THE RELATIONSHIP BETWEEN SOCIAL CAPITAL, DYNAMIC CAPABILITIES AND INNOVATION PERFORANCE: A CASE STUDY OF MICRO-, SMALL AND MEDIUM-SIZED FOREIGN TRADE ENTERPRISES IN HUNAN, CHINA

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ABSTRACT
This study aims to investigate the relationship between social capital (SC), dynamic capabilities (DC) and innovation performance (IP) of foreign trade MSMEs, and also explores the role of social capital and dynamic capabilities in improving the innovation performance of foreign trade MSMEs. The sample is 418 foreign trade MSMEs in Hunan, China. Purposive and convenience sampling methods were used to collect data in the form of questionnaires. The data were analyzed with the help of Smart-Partial Least Squares (PLS) version 3.3.2, combined with confirmatory factor analysis and PLS structural equation modeling. The results show that SC directly affects the IP of foreign trade enterprises. The study also shows that dynamic capabilities (DC) have a partial mediating effect between SC and IP of foreign trade enterprises. Compared with the effect of SC on IP, the effect of DC on IP is also very significant. This study expands the research field of social capital, improves people's understanding of innovation performance from the perspective of foreign trade enterprises, further clarifies the mediating role of enterprise dynamic capabilities between social capital and innovation performance, and helps to enrich the theory and framework of social capital. The results of this study may help scholars and managers make full use of social capital to improve the innovation performance of small and medium-sized foreign trade enterprises.
Keywords: Social Capital, Innovation Performance, Dynamic Capabilities

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INTRODUCTION

Social capital refers to the resources that individuals or organizations build through social relationships, which can bring various benefits to individuals or organizations. Nahapiet and Ghoshal (1998) emphasized that strong social networks built through social capital can enhance knowledge sharing, communication and innovation, thereby bringing obvious competitive advantages. In addition, Burt (2004) emphasized that social capital is characterized by close connections and bridges that enable SMEs to access different sources of information, enrich their knowledge base and support innovation initiatives. Li et al. (2022) emphasized that social capital helps to obtain valuable information, market insights and international business opportunities, thereby improving SMEs' innovation capabilities and ability to adapt to dynamic market conditions. Similarly, Chen et al. (2021) found that social capital represented by strong inter-firm relationships and industry networks has a positive impact on the innovation activities and performance of foreign trade MSMEs enterprises.

Dynamic capabilities refer to the ability of enterprises to adapt to changes in the external environment, adjust resource allocation, and respond quickly to market opportunities. As pointed out by Teece, Pisano, and Shuen (1997), dynamic capabilities enable enterprises to continuously adjust resource allocation, reorganize, and reintegrate internal and external capabilities to adapt to rapid changes in the market. The challenges for foreign trade MSMEs enterprises to develop dynamic capabilities first come from the rapid changes in technology, market, and strategy, which makes the cultivation of dynamic capabilities essential. Resource constraints, relatively simple organizational structures, and the acquisition of technology and market knowledge may affect the construction and application of dynamic capabilities of enterprises (Zhao et al., 2021). Due to resource constraints and insufficient management capabilities, many foreign trade MSMEs enterprises find it difficult to effectively acquire, integrate, and apply new knowledge and technologies (Peng et al., 2022). Secondly, the construction of dynamic capabilities requires the coordination of multiple factors such as the support of leaders, the shaping of organizational culture, and the allocation of resources. The foreign trade MSMEs enterprises may face certain obstacles (Wang et al., 2022). When cooperating with external stakeholders such as suppliers, partners, and customers, micro-, small and medium-sized foreign trade enterprises may face problems such as information asymmetry and cooperation difficulties, which affect the formation and development of dynamic capabilities (Li et al., 2020), because they may lack sufficient resources to train high-quality management teams and cultivate a positive innovation culture (Zhao et al., 2021).

While recognizing the potential benefits of social capital, the challenges of developing, utilizing and integrating dynamic capabilities are major obstacles that SMEs need to overcome in order to fully realize their innovation potential. Given limited resources, how to build and apply dynamic capabilities to adapt to the challenges of rapid market changes and technological advances is an issue that requires in-depth research and practice. The reason why China's foreign trade industry was chosen is that China's total import and export volume in 2023 was US$5936.8 billion, a year-on-year decrease of 5.0%, and the trade surplus was US$823.22 billion. Chinese foreign trade enterprises face significant challenges in achieving and maintaining competitive innovation performance.

