

Multidimensional Analysis Of The External Environment In The Strategic Networking Process Among Service SMEs In A Lagging Economic Context

¹Bojan Morić Milovanović, PhD , ²Jonatan Jelen, PhD , ³Mihaela Mikić, PhD

¹ Assistant Professor School of International Business and Economics, DIU Libertas International University Trg J.F. Kennedyja 6b 10000 Zagreb, Croatia, Main research interests: Entrepreneurship, Business models, Social networking, Strategic design

² Assistant Professor School of Design Strategies, Parsons The New School for Design 66 5th Ave New York, NY 10011, USA, Main research interests: Entrepreneurship, Strategy, Strategic design, Information systems

³ Senior Research Assistant Faculty of Economics and Business, University of Zagreb Trg J.F. Kennedyja 6, 10000 Zagreb, Croatia, Main research interests: Social entrepreneurship, Managerial economics, Microeconomics

-----ABSTRACT-----

Analogous to market micro structures the purpose of 'strategic networks' is to leverage specialization, and their objective is to efficiently allocate transformational resources, and optimize support through information. Unlike the merely opportunistic market interdependencies, however, strategic networks are additionally defined by intentional long-term relationships between firms and other types of participant in the environment through co-competition and collaboration. The purpose of this paper is to examine the influence of such strategic networking (SN) on firm performance of Croatian service SMEs, one of a dozen small 'balkanized', still-transitioning economies resulting of an intense social, political, and economic Central and Eastern European transformation and reconfiguration, particularly pronounced over the span of the last three decades. Financial and non-financial indicators were used in order to more precisely clarify the multidimensional aspect of the SN-performance relationship. The external environment was assessed in terms of turbulence, hostility and dynamism; furthermore its effect as a moderator was tested. The results yield some significantly new elements necessary for understanding the role of SN for the performance of service SMEs in a developing country.

KEY WORDS: strategic networking, business performance, external environment, service sector, SMEs, Croatia

Date of Submission: 11 September 2014



Date of Publication: 10 October 2014

I. INTRODUCTION

Small and medium sized enterprises play an important 'backbone' role in the development of most world economies. Small and still-transitioning economies such as the Croatian one are no exception. Consequently numerous studies have investigated if, and have attempted to demonstrate that – and to what extent - firms with higher levels of SN intentions and activities perform better than those with lower levels. Much of this literature has, however, not been able to confirm this hypothesis. This raises the question whether the phenomenon of strategic networking as a firm's strategic orientation with regards to its business performance is in fact the appropriate causal relationship to measure altogether or if there is more complexity behind this seeming simplicity of these constructs. What the literature has acknowledged thus far is the situational aspect of the strategic orientation and business performance relationship as contingent on the industry in which the company operates and depending on the various internal and external factors. It is here where we position our contribution and extend the analysis of the linkages between strategic networking and business performance by investigating the effect in particular with regards to small businesses in a service sector. We add to the relationship the external environment as a moderating variable. Furthermore, we treat SN for the purpose of this study as a unidimensional as well as multidimensional construct. And finally, we test its influence on business performance by measuring financial as well as non-financial outcomes of business performance. The research is the result of observations conducted on 147 service sector SMEs. The data was then aggregated using multiple and hierarchical linear regression analysis to test the relationships between strategic networking, external environment and business performance and to test the strategic networking and business performance

interaction effect. Based on the results we propose that strategic networking positively influences small business performance, while there is a positive relationship between a conducive external environment and the firm's strategic networking posture. With regards to the interaction effect between the external environment and the strategic networking-business performance relationship we find no supporting evidence as to its existence.

II. LITERATURE REVIEW

Globalization, technological progress, and socio-political turbulence at such level have introduced change at such levels that allowed organizations to both harness the energy resulting from tension and disruptive dissonance rather opportunistically, but that has also directly impacted firms by transforming their structures, redefining their strategic processes, dictating their new scale and scope, and demanding intention in their social positioning. Partial answers to these changes have given rise to new, emergent business models and forms, such as networks in particular. Absent or near-absent a bureaucratic hierarchy of the traditional Weberian institution, networks, are effective before they are efficient, resilient, before they are optimized, and nimble before they are planified. Consequently, most economic sectors are characterized by a dramatic increase in network activity and various forms of interorganizational connectivity. Network relations are based on trust and long-term commitment and therefore represent a higher and more highly developed form than a traditional buyer-seller relationship (Cook et al., 2009), for example. Networks can be defined as structures of long-term relationships between companies or between a company's organizational units (Nooteboom, 2004; Gebreeyesus, 2013) as well. From such definitions it results that networks can invariably emerge or be formed within companies, between companies and as any combination thereof. Relationships between companies can be of unilateral or bilateral character by which products, services, resources and equity are exchanged, control of activities is conducted, and various communication and cooperation activities are performed. Companies that commit themselves to a long-term network relationship implicitly suggest that they can achieve greater strategic benefits from cooperation than from competition (Human&Provan, 1997).

