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Developing and Validating An Overall International Marketing Performance Scale

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ABSTRACT

The purpose of this chapter is to develop and validate a scale of the overall international marketing performance. Based on a review of the existing literature, the scale constructed to measure international marketing performance used in this study included three factors; namely, finance, strategic and brand performance. A total of 315 Australian firms involved in international marketing were surveyed. Exploratory and confirmatory factor analyses were undertaken to validate the scale. Findings support the conceptualization that the overall international marketing construct consists of three factors. The present study contributes to the understanding of the measurement of the overall international marketing performance by empirically testing the dimensionality of this construct.

INTRODUCTION

Firm performance is a critical aspect in the business literature. It attracts a considerable amount of attention in the international marketing literature (Khavul, Peterson, Mullens, & Rasheed, 2010; Lee, 2010; Morgan, Kalaeka, & Katsikeas, 2004; O’Cass & Julian, 2003; Wong & Merrilees, 2007) and in the strategic management literature (Aragon-Sanchez & Sanchez-Marin, 2005; Calantone & Knight, 2000; Chen & Hu, 2002; Mankins & Steele, 2005; Pan & Chi, 1999; Prescott, 1986; Slevin & Covin, 1997). It is argued that the distribution of new methods of assessing marketing productivity to the business community is important in order to raise marketing’s vitality in the firm (Rust, Ambler, Carpenter, Kumar, & Srivastava, 2004). Since then, there has been some calls for more research in the areas of marketing performance measurement to strengthen the knowledge of and contributions of marketing performance (O’Sullivan & Abela, 2007).

Firm performance in the international marketing literature has been based on the theory of microeconomics - profit maximisation (Styles, 1998). Profit maximisation is realised when marginal revenue is equal to or greater than marginal cost, profit is maximised. As a result, one of the streams of firm performance is related to the measure of profit, especially in the form of return on investment and profit-to-sales ratios (Cavusgil & Zou, 1994; Wong & Merrilees, 2007). Another stream of firm performance is concerned with sales-driven measures such as sales growth and market share (Cavusgil & Zou, 1994; Day & Wensley, 1988). These two streams combined together is called financial performance (Wong & Merrilees, 2007). In addition to financial performance, business literature also shows that firms can have goals focused on competitors (Day & Wensley, 1988; Khavul, et al., 2010) and geographic areas (Appiah-Adu, 1999; Beamish & Craig, 1993). While these studies contribute the understanding of firm performance, it has been criticised that the construct of firm performance has not yet been adequately developed and tested due to conceptual and methodological problems (Keats, 1988; Lewin & Monton, 1986). Moreover, as suggested by Wong and Merrilees (2007), the existing international marketing literature on performance lacks a branding focus. For instance, concepts of brand performance, such as brand awareness, satisfaction and loyalty, have not been considered as a part of performance measures in the international marketing literature. Even though brand equity literature sheds light on how to measure brand performance (Chaudhuri, 2002; Yoo & Donthu, 2001), the literature heavily focuses on the domestic context (Wong & Merrilees, 2007). Given that these brand-performance concepts may have a profound impact on a firm’s general performance, there is a need to include them in the business performance construct.

In summary, marketing performance measurement is not just a post hoc justification of marketers’ efforts, but a valuable exercise to the firms that seek an understanding of the relationship between marketing activities and firm performance. The existing literature on international marketing fails to tap into various brand performance; while the brand equity measurement misses the financial and strategic aspects. There is a need to close the gap in the international marketing literature relating to the measurement of firm performance. Since various measures of firm performance tap into different aspects, firm performance may be a multidimensional construct in the international marketing context. The empirical findings in this study are expected to provide insight into exactly how to measure overall international marketing performance. The general question that this study addresses to is “what is a valid scale to measure overall international marketing performance?”

