

Social capital of managers and firm operational performance of SMEs in Ho Chi Minh City

Nguyen Kim Phuoc*



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ABSTRACT

Operational efficiency, a dominant concern for businesses, is always an issue for the researchers to find the solutions for helping the businesses enhance their corporate performance. In previous studies on the performance of enterprises in general and small and medium-sized enterprises in particular, most of the studies focused on financial factors, but did not pay much attention to non-financial factors. Operational efficiency depends on financial and non-financial factors, of which, non-financial factors are diverse (human capital, social capital, psychological capital, non-financial risk, management efficiency, etc.). theory, applied science, etc). Social capital is a new area of research in Vietnam, which is closely related to the economic field. In Vietnam, interdisciplinary theoretical applied research is a new research trend (economic theory combined with social theory), which this study follows. The study applies the social capital theory "The strength of weak ties" of Granovetter, theory "The network Structure: of Burt and "A Network theory of social capital" of Lin to examine the influence of social capital on firm performance. The research model comprises 5 factions of independent variables representing social capital (Relational (REH), Cognitive (CSC), Social Interaction Ties (SIT), Trust (TRU) and Structural (SSC) and a group of dependent variables (Firm Operational Performance). Structural Equation Modeling was used to analyze data collected from a survey of 378 SME managers in Ho Chi Minh City based on a convenient method. The analysis results demonstrate that all aspects of social capital have positive effects on business operational performance, of which Structural Social Capital (SSC) and trust (TRU) are the two most influential groups. The research results help business administrators better understand social capital's importance, thereby improving business performance through maintaining and developing managers' social capital.

Key words: Firm Operational Performance, Social Capital, Small and Medium Enterprise (SME)

Ho Chi Minh City Open University,
Vietnam

Correspondence

Nguyen Kim Phuoc, Ho Chi Minh City
Open University, Vietnam

Email: phuoc.nk@ou.edu.vn

History

- Received: 12/04/2021
- Accepted: 21/7/2021
- Published: 05/8/2021

DOI : 10.32508/stdjelm.v5i4.796



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INTRODUCTION

Social capital (SC) is a special kind of capital that can bring many intangible benefits to the individual who owns it. Recent studies have shown that SC can help businesses maximize profits, improve the efficiency of operations¹, or financial performance of the company², or bring other advantages to businesses³. The manager plays a leading role, having a convincing influence on the performance of the organization⁴ and influencing the performance of the firm^{5,6}, corporate culture, innovation ability⁷, employee working capacity⁵.

Research on SC's impact on corporate performance has been of great interest to researchers in recent years. However, most studies focus on the effects of SC through intermediate variables such as knowledge sharing^{2,8,9}; human capital^{10,11}; entrepreneurship^{12,13}; access to information^{14,15}; the ability to innovate businesses¹⁶⁻¹⁸; corporate social responsibility^{19,20}; collaborative capacity²¹, among others. Although studies on the direct impact of SC on cor-

porate operations are various, SC's main study is intended to complement previous studies related to SC and FOP.

Manager's SC is a new and important concept in the recent management literature²². Compared with other sorts of capital such as financial capital, economic capital, human capital, intellectual capital, SC has not been thoroughly studied. Therefore, the manager's SC study is still promising for researchers.

Based on literature review, the topic found that SC of the board of directors or business managers has been carried out by many studies in developed and developing countries such as: research by Hillman, 2005²³; Lester et al, 2008²⁴; Kor & Sundaramurthy, 2009²⁵; Devos, Prevost & Puthenpurackal, 2009²⁶. Although Vietnam is known as a developing country having numerous development opportunities in the future, studies on the relationship between SC and FOP are not popular.

This study aims to fill the previous gap by finding an answer to the question "How does SC affect FOP?"

Cite this article : Phuoc N K. **Social capital of managers and firm operational performance of SMEs in Ho Chi Minh City.** *Sci. Tech. Dev. J. - Eco. Law Manag.*; 5(4):1797-1810.

