



Does coopetition support SMEs in turbulent contexts?

Christian Keen ^{a,*}, Denis Lescop ^b, Valeriano Sanchez-Famoso ^c



^a Département de management, FSA, Université Laval, Canada

^b Département Stratégie, Management et Entrepreneuriat, Montpellier Business School, France

^c Departamento de Economía Financiera, University of the Basque Country UPV/EHU, Spain

ARTICLE INFO

Article history:

Received 31 March 2022

Received in revised form 13 July 2022

Accepted 22 July 2022

Available online 29 July 2022

JEL classification:

M19

L21

Keywords:

SME

Emerging economies

Performance

Coopetition

Entrepreneurial support

ABSTRACT

We examined how entrepreneurial support, resource securement, and coopetition affect the performance of SMEs in the turbulent context of an emerging economy. Data collected from a survey of SMEs in Bolivia generated an unusual finding: coopetition strategy has no significant impact on performance.

© 2022 Elsevier B.V. All rights reserved.

1. Introduction

A strong political and academic consensus exists on the importance of small and medium-sized enterprises (SMEs) for economic development and towards understanding the conditions that favour their advancement (Prieger et al., 2016), notably as valuable contributors to economic growth and employment (Acs et al., 2012). Surviving and growing in a turbulent context is complex, yet very little is known about how SMEs achieve this.

Latin America offers a unique context characterized by high volatility where SMEs must continually adapt to institutional, political, and socioeconomic turbulence that impact their performance and survival (Khanna and Palepu, 2000). This vulnerability brings SMEs to focus primarily on subsistence rather than growth (Mendoza et al., 2021). Most entrepreneurial research in Latin America is based on case studies or international agency macroeconomic databases and neither offer much insight into drivers and antecedents at the micro level (Acs et al., 2012). Our study aimed to shed light on how business environment, resources securement, entrepreneurial support and coopetition behaviours support SME performance in turbulent contexts.

2. Hypothesis development

SMEs in turbulent contexts operate to secure resources, deal with economic instability, fill institutional voids, avoid threats, and exploit opportunities (Khanna and Palepu, 2000). SME performance can be hampered by a lack of entrepreneurial and local support (e.g. necessary social and business infrastructure), a lack of entrepreneurial resources and professional services to support their start-up and growth, and a political landscape unfavourable to business.

Hypothesis 1. Entrepreneurial support has a positive effect on SMEs performance in turbulent contexts.

Hypothesis 2. SME resource securement has a positive impact on their performance in turbulent contexts.

Possessing limited resources and capabilities, SMEs hold a poor strategic position to achieve sufficient performance in turbulent contexts (Zarrouk et al., 2020). SMEs gain competitiveness through cooperative arrangements (Ritala, 2018) rather than through independent scale economies. This is particularly salient in contexts where routinized market mechanisms do not really exist (Prieger et al., 2016). Synergistic interactions with selected stakeholders can be crucial in overcoming limited resources and becoming more competitive (Mendoza et al., 2021).

Hypothesis 3. Coopetition has a positive impact on SME performance in turbulent contexts.

* Corresponding author.

E-mail addresses: christian.keen@fsa.ulaval.ca (C. Keen),
d.lescop@montpellier-bs.com (D. Lescop), valeriano.sanchezfamoso@ehu.eus (V. Sanchez-Famoso).

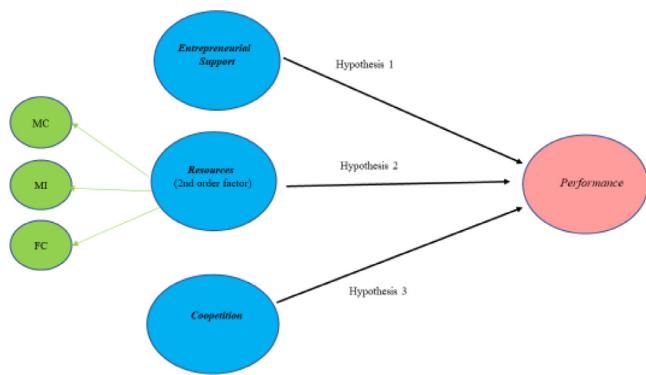


Fig. 1. Model.

3. Methodology

We collected data from Bolivian SMEs through an online questionnaire (see annex). Bolivia can be seen as a benchmark for turbulent emerging countries, since: (1) it showed strong signs of pandemic recovery in 2021; (2) it struggles with a transition from transactional to institutional policies; (3) it has a history of macroeconomic instability; (4) government support tends to be limited and inconsistent; (5) it has a relatively open economy surrounded by large economies (e.g. Brazil) or others otherwise very open to the world (e.g. Chile); (7) suffers from the usual problems related to Dutch disease.