LITERATURE REVIEW

The firm’s overall international marketing performance indicates the extent to which a firm’s financial and strategic objectives with respect to marketing a product/service to a foreign market are achieved through planning and execution of its international marketing strategy. A major criticism of
earlier studies about firm performance is that the use of a single dimension of performance does not adequately represent the performance construct (Nicholson & Brenner, 1994; Styles, 1998). In recent years, most researchers have advocated a multi-dimensional approach (Calantone & Knight, 2000; Lee, 2010; O’Cass & Julian, 2003; Voola & O’Cass, 2010; Wong & Merrilees, 2007). It is suggested that the multi-dimension measures of a firm’s performance can enhance the validity and reliability of the construct. In other words, multi-dimensional measure of a firm’s performance includes more than only financial aspects.

In terms of multi-dimension aspects, Styles (1998) suggests that the marketing literature has focused on three dimensions of marketing performance: effectiveness, the extent to which organisational objectives are reached; efficiency, the relationship between performance outputs and the resources inputted to achieve the objectives; and adaptiveness, the firm’s ability to react to changes within the external environment. Based on this argument, Morgan, Clark and Gooner (2002) have come up with a performance indicator of marketing performance, which includes market share, sales responses, revenue, margin, cash flow, customer behaviours, and customer perceptions. This approach takes into consideration efficiency, effectiveness and adaptiveness perspectives within and between each stage of the marketing performance process. Wong and Merrilees (2007), similarly, measure financial performance in terms of market share, profitability, overall financial performance, return on your investment, and a range of brand performance items. Empirical research has adopted a multi-dimensional approach to measure firm performance. In essence, performance can be measured not only from the financial perspective, but also from the non-financial perspective. As argued by Cavusgil and Zou (1994, p. 4), “a firm usually initiates an export venture with a number of objectives, which can be financial (i.e. profits, sales, or costs) and/or strategic (i.e. market expansion, competitive response, gaining a foothold in a foreign market, or increasing the awareness of the product/firm).”

Again, it is suggested that marketing performance is a multidimensional process.

For international marketers, not only is the financial performance importance, but also the strategic performance. The importance of strategic performance is twofold. First, it enables firms to shape the processes of their strategy formulation (Bisbe & Malagueno, 2012; Bourne, Mills, Wilcos, Neely, & Platts, 2000; Gimbert, Bisbe, & Mendoza, 2010). Second, strategic performance measurement contributes to the successful implementation in terms of better communication, better execution, and more effective follow-up, of intended strategies (Bisbe & Malagueno, 2012; Garengo, Biazzo, & Bititci, 2005; Kaplan & Norton, 2004). From the management point of view, focusing on strategic performance is beneficial to the firm in general because it helps “translate strategy into objectives and measures that can be clearly communicated, thus facilitating the closure of the gap between the strategic vision of the firm and the management of its operating activities” (Bisbe & Malagueno, 2012, p. 298). Strategic performance measurement is arguably more useful than financial performance measure as it provides insights to top management as to exactly what can be done. However, most studies in the international marketing literature consider financial and strategic performance as a single construct. A research gap exists in the examination of the multi-dimensional performance construct that includes both financial and strategic performance. Empirical evidence to substantiate this conceptualization is required.

One firm performance measure that has been gaining momentum in the marketing literature is brand performance. The holistic view of a brand is ascendant in the current environment of brand management. It implies that a synergistic effect of the marketing mix can create added value for a brand. This added value is the principal basis for distinguishing a brand from a product. In fact, the added value focuses on potential customers rather than the firm itself (Aaker, 1996; Farquhar, 1994; Keller, 2003; Levitt, 1980; McCracken, 1993; Wong & Merrilees, 2007). Thus, a brand can build the added value surrounding the tangible features with distinctive benefits perceived by customers. The combination of core functionality, added value, and emotional values of a brand can create customer value and loyalty. Therefore, firms that have successful brands with these attributes are more likely to perform better in terms of creating stronger cash flows, higher earnings, and more profit (Wong & Merrilees, 2007), consequently creating higher values for shareholders (Yovovich, 1988). However, the extent international marketing literature on performance lacks a branding focus and mainly focuses on financial performance (Cavusgil & Zou, 1994; Morgan, et al., 2002; O’Cass & Julian, 2003; Ogunmokun & Ng, 1999; Styles, 1998). For instance, concepts of brand performance, such as brand awareness, satisfaction and loyalty, have not been considered as a part of performance measures. Given that these brand-performance concepts may have a profound impact on a firm’s performance, especially at the international levels (Malhotra, Peterson, & Kleiser, 1999; Wong & Merrilees, 2007), there is a need to include them in the international marketing performance construct.

Given the overwhelming support for a multidimensional approach to international marketing performance, this study attempts to examine the underlying structure of three international marketing firm-performance dimensions; that is, financial, strategic and brand performance.

RESEARCH METHOD

Sample and procedure
Two sampling issues need to be addressed in this study; the first relates to the choice of respondents as key informants, and the second concerns the selection of the sample.
**Choice of Respondents**

The choice of respondents for this study was considered in relation to the knowledge required on the particular issues under investigation. Key informants are respondents who are knowledgeable about the issues being researched, and are willing to communicate their knowledge to others. Major involvement in decision areas related to the investigation in a survey appears to be a sufficient condition for establishing the qualification of an informant (Phillips, 1981). In this study, key informants were selected on the basis of their knowledge of international marketing activities in their firms. Thus, the choice of senior executives responsible for, or heavily involved in, their firm’s international operations as respondents is consistent with the purposes of the study. Senior executives such as CEOs, marketing managers, general managers, managing directors and export managers were chosen as the sampling units, as they are most likely to be involved in the international operations of their firms, and will thus be knowledgeable about international marketing activities.

**Selection of the Sample**

In this study, the target population is Australian firms involved in international business. The database for the targeted population was derived from Austrade. Owing to resource constraints, it was not practical to survey the whole population. Therefore, a random sampling method was adopted. A simple random sample of firms within the database was invited to participate in the study by completing the questionnaire mailed to them. The sample was drawn randomly by choosing systematically every fifth firm from the database.

In confirmatory factor analysis, the data analysis method used in this study, a relative large sample size is required to maintain power and obtain stable parameter estimates and standard errors. One recommendation is to have a sample size of at least one hundred cases, preferably two hundred when using the Maximum Likelihood estimation procedure, as in this study (Hair, Black, Babin, & Anderson, 2009; Loehlin, 1992). Alternative, Bentler and Chou (1987) suggested at least five cases per parameter estimate, including error terms and path coefficients. Since the total number of parameters in this study is 23, a minimum sample size of 200 is preferred. Altogether, 2,882 questionnaires were mailed to the selected firms in the sampling frame, a total of 315 usable questionnaires was received, giving a response rate of 12.4%. The sample size was greater than the minimum target of 200 and above the industry rate of return for mail survey, which is 10% in general (Hart, 1987).

**Measures**

The financial-performance aspect has been a recurring theme in the business literature (Calantone & Knight, 2000; Cavusgil & Zou, 1994; Shoham, 1999; Voola & O’Cass, 2010). Calantone and Knight (2000) studied the international performance of firms involved in international business from the financial point of view. In this study, the firm’s overall international marketing performance will be measured based on the studies of Calantone and Knight (2000) and Shoham (1999). The combination of the scales of these two studies enables this study to measure the financial performance from different aspects such as growth rate of sales, market share, profitability, return on investment, and overall financial performance in the overseas market. There are four items in total. These items represent the quantitative aspects of a firm’s performance. The items were rated on a seven-point Likert scale ranging from decrease a lot (1) to increase a lot (7).

- Growth rate of sales in the overseas markets in the last 12 months (V1)
- Profitability of your firm in the overseas markets in the last 12 months (V2)
- Overall financial performance in the overseas markets in the last 12 months (V3)
- The total return on your investment (ROI) of the overseas market (V4)

With regard to the strategic performance, four items were adopted from Calantone and Knight (2000) and Shoham (1999). These four items tap into the aspects about whether the firm strategy has worked according to plan. The strategic performance measure is not concerned with the increase or decrease of sales, profit, or return on investment, but emphasizes the qualitative side of firm performance. It can be in the form of the capitalization on the potential of overseas markets and the ratio of overseas markets in the firm’s portfolio. Four items were adopted to measure the strategic performance construct. The items were rated on a seven-point Likert scale anchoring from strongly disagree (1) to strongly agree (7).

- Overall, our firm has fully capitalised on the potential that overseas markets afford for our firm (V9)
- We are satisfied with the ratio of overseas to domestic sales (V10)
- We are satisfied with the sales profitability ratio from the overseas market (V11)
- Our overall marketing strategy is working well (deleted after exploratory factor analysis)

Finally, this study introduces brand performance as part of the overall international marketing performance. Brand performance represents the success of a brand within the market (Wong & Merrilees, 2007). It has been measured in a variety of ways and from different viewpoints. The items used in this study capture the essential ideas of measuring brand performance from different studies. Customer loyalty is a common item used to measure brand performance (Chaudhuri & Holbrook, 2001; Reid, 2002). In addition to customer loyalty, brand awareness and customer...
satisfaction, used also in Reid’s study, form part of the construct for this study. Reid’s study on the relationship between brand performance and integrated marketing communication highlights two different types of performance, namely market impact-related performance and profitability-related performance (Reid, 2002). The construct of brand performance in this study shares the same thought of Reid in the sense that brand performance is evaluated in a non-financial manner. Brand reputation has been empirically tested to have a positive impact on brand performance (Chaudhuri, 2002). Thus the idea of reputation has been adopted as one of the items for this construct. Four items from these studies were used to measure the brand performance construct. The items were rated on a seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7).

In summary, there are four items representing the financial aspects (quantitative) of firm performance, four items for strategic aspects (qualitative) of firm performance, and four items for brand performance. Altogether, the construct comprises twelve items capturing a broad representation of overall international marketing performance.

- Our firm has built a strong brand awareness in the target market (V5)
- Our firm has built a solid brand reputation (V6)
- We are very satisfied with our brand marketing (V7)
- Our firm has built strong customer brand loyalty (V8)

ANALYSIS AND RESULTS

I conducted three levels of analyses to develop an overall international marketing performance construct. First, I conducted a reliability test to determine whether the overall consistency of a measure is met. Reliability is necessary to develop the constructs, but not sufficient for construct validity (Nunnally & Bernstein, 1994), as the items may be consistent, but not capturing the right measure. Consequently factor analyses, which are levels two and three analyses, are needed. Second, based on the items selected in the reliability test, I performed an exploratory factor analysis to uncover the underlying structure between variables so that a set of latent measured variables underlying a set of constructs can be identified for further analysis. Third, I conducted a confirmatory factor analysis to test whether the data of measuring the designated constructs fit a hypothesized measurement model.

Table 1: Sample Characteristics

<table>
<thead>
<tr>
<th>A. Number of Staff</th>
<th>N</th>
<th>% of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 10</td>
<td>103</td>
<td>33</td>
</tr>
<tr>
<td>11 – 50</td>
<td>130</td>
<td>41</td>
</tr>
<tr>
<td>51 – 100</td>
<td>28</td>
<td>9</td>
</tr>
<tr>
<td>101 - 200</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>201 and more</td>
<td>32</td>
<td>10</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>315</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Foreign Sales as % of Total Sales</th>
<th>N</th>
<th>% of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 10</td>
<td>90</td>
<td>29</td>
</tr>
<tr>
<td>11 – 30</td>
<td>93</td>
<td>29</td>
</tr>
<tr>
<td>31 - 50</td>
<td>45</td>
<td>14</td>
</tr>
<tr>
<td>51 - 70</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>71 – 90</td>
<td>37</td>
<td>12</td>
</tr>
<tr>
<td>91 – 100</td>
<td>33</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>315</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job Title of Informants</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>88</td>
<td>28</td>
</tr>
<tr>
<td>CEO</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Managing director</td>
<td>65</td>
<td>20</td>
</tr>
<tr>
<td>General manager</td>
<td>39</td>
<td>12</td>
</tr>
<tr>
<td>Marketing manager</td>
<td>65</td>
<td>21</td>
</tr>
<tr>
<td>Manager</td>
<td>46</td>
<td>15</td>
</tr>
<tr>
<td>Missing</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>315</td>
<td>100</td>
</tr>
</tbody>
</table>

Reliability Test

Reliability is an assessment of the degree of consistency between multiple measurements of a variable (Hair, et al., 2009). Cronbach’s Alpha test is arguably the most commonly used measure of reliability, and is based on the concept of internal consistency. Reliability tests were performed on each construct at a time. Since there are three constructs involved in the conceptual model, three separate reliability tests were performed. There is no general agreement on the rule for the acceptable level of coefficient alpha in Cronbach’s Alpha test, but measures with values 0.7 or more indicates satisfactory internal consistency reliability (Francis, 2007; Robinson, Shaver, & Wrightsman, 1991). Items below this threshold were taken out from further analysis to ensure reliability of the constructs. This process continued until an acceptable level of alpha was obtained. At the initial stage, all constructs have achieved satisfactory results; that is all Cronbach’s Alpha values with 0.70 or more. The initial and revised Cronbach’s Alpha reliability estimates for the constructs are presented in Table 2.
Our firm has built a strong performance in the overseas markets. We are very satisfied with our brand marketing and customer brand loyalty. Our overall marketing strategy is working well.

### Exploratory Factor Analysis

The major purpose of exploratory factor analysis is the systematically simplification of a large number of inter-correlated measures to only a few symbolic constructs. The assumption of exploratory factor analysis is that all variables are correlated to a certain degree (Ho, 2006). The exploratory factor analysis using principal component analysis with varimax rotation method was undertaken to examine the 13 items. The items that were cross-loaded (items loading onto more than one factor with), or showed a factor loading of ±0.30 or less were removed (Hair, et al., 2009; Ho, 2006). Varimax rotation method was adopted as it has a proven analytic approach to provide clearest separation of factors (Hair, et al., 2009; Ho, 2006).

Embedded in factor analysis are two sub-tests; namely Bartlett’s test of sphericity and the Kaiser–Meyer–Olkin measure of sampling adequacy (KMO). Bartlett’s test of sphericity calculates whether a set of items are associated with each other. This is a test of uni-dimensionality of the items. Bartlett’s test of sphericity tests the null hypothesis that the items are uncorrelated in the population. A high chi-square value with a low p-value (p<0.05) indicates a significant relationship between the items, suggesting that the data are suitable for further analysis, such as factor analysis. KMO test statistics are based on partial correlation. If two items share a common factor with other items, their partial correlation will be small, indicating the unique variance they share. The measures of KMO test can range from zero to one. But the overall score should be greater than 0.5 (De Vaus, 2001). If the KMO score is less than 0.5, it shows lack of systematic covariation in the data and the variables are essentially independent. Hair et al. (2009) propose the following guidelines in interpreting the KMO sampling adequacy score:

- Outstanding : 0.90 – 1
- Meritorious : 0.80 – 0.89
- Middling : 0.70 – 0.79
- Mediocre : 0.60 – 0.69
- Miserable : 0.50 – 0.59
- Unacceptable : < 0.50

The Bartlett’s test of sphericity was significant ($\chi^2 = 2,712, p < 0.000$) and the KMO value was greater than 0.5 (KMO = 0.88). Both test results suggest that the items of the construct are sufficiently correlated and there is adequate and high variability in the collected data, indicating that the data are suitable for factor analysis based on the tested items in the constructs. An exploratory factor analysis of the 13 items showed three factors, as shown in table 3. Three factors accounting for 70.40% of the total variance were extracted with eigenvalues greater than 1. Examination of the factor loadings led to the conclusion that all three factors were interpretable, except v51 that has cross loadings with the consequence of being dropped.

### Confirmatory Factor Analysis

Analysis of Moment Structures (AMOS) was used to perform confirmatory factor analyses with an aim to testing convergent validity and divergent validity. The confirmatory factor analysis examines the relationship between the observed variables and any potential underlying factors (Bagozzi & Yi, 1988; Schumacker & Lomax, 2010). It is the most comprehensive analytical method for examining construct validity (O'Leary-Kelly & Vokurka, 1998). Based on the findings in the

### Table 2: Results of Cronbach’s Alpha Internal Reliability Test

<table>
<thead>
<tr>
<th>Construct</th>
<th>Initial # of Items</th>
<th>Initial Alpha</th>
<th>Items Deleted</th>
<th>Revised # of Items</th>
<th>Revised Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Performance</td>
<td>4</td>
<td>.90</td>
<td>none</td>
<td>4</td>
<td>.84</td>
</tr>
<tr>
<td>Strategic Performance</td>
<td>2</td>
<td>.78</td>
<td>1</td>
<td>3</td>
<td>.73</td>
</tr>
<tr>
<td>Brand Performance</td>
<td>4</td>
<td>.88</td>
<td>(after Exploratory Factor Analysis) none</td>
<td>4</td>
<td>.73</td>
</tr>
</tbody>
</table>

### Table 3: Exploratory Factor Analysis for financial, strategic and brand performance

<table>
<thead>
<tr>
<th>Variables</th>
<th>Financial Performance</th>
<th>Strategic Performance</th>
<th>Brand Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth rate of sales in the overseas markets in the last 12 months (V1)</td>
<td>.88</td>
<td>.16</td>
<td>.11</td>
</tr>
<tr>
<td>Profitability of your firm in the overseas markets in the last 12 months (V2)</td>
<td>.86</td>
<td>.16</td>
<td>.26</td>
</tr>
<tr>
<td>Overall financial performance in the overseas markets in the last 12 months (V3)</td>
<td>.89</td>
<td>.16</td>
<td>.21</td>
</tr>
<tr>
<td>The total return on your investment (ROI) of the overseas market (V4)</td>
<td>.50</td>
<td>.22</td>
<td>.27</td>
</tr>
<tr>
<td>Overall, our firm has fully capitalised on the potential that overseas markets afford for our firm (V9)</td>
<td>.19</td>
<td>.55</td>
<td>.32</td>
</tr>
<tr>
<td>We are satisfied with the ratio of overseas to domestic sales (V10)</td>
<td>.12</td>
<td>.87</td>
<td>.16</td>
</tr>
<tr>
<td>We are satisfied with the sales profitability ratio from the overseas market (V11)</td>
<td>.38</td>
<td>.74</td>
<td>.18</td>
</tr>
<tr>
<td>Our overall marketing strategy is working well (deleted due to cross loadings)</td>
<td>.39</td>
<td>.50</td>
<td>.48</td>
</tr>
<tr>
<td>Our firm has built a strong brand awareness in the target market (V5)</td>
<td>.22</td>
<td>.18</td>
<td>.83</td>
</tr>
<tr>
<td>Our firm has built a solid brand reputation (V6)</td>
<td>.15</td>
<td>.24</td>
<td>.76</td>
</tr>
<tr>
<td>We are very satisfied with our brand marketing (V7)</td>
<td>.16</td>
<td>.17</td>
<td>.85</td>
</tr>
<tr>
<td>Our firm has built strong customer brand loyalty (V8)</td>
<td>.17</td>
<td>.16</td>
<td>.82</td>
</tr>
</tbody>
</table>
exploratory factor analysis, the postulated items are loaded to the designated constructs to test the convergent and divergent validities.

Convergent validity can be tested by examining the factor loadings to see whether the items in a construct converge or load together on a single construct in the measurement model (Steenkamp, 1991). Convergent validity exists when statistically-significant loadings for all items hypothesised to measure a latent variable are found and the standardized regression weights are at least 0.5 (Anderson & Gerbing, 1988; Dunn, Seaker, & Waller, 1994; Hair et al., 2009). The critical ratio (c.r.) values in confirmatory factor analysis can analyse the convergent validity of the items within the construct to check whether they are fitting together. Critical ratio values that are greater than 1.96 (c.r.>1.96 = p<0.05) suggest convergent validity. The results of confirmatory factor analysis showed that the critical ratio values of all items are above 1.96, and all standardized regression weights are above 0.50; thus showing convergent validity.

