Entrepreneurial Orientation and Performance: A Moderated Mediation Model of Marketing Resources and Marketing Capabilities

Abstract

Studies indicate that the EO – performance relationship is more complex than a main-effects only relationship. Studies investigating the effect of variables in the EO – performance relationship have considered a number of mediators and moderators, concluding that no one suitable moderator or mediator pertaining to the relationship between EO and performance. Underpinned by the resource-based view and the resource-capability complementarity literature, we investigate the role of marketing capability and marketing resources in linking EO and performance. Using a sample of 469 service firms, we develop and test a moderated-mediation model that examines marketing capabilities as a mediating mechanism and marketing resources as a moderator to offer a wider picture of the EO – performance relationship. Results indicate that marketing resources moderates the strength of the mediated relationship between EO and firm performance via marketing capability, such that the mediated relationship is stronger when marketing resources are high than when they are low.

Keywords: entrepreneurial orientation, marketing capability, marketing resources, moderated-mediated model

Track: Services Marketing

1.0 Introduction

The literature has established the complex relationship between entrepreneurial orientation (EO) and performance with mixed findings pointing to the variability of the magnitude of the relationship between the two. Some studies found a positive relationship, while others found a negative relationship, and some even found the relationship between EO and performance to be insignificant (Rauch et al., 2009). These conflicting findings suggest that the EO – performance relationship is more complex than a simple main-effects-only relationship (see also Wiklund and Shepherd, 2005). In advancing the EO – performance relationship, studies have traditionally adopted a contingent approach in exploring the effect of different environmental contexts on EO – performance relationship (Covin and Lumpkin, 2011; Lumpkin and Dess, 1996; Gupta and Batra, 2015). While such an approach holds merit, Covin and Lumpkin (2011) argue that further research along this path is unlikely to advance theory and suggest that studies looking beyond exploring the congenial environmental impact on the relationship between EO and performance offer more potential.

In a meta-analysis study by Rauch et al. (2009), three main moderators were identified: firm size; industry type; and culture. Rauch et al. (2009) further suggest that while these three moderators were found to have an impact on EO – performance relationship, other potential moderators such as firm age, organizational structure, and strategy pursued should also be considered in future research. In a similar vein, Baker and Sinkula (2009) and Zahra, Sapienza, and Davidsson (2006) suggest that future research should also look more deeply into the EO – performance relationship by identifying the key mediators (intermediate steps) that link these two variables. Consequently, numerous studies have contributed empirically by studying the effects of different moderators (e.g., De Clercq, Dimov, and Thongpapanl, 2010; Engelen, Kaulfersch, and Schmidt, 2015; Gupta and Batra, 2015) and mediators (Wang, 2008) on EO – performance relationship. While these studies make important contributions, no study has incorporated both moderator(s) and mediator(s) to unpack the EO – performance relationship. Importantly, our understanding of the role of marketing function (accumulation and deployment of marketing resources and capability) in facilitating the EO – performance is limited. This is perplexing since the possession of high levels of marketing resources and marketing capability is critical for small firms to achieve marketplace success (see also Sok, O'Cass, and Miles, 2015).

The main objective of this study therefore is to investigate the relationship between EO, marketing resources, marketing capability, and firm performance. In particular, this study aims to examine the role played by important organizational resources and capabilities within the EO – performance relationship. We argue that marketing capability plays a mediating role while marketing resources play a moderating role in the EO – performance relationship and that such mediation and moderation are critical in order to get a more complete understanding of the EO – performance relationship. Hence, this study proposes a moderated-mediation model (Baron and Kenny, 1986, Preacher, Rucker and Hayes, 2007) which jointly examines marketing capability as the mediating mechanism and marketing resources as the moderator to offer a wider picture of the EO – performance relationship.

