Competitive intensity as a moderator of trust–commitment relationships and of their linkages with export performance

Jalal Ahamed, School of Business and Economics, UiT –the arctic university of Norway

Abstract:

The purpose of the study is to provide new insights into the links between trust–commitment, trust–export performance and commitment–export performance by examining whether competitive intensity moderates the relationships. 185 survey responses obtained from Bangladeshi readymade garments exporters was used. The dataset was analysed in WarpPLS 3.0. Our findings suggest that competitive intensity has a strong moderating effect on trust–commitment and commitment–export performance relationships. Furthermore, in congruence with previous researches, this study confirms the existence of strong positive relationships between trust–commitment, trust–export performance and commitment–export performance. The study has implications for export marketing managers and researchers with respect to managing cross-border export–import relationships categorised by trust, commitment and export performance.

Keywords: PLS, moderation, readymade garments, Bangladesh
Introduction

Over the last 35 years, especially after the introduction of the MFA (multi-fibre arrangement) quota system, the world has witnessed an exponential growth of the number of readymade garment manufacturers. This industry is characterised by high competitive intensity, especially after the post-MFA era (Adhikari and Yamamoto, 2008, p. 3). Competitive intensity is defined as the reflecting on the behaviour, resource availability and the ability to differentiate the firm from its competitors (Singh, 2004, p. 85). Very low entry barriers, where entry does not require a huge capital outlay and factories can be set up that employ workers with relatively low skills, is the major reason for having such a high level of competition within the industry (Adhikari and Yamamoto, 2008, p. 3). Competition in the garment industries happens not only within the country but also across borders. In the case of cross-border export–import relationships, the trust and commitment of the trading partners plays a crucial role. Furthermore, Ang (2008) and Wu et al. (2012) have argued that firms facing a high competitive intensity have a greater desire for collaboration, and trust and commitment are the key issues in cross-border collaboration.

Competitive intensity is also one of the important determinants of performance and of the strategic choices of the firm.

Research to date has focused exclusively on the direct links between the relationship of trust–commitment and export performance (Morgan and Hunt, 1994; Ambler et al., 1999; Styles et al., 2008; Bloemer et al., 2013; Pinho, 2012). Competitive intensity is also used as a recognisable moderating variable (Auh and Menguc, 2005; Chan et al., 2012). However, to the best of our knowledge very less attention has been paid to uncovering the moderating effect of competitive intensity on those links of trust, commitment and export performance. Because firms act differently in different environmental conditions, as Kohli and Jaworski (1990) addressed, in a low competitive market customers are ‘stuck’, while in a high competitive market the customers are free to choose alternatives. It is assumable that the firms who are more responsive to the market and competitive intensity are expected to manage inter-firm relationships efficiently (Zhao and Cavusgil, 2006). The purpose of this study is to bridge this research gap. Specifically, we have extended the previous research by investigating whether competitive intensity moderates the trust–commitment, trust–export performance and commitment–export performance relationships in the exporting context of a developing country. The expectations of this article are
that in an intensified competitive environment the effect of trust on commitment will be less, the same is for the effect of commitment on export performance and the effect of trust on performance.

Evidence of the moderating impact of competitive intensity on the trust–commitment, commitment–export performance and trust–export performance relationships is sought; this would be a significant contribution to the literature because previous studies have not explored how differences in competitive intensity might impact on the trust–commitment–export performance relationships. In sum, there are two key benefits to be gained from the research reported in this study. First, the findings will shed new light on the trust–commitment and export performance linkage. Second, by identifying the moderating effect of competitive intensity, the study can be helpful to inform better export practice and management of export–import relationships based on trust–commitment.

The paper is organised as follows: first, we provide a synopsis of the clothing industry exports and the Bangladeshi readymade garments (RMG) sector; this is followed by the theoretical background and hypotheses for the study. The research methodology is then presented, along with research measurements and analysis tools. This is followed by the data analysis and results section. Finally, the discussion, conclusions, implications and research limitations are presented at the end of the paper.

