Exploring the internal drivers of SMEs' resilience: The case of Ho Chi Minh City SMEs in the context of Covid-19

Tran Minh Ngoc¹, Huynh Dang Bich Vy^{1*}

¹Ho Chi Minh City Open University, Ho Chi Minh City, Vietnam *Corresponding author: vy.hdb@ou.edu.vn

ARTICLE INFO

ABSTRACT

DOI: 10.46223/HCMCOUJS. econ.en.13.1.2324.2023

Received: May 25th, 2022 Revised: June 28th, 2022 Accepted: June 30th, 2022

JEL classification code: D23; J24; O15

Keywords:

human capital; leadership; PLS-SEM; resilience; SMEs; social capital

Small and Medium Enterprises (SMEs) share a majority and play an important role in the socio-economic development of national as well as regional economies in the world and Vietnam is not an exception. However, they are more vulnerable to adverse changes due to limited resources. The Covid-19 pandemic which started in the year 2020 has seriously challenged the SMEs operation. Their resilience becomes the first priority under this specific circumstance. This research was conducted to explore the factors affecting the resilience of SMEs in Ho Chi Minh City. By employing PLS-SEM on the data of 300 surveyed businesses, the effects of three key internal factors: leadership, human capital and social capital on SMEs resilience have been investigated. The findings reveal the significant impacts of social capital, leadership, and human capital on the SMEs resilience, especially in the context of Covid-19. The study results highlight that social capital mobilization should be firstly prioritized for SMEs to promote their resilience.

1. Introduction

Small and Medium Enterprises (SMEs), defined as per criteria stipulated in Decree 80/2021/ND-CP, currently account for a very large proportion of the total enterprises, play an important role in the socio-economic development of Ho Chi Minh City (Prime Minester, 2021). According to the General Statistics Office (GSO) (2020), Ho Chi Minh City has about 430,588 SMEs, reaching nearly 98% of the total number of operating enterprises with a total registered capital of more than two million billion VND, sharing about 30% of total registered capital of all enterprises operating in Ho Chi Minh City.

Since the beginning of 2020, due to the impact of the Covid-19 pandemic, most SMEs have fallen into a difficult situation. A preliminary survey by the Ho Chi Minh City Business Association (HUBA) (2021) shows that about 84% of the city's SMEs face difficulties at various levels such as lacking capital (40%), shrinking market (88%), cutting labors (52%) and failing to access the business support policies offered by the government (76%). In general, the limited resources and capabilities have put the SMEs themselves in adverse situations from external shocks such as natural disasters and epidemics which may threaten their viability and sustainability. Therefore, the resilience of the business is of the top interest for both practitioners and researchers.

"Resilience" is originated from Latin "resilio", which means to return to its original state. Resilience has initially been introduced in ecosystem research since the 1970s and has gradually

expanded into many different fields. However, resilience is a multi-dimensional concept, depending on the context and the research approaches. Therefore, its concept and measures are also different in each country, region, and research field. In Vietnam, researches on resilience is mostly concentrated in the fields of climate change, sociology, and psychology (Arouri, Nguyen, & Youssef, 2015). The knowledge on SMEs resilience in the current context has not been profoundly explored. Organizational resilience has been determined by both internal and external factors (Luthans & Stewart, 1977). Though no immunization to the Covid-19 pandemic can be found in businesses, SMEs are the most vulnerable due to their limited internal resources (Childs, Turner, Sneed, & Berry, 2022; Murphy et al., 2012). Human resources have greatly contributed to the goals and achievement of the organization (Nugroho, Asrunputri, & Sumardi, 2021). Similar roles have been empirically confirmed with leadership and human capital (Childs et al., 2022). Therefore, this research is to focus on exploring the three major internal drivers of corporate resilience including human capital, social capital, and leadership in the context of Vietnam. We contribute to the literature in two folds. Firstly, the research bridges the existing gap between internal resources and SMEs resilience by the application of contingency theory. In addition, the empirical evidence on the relevance of social capital, human capital, and leadership with their priority is provided.

This study is structured with the review of the theoretical basis in the next section, to serve as the basis for the research model. Research methods and results are then described, analyzed, and discussed. Finally, conclusions and implications are presented.

2. Theoretical basis

2.1. Resilience concept

Resilience is not only an individual trait but also an attribute that can be studied from a collective perspective, e.g., groups, communities, and organizations (Lengnick-Hall & Beck, 2005). According to Vera, Rodríguez-Sánchez, and Salanova (2017), resilience is a fundamental quality of individuals, groups, organizations and systems, in general, to respond effectively to adverse change. Horne and Orr (1998) argue that resilience is the fundamental factor for adapting to significant change that disrupts the expected operating pattern. From a personal perspective, Panter-Brick and Leckman (2013) define resilience as a process for harnessing resources in order to maintain happiness. From an organizational perspective, Masten (2015) considers resilience as the ability of a dynamic system to adapt successfully. Tillement, Cholez, and Reverdy (2009) define organizational resilience as the capacity to manage disturbances and work processes to regain a stable dynamic state, enabling the achievement of organizational goals in a timely and safe manner. Seville et al. (2008) emphasize organizational resilience as the ability to survive, and even thrive after adversity.

