Export Performance: The Role Of Product Quality And Market Orientation

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Abstract - Exporting among of importance mechanism entry for going international market. Positive export performance provides firms with opportunity to grow and enhance the dynamism in the domestic economy. Accordingly, many of the studies have been conducted to identify the strategy that determine the firm’s export success. In this study, two main strategy that are refer to product quality and market orientation is investigated in determine the export success. This study focused in Electric and Electronic context in Malaysia country. The findings showed that the role of product quality is important in influence the export performance. However, the market orientation is much stronger in influence the export performance. Hence, this study basically increased the knowledge regarding of the factors that affect the export success, especially in Electric and Electronic sector.

Key-Words: - Export Performance, Product Quality, Market Orientation, SEM.

1 Introduction

The grown of worldwide phenomenon, that is, globalization motivate a lot of firms exploring for abroad prospects, and undeniable where exporting is among of the entry mechanism that frequently used by the firm when selling the product internationally. Hence, export performance become the important context as well that gained attention from both academicians and practitioners. Moreover, in related to practitioners, the concept of export performance is significant for managers in relation to their decision on future international commitments [1].

Export performance is defined as the success of export activities done via the firm’s export marketing strategy implementation, which conveyed it in term of firm’s objectives that referring to both strategic and financial achievement [2]. As regards to export marketing strategy, there are a lot of studies that have been conducted in determined the firm’s export success strategy [3][4][5]. However, more study is still needed in this area due to lacking in explaining the strong strategy that able to explain the firm’s export performance successfully. Indeed, there are some study that focused on marketing strategy such as marketing mix strategy and adaptation to determine the success of export performance. However, the findings are still uncertain [6].

Export market orientation (MO) is among of significant key factor that affect export performance [7] [8] [9]. Meanwhile, previous researchers [10] [11] argued that market orientation (MO) required firms to constantly monitor their customers, competitors and inter-functional coordination in order to remain customers valuable perception toward the product. Obviously, in exporter context, an exporter’s performance largely depends on the cooperation and efficiency of the various actors including inter-functional coordination in providing vital support for great performance achievement [12]. Therefore, for the success of export performance, the MO strategy need to be well understood by the firms including it dimensions as well as the factors that affect the MO.

Past researchers [8] [12] emphasised that in ignoring the bias, the formation of factors that affect the export market-oriented behaviour...
should be based on the export level. But still, limited studies have explored the antecedents or factors that affect the export MO. Moreover, the enquiry of either a firm’s market orientation has the same impact on domestic in comparison to international markets still need for further explanation [12].

In relations, export performance in Malaysia as well is among of importance performance that generate value to Malaysia economy. As regard to export performance major sectors, the electric and electronic (E&E) products is the major export, followed by petroleum products, chemicals and chemical products, and palm oil and palm oil-based agriculture. In particular, for the year of 2017, the E&E products obtained strong export support by Asean countries mainly Singapore and other countries such as China; EU markets such as Netherlands, Germany, Belgium, UK, Poland and Hungary; USA; Japan; and, India products [13].

Despite the importance of the manufacturing sectors, the analysis in MPC Productivity Report [13, p. 55] has showed that since 2012 until 2016, the growth of manufacturing sectors is fluctuated with 4.4% (2012), 3.4% (2013), 6.2% (2014), 4.9% (2015) and 4.4% (2016). In fact, the export major sector of E&E products for its yearly growth comparison are fluctuated as well, with 8.1% (2014), 8.5% (2015), 3.5% (2016), and 19.2% (2017) [13] [14] [15].

Hence, the unstable of growth in manufacturing sectors determined that these important sectors need to be closely monitored and managed, in particular for the E&E sectors. Even in 2018, Malaysia's gross exports were expected to climb 8.4 per cent this year, slowing from 2017’s [16]. Also, based on Department of Statistics Malaysia explained that the Malaysia economy grew by 4.5% in the second quarter of 2018, slower than the first quarter growth which is 5.4%. Hence, examination toward the core strategies that able to effect export performance is obviously important. Therefore, this study is aimed to investigate the role of firm’s MO and it’s antecedent in affect export performance. Particularly this study is:

- to investigate the role of product quality toward export performance
- to investigate the role of MO toward export performance
- to investigate to role of product quality toward firm’s MO
- to investigate the mediator effect of MO in the relationship between product quality and export performance

2 Literature Review

Export performance has defined as the objective performance that covers the composite outcome of a firm’s international sales [17]. Means, export performance is the export sales, profit and export growth. In addition to objective performance, export performance also is defined in the context of subjective performance. Previous study [18] pointed out that subjective data is such as personal experience of the respondent, customer satisfaction, customer loyalty, customer perception is significant when objective information, for example, revenue, profit, and market share is not accessible or available. Hence, for assessing export performance the focus is not just towards economically (objective performance) but also strategically (subjective performance) [19][20].

