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How social capital affects innovation, marketing and entrepreneurial orientation: the case of SMEs in Ho Chi Minh (Vietnam)

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Abstract

Social capital, embedded in the networking relationship, is critical for firm performance. SMEs, especially in emerging economies, should effectively use their limited resource and network relationships to deal with increased uncertainties in the business environment. Accordingly, this paper investigates the effect of social capital on innovation, marketing communication expenditure, and entrepreneurial orientation (EO). The research employs a binary logistic model based on data collected from a survey of 645 small and medium enterprises (SMEs) in Vietnam. The survey focused on SMEs in Ho Chi Minh City, which is the biggest city in Vietnam and accounts for one-third of the country's gross domestic product. The research found significant evidence of the benefits of social capital on innovation, marketing communication expenditure, and EO. Specifically, we found significant relationships between personal network and marketing communication expenditure, between a business network with innovation and EO, and between network range and marketing communication expenditure. This research has important implications for managers and government agents. SMEs managers should effectively use what they receive from network relationships to improve the performance of firms. The findings clarify the characteristics of networks constituting social capital. Moreover, we respond to the call for more empirical study in the emerging economy.

Keywords: Social capital, Innovation, Marketing expenditure

Introduction

With changes in competitive strategies and information technology, social capital received enormous attention from researchers and practitioners (Putman, 2001). Social capital is an assembly of total nodes in the social network that can lead to firm resources. Therefore, building up a firm's social capital can create intangible values and can promote the firm to innovation. Doing this way, the firm can widen horizontal cooperation with various channels, for example, banking systems, government departments, consulting agencies, and business associations.

During the past 10 years, the business world has faced significant challenges. The advancement of information technology, demographic shift, financial reform, and

disaster events have changed consumer behaviour and shaped the business structure. For example, due to the strict lockdown to curb the spread of COVID-19, many SMEs in the hospitality industry had to switch to takeaway services for survival (Hoang et al., 2021). Firms are pushed into looking for new activities through innovation (Hizarci-Payne et al., 2021), marketing communication (Falahat et al., 2020), and EO (Binh et al., 2021; Rezaei & Ortt, 2018) to survive and succeed.

According to Konsti-Laakso et al. (2012), firms form a collaboration with their partners as they can share knowledge, information, and experience. An effective collaboration constitutes effective leverage for small and medium enterprises (SMEs) to save transaction costs and create a competitive advantage. In contrast, the lack of a network can cause inertial responsiveness to enable firm performance. The process of sharing information, getting advice, and supporting relationships is sourced by collaboration among partners. Value networks are argued as inter-organisational networks linking firms with different competencies and assets and addressing new market opportunities.

With current technological development and fast-improved information technology systems, SMEs are more concerned about building up networks among partners. According to Borgatti and Foster (2003), social capital literature has rapidly grown because of its importance in understandings the relevance between social and economic life. In the case of advanced economies, social capital is a significant advantage and adds success to firm performance. However, its role remains unclear in undeveloped and emerging economies (Boso et al., 2013). This research is based on the data collected in Vietnam, which is an emerging economy in Asia. The market development strategies of SMEs are in the process of learning.

The number of SMEs in Vietnam continues to grow at an impressive rate, with about 14,500 new businesses created and registered in the first 2 months of 2018, an increase of 3.9% compared to the first 2 months of 2017. The registered capital of these new SMEs was USD 6.7 billion, an increase of 35%. With more than 600,000 SMEs registered and an annual growth rate of over 100,000, SMEs are a major sector of the economy. Vietnamese SMEs account for more than 40% of gross domestic product (GDP) and account for more than 50% of employment. Due to the size and scope, SMEs are vulnerable to any change or fluctuation from the external environment. In the context of an emerging economy like Vietnam, where the regulation and policies change frequently, social capital would be the key solution to deal with change in the external environment (GSO 2018).[1]

Social capital is the knowledge that can be utilised for collaborations among individuals, working groups, and their linkages of relationships. Anderson and Miller (2003) and Park and Luo (2001) found a significantly positive relationship between social network, social capital and firm performance. Social capital can affect the performance of stakeholders and additionally has either a positive or negative impact on the growth of SMEs.

Many studies focused on the relationship between social capital and firm performance. Firm performance is measured by financial indicators (e.g. return on equity) (Watson, 2007) and growth of sales (Binh & Tien, 2019). This paper provides a different

[1] https://www.gso.gov.vn/en/data-and-statistics/2019/10/report-social-and-economic-situations-in-the-first-quarter-of-2018/%3E

perspective from previous studies. Specifically, this research considers a firm performance as a proxy of innovation indicators, marketing communication expenditure, and entrepreneurial orientation (EO). Innovation means radical changes in technology or research and development (Ioanid et al., 2018). Marketing communication expenditure plays an important role; its cost is more or less due to the available social network (Lin, 2001). While there are manifests of the network level in EO, only a few focus on marketing communication (Wincent et al., 2014).