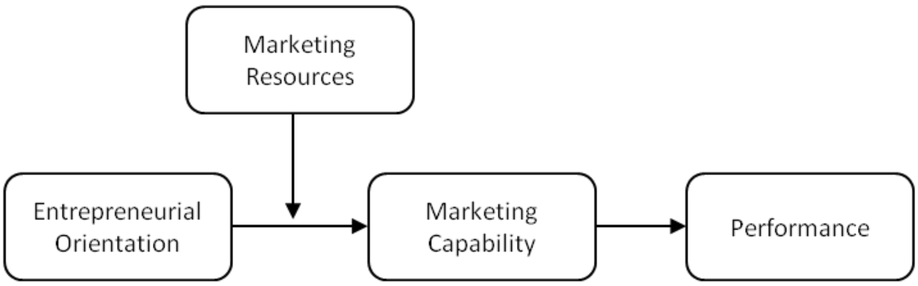

Figure 1. Hypothesised Model

2.0 Theory and Hypotheses

The resource-based view (RBV) of firm is one of the most influential and widely adopted theories among marketing, management, and entrepreneurship scholars exploring performance differentials between firms (e.g., Penrose, 1959; Villanueva, Van de Ven and Sapienza, 2012). The RBV posits that firms within an industry are heterogeneous in terms of their resources and this heterogeneity is the source of competitive advantage that firms gain in their marketplace (Penrose, 1959; Barney, 1991). Resources comprise tangible and intangible assets such as brands, facilities, intellectual property, and capabilities which are the "glue" that binds different resources together and enables them to be deployed to maximum advantage (Day, 2011, p.185). Some scholars contend that resources are static and possess no real value in isolation (e.g., Eisenhardt and Martin, 2000; Priem and Butler, 2001) and that it is the firm's ability to deploy resources (commonly referred to as the firm's capabilities) that better explain performance differentials between firms (Priem and Butler, 2001; Teece *et al*., 1997; Sok *et al*., 2013).

Firms benefit from focussing on being innovative, responsive and competitive (Lumpkin and Dess, 1996). EO has been defined as "the simultaneous exhibition of innovativeness, proactiveness, and risk taking" (Stam and Elfring, 2008, p.98). Because efforts to anticipate demand and aggressively position new product offerings often result in strong performance (Ireland, Hitt and Sirmon, 2003), conceptual arguments suggest that EO leads to higher performance. While EO provides directions for organizations to pursue new opportunities in the marketplace, effective implementation of EO requires the organization to have certain capabilities. Although numerous studies have established a positive relationship between EO and performance (e.g., Rauch et al., 2009), our study is interested in understanding how the marketing function facilitates the EO – performance link. Superior performance is achieved when a firm is able to maximize its resources through specific operational capabilities. Recent studies provide evidence for the importance of examining both marketing resources and marketing capability in understanding firm performance (e.g., Sok, O'Cass and Miles, 2015, O'Cass et al., 2015). The premise of these studies is based on the view that resources alone do not determine firm performance. Rather, it is the capabilities by which resources are deployed which drives performance (Eisenhardt and Martin, 2000; Teece et al., 1997). This discussion raises questions relating to the specific relationship between EO, marketing resources, their deployment and how such relationships drive firm performance.

Marketing capability enable firms to manage their connection to the customer, which contribute to both customer and firm performance (Moorman and Rust, 1999; O'Cass et al., 2015). Sok et al. (2015) define marketing capability as "a bundle of interrelated routines, processes, or skills firms engage in specified marketing related activities" (p.5). Grant (1996) suggests that marketing capabilities serve as a firm's know-how deployment capabilities which provide the means to achieve performance outcome. As EO is a strategic posture (Covin and Slevin, 1989) or attitude developed by managers toward entrepreneurship, marketing capability can be seen as a means by which managers implement EO. We argue that the effectiveness and value of EO depends on how firms deploy their marketing activities. Specifically, we suggest that marketing capability could enhance the effect of EO on performance as expressed in the following hypothesis:

H1: Marketing capability mediates the relationship between EO and performance

Though marketing capability is crucial to achieve superior performance (e.g., Vorhies and Morgan, 2005), firms need complementary marketing resources to achieve performance outcomes. Marketing resources are assets related to marketing such as product reputation, brand equity, customer service reputation and financial resources allocated for marketing purposes (Sok et al., 2015). Our study builds on work by O'Cass et al. (2015) and Sok et al., (2015) in conceptualizing marketing resource and marketing capability as integrated mechanisms necessary in delivering above normal performance. The resource-capability complementarity approach posits that firms can achieve performance outcome by identifying and acquiring resources that are critical to the development of superior products and using such products to capture and retain customers (O'Cass et al., 2015). Thus, although resources are important, they are insufficient to drive performance (Murray, Gao and Kotabe, 2011). To achieve superior performance, firms need to leverage their resources by deploying them (Teece, 2007). However, because resources cannot be deployed without the aligned capability, O'Cass et al. (2015) state that higher than normal performance outcomes "come from the creation of synergistic configurations of the marketing resources and their deployment" (p.195). This discussion suggests that resource-rich firms who lack the means to deploy them will be at a disadvantage just as firms with high deployment capabilities but lacking in resources will be at a disadvantage against firms with superior resources and capabilities (Sok and O'Cass, 2011). Our study draws on the theoretical contentions proposed by the resource-capability complementarity literature by arguing that the mediated relationship between EO and performance will be stronger when marketing resources is high than when it is low as expressed in the following hypothesis:

H2: Marketing resources will moderate the strength of the mediated relationship between EO and performance, such that the mediated relationship will be stronger when marketing resources is high than when it is low.

3.0 Methodology

The research sample was derived from an online survey issued to 5,272 owner-managers of small service firms in Australia. We focus on small service firms because 84% of the total number of Australian small business is in the services sector (DIISRT, 2012). Of the 5,271 surveys issued, a total of 469 responses were obtained (9% response rate). Marketing resources was measured using the 8-item scale adapted and refined from Coviello, Winklhofer and Hamilton (2006). Marketing capability was measured using 8-item scale adapted and refined from Chen, Greene and Crick (1998). Entrepreneurial orientation was measured using 18-item scale adopted from Khandwalla (1977), Miller (1983), Covin and Slevin (1986, 1989a), and Covin and Covin (1990). Performance was measured using the 5-item scale adapted from Coviello et al. (2006) and Morgan et al. (2009). A seven-point rating scale was used to capture responses to all items measuring the variables. The use of subjective performance measures has been widely used in studies of small business (i.e. O'Cass and Sok, 2013). In this study, the most senior manager or owner of each firm was the specific respondent chosen as their perceptions of success or failure is argued to provide reliable responses (O'Cass and Sok, 2013). Control variables including firm age, firm size, and industry type were coded using dummy variables.

4.0 Analysis and results

The factor loading of all items was relative high (Bagozzi and Yi, 1988) and the average variance extracted (AVE) of all constructs exceeded Fornell and Larcker's (1981) recommendation of .50 thus providing support for convergent validity (Bagozzi and Yi, 1998). The composite reliability of all constructs was also higher than the recommended level of .70 (Nunnally, 1978), providing support that our measures were reliable. In addition, the square roots of the AVE of all constructs were consistently greater than the off-diagonal correlations, providing support for discriminant validity (Fornell and Larcker, 1981). We adopted the procedure recommended by Baron and Kenny (1986) to test our mediation hypothesis (H1) in which four conditions need to be met: (1) the effect of independent variable on dependent variable must be significant; (2) the effect of independent variable on mediating variable must be significant; (3) the effect of mediating variable on dependent variable must be significant; and (4) when the mediating variable is included in the model, the effect of independent variable on the dependent variable must become insignificant for full mediation or reduce in size for partial mediation. The results show that the effect of EO on performance (β =.45, t = 11.03) and marketing capability (β = .52, t = 13.23) are significant, thus satisfying the first and second condition for mediation. Marketing capability was also found to have a significant effect on performance (β = .48, t = 11.88), thus satisfying the third condition. The results also show that when marketing capability is included in the model, the effect of EO on performance becomes weaker (β = .45, t = 11.03 vs β = .27, t = 6.09), thus satisfying the fourth condition for partial mediation. Consequently, hypothesis 1 is supported.