Data collection took place over the summer and fall of 2021. To ensure quality, the survey was administered by Masters students from the *Universidad Privada Boliviana's Cluster de Innovacion* research centre under the supervision of a quantitative methods expert. All company information was collected with the collaboration of four leading chambers of commerce covering approximately 90% of Bolivian SMEs. For our sample, we chose firms (1) having 10 to 250 employees, (2) legally established in Bolivia, (3) not influenced by liquidation or insolvency or the like, and, (4) that are independently owned domestic firms. The questionnaire was designed in English and translated into Spanish. We conducted a pilot test with fifteen SMEs and asked three academic research methods and entrepreneurship experts to examine the questionnaire. This validation ensured that the questions were unambiguous for respondents and displayed high content validity. It was sent to 1,700 SMEs of which 514 answered and from which 487 responses were exploitable. The questionnaire was addressed to owner-managers duly fulfilling the role of expert informant (Klein et al., 2005).

3.1. Structural model

Hypotheses were tested using structural equation modelling, with a partial least squares (variance-based) technique relying on a principal component-based estimation approach (Hair et al., 2017). Following Hair et al. (2017), we adopted a two-stage approach to (i) assess the measurement of the model and (ii) assess the structural model and test the hypotheses (Fig. 1).

(i) *Model Measurement Assessment.* The acceptability of measurement models must be confirmed (Hair et al., 2017) by evaluating the convergent and discriminant validity and reliability of the model's latent variables. Evaluating this means assessing the relationships between the latent variables and their associated items using two coefficients: composite reliability (CR) and average variance extracted (AVE) (Hair et al., 2011). To achieve an acceptable indicator reliability, the loading of each indicator should be >0.6 ; to establish construct reliability, the CR coefficient

should be >0.70 and Alpha Cronbach should be >0.70 ; and to assess the convergent validity, the AVE should be >0.5 (Hair et al., 2011). Our model reflects the required reliability and convergent validity (see Tables 1 and 2):

Discriminant validity is the extent to which each latent variable is distinct from other constructs in the model (Hair et al., 2017). To establish this, the square root of the AVE for each construct should be greater than all of the correlations among the other constructs in the model if they are to meet the Fornell-Larcker criterion (Hair et al., 2017). Our model reflects the required discriminant validity:

(ii) *Structural Model Assessment.* In the second stage of our analysis, the structural model was assessed by calculating the R^2 value of the dependent constructs (performance) as an indicator of the model's explanatory power (Hair et al., 2017). The R^2 value was 0.29, considered relatively high and acceptable by behavioural research standards (Hair et al., 2017).

After confirming model validity, we identified effect following Hair et al. (2017). We first analysed the direct effect between each independent variable and the dependent variable by checking the value of the path coefficient along with its significance and the confidence interval with a bootstrapping procedure of 10,000 resamples. An effect is significant when it has a 95% probability if the resulting confidence interval does not include zero (Hair et al., 2017).

4. Empirical findings

Based on the findings of the structural model analysis, entrepreneurial support (social and business infrastructure and professional services) has a positive and significant effect on performance ($\beta = 0.467$; $p < 0.001$; [0.386;0.544]), thereby validating our first hypothesis. This is in line with the entrepreneurship and regional development literature that support these as having a direct and positive impact on SME performance. This insight is especially salient for emerging economies where the political and economic landscape tends to shift regularly and makes predictability difficult. Our analysis also confirms our second hypothesis that resource securing has a significant impact on the SME performance ($\beta = 0.157$; $p < 0.001$; [0.069;0.239]), true in developed as well as emerging economies. Though these last results are significant, they are less so than the relationship between entrepreneurial support and performance. Lastly, results showed no significance for our third hypothesis ($\beta = 0.049$, $P > 0.05$; [-0.114;0.158]), revealing that competition has no significant influence on SME performance. This is interesting given that SMEs are resource-constrained and competing and cooperating among SMEs is generally held as a viable strategy to alleviate this weakness.

5. Conclusions

Our analysis suggests that entrepreneurial support (social and business infrastructure and professional services) are greatly important to SME performance and likely their growth in turbulent contexts. That cooperation was not significant raises interesting questions for future research in that it does not align with previous research and highlights the critical role of cultural and local government support for SMEs.

Data availability

The data that has been used is confidential.

Appendix A. Supplementary data

Supplementary material related to this article can be found online at <https://doi.org/10.1016/j.econlet.2022.110762>.

Table 1
Measurement model evaluation.

