers for

SME internationalisation that requires a considerable attention. Therefore, the following hypothesis is proposed:

H2a: Non-preferential custom duty as economic regulatory barriers has a negative influence on Bangladeshi SMEs participation in international trade.

2.3.2 Non-preferential tax

Tax policy of home government is another type of barriers to SME internationalisation. Harvie, Narjoko, and Oum (2010) found high tax and tariff imposed by home country ranked sixth by the participants of a survey on constraints faced by SMEs at the time of expansion to foreign market. Accordingly, in a survey conducted by the Ministry of European Affairs and Foreign Trade (2013), problems related to taxes and taxation were found as a barrier facing SMEs while participating in international business. The Policy Department of the European Parliament (2016) specified that one of the greatest administrative burdens on European business was to comply with national taxation and customs rules. However, this issue remains unaddressed in many of the literature (Duso, Mahadeo, and Rogbeer 2013; Lakew and Chiloane-Tsoka 2015).

Tax or fiscal policy in Bangladesh is not SME-friendly. For example, in Bangladesh tax holiday benefits are not given to sole proprietorship firms, whereas majority of SMEs are sole proprietorship enterprise. Another example - exemption of indirect taxes are given to cottage firms whose annual turnover is Tk. 15 lac (BDT 1.5 million) but this knock off level is too low that SMEs need to pay 15 per cent VAT which is identical to large firms (Bakht and Basher 2015). In case of Bangladesh, government has made paying taxes less costly by reducing the corporate income tax rate but at the same time makes it complicated for business by increasing the time to prepare the income tax return (World Bank 2016, 2017). Preparing tax returns is a burdensome task for SMEs due to their lack of expertise. OECD (2017b) addressed this issue as an area to reform for promoting SME friendly business environment. In the light of given discussion, it has been hypothesized that:

H2b: Non-preferential tax as economic regulatory barriers has a negative influence on Bangladeshi SME participation in international trade.

2.3.3 Inflation

Inflation or increase in the price level affects SMEs planning both for domestic and international market. According to Ghauri and Kirpalani (2015), SMEs need to adjust the internationalisation plans due to changes in market conditions, including inflation, price fluctuation, and changes in supply and demand. SMEs, particularly in the manufacturing sector, face severe obstacle due to price increases because of their limited capacity and weaker position in accessing raw materials. Hurley (2011) reported that small firms are affected more by the inflationary impact on cost because they have limited bargaining ability with both suppliers and customers. Inflationary environment leads SMEs to the most vulnerable position, as they have no plans to face the inflationary fluctuation (Gough 2017). SMEs in Bangladesh face worse situation with its average inflation rate of 6.59% from 1994 until 2017. Considering the above discussion, the present paper proposes the following hypothesis:

H2c: Higher inflation as economic regulatory barriers has a negative influence on Bangladeshi SMEs' participation in international trade.

2.3.4 Foreign exchange risk

Another source of international trade barrier is the risk associated with foreign exchange. Roy, Sekhar, and Vyas (2016) found that SMEs in India face procedural and currency barriers as highest obstacle for SMEs in their involvement in internationalisation. Even in the UK in 2016, SMEs pointed that potential currency fluctuations over the next six months could prove to be a significant barrier going into 2017 (Gough 2016). As each country has its own currency, therefore risk related to foreign exchange is country specific. As a result, this issue was addressed by many country-specific studies (e.g. Al-Hyari, Al-Weshah, and Al-nasour 2012; Dusoye, Mahadeo, and Rogbeer 2013; Lakew and Chiloane-Tsoka 2015). Therefore, this paper proposes a foreign exchange risk as a function of economic regulatory barrier to entering foreign market.

H2d: Risk related to foreign exchange as economic regulatory barriers has a negative influence on Bangladeshi SMEs' participation in international trade.