The connections and cooperation formed by social capital can significantly improve the ability of foreign trade enterprises to enter new markets, master trade regulations, and seize international business opportunities. Therefore, this study aims to examine the relationship between social capital (SC), dynamic capabilities (DC), and innovation performance (IP) of foreign trade MSMEs and explore the role of social capital and dynamic capabilities in improving the innovation performance of foreign trade MSMEs.

LITERATURE REVIEWS

Relationship between social capital and innovation performance

The relationship between social capital and innovation performance is an important topic in management research. Here are some relevant literatures exploring the relationship between social capital and innovation performance:

Huggins and Thompson (2014) explored the impact of social capital on regional innovation performance. The authors highlight the role of social capital in promoting inter-enterprise cooperation, knowledge sharing and innovation. Barghini and Magnani (2015) Using spatial measurement analysis, we examined how social capital affects regional innovation performance. Found a significant positive relationship between social capital and innovation. (Uzzi, 1997) Research explores the structure of social networks between companies and how these networks affect innovation. He proposed the "paradox of embeddedness," emphasizing that moderate embeddedness of social networks contributes to innovation. Naha Piet and Ghoshal (1998) discusses the relationship between social capital, intellectual capital, and organizational performance. Social capital is seen as contributing to knowledge sharing and innovation that improving organization performance. Zahra and George (2002) explore the concept of absorption capacity, namely how an organization absorbs external knowledge and applies it to innovation. Social capital can influence absorption capacity and thus affect innovation performance.

This literature provides some important points of research on how social capital relates to innovation performance. Social capital can have a positive impact on innovation performance by promoting cooperation, knowledge sharing, resource acquisition, and the establishment of an innovation culture.

Based on the above analysis, the study makes the following assumptions:

H1: Social capital has a significant positive impact on innovation performance.

Relationship between social capital and enterprise dynamic capabilities

The following is some relevant literature exploring the link between social capital and corporate dynamic capabilities:

Ahuja (2000) Research has focused on the impact of structural holes (structural holes) in social networks on enterprise innovation and dynamic capabilities. The authors highlight the role of social capital in promoting enterprise innovation. Tsai (2001) Research explores knowledge transfer in social networks within enterprises and how it affects enterprise innovation and performance. The authors examine the influence of social capital, network location and absorption capacity on enterprise dynamic capacity.

Nahapiet and Ghoshal (1998) emphasized the impact of social capital on an organization's knowledge management and ability to innovate. It explores how social networks and social relationships can promote knowledge sharing and innovation to improve the dynamic capabilities of enterprises.

Wang and Rafiq (2014) compare the relationship between the culture, social capital and dynamic capabilities of British and Chinese high-tech enterprises. The authors focus on how social networks and culture influence the innovative and dynamic capabilities of businesses.

Hitt and Lee (2000) explored the relationship between technology learning, knowledge management, and enterprise performance. It highlights the role of social capital in knowledge management and dynamic competence.

This literature provides some useful perspectives on how research links social capital and the dynamic capabilities of the enterprise. Social capital can have a positive impact on the dynamic capabilities of enterprises by promoting knowledge sharing, cooperation, and innovation, as well as strengthening the external network of relationships.

Based on the above analysis, the study makes the following assumptions:

H2: Social capital has a significant positive impact on the dynamic capabilities of enterprises.

Relationship between Dynamic capabilities and innovation performance

Teece and Pisano (1994) did not talk about influencing factors when they proposed the concept of "dynamic capability". Subsequently, to study the causes affecting dynamic capabilities, scholars Eisenhardt and Martin (2000) proposed that internal cognition and external environmental changes of enterprises are the two leading factors affecting dynamic capabilities, which made pioneering contributions to the theory of dynamic capabilities. This paper summarizes the influencing factors of dynamic capacity and its outcome elements, as shown in Table 2.10.