Strategic networks have also been defined as intentionally formed groups of companies that are (often) geographically close, operate in the same industry and exchange inputs and outputs, in order to achieve certain business activities (Thorgren et al., 2012). Since companies have established long-term relationships based on trust, they are able to exchange key competencies and resources to achieve goals that individually would not be able to. In fact, other benefits, such as increased sales and a greater return on investment, may also be identified as direct outcomes of trust (Zaheer&Harris, 2006). Therefore, the purpose of SN is the formation of joint activities among the network members where members both contribute inputs to the network as well as realize benefits by using the other member's outputs. Mutual cooperation and exchange represent the basis for value creation and competitive advantage generation in SN (Provan&Kenis, 2007). Others in turn have defined SN as a multidimensional construct through its antecedents: a) commitment, b) trust, c) reputation, d) communication and e) cooperation (Chang&Harwood, 2003; Lau et al., 2005).

Strategic networking and performance

Networking theory holds that firms' competitive advantages reside in collaborative business relationships (Gulati et al., 2011), and that entrepreneurs are able to gain access to resources they do not control through these very network activities, thus affecting their business performance (Robson&Bennett, 2000; Watson, 2007). By forming such business networks companies can reduce risk levels and production costs, and they can increase flexibility, efficiency and knowledge capacity, all of which ultimately lead to higher performance levels (Oliver, 1990; Lin&Zhang, 2005; Farinda et al., 2009). Through business networks companies are able to better predict, prevent and absorb uncertainties that affect their operations (Oliver, 1990) and are able to jointly access previously inaccessible markets (Saleh&Ndubisi, 2006). In comparison to less successful companies, successful companies may also extend their networking beyond the primary or core activities to support activities in the sense of the Porterian value chain paradigm; in the event they more often use expert advice (Street&Cameron, 2007; Linda&Christopher, 2008) for example, as well as increasingly rely on information provided by their accountants (Robson&Bennett, 2000). Inversely, the lack of contacts with business professionals has been found to present an obstacle to their further business expansion (Larsson et al., 2003). In their study, Donckels and Lambrecht (1995) found that the development of networks has a positive effect on business growth. In turn, Saleh and Ndubisi (2006) determined that it leads to significant revenue growth and customer base expansion, while Lerner et al. (1997) affirmed that network participation significantly contributes to increased profitability.

Strategic networking and the external environment : Modern entrepreneurs are faced with ever more dynamic, complex, and unpredictable business environments in which technology, globalization, lack of resources, frequent fluctuations in business cycles, changes in social values, competition, customers, suppliers,

and many other invariably dynamic forces affect overall business performance (Ward&Lewandowska, 2005; Asch&Salaman, 2002). Intensity and complexity of the current environmental changes are putting pressure on companies to look for new possibilities of conducting business with the purpose of creating new added value (Stopford, 2001). While the external environment can certainly be characterized in a number of ways, many a definition relies on aspects such as turbulence (Roger 2006; Boyne&Meier 2009); dynamism (Lumpkin&Dess, 2001; Wiklund&Shepherd, 2005; Ruis-Ortega et al., 2013); and hostility (Lumpkin&Dess, 2001; Chow, 2006). Turbulent environments can be described as those with a high rate of change and a high the level of unpredictability of these changes (Dess&Beard, 1984; Roger, 2006). Environmental hostility is characterized by intense price, product and technology competition, lack or constraint of resources (such as raw materials, human resources, etc.), serious regulatory restrictions, a relative lack of exploitable opportunities, as well as the presence of negative demographic trends (Alexandrova, 2004; Covin&Slevin, 2006). Environmental dynamism can be expressed as the extent of change predictability in the environment, or the level of uncertainty in the environment, as well manifesting itself as variability in the rate of market and industry change (Dess&Beard, 1984; Lumpkin&Dess, 2001; Wiklund&Shepherd, 2005).

2.3. Interaction between strategic networking and the external environment-performance relationship

The importance of the external environment on firm strategy has long been acknowledged in the strategy literature (Goll&Rasaheed, 2005; Mason, 2007). There is furthermore sufficient empirical evidence that the external environment represents an important moderating role for the wide spectrum of business strategies (Wiklund&Shepherd, 2005; Chow, 2006). Uncertainty in the environment affects the structure and the strategy of the organization since it represents the incompleteness of requisite information with regards to the decision making processes of the company and its ensuing activities (Covin et al., 2000; Wiklund&Shepherd, 2005). As the level of uncertainty and insecurity increases, companies show increased propensity to act proactively and to implement aggressive strategies (Li et al., 2006). In turn, unlike the tendency towards self-absorbed complacency resulting from a stable environment, unpredictability in the environment will increase the firm's propensity for exposure and risk taking as it needs to link and connect its activities with other industry players in order to remediate and complete the partial information situation. Anderson (2004) found out that the relationship between decision making process and business performance is moderated by a dynamic environment.