**State of world clothing industry exports and overview of Bangladeshi RMG sector**

In 2011, the world exports for the clothing industry stood at US$412 billion (World Trade Organization, International Trade Statistics, available at: [www.wto.org/statistics](http://www.wto.org/statistics)), of which China exported US$153.77 and the EU exported US$116.24 billion, which are 37.32% and 28.21% of the world exports respectively, securing the first and second positions in exporting. The following Figure 1 shows the major clothing exporters (excluding China and the European Union) in the world and their export quantity in 2011.
Figure 1. Clothing exports of top ten exporters in 2011 [excluding China and EU].


With growth pioneered by ‘Desh Limited’ in 1979, over the last three decades Bangladesh has ranked among the top RMG exporting nations in the world (see Table 1). The RMG industry is the main exporting sector for Bangladesh, contributing about 80% of the total export earnings of the country. In 1977-78 there were only nine export oriented RMG units in Bangladesh compared to about 5000 factories in 2011, according to the members list of the Bangladesh Garments Manufacturers and Exporters Association (BGMEA). The US and the European Union are the two major destinations for Bangladeshi RMG products, accounting for more than 90% of the country’s total export earnings from garment exports.
Table 1. Readymade garment exports of Bangladesh (2004–2009)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Exports</th>
<th>RMG Export in millions taka</th>
<th>Share of RMG % of total exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In millions taka</td>
<td>In millions US dollars</td>
<td></td>
</tr>
<tr>
<td>2004-05</td>
<td>532, 831</td>
<td>8,679</td>
<td>398, 149</td>
</tr>
<tr>
<td>2005-06</td>
<td>691, 950</td>
<td>10,315</td>
<td>478, 226</td>
</tr>
<tr>
<td>2006-07</td>
<td>850, 309</td>
<td>12,334</td>
<td>633, 430</td>
</tr>
<tr>
<td>2007-08</td>
<td>985, 931</td>
<td>14,372</td>
<td>734, 651</td>
</tr>
<tr>
<td>2008-09</td>
<td>1,074, 992</td>
<td>15,627</td>
<td>849, 673</td>
</tr>
</tbody>
</table>


Theoretical background and hypothesis development

Trust, commitment and export performance

Trust and commitment are the cornerstones for establishing, developing and maintaining successful cooperation between parties in a relationship (Morgan and Hunt, 1994). Trust, which is one of the main prerequisites for inter-organisational and cooperative interactions, is one of the most interesting research concepts to have emerged over the last couple of decades (Zaheer and Venkatraman, 1995; Zaheer et al., 1998). By defining trust as the confidence in a relationship partner’s reliability and integrity, Morgan and Hunt (1994) posited that trust is a major determinant of commitment (key mediating variable); similarly, Ganesan (1994) advocated that long-term orientation is affected by the extent to which customers and vendors trust their ‘channel partners’. Morgan and Hunt (1994) argued that trust prevents partners from working opportunistically and encourages them to consider the long-term expected benefits over short-term attractive ones. Trust is a prerequisite for succeeding in an international export–import context, as both the parties (exporter and importer) need to have confidence in each other’s ability. Parallel to previous studies, this study defines commitment as the enduring desire of firms to maintain a valued relationship (Moorman et al., 1993; Morgan and Hunt, 1994; Mysen and Svensson, 2010). However, we took the exporter’s perspective on commitment, and conceptualised it as the exporter’s desire to secure the relationship and maximise profit (Lages et
Several scholars have identified that trust is a precursor to commitment and that they have a positive and significant association (Caceres and Paparoidamis, 2007; Wu et al., 2012).