This study aims at investigating the effects of social capital on innovation, marketing communication expenditure, and EO in the context of SMEs in Vietnam, an emerging economy. SMEs play a vital role in economic development in emerging economies and create more employment (Batista et al., 2019). However, research on SMEs in the emerging context is sparse (Clarke et al., 2016).

The rest of the paper is organised as follows: Section "Literature review and hypotheses development" reviews the literature and develops hypotheses. The research method and results are presented in sections "Research methodology" and "Results". Section "Discussion and conclusion" discusses the findings and concludes the research.

Literature review and hypotheses development

Social capital

Social capital, defined as "the ability of people to work together for common purposes in groups and organizations" (Fukuyama, 1995), is a resource that could be exploited from the social relationship and can be used as leverage for business goals. Adler and Kwon (2002) stated that social capital should be divided into external social capital and internal social capital. According to Adler and Kwon (2002), external social capital refers to the network of social relationships with external entities, such as suppliers, customers, and government representatives. Internal social capital pertains to the interconnectedness among employees, colleagues, business partners, as well as friends and family members. The significance of these two forms of social capital cannot be overstated for small and medium-sized enterprises (SMEs), as they possess the potential to leverage intangible resources, including trust, loyalty, referrals, support, information, and strategic counsel. By harnessing such resources, SMEs can enhance and optimise their business performance while concurrently establishing and sustaining a competitive edge.

External social capital is how the organisation has connections with external partners (Barroso-Castro et al., 2016). This relationship helps generate potential resources that increase the organisation's competitive advantages. Organisations with high levels of connections or an external network have faster access to timely information and critical resources, resulting in better performance (Mitręga & Choi, 2021). External social capital provides channels for communication with external stakeholders and helps firms gain support from external stakeholders. For example, Gamble et al. (2021) revealed that a strong partnership with suppliers could help SMEs create value from their business model. Similarly, the most influential business directors often sit on managing boards of industrial associations or advisory groups, which may be a prerequisite for securing resources for the firm (Barroso-Castro et al., 2016). Despite these advantages, a challenge for SMEs, particularly in emerging countries, in developing external social capital is the skill and time of SME directors (Li & Tan, 2004). Additionally, the lack of

stakeholder engagement is another challenges for SMEs to develop external social capital (Jia et al., 2018).

On the other side, internal social capital refers to the network and relationship between individuals within a firm or a department. A robust internal network enhances trust and facilitates knowledge sharing, contributing to a firm's competitive advantages. A strong internal social capital could increase a firm's image as its employee could spread positive voices to the outside community (Barroso-Castro et al., 2016). Additionally, internal social capital is important to deal with the complexity and uncertainty of innovative projects, which commonly require changes in the company (Cuevas-Rodríguez et al., 2014). Thus, internal social capital has become an important research stream as it helps firm achieve sustainability objectives (Gudmunson & Danes, 2013). However, through a comprehensive review of studies on internal social capital, Sanchez-Famoso et al., (2020) found that the study of internal social capital is still in its infancy, especially in the SME context.

Unlike large firms, managers in SMEs tend to be involved more directly in daily operations and have a greater influence on decision-making. Thus, social capital embedded in managers' contact networks is essential for SMEs. Through these networks, managers can access resources that allow them to identify opportunities and build legitimacy for their firms (Bhagavatula et al., 2010). Particularly in emerging economies where there is a lack of regulations and laws, managers rely more on their contact network to procure resources and protect their firms (Stam et al., 2014). While there is a strong consensus on the benefits of social capital, Stam et al. (2014) noted that there is no consensus on the characteristics of contact networks constituting social capital. Also, Slotte-Kock and Coviello (2010) called for the clarity of how social capital (external and internal social capital) affects SMEs' performance.

Social capital and innovation

Nowadays, firms have confronted great challenges as digital technologies have been adopted increasingly in businesses and lives. In this aspect, innovation helps firms respond to changing business environments and maintain competitive advantages (Baláž et al., 2023). Innovation is expensive, risky, and complicated but vital for a firm's survival and growth (Lohe & Calabrò, 2017). It presents the firm's capabilities to understand customers and predict their demand. Thus, innovation requires the mobilisation of external and internal resources (Lohe & Calabrò, 2017) through social capital (David et al., 2001).