3. RESEARCH METHODOLOGY

Despite benefits and opportunities that SMEs can exert from participation in international markets, SME involvement in trade remains relatively limited (WTO 2016). This holds true for Bangladeshi SMEs as well (Mendy and Rahman, 2019; Rahman and Mendy, 2019; Rahman, Billah and Hack-Polay, 2019). The ITC's report from 2017 notes that Bangladesh has unrealised potential to increase exports as it has diversification opportunities in processes food, wood industry, such as wood marquetry, ornaments of wood and prepared and processed pineapples. Therefore, it is important to identify what hinders Bangladeshi SMEs during the process of internationalisation. To investigate the regulatory barriers to internationalisation, a reflective hierarchical model approach was employed. An empirically testable theory had also been developed and tested. Primary data had been collected through survey to measure casual network relationship (Jenkins 1985) among the barriers that Bangladeshi SMEs face at the time of entering foreign markets. Instead of using telephone, e-mail or online survey, data for this research has been collected through postal survey to maximize the response rate (Malhotra 2008).

For data collection purpose, four major cities (Dhaka, Khulna, Chittagong and Khulna) of Bangladesh were targeted. The period of data collection was from July 2011 to September 2011. SMEs participating in international business were taken into consideration to define the population for this research. Using a cluster-sampling technique, 250 questionnaires were distributed to each division. As the population of this study is concentrated over a wide area, area wise cluster sampling was used in this study. This sampling strategy also ensures the representation of different areas of the economy. Internationally active SMEs were selected from each villages and wards from each division. A systematic random sampling technique was followed to ensure the equal chances of being selected for each SME located in a chosen villages and wards of each division. A total of 1,000 questionnaires were distributed among four divisions and 219 responses were received. Of 219 completed questionnaires, 212 were acceptable as seven questionnaires were unsuitable due to excessive missing data.

[Insert Table 1]

As shown in Table 1, out of 212 respondents, percentage of male and female participants were 68.1% and 32.9% respectively, which reflects the diversity among respondents. Among the participated SMEs, 13.9% are operating in the primary sector, 51.4% in the manufacturing and 34.7% in the service sector. Participation from each division level shows that percentages of firms are from Dhaka, Khulna, Chittagong and Khulna were 28.5% 25.8%, 22.1%, and 23.6% accordingly. Concerning a type of business, 28.9% are sole traders, 21.4% are partnership businesses, 9.1% are family businesses, 6.9% are co-operatives and 33.7% are private limited companies.

All items in the questionnaire were identified from a systematic review of previous researches in this domain. Likert-scale (five point) was used to elicit responses on each item. Structured questionnaire used in this research were finalised based on the findings of a pre-test. Both SME owners (20 participants) and academics (5 participants) were targeted for the pre-test to check the suitability and appropriateness of the questionnaire.

3.1 Hierarchical reflective model

Composite and reflective measurements are combined to form a hierarchical construct for capturing the overall reflections in the underlying latent variable (Jarvis, MacKenzie, and Podsakoff 2003; Petter, Straub, and Rai 2007; Rahman et al. 2017). Use of hierarchical construct provides a nonparametric method for analyzing factorially designed survey data (Farrelly 2017) as well as reduces a model complexity and increases theoretical discretion (Akter, Rajasekera, and Rahman 2010).

Jarvis, MacKenzie, and Podsakoff (2003) argued that in a reflective model, covariation among the measures is caused by and reflects variations in the underlying latent factor. Taking this exploration into account, this paper specifies regulatory barriers that Bangladeshi SMEs face in entering foreign markets as a reflective hierarchical model composed of two reflective constructs – *administrative regulatory barriers and economic regulatory barriers* of internationalisation (see Figure 1).

[Insert Figure 1]

Finally, all of the constructs of the model reflect the overall regulatory barriers Bangladeshi SMEs face in entering international markets. It is assumed that in a reflective construct two measures are strongly correlated (Bollen and Lennox 1991). This finding is consistent with Jarvis, MacKenzie, and Podsakoff (2003) and Akter, Rajasekera, and Rahman (2010), as they have stated that reflective indicators of latent construct should be internally consistent. Another reason of using a reflective model in this research is to improve construct validity without trading off the content validity (Petter, Straub, and Rai 2007; Wetzels, Schroder, and Oppen 2009).