Therefore, this study is expected to contribute to both academic research and management implications for businesses in Vietnam. According to Kwon & Adler (2014)²⁷, research on SC can continue to usefully expand on specific aspects and mechanisms as they are related to specific topics. Therefore, this study will focus on determining the direct relationship between the five SC dimensions of SME managers and FOP. After the introduction, the first main part of the article will review the literature related to the research topic and propose research hypotheses, followed by research methodology. After the results of quantitative research are demonstrated, the last section discusses research results, conclusions and recommendations.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

Venkatraman and Ramanujam's (1986)²⁸ present a number of indicators of company performance, including: (i) financial aspects: return on investment (ROI), return on assets (ROA), return on equity (ROE), profit margins, growth of sales...;(ii) non-financial aspects: the company's market share, product quality, employee or customer satisfaction, achievement of pre-set goals which are related to the company's competitors²⁸⁻³⁰. As for this study, Firm operational Performance will be measured using non-financial parameters. We will concentrate on non-financial (perceived) parameters that consist of customers' satisfaction, development of quality, the productivity of the business compared to major competitors^{30,31}.

The SC concept is not consistent among researchers. SC is the sum of available or potential resources and is derived from 'social ties'³². Coleman (1988)³³ stated that SC is the structure of the relationship between individuals in society. According to Putnam (1995a)³⁴, the main aspects of SC are obligations, ethical norms, social values (in which the belief is strong), and social networks (primarily voluntary associations). SC includes relationships, trustworthiness, and mutual support among network members^{35,36}. SC is considered on three aspects: structure, cognitive and relational^{36,37}. SC manifests itself in trust, compliance (customs, regulations, rules), organizational networks, and relationships^{22,38}.

Social capital is a new, multifaceted concept. Social capital researchers mostly consider social capital in terms of structure and cognition². According to Granovetter (1973)³⁸, Bourdieu (1986)³⁹ and Coleman

(1988)³³, in terms of structure, social capital is reflected in relationships and the structure of relationships (individuals, organizations, authorities, communities, etc.) and social interaction. Cognitive social capital is expressed in trust, reciprocity, support or mutual assistance in work or life^{33,39,40}. Thus, SC is shown in relationships, structure, interactions, cognition, and trust.

Relationships include attachment, bridging, linking relationships⁴⁰ or strong and weak relationships³⁸. Managers in a business can have internal relationships (with co-workers, subordinates, senior leaders) and external relationships, including customers, partners, suppliers^{31,41}. Relationships with colleagues, partners, and customers are the main ones that show the relationship structure in a business⁴². These relationships indirectly influence firm performance^{2,22,42,43}. Individuals in an organization regularly interact with each other during working time. The intimacy, chatting time, sharing experiences and knowledge among colleagues facilitate the working process, creating cohesion and mutual support, thereby helping family members increase work efficiency and the efficiency of businesses^{44,45}.

Cognitive SC is expressed in mutual understanding with common aims and vision among internal employees in the business^{36,37}, which affects business performance⁴⁴. Relationships are built on trust. Trust is the basis of relational SC, promoting cohesion, cooperation, and sharing of resources among individuals in society^{22,38,46}. Trust helps to better access internal and external resources of the enterprise, enhance the competitiveness and operational efficiency of enterprises⁴⁷⁻⁴⁹.

Relational and Firm operational performance

Business managers attach great importance to their relationships with their participants⁵⁰. With Relational Social Capital's support, employees can handle jobs more efficiently by using the resources provided by relationships: experience, information, mutual consent³. Relationships with customers or partners can help businesses improve, innovate business activities^{51,52}. Companies can rapidly enhance quality, reduce costs, improve responsiveness, and better manage assets through new insights from the Relational SC of managers⁵³.

Relational SC is considered an asset of the company⁵⁴. Granovetter (1983)⁵⁵ proposed that relationships create reciprocity between individuals. Organizational performance is highly effective with internal and external individuals⁵⁶. SC relationship and the growth

or performance of companies correlate^{53,57}, primarily Relational SC of senior leaders^{43,58,59}. According to Wang, Wang & Liang (2014)³¹, relationships with colleagues, customers, shareholders, suppliers, and strategic partners greatly influence business performance. Therefore, the study proposes the following hypothesis:

H₁: **Relational** (REL) has a positive impact on FOP.