III. HYPOTHESES

Strategic networking and performance

We thus propose to test the following hypotheses and their corollaries:

H1: Strategic networking has a positive effect on small business performance.

H1a: Commitment has a positive effect on small business performance.

H1b: Trust has a positive effect on small business performance.

H1c: Reputation has a positive effect on small business performance.

H1d: Communication has a positive effect on small business performance.

H1e: Cooperation has a positive effect on small business performance.

On a conceptual level, it is possible to distinguish and prioritize between growth indicators on one hand, and profitability indicators on the other, since the company can invest into long-term growth at the expense of short-term profitability (Combs et al., 2005; Yip et al., 2009). Conceptual arguments concerning the SN-business performance relationship generally focus on financial profitability indicators, because firms characterized by higher level of SN may achieve economies of scale to successfully compete in the market, obtain partners' complementary resources to enhance their competitive advantage, and share costs and risks that companies face when entering new markets (Watson, 2007). Some have furthermore also tested the relationship between SN and financial performance (Lerner et al., 1997; Saleh&Ndubisi, 2006) and confirmed a positive relationship.

Consequently, we propose to further test the following corollary hypotheses:

H1.1: Strategic networking has a positive effect on small business financial performance.

H1.1a: Commitment has a positive effect on small business financial performance.

H1.1b: Trust has a positive effect on small business financial performance.

H1.1c: Reputation has a positive effect on small business financial performance.

H1.1d: Communication has a positive effect on small business financial performance.

H1.1e: Cooperation has a positive effect on small business financial performance.

Next, the relationship between non-financial indicators and SN is not as direct as is the case of financial indicators. Researchers have tested the proposed relationship and found a positive relationship (Donckels&Lambrecht, 1995; Larsson et al., 2003; Saleh&Ndubisi, 2006), while others have not found any significant correlation (Cooper et al., 1994; Zhao&Aram, 1995). Therefore, the present paper attempts to clarify this relationship.

To that end, we propose to test the following second set of corollary hypotheses:

H1.2: Strategic networking has a positive effect on small business non-financial performance.

H1.2a: Commitment has a positive effect on small business non-financial performance.

H1.2b: Trust has a positive effect on small business non-financial performance.

H1.2c: Reputation has a positive effect on small business non-financial performance.

H1.2d: Communication has a positive effect on small business non-financial performance.

H1.2e: Cooperation has a positive effect on small business non-financial performance.

2.2. Strategic networking and the external environment

Turbulent, dynamic, and hostile environments can and do significantly impact networking intentions and activities of small and medium-sized enterprises, since firms are compelled to share information, resources, knowledge, and to constantly seek new sales and distribution channels, suppliers and monitor many of their stakeholders the actions and behaviours of which could potentially impact their business performance (Dickson et al., 2006).

To that end, we propose to test the following hypotheses:

H2: External environment has a positive effect on strategic networking.

H2a: Turbulence has a positive effect on strategic networking.

H2b: Hostility has a positive effect on strategic networking.

H2c: Dynamism has a positive effect on strategic networking.

Interaction of strategic networking, external environment and performance : Since the source of achieving and maintaining a sustainable competitive advantage lies in the firm's ability to adapt to changes in the environment, and if one captures the external environment via the above variables of environmental turbulence, hostility, and dynamism one can reliably posit that strategic networking represents yields a very effective response with regards to the complexity of decision making and the emphasis of the firm's organizational efficiencies (Dess&Beard, 1984).

For that, we propose the following third main hypothesis:

H3: The relationship between strategic networking and small business performance is moderated by the external environment.

IV. RESEARCH METHODS

Sample selection

The sampling frame was taken from the database of the Croatian Chamber of Economy, which includes all incorporated Croatian companies. A random sample of independent firms from the service sector was taken. Half of the sample had between 1 and 49 employees and half between 50 and 249 employees which corresponds to the European Union definition of small and medium-sized enterprises. A total of 1,000 small and medium sized business owners and managers from the sampling frame were contacted in June and July of 2011 of which 147 responded to a mail questionnaire (i.e. response rate of 14,7%). Regarding the business size of the respondents, 27% (n=40) were micro firms, 35% (n=51) small firms and 38% (n=56) medium sized firms. The majority of the firms are in the private ownership – 90%, 7% are owned by state and 3% are in the joint ownership. They most common business activities are: manufacture (20%), finance and other business services (17%), and retail and wholesale (16%). Regarding the sex of the examinee, 60% were male and 40% women. Examinees were mostly managers – 44%, owners 34% and CEOs 22%. The majority of them were working for present company more than 7 years – 54%, five to seven years – 14%, one to four years – 26% and less than one year only 6%. Analyses of educational structure of the examinees shows that almost 68% have collage degree, 18% MBA or master degree, 2% doctoral degree and only high school degree have 12%.