Export is among of the critical sources of profits in every country [21]. Even, there are countries that the economy is rely on just one product, the vital source of international exchange and profits would be the export performance. Indeed, exporting is the remarkable way to overcome economic problems. An access to international markets will provide the chances to take advantage of gaining economies of scale.

Hence, research on export perspective is vital because it is considered as a method to raise corporate growth, enhance competitive advantage, and ensure company endurance in a dynamic and competitive marketplace [22][23].
In relation, the identification of export performance antecedents for its improvement is among of most important factors balancing between countries' economy and global economy [24][25].

2.1 Product Quality and Export Performance

There are several strategies and factors which important in determined the export performance discussed by past authors. Among of importance is product quality. In the survey of New Zealand export manufacturers, they have found that product quality is significantly affect the export performance [19]. According to them, quality that reflect the company’s competencies is among the great factor that able to influence the performance including the export performance.

Product quality strategy play a vital role in develop and enhance export performance [26]. In developing economies, [27] argued that higher productivity firms in comparison to the low productivity firms in the same industries would gain more export opportunities by improving product quality. In addition, in trade liberalization context, firms are likely to invest in adopting new technologies with expectation of quality requirements before choosing to export [28]. Indeed, [29] in their study on China’s agri-food export context, they found that the exporters with great product quality will capture more demand and opportunities in world market. Consequently, their firms able to improve their profits performance in export context. Thus, due to significant of product quality, this study will further investigate the role of product quality as antecedent in the context of Malaysia export performance. Therefore,

H1: Product quality significantly affect export performance

2.2 Product Quality and Market Orientation

Product quality has emerged as one of the key competitive variables of marketing strategy [30]. Product quality is the assurance of customer requirements, on all relevant dimensions like performance, reliability, and durability [31]. In relations, the importance of product quality as indicator of the effectiveness of a market-oriented campaign is postulated by previous study [32]. Market orientation refers to as, “monitoring and responding to the marketing environment effectively” [33, p.140]. They further explained that past studies have described the role of quality context (such as product quality) and marketing orientation is relation to organizational performance. However, the relationships between the three constructs are still not entirely clear. Hence, in this export context of study, it proposed that:

H2: Product quality significantly affect market orientation

2.3 Market Orientation (MO) and Its Role as Mediator

Market orientation (MO) strategy is the heart of modern marketing that frequently been studied including in the organizational performance context [34][35][11]. The impact of market orientation on organizational performance have paid great attention by a number of relevant studies [36]. Several studies have discussed the effect of market orientation on firms’ domestic performance. For examples, [37] have found significant relationship between MO and business performance that referring to ROI in SMEs context. Also, in the study by [38] demonstrate the significant relationship between MO and business performance (both objective and subjective performance) in Malaysia hotel industry context. Similarly, study in Russia [39] on knowledge-intensive companies have found significant relationship between MO and business performance either in financial or non-financial context. In fact, the study of [55] found that export market-oriented culture positively influences export performance.
Although the study discussed above explained the important of MO in influence the organization business performance, however, there is shortcomings study in MO and export performance context [7] [12]. Hence, in this export context of study, it proposed that:

H3: MO significantly affect export performance

Otherwise, concerning on product quality and performance, researchers emphasised that quality alone is not enough to improve organizational performance. Hence, they have agreed that many of marketing and customer related variables, for examples, customer satisfaction, customer loyalty, and customer retention, that able to mediate the quality-performance relationship. In fact, many of these customer related variables are either encompassed within or closely aligned with the marketing orientation, such as market orientation [33]. Hence, in this export study context, it proposed that:

H4: Market orientation mediates the relationship between product quality and export performance

3 Methodology

3.1 Sampling Design and Data Collection Procedure

This study was based on a cross-sectional approach where the data was gathered once in answering the research questions. The unit of analysis in this study is refers to the export staffs of Electric & Electronic (E&E) companies in Peninsular Malaysia. In order to validate the measurement instrument and to ensure the appropriateness of the survey administration, a pretest survey (n=20) were performed. Based on pre-test result, only simple error wording needs to be improved.

For data collection, the list of the E&E companies in Selangor and Kuala Lumpur area represents as the sampling frame for this study. The total population for E & E companies in Selangor and Kuala Lumpur are 320. The simple random sampling is used in selected 68 companies in order to meet the sample size of 300 and above. Each of company is represented by five staff from Export Department. The selection of the staff is based on simple random procedure. Hence, with 68 companies, total of samples for this study is 340 (68 x 5). A sample size of 100 or larger is preferable for factor analysis and regression analysis [40]. While, other researcher [41] argued that PLS has advantages over other techniques when analyzing small sample sizes. Therefore, following previous studies, the sample size of 300 and above is acceptable for factor analysis and the PLS used [40] [41].