Specifically, the internal social capital has been proved to help the generation of information sources that cultivate the innovative procedure (Nickels & Dimov, 2012; Thongpapanl, 2012; Yli-Renko et al., 2001). Internal social capital contributes to activating information inserted inside, accessible among people inside associations (Nahapiet & Ghoshal, 1998). Ioanid et al. (2018) investigated the impacts of social networks on SMEs' innovation and found that the process of innovation attracts stakeholders to the firm's responses.

Emerging countries normally have a large number of young consumers who rapidly adopt new technologies (e.g. online shopping) (Binh et al., 2023). Consequently, SMEs in these countries have paid much attention to the innovation process for the adoption of digital technologies to meet the demand from these young consumers. However, the

adoption of digital technologies requires high investment on financial resources and knowledge development (Hanna, 2020). This innovation process needs strong collaboration with external partners (e.g. suppliers) as well as the awareness of internal partners (e.g. awareness of staff). Therefore, we argue that:

H1: SMEs' social capital from emerging economies positively relates to firm innovation.

Social capital and marketing communication expenditure

Marketing communications provide information about products, services, quality, and price and help create favourable firm images (Banerjee & Siddhanta, 2015). In the marketing management literature, social capital has been conceptualised as a resource reflecting the character of networks within a firm and between firms (Kostova & Roth, 2003) that provide a basis for inter- and intra-firm collaboration. Social network could be used as a marketing tool that provides opportunities for increased business values (Jung et al., 2013).

In the same manner, Wang et al. (2002) argue that a social network could potentially serve as "the most efficacious method of relationship marketing" due to its ability to obscure the distinctions between partners, customers, and allies. In addition, social networks facilitate connections among users in the digital domain and provide recommendations derived from the experiences of other participants (Chung & Buhalis, 2009). In a similar vein, social networks enable individuals to "gain access to information, maintain relationships, and develop connections" (Wang et al., 2002) through the expansion of personal networks and the elimination of geographical restrictions. In conclusion, social networking can function as an innovative marketing platform that facilitates direct communication and audience engagement with a wider range of prospective and existing consumers. We contend that organisations that allocate resources towards social capital also demonstrate greater diligence in managing their marketing communication expenditures. As a result, the hypothesis is concerned as follows.

H2: SMEs' social capital from emerging economies positively relates to marketing communication expenditure.

Social capital and entrepreneurial orientation

Entrepreneurial orientation (EO) refers to the firm's willingness to take risks, to innovate, and to be proactive relative to business opportunities (Zhou et al., 2021). Lumpkin and Dess (2001) stated EO is an important process and decision-making activity that leads to a new entry. According to Wincent et al. (2014), EO is vital for a firm that participates in the innovation process. EO highlighted that a firm needs to strengthen the relationship with other stakeholders in the innovation process and support firm performance (Wincent et al., 2014).

On the other side, social capital provides firms with access to different resources, helps to identify opportunities and quickly reacts to fast-changing market needs (Acosta et al., 2018). This is especially significant for SMEs due to their lack of resources (Parida et al., 2017). In this context, social capital is a valuable capital adding success for SMEs. Significantly, once a firm considers the management of information flows and social networks,

they improve the EO performance by knowledge sharing, cost reductions, innovation speed, reputable gains and opportunity identification.

In an emerging economy such as Vietnam, the market imperfection is still hidden. The policies and regulations are vague. Thus, the network relationship becomes critically important for SMEs to access resources, information, and knowledge. The network relationships with government leaders secure access and facilitate the exchange of resources, information, and knowledge for business activities, which significantly contributes to firm performance (Acquaah, 2007). SMEs develop their social network more easily than large firms. They use the available knowledge from relationships more readily to achieve high performance. (Wong et al., 2005) added that SMEs' closeness to their customers enables them to get knowledge more directly and faster than large organisations. Together, these arguments lead to the following prediction:

H3: Social capital of SMEs from emerging economies positively relates to EO.

Research methodology

This research extracted data from a survey conducted in 2019 in Vietnam by three organisations, including: (i) Central Institute for Economic Management (CIEM), Ministry of Planning and Investment. CIEM has served as Vietnam's leading think tank for the advancement of economic management science. It has suggested policies to modernise economic management mechanisms in line with the needs of the country's socioeconomic conditions at every stage of development. Additionally, CIEM is a dependable and significant source of economic advice for the government; (ii) The Institute of Labour Science and Social Affairs (ILSSA), the Ministry of Labour, War Invalids and Social Affairs (MOLISA). The ILSSA is actively engaged in endeavours to enhance its contributions to the scientific underpinnings of strategic planning and policies pertaining to the development of human resources, labour, employment, and social stability; (iii) The Development Economics Research Group (DERG) at the University of Copenhagen is responsible for technique support and survey process design. In sum, the survey is funded by Business Sector Programme Support of Denmark and it is referred to as the Vietnam SME survey, represents a collaborative endeavour involving the aforementioned three units. The survey interviewed owners as entrepreneurs of enterprises to draw an overview of performance of enterprises in Vietnam.