Variables and measures

Strategic networking

Strategic networking represents a long-term exchange of various resources between firms with the purpose to achieve business advantages (Wincent 2005). Our construct for strategic networking was thus conceptualized using five variables: commitment, trust, reputation, communication and cooperation. Each of these variables were measured with three questions using a seven point Likert scale. Commitment was measured using the Allen and Meyer (1990) scale, trust using the Garbarino and Johnson (1999) scale, reputation using the Hansen et al. (2008) scale, communication using the Sivadas and Dwyer (2000) scale, while cooperation was measured by the Eriksson and Pesamaa (2007) scale.

Business performance

Business performance cannot be measured solely by focusing on certain business segments. Composite approaches are needed, as well as proxies in order to measure for example the quality of business success. Business performance has traditionally been proxied via some internal aspects (such as productivity, efficiency, quality, etc.) and some external aspects of quantifiable performance (such as profitability, liquidity, solvency, etc.). Consequently researchers have emphasized a multidimensional approach in measuring business performance (Venkatraman&Ramanujam, 1986; Lumpkin&Dess, 2001; De Hoyos-Ruperto et al., 2013). However, since entrepreneurial activity can lead to positive business effects and at the same time have negative impact on other aspects of the business (Lumpkin&Dess, 1996), in order to obtain a more extensive and more reliable picture it is necessary to measure business performance by incorporating both financial and non-financial performance indicators (Murphy et al., 1996). The most common indicators of financial performance are notably return on assets (ROA), sales growth, gross profit, and value added, while in terms of non-financial indicators one can include market share, customer retention rate, reputation, and corporate social responsibility (Antoncic&Hisrich, 2003).

Analysing SMEs business performance is further complicated by the tendency of owners and their management to be reluctant to reveal their business results. Therefore, the present research is based on the collected subjective answers about financial as well as non-financial performance from the respective entrepreneurs in order to reflect the above-mentioned multi-dimensionality. This approach has its origin in the numerous studies of business performance where it has been shown that management's subjective assessment of performance is highly correlated with objective performance measures (Venkatraman&Ramanujam, 1986, Wall et al., 2004). Therefore, similar to the way business performance was conceptualized by Gupta and Govindarajan (1984) where the respondents were asked to rate the extent to which stated financial and non-financial indicators are *important* for their business, and afterwards to assess the extent of *satisfaction* with the achieved performance of these indicators. For this purpose three financial and three non-financial indicators were used, each of the indicators were measured using a seven point Likert scale.

External environment

We retain the definition of the external environment as a set of elements that exist outside the organization but potentially have an effect on some parts of the organization or on the organization as a whole (Dess et al., 1997). The external environment was operationalized using three variables (turbulence, hostility and dynamism) as proposed by Naman and Slevin (1993). These variables were measured with three questions using a seven point Likert scale.

Analysis

Multiple linear regression analysis was used to test the relationships between strategic networking, external environment and business performance, while hierarchical linear regression analysis was used to test whether there exist interaction effects between the external environment and the strategic networking-business performance relationship. Interaction effects represent the combined effects of the independent variables on the dependent measure. More accurately, the interaction effects are presumed to present when the impact of one variable depends on the level of the other variable and if the interaction term gives a significant contribution over and above the direct effects of the independent variables (Pedhazur, 1997; Pearl, 2009).

V. RESULTS

The means, standard deviations and correlations of the variables are displayed in Table 1, where it can be seen that correlations among the independent variables are relatively modest, ranging from -.139 to .441. The absence of multicollinearity was ensured by centering the means of the interaction variables and by applying multicollinearity diagnosis. Variance inflation factors are well below critical values.

Table 1 to be placed about here

Table 2 displays the means, standard deviations and correlations between the second-order variables, where it can also be seen that correlations among the second-order independent variables are relatively modest, ranging from -.151 to .423.

Table 3 gives the results of the hypothesis testing where each column presents the result of the different hypotheses' tests. Columns 1, 2 and 3 give the answer to the first hypothesis, column 4 to the second hypothesis, while column 5 gives the answer to the third hypothesis.

Table 2 to be placed about here

Strategic networking, as a first order variable, has a significantly positive effect on business performance ($r = .441, P < .01$), financial business performance ($r = .365, P < .01$) and non-financial business performance ($r = .434, P < .01$) which provides support for hypotheses 1, 1.1 and 1.2.

From the second order variables that conceptualize strategic networking only two, reputation ($b = .34, P < .01$) and cooperation ($b = .18, P < .10$) have significantly positive effect on overall business performance.