Cognitive social capital and Firm operational performance

Cognitive SC refers to mutual understanding among people and knowledge, shared vision, shared goals, and shared opportunities among people within the company and others^{36,44,46,48,60}. Cognitive SC refers to the shared vision, mutual learning², shared goals, and a common approach to organizational tasks^{61,62}. Cognitive SC provides a shared vision for everyone, which helps achieve a common goal in the future⁵⁶. The CSC promotes organizational value creation activities that positively impact their performance⁶⁰. The CSC has a positive and significant influence on employee's and leaders' performance in the enterprise^{59,63}. SC awareness plays an essential role in gaining business advantage to doing business over competitors and generate revenues and overall business performance^{44,49}. Therefore, the study proposes the following hypothesis:

H₂: **Cognitive social capital (CSC)** has a positive impact on FOP.

Social Interaction Ties and Firm Operational Performance

SIT shows the level of intimacy, regular contact, understanding, and sympathy between managers and other subjects in the network⁴⁴. SIT describes personal relationships created through previous relationships⁶⁴, closeness to others that facilitate the transfer of knowledge⁶⁵, increasing willingness to exchange information⁶⁶. SIT refers to mutual understanding among people in the company and others³⁶.

According to Granovetter (1992)⁶⁴, openness and interpersonal trust of people inside or outside the organization are essential to building new relationships. Strong relationships facilitate quick access to information, increasing businesses' competitive advantage⁴⁹. Understanding, cohesion, and sharing among colleagues within the company create a favorable and effective working environment⁶⁷. Managers play a rather important role⁶⁸. SIT promotes businesses' creativity and development^{44,46,69}. Based on this premise, the study proposes the following hypothesis:

H₃: **Social Interaction Ties** (SIT) has a positive impact on FOP.

Trusts and Firm Operational Performance

Relationships are built, strengthened, and developed based on mutual respect, trust and close relationships²². Mutual trust between parties facilitated the transfer of knowledge⁶⁵ and increased willingness to exchange information⁶⁶. Trust is considered the most critical aspect of SC as the basis for creating and maintaining relationships^{44,70}. Partners and customers who trust the business increase openness in information sharing and reduce transaction costs²². Trust is also an important determinant when companies choose partners for cooperation^{44,71}. Wu (2008)⁷² concluded that trust, network relationships help to improve enterprise competitiveness. Transaction consistency, commitment, and confidence are essential for repeated transactions between partners⁷³. A high degree of confidence helps keep customers and partners, reduces transaction costs^{38,44,74}, and increases competitiveness⁶². Accordingly, the hypothesis is built as follows:

H₄: Trust (TRU) has a positive impact on FOP.

Structural social capital and Firm operational performance

Interpersonal connection helps develop interpersonal trust, and it defines network strength⁵⁶. The SSC is a network of relationships and ties⁴⁸. The SSC is defined as a set of relationships within and outside the organizational network^{36,38}. Relationships within a business are relationships between colleagues, managers, and employees, and between departments^{42,75}. Relationships with partners, suppliers, customers, etc. are external network relationships^{22,41,42}. Network relational structure can be measured by quantity and quality⁷⁵, interpersonal interaction⁵⁴, the strength of the network^{35,36}. Among them, interpersonal interaction is an essential SSC aspect⁵⁴.

SSC is sometimes used to replace financial capital and bring better business performance⁷⁶⁻⁷⁸. The SSC promotes the value creation activities of the organization and has a positive impact on its performance. Phusavat et al. (2011)⁷⁹ concluded, SSC positively and significantly affects financial performance (ROI, ROA, ROS) and productivity of employees and leaders in enterprises⁶³. A firm has a strong relationship structure that enhances competitive advantage and revenue and profit⁴⁹. Therefore, the hypothesis is built as follows:

H₅: Structural social capital (SSC) has a positive impact on FOP.