We focused on SMEs in Ho Chi Minh City, Vietnam, as it is the biggest city in Vietnam and accounts for one-third of Vietnam's GDP (GSO, 2018). We excluded four enterprises which do not have a business certification and 12 enterprises which were established less than 2 years. In total, there are 645 enterprises in our sample. They are SMEs that has been in the market with the length of stay for over 2 years. Thus, with the active time of at least 2 years, SMEs selected have formed external and internal network that could shed light on the influence of social capital on firm performance.

This research recruits the binary logistics model to investigate the influence of social capital on radical innovation, marketing communication expenditure, and EO. This model is employed in literature on social capital to determine the response in which the dependent variable is an indicator of a discrete choice such as 'adopted' or 'not adopted' (Belay & Fekadu, 2021).

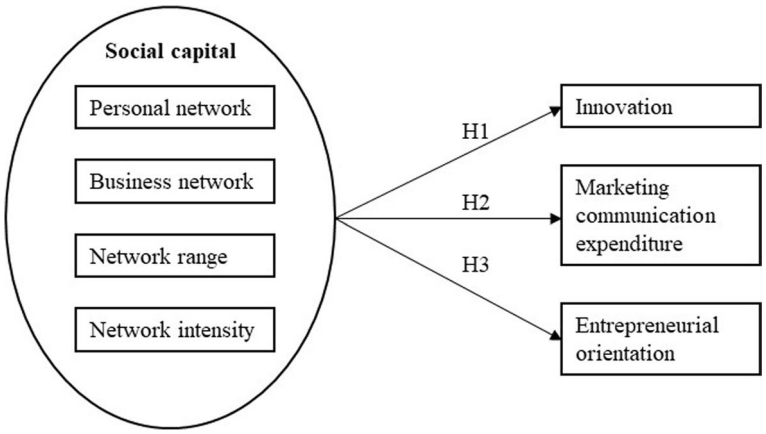

Fig. 1 Hypothesised relationships between networks and SME performance

Dependent variables

Similar to Ioanid et al. (2018) who employed innovation of SMEs as a dependent variable and explored the impact of social networks on the innovation performance of SMEs, this research also adopts innovation as dependent variables. Additionally, we employ marketing communication expenditure and EO as other two dependent variables.

Independent variables

Consistent with previous research, we consider personal network (Stam et al., 2014), business network (Tóth et al., 2020), network range, and network intensity (Dong et al., 2020) are four factors of social capital. A personal network refers to friends and family members of owners, directors of managers at a firm (Islam et al., 2018). Business network refers to communication with customers (Islam et al., 2018). Network range and network intensity are important for exploiting market opportunities and accessing diverse information (Patel & Terjesen, 2011). Based on Watson (2007), the network range is the frequency of support that owners, directors, and managers of SMEs receive per year from their all network linkages. The network intensity of the firm is derived by the ratio between total advice as total supports and the total number of transactions of the SMEs (Watson, 2007). The research framework is summarised in Fig. 1.

Control variables

To measure how the relationship between marketing capabilities and human resource development is, firm age and firm size are used as instruments to measure that relation. Adams et al. (2019) confirmed a significant impact of firm size on innovation performance. Also firm size is a positive contribution to firm performance (Wang, 2020). As a result, we introduced two control variables of firm age as LOS and firm size to investigate how their role is. LOS is measured as the number of years the firm has been established. The grouping of firms by age is derived on the work of Binh (2019). The inclusion of firm age as a control variable is substantiated by the studies

conducted by Liao (2018) and Wang (2020). The grouping of firms by age is derived on the work of Binh and Tien (2019). The inclusion of firm age as a control variable is substantiated in existing literature (e.g. Liao (2018) and Wang (2020)). Similarly, Binh and Tien (2019) contend that the magnitude of a company is ascertained by its labour force. This division is also applied in the current paper. Additionally, the division of enterprise size is also based on reference to GSO's statistical yearbook. As a result, firm size is regarded as a control variable in the statistical model, drawing from the works of Adams et al. (2019) and Binh and Tien (2019).

Similarly, Binh and Tien (2019) contend that the magnitude of a company is ascertained by its labour force. The categorisation of enterprise size is also determined by referencing the statistics yearbook published by the GSO. Within the statistical framework, the variable of firm size is considered a control variable, as evidenced by the studies conducted by Adams et al. (2019) and Binh and Tien (2019).