Regarding financial performance, it can be concluded from table 3 that commitment ($b = .14, P < .10$) and reputation ($b = .34, P < .01$) have significantly positive effect, while only reputation ($b = .26, P < .01$) and cooperation ($b = .19, P < .10$) have significantly positive effect on non-financial business performance. Only communication as a second order variable has a significant influence on financial business performance ($b = -.17, P < .10$). Therefore, the findings support the hypotheses 1c, 1e, 1.1a, 1.1c, 1.2c and 1.2e.

Table 3 to be placed about here

The external environment has a positive influence on strategic networking ($r = .371, P < .01$), supporting hypothesis 2, while hostility in its own right as a second order variable that conceptualizes the external environment has a significantly positive effect on strategic networking ($b = .15, P < .10$), which supports hypothesis 2.b.

Regarding the moderation effect of the external environment on the relationship between strategic networking and business performance it can be concluded that, as such it does not exist, therefore there is not enough evidence to support hypothesis 3. Table 4 gives an overview of the hypothesis and sub-hypothesis testing results.

Table 4 to be placed about here

VI. DISCUSSION

Implications for research and management

The exercise of analysing the linkage between strategic networking and small service sector firm performance in the context of small transitional economies such as is the case of Croatia uncovered the need to incorporate the moderating effect of the external environment into the analysis. The obtained results then supported the conclusion that strategic networking positively affects the business performance of Croatian service SMEs. This conclusion in turn reveals the benefit for Croatian small business owners and their management to consider the antecedents of strategic networking in defining their business strategies. Only then will companies realize numerous advantages if sophisticated long-term network relationships are established with business partners. These advantages can include easier access to information, knowledge, human resources, financial sources, etc., and lead to better position of Croatian SMEs on both domestic and global market. As Croatian economy is determined by dynamic and turbulent business environment, owners and managers of Croatian SMEs should develop programs and methods for finding complementary business partners and establish strategic networks in order to increase their business performance.

Limitations

The size of the sample represents a certain limitation of the study. Although the sample size and the rate of return may be considered satisfactory a priori, and seem in line with the international publication standards (Klein 2005; Malhotra 2010), conducting future research on a larger sample could significantly enhance the contribution to the understanding of the research issues. Since the research was conducted at one point in time, future research work should be continued over a longer time period because longitudinal research would provide clearer insights into the relationship of strategic networking antecedents and various aspects of business performance as related to the arable time present in the environment. Moreover, the study is based on subjective perceptions of firm representatives, comprised of the owners, directors or higher-level managers, where directors and managers may be personally biased whilst evaluating internal and external organizational

environment and performance. The metric for this unobservable has to be developed and the appropriate proxies have to be operationalized. Finally, limitations can also be found in the research design itself. From a methodological point of view, the research design could be improved if the study included several representatives from each investigated company and not solely rely on the answers provided by only one representative from each firm. Since the research is based solely on subjective measures of observed concepts, i.e. on the individual perceptions of individual firms' representatives, it is necessary to operationalize certain objective measures that than could serve as a reference with respect to the subjective measures. This in turn would provide a more robust understanding of the observed relationships and an increase in the overall reliability of the analysis.

VII. CONCLUSION

Small and medium-sized firms represent the most agile, dynamic and innovative sector of any economy. Any investigation effort with regards to their performance therefore represents a valuable contribution. Additionally the findings of this paper are consistent with the previous research and suggest that a strategic networking posture as a unidimensional construct (i.e., commitment, trust, reputation, communication and cooperation) positively influence business performance of Croatian service SMEs. However, relying on this main effect relationship provides an incomplete understanding of small business performance. We attempted to provide a more in-depth analysis of business performance by dividing business performance into financial and non-financial aspects and were able to conclude that strategic networking positively influences both financial and non-financial business performance. With regards to strategic networking as a multidimensional construct, however, only reputation had a positive influence on financial, non-financial, and overall business performance. Cooperation had a positive influence on overall and non-financial performance, while commitment had a positive influence on financial performance only. The external environment as a unidimensional construct positively influenced strategic networking, while only hostility as a dimension of the external environment has a separate positive influence as well. Other dimensions do not show significant influence on strategic networking. Regarding the moderation effect that external environment could have on the strategic networking and business performance relationship it can be concluded that as such it does not exist.