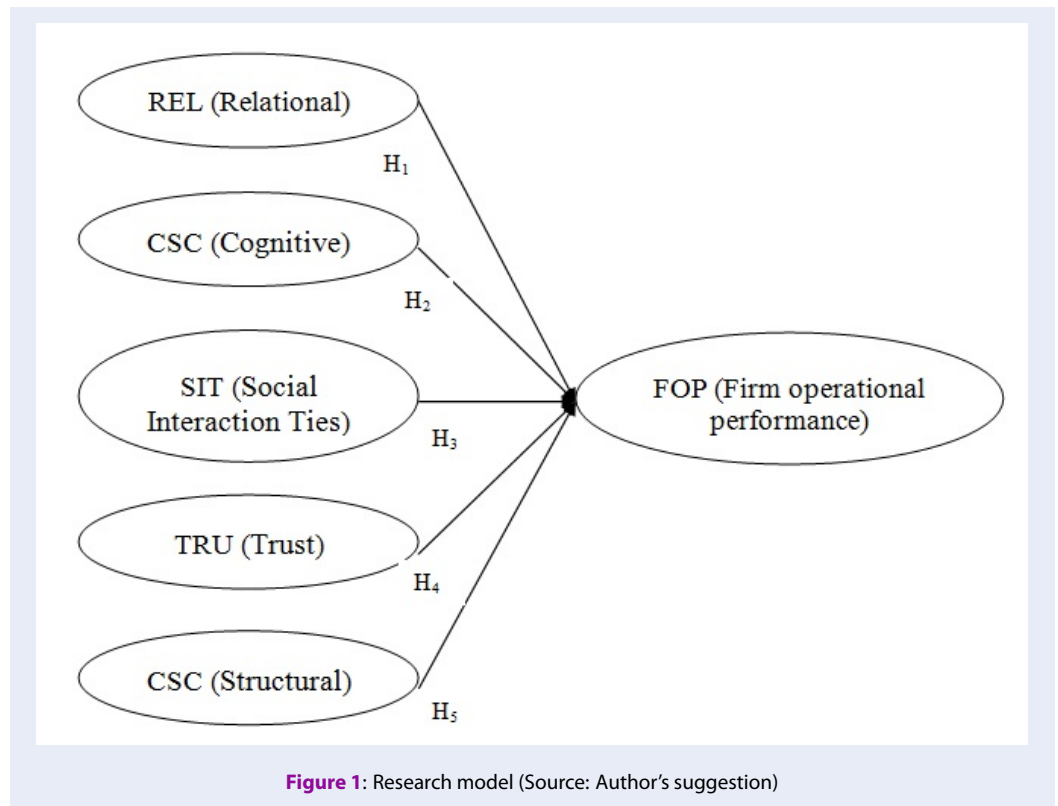


Figure 1: Research model (Source: Author's suggestion)

METHODOLOGY

The model's observed variables (Figure 1) are developed based on recent studies that are closely related to this study, specifically Relational Social Capital (REL) and Firm operational performance (FOP) adapted from Wang, Wang & Liang (2014)³¹; Cognitive, social capital (CSC), Social interaction ties (SIT), and Trust (TRU) adapted from Aslam et al. (2013)⁴⁴; Structure social capital adapted from Chow & Chan (2008)⁴². However, the scales were slightly adjusted according to the discussion of 15 experts (5 lecturers with research on SC, five business directors, and five leaders of Ho Chi Minh City Department of Planning and Investment).

The research investigates SC's direct effects on the performance of SMEs. The database was collected from a survey of 400 managers in SMEs in Ho Chi Minh City during a dialogue between SMEs and the state management agency (Ministry of Finance and the General Department of Taxation in December, 2020). Respondents were quizzed to choose the answers on a 5-level Likert scale (1 – Strongly disagree, 2 - Disagree, 3 - Neither agree nor disagree, 4 - Agree, 5 - Strongly Agree). The number of research samples used was 378, accounting for 94.5% (5.5% of the survey was removed due to the lack of information). CB-SEM

model analyzes data and test research hypotheses and pushes the reliability, convergence, and differentiation of the model's factors. According to Anderson & Gerbing (1998)⁸⁰, the process of analyzing Structural Equation Modeling (SEM) consists of 4 steps: (i) Cronbach's Alpha (CR); (ii) EFA; (iii) CFA; and (iv) SEM.