Based on arguments, variables employed in binary logistics model are defined in Table 1. Also, these variables are also informed to know which author they were concerned and adapted in this study.

Results

Table 2 presents differences of group test between "Yes" and "No" of 645 enterprises. Accordingly, there is no significant difference in the innovation approach of SMEs with different LOSs. In contrast, there is a significant difference in the marketing communication expenditure of SMEs having LOS range of 10–20 years and of 20–60 years. In addition, the SMEs with the oldest age (LOS: > 20–60 years) has an intension of entrepreneurial orientation.

SMEs with different numbers of employees (i.e. EMP_G1, EMP_G2, EMP_G3, EMP_G4, and EMP_G5) have significantly different approaches on innovation, marketing communication expenditure, and entrepreneurial orientation. This result could be that different SMEs with different size (i.e. number of employees) have a certain perception of interest in innovation, marketing expenditure and entrepreneurial orientation.

The statistical results described in Table 3 offer a general picture of the values of the independent and dependent variables used in the binary logistic model. The measured value of the variables can be seen as the mean value and the frequency of dichotomy variable (personal network, innovation, marketing communication expenditure, and entrepreneurial orientation.

Table 4 provides results received from the binary logistics models to investigate the relationship between social capital and innovation, between social capital and marketing communication expenditure, and between social capital and EO. Accordingly, the calibration and goodness-of-fit of six models (e.g. Model 1a, Model 2a, Model 1b, Model 2b, Model 1c, and Model 2c) are examined, which the calibration test is based on the calibration belt of Nattino et al. (2017) to test calibration and reliability of binary outcome models, while the goodness-of-fit test is based on Hosmer–Lemeshow (Hosmer et al., 2013). As a result, the *P*-value of "Calibrationbelt" of six models is not significant at any level. This confirms that six logit models are calibration belt. Also, the Pro > 2chi of Hosmer–Lemeshow are not significant, the goodness-of-fit of the six logit model is proved. As a result, we are confident to describe results of six models.

Table 1 Variables and its measurement employed in the model

Label	Content	Measure	Author
LOS1	Length of stay ≤ 5 years	1 = yes and 0 = no	Binh and Tien (2019), Liao (2018), Wang (2020)
LOS2	Length of stay > 5–10 years	1 = yes and 0 = no	
LOS3	Length of stay > 10–20 years	1 = yes and 0 = no	
LOS4	Length of stay > 20–60 years old	1 = yes and 0 = no	Adams et al. (2019), Binh and Tien (2019)
EMP1	Employee number ≤ 5 employees	1 = yes and 0 = no	
EMP2	Employee number > 5–10 employees	1 = yes and 0 = no	
EMP3	Employee number > 10–50 employees	1 = yes and 0 = no	
EMP4	Employee number > 50–200 employees	1 = yes and 0 = no	
EMP5	Employee number > 200 employees	1 = yes and 0 = no	
Personal network	The contact with family members, friends, and relatives per year	1 = yes and 0 = no	Stam et al. (2014)
Business network	Business network = percentage of customers known as close communication of the total transaction per year	Percent (%)	Tóth et al. (2020)
Network range	The frequency of advice and support per year that the owners/director of SMEs received from their network	Unit	Dong et al., (2020), Watson (2007)
Network intensity	Network intensity = (total advice and supports)/total transactions	Unit	Dong et al. (2020), Watson (2007)
Innovation	Radical changes in technology and new product development (R&D)	1 = Radical innovation and 0 = Otherwise	Hizarci-Payne et al. (2021)
Marketing expenditure	Marketing communication expenditure	1 = Done marketing communication expenditure and 0 = Otherwise	Falahat et al. (2020)
Entrepreneurial orientation	SMEs' production oriented to customers' order	1 = Based on customers' order, 0 = Otherwise	Binh et al.. (2021), Rezaei and Ortt (2018)

Generally, all LOS ranges do not have a significant impact on three indicators of innovation, marketing communication expenditure and entrepreneurial orientation.

To innovation, model 1a presents a significant relationship between employment size and innovation. The higher firm size, the lower firm performance, this finding is consistent with Ardito et al. (2021). Luckily, there is enough evidence to confirm a highly significant relationship between business network and innovation in Model 1a and Model 2a. This finding is a combination with Islam et al. (2018), which business network is associated with firm performance. As a result, an increase in business network of firm's owners causes a raise in the enterprise's innovation. The marginal effects shown in Table 5 indicate that as SMEs expand their business networks, the positive shift in the probability of innovation (with 0.002% in Model 1a and 0.003% in Model 2a) will also expand.