We adopted the procedure recommended by Preacher et al. (2007) to test our moderated-mediation (H2) in which four conditions need to be met: (1) the effect of independent variable on dependent variable is significant; (2) the effect of the interaction between independent variable and moderating variable on mediating variable is significant; (3) the effect of mediating variable on dependent variable is significant; and (4) different conditional indirect effect of independent variable on dependent variable via mediating variable at different levels of moderating variable. The results show that the effect of EO on performance is significant ($\beta = .45$, $t = 11.03$), thus satisfying the first condition. The results also show that the interaction between EO and marketing resources has a significant effect on marketing capability ($\beta = .11$, $t = 2.85$), thus satisfying the second condition. Marketing capability was also found to have a significant effect on performance ($\beta = .48$, $t = 11.88$), thus satisfying the third condition. The statistical significance test recommended by Preacher et al. (2007) was adopted to examine the fourth condition. Specifically, the bootstrapping procedure was employed to gain further insight into how the indirect effect of EO on performance through marketing capability differs at low (one standard deviation below the mean score) and high (one standard deviation above the mean score) levels of marketing resources. A statistically significant indirect effect is evident when the 95% upper and lower bound confidence intervals do not contain zero (Preacher et al. 2007). The results show that the indirect effect of EO on performance via marketing capability is weaker at low level of marketing resources (LLCI = .022, ULCI = .132; $z = 2.381$) than at high level of marketing resources (LLCI = .093, ULCI = .219; $z = 4.132$), thus satisfying the fourth condition. Consequently, hypothesis 2 is supported.

5.0 Discussion, Limitations, and Guidelines

Drawing on the RBV and resource-capability complementarity literature as our theoretical basis, we focused on small service firms and examined how functional areas influence the EO–performance relationship within small service firms. Our study provides a theoretical case and empirical support that demonstrates the specific relationship between EO, marketing resources, their deployment and how these relationships drive firm performance. Our moderated-mediation model (Baron and Kenny, 1986, Preacher et al. 2007) shows that while marketing capability mediates the EO – performance relationship, marketing resources moderate the strength of the mediated relationship. Our moderated-mediation model confirms Wiklund and Shepherd's (2005) suggestion that the EO–performance relationship is "more complex than a simple main-effects-only relationship" (p.73). Our joint examination of the mediating mechanism of marketing capability and the moderating effect of marketing resources on this mediated relationship offers a wider picture of the EO–performance relationship. This moderated-mediation also diverges from prior studies that have either examined moderating effects or mediating effects on EO – performance by incorporating both moderating and mediating effects in a single model to unpack the EO – performance. We acknowledge limitations associated with the use of the self-report performance measure. Even though we carefully constructed our measures to account for this issue, future research may seek objective performance indicators to test the robustness of our findings. We also acknowledge limitations associated with common method bias inherent in cross-sectional designs. Our moderated mediation model could be expanded to examine the role of the marketing function in conjunction with leadership behaviours.

References

Bagozzi, R.P. and Yi, Y. (1988). On the evaluation of structural equation model. *Journal of the Academy of Marketing Science*, 16, 74-94.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120.

Baron, R. M., and Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51, 1173-1182.

Chen, C.C., Greene, P.G. and Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13, 295-316.

Coviello, N., Winklhofer, H. and Hamilton, K. (2006). Marketing practices and performance of small service firms: An examination in the tourism accommodation sector. *Journal of Service Research*, 9, 38-580.

Covin, J. G. and Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship Theory and Practice*, 35, 855-872.

Covin, J. G. and Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10, 75-87.

Day, G.S. (2011). Closing the marketing capabilities gap. *Journal of Marketing*, 75, 183-195.

De Clercq, D., Dimov, D. and Thongpapani, N. (2010). The moderating impact of internal social exchange processes on the entrepreneurial orientation-performance relationship. *Journal of Business Venturing*, 25, 87-103.

Department of Industry Innovation, Science, Research and Tertiary Education, 2012. Australian Small Business: Key Statistics and Analysis. Retrieved from http://www.innovation.gov.au/SmallBusiness/KeyFacts/Documents/AustralianSmallBusinessKeyStatisticsAndAnalysis.pdf

Eisenhardt, K. and Martin, J. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21, 1105-1121.*

Engelen, A., Gupta, V., Strenger, L. and Brettel, M. (2015). Entrepreneurial orientation, firm performance, and the moderating role of transformational leadership behaviors. *Journal of Management*, 41, 1069-1097.