The observed variables with the item-total correlation being <0.3 will be disqualified and the scale selection criteria of Cronbach's Alpha is ≥ 0.6 (Nunnally & Burnstein, 1994)⁸¹. According to Hair et al (1998)⁸², $FD \geq 0.3$ is considered to be the minimal, $FD \geq 0.4$ is considered important, and $FD \geq 0.5$ is considered practical. In this study, $FD \geq 0.5$ was selected. KMO is a criterion to consider the appropriateness of EFA, if $0.5 \leq KMO \leq 1$, factor analysis is appropriate. The Bartlett test considers the hypothesis of the correlation between zero observed variables in the population. If this test is statistically significant ($Sig \leq 0.05$), the observed variables are correlated in the overall population⁸² and the total variance extracted is $\geq 50\%$ ⁸⁰.

The model received values GFI, TLI, CFI being ≥ 0.9 ^{83,84}; CMIN / df being ≤ 2 , in some cases CMIN / df can be ≤ 3 ⁸⁵; RMSEA being ≤ 0.08 , the case RMSEA being ≤ 0.05 is considered positive⁸⁶; then the

model is considered to be consistent with market data, or compatible with market data. Hair, et al. (1998)⁸² contend that TLI and CFI being ≥ 0.9 , CMIN / df being ≤ 2 , RMSEA being ≤ 0.08 show that the model is highly consistent with market data. In this study, the SEM model's indicators use the standards of Hair et al. (2014)⁸³, namely: GFI, TLI, CFI ≥ 0.9 , CMIN / df ≤ 3 , RMSEA ≤ 0.05 to ensure high guarantee reliability, most suitable for market data.

RESULTS

Measurement model

As a result of reliability analysis (Table 1), all observed variables meet the reliability standard. CSC has the lowest KMO of 0.685. However, the KMO coefficient is still guaranteed to be greater than the minimum reliability in the analysis of 0.6⁸⁷. Standardized Loading of all Items is satisfactory, which is of statistical significance and has SMC > 0.3. Alpha and CR coefficients of the factor groups are > 0.8, so it can be said that the scales used in the research ensure reliability^{80,81}.

Table 1: Constructs and their evaluation items

Construct	Code	Item	Standardized regression weights	SMC	Alpha	CR	KMO
Relational (Items adapted from Wang, Wang & Liang, 2014) ³¹	REL1	Our company explores and solves problems through intimate communication and effective association.	0.647***	0.358	0.886	0.872	0.832
	REL2	Our company cultivates appropriate interactions with its collaborators.	0.791***	0.574			
	REL3	Our company retains lasting relationships with customers.	0.889***	0.860			
	REL4	Our company has various excellent suppliers.	0.835***	0.671			
	REL5	Our company has reliable and firm relationships with the strategic partners.	0.695***	0.451			
Cognitive social capital (Items adapted from Aslam et al., 2013) ⁴⁴	CSC1	Members in my company share the vision of supporting others to solve their intensive problems.	0.676***	0.428	0.932	0.778	0.685
	CSC2	Members in my company share the similar goal of learning from each other.	0.839***	0.736			
	CSC3	Members in my company share the same value that aiding others is satisfying.	0.682***	0.463			
Social interaction ties (Items adapted from Aslam et al., 2013) ⁴⁴	SIT1	I maintain close social relationships with several members in my company.	0.693***	0.598	0.876	0.874	0.783
	SIT2	I spend much time interacting with some members in my company	0.870***	0.754			
	SIT3	I know a few members in my working network on a personal level.	0.870***	0.636			
	SIT4	I have frequent conversations with some members in my Amy working system	0.764***	0.553			