In summary, resilience is a multidimensional concept that refers to people, as individuals or groups, managing uncertainty in diversified ways: i) they focus on internal control (Salancik & Pfeffer, 1978), ii) they learn from previous experience (Carroll, 1998; Weick, Sutcliffe, & Obstfeld, 2005), iii) they create (Kendra & Wachtendorf, 2003), and they adapt (Vogus & Sutcliffe, 2007). In this study, the resilience of enterprises is interpreted as the employment of resources to react and make positive adjustments; consolidate, maintain, and develop business activities, business performance, and competitive advantages of sustainable enterprises. Resilience is measured in 03 dimensions: 1) adaptive, 2) predictable, 3) agile (Horne & Orr, 1998; Masten, 2015; Lengnick-Hall & Beck, 2005; Vogus & Sutcliffe, 2007).

2.2. Relevant theory

In the process of operation, businesses are always greatly affected by internal and external factors, so businesses need to have the plan to cope with such changes. This study is based on the general contingency theory of Luthans and Stewart (1977). The contingency approach has the goal of building an efficient organization. An organization is understood as a social system, consisting of many subsystems of resource variables related to management policies, practices, and techniques to achieve the organization's objectives under limited resources. This theory emphasizes the importance of variables as shown in Figure 1 which are related to the existence and development of the organization, including 1) internal factors and 2) external factors.

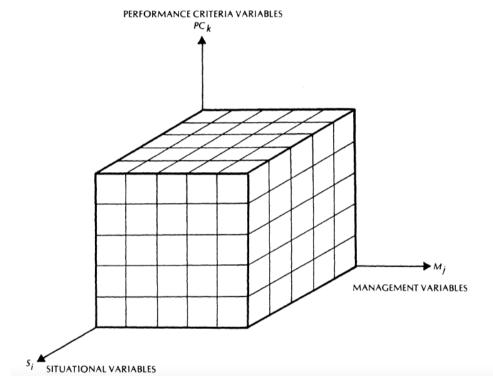


Figure 1. A general contingency matrix for management

Source: Luthans and Stewart (1977)

2.3. SMEs resilience determinants

The literature review has empirically shown various factors affecting the resilience of enterprises, both internally and externally, including external business environment and internal firm resources (Luthans & Stewart, 1977). Friborg, Hjemdal, Rosenvinge, and Martinussen (2003) focused on resilience components of the group, besides that the adversity has been eliminated by using some resources to protect themselves, i.e., personal competence (e.g., self-esteem, self-efficacy, expectation, and determination); social competence (e.g., social expertise, good mood, and good communication skills); personal structure (e.g., ability to maintain daily routines, planning, and organizing); family cohesion (e.g., family cooperation, loyalty, and stability); social support (access to support from friends and family, closeness, and ability to provide support). Barreira and Nakamura (2006) clarified the relationship between self-efficacy and resilience in different life cycles and contexts. Self-efficacy was the perception of the capacity of resilience. With self-efficacy, the proactive mechanism was motivated to cope with adversity (De Oliveira Teixeira & Werther, 2013). Nugroho et al. (2021) specified that human capital development, a process of positive change in human resources in an organization was to

prepare for responsibility to achieve the organizational goals. Sotarauta, Beer, and Gibney (2017) considered leadership as the institutional dimension and played an important role in a time of crises. Leaders should be competent, powerful, and pursuasive to make strategic decisions and consensus building. Sutclife and Vogus (2003) proved that leadership can provide insight into the cause, the positive adjustment process, and the ability to adapt under challenging conditions. According to Harland, Harrison, Jones, and Reiter-Palmon (2005), leaders made a difference in helping employees become more resilient to adversity. Both transformational and transactional leadership dimensions are positively associated with resilience (Budiasih, Hartanto, Ha, Nguyen, & Usanti, 2020).

Torres, Marshall, and Sydnor (2019) approached social capital as informal institution. By combining the data surveyed from the small businesses which remained operating after Hurricane Katrina in Mississipppi, USA they invistigated how network types (bonding, bridging, linking) benefited the small businesses. The ordered probit analysis confirmed that social capital was a key asset for long-term resilience of small business. In addition to network, Bandura (2010) argued that when businesses maintained trust, they would be able to control themselves, and were more likely to sustain their efforts and struggle the difficulties. Table 1 summarizes the factors affecting the resilience of enterprises.

Table 1
Summary of factors affecting the resilience of enterprises

Sources	Resilience Determinants
	Environment
	Human resources
Luthans and Stewart (1977)	Management
	Inside factors
	Outside factors
Cred (2004)	External support
Grotberg (2004)	Inner strength
	Resources
	Personal capacity
Friborg et al. (2003)	Social competence
	Personal structure
	Family cohesion
Harland et al. (2005)	
Sutclife and Vogus (2003)	Authentic leadership
Sotarauta et al. (2017)	
Barreira and Nakamura (2006)	Self-efficacy
	Leadership's role
De Oliveira Teixeira and Werther (2013)	Innovation culture
	Proactivity
Bandura (2010)	Trust (social capital)
Torres et al. (2019)	Bonding, bridging, linking (social capital)

Source: Authors' review of literature

The previous literature has emphasized the main group of variables that have an impact on the resilience of enterprises, that is, the resources of the enterprise. In this study, internal factors have been deeply investigated because they are the major weakness of SMEs (Childs et al., 2022; Murphy et al., 2012). Moreover, businesses operating in Ho Chi Minh City encountered external environment which was almost identical. The study thus focuses on the role of internal resources including social capital, human capital and leadership (Figure 2).