Table 2 LOS of firm by innovation, marketing communication, production

Length of stay	Innovation (%)		Marketing communication expenditure (%)		Entrepreneurial orientation (%)	
	Yes	No	Yes	No	Yes	No
LOS_G1: ≤ 5 years	27.1%	32.3%	39.8%	31.9%	27.6%	34.2%
LOS_G2: > 5–10 years	23.8%	19.2%	19.5%	21.5%	19.2%	21.7%
LOS_G3: > 10–20 years	40.9%	36.4%	28.5%	35.5%[b]	40.9%	34.5%
LOS_G3: > 20–60 years	8.3%	12.1%	12.2%	11.2%[c]	12.4%	9.6%[c]
Total	100	100	100	100	100	100
Firm size by business activities						
EMP_G1: < 5 employees	13.3%	41.8%[a]	11.2%	40.2%[a]	28.8%	38.8%[a]
EMP_G2: 5–9 employees	22.7%	30.2%[c]	18.9%[a]	30.7%[a]	22.0%	34.2%[a]
EMP_G3: 10–40 employees	40.3%	22.2%[a]	42.0%[a]	23.1%[a]	32.8%	21.7%[a]
EMP_G4: 50–199 employees	17.7%	5.4%[a]	21.7%[a]	5.2%[a]	13.6%	4.0%[a]
EMP_G5: ≥ 200 employees	6.1%	0.4%[a]	6.3%	0.8%	2.8%	1.2%[a]
Total	100	100	100	100	100	100

[a] Is significant at 1%; [b] is significant at 5%; [c] is significant at 10%

Table 3 Descriptive statistics

Label	Obs	Mean	Std.Dev	Min	Max
Personal network (1 = contract with family members, friends, and relative occupying 74.42%, 0 = otherwise occupying 25.58%)	645	0.744	0.437	0	1
Business network	645	169.828	159.594	0.05	700
Network range	645	266.685	278.820	1	3000
Network intensity	645	9.844	16.933	1	355
Innovation (1 = radical innovation occupying 22.17%; 0 = otherwise occupying 77.83%)	645	0.281	0.450	0	1
Marketing expenditure (1 = done marketing communication expenditure occupying 50.08%; 0 = otherwise occupying 49.92%)	645	0.222	0.416	0	1
Entrepreneurial orientation (1 = based on customers' order occupying 50.08%; 0 = otherwise occupying 49.92%)	645	0.501	0.500	0	1

To marketing communication expenditure, a significant relationship between personal network and marketing expenditure in both Model 1b and Model 2b is found. This brings a message of importance of personal network having a positive contribution to the enterprise's marketing communication expenditure. In addition, influencing of network range on marketing communication expenditure is also confirmed. The marginal effects shown in Table 5 indicate that as SMEs expand their personal networks, the positive shift in the probability of marketing communication expenditure (with 0.117% in Model 1b and 0.096% in Model 2b) will also expand.

To entrepreneurial orientation, business network is an important role for entrepreneurial orientation, due to a significant relationship between business network and entrepreneurial orientation in both Model 1c and Model 2c. This means that once the more business network that owners have, the more entrepreneurial orientation happened in firm. The marginal effects shown in Table 5 indicate that as SMEs expand their personal network and business networks, the positive shift in the probability of

Table 4 Logit models with innovation, marketing and EO as dependent variables

Variable	Innovation		Marketing communication expenditure		Entrepreneurial orientation (EO)	
	Model 1a	Model 2a	Model 1b	Model 2b	Model 1c	Model 2c
LOS_G1: ≤ 5 years	0.284		− 0.142		− 0.508	
LOS_G2: > 5–10 years	0.569		− 0.454		− 0.493	
LOS_G3: > 10–20 years	0.446		0.141		− 0.236	
EMP_G1: < 5 employees	− 3.921[a]		− 3.471[a]		− 1.157[c]	
EMP_G2: 5–9 employees	− 3.028[a]		− 2.652[a]		− 1.321[b]	
EMP_G3: 10–40 employees	− 2.207[a]		− 1.517[a]		− 0.443	
EMP_G4: 50–199 employees	− 1.607[b]		− 0.794		0.398	
Personal network	− 0.220	− 0.275	0.825[a]	0.571[b]	0.374[c]	0.286
Business network	0.002[a]	0.002[a]	0.0004	0.001	0.001[b]	0.002[a]
Network range	0.0005	0.0004	0.0004	0.001[b]	0.0004	0.0003
Network intensity	0.007	0.001	− 0.007	− 0.016	− 0.012	− 0.015
Constant	1.251	− 1.160[a]	0.213	− 1.928[a]	0.918	− 0.312[c]
Pseudo-R^2	0.136	0.016	0.165	0.024	0.070	0.021
Calibrationbelt and test for internal validation (*P*-value)	0.214	0.642	0.523	0.302	0.252	0.978
Hosmer–Lemeshow and test goodness-of-fit after logistic model (Pro > chi 2)	0.888	0.278	0.101	0.769	0.623	0.813

[a] Is significant at 1%; [b] is significant at 5%; [c] is significant at 10%

Table 5 Logit models and its marginal effects

Variable	Innovation		Marketing communication expenditure		Entrepreneurial orientation (EO)	
	Model 1a: dy/dx	Model 2a: dy/dx	Model 1b: dy/dx	Model 2b: dy/dx	Model 1c: dy/dx	Model 2c: dy/dx
LOS_G1: ≤ 5 years	0.048		− 0.020		− 0.115	
LOS_ G2: > 5–10 years	0.096		− 0.064		− 0.112	
LOS_ G3: > 10–20 years	0.076		0.019		− 0.053	
EMP_G1: < 5 employees	− 0664[a]		− 0.490[a]		− 0.262[c]	
EMP_G2: 5–9 employees	− 0.513[a]		− 0.374[a]		− 0.299[b]	
EMP_G3: 10–40 employees	− 0.374[a]		− 0.214[b]		− 0.101	
EMP_G4: 50–199 employees	− 0.272[b]		− 0.112		0.090	
Personal network	− 0.037	− 0.054	0.117[a]	0.096[b]	0.085[c]	0.069
Business network	0.002[a]	0.003[a]	0.0001	0.0001	0.0003[b]	0.0004[a]
Network range	0.0003	0.0001	0.0001	0.0001[b]	0.0001	0.0000
Network intensity	0.000	0.0002	− 0.003	− 0.016	− 0.003	− 0.004

[a] Is significant at 1%; [b] is significant at 5%; [c] is significant at 10%

entrepreneurial orientation will also expand, in which the personal network cause higher probability (0.085%) in Model 2b.

Findings of Model 1a, Model 2a, Model 1b, Model 2b, Model 1c, and Model 2c give confirmations that the role of social capital derives positive contributions to innovation, marketing communication, and entrepreneurial orientation. Especially, personal network has a highly significant influence on marketing communication expenditure and EO. However, there is not enough evidence to conclude that network intensity has a bearing on innovation, marketing communication, and EO. There is a limited amount of literature available about the influence of network intensity on innovation, marketing communication, and entrepreneurial orientation. However, certain scholars have addressed the relationship between network intensity and business performance, including Danis et al. (2010) and Watson (2007). In the studies conducted by Eggers et al. (2020) and Nunes et al. (2019), the authors examined the impact of intensity networking on innovation performance. Their findings indicated that innovation success was influenced by the level of networking intensity (Eggers et al., 2020). Thus, once the organisation increases the intensity with which it utilises knowledge networks, its innovation outcomes are also expected to improve (Nunes et al., 2019). However, the current paper presents contrasting results. This outcome is really unexpected. Network intensity may not be fully utilised by SMEs in Vietnam, which may be the reason it has no effect on innovation, marketing communication, and EO. This could be as a result of Vietnamese SMEs' relationship-based culture, which forges connections within the social activity network.

Discussion and conclusion

This research provides fresh insights on the relationship between social capital and radical innovation, marketing communication expenditure, and EO of SMEs in an emerging economy. We examined four constituent factors of social capital: personal network, business network, network range, and network intensity. Our empirical evidence, based on a sample of 645 SMEs in Ho Chi Minh City, Vietnam, demonstrates the benefits of social capital on SMEs' performance. Specifically, we reveal a significant relationship between the personal network with marketing communication expenditure, the business network with innovation and EO, and the network range with marketing communication expenditure. SMEs with limited resources should make effective decisions to balance resources (e.g. time and money) invested in networking development and other operational activities (e.g. innovation and marketing). These, in turn, enhance the performance of firms. Surprisingly, we do not find significant evidence for the relationship between network intensity and innovation, marketing communication expenditure, and EO. (Watson, 2007) did not find a significant impact of network intensity on firm performance (e.g. firm growth and ROE), but a positive contribution of it on firm's survival is existed.

Our findings are associated explicitly with SMEs in Vietnam. Like other emerging economies, Vietnam has inadequate market supporting institutions and lacks regulation and law (Acquaah, 2007). It creates more significant uncertainties in the business environment, particularly for SMEs. Thus, networking relationships have a critical role

for SMEs in information sharing, knowledge sharing, and increasing their competitive advantages.

Theoretical contributions

Several theoretical contributions arise from this research. First, in line with social capital theory, we found that social capital has a significant relationship with innovation, marketing communication expenditure, and EO. In this research, we use three refined measures of firm performance, which clarify the benefits of social capital on SMEs (Slotte-Kock & Coviello, 2010). It is an important finding considering that SMEs are facing more significant uncertainties in the business environment than ever. To survive and develop, SMEs should leverage the resources and effectively respond to the swift change in consumer behaviour. It is noted that social capital, while benefits firm performance, also has some negative effects on social and economic communities and organisational settings (Pillai et al., 2017). In this aspect, leadership, focal firm's capabilities, transaction-specific investments, and environmental uncertainties play key roles in moderating these negative effects (Pillai et al., 2017). Our research, while highlighting the benefits of social capital, also discusses how to ensure the benefits of social capital, which leads to the second contribution.

Second, we respond to the call for further research about the characteristics of networks constituting social capital (Stam et al., 2014). We highlight the important roles of SMEs' personal network, business network, and network range. SMEs normally spend a significant amount of money on marketing activities (Jahanshahi et al., 2013). Particularly, they focus on investigating societal trends, technologies, and culture (Bettiol et al., 2012). SMEs managers proactively join business networking to gain information and improve marketing activities (Gilmore et al., 2006). For example, SMEs in the hospitality sector remained worst affected by the COVID-19 pandemic given their business size, limited cash flow, and scarce resources. In this crisis, a cordial relationship with stakeholders is crucial in helping SMEs shape operational activities in response to COVID-19 (Burhan et al., 2021). The findings are also consistent with the work of Konsti-Laakso et al. (2012) and Gronum et al. (2012), who highlight that innovation in SMEs can be promoted through the business network.

Third, we respond to the call for more empirical study in an emerging economy (Zaefarian et al., 2016). Social networking is common in emerging economies of Asia and Africa (Acquaah, 2007). However, few empirical studies investigate the effects of social networking in emerging economies. Most literature focuses on advanced economies (Lee et al., 2023). Also, most of the work on emerging economies focused on China to examine the network managers develop with government officials (Lee et al., 2023). Our work, conducted in a different country with a different culture, is needed to investigate the robust relationship between social capital and SME performance.

Managerial contributions

This research has important implications for managers and government agents. The role of the local community should be taken into account in support. SMEs managers should effectively use what they receive from network relationships to improve the performance of firms. Here, the unique needs, perspectives, and strengths of the people

living in a particular area or community should be recognised, respected, and integrated into the support, assistance, or decision-making processes. SMEs managers should consider knowledge, expertise, and feedback from the local community and utilised them to ensure that the support provided by the local community is not only effective but also culturally sensitive, inclusive, and aligned with the community's specific requirements. This approach fosters a sense of ownership, empowerment, and partnership within the local community, ultimately leading to more sustainable and successful outcomes.

In addition, our work stresses that programmes for developing both personal networks and business networks are crucial for firm performance. SMEs managers should leverage personal networks and business networks to exchange information and knowledge. Personal networks are crucial because they provide employees with support, knowledge, and resources. They can help individuals navigate their roles, access information, and seek guidance when needed. These personal networks not only enhance the well-being of employees, but also contribute to their professional growth, which, in turn, can positively impact the firm's performance. On the other side, business networks encompass the connections that a firm as a whole establishes with other businesses, partners, suppliers, customers, and industry associations. These networks are essential for firm performance because they facilitate collaboration, innovation, and business opportunities. Building and maintaining strong business networks can lead to access to new markets, technological advancements, cost-effective supply chains, and a broader customer base. Moreover, given the benefits of marketing communication, SMEs should balance the investment in marketing communication activities and their daily operational activities.

Future research directions

This research has some limitations that should be taken to interpret findings and suggest some future research directions. The research was conducted in Vietnam, leading to questions of whether the findings are country-specific. A comparison among different emerging economies could clarify the benefits of social capital. Unexpectedly, we do not find a significant relationship between network intensity with innovation (Liao, 2018). Future research could further investigate the mechanism by which networking relationship supports innovation in SMEs. Finally, new product development and technologies are essential for the development of SMEs. Future research could investigate how social capital moderate or mediate the benefits of new product development and technologies for SMEs.

Abbreviations

SMEs	Small and medium enterprises
EO	Entrepreneurial orientation
GDP	Gross domestic product
CIEM	Central Institute for Economic Management
ILSSA	The Institute of Labour Science and Social Affairs
MOLISA	The Ministry of Labour, War Invalids and Social Affairs
DERG	The Development Economics Research Group

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