Continued on next page

Table 1 continued

Trust (Items adapted from Aslam et al., 2013) ⁴⁴	TRU1	Members in our association will always keep the promises they make to one another.	0.734***	0.554	0.896	0.873	0.693
	TRU2	Members in our group behave in a persistent manner.	0.958***	0.859			
	TRU3	Members in our team are reliable in dealing with one another	0.795***	0.679			
Structure social capital (Items adapted from Chow & Chan, 2008) ⁴²	SSC1	In general, I have a deserved relationship with my colleagues	0.743***	0.597	0.918	0.840	0.715
	SSC2	In general, I have a gratifying relationship with my partner	0.868***	0.706			
	SSC3	In general, I have a great relationship with customers	0.772***	0.605			
Firm operational Performance (Items adapted from Wang, Wang & Liang, 2014 ³¹ ; Kanini & Muathe, 2019 ³⁰)	FOP1	Customer satisfaction of our company is better as compared to major competitors.	0.812***	0.647	0.943	0.871	0.739
	FOP2	Quality development of our company is better as compared to major competitors.	0.861***	0.769			
	FOP3	Productivity of our company is better as compared to major competitors.	0.823***	0.661			

Source: Author's data analysis results

Reliability analysis: According to Hair et al. (2014), a scale achieves general reliability when the CR index is ≥ 0.7 . Checking the test results in Table 2 shows that all Scales have $CR > 0.7$. Therefore, the Scales achieve general reliability.

Convergence test: Hair et al. (2014) said that for a scale to achieve convergence, the CR must be $> AVE$ and AVE must be > 0.5 . Besides, Anderson & Gerbing (1988) argue that the scale achieves convergent value when the normalized weights of the scale are both higher than 0.5 and statistically significant ($P < 0.05$). Table 4 shows that all plates satisfy the conditions given by Hair et al. (2014)⁸³ and Anderson & Gerbing (1988)⁸⁰. Therefore, all scales reach convergence.

Test of distinction: According to Hair et al. (2014)⁸³, the scales achieve differentiation when the MSV index $< AVE$ and $ASV < AVE$. Table 2 shows that the Scales satisfy the above conditions. Therefore, the Scales achieve differentiation.

Bootstrap test (Table 3) results give a minimal absolute CR value compared to 2. The difference is minimal; at the same time, it is not statistically significant at a 95% confidence level^{80,83}. Thus, it can be concluded that the estimates in the model can be reliable. ML (Maximum Likelihood) and Bootstrap's estimated results in the linear structural model analysis show that all relationships in the research model are statistically significant ($P < 10\%$).

After analyzing the affirmative factors, the author performs the theoretical model testing by the method of linear structural model analysis (SEM) to test the causal relationship between the factors in the model. The results from the SEM analysis (Figure 2) show that the test indicators of the model all meet the test standard $CFI = 0.931$, $CMIN / df = 2.839$, $TLI = 0.915$, $RMSEA = 0.070$. Thus, the research model Suggested rescue is appropriate.

Structural model

Accordingly, the author has tested the causal relationships between the factors in the model, showing that REL & CSC positively impact FOP at the significance level of 10%. SIT has a positive effect on FOP at the 5% significance level. TRU and SSC both have an effect on two FOPs at the 1% significance level. SSC has the strongest influence on FOP (Beta = 0.364), followed by TRU (Beta = 0.213) and SIT (Beta = 0.213) ranked third (Table 4). Two groups of factors, REL and CSC, have not high influence (Beta = 0.098).

DISCUSSION, CONCLUSION AND IMPLICATIONS

Discussion

In a rapidly developing country like Vietnam, the theoretical review shows that surprisingly few researchers pay attention to consider SC and its influence on FOP systematically. In order to occupy this research gap, the study has proposed a model that describes how five different aspects of SC of managers affect FOP in SMEs in Ho Chi Minh City. The empirical findings predominantly support the proposed model by proving that all five SC elements have a positive effect on FOP. The study found that all five aspects of SC, REL, CSC, SIT, TRU & SSC directly impact FOP. Compared to the study of Chow & Chan (2008)⁴², Aslam et al. (2013)⁴⁴, Mahajan & Benson (2013)⁸⁸, and Wang, Wang & Liang (2014)³¹, the results of this study add two new aspects: SIT and TRU. Simultaneously, the results of data analysis have proven that SC has a direct impact on FOP rather than an indirect effect like the results of a previous study.