Export performance is the outcome of a firm’s activities in export markets (Ling-yee and Ogunmokun, 2001). In this study we have conceptualised export performance in terms of financial export performance, strategic export performance and satisfaction with the export as proposed by (Zou et al., 1998). Empirical studies have extensively supported the positive influence of trust and commitment on export performance. Trust constrains the partners from working opportunistically and is a possible source of reductions in transaction costs; trust also boosts confidence in the exchange partner’s credibility and ability, which upgrades the innovation and learning process in the relationship and leads to improved export performance (Morgan and Hunt, 1994; Sako, 2006; Zur et al., 2012). Commitment to maintaining a long-term valued relationship helps both the parties to integrate operational and strategic actions to improve their mutual performance (Styles et al., 2008); furthermore, higher export commitment from the firm’s management side facilitates the exploration of export market opportunities and the pursuit of effective export strategies, which ultimately improve export performance (Shamsuddoha and Ali, 2006). Thus, based on the aforesaid discussion we hypothesised:

**H1:** Trust affects commitment positively.

**H2:** Trust affects export performance positively.

**H3:** Commitment affects export performance positively.

**Competitive intensity**

Competitive intensity is ‘a situation where competition is fierce due to the presence of numerous competitors and the lack of opportunities for further growth’ (Chan et al., 2012, p. 624). Marketing scholars have acknowledged that firms act differently in different environmental conditions (Jaworski and Kohli, 1993; Ganesan, 1994; Zhao and Tamer Cavusgil, 2006). Taking the view of Jaworski and Kohli (1993), several researchers hypothesised the moderating role of competitive intensity mostly between the market orientation and firm’s performance.
Schmitz and Wagner (2007) found that competitive intensity moderated the relationship between satisfaction and trust negatively; however, although they hypothesised a negative moderating effect on the satisfaction–commitment relationship they did not find any significant result in support of this hypothesis. Marketing scholars have also identified that competitive intensity affects export performance negatively (Madsen, 1989; Ambler et al., 1999). In low competitive intensity markets’ preferences are limited. By contrast, in high intensity competition the importers are freer to change their exporters; in other words, they have the freedom to prefer and choose firms (Zhao and Tamer Cavusgil, 2006; Chan et al., 2012). Thus, it is assumed that in the presence of high competitive intensity, both the exporter and importer will try to act opportunistically (Mysen et al., 2011), which ultimately deters the trust–commitment relationship.

Analogous to various researchers in the earlier section of this study, we have hypothesised the positive effect of trust on commitment (H1), trust on export performance (H2), commitment on export performance (H3) and that competitive intensity adversely affects trust, commitment and export performance; accordingly this study hypotheses that competitive intensity negatively moderates the effects of trust on commitment, of trust on export performance and of commitment on export performance as follows:

**H4:** Competitive intensity moderates negatively the effect of trust on commitment.

**H5:** Competitive intensity moderates negatively the effect of trust on export performance.

**H6:** Competitive intensity moderates negatively the effect of commitment on export performance.
Methodology

Data collection and sample

The research was conducted on the basis of the questionnaire survey responses of Bangladeshi garment exporting firms located in Dhaka City and nearby districts. The sampling frame was formed mainly from the members’ directory of Bangladesh Garment Manufacturers and Exporters Association (BGMEA). Most of the key Bangladeshi readymade garments exporting firms were listed in the directory. A simple random sampling procedure was employed with an intention to collect 500 responses. A reputable Dhaka based survey company was hired for the data collection. A total of 185 responses were collected, of which five were eliminated because of missing values, a net response rate of 36%. Most of the respondents were from merchandising and commercial units (78%) and they had on average about five years of experience with the responding organisation. Since all the variables used in this study were perception-based, they are subject to measurement errors that can bias the results, so in order to minimise this bias we used multiple indicators to measure each variable, as suggested by various scholars (Fornell and Larcker, 1981; Hair et al., 1998; Kock et al., 2009). Since the survey was conducted on a person-to-person basis, the non-response bias was not checked, as recommended by Armstrong and Overton (1977).