Author (Year)	Enter a variable	Mediation variables	Result variables
Blyler and Coff (2003) empirical research	Social capital	No	Dynamic Capability
Zott (2003) empirical research	Dynamic Capability	No	The performance difference between the enterprises within the industry
Zahra et al. (2006) theoretical research	Market mechanisms	Dynamic Capability	Performance
Marsh and Stock (2006) empirical research	Dynamic Capability	No	New product development performance
Arthurs and Busenitz (2006) empirical research	Venture capitalist Dynamic Capability	No	Venture capital Performance
Wu (2006) empirical research	Knowledge resources	Dynamic Capability	Enterprise Performance
Zheng et al. (2011) empirical research	Structural embedding Relationship embedding	Dynamic Capability	Innovation Performance
Chien and Tsai (2012) empirical research	Knowledge resources Learning mechanisms	Dynamic Capability	Performance
Hautz et al. (2014) empirical research	Dynamic Capability	No	Continuous competitive advantage
Lin et al. (2016) empirical research	Dynamic Capability	No	Management Innovation
Lee (2018) empirical research	Dynamic Capability	Market ability technical competence	Enterprise Performance
Zhou et al. (2019) empirical research	Dynamic Capability	Technology Innovation Market Innovation	Finance Performance
Bitencourt et al. (2020) empirical research	Knowledge management and learning, alliance, and entrepreneurship orientation	Dynamic Capability	Performance
Cao Hong Jun and Zhao Jian Bo (2008) empirical research	Dynamic Capability	Strategic process	Enterprise Performance
Jiao Hao et al. (2008) empirical research	Dynamic Capability	No	Enterprise Performance
Zeng Ping and Blue Ocean Forest (2009) empirical research	Knowledge Innovation	Dynamic Capability	Enterprise Performance
Du Jianhua et al. (2009) empirical research	Social Capital	Dynamic Capability	Entrepreneurship performance
Lu departure et al. (2018) empirical research	Organize learning knowledge management	Dynamic Capability	Organizational Innovation
Xiong Mingning and Wang Tao (2020) empirical research	cultural diversity	Dynamic Capability	Business Performance

Source: According to the existing studies

Based on rationalizing the relevant literature, it can be found that the antecedent variables of dynamic capability mainly focus on organizational learning mechanism, manager cognition, resource acquisition, etc., such as the impact of organizational learning depth, senior management team, enterprise resource stock, social capital, network relationship resources, etc. on dynamic ability. The outcome variables of dynamic capability are mainly enterprise innovation and performance, competitive advantage, etc., such as the research on the influence mechanism of new product development. Based on the above analysis, the purpose of the study is to analyze how firm dynamic capabilities as mediating variables affect firm innovation performance in volatile environments, and based on the above analysis, the following assumptions are made:

H3: The dynamic capabilities of enterprises have a positive and direct impact on the innovation performance of foreign trade small and medium-sized enterprises.

Dynamic capabilities mediate the relationship between social capital and innovation performance

Kong and Kim (2018) Study explore how social capital can affect innovation performance by influencing dynamic capacity. The results show that social capital contributes to the improvement of organizational dynamic ability, which affects innovation performance. Burt (2004) emphasized the role of social capital in organizational innovation. The high level of social capital may influence innovation performance by promoting the dynamic capacity within the organization. Naha Piet and Ghoshal (998) explores the relationship between social capital, network and knowledge transmission. Social capital can enhance the dynamic capacity of organizations by establishing networks conducive to knowledge transmission, thus affecting innovation performance. Lin (2007) focuses on the relationship between social capital and knowledge integration and believes that social capital enhances the dynamic capacity of the organization by promoting the integration of knowledge, and ultimately affects the innovation performance.

Dynamic capacity is considered as a potential mediator of the relationship between social capital and innovation performance, because dynamic capacity involves organizational adaptability, resource integration, and learning ability, which can influence innovation performance. Some theoretical viewpoints that support dynamic ability as an intermediary factor in the relationship between social capital and innovation performance:

Resource integration: Dynamic capabilities involve how organizations integrate both internal and external resources to respond to a changing environment. Social capital can provide external resources and information to the organization, and dynamic capabilities enable the organization to effectively integrate these resources and promote innovative activities.

Learning ability: Dynamic ability is closely related to the learning ability of the organization. Social capital can promote knowledge sharing and learning, while dynamic ability enables organizations to adapt to new technologies and market trends in the process of continuous learning, thus affecting innovation performance.

Adaptability: Dynamic capabilities enable organizations to adapt to a rapidly changing environment. Social capital provides more adaptive resources for organizations by establishing relationship networks. Dynamic capabilities help organizations to flexibly adapt strategies, processes, and resource allocation to better respond to change.