According to the research results of Chow & Chan (2008)⁴², Aslam et al. (2013)⁴⁴, Mahajan & Benson (2013)⁸⁸ and Wang, Wang & Liang (2014)³¹, Nguyen & Ha (2020)², Ha & Nguyen (2020)⁹, REL, CSC, SSC affect FOP through intermediate variables. This study has demonstrated that REL, CSC, SSC have a positive and direct impact on FOP. SSC & TRU are the two groups of factors that have the most decisive influence on FOP. This result is also consistent with the theory of Putnam (2000)⁴⁰, Adler & Kwon (2002)²². Similar to the research results of Chow & Chan (2008)⁴², Aslam et al. (2013)⁴⁴, and Mahajan & Benson (2013)⁸⁸, the leader's SC has a significant influence on the FOP of SMEs.

SC relates to relation, cognitive, interaction, trust, and structure aspects, based on studies by Chow & Chan (2008)⁴², Aslam et al. (2013)⁴⁴, Wang, Wang & Liang (2014)³¹ to verify the direct relationship. of SC to FOP. Our work fills the research gap by constructing a model to illustrate direct interactions between SC and FOP in SMEs. Therefore, this research model can be used as a modern theoretical model in other studies to evaluate SC & FOP. Our experimental results have confirmed all the hypotheses. This result means that SC contributes directly to the performance of SMEs.

Conclusion and Implications

The experimental findings largely support the suggested model by proving that all five SC elements have a positive effect on FOP (REL, CSC, SIT, TRU & SSC). Simultaneously, the results of data analysis prove that

Table 2: Results of discriminant validity

	CR	AVE	MSV	MaxR(H)	REL	CSC	SIT	TRU	SSC	FOP
REL	0.872	0.583	0.099	0.916	0.763					
CSC	0.778	0.543	0.096	0.815	0.279***	0.737				
SIT	0.874	0.635	0.304	0.883	0.314***	0.245***	0.797			
TRU	0.873	0.697	0.304	0.904	0.313***	0.294***	0.551***	0.835		
SSC	0.840	0.636	0.325	0.844	0.141*	0.229***	0.521***	0.423***	0.797	
FOP	0.871	0.692	0.325	0.877	0.292***	0.309***	0.515***	0.511***	0.570***	0.832

Note: Significance of Correlations: * p < 0.100 ** p < 0.050 *** p < 0.00
 Source: Author's data analysis results

Table 3: Bootstrap test results

Parameter	Estimate	SE	Mean	Bias	SE-Bias	CR
FOP ← REL	0,098	0,005	0,103	0,005	0,004	1,250
FOP ← CSC	0,098	-0,001	0,097	-0,001	0,004	-0,250
FOP ← SIT	0,153	0,008	0,161	0,008	0,006	1,333
FOP ← TRU	0,213	-0,004	0,209	-0,004	0,006	-0,667
FOP ← SSC	0,364	-0,006	0,358	-0,006	0,006	-1,000