As shown in Figure 2 below, the reflective model in this research is a second-order reflective model. The first-order level of the model encompasses *administrative regulatory barriers* and *economic regulatory barriers*, composed with corresponding indicators; mentioned as MVs (manifest variables). At the second-order level, regulatory barriers to internationalisation facing by the Bangladeshi SMEs are executed in a hierarchical reflective model. The second-order construct combines eight MVs (four + four) of two first-order constructs.

[Insert Figure 2]

Table 2 depicts the equation of estimating the hierarchical reflective models on regulatory barriers. In the first-order model, y_i represents the first-order model MVs, η_j represents latent variable, Δ_y represents factor loadings and ε_i represents error term. The equation of the second-order model specifies the first-order factors (η_j) in terms of the second-order latent variables (ζ_k) and error (ζ_j) for the first-order factor and second-order latent variable loadings (I).

[Insert Table 2]

PLS path modeling is a suitable approach for models with hierarchical constructs (Akter, Rajasekera, and Rahman 2010; Wetzels, Schroder, and Oppen 2009). This study

specifies regulatory barriers by applying a higher order reflective model, including more than one dimension and more than one indicator. As a result, this paper avoids the limitations of the structural equation modeling such as limitation of sample size, sample distribution, and measurement level (Rahman et al. 2017; Wetzels, Schroder, and Oppen 2009). Considering this evidence, Partial Least Square (PLS) method was applied in this paper to evaluate the regulatory barriers facing by the Bangladeshi SMEs for participating in international business.

3.2 PLS-SEM results

This study investigates regulatory barriers and represents the findings through a three-pronged approach. The first step involves identification and evaluation of the model measurements. The second step involves evaluating the model. Finally, at the third level, the relationships in the model are tested. According to Akter, Rajasekera, and Rahman (2010), this three-step approach of presenting findings safeguard the validity and reliability of the latent variables before concluding on hypothesized relationships.

Scrutinizing the measurement model

In this paper, PLS graph 3.0, proposed by Wetzels, Schroder, and Oppen (2009), has been used to assess the regulatory barriers that are holding back Bangladeshi SMEs to participate in the foreign markets. To investigate the inside approximation, PLS graph 3.0 was used by applying the hierarchical model with PLS path modeling with a path weighting scheme as suggested by Akter, Rajasekera, and Rahman (2010). A non-parametric bootstrapping technique (Wetzels, Schroder, and Oppen 2009) was used and the standard errors of the estimates were obtained using 500 replications. This paper has also used the repeated indicators approach to estimate the higher-order latent variables as applied in Akter, Rajasekera, and Rahman (2010). As a result, the second-order factor (overall regulatory barriers facing by the Bangladeshi SMEs) is measured without changing the direction of the indicators (MVs) of the first-order factors (*administrative* and *economic regulatory barriers*).

Following the PLS path modeling, a confirmatory factor analysis is conducted to test the model and assess the reliability and validity as instructed by Wetzels, Schroder,

and Oppen (2009). Based on the analysis, it is shown that each item loading is higher than 0.70, which is significant at the 1% level ($p < 0.01$) (as shown in Table 3). Additionally, the composite reliability (CR), Cronbach's α (CA) and average variance extracted (AVE) are used to measure the reliability of the scale (Akter, Rajasekera, and Rahman 2010).

[Insert Table 3]

Table 3 shows that the values for CR and CA on the *administrative* and *economic* regulatory barriers are more than the threshold level of 0.70 (Hulland 1999; Rahman et al. 2017), which validates the scale consistency of each item. Moreover, AVE (shown in Table 3) for both administrative and economic regulatory barriers is also well above the modest threshold point of 0.50 (Fornell and Bookstein 1982), which also indicates that each construct captures adequate variance from its items and all the constructs are conceptually distinct (Rahman et al. 2017). These findings ensure the convergent validity of all the scales used in the model.

The convergence validity (Table 3), depending on the average variance extracted (AVE) was above the recommended value of 0.5 for all construct which shows the explaining capability of all the indicators of the latent constructs. Finally, the values of the square root of AVE confirm the discriminant validity of the model (Akter, Rajasekera, and Rahman 2010).