Innovation culture: The development of dynamic ability may be related to the cultivation of innovation culture. Social capital can promote open communication and the formation of an innovation culture within the organization, while dynamic capacity helps to translate this culture into practical innovation performance.

Based on the above analysis, the present study makes the following assumptions:

H4: The dynamic capabilities of enterprises mediate the relationship between the social capital and the innovation performance of foreign trade micro, small and medium-sized enterprises.

From the literature review, the conceptual framework can be drawn as shown in Figure 1.

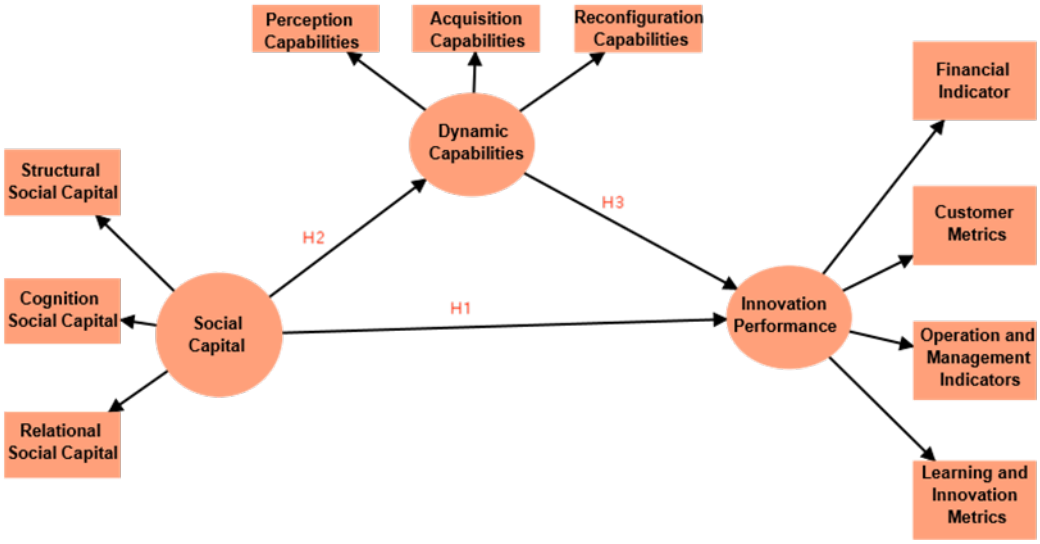

Figure 1 Conceptual Framework

RESEARCH METHODOLOGY

This study adopts a mixed research method. The sample size comes from 7632 foreign trade small and medium-sized enterprises in Hunan Province. The preference of these foreign trade enterprises is based on the convenience of their geographical location in Hunan Province. The minimum sample size calculated according to the Yamane sample size formula proposed by Yamane (1973) is 380 samples. As Comrey and Lee (1992, p. 217) said, the adequacy of the sample size can be roughly assessed according to the following scale: 50-very poor; 100-poor; 300-good; 500-very good. Considering that the collection of sample data will have invalid data, in order to ensure the adequacy and validity of the sample, the researchers expanded the sample size to 420 Hunan foreign trade small and medium-sized enterprises. The survey subjects are executives and employees of foreign trade small and medium-sized enterprises. The questionnaires are distributed anonymously, mainly online electronic questionnaires, supplemented by paper questionnaires. A total of 420 questionnaires were distributed in this study, of which 418 valid questionnaires were screened after data screening, meeting the minimum sample size requirement. Finally, 418 correct answers were used for PLS-SEM analysis. The questionnaire is divided into four parts. The first part of the questionnaire included demographic data such as gender, age, education, marital status, and salary. Then, the second to fourth parts adopted Likert scale with 1-5 rating scale ranging from 1 for “strongly disagree” to 5 for “strongly agree” to study social capital, dynamic capabilities, and innovative performance with 3, 4, and 4 observed variables, respectively.

Before using the instrument for data collection, the Cronbach's alpha coefficient and the corrected item-total correlation coefficient (CITC) values of the questionnaire in this study were greater than 0.8 and 0.5, which clearly showed good reliability (DeVellis, 2016). In addition, structural equation modeling and confirmatory factor analysis were conducted, taking into account the good fit index, as well as the convergent and discriminant validity implied by the factor loading (FL), composite reliability (CR), average variance extracted (AVE), correlation matrix, and the square root of AVE. The model studied is expected to produce satisfactory good fit indices (Tabachnick et al., 2007). However, when the model is judged to be inappropriate, it can be adjusted based on the modification index (Knekta et al., 2019). In order to achieve the focused objectives, the results are reported in descriptive and tabular forms. All details are described in the next section.