REFERENCES

- [1] Alexandrova, M. 2004. Entrepreneurship in a transition economy: The impact of environment on entrepreneurial orientation, *Problems and Perspectives Management*, **2**, 140-148.
- [2] Allen, N. J. & Meyer, J. P. 1990. The measurement and antecedents of affective, continuance, and normative commitment to the organization, *Journal of Occupational Psychology*, **63**, 1-18.
- [3] Anderson, T. J. 2004. Integrating decentralized strategy making and strategic planning processes in dynamic environments, *Journal of Management Studies*, **41**(8), 1271-1299.
- [4] Antonic, B. & Hisrich, R.D. 2003. Clarifying the intrapreneurship concept, *Journal of Small Business and Enterprise Development*, **10**(1), 7-24.
- [5] Asch, D. & Salaman, G. 2002. The challenge of change, *European Business Journal*, **14**(3), 133-143.
- [6] Boyne, G.A. & Meier, K.J. 2009. Environmental turbulence, organizational stability, and public service performance, *Administration & Society*, **799-824**
- [7] Chang, M.T. & Harwood, R.J. 2003. The Use of Strategic Networks to Enhance Global Competitiveness in the Hong Kong Clothing Manufacturing Industry, *Journal of the Textile Institute*, **92**(1), 76-83.
- [8] Chow, I.H.S., 2006. The relationship between entrepreneurial orientation and firm performance in China, *SAM Advanced Management Journal*, **71**(3), 11-20.
- [9] Combs, J. G. & Crook, T. R. & Shook, C. L. 2005. The dimensionality of organizational performance and its implications for strategic management research, *Research methodology in strategic management*, San Diego, CA
- [10] Cook, K. S. & Levi, M. & Hardin, R. 2009. *Whom Can we Trust? How Groups, Networks and Institutions Make Trust Possible*, Russell Sage Foundation Publications, New York
- [11] Cooper, A.C. & Gimeno-Gascon, J.F. & Woo, C. 1994. Initial human and financial capital as predictors of new venture performance, *Journal of Business Venturing*, **9**(5), 371-395.
- [12] Covin, J. G. & Slevin, D. P. 2006. Strategic management of small firms in hostile and benign environments, *Strategic management journal*, **10**(1), 75-87.
- [13] Covin, J. G. & Slevin, D. P. & Heeley, M. B. 2000. Pioneers and followers. competitive tactics, environment, and firm growth, *Journal of Business Venturing*, **15**, 175-210.
- [14] De Hoyos-Ruperto, M. & Romaguera, J.M. & Carlsson, B. & Lyytinen, K. 2013. Networking. A Critical Success Factor for Entrepreneurship, *American Journal of Management*, **13**(2), 55-72
- [15] Dess, G. G. & Lumpkin, G. T. & Covin, J. G. 1997. Entrepreneurial strategy making and firm performance. Test of contingency and configurational models, *Strategic Management Journal*, **18**(9), 677-695.
- [16] Dess, G. G. & Beard, D. W. 1984. Dimensions of organizational task environments, *Administrative Science Quarterly*, **29**, 52-73.
- [17] Dickson, P. H. & Weaver, K. M. & Hoy, F. 2006. Opportunism in the R&D alliances of SMEs. The roles of the institutional environment and SME size, *Journal of Business Venturing*, **21**(4), 487-513.
- [18] Donckels, R. & Lambrecht, J. 1995. Networks and Small Business Growth. An Explanatory Model, *Small Business Economics*, **7**, 273-289.
- [19] Eriksson, P. E. & Pesamaa, O. 2007. Modelling procurement effects on cooperation, *Construction management and economics*, **25**, 893-901.