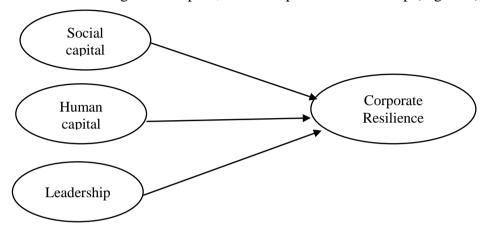


Figure 2. Business resilience research model

Source: Recommended by the authors

2.4. Hypotheses development

Relationship between social capital and corporate resilience

According to Yang, Alejandro, and Boles (2011), social capital has been studied in many different fields such as economics, education, society, and psychology. It is a multidimensional concept including 1) a network system, (2) people's trust, and (3) mutual cooperation (Helliwell & Putnam, 1995; Putnam, 1993; Quyen, Nguyen, & Huynh, 2017; Van Nguyen, Nguyen, Thuy, Nguyen, & Huynh, 2016). Relating to corporate social capital, is defined as the aggregate of firm resources (Bourdieu & Wacquant, 1992), which exists in a qualitative relationship consisting of the leadership network, the corporate external network (Yang et al., 2011), and the corporate intranet (Brookes, Morton, Dainty, & Burns, 2006). Research has shown that social capital is a critical resource to enhance corporate resilience. Chowdhury, Prayag, Orchiston, and Spector (2019) measured social capital as structural, relational, and cognitive aspects. Though the interrelationships were found among the three facets of social capital, only relational capital was positively impacted the organizational resilience and business performance in the study about tourism companies in Christchurch, New Zealand. However, social capital has not been distinguished internally and externally in this study. Polyviou, Croxton, and Knemeyer (2019) has overcome such a limitation by exploring internal social capital as a resource that enhances resilience. Based on the case analysis (four US medium-sized manufacturing firms), structural capital in terms of network size, geographical proximity among decision makers, and organizational hierarchy has been investigated. Relationship capital has emerged through closed relationships, commitment, and respect. Finally, cognitive capital was based on long-term employee tenure. The findings have emphasized the role of internal social capital, a resource stemming from interpersonal relationship as a resilience enhancing resource. However, internal social capital is essential but not sufficient, given its constraints (Jia, Chowdhury, Prayag, & Chowdhury, 2020). Unlike internal social capital, external social capital refers to how an organization uses resources and relationships outside the company, such as suppliers, customers, partners, and authorities. External social capital serves well, establishing horizontal and vertical

relationships, especially those of consulting organizations (horizontal) and government levels (vertical). As a result, business people have better conditions to remove difficulties in administrative procedures and technical conditions.

In general, there are three common approaches used to increase intrinsic social capital to enhance the resilience of an organization, including enhancing personal growth, improving teamwork, and promote the empowerment of individuals. Thus, we can propose:

H1: Stronger social capital enhances the corporate resilience

Relationship between leadership and corporate resilience

Under the umbrella of institutional theory, besides informal institution (i.e., social capital), leadership which is considered as formal institution plays a very important role in determining corporate resilience (Kennerley & Neely, 2003; Sotarauta et al., 2017). The likelihood of increased exposure to disasters is growing, leading to high uncertainty and loss of control among leadership and employees (D'Auria & De Smet, 2020). Leadership, the art of motivating followers towards the organizational goals is therefore critical, expecially in the crisis (Northouse, 2021). In corporate leadership relationships, the two main leadership styles including transactional leadership and transformational leadership that positively impact the corporate resilience (Budiasih et al., 2020). Transactional leadership is a traditional form of leadership, while transformational leadership is based on rewards and management by exception. Management by exception describes a leader who does not interfere in the work of employees unless their actions deviate from normal standards and procedures (Dartey-Baah, 2015; Molenaar, 2010). Rodriguez and Rodriguez (2015) show that transformational leadership has a positive relationship with corporate resilience. They argue that the characteristics of transformational leaders are due to charisma, idealized influence, and motivational inspiration. Thus, the hypothesis is proposed as follows:

H2: Leadership can improve the corporate resilience

Relationship between human capital and corporate resilience

The concept of human capital has dominated contemporary discourses about corporate resilience and performance with general evaluation at the firm-based level (Demirgil, Karaöz, Bekir, & Can, 2010). Formal training and on the job training became the core factor to enhance human capital, then build the capacity to foster resilience (Blundell, Dearden, Meghir, & Sianesi, 1999; Collier, Green, Kim, & Peirson, 2011). Blanco and Montes-Botella (2017) clarified that the importance and contribution of human capital, combined with Research and Development (R&D) measures, to nurture corporate resilience such as knowledge innovation and human resources to face the challenges driven by globalization, competitiveness and the knowledge-based economy. Levasseur (2010) identified human capital as an important factor determining the success or failure of the organization, in efforts to implement perfect technical solutions, provide ideas for significant improvement of project success rate based on established change management principles and processes. Therefore, the proposed hypothesis is as follows:

H3: Human capital can positively impact on the corporate resilience

3. Methodology

3.1. Qualitative method

The qualitative research was conducted via interviews, consultations of 10 experts with experience in corporate management and research related to the topic of social capital, human

capital, leadership and corporate resilience. These are experts with academic knowledge, business understanding, management, practical work to consult, get comments, adjust the measured items accordingly. Experts information is summarized in Table 2.