RESEARCH RESULTS

An experimental study method was chosen for this study. We performed the analysis using the SMRT PLS 4.0 statistical software. Using SMART PLS, the measurement results of the measured and structural models were determined. The structural model has been tested using 5,000 bootstraps. This study used the Harman's single factor test to investigate the common method bias. In this method, a total of 14 factors with eigenvalues greater than 1 were selected from the questionnaire, the total explained variance of 69.957%. Loading all items into a single factor found that the explained variance was only 35.524%, below the critical criterion of 40% (Yi-Ming & Jin, 2022). Therefore, there was no serious common methodological bias in this study.

Measurement model assessment

In this study, composite reliability, convergent validity, and discriminant validity were applied to study the SEM model. This study mainly measures the Alpha and composite reliability of the reliability index, as well as the convergence and discriminative validity of the construct validity indexes. In measurement model analysis, internal consistency is usually assessed by calculating Cronbach alpha. The higher the internal consistency is, the more reliable the measurement tool. Convergent validity was also tested by the AVE values. Composite reliability (CR) measures the internal consistency between the multiple indicators included in the latent variable, meaning that these indicators collectively represent the power of the latent variable.

Table 1 Quality criterion for model assessment

Constructs	Item	Factor loading	Cronbach's alpha	CR	AVE
Acquisition Capabilities	AC1	0.877	0.899	0.923	0.665
	AC2	0.793			
	AC3	0.803			
	AC4	0.801			
	AC5	0.832			
	AC6	0.785			
Customer Metrics	CM1	0.883	0.897	0.924	0.709
	CM2	0.813			
	CM3	0.828			
	CM4	0.851			
	CM5	0.835			
Cognition Social Capital	CSC1	0.862	0.910	0.933	0.735
	CSC2	0.872			
	CSC3	0.817			
	CSC4	0.855			
	CSC5	0.880			
Financial Indicator	FI1	0.833	0.916	0.934	0.703
	FI2	0.820			
	FI3	0.835			
	FI4	0.843			
	FI5	0.873			
	FI6	0.828			
Learning and Innovation Metrics	LIM1	0.799	0.859	0.898	0.639
	LIM2	0.790			
	LIM3	0.803			
	LIM4	0.796			
	LIM5	0.809			
Operation and Management Indicators	OMI1	0.884	0.890	0.919	0.694
	OMI2	0.834			
	OMI3	0.800			
	OMI4	0.842			
	OMI5	0.803			

Constructs	Item	Factor loading	Cronbach's alpha	CR	AVE
Perception Capabilities	PC1	0.861	0.921	0.936	0.678
	PC2	0.826			
	PC3	0.809			
	PC4	0.826			
	PC5	0.793			
	PC6	0.830			
	PC7	0.816			
Reconfiguration Capability	RC1	0.867	0.907	0.927	0.645
	RC2	0.828			
	RC3	0.742			
	RC4	0.725			
	RC5	0.761			
	RC6	0.789			
	RC7	0.895			
Relational Soclal Capital	RSC1	0.766	0.865	0.903	0.651
	RSC2	0.778			
	RSC3	0.750			
	RSC4	0.835			
	RSC5	0.898			
Siructural Soclal Capital	SSC1	0.769	0.894	0.922	0.705
	SSC2	0.883			
	SSC3	0.816			
	SSC4	0.886			
	SSC5	0.838			

As can be seen from the above table above, the Cronbach Alpha values for each variable dimension ranged from 0.859 to 0.921, greater than 0.7 (DeVellis, 2016) (DeVellis & Thorpe, 2021), indicating good reliability for each dimension.

The factual loading for each item in each dimension is between 0.725 and 0.898, greater than 0.7 (Hair et al., 2019).The composite reliability (CR) value of structural capital, cognitive capital and relationship capital is between 0.898 and 0.942, greater than 0.7 (Hair et al., 2019).The AVE values ranged between 0.639 and 0.735, greater than 0.5, indicating good convergent validity for each dimension (Hair et al., 2019).Therefore, each structure in this study has a relatively good reliability.