Fornell, C. and Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39-50.

Grant, R. M. (1996). Prospering in dynamically competitive environments: Organizational capability as knowledge integration. *Organization Science*, 7, 375-387.

Ireland, R. D., Hitt, M. A. and Sirmon, D. G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, 29, 963-989.

Lumpkin, G. T. and Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21, 135-172.

Morgan, N., Vorhies, D. and Mason, C. (2009). Market orientation, marketing capabilities, and firm performance. *Strategic Management Journal*, 30, 909-920.

Moorman, C. and Rust, R. T. (1999). The role of marketing. *Journal of Marketing*, 63, 180-197.

Murray, J. Y., Gao, G. Y. and Kotabe, M. (2011). Market orientation and performance of export ventures: The process through marketing capabilities and competitive advantages. *Journal of Academy of Marketing Science*, 38, 252-269.

Newbert, S. (2008). Empirical research on the resource-based view of the firm: An assessment and suggestions for future research. *Strategic Management Journal,* 28, 121-146.

Nunnally, J.C. (1978). *Psychometric Theory*. McGraw-Hill, New York: NY.

O'Cass, A., Ngo, L., and Siahtiri, V. (2013). Marketing resource-capability complementarity and firm performance in B2B firms. *Journal of Business and Industrial Marketing,* 30, 194-207.

Penrose, E. T. (1959). *The Theory of the Growth of the Firm*, 3rd ed. Oxford University Press: Oxford, UK.

Preacher, K. J., Rucker, D. D. and Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate behavioral research*, 42, 185-227.

Priem, R. L. and Butler, J. E. (2001). Is the resource-based "view" a useful perspective for strategic management research? *Academy of Management Review,* 26, 22-40.

Rauch, A., Wiklund, J., Lumpkin, G. T. and Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33, 761-787.

Sok, P. and O'Cass, A. (2011). Achieving superior innovation-based performance outcomes in SMEs through innovation resource-capability complementarity. *Industrial Marketing Management*, 40, 1285-1293.

Sok, P., O'Cass, A. and Sok, K. M. (2013). Achieving superior SME performance: Overarching role of marketing, innovation, and learning capabilities. *Australasian Marketing Journal*, 21, 161-167.

Sok, P., O'Cass, A. and Miles, M. P. (2015). The performance advantages for SMEs of product innovation and marketing resource-capability complementarity in emerging economies*. Journal of Small Business Management*, DOI: 10.1111/jsbm.12172.

Stam, W. and Elfring, T. (2008). Entrepreneurial orientation and new venure performance: The moderating role of intra-and extraindustry social capital. *Academy of Management Journal*, 51, 97-111.

Teece, D. (2007). Explicating dynamic capabilities: The nature and micro foundations of sustainable enterprise performance. *Strategic Management Journal*, 28, 1319-1350.

Teece, D., Pisano, G. and Shuen, A. (1997). Dynamic capabilities and strategic management. . *Strategic Management Journal*, 18, 509-533.

Thoumrungroje, A. and Tansuhaj, P. (2005). Entrepreneurial strategic posture, international diversification, and firm performance. *Multinational Business Review*, 13, 55-73.

Villanueva, J., Van de Ven, A. H. and Sapienza, H. J. (2012). Resource mobilization in entrepreneurial firms. *Journal of Business Venturing*, 27, 19-30.

Vorhies, D. W. and Morgan, N. A. (2005). Benchmarking marketing capabilities for sustainable competitive advantage. *Journal of Marketing*, 69, 80-94.

Vorhies, D. W., Morgan, N. A. and Autry, C. (2009). Product-market strategy and marketing capabilities of the firm: Impact on market effectiveness and cash flow performance. *Strategic Management Journal*, 30, 1310-1334.

Wang, C. L. (2008). Entrepreneurial orientation, learning orientation, and firm performance. *Entrepreneurship Theory and Practice*, 32, 635-657.

Wiklund, J. and Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and performance of small and medium sized businesses. *Strategic Management Journal*, 24, 1307-1314.

Wiklund, J. and Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing*, 20, 71-89.