Table 2 Summary of expert survey sample information

Interpretation	Description	Quantity	Ratio
Candan	Male	6	60%
Gender	Female	4	40%
	30 - 39	4	40%
Age	40 - 49	4	40%
	> 50	2	20%
	University	2	20%
Degree	Master	2	20%
	PhD	6	60%
Field of activity	Research	7	70%
Field of activity	Business management	3	30%

Source: The researcher's data analysis

Based on previous studies review combined with group discussion, the qualitative research result got the consent on the measurements of key variables in the study as listed in Table 3. In general, wordings of the measured items are modified to adapt the context of Vietnam.

Table 3 Measurement of key variables in the model

No.	Code	Description	Source		
	LD	Leadership			
1	LD1	Leadership does not interfere with employees' work unless their actions deviate from normal standards and procedures	Dartey-Baah (2015);		
2	LD2	Leadership focuses on aspects of human resource development	Molenaar (2010); Rodriguez and		
3	LD3	Leadership focuses on aspects of corporate innovation	Rodriguez (2015); Tran, Lee, Nguyen, and		
4	LD4	Leadership focuses on inspiring corporate human resources	, , ,		
5	LD5	A clear understanding of innovation and growth leadership informs how the business works on multiple levels	Gilley (2011)		

No.	Code	Description	Source	
	SC	Social Capital		
6	SC1	Businesses focus on building a network of internal relationships		
7	SC2	Businesses focus on building a network of external relationships	Yang et al. (2011); Alejandro, Yang, and Boles (2011);	
8	SC3	Businesses focus on building a network of relationships of leaders	Brookes et al. (2006)	
9	SC4	Businesses focus on building trust in relationships		
	нс	Human Capital		
10	HC1	Businesses put the highest priority on hunan capital investment		
11	HC2	Businesses focus on the capacity of the management team	Blanco and Montes- Botella (2017);	
12	НС3	Businesses have plans to train and foster human resources	Levasseur (2010); Atiase, Dzansi, and David (2019)	
13	HC4	Businesses implement performance management for employees		
	Re	Resilience of the business		
14	Re1	Firms focus on adaptive capacity	Horne and Orr (1998);	
15	Re2	Firms focus on predictability	Masten (2015);	
16	Re3	Firms focus on flexibility and agility	Lengnick-Hall and Beck (2005); Vogus and Sutcliffe (2007)	

Source: The researcher's data analysis

3.2. Quantitative method

The study conducted a survey of small and medium enterprises in Ho Chi Minh City. The minimum sample size of 147 observations in this study was defined based on Cohen (1992) at a significance level of 5%, given the maximum number of 05 arrows pointing at a construct, min R² of 0.1 (Hair et al., 2021). The convenience sampling method has been applied in this study with the focus on service sector as stipulated in Table 4 because it is badly hit by the pandemic (Xiang et al., 2021). In this study, 500 questionnaires were sent to the SMEs and 300 final responses with complete data were received. The sample description is presented in Table 4.

The questionnaire consists of 16 observed variables as in Table 3. Likert scale with seven levels are applied: (1) Totally disagree; (2) Strongly disagree; (3) Disagree; (4) Neutral; (5) Agree; (6) Strongly agree; (7) Totally agree, used in this study for all observed variables in the composition.

Table 4Sample description

Description	Quantity	Percentage
Business scope		
Information technology	45	15%
Commerce	36	12%
Transportation	45	15%
Finance/Bank/Insurance	45	15%
Health care	30	10%
Tourism	45	15%
Others	54	18%
Total	300	100%
Location	Quantity	Percentage
District 1	90	30%
District 2	10	3.33%
District 3	30	10.00%
District 5	10	3.33%
District 7	05	1.67%
District 8	10	3.33%
District 10	15	5.00%
Binh Tan District	10	3.33%
Binh Thanh District	15	5.00%
Go Vap District	05	1.67%
Phu Nhuan District	30	10.00%
Tan Binh District	35	11.67%
Tan Phu District	35	11.67%
Total	300	100%

Source: The researcher's data analysis

PLS-SEM analysis technique is applied to explore the role of social capital, human capital, and leadership in the SMEs resilience. PLS-SEM is based on variance (Lohmöller, 1989; Wold, 1982, 1985) to maximize the explanatory variance of unobserved endogenous variables by estimating a partial model by repeating a series of least squares regressions (OLS). PLS-SEM was developed to replace CB-SEM in the case of non-normal distribution data (Hair et al., 2021).

4. Result and discussion

4.1. Description of the study sample

In these 300 valid SMEs, there is a difference in the proportion of men and women, 70.0% male and 30.0% female. Participants aged from 30 to 40 years old account for 35.6%; people over 40 to 50 years old account for 38.4% and the rest over 50 years old account for 26.0%. Due to the impact of technology on production and business, the group of people involved in business management is getting younger and younger in the technology age (Nguyen, 2020).

In general, the level of managers in production and business is quite high, showing the increasing learning spirit of enterprises. High school or equivalent shares 18.0%, intermediate/college level reaches 32.8%, university peaks at 41.6% and the lowest is postgraduate with 7.6%.

4.2. Evaluation of the measurement model

After checking the loading coefficient requirements, the author evaluates the reliability of the scale through diversified indexes, Cronbach's Alpha, Roh-A, Composite Reliability (CR) and Average Variance Extracted (AVE). Cronbach's Alpha, Roh_A must be ≥ 0.7 , CR values from 0.7 to 0.9 will be satisfactory, AVE should exceed 0.5 (Hair, Risher, Sarstedt, & Ringle, 2019).

Testing the reliability of each indicator shows that the Cronbach's Alpha coefficient of the indicators is above 0.7, the reliability level is acceptable. The smallest Cronbach's Alpha is the latent variable LD = 0.825 and the highest is SC = 0.859 (Table 5).