Measurement

The measurement scales were developed from the reviewed literature on the construction of the conceptual model. The items were either borrowed or slightly modified from previous research and all items were measured using a Likert scale anchored from 1 (strongly disagree) to 7 (strongly agree; see the Appendix for details of the items). A three-item scale adapted from Lages et al. (2005) was used to measure commitment and a two-item scale adapted from Ganesan (1994) and Zaheer et al. (1998) was used to measure trust. Nine items drawn from Zou et al. (1998) were used to measure export performance. Finally, three items of the scale were borrowed from Mysen and Svensson (2010) to measure competitive intensity.
Data analysis tool

In order to validate the measurement model and the structural relationships in the conceptual model, the variance-based partial least squares (PLS) structural equation modelling (SEM) technique was employed, for which we used the WarpPLS 3.0 software (Kock, 2012). PLS was preferred because of the opportunity it provided to model latent variables with a relatively small sample size, and because the presence of interaction effects does not satisfy the requirements of multivariate normality (Chin, 1998; Chin et al., 2003; Hair et al., 2012). PLS produces loadings between items and constructs and estimates the standardised regression coefficient (beta coefficient) for the paths between constructs.

We assumed the existence of nonlinear relationships in our research model and chose WarpPLS 3.0 because of its capability for testing both linear and nonlinear relationships in an integrative manner (Guo et al., 2011; Kock, 2012). The results of the WarpPLS analysis provided some evidence that suggests a pattern of nonlinear effects; all the relationships among latent variables were shown as ‘warped’ (i.e., nonlinear). Figure 2 provides an example of the existence of nonlinear relationships in the research model.
Data analysis and results

Measurements’ reliability and validity

In order to assess the reliability of the measurements we checked the internal consistency following Bagozzi and Yi’s approach of comparing three consistency indicators as follows: composite reliability (CR), Cronbach’s alpha and average variance extracted (AVE) with a critical threshold (Bagozzi and Yi, 1988; see Table 2).
Table 2. PLS measurement model–construct correlations

<table>
<thead>
<tr>
<th></th>
<th>Competitive intensity</th>
<th>Trust</th>
<th>Commitment</th>
<th>Export performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive intensity</td>
<td><strong>0.81</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>0.42</td>
<td><strong>0.93</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>0.50</td>
<td>0.58</td>
<td><strong>0.83</strong></td>
<td></td>
</tr>
<tr>
<td>Export performance</td>
<td>0.42</td>
<td>0.60</td>
<td>0.75</td>
<td><strong>0.89</strong></td>
</tr>
<tr>
<td>Composite reliability (CR)</td>
<td>0.85</td>
<td>0.93</td>
<td>0.87</td>
<td>0.92</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>0.73</td>
<td>0.84</td>
<td>0.78</td>
<td>0.87</td>
</tr>
<tr>
<td>Average variance extracted</td>
<td>0.65</td>
<td>0.86</td>
<td>0.70</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Note: Square roots of average variance extracted (AVE’s) shown on diagonal of the inter-construct correlations.

Table 2, which contains the internal consistency indicators, shows that all the composite reliability coefficients are greater than the critical value of 0.70 (Nunnally et al., 1967); the Cronbach’s alpha coefficients are above 0.50 (Hair et al., 1998) and AVE is greater than 0.50 (Fornell and Larcker, 1981). Therefore, the reliability of the measurements is demonstrated.

In order to check the validity of the measurements we checked both convergent and divergent validity. Convergent validity refers to the evaluation of the scores for the items that are supposed to measure the same construct (Fornell and Larcker, 1981), and if the items yield similar results then convergent validity is assumed. The item loadings and cross-loadings produced by the WarpPLS software are shown in Table 3, which reveals that items load more inside the construct than outside, which establishes the convergent validity. We assessed divergent validity by following Fornell and Larcker’s criteria by comparing the square roots of average variance extracted (AVE) of the latent variables with all other inter-construct correlations (Fornell and Larcker, 1981), and in Table 2 it shows that the square roots of the AVE of each construct are higher than the inter-construct correlations of the respective construct with others, implying that a satisfactory level of divergent validity was achieved.
Table 3. Item loadings and cross-loadings (factor loadings greater than 0.50 are shown in boldface)