Thus, the self-administered questionnaires were sent to 340 respondents. The number of returned questionnaires was 300 representing 88.2 percent response rate. After data screening for missing values and deleting for outliers, 33.7 percent (101) responses were useable for data analysis using PLS-SEM.

3.2 Research Construct

This study adapted the measurement of: Export performance (EP) (12 items) by [42] and [18]; Product quality (PQ) (5 items) by [43]; and, Market orientation (MO) (21 items that refers to 8 items for customer orientation, 8 items for competitor orientation, and 5 Inter-functional coordination) [10,11]. All variables are measured using 7-point Likert scale.

4 Findings

Table 1a depicts the assessment of convergent validity. All indicators achieve satisfactory indicator loadings. Composite reliability (CR) for the constructs ranges between 0.883 to 0.947 indicating that the items measuring the construct possesses high internal consistency. In the similar vein, the Average Variance Extracted (AVE) is higher than the threshold value of 0.5 [44] except for MO which is a bit lower, AVE = 0.431, but still acceptable [45]. We can conclude that
convergent validity has been established. The detail of items loading for each construct measurement is showed in Table 1b.

Table 1a: Convergent validity assessment

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>rhoA</th>
<th>Composite Reliability (CR)</th>
<th>Average Variance Extracted (AVE)</th>
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</thead>
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<tr>
<td>Export Performance (EP)</td>
<td>0.934</td>
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<td></td>
<td>0.947</td>
</tr>
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<td>Competitor Orientation (COMPTO)</td>
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<td></td>
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</tr>
<tr>
<td>Customer Orientation (CUSTO)</td>
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<td>0.883</td>
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<tr>
<td>Inter-Functional Coordination (IFC)</td>
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<td></td>
<td>0.889</td>
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<tr>
<td>Market Orientation (MO)</td>
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<td></td>
<td>0.899</td>
</tr>
<tr>
<td>Product Quality (PQ)</td>
<td>0.899</td>
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<td></td>
<td>0.924</td>
</tr>
</tbody>
</table>

Table 1b: Items Loading for Each Construct

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>EP</th>
<th>COMPTO</th>
<th>CUSTO</th>
<th>IFC</th>
<th>MO</th>
<th>PQ</th>
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<td>S5MOCO_4</td>
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<td>0.501</td>
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<td>0.721</td>
</tr>
<tr>
<td>S5MOCOPO_2</td>
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<td>0.809</td>
<td></td>
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<td>0.775</td>
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<td>S5MOCOPO_3</td>
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<td></td>
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<td>0.947</td>
<td></td>
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<td>0.812</td>
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<td>S5MOCOPO_5</td>
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<td>S7EP_5</td>
<td></td>
<td>0.884</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Table 2 depicts the assessment of discriminant validity using based on [46] criterion. From Table 2, it is observed that the square root of AVE is larger than the construct correlation suggesting that discriminant validity is established.

Table 2: Discriminant validity test (AVE and correlation)

<table>
<thead>
<tr>
<th>Variables</th>
<th>EP</th>
<th>MO</th>
<th>PQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>0.737</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>QUALITY</td>
<td>0.534</td>
<td>0.598</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Figure 1 and Table 3 below demonstrate all the direct relationship involved in the study. The hypothesis testing indicated by the direct standardized beta coefficients demonstrated all significant paths from 3 hypotheses suggested. MO is significantly related with EP at $\beta=0.651$, $t=9.936$; PQ is significantly related with EP at $\beta=0.145$, $t=2.011$; and, PQ is significantly related with MO at ($\beta=0.5981$, $t=5.984$). Hence, in responding to objective 1, 2, and 3 [H1, H2 and H3], all hypotheses are supported. Table 4 showed that 55.7% (R Square) of the variance in the EP is explained by the model.

Table 3: Standardised Estimates of Direct Relationship

| Direct Relationship | Beta (β) | T Statistics (|O/STDEV|) | Result |
|---------------------|----------|---------------------------|--------|
| MO -> EP            | 0.651    | 9.936                     | Significant |
| PQ -> EP            | 0.145    | 2.011                     | Significant |
| PQ -> MO            | 0.598    | 5.984                     | Significant |

Notes: One tailed t-test: $t > 1.645$ (p<0.05)

Table 4: R square of dependent paths

<table>
<thead>
<tr>
<th>Variables</th>
<th>R Square</th>
<th>R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP</td>
<td>0.557</td>
<td>0.548</td>
</tr>
<tr>
<td>MO</td>
<td>0.357</td>
<td>0.351</td>
</tr>
</tbody>
</table>

Table 5: Assessment of Market Orientation as a Mediator

| Relationship | Beta (β) | T Statistics (|O/STDEV|) | Result |
|--------------|----------|---------------------------|--------|
| PQ -> MO -> EP | 0.389    | 4.634                     | Significant |

Based on Table 5, the bootstrapping analysis showed there is mediator effect of attitude MO on the relationship between PQ and EP. Hence, in responding to objective 4, this result showed that H4 is supported.