The combined reliability measure CR coefficient (Table 5) shows the consistency of the indicators in the scale of the elements of the measurement model. The CR results of the scales are all greater than 0.8 and less than 0.95, the indicators used to measure the latent variable are relevant, and the indicators in the model are suitable.

Table 5Results of analysis of reliability, convergence value of scale and load factor

Code	Description	Factor loading	
LD	Leadership (Cronbach's Alpha: 0.825; rho-A: 0.849; CR: 0.874; AVE: 0.582)		
LD1	Leadership does not interfere with employees' work unless their actions deviate from normal standards and procedures	0.693	
LD2	Leadership focuses on aspects of human resource development	0.728	
LD3	Leadership focuses on aspects of corporate innovation	0.823	
LD4	Leadership focuses on inspiring corporate human resources	0.780	
LD5	A clear understanding of innovation and growth leadership informs how the business works on multiple levels	0.784	
SC	Social capital (Cronbach's Alpha: 0.859; rho-A: 0.879; CR: 0.903; AVE: 0.700)		
SC1	Businesses focus on building a network of internal relationships	0.865	
SC2	Businesses focus on building a network of external relationships	0.856	

Code	Description	Factor loading		
SC3	Businesses focus on building a network of relationships of leaders	0.812		
SC4	Businesses focus on building trust in relationships	0.813		
НС	Human capital (Cronbach's Alpha: 0.841; rho-A: 0.857; CR: 0.85	94; AVE:0.678)		
HC1	Businesses put the highest priority on human capital investment	0.854		
HC2	Businesses focus on the capacity of the management team	0.846		
НС3	Businesses have plans to train and foster human resources	0.719		
HC4	Businesses implement performance management for employees	0.867		
Re	Enterprise resilience (Cronbach's Alpha: 0.843; rho-A: 0.845; CR: 0.905; AVE: 0.761)			
Re1	Firms focus on adaptive capacity	0.896		
Re2	Firms focus on predictability	0.876		
Re3	Firms focus on flexibility and agility	0.845		

Source: Data analysis result of the research

The study conducts the Fornell-Larcker matrix coefficient analysis. The results in Table 6 show that the first coefficients in each column are larger than the coefficients in the same column and in Table 7 all HTMT values are less than 0.85. Thus, discriminant criterium is guaranteed.

Table 6Fornell-Larcker matrix coefficients

	нс	LD	Re	SC
НС	0.824			
LD	0.435	0.763		
Re	0.166	0.183	0.872	
SC	0.240	0.287	0.263	0.837

Source: Data analysis result of the research

Table 7Heterotrait-Monotrait coefficient

	нс	LD	Re	SC
НС				
LD	0.518			
Re	0.195	0.205		
SC	0.268	0.321	0.299	

Source: Data analysis result of the research

4.3. Evaluation of structural models

Through Bootstrapping process with sample size as suggested by Henseler, Ringle, and Sarstedt (2015) as n = 5,000, the author continues to test the model of linear structure. Bootstrapping results are presented in Table 8 and Figure 2.

Table 8Bootstrapping results of structural model and testing of research hypotheses

Relationship	Level of Impact	Standard Deviation	Value t	p-value
Human capital => resilience	0.075	0.046	1.636	0.103
Leadership => resilience	0.087	0.049	1.775	0.077
Social capital => resilience	0.220	0.048	4.619	0.000

Source: Data analysis result of the research

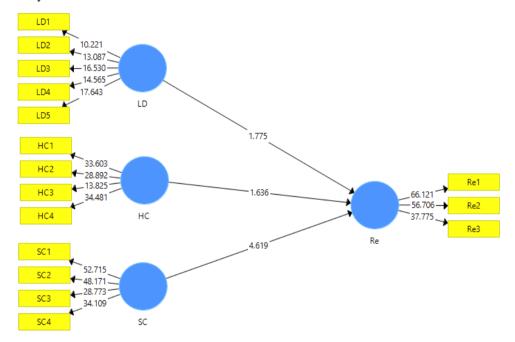


Figure 2. PLS-SEM bootstrapping results

The path analysis shows the significant impacts of social capital (significant level of 1%), leadership (significant level of 10%), and human capital (significant level of 11%) on SMEs resilience with coefficients of 0.220, 0.087, and 0.075 respectively. The findings reveal the critical role of social capital with the priority orders of internal networks, external networks, mutual trust, and leaders' networks. Internal networks are the first source for corporate resilence but it only serves as an urgency to get by. External networks are important for getting ahead (Claridge, 2018). Social relations are formed from interactions that are not random but purposeful with repetition and stability to create the pattern. Therefore, investment into social capital is requested for the expected return. Johnson, Elliott, and Drake (2013) confirms that social capital can foster resilience via enhancing adaptability, fexiblity and cooperation. Thus, the resources are mobilized to reactively and proactivly response to the adversity.

Leadership is ranked as the second priority for corporate resilience. According to Rodriguez and Rodriguez (2015), transformed leadership benefits the SMES via motivating the employees' engagement, contributing to the corporate performance. Tran et al. (2020) also provides the empirical evidence of leadership impact on the corporate resilience by applying

innovative and even risk intensive strategies. This encourages the new products, servcies, competitive advantages. In addition, confidence to external stakeholders can be intensified with the transformed leadership which pushes the corporate resilience.

Human capital has the weakess impact on SMEs resilience in this empirical study. Shortterm effect of human capital may be justified for this finding.

5. Discussion and implication

Despite the plethora of literature on corporate resilience, its multidimensional approach are limited. Either static or dynamic conceptualization have been expplored in the previous studies though both are critical (Melnyk, Narasimhan, & DeCampos, 2014). This study has provided the remedy for this shortcoming by operationalizing the dynamic, proactive and reactive dimensions of resilience.

Our study presents the empirical investigation of the contingency theory with the focus on internal drivers of SMEs resilience at multiface in the context of Ho Chi Minh City, Vietnam under the Covid-19 pandemic. Three key factors of social capital, leadership, and human capital with different magnitude effects on SMEs resilience have been identified. Furthermore, social capital has empirically been validated as the most important resource for firm resilience. This finding is consistent with Torres et al. (2019), Chowdhury et al. (2019) in clarifying the contribution of internal and external social capital. Leadership and human capital have shared less weight to the firm resilience compared to social capital in this specific context. However, firm capacity for resiliences is still developed through strategically managing human resources for capacity building (Lengnick-Hall, Beck, & Lengnick-Hall, 2011). This practical implication has guided the SMEs to develop the pathway to reach the ability to respond the severe shocks in a resilient manner.

6. Conclusions & recommendations

The objective of this study is to understand the factors affecting the resilience of SMEs in Ho Chi Minh City under the adverse impact of the Covid-19 pandemic. The findings provide policy implications to help managers come up with necessary and urgent solutions to improve the performance of organizations and individuals as well as improve the resilience of businesses with the focused strategies on social capital, leadership and human capital.

Research is carried out with both qualitative and quantitative methods. Through qualitative analysis, the preliminary consensus on measurement models of social capital and resilience is reached. The study officially collected data by directly sending questionnaires to Directors/Deputy Directors of the SMEs in Ho Chi Minh City, and obtained 300 valid responses for PLS-SEM technique. However, the limitation of the convenience sampling method with big sampling errors should be noted.

Structural model testing by PLS-SEM shows that social capital has a positive and statistically significant impact on resilience in addition to leadership and human capital those the latter impacts are rather weak. This may be because investing in human resources and inspiring leadership is a long-term process that cannot be returned in the short term.

ACKNOWLEDGEMENTS

This paper is part of the research topic funded by Ho Chi Minh City Open University (Code: T2021.13.1).

References

- Alejandro, T. B., Yang, J., & Boles, J. S. (2011). The role of social capital and knowledge transfer in selling center performance. *Journal of Business & Industrial Marketing*, 26(3), 152-161. doi:10.1108/08858621111115877
- Arouri, M., Nguyen, C., & Youssef, A. B. (2015). Natural disasters, household welfare, and resilience: evidence from rural Vietnam. *World Development*, 70, 59-77.
- Atiase, V., Dzansi, D., & David, S. (2019, November). *Managerial resilience and performance: A human capital approach*. Paper presented at Conference: The 42nd Annual Conference for the Institute of Small Business and Entrepreneurship, Newcastle, UK.
- Bandura, A. (2010). Self-efficacy. In *The Corsini encyclopedia of psychology* (pp. 1-3). Hoboken, NJ: John Wiley & Sons, Inc.
- Barreira, D. D., & Nakamura, A. P. (2006). Resilience and perceived self-efficacy: Articulation between concepts. *Aletheia*, 23, 75-80.
- Blanco, J. M. M., & Montes-Botella, J. L. (2017). Exploring nurtured company resilience through human capital and human resource development: Findings from Spanish manufacturing companies. *International Journal of Manpower*, 38(1). doi:10.1108/IJM-11-2015-0196
- Blundell, R., Dearden, L., Meghir, C., & Sianesi, B. (1999). Human capital investment: The returns from education and training to the individual, the firm and the economy. *Fiscal Studies*, 20(1), 1-23.
- Bourdieu, P., & Wacquant, L. J. (1992). *An invitation to reflexive sociology*. Chicago, CA: University of Chicago Press.
- Brookes, N., Morton, S., Dainty, A., & Burns, N. (2006). Social processes, patterns and practices and project knowledge management: A theoretical framework and an empirical investigation. *International Journal of Project Management*, 24(6), 474-482. doi:10.1016/j.ijproman.2006.03.005
- Budiasih, Y., Hartanto, C. F. B., Ha, T. M., Nguyen, P. T., & Usanti, T. P. (2020). The mediating impact of perceived organisational politics on the relationship between leadership styles and job satisfaction. *International Journal of Innovation, Creativity and Change*, 10(11), 478-495.
- Carroll, A. B. (1998). The four faces of corporate citizenship. *Business and Society Review*, 100(1), 1-7.
- Childs, M., Turner, T., Sneed, C., & Berry, A. (2022). A contingency theory approach to understanding small retail business continuity during Covid-19. *Family and Consumer Sciences Research Journal*, 50(3), 216-230.
- Chowdhury, M., Prayag, G., Orchiston, C., & Spector, S. (2019). Postdisaster social capital, adaptive resilience and business performance of tourism organizations in Christchurch, New Zealand. *Journal of Travel Research*, 58(7), 1209-1226. doi:10.1177/0047287518794319
- Claridge, T. (2018). Functions of social capital-bonding, bridging, linking. *Social Capital Research*, 20, 1-7.

- Cohen, J. (1992). Quantitative methods in psychology: A power primer. Psychological Bulletin, 112(1), 155-159.
- Collier, W., Green, F., Kim, Y. B., & Peirson, J. (2011). Education, training and economic performance: Evidence from establishment survival data. Journal of Labor Research, 32(4), 336-361.
- D'Auria, G., & De Smet, A. (2020). Leadership in a crisis: Responding to the coronavirus outbreak and future challenges. Psychology, 22(2), 273-287.
- Dartey-Baah, K. (2015). Resilient leadership: A transformational-transactional leadership mix. Journal of Global Responsibility, 6, 99-112. doi:10.1108/JGR-07-2014-0026
- de Oliveira Teixeira, E., & Werther, W. B., Jr. (2013). Resilience: Continuous renewal of competitive advantages. Business Horizons, 56(3), 333-342.
- Demirgil, H., Karaöz, M., Bekir, G., & Can, M. (2010), Determinants of firm survival in manufacturing industry: A research on lake region. In Turkey, 2nd International Symposium on Sustainable Development, Sarajevo (pp. 210-216). Ilidža, CA: International Burch University.
- Friborg, O., Hjemdal, O., Rosenvinge, J. H., & Martinussen, M. (2003). A new rating scale for adult resilience: What are the central protective resources behind healthy adjustment? International Journal of Methods in Psychiatric Research, 12(2), 65-76.
- General Statistics Office (GSO). (2020). SMEs in Ho Chi Minh City. Retrieved October 15, 2021, from https://www.gso.gov.vn/en/homepage/
- Gilley, J. W., Shelton, P. M., & Gilley, A. (2011). Developmental leadership: A new perspective for human resource development. Advances in Developing Human Resources, 13(3), 386-405.
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial least squares structural equation modeling (PLS-SEM) using R: A workbook. Cham, Switzerland: Springer.
- Hair, J. F., Jr., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2-24.
- Harland, L., Harrison, W., Jones, J. R., & Reiter-Palmon, R. (2005). Leadership behaviors and subordinate resilience. Journal of Leadership & Organizational Studies, 11(2), 2-14.
- Helliwell, J. F., & Putnam, R. D. (1995). Economic growth and social capital in Italy. Eastern Economic Journal, 21(3), 295-307.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of *Marketing Science*, 43(1), 115-135.
- Horne, J. F., & Orr, J. E. (1998). Assessing behaviours that create resilient organisations. Employment Relations Today, 24(4), 29-39.
- HUBA. (2021). TP.HCM đề xuất giảm thuế VAT do doanh nghiệp bị ảnh hưởng nặng nề bởi Covid-19 [Ho Chi Minh city propose to reduce VAT because businesses heavily affectedly by Covid-191. Retrieved October 15, 2021, from https://tuoitre.vn/tp-hcm-de-xuat-giamthue-vat-do-doanh-nghiep-bi-anh huong-nang-ne-boi-covid-19-20210610083048997.htm

- Jia, X., Chowdhury, M., Prayag, G., & Chowdhury, M. M. H. (2020). The role of social capital on proactive and reactive resilience of organizations post-disaster. *International Journal of Disaster Risk Reduction*, 48(1), Article 101614.
- Johnson, N., Elliott, D., & Drake, P. (2013). Exploring the role of social capital in facilitating supply chain resilience. *Supply Chain Management: An International Journal*, 18(3), 324-336.
- Kendra, J. M., & Wachtendorf, T. (2003). Elements of resilience after the world trade center disaster: reconstituting New York City's Emergency Operations Centre. *Disasters*, 27(1), 37-53.
- Kennerley, M., & Neely, A. (2003). Measuring performance in a changing business environment. *International Journal of Operations & Production Management*, 23(2), 213-229. doi:10.1108/01443570310458465
- Lengnick-Hall, C. A., & Beck, T. E. (2005). Adaptive fit versus robust transformation: How organizations respond to environmental change. *Journal of Management*, 31(5), 738-757.
- Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, 21(3), 243-255.
- Levasseur, R. E. (2010). People skills: Ensuring project success A change management perspective. *Interfaces*, 40(2), 159-162.
- Lohmöller, J. B. (1989). Predictive vs. structural modeling: Pls vs. ml. In *Latent variable path modeling with partial least squares* (pp. 199-226). Heidelberg, Germany: Physica.
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership development. In K. S. Cameron, S. E. Dutton & R. E. Quinn (Eds.), *Positive organizational scholarship Foundations of a new discipline* (pp. 241-258). San Francisco, CA: Berrett-Koehler.
- Luthans, F., & Stewart, T. I. (1977). A general contingency theory of management. *Academy of Management Review*, 2(2), 181-195.
- Masten, A. S. (2015). *Ordinary magic: Resilience in development*. New York, NY: Guilford Publications.
- Melnyk, S., Narasimhan, R., & DeCampos, H. (2014). SC design: Issues, challenges, frameworks and solutions. *International Journal of Production Research*, 52(7), 1887-1896.
- Molenaar, D. A. (2010). The influence of transformational leadership training on team resilience (Master's thesis). University of Twente, Enschede, Overijssel, Netherlands.
- Murphy, P. J., Wu, Z., Welsch, H., Heiser, D. R., Young, S. T., & Jiang, B. (2012). Small firm entrepreneurial outsourcing: Traditional problems, nontraditional solutions. *Strategic Outsourcing: An International Journal*, *5*(3). doi:10.1108/17538291211291774
- Nguyen, K. (2020). Công nghệ ảnh hưởng giới trẻ Việt Nam như thế nào? [How does technology affect young people in Vietnam?]. Retrieved October 15, 2021, from https://thanhnien.vn/cong-nghe-anh-huong-gioi-tre-viet-nam-nhu-the-nao-post915111.html

- Nguyen, P. V., Nguyen, P. T., Nguyen, Q. L. H. T. T., & Huynh, V. D. B. (2016). Calculating weights of social capital index using analytic hierarchy process. International Journal of Economics and Financial Issues, 6(3), 1189-1193.
- Nguyen, Q. L. H. T. T., Nguyen, P. T., & Huynh, V. D. B. (2017). Prioritization of social capital indicators using extent analysis method. International Journal of Advanced and Applied Sciences, 4(10), 54-57.
- Northouse, P. G. (2021). Leadership: Theory and practice. Thousand Oaks, CA: Sage publications.
- Nugroho, A. W., Asrunputri, A. P., & Sumardi, S. (2021). Determinants of bank's resilience in emerging market: SEM PLS Approach. Budapest International Research and Critics Institute (BIRCI-Journal). *Humanities and Social Sciences*, 4(4), 9591-9597.
- Panter-Brick, C., & Leckman, J. F. (2013). Editorial commentary: Resilience in child development-interconnected pathways to wellbeing. Journal of Child Psychology and Psychiatry, 54(4), 333-336.
- Polyviou, M., Croxton, K., & Knemeyer, A. (2019). Resilience of medium-sized firms to supply chain disruptions: The role of internal social capital. *International Journal of Operations &* Production Management, 40. doi:10.1108/IJOPM-09-2017-0530
- Prime Minester. (2021). Decree No. 80/2021/ND-CP dated August 26, 2021, on elaboration of some articles of the law on provision of assistance for small and medium enterprises. Retrieved October 15, 2021, from https://english.luatvietnam.vn/decree-no-80-2021-nd-cpdetailing-and-guiding-the-law-on-suppor-208340-Doc1.html
- Putnam, R. D. (1993). The prosperous community. The American Prospect, 4(13), 35-42.
- Rodriguez, A., & Rodriguez, Y. (2015). Metaphors for today's leadership: Vuca world, millennial and "cloud leaders". Journal of Management Development, 34(7), 854-866. doi:10.1108/JMD-09-2013-0110
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. Administrative Science Quarterly, 224-253.
- Seville, E., Brunsdon, D., Dantas, A., Le Masurier, J., Wilkinson, S., & Vargo, J. (2008). Organisational resilience: Researching the reality of New Zealand organisations. Journal of Business Continuity & Emergency Planning, 2(3), 258-266.
- Sotarauta, M. (2014). Territorial knowledge leadership in policy networks: A peripheral region of South Ostrobothnia, Finland as a case in point. In The social dynamics of innovation networks (pp. 68-85). London, UK: Routledge.
- Sotarauta, M., Beer, A., & Gibney, J. (2017). Making sense of leadership in urban and regional development. Regional Studies, 51(2), 187-193.
- Sutcliffe, K. M., & Vogus, T. J. (2003). Organizing for resilience. In K. S. Cameron, J. E. Dutton & R. E. Quinn (Eds.), Positive organizational scholarship: Foundations of a new discipline. San Francisco, CA: Berrett-Koehler.
- Tillement, S., Cholez, C., & Reverdy, T. (2009). Assessing organizational resilience: An interactionist approach. Management, 12(4), 230-264.

- Torres, A. P., Marshall, M. I., & Sydnor, S. (2019). Does social capital pay off? The case of small business resilience after Hurricane Katrina. *Journal of Contingencies and Crisis Management*, 27(2), 168-181.
- Tran, D. T., Lee, L. Y., Nguyen, P. T., & Srisittiratkul, W. (2020). How leader characteristics and leader member exchange lead to social capital and job performance. *Journal of Asian Finance, Economics and Business*, 7(1), 269-278. doi:10.13106/jafeb.2020.vol7.no1.269
- Vera, M., Rodríguez-Sánchez, A. M., & Salanova, M. (2017). May the force be with you: Looking for resources that build team resilience. *Journal of Workplace Behavioral Health*, 32(2), 119-138.
- Vogus, T. J., & Sutcliffe, K. M. (2007). The impact of safety organizing, trusted leadership, and care pathways on reported medication errors in hospital nursing units. *Medical Care*, 45(10), 997-1002.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005) Organizing and the process of sensemaking. *Organization Science*, *16*(4), 409-421.
- Wold, H. O. A. (1982). Soft modeling: The basic design and some extensions. In K. G. Jöreskog & H. O. A. Wold (Eds.), *Systems under indirect observations: Part II* (pp. 1-54). North-Holland, Amsterdam: Scientific Research Publisher.
- Wold, H. O. A. (1985). Systems analysis by partial least squares. In P. Nijkamp, H. Leitner & N. Wrigley (Eds.), *Measuring the unmeasurable* (pp. 221-252). Boston, UK: Martinus Nijhoff Publishers.
- Xiang, S., Rasool, S., Hang, Y., Javid, K., Javed, T., & Artene, A. E. (2021). The effect of Covid-19 pandemic on service Sector sustainability and growth. *Frontiers in Psychology*, 12, Article 633597.
- Yang, J., Alejandro, T. G. B., & Boles, J. S. (2011). The role of social capital and knowledge. *Journal of Business and Industrial Marketing*, 26(3), 152-161. doi:10.1108/08858621111115877