Discriminant validity shows that the items are measuring the right constructs. It refers to an assessment of the extent to which measures of different constructs are unique from each other (Bagozzi, Yi, & Phillips, 1991; Churchill, 1979). The existence of convergent validity indicates uniqueness of a construct from other constructs (Hair et al., 2009). Two methods were used to examine the discriminant validity. First, a comparison between the average variance (AVE) extracted estimates and the squared correlation estimates was made (Fornell & Larcker, 1981). The discriminant validity exists when AVE scores are greater than the squared correlation estimates between pairs of constructs. Results of the AVE method are shown in Table 4. All AVE scores are greater than the squared correlation estimates. Thus, discriminant validity with the AVE method is obtained.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>AVE</th>
<th>Financial Performance</th>
<th>Strategic Performance</th>
<th>Brand Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Performance</td>
<td>.67</td>
<td>---</td>
<td>.40</td>
<td>.20</td>
</tr>
<tr>
<td>Strategic Performance</td>
<td>.49</td>
<td>---</td>
<td>---</td>
<td>.35</td>
</tr>
<tr>
<td>Brand Performance</td>
<td>.65</td>
<td>---</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Discriminant Validity Test Using AVE and Correlation Methods

The second method to test discriminant validity is to examine a measurement model using AMOS (Schumacker & Lomax, 2010). Hair et al. (2009) propose a guideline for establishing acceptable fit using five typical fit indices to evaluate the theoretical model; namely $\chi^2$, AGFI, CFI, RMSEA, and SRMR. In consideration of the limitation of the $\chi^2$ value with a big sample size, normed $\chi^2$ with a cut-off less than three instead of $\chi^2$ should be used (Carmines & McIver, 1981; Kline, 2005). All five absolute and incremental fit indices measured performed well for the measurement models: $\chi^2$/DF = 2.81, AGFI = .90, CFI = .96, RMSEA = .08, and SRMR = .06. Thus, discriminant validity is achieved. In other words, the items were found to measure their designated latent constructs. A graphical illustration of the confirmatory model for an overall international marketing performance is illustrated in Figure 1.

Figure 1: An Overall International Marketing Performance Model
DISCUSSION

The purpose of this study is to develop a reliable and valid measure of overall international marketing performance. Based on literature review, I concluded that international marketing performance should be measured not only from the financial perspective, but also from the strategic and brand perspectives. This chapter thus proposed a measurement model that integrates the different research streams with regard to firm performance. The hypothesized three-factor model fitted the data well. All factor loadings were large and statistically significant; indicating convergent validity. The AVE test and overall model goodness-of-fit results of the confirmatory factor analysis showed discriminant validity. All these results confirmed that international marketing performance was a three-dimensional construct. In spite of considerable interest in the concept of international marketing performance, there have been few studies providing empirical evidence to develop and test the measurement scales. In fact, the existing measurement scales suffer from two major limitations: the lack of branding perspective in international marketing performance and the consideration of financial and strategic performance as one-dimensional construct.

By providing empirical evidence, this study filled the research gaps in developing an overall international marketing performance. It shed lights on the performance measurement by incorporating the international brand performance measures. Various researchers (Malhotra, et al., 1999; Wong & Merrilees, 2007) advocated the inclusion of international brand performance measures into the overall international marketing performance scales. Another contributions of this study is the examination the financial, strategic and brand performance measures in a holistic manner. The multi-dimensional approach to firm performance is able to capture various aspects of what the firms accomplish, rather than only one single aspect such as financial performance. As a result, the measures are able to render a better explanation of international marketing performance.

The managerial implications of this study include the applicability of the three-dimensional measures of international marketing performance. International marketing managers can measure the overall international marketing performance using the postulated items for each dimension. The breaking down of the overall international marketing performance construct into three different dimensions helps the managers to discern clearly which aspect performs better or worse. Not only are the measures valid and reliable, but also parsimonious. The measures help international marketing managers track firm performance in a particular market on a regular basis. It offers a better understanding of the international marketing performance from various angles. Consequently, the three-dimensional measures can provide better insights for top management to consider or re-consider the formulation of their international marketing strategy (Bisbe & Malagueno, 2012; Bourne, et al., 2000; Gimbert, et al., 2010).

This study has several limitations, which offer opportunities for future research. First, even though the sample size is big enough for conducting various tests, the response rate was only modest. Second, the three-dimensional model was tested with only Australia samples. Finally, the items in strategic performance need to be strengthened, considering the AVE score for this construct is marginally below satisfactory level. Future empirical research that can provide further evidence to overcome these limitations will be needed to enhance the generalizability of the three-dimensional model.

REFERENCES