Source: Author's data analysis results

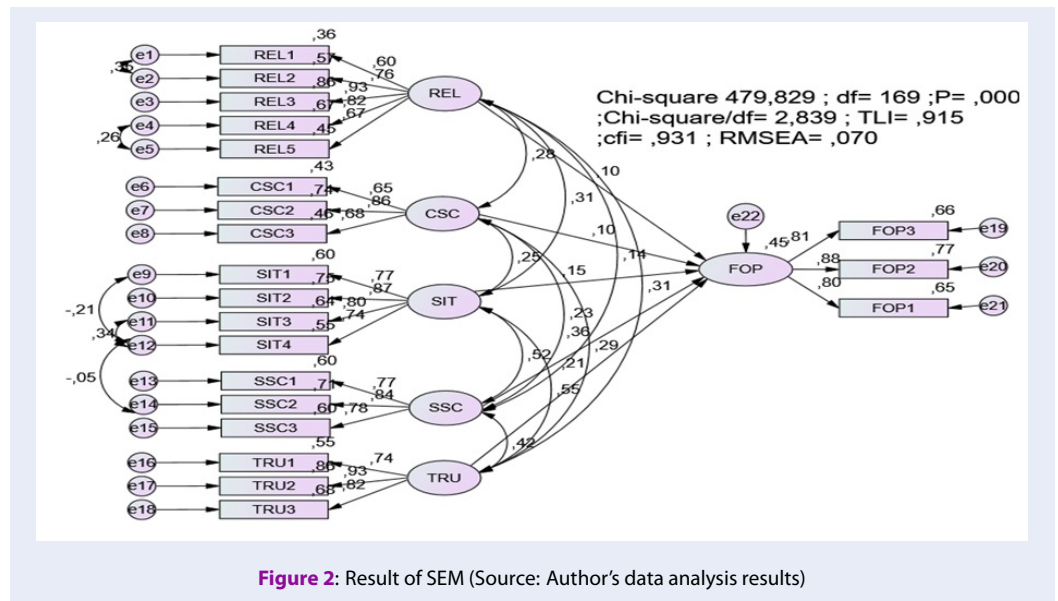


Figure 2: Result of SEM (Source: Author's data analysis results)

Table 4: Hypotheses validated results

Hypothesis	Expectation	Standardized Regression Weights	Value P	Results
H1: REL → FOP	Positive	0.098*	0,058	Acceptable
H2: CSC → FOP	Positive	0.098*	0,067	Acceptable
H3: SIT → FOP	Positive	0.153**	0,022	Acceptable
H4: TRU → FOP	Positive	0.213***	0.000	Acceptable
H5: SSC → FOP	Positive	0.364***	0.000	Acceptable

Note: * is significant at P<10%, ** is significant at P<5%, *** is significant at P<1%.
Source: Author's data analysis results

SC has a direct impact on FOP rather than an indirect effect like the results of a previous study.

According to research results, to increase enterprises' efficiency, managers should raise financial capital, innovate the industry, and invest and develop their own SC. To increase SC, managers need to improve communication, engagement, friendliness, regular communication, and trust with individuals inside and outside the business. Trustful and friendly relationships with stakeholders are an invisible resource that helps companies improve their competitiveness and increase operational efficiency. Cohesion which is about taking the time to exchange, sharing the corporate vision, mission, and shared goals with colleagues will create cohesion, sympathy, and mutual support to go together to the final destination, allowing enterprises to operate effectively and facilitate sustainable growth.

Limitations and further studies

This study's results have supplemented the theory and practice for SC studies that directly affect the business performance of the business. However, this study also entails shortcomings which require thorough considerations so that the following tasks can be completed. Although our outcomes are consistent with our preceding results, the use of the survey design does not allow us to characterize levels of management to research recent issues. Second, the convenient sampling method is limited to representing the population. To confirm this study's results, future research may use random sampling and focus on SC studies with a specific industry's performance.

LIST OF ABBREVIATIONS

AVE: Average Variance Extracted
CB-SEM: Covariance Base - Structural Equation Modeling
CFA: Confirmatory Factor Analysis

CFI: Comparative Fix Index
CMIN/df: Chi-square/df
CR: Composite reliability
EFA: Explanatory Factor Analysis
FD: Factor Loading
GFI: Goodness of Fix Index
KMO: Kaiser Meyer Olkin
MSV: Maximum Shared Variance
SC: Social capital
SEM: Structural Equation Modeling
SMC: Squared Multiple Correlations
TLI: Tucker Lewis Index

CONFLICT OF INTERESTS

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

AUTHOR'S CONTRIBUTION

The entire content of the article is done by the author.

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