3.2.1 Evaluation of higher order model

The parameters of regulatory barriers that affect internationalisation of Bangladeshi SMEs are presented in a second-order hierarchical reflective model as shown in Figure 2. The *overall regulatory barriers* considered as second-order constructs are reflected in first-order constructs. The extent of explained variances of second-order construct as reflected in first-order constructs is *administrative regulatory barriers* (88%) and *economic regulatory barriers* (83%). All path coefficients (in Table 3) from the second-order (*overall regulatory barriers*) to the first-order (*administrative regulatory barriers* and *economic regulatory barriers*) are significant at the 1% level ($p < 0.01$). Accordingly, the evidence of

reliable higher order reflective model is confirmed from the CR and AVE values. Table 3 shows that the CR and AVE of the first-order constructs are more than their cut-off levels 0.70 and 0.50 respectively.

3.2.2 Assessment of structural model and hypotheses testing

To measure the validity of the structural model, the relationship between *overall regulatory barriers* (second-order construct) and its sub-dimensions, i.e. *administrative* and *economic* regulatory barriers (first-order constructs) has been developed (as shown in Figure 3). Results in Table 5 show a standardized β of 0.939 and 0.915 accordingly and these results indicate a strong interdependence between those variables. Results (Tables 4 and 5) show that all path coefficients are significant at the 1% level ($p < 0.01$). Further, overall findings support all eight hypotheses (see Table 5). This result indicates the importance of regulatory barriers for the internationalisation of SMEs in emerging markets.

[Insert Figure 3]

[Insert Table 4]

[Insert Table 5]

4. SUMMARY OF FINDINGS

The main objective of this paper is to identify regulatory barriers that Bangladeshi SMEs are facing when entering foreign markets. In this regard, the paper aims to identify key regulatory barriers by developing and validating a higher order reflective hierarchical model of barriers faced by SMEs in Bangladesh. PLS path modeling is used to assess the barriers in a hierarchical model as this technique better explains the complex relationships among variables than traditional regression analysis (Akter, Rajasekera, and Rahman 2010, Rahman et al. 2017). By categorizing eight indicators of regulatory barriers into two dimensions (*administrative regulatory* and *economic regulatory*), this paper aims to enrich our knowledge about the regulatory barriers faced by SMEs when entering international markets. In addition, findings from our paper are consistent with previous studies (e.g. APEC 2015; Narayanan 2015; Serrano and Romero 2014; WTO 2016), focusing on

identifying barriers to SME internationalisation particularly in developing countries. As this paper provides a ranking of the regulatory barriers through a *hierarchical reflective model*, it strengthens all the constructs conceptualized in previous studies. Findings show that *administrative regulatory barriers* explain 88% of the variance of overall regulatory barriers whereas 83% variances of the regulatory barriers are explained by the *economic regulatory barriers* (see Figure 3). Therefore, it can be said that within the regulatory barriers, *administrative regulatory barriers* (barriers related to administrative activities facilitating SME internationalisation, i.e. administrative procedure, legal support, corruption etc.) seem to be more significant as barriers to entering international market for SMEs in Bangladesh. However, equal attention should be given to both dimensions of regulatory barriers, as the difference in magnitude of their impacts is very small.

This study provides empirical findings based on the data collected from SMEs in Bangladesh by developing a second-order reflective hierarchical model with the application of PLS path-modeling technique. Structural properties as well as measurement validity and reliability of the research model are confirmed by the application of repeated indicators (Wold 1985). Moreover, PLS modeling in the research model has successfully shifted the individual component of regulatory barriers of internationalisation to the overall regulatory barriers (Akter, Rajasekera, and Rahman 2010; Wold 1985). The model predicted *administrative regulatory barriers* as the more influential barriers to internationalisation for SMEs in Bangladesh.

5. CONCLUSION

By developing a higher-order reflective model and applying the PLS path modeling, this study identifies major barriers faced by Bangladeshi SMEs in participating in international markets. The second-order hierarchical model clearly distinguished regulatory barriers into two dimensions - *administrative* and *economic* - by indicating a significant reflection of both dimensions on overall regulatory barriers. All the eight hypotheses formulated in this study based on the literature are supported by the empirical findings (see Table 5). As studies on regulatory barriers should be country- specific (Novikov 2014) and there are no previous studies on regulatory barriers to internationalisation facing Bangladeshi SMEs, findings of this study will fill in the gaps in

this context. This paper also provides a step forward by providing conceptual clarity and severity of regulatory barriers that SMEs from emerging economies are facing when entering foreign markets.