<table>
<thead>
<tr>
<th></th>
<th>COMPETE</th>
<th>Trust</th>
<th>Commitment</th>
<th>Experf</th>
<th>COMPETE * Trust</th>
<th>COMPETE * Commitment</th>
<th>SE</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition 1</td>
<td>0.81</td>
<td>−0.01</td>
<td>−0.14</td>
<td>0.11</td>
<td>−0.69</td>
<td>0.68</td>
<td>0.14</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition 2</td>
<td>0.86</td>
<td>0.06</td>
<td>−0.15</td>
<td>0.22</td>
<td>0.20</td>
<td>−0.25</td>
<td>0.09</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition 3</td>
<td>0.73</td>
<td>−0.06</td>
<td>0.33</td>
<td>−0.38</td>
<td>0.53</td>
<td>−0.46</td>
<td>0.11</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Trust 1</td>
<td>0.06</td>
<td>0.93</td>
<td>−0.14</td>
<td>0.10</td>
<td>−0.17</td>
<td>0.12</td>
<td>0.09</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Trust 2</td>
<td>−0.06</td>
<td>0.93</td>
<td>0.14</td>
<td>−0.10</td>
<td>0.17</td>
<td>−0.12</td>
<td>0.13</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Commitment 1</td>
<td>0.02</td>
<td>−0.09</td>
<td>0.89</td>
<td>0.21</td>
<td>0.18</td>
<td>−0.10</td>
<td>0.10</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Commitment 2</td>
<td>0.01</td>
<td>−0.07</td>
<td>0.88</td>
<td>0.02</td>
<td>−0.07</td>
<td>−0.21</td>
<td>0.15</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Commitment 3</td>
<td>−0.04</td>
<td>0.19</td>
<td>0.73</td>
<td>−0.28</td>
<td>−0.13</td>
<td>0.37</td>
<td>0.08</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>EXPERF Financial</td>
<td>0.04</td>
<td>0.09</td>
<td>−0.21</td>
<td>0.93</td>
<td>−0.01</td>
<td>−0.07</td>
<td>0.08</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>EXPERF Strategic</td>
<td>0.01</td>
<td>−0.26</td>
<td>0.18</td>
<td>0.86</td>
<td>−0.20</td>
<td>0.27</td>
<td>0.07</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>EXPERF Satisfaction</td>
<td>−0.05</td>
<td>0.16</td>
<td>0.05</td>
<td>0.89</td>
<td>0.20</td>
<td>−0.18</td>
<td>0.07</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition1*Trust1</td>
<td>−0.52</td>
<td>0.09</td>
<td>−0.09</td>
<td>0.23</td>
<td>0.56</td>
<td>−0.89</td>
<td>0.17</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition1*Trust2</td>
<td>−0.36</td>
<td>0.45</td>
<td>−0.13</td>
<td>−0.01</td>
<td>0.77</td>
<td>−0.47</td>
<td>0.17</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition2*Trust1</td>
<td>0.05</td>
<td>0.01</td>
<td>−0.35</td>
<td>0.28</td>
<td>0.87</td>
<td>0.07</td>
<td>0.16</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition2*Trust2</td>
<td>0.01</td>
<td>−0.03</td>
<td>−0.18</td>
<td>0.20</td>
<td>0.87</td>
<td>0.44</td>
<td>0.17</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition3*Trust1</td>
<td>0.38</td>
<td>−0.29</td>
<td>0.35</td>
<td>−0.32</td>
<td>0.77</td>
<td>0.17</td>
<td>0.18</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition3*Trust2</td>
<td>0.28</td>
<td>−0.20</td>
<td>0.43</td>
<td>−0.36</td>
<td>0.80</td>
<td>0.36</td>
<td>0.20</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition1*Commitment1</td>
<td>−0.12</td>
<td>−0.10</td>
<td>0.01</td>
<td>0.34</td>
<td>−0.47</td>
<td>0.71</td>
<td>0.11</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition1*Commitment2</td>
<td>0.04</td>
<td>−0.11</td>
<td>−0.08</td>
<td>0.19</td>
<td>−0.14</td>
<td>0.84</td>
<td>0.17</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition1*Commitment3</td>
<td>−0.32</td>
<td>0.18</td>
<td>0.14</td>
<td>−0.04</td>
<td>0.55</td>
<td>0.66</td>
<td>0.10</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition2*Commitment1</td>
<td>−0.01</td>
<td>0.06</td>
<td>−0.18</td>
<td>0.10</td>
<td>−0.29</td>
<td>0.90</td>
<td>0.15</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition2*Commitment2</td>
<td>0.04</td>
<td>−0.03</td>
<td>−0.24</td>
<td>0.16</td>
<td>−0.05</td>
<td>0.93</td>
<td>0.19</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition2*Commitment3</td>
<td>−0.06</td>
<td>0.02</td>
<td>0.07</td>
<td>−0.06</td>
<td>0.14</td>
<td>0.85</td>
<td>0.13</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition3*Commitment1</td>
<td>0.08</td>
<td>0.04</td>
<td>0.06</td>
<td>−0.17</td>
<td>−0.10</td>
<td>0.87</td>
<td>0.16</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition3*Commitment2</td>
<td>0.11</td>
<td>−0.07</td>
<td>−0.04</td>
<td>−0.04</td>
<td>0.09</td>
<td>0.90</td>
<td>0.21</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Competition3*Commitment3</td>
<td>0.14</td>
<td>0.04</td>
<td>0.36</td>
<td>−0.48</td>
<td>0.35</td>
<td>0.80</td>
<td>0.11</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>
Structural relationships and hypotheses testing