Constructs	β	CA	CR	AVE
<i>Entrepreneurial Support</i>		0.88	0.91	0.68
My community has the infrastructure necessary to start and run most businesses	0.834***			
My community has many entrepreneur-friendly organizations such as Chambers of Commerce	0.805***			
Professional services for entrepreneurs are readily available in my community	0.824***			
I believe the resources in my community are well designed to support business growth	0.847***			
Local organizations, such as incubators and Small Business Development Centers, are active in supporting local entrepreneurs	0.803***			
<i>Management Capabilities</i>		0.77	0.85	0.59
Friends and family	0.703***			
Work/Business networks	0.776***			
Common interest groups	0.825***			
Institutional groups	0.764***			
<i>Market Information</i>		0.73	0.83	0.56
Friends and family	0.634***			
Work/Business networks	0.786***			
Common interest groups	0.813***			
Institutional groups	0.734***			
<i>Financial Capital</i>		0.89	0.92	0.69
There is sufficient equity funding available for new and growing firms.	0.836***			
There is sufficient debt funding available for new and growing firms.	0.821***			
There are sufficient government subsidies available for new and growing firms.	0.842***			
There is sufficient funding available from private individuals other than founders for new and growing firms.	0.795***			
There is sufficient venture capitalist funding available for new and growing firms.	0.847***			
<i>Resources (2nd Order Factor)</i>		0.85	0.88	0.55
Management Capabilities	0.866***			
Market Information	0.813***			
Financial Capital	0.635***			
<i>Cooperation</i>		0.88	0.90	0.53
Even though the partner is my competitor, I would not hesitate to get into the relationship if my competitive position would be enhanced.	0.703***			
Even though the partner is my competitor, we are open to sharing resources and information.	0.752***			
Even if I establish a relationship with a competitor, competition with the partner is more important to me.	0.693***			
When I have a relationship with a competitor, the relationship is more important than competing.	0.734***			
I am willing to get into a relationship only when my partner has resources such as equipment, knowledge and connections, which I do not have.	0.752***			
I get into a relationship with a competitor only if both companies are of similar sizes.	0.767***			
I get into a relationship with a competitor only if the firm is smaller than my company.	0.735***			
To establish a relationship with my competitor, both companies must have mutual goals and objectives.	0.664***			
<i>Performance</i>		0.90	0.94	0.83
Profitability	0.924***			
Market share	0.912***			
Market growth	0.901***			

Notes: *** $p < 0.001$. CA = Cronbach's α ; CR = Composite Reliability; AVE = Average Variance Extracted**Table 2**
Discriminant validity.

	1. ES	2. MC	3. MI	4. FC	5. RS	6. Coop	7. Perf
1. Entrepreneurial Support (ES)	0.823						
2. Management Capabilities (MC)	0.207	0.768					
3. Market Information (MI)	0.194	0.706	0.745				
4. Financial Capital (FC)	0.282	0.282	0.191	0.828			
5. Ressources (RS)	0.295	0.866	0.813	0.635	0.596		
6. Cooperation (Coop)	-0.001	0.123	0.13	-0.047	0.09	0.726	
7. Performance (Perf)	0.514	0.237	0.249	0.206	0.299	0.062	0.912

References

- Acs, Z.J., Audretsch, D.B., Braunerhjelm, P., Carlsson, B., 2012. Growth and entrepreneurship. *Small Bus. Econ.* 39 (2), 289–300.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., Marko, S., Thiele, K.O., 2017. Mirror, mirror on the wall: A comparative evaluation of composite-based structural equation modeling methods. *J. Acad. Mark. Sci.* 45 (5), 616–632.
- Hair, J.F., Ringle, C.M., Sarstedt, M., 2011. PLS-SEM: Indeed a silver bullet. *J. Mark. Theor. Pract.* 19 (2), 139–152.
- Khanna, T., Palepu, K., 2000. The future of business groups in emerging markets: Long-run evidence from Chile. *Acad. Manag. J.* 43 (3), 268–285.
- Klein, S.B., Astrachan, J.H., Smyrnios, K.X., 2005. The F-PEC scale of family influence: Construction, validation, and further implication for theory. *Entrepreneurship Theory Pract.* 29 (3), 321–339.
- Mendoza, G., Llopis, J., Gasco, J., Gonzalez, R., 2021. Entrepreneurship as seen by entrepreneurs in a developing country. *J. Bus. Res.* 123, 547–556.
- Prieger, J.E., Bampoky, C., Blanco, L.R., Liu, A., 2016. Economic growth and the optimal level of entrepreneurship. *World Dev.* 82, 95–109.
- Ritala, P., 2018. Competition and market performance. In: *The Routledge Companion to Competition Strategies*, pp. 317–325.
- Zarrouk, H., Sherif, M., Galloway, L., El Ghak, T., 2020. Entrepreneurial orientation, access to financial resources and SMEs' business performance: The case of the United Arab Emirates. *J. Asian Finance Econ. Bus.* 7 (12), 465–474.