This study also has gone through the discriminant validity assessment. The discriminant validity was investigated by comparing the inter-item correlation. The under the root of AVEs of the construct on the diagonal was higher than the inter-item correlation values (Fornell & Larcker, 1981). The assessment of discriminant validity is shown in Table 2.

Table 2 Fornell-Larcker approach for discriminant validity

	AC	CSC	CM	FI	LIM	OMI	PC	RC	RSC	SSC
AC	**0.816**									
CSC	0.477	**0.857**								
CM	0.543	0.454	**0.842**							
FI	0.479	0.442	0.518	**0.839**						
LIM	0.499	0.405	0.533	0.501	**0.799**					
OMI	0.507	0.424	0.543	0.535	0.551	**0.833**				
PC	0.604	0.491	0.525	0.432	0.497	0.521	**0.823**			
RC	0.614	0.400	0.487	0.445	0.456	0.532	0.530	**0.803**		
RSC	0.479	0.591	0.445	0.412	0.374	0.437	0.493	0.421	**0.807**	
SSC	0.412	0.626	0.396	0.408	0.402	0.444	0.408	0.393	0.574	**0.839**

Note: The bold value is AVE square root value, the unbolt is correlation coefficient SSC=Structural social capital, CSC=Cognitive social capital, RSC=Relationship social capital, PC=Perception Capabilities, AC= Acquisition Capabilities, RC= Reconfigure Capabilities, FI=Financial Indicator, CM= Customer Metric, OMI= Operation and Management Indicators, LIM= Learning and Innovation Metrics

As can be obtained from Table4.19, the square root value of AVE for each variable is greater than the correlation coefficient between the variables, indicating discriminative validity (Fornell & Larcker, 1981).

In addition to this, this study has gone through a new approach to analyzing the discriminant validity. The Heterotrait-Monotrait Ratio of Correlations (HTMT) of correlation must be less than one; however. The maximum HTMT ratio should be 0.85 (Henseler et al., 2015). The HTMT ratio has been shown in Table 3.

Table 3 HTMT approach for discriminant validity

	AC	**CSC**	**CM**	**FI**	**LIM**	**OMI**	**PC**	**RC**	**RSC**	**SSC**
AC										
CSC	0.528									
CM	0.603	0.502								
FI	0.527	0.483	0.571							
LIM	0.567	0.456	0.605	0.563						
OMI	0.566	0.471	0.608	0.591	0.629					
PC	0.664	0.537	0.577	0.470	0.558	0.575				
RC	0.681	0.440	0.538	0.488	0.515	0.592	0.580			
RSC	0.543	0.665	0.504	0.462	0.433	0.498	0.552	0.473		
SSC	0.458	0.690	0.441	0.448	0.457	0.495	0.448	0.435	0.650	

The HTMT ratio has values ranging between 0 and 1, with lower values indicating better discriminatory validity. In general, the model can be considered to have good discrimination validity if the HTMT ratio is less than 0.85 (Henseler et al., 2015).According to the data in Table 4, the HTMT ratio values of each variable dimension are between 0.690 and 0.433, which are less than 0.85. Therefore, the differential validity of the latent variables in the measured model in this study is good.

Tables 2 and 3are sufficient enough to fulfill the criterion for discriminant validity. Thus, the discriminant validity is confirmed.

Structural model assessment

In this study, the collected data were tested by Partial Least Squares method (PLS) using SmartPLS4.0 statistical analysis software. Partial Least Squares method (PLS) belongs to a multivariate statistical data analysis method. It finds a set of data best function matching by minimizing the square of the error, and can regression model multiple dependent variables to multiple independent variables. The relationship between these structures was investigated by structural model evaluation (Hair et al., 2019). This process is based on the developed hypothesis and mediation analysis.

Testing of the structural models included pathway coefficient estimates and values for R2 and Q2. The path coefficients reflect the direction and the extent of influence between the underlying variables. The R2 value reflects the extent to which endogenous latent variables can be explained by exogenous latent variables in the structural model, and also reflects the explanatory power of the model. In the theoretical model constructed in this chapter, in order to verify the model and hypothesis proposed in this study, this study used visual Smart PLS 4.0 to conduct PLS analysis and calculated the significance of the path coefficient in the constructed model by Bootstrapping sampling method.