- [20] Farinda, A. G. & Kamarulzaman, Y. & Abdullah, A. & Ahmad, S. Z. 2009. Building Business Networking. A Proposed Framework for Malaysian SMEs, *International Review of Business Research Papers*, **5**(2), **151-160**
- [21] Garbarino, E. & Johnson, M.S. 1999. The Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships, *The Journal of Marketing*, **63**(2), **70-87**.
- [22] Gebreeyesus, M. 2013. Innovation Performance and Embeddedness in Networks. Evidence from the Ethiopian Footwear Cluster, *World Development*, **4**, **302-316**
- [23] Goll, I. & Rasheed, A. A. 2005. The relationships between top management demographic characteristics, rational decision making, environmental munificence, and firm performance, *Organization Studies*, **26**(7), **999-1023**.
- [24] Gulati, R. & Lavie, D. & Madhavan, R. 2011. How Do Networks Matter? The Performance Effects of Interorganizational Networks, *Research in Organizational Behavior*, **31**, **207-224**.
- [25] Gupta, A.K. & Govindarajan, V. 1984. Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation, *Academy of Management Journal*, **27**, **25-41**.
- [26] Hansen, H. & Samuelsen, B.M. & Silseth, P.R. 2008. Customer perceived value in B-t-B service relationships. Investigating the importance of corporate reputation, *Industrial Marketing Management*, **37**(2), **206-217**.
- [27] Human, S.E. & Provan, K.G. 1997. An Emergent Theory of Structure and Outcomes in Small-Firm Strategic Manufacturing Networks, *The Academy of Management Journal*, **40**(2), **368-403**.
- [28] Kline, R. B. 2005. *Principles and Practice of Structural Equation Modeling*, 2E, The Guilford Press, NY
- [29] Larsson, E. & Hedelin, L. & Garling, T. 2003. Influence of expert advice on expansion goals of small businesses in rural Sweden, *Journal of Small Business Management*, **41**(2), **205-212**.
- [30] Lau, M.M. & Moon, K.L. & Zhang, Z.M. 2005. The antecedents of successful buyer-supplier relationships in strategic networks of the Hong Kong clothing industry, *Journal of the Textile Institute*, **96**(5), **329-338**.
- [31] Lerner, M. & Brush, C. & Hisrich, R. 1997. Israeli women entrepreneurs. an examination of factors affecting performance, *Journal of Business Venturing*, **12**(4), **315-339**.
- [32] Li, Y. & Liu, Y. & Zhao, Y. 2006. The role of market and entrepreneurship orientation and internal control in the new product development activities of Chinese firms, *Industrial Marketing Management*, **35**, **336-347**.
- [33] Lin, C. Y. & Zhang, J. 2005. Changing structures of SME networks. lessons from the publishing industry in Taiwan, *Long Range Planning*, **38**, **145 - 162**.
- [34] Linda, M. & Christopher, A. 2008. Seeking advice in a dynamic and complex business environment. Impact on the success of small firms, *Journal of Developmental Entrepreneurship*, **13**(2), **133-149**.
- [35] Lumpkin, G. T. & Dess, G. G. 2001. Linking two dimensions of EO to firm performance. The moderating role of environment and industry life cycle, *Journal of Business Venturing*, **16**, **429-451**.
- [36] Lumpkin, G.T. & Dess, G.G. 1996. Clarifying the entrepreneurial orientation construct and linking it to performance, *Academy of Management Review*, **21**, **135-172**.
- [37] Lumpkin, G.T. & Dess, G.G. 2001. Linking two dimensions of entrepreneurial orientation to firm performance. The moderating role of environment and industry life cycle, *Journal of Business Venturing*, **16**, **429-451**.
- [38] Malhotra, N. M. 2010. *Marketing research. an applied orientation*, Pearson, NJ
- [39] Mason, R.B. 2007. The external environment's effect on management and strategy. A complexity theory approach, in *Management Decision*, **4**(1), **10-28**
- [40] Murphy, G.B. & Trailer, J.W. & Hill, R.C. 1996. Measuring performance in entrepreneurship research, *Journal of Business Research*, **36**, **15-23**.
- [41] Naman, J. L. & Slevin, D. P. 1993. Entrepreneurship and the concept of fit. A model and empirical tests, *Strategic Management Journal*, **14**, **137-153**.
- [42] Nooteboom, B. 2004. *Inter-Firm Collaboration, Learning and Networks. An Integrated Approach*, Routledge
- [43] Oliver, C. 1990. Determinants of inter-organizational relationships. Integration and future directions, *The Academy of Management Review*, **15**(2), **241-265**.
- [44] Pearl, J. 2009. *Causality*, Cambridge University Press, New York
- [45] Pedhazur, E.J. 1997. *Multiple regression in behavioral research*, 3rd Ed. Fort Worth, TX. Harcourt Brace.
- [46] Provan, K.G. & Kenis, P. 2007. Modes of Network Governance. Structure, Management, and Effectiveness, *Journal of Public Administration Research and Theory*, **18**(2), **229-252**
- [47] Robson, P. J. & Bennett, R. J. 2000. SME growth. the relationship with business advice and external collaboration, *Small Business Economics*, **15**(3), **193-208**.
- [48] Ruiz-Ortega, M. J. & Parra-Requena, G. & Rodrigo-Alarcón, J. & García-Villaverde, P. 2013. Environmental dynamism and entrepreneurial orientation. The moderating role of firm's capabilities, *Journal of Organizational Change Management*, **26**(3), **475 - 493**
- [49] Saleh, A. S. & Ndubisi, N. O. 2006. An Evaluation of SME Development in Malaysia, *International Review of Business Research Papers*, **2**(1), **1-14**.
- [50] Sivadas, E. & Dwyer, F. R. 2000. An examination of organizational factors influencing new product success in internal and alliance based processes, *Journal of Marketing*, **64**, **31-49**.
- [51] Stopford, J. 2001. Should strategy makers become dream weavers, *Harvard Business Review*, **79**(1), **165-169**.
- [52] Street, C. T. & Cameron, A. F. 2007. External Relationships and the Small Business. A Review of Small Business Alliance and Network Research, *Journal of Small Business Management*, **45**(2), **239-266**.
- [53] Thørgren S. & Wincent J. & Örtqvist D. 2012. Unleashing synergies in strategic networks of SMEs. the influence of partner fit on corporate entrepreneurship, in *International Small Business Journal*, **30**(5), **453-471**.
- [54] Venkatraman, N. & Ramanujam, V. 1986. Measurement of business performance in strategy research. A comparison of approaches, *Academy of Management Review*, **11**, **801-814**.
- [55] Wall, T. & Michie, J. & Patterson, M. & Wood, S. & Sheehan, M. & Clegg, C. & West, M. 2004. On the validity of subjective measures of company performance, *Personnel Psychology*, **57**, **95-118**
- [56] Ward, S. & Lewandowska, A. 2005. Shelter in the storm. marketing strategy as moderated by the hostile environment, *Marketing Intelligence and Planning*, **23**(7), **670-687**.
- [57] Watson, J. 2007. Modeling the relationship between networking and firm performance, *Journal of Business Venturing*, **22**(6), **852-874**.
- [58] Wiklund, J. & Shepherd, D. 2005. Entrepreneurial orientation and small business performance. A configurational approach, *Journal of Business Venturing*, **20**, **71-91**.