We tested the hypotheses and structural relationships in structural equation modelling (SEM) with WarpPLS 3.0 software (Kock, 2012), where the $R^2$ values of the dependent variables represent the predictive power of the theoretical model and standardised path coefficients indicate the strength of the relationships between the independent and dependent variables (Chin, 1998; Guo et al., 2011). In order to test the conceptual model we employed a bootstrapping re-sampling procedure with 500 samples and estimated the significance of paths in the structural model; the results of the analysis are shown in Figure 3.

![Figure 3](image)

**Figure 3.** The research model with variance explained ($R^2$), path coefficient ($\beta$) and p values. N.S. = not significant. $H_1$ to $H_6$= Hypotheses 1-6.
The $R^2$ value of 0.58 indicates that the theoretical model explained a substantial amount of variance in export performance. In addition, 58 per cent of the variance of commitment is accounted for by the model, which indicates that the conceptual model has a satisfactory explanatory power (Guo et al., 2011). We also checked three fit indices and their $p$-values provided by the software: (i) average path coefficient, APC = 0.33, $p < 0.001$; (ii) average $R$-squared, ARS = 0.58, $p < 0.001$ and (iii) average variance inflation factor, AVIF = 2.78. For the model fit indices, it is recommended that $p$-values for the APC and ARS be both lower than 0.05 and the AVIF should be lower than 5; the research model in this study exhibited satisfactory model fit (Kock, 2012).
<table>
<thead>
<tr>
<th>No</th>
<th>Hypotheses</th>
<th>Path coefficient</th>
<th>P value</th>
<th>Standard Errors</th>
<th>Effect size</th>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Trust–commitment</td>
<td>0.42</td>
<td>p &lt; 0.01</td>
<td>0.07</td>
<td>0.27</td>
<td>Yes</td>
</tr>
<tr>
<td>H2</td>
<td>Trust–export performance</td>
<td>0.33</td>
<td>p &lt; 0.01</td>
<td>0.07</td>
<td>0.22</td>
<td>Yes</td>
</tr>
<tr>
<td>H3</td>
<td>Commitment–export performance</td>
<td>0.39</td>
<td>p &lt; 0.01</td>
<td>0.09</td>
<td>0.29</td>
<td>Yes</td>
</tr>
<tr>
<td>H4</td>
<td>Moderating effect of competitive intensity on trust–commitment relationship</td>
<td>−0.45</td>
<td>p &lt; 0.01</td>
<td>0.12</td>
<td>0.31</td>
<td>Yes</td>
</tr>
<tr>
<td>H5</td>
<td>Moderating effect of competitive intensity on trust–export performance relationship</td>
<td>−0.11</td>
<td>p = 0.17</td>
<td>0.11</td>
<td>0.06</td>
<td>No</td>
</tr>
<tr>
<td>H6</td>
<td>Moderating effect of competitive intensity on commitment–export performance relationship</td>
<td>−0.27</td>
<td>p &lt; 0.01</td>
<td>0.11</td>
<td>0.17</td>
<td>Yes</td>
</tr>
</tbody>
</table>

According to Table 4 all hypotheses but H5 (moderating effect of competitive intensity on trust–export performance relationship) are valid at \( p < 0.01 \) level.
Testing the moderating effect

A moderating variable influences the direction and/or strength of the direct effect between the independent variable and the dependent variable (Henseler and Fassott, 2010). In this study, we conceptualised the effects of a moderating variable on three relationships, as postulated in H4, H5 and H6. The tests for the moderation effects are given below.

Moderating effect of competitive intensity on trust–commitment relationship

Competitive intensity has a moderating effect on the relationship between trust and commitment. The path coefficient of the moderating effect is −0.45 at p < 0.01. The path has a negative sign and moderates a significant and positive direct relationship (coefficient 0.42, at p < 0.01); therefore, the relationship between trust and commitment reduces as the values for competition intensity increase. Figure 4 shows the plots for the moderating relationship involving trust, commitment and competitive intensity. The first plot shows the perceived relationship between trust and commitment with low competitive intensity, while the second plot indicates the trust–commitment relationship with high competitive intensity. Since the moderating effect is in a negative direction it will tend to make the coefficient of the direct effect lower. The plots clearly show that with low competitive intensity the effect between trust and commitment is stronger than with high competitive intensity. The effect size of the moderating link is 0.31 (Table 4), which is a strong effect according to Cohen’s (1988) guidelines.
Figure 4. Plots of moderating effect of competitive intensity on trust–commitment relationship (H4).

Moderating effect of competitive intensity on trust–export performance relationship

We also tested the moderating effect of competitive intensity on the trust–export performance relationship. The moderating effect has a path coefficient of −0.11 at p = 0.17; although the p-value is not significant, the direction of the path coefficient is negative, which tells us that the relationship between trust and export performance (path coefficient 0.33, p < 0.01) will go down as the competitive intensity increases. Figure 5 shows the plots for the moderating effect. Furthermore, we checked the magnitude of the effect size according to Cohen (1988); an effect size of 0.06 (Table 4) of the moderating effect on the trust–export performance relationship implies a weak effect.
Figure 5. Plots of moderating effect of competitive intensity on trust–export performance relationship (H5).

**Moderating effect of competitive intensity on commitment – export performance relationship**

The moderating effect of competitive intensity on the commitment–export performance relationship is negative and statistically significant (path coefficient $-0.27$, $p < 0.01$). The direct association between commitment and export performance is positive and significant (path coefficient $0.39$, $p < 0.01$). Since the moderating link has a negative direction and moderates a positive and significant link, it implies that as competitive intensity increases the relationship
between commitment and export performance will reduce; this is shown in Figure 6. The strength of the moderating effect of competitive intensity on the commitment–export performance relationship is strong, according to Cohen’s (1988) guideline (effect size 0.17; see Table 4).

Figure 6. Plots of moderating effect of competitive intensity on commitment–export performance relationship (H6).

Discussion and conclusions

The findings of the study are interesting from a number of perspectives. The study extends the understanding of the trust–commitment–performance framework by investigating the moderating
role of competitive intensity on the framework. The trust–commitment–export performance links (H1, H2 and H3) are positive and significant, as was expected. These findings are in congruence with previous researches (Morgan and Hunt, 1994; Ambler et al., 1999; Lages et al., 2005; Sako, 2006; Shamsuddoha and Ali, 2006; Ural, 2009; Pinho, 2012) and confirm the applicability of trust–commitment for export performance in the context of an emerging country’s export industry. Apart from this, the findings imply that under the conditions of low competitive intensity trust has a stronger impact on commitment, and commitment has a stronger impact on export performance under the conditions of low competitive intensity than under high competitive intensity. This, we believe, puts new light on the trust-commitment theory (Morgan and Hunt, 1994).

The finding with regard to the moderating effect of competitive intensity reveals mixed results. A negative moderating effect of competitive intensity on the trust–commitment and commitment–export performance relationship is found (H4 and H6), which implies that the undermining of trust caused by intensified competition leads firms to adopt a short-term orientation, rather than looking towards a long-term commitment (Wu, 2012) and the enhancement of their export performance. In order to mitigate the negative effect of competitive intensity, the decision makers should focus on long-term mutual benefits. The findings for the moderating effect of competitive intensity on the trust–export performance relationship are not strongly supportive of the hypothesis (H5); although a weak negative effect is found, the p-value of the effect is not significant. The causes might be the complexity inherent in the trust–performance linkage, or simply the data gathered may not be sufficient to support the hypothesis.

This study also has some interesting implications for managers and practitioners. First, besides testing the trust–commitment–export performance links in an emerging country’s exporting context, this study is one of the few studies (Costa e Silva et al., 2012) that have empirically tested the direct effect of trust and commitment on export performance. Understanding the fact that trust and commitment have a strongly positive effect on export performance, managers should ensure that sufficient organisational capabilities are dedicated to nurturing and enhancing trust and commitment in their export–import relationships. The negative moderating effects of
competitive intensity on the trust–commitment–export performance relationships also intensify the necessity to establish and maintain trust–commitment based relationships.

Over the last couple of years the Bangladeshi RMG sector has been undergoing a critical situation. A number of fatal industrial accidents (Manik and Yardley, 2013) and their consequence of withholding the GSP (Generalised System of Preferences) facility by the US government have rocked the RMG sector (Liberto, 2013). For most of the industrial tragedies responsibility goes to poor infrastructure and poor safety measures. Improvement in infrastructure and safety measures is the main concern of EU and US buyers (The Wall Street Journal, 2013). The garments owners argue that if they want to invest in improving infrastructure and safety measures the product cost will be higher, which eventually puts them in trouble in an intensified competitive environment. Common sense is that, if Bangladeshi garments want to continue their export to US and EU, they have to implement standard infrastructure and safety measures. In this study we found the negative moderating effect of competitive intensity on trust-commitment relationships and with their linkage with export performance, Ang (2008) argues that competitive pressure is offset by collaboration; similarly, we are arguing that the negative effect of competitive intensity might be reduced by a higher degree of trust and commitment based export-import relationships. So, if the Bangladeshi garments exporters emphasise establishing and maintaining trust-commitment based relationships with their foreign importers then they will be able to restrain their export performance at a higher level.

The limitations of the study include the use of cross-sectional data, which cannot draw out the causal linkage of the variables; a longitudinal study may be more useful in confirming the linkages and for drawing a solid conclusion (Cadogan et al., 2003). Furthermore, a multi-country and dyadic data set would probably more rigorously test the conceptual model.
Appendix

Measurement items

**Competitive intensity** (Mysen and Svensson, 2010)
- Competition in our industry is aggressive
- One hears of a new competitive move almost everyday
- Price competition is a hallmark of our industry

**Commitment** (Lages *et al*., 2005)
- We believe that over the long run, our relationship with the importer will be profitable
- Maintaining a long-term relationship with this importer is important to us
- We are willing to make sacrifices to help this importer from time to time

**Trust** (Ganesan, 1994; Zaheer *et al*., 1998)
- The importer has been frank in dealing with us
- Our importer is trustworthy

**Export performance** (Zou *et al*., 1998)

*Financial performance*
- Our export to this importer has been very profitable
- The export to this importer has generated a high volume of sales
- The export has achieved rapid growth

*Strategic performance*
- The export has improved our global competitiveness
- The export has strengthened our strategic position
- The export has significantly increased our global market

*Satisfaction with export venture*
- The performance of this export has been very satisfactory
The export has been very successful
The export has fully met our expectations

* All measurement items are anchored as Likert-type scales ranging from (1) strongly disagree to (7) strongly agree.
References