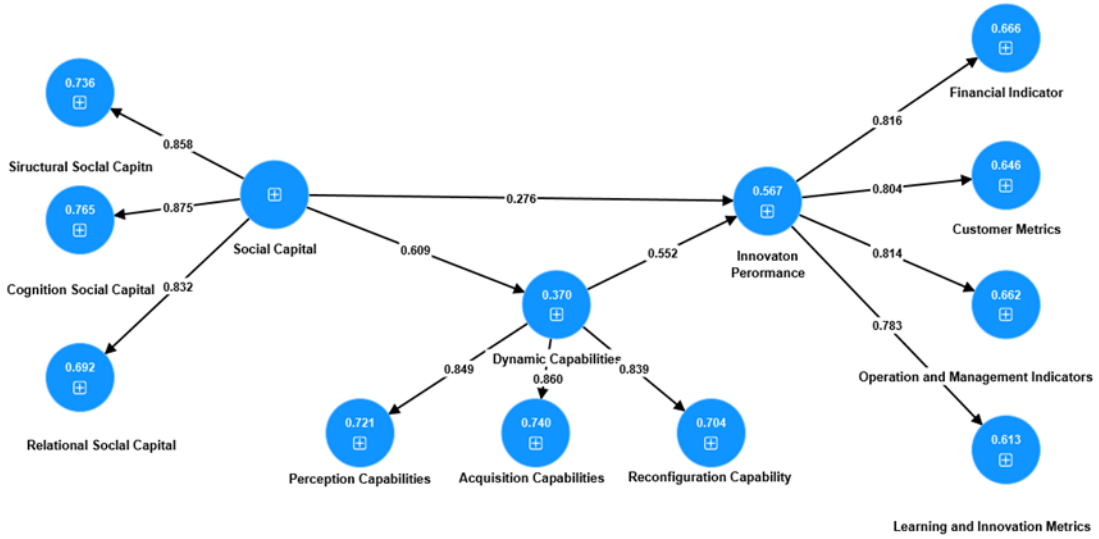

Figure 2 Path Coefficient of the Structural Model

Table 4 R^2 和 Q^2

Variable	R-square	Q-square
Acquisition Capabilities	0.740	0.486
Cognition Social Capital	0.765	0.558
Customer Metrics	0.646	0.453
Dynamic Capabilities	0.370	0.174
Financial Indicator	0.666	0.464
Innovation Performance	0.567	0.249
Learning and Innovation Metrics	0.613	0.386
Operation and Management Indicators	0.662	0.456
Perception Capabilities	0.721	0.484
Reconfiguration Capability	0.704	0.448
Relational Social Capital	0.692	0.446
Structural Social Capital	0.736	0.511

Hair et al. (2019) proposed that the R^2 value is between 0-1, the higher the value, the higher the explanatory power. Generally speaking, R^2 close to 0.19, can be regarded as slightly weaker explanatory power, R^2 close to 0.33, the model has a moderate degree of explanatory power, and when R^2 is close to 0.67, the model has strong explanatory power. As can be seen in Table 5, the R^2 is between 0.37 and 0.765, greater than 0.33 indicates that the variants that can be explained have moderate or above explanatory power.

The Q^2 statistic is a measure of the predictive correlation for a set of variables. Hair et al. (2019) mentioned that in the structural model, the Q^2 value of the endogenous latent variables is greater than 0, which means that the structural model has a predictive correlation with the endogenous latent variables. The larger the Q^2, the higher the predictive accuracy of the model is. That is, the structural model can accurately predict the value of each latent variable. Q^2 for each variable in this study at 0.174~ 0.558 greater than 0， indicates good predictive power.

VIF (Variance Inflation Factor) is a statistical measure used to detect multicollinearity. In the regression analysis, multicollinearity is the case where there is a high correlation between the independent variables, which may lead to the instability of the estimated parameters and decreased explanatory power. The VIF was used to quantify the degree of collinearity between the independent variables.

VIF was calculated by performing a regression analysis on each independent variable, taking each independent variable as the dependent variable and the remaining independent variable, and then calculating the ratio of the variance of the resulting regression coefficient to the corresponding independent variable coefficient in the original model. The VIF statistics of the three independent variables in this study are as follows:

Table 5 Variance Inflation Factor (VIF)

	Dynamic Capabilities	**Innovation Performance**
	VIF	**VIF**
Dynamic Capabilities		1.588
Social Capital	1.000	1.588

Hair et al. (2019) pointed out that the variance inflation factor (VIF) value can be used to judge. When the VIF value is less than 5, it is judged that there is no serious collinearity problem among the variables. As can be obtained from the table above shows, the VIF value of each variable is less than 5, indicating that there is no multicollinearity among each variable.