- [59] Yip, G. S. & Devinney, T. M. & Johnson, G. 2009. Measuring long term superior performance. The UK's long term superior performers 1984-2003, *Long Range Planning*, **42**(3) **390-413**
- [60] Zaheer, A. & Harris, J. 2006. Interorganizational trust, *Handbook of strategic alliances*, Thousand Oaks, CA. Sage, **169-197**
- [61] Zhao, L. & Aram, J.D. 1995. Networking and growth of young technology-intensive ventures in China, *Journal of Business Venturing*, **10**(5), **349-370**.

Table 1: Means, S.D.s, and correlations (n=147)

	Mean	S.D.	1	2	3	4	5	6
1. Performance	24.53	9.15	1.00					
2. Financial performance	24.67	10.85	.914**	1.00				
3. Non-financial performance	24.39	9.47	.885**	.621**	1.00			
4. Strategic networking (SN)	5.11	.90	.441**	.365**	.434**	1.00		
5. External environment (EE)	4.37	1.06	.108	-.103	.224**	.371**	1.00	
6. SNxEE			.040	.097	-.034	-.139+	-.127	1.00

Notes: +. Correlation is significant at the 0.1 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed);

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2: Means, S.D.s, and correlations (n=147)

	Mean	S.D.	1	2	3	4	5	6	7	8
1. Performance	24.53	9.15	1.00							
2. Financial perf.	24.67	10.85	.914**	1.00						
3. Non-financial perf.	24.39	9.47	.885**	.621**	1.00					
4. Commitment	4.06	1.65	.245**	.247**	.190*	1.00				
5. Trust	6.10	.99	.328**	.293**	.298**	.185*	1.00			
6. Reputation	5.96	.97	.423**	.368**	.396**	.160+	.560**	1.00		
7. Communication	5.26	1.32	.277**	.165**	.347**	.218**	.370**	.558**	1.00	
8. Cooperation	4.18	1.50	.326**	.252**	.342**	.450**	.312**	.309**	.561**	1.00
9. Turbulence	4.70	1.45	-.065	-.151+	-.047	-.081	.021	.066	.185*	.047
10. Hostility	4.60	1.30	.203*	.129	.244**	-.025	.046	.262**	.246**	.086
11. Dynamism	3.81	1.34	.129	.008	.240**	-.003	.013	.048	.052	.135+

Notes: +. Correlation is significant at the 0.1 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed);

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3: Results of multiple linear regression analysis (n=147)

	H1		H1.1.		H1.2.		H2		H3	
	Performance		Financial performance		Non-financial performance		Strategic networking		Performance (interaction)	
	β	S.E.	β	S.E.	β	S.E.	β	S.E.	β	S.E.
Commitment	.10	.45	.14*	.55	.03	.48				
Trust	.08	.82	.09	1.00	.06	.87				
Reputation	.34***	.94	.34***	1.14	.26**	.98				
Communication	-.07	.70	-.17*	.85	.06	.74				
Cooperation	.18*	.59	.15	.72	.19*	.62				
Turbulence							-.00	.06		
Hostility							.15*	.06		
Dynamism							.02	.06		
Strategic networking (SN)									.44***	.76
External environment (EE)									.06	.65
SNxEE									.11	.73
R square (R ²)	.23***		.19***		.21***		.02		.20***	
Adjusted R square	.21***		.17***		.18***		.00		.19***	

Notes: *P < .10; **P < .05; ***P < .01.

Table 4: Hypothesis and sub-hypothesis testing results

	H1 Performance	H1.1. Financial performance	H1.2. Non-financial performance	H2 Strategic networking	H3 Performance (interaction)
Strategic networking (SN)	YES	YES	YES		YES
External environment (EE)				YES	NO
SNxEE					NO
(a) Commitment	NO	YES	NO		
(b) Trust	NO	NO	NO		
(c) Reputation	YES	YES	YES		
(d) Communication	NO	NO	NO		
(e) Cooperation	YES	NO	YES		
(a) Turbulence				NO	
(b) Hostility				YES	
(c) Dynamism				NO	