5.1 Implications

This study extends our knowledge about salient regulatory obstacles to involve in international business particularly for SMEs in emerging economies. There are some support services to encourage entrepreneurship development (St-Jean, Radu-Lefebvre, and Mathieu 2018). As noted in WTO (2016), if policymakers concentrate on easing regulatory barriers and opportunities are given for entering a foreign market, SMEs tend to respond more swiftly and flexibly than large firms and can play a vital role in creating new exports. Regarding this, findings from this study could be useful for Bangladeshi policy makers, as paper empirically tested the possible components of the barriers related to the regulatory environment.

This study has a theoretical implication in that the model developed here serves as an extension of how to combine institutions, entrepreneurship, internationalisation and small business management to an area where it has not been examined before – i.e. barriers of SMEs' internationalisation. For theoretical extension, this study followed Amankwah-Amoah, Danso & Adomako (2019).

In addition, barriers related to regulatory environment have been categorized in two dimensions: *administrative regulatory* and *economic regulatory* (by using PLS path model) based on their explanatory power. The empirical findings predict the administrative regulatory barriers as foremost compared to barriers related to economic regulations in Bangladesh. Due to the dominating effect of administrative regulatory barriers on holding back of SMEs to grab the potential of participating in international business, a priority should be given to *administrative regulatory barriers* due to resource limitations, though the magnitude of both dimensions of regulatory barriers is relatively very small. PLS path model used in this research also provides a ranking according to explanatory power of individual components of regulatory barriers. Therefore, based on the severity of barriers, government and also non-government organizations can allocate their resources and give

prioritized concentration to eradicate the regulatory barriers to entering foreign markets. This will be an effective strategy as government and other voluntary trade facilitating organizations have limited time and strategic resources.

5.2 Limitations and suggestions for future research

The present study should be considered along with its worth noting limitations. Firstly, the scope of this study was limited to a specific domain of SME internationalisation barriers (regulatory barriers) and to a specific context (an emerging country). Therefore, the findings from this study should not be generalized to other scopes (i.e. social and/ or technological barriers) or in other contexts (i.e. a developed country). Secondly, data used in this study was cross-sectional and this method suffers from some common variance limitations (Straub, Boudreau, and Galen 2004). In this regard, a future research could be conducted by using longitudinal data. Finally, using covariance-based SEM and components-based SEM or PLS path modeling as complementary methods (Wetzels, Schroder, and Oppen 2009), future research could also deepen our understanding of regulatory barriers under various research contexts (i.e. increasing sample size, including more MVs, in another country in emerging economy). In addition, a refined understanding of the relationships could be obtained by using a mix of formative and reflective constructs (Wetzels, Schroder, and Oppen 2009). Finally, future research could also look into internationalisation and capacity building (Shams, 2016) and entrepreneurial co-creation (Shams and Kaufmann, 2016).

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Table 1: Demographic Profiles of Respondents

Characteristics	Category	%	Characteristics	Category	%
Gender	Male	68.10	Sector	Primary	13.90
	Female	32.90		Manufacturing	51.40
Area	Dhaka	28.50	Business Type	Service	34.70
	Chittagong	25.80		Sole trader	28.90
	Rajshahi	22.10		Partnership	21.40
	Khulna	23.60		Family	09.10
				Co-operative	06.90
			Private Ltd	33.70	

Table 2: Estimation of the Regulatory Barriers

First Order	Second Order
$y_i = \Delta_y \cdot \eta_j + \varepsilon_i$	$\eta_j = \Gamma \cdot \xi_k + \zeta_j$
y_i = manifest variables	η_j = first order factors (e.g. administrative regulatory)
Δ_y = loadings of first order latent variables	Γ = loadings of second order latent variables
η_j = first order latent variables (administrative regulatory and economic regulatory)	ξ_k = second order latent variables (e.g. legal procedural barrier)
ε_i = measurement error of manifest variables	ζ_j = measurement error of first order factors

Table 3: Psychometric properties for first order constructs

Constructs	Items summary	Loadings	CR	CA	rho_A	AVE
Administrative (H1)	Political instability	0.952	0.944	0.920	0.933	0.811
	Legal procedural barriers	0.958				
	Corruption	0.914				
	Inadequate legal support	0.763				
Economic (H2)	Non-preferential custom duty	0.803	0.900	0.852	0.855	0.693
	Non-preferential tax	0.863				
	Higher inflation	0.826				
	Foreign exchange risk	0.838				

Table 4: Analysis of Structural Model Path Coefficients (Mean, STDEV, t-values)

	Original sample coefficient	Sample mean coefficient	Standard deviation (STDEV)	p-values	t-statistics
Overall Barriers -> Administrative	0.939	0.939	0.010	0.000	96.097
Overall Barriers -> Economic	0.915	0.914	0.016	0.000	56.367

Table 5: Hypotheses testing results

Hypothesis	Path coefficient	t-value	Conclusion
H1a: Political instability as administrative regulatory barriers has negative impact on Bangladeshi SMEs' participation in international trade.	0.952	129.825	Supported
H1b: Legal procedural systems as administrative regulatory barriers have negative impact on Bangladeshi SMEs' participation in international trade.	0.958	150.032	Supported
H1c: Corruption as administrative regulatory barriers has negative impact on Bangladeshi SMEs' participation in international trade.	0.914	60.368	Supported
H1d: Inadequate legal supports as administrative regulatory barriers have negative impact on Bangladeshi SMEs' participation in international trade.	0.763	19.455	Supported
H2a: Non-preferential custom duty as economic regulatory barriers has influence on Bangladeshi SMEs' participation in international trade.	0.803	23.811	Supported
H2b: Non-preferential tax as economic regulatory barriers has influence on Bangladeshi SMEs' participation in international trade.	0.863	32.342	Supported
H2c: Higher inflation as economic regulatory barriers has influence on Bangladeshi SMEs' participation in international trade.	0.826	30.299	Supported
H2d: Risk related to foreign exchange as economic regulatory barriers has influence on Bangladeshi SMEs' participation in international trade.	0.838	35.236	Supported

Figure 1: Hypotheses on regulatory barriers to SME internationalisation in developing countries

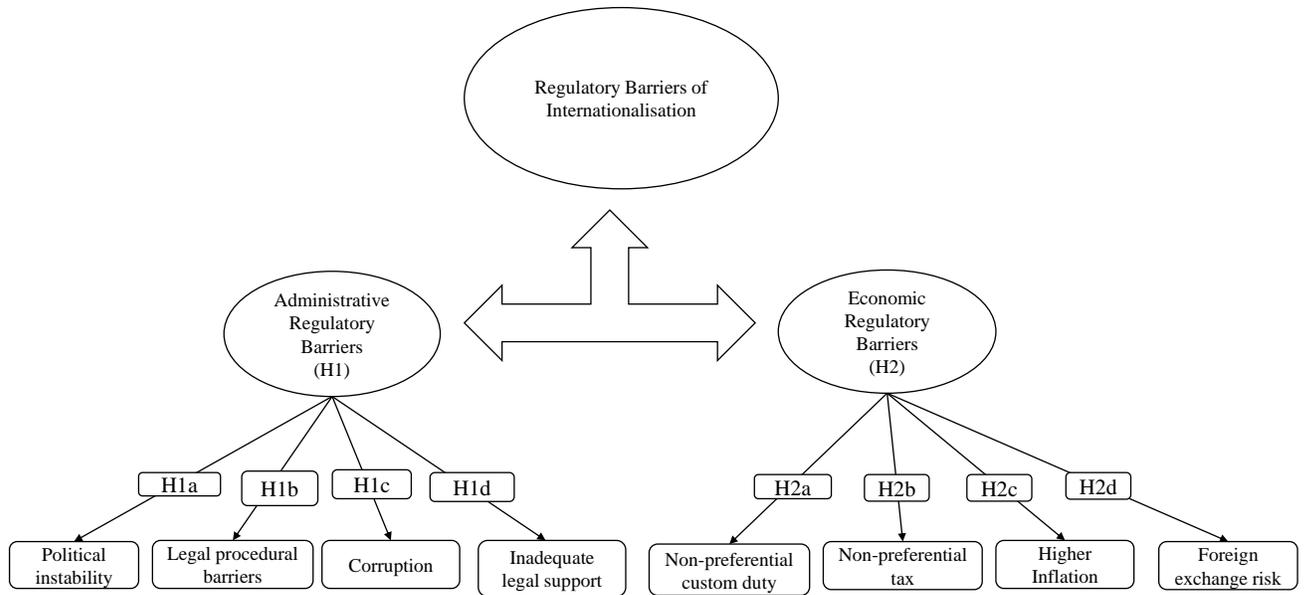


Figure 2: Regulatory barriers on entering into foreign markets for Bangladeshi SMEs as a Hierarchical Reflective Model

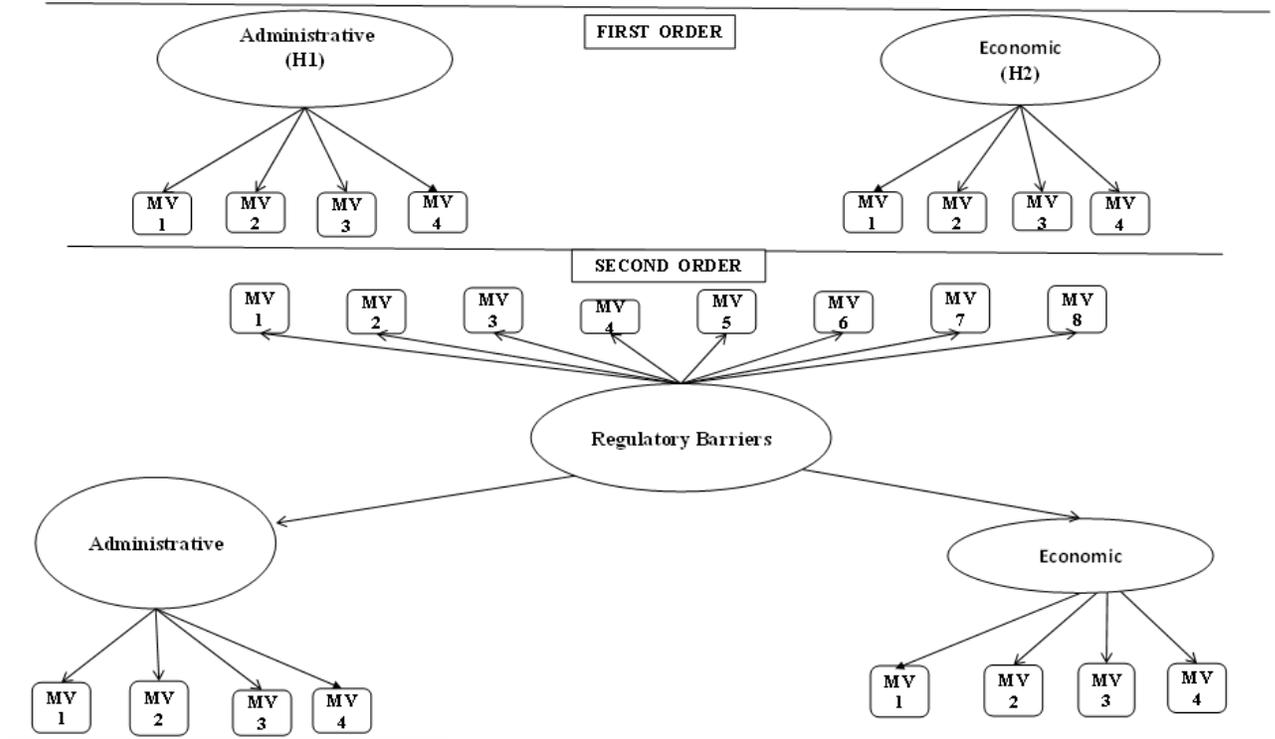


Figure 3: Main loadings of the model