Table 6 The Result of Structural Model Path Hypothesis Testing

	Path	**path coefficient (β)**	**S.D.**	**t**	**p-value**	**Hypothesis**
H2	Social Capital -> Dynamic Capabilities	0.609	0.041	14.779	0.000	accepted
H1	Social Capital -> Innovation Performance	0.276	0.058	4.742	0.000	accepted
H3	Dynamic Capabilities -> innovation Performance	0.552	0.053	10.489	0.000	accepted

It can be seen from the above table that Social Capital -> Dynamic Capabilities ($\beta = 0.609$, $p < 0.05$) has a significant positive impact, and the hypothesis is accepted; Social Capital -> Innovation Performance ($\beta = 0.276$, $p < 0.05$) has a significant positive impact, the hypothesis is accepted; Dynamic Capabilities -> Innovation Performance ($\beta = 0.552$, $p < 0.05$) has a significant positive impact, the hypothesis is accepted.

Table 7 Mediation Analysis

	Path	**Coefficient**	**S.D.**	**t**	**p value**	**Bootstrap=5000**		**Hypothesis**
						Lower	**Upper**	
Total Effect								
	Social Capital -> Innovation Performance	0.612	0.052	11.706	0.000	0.501	0.707	
Indirect Effect								
H4	Social Capital -> Dynamic Capabilities -> Innovation Performance	0.336	0.040	8.487	0.000	0.260	0.412	accepted
Direct Effect								
	Social Capital -> Innovation Performance	0.276	0.058	4.742	0.000	0.160	0.388	

As can be obtained from the above table, the total effect value of Social Capital-> Innovation Performance is 0.612, $p < 0.05$, and the confidence interval does not contain 0. indicating a significant total effect； The mediation effect value of Social Capital-> Dynamic Capabilities-> Innovation Performance was 0.336, $p < 0.05$, and the confidence interval did not contain 0. indicating a significant mediation effect; The direct effect value of Social Capital-> Innovation Performance was 0.276, $p < 0.05$, and the confidence interval did not include 0. indicating a significant direct effect. It signifies that there is a partial mediation effect in the model in Table 7.

DISCUSSION & CONCLUSION

This chapter aims to clarify the research results, answer the research questions and determine the research objectives through data analysis and interpretation. This study explores the impact of social capital on the innovation performance of small and medium-sized enterprises in Hunan Province and examines the mediating role of dynamic capabilities. The purpose of the study is to determine whether there is a relationship between social capital and innovation performance, whether these factors have an impact on enterprise performance, and whether there is a mediating role between dynamic capabilities.

This study used three variables: social capital, dynamic capabilities, and innovation performance. The Cronbach's alpha value was 0.840, indicating high internal consistency and reliability, which confirmed the accuracy of the results.

The results of the study on the impact of social capital on the innovation performance of micro-small and medium-sized foreign trade enterprises in Hunan Province show that social capital has a significant positive impact on innovation performance, and social capital->dynamic capabilities ($\beta = 0.264$, $p < 0.05$) have a significant positive impact. This shows that the increase of social capital can effectively promote the improvement of enterprise dynamic capabilities, thereby directly improving innovation performance ($\beta = 0.162$, $p < 0.05$).

The results of exploring the mediating role of dynamic capabilities in the relationship between social capital and innovation performance also show that dynamic capabilities also play a significant mediating role between social capital and innovation performance, and the mediating effect value of social capital->dynamic capabilities->innovation performance is 0.105 ($p < 0.05$). This means that social capital can indirectly improve corporate innovation performance by improving corporate dynamic capabilities.

By achieving the above research objectives, this study comprehensively reveals the impact mechanism of social capital on the innovation performance of small and medium-sized foreign trade enterprises in Hunan Province, especially the mediating role of dynamic capabilities. The results show that social capital not only directly promotes the innovation performance of enterprises, but also indirectly improves the innovation capabilities of enterprises through the improvement of dynamic capabilities. The research results provide practical and feasible innovation strategy suggestions for small and medium-sized foreign trade enterprises in Hunan Province to achieve sustainable development in a fierce market environment.

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