5 Discussion and Implication

The study investigated the importance role of product quality and market orientation in export performance context. The results of this study have several implications for academic researchers and for practitioners in the context of export performance specifically in the Electric & Electronic industry setting. These
results can be summarized in terms of three main important findings: the role of product quality as antecedent for export performance (H1); the role of market orientation as antecedent to export performance (H3); and, the role of market orientation as mediator in the relationship between product quality and export performance (H4).

Quality perspective reflected the scenario related to quality practices within an organization [33]. The quality perspectives that includes elements such as encouragement of a firm in giving priority to quality practices and produce a quality product or service is important in developing the firm quality culture. In particular, product quality basically focused on the attributes or characteristics of a product or services that able to satisfy customers’ wants and needs, when exchange for monetary is considered. These includes functional and psychological benefits attached with a product. If a consumer is satisfied with the product, then the quality is satisfied to be accepted [47] [48] [49]. Interestingly, for several decades, the important role of product quality in influence organizational performance has been recognized in the literatures [33] [50].

In this study, the product quality is tested in the export performance context (H1). The result showed that product quality has significant effect towards export performance. Hence, this result is also supported past studies in export performance context [51] [52], where product quality is important antecedent to export performance. In addition, product quality also is found to has significant effect on market orientation (MO) (H2). This demonstrated of how product quality could influence dimensions of MO such as customers orientation, competitor orientation and inter-functional coordination. Hence, for practitioners, the great impact of product quality towards MO and export performance means that they need to focus this strategy in their firms. In particular, this study showed that product quality can be concluded as strong antecedent for MO with the beta (β) value is 0.598. In comparison to the role of product quality as antecedent to export context, the beta (β) value is very low, which is 0.145. While for MO as antecedent (H3), the finding has been proven that MO became as important antecedent for export performance with the beta value is 0.651. Hence, for academician researchers, product quality construct is needed to further research in enhance it roles in export performance context. Otherwise, in Electric & Electronic industries, based on the findings discussed above, MO is credited to have strong tendency of becoming a mediator as well to enhance the role of product quality in export performance context.

Indeed, MO is among of the researched topics in the marketing discipline [53]. Firms that apply the market orientation strategy will employ the customer orientation, the competitor orientation, and cross-functional coordination. These three remarkable variables will able for firm to achieve business performance effectively. In addition to significant antecedent role in business performance context, the important role of MO as a mediator has been discussed by past studies as well [54] [33]. Hence, the finding in this study showed that MO is mediate the relationship between product quality and export performance. Due to MO is strongly proven it significant roles in export performance context, hence, it is required that in Electric & Electronic industries being market-oriented firm is necessary.

In relation to product quality, the role of product quality cannot be avoided due to product quality as well is important antecedent for MO. Hence, product quality still needed to be considered valuable for both practitioners and academic researchers especially when the environment is more competitive. Spending amount of time and effort on quality initiatives is still important and considerable. In relations, past study suggested that main executives such as quality and marketing managers must perform a critical role in successful coordinate between the quality and marketing functions within their firms [33]. For example, the greater awareness toward the impact of their actions on
firm’s external marketing (such as marketing intermediaries) and customer-related variables such as customer satisfaction, loyalty, and retention. Customer-related variables basically the critical element of MO which need to be concerned by the managers especially when considering the role of quality that influencing performance through its effect on market orientation.

Despite the strong role of MO toward the relationship between product quality and export performance, the study also dealing with several limitation which need for further enhancement by academic researchers. For example, this study has concentrated on overall MO. Future study is recommended to investigate MO as separated for each dimension. The study framework as well can be tested in other categories of industries context and not just limited to Electric & Electronic industries context. Other variables instead of product quality not to be proposed as antecedent in order to expand the existing framework. Otherwise, in addition to customer oriented, competitor oriented, and inter-functional coordination, other dimensions of MO such as customer satisfaction and customer retention should be incorporate as well due to these two variables are important determinant of customers-related variables. Lastly, this study framework can be tested in other country than Malaysia but within the same scope of study context to increase the generalization purposes.

References:


