

# External social capital and acquire Knowledge of logistics firms

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## ABSTRACT

This paper aims at providing a comprehensive empirical examination regarding the external social capital and acquisition of knowledge by logistics firms in Hanoi and neighboring provinces. By drawing the concept from the previous studies, the study explores the external social capital and acquisition of knowledge by logistics firms in Hanoi and neighboring provinces. We used primary data from a survey of 250 employees working at logistics firms in Hanoi and neighboring provinces during 2023–2024, and there were 205 valid survey questionnaires included in the analysis, including descriptive statistics, reliability analysis of scales, EFA analysis, and correlation analysis. Our findings suggest that the external social capital and acquisition of knowledge by logistics firms are highly appreciated. There is no basis to confirm, there is a positive influence of external social capital on knowledge acquisition in logistics firms. Based on the research findings, our study emphasizes that the external social capital and acquisition of knowledge by logistics firms need urgent improvement to support their business performance.

**Keywords:** business administration, social work, external social capital, acquire knowledge, logistics firms, economics

**JEL classification code:** M10, A14, O15, G21

## 1. INTRODUCTION

The development of social capital is crucial for many firms. It reduces risks, sustains economic strength, and influences business performance (Casey, 2022); enhances material benefits, boosts output and profits, and brings long-term benefits, all while fostering the growth of human capital; influences business opportunities and success (Davis et al., 2013); influences innovation in firms (Jiménez et al., 2016); and influences entrepreneurship (Chen et al., 2007). In this way, social capital aids in the development of many firms.

Strong, long-lasting relationships that a company has with its stakeholders, business partners, and customers will boost its success. Businesses can effectively share knowledge and information, save transaction costs, mobilize each other's resources, and open up numerous commercial cooperation prospects because of this relationship (Yang et al., 2011).

Vietnam is seeing a sharp rise in the quantity of logistics companies. There are already hundreds of domestic logistics and transportation businesses as well as a few dozen of the top forwarding companies in the globe that offer services ranging from filing taxes to handling goods transit procedures. Vietnam's logistics industry is expanding quickly and producing good outcomes, however the size, capital, human resource capacity, and experience of logistics companies are still constraints on their operations.

Logistics companies link operations in the global value chain (GVC) by offering a chain of services for the delivery, distribution, and circulation of goods. Managers view logistics services as a tool and a channel of communication that connects various aspects of company strategy as the global market grows with technological advancements, particularly the opening of markets in developing and undeveloped nations. For business purposes, logistics produces value at the right time and location. The development of logistics links the domestic economy to the global and regional economies.

Logistics companies are involved in the movement and provision of commodities to meet the demands of life and production. They also help to develop international trade, increase customer satisfaction, and support economic restructuring.

Although the quantity and scope of logistics companies in Hanoi and the surrounding regions have increased, there are still numerous flaws in the way business is conducted. There are still numerous businesses that are unable to offer high-quality logistics services; their operations are disorganized, impromptu, and unprofessional, and the majority only offer one or two value-added services. Consequently, research on the subject of external social capital and knowledge acquisition by businesses needs to be both theoretically and practically significant.

## **2. LITERATURE REVIEW**

### **2.1. External social capital**

According to Tran (2006), social capital is a distinctive manifestation of the relationships that exist among individuals within a community or society. The relationship between social capital and economic development as well as between social capital and economic policy is highlighted by Tran (2006a). The author highlights the role that social capital plays in reducing transaction costs and raising investment levels by examining previous claims. According to Le (2008), social capital is crucial to economic transactions, but because businesses frequently rely primarily on social capital from social networks, there is a risk that this dependence could be counter-functional or dangerous.

Because both sides are dedicated to sharing a substantial portion of their resources, the more cohesive the external relationships, as evidenced by trust, mutual aid, and support, the more favorable outcome will be facilitated (Laursen et al., 2012).

According to Cuevas-Rodríguez et al. (2014), social capital theory suggests that a company can acquire resources from its surroundings and explore for new prospects by means of its external networks.

The links between businesses and people that represent organizations that are externally related are reflected in external social capital (Dai et al., 2015).

In addition to introducing new business opportunities and preventing harm to one another (Dai et al., 2015), external social capital will facilitate enterprises' prompt access to market information and expertise.

## **2.2. Acquire knowledge**

Information, expertise, and organizational abilities are all considered forms of knowledge. This information is obtained by means of internal learning and research within the enterprise organization (Dai et al., 2015) as well as social capital amassed with the enterprise's external essential customer interactions (Yli-Renko et al., 2001). Knowledge growth is comprised of four parts, according to Hult and colleagues (2007): knowledge acquisition (i), information distribution (ii), shared meaning (iii), and acquired memory (iv). Yli-Renko et al. (2001) assert that knowledge acquisition plays a crucial role by creating new production opportunities and improving the capacity to take advantage of them.

Lee et al. (2015) state that in order for employees to freely communicate critical information regarding tasks throughout implementation, relationships between them within the organization must be established.

## **2.3. The relationship between external social capital and acquire knowledge**

Suseno and Ratten (2007) assert that the growth of business knowledge is positively impacted by external social capital. Partners that possess distinct knowledge are more inclined to learn from one another's expertise in order to jointly accomplish the desired outcomes. Success in the market is mostly determined by knowledge acquisition, which is the means by which companies can undertake internal research using data gathered from the market and consumer trends to help them develop and innovate their products (Laursen et al., 2012).

In order to interact with the corporate environment and share knowledge from the network of relationships, external social capital is crucial. This helps the enterprise acquire knowledge (Prieto-Pastor et al., 2018; Lee et al., 2015).

Numerous modes of transportation have an effect on the environment, and one of the main industries producing greenhouse gas and carbon emissions is the logistics sector. Consequently, in order to lessen its influence on the environment, the logistics sector has been putting solutions into practice.

# **3. METHODOLOGY**

## **3.1. Sample and research methods**

Two approaches were used to conduct this study: qualitative and quantitative. The scale was completed and the questionnaire was designed using qualitative research methods. We interview specialists and corporate managers in-depth on knowledge acquisition and external social capital.

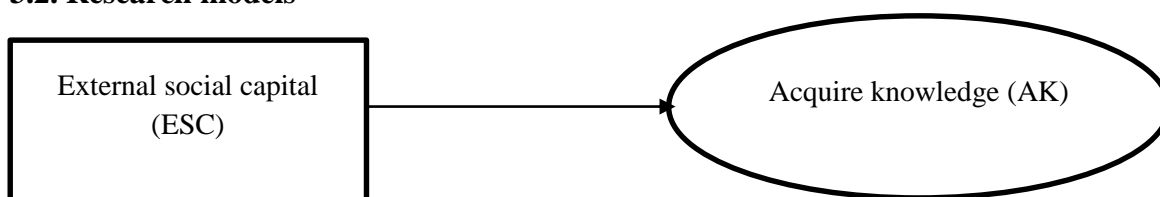
"Questionnaire-answer" research methodology is used in quantitative studies. Hair et al. (2014) state that the ratio 5:1 (number of observations/measured variables) is used to determine the minimum sample size; one measurement variable requires a minimum of 9 observations. The minimum sample size for this study, which includes four observed variables, is  $9 * 5 = 45$  observations (questionnaire). A straightforward strategy was employed to pick logistics enterprises in Hanoi and nearby provinces for the research sample, based on the author's group's available data.

After filtering, the remaining 205 questions from the total number of surveys were included in the study.

The people who answered the questionnaire work for logistics companies in Hanoi and the surrounding provinces. In addition to evaluating the company's circumstances, respondents will address divisive issues including knowledge acquisition and external social capital.

Every research concept scale is a multivariate scale. On a 5-point Likert scale, which goes from 1 = strongly disagree to 5 = strongly agree, or from 1 = strongly disinfluence to 5 = strongly influence, the observed factors are measured. Previous research serves as the foundation for each scale's statements. The results of in-depth discussions with experts and company managers are used to modify the scale to fit the needs of logistics companies in Hanoi and surrounding regions.

### 3.2. Research models



**Figure 1:** Research model

External social capital (ESC): Includes 5 observed variables (ESC1, ESC2, ESC3, ESC4, ESC5) inherited from the research results of Nguyen et al. (2023).

Acquire knowledge (AK): Includes 4 observed variables (AK1, AK2, AK3, and AK4) inherited from the research results of Le et al. (2024).

## 4. RESULTS

### 4.1. Descriptive Statistics

Table 1 indicates that the respondents agree with the variables of acquiring knowledge and external social capital of logistics firms, where four and five attributes were quite high. The average rating for all attributes was 3.93 or higher.

The analysis results also show that the skewness and kurtosis coefficients are in the range of -1 to 2, so the survey data ensures a relatively standard distribution. Therefore, the evaluation levels of the employees participating in the survey are relatively uniform and concentrated, with little dispersion, so the analysis results have high statistical significance.

**Table 1.** Descriptive analysis of attributes

Code	N	Mini	Max	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
Acquire knowledge (AK).									
AK1	205	1	5	3.99	0.866	-0.841	0.170	0.532	0.338
AK2	205	1	5	4.05	0.887	-0.830	0.170	0.314	0.338
AK3	205	1	5	3.95	0.853	-0.806	0.170	0.549	0.338
AK4	205	1	5	4.08	0.873	-0.965	0.170	0.719	0.338
Valid N (listwise)	205			4.02					
External social capital (ESC).									
ESC1	205	1	5	3.98	0.837	-0.866	0.170	1.036	0.338
ESC2	205	1	5	3.93	0.840	-0.863	0.170	1.482	0.338
ESC3	205	1	5	4.01	0.866	-0.898	0.170	1.083	0.338
ESC4	205	1	5	3.93	0.837	-0.882	0.170	1.303	0.338
ESC5	205	1	5	4.02	0.801	-0.969	0.170	1.915	0.338
Valid N (listwise)	205			3.97					

Source: Prepared by the authors (2023) and SPSS software.

#### 4.2. Cronbach alpha

The internal reliability of the scales is evaluated using the Cronbach alpha coefficient. The statistical results in Table 2, which show that Cronbach alpha values in the range of 0.860 to 0.873 are greater than the significance level of 0.7 (Nunnally & Bernstein, 1994), validate the reliability of the scale used in the study. For each observable variable on the scales, the item-total correlation is greater than 0.3. Because they meet the requirements, all of the scales can therefore be used for exploratory factor analysis (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

**Table 2.** Results of Cronbach's alpha testing of attributes and item-total statistics

<b>AK</b>				
Cronbach's Alpha		N of Items		
.899		4		
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
AK1	12.08	5.498	0.749	0.879
AK2	12.01	5.250	0.801	0.860

AK3	12.12	5.500	0.765	0.873
AK4	11.99	5.358	0.784	0.866
<b>ESC</b>				
Cronbach's Alpha	N of Items			
.900	5			
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ESC1	15.90	8.230	0.742	0.880
ESC2	15.95	8.188	0.749	0.879
ESC3	15.86	8.073	0.746	0.879
ESC4	15.94	8.222	0.743	0.880
ESC5	15.85	8.266	0.779	0.873

Source: Prepared by the authors (2024) and SPSS software.

### 4.3. EFA analysis

Subsequently, component analysis and variance were used to perform exploratory factor analysis (EFA), as indicated by tables 3, 4, and 5.

According to the findings of the Bartlett's test, which was used to look into the possibility of correlation between the observed variables, the KMO index is 0.839 and 0.886, respectively, more than 0.5 ( $>0.5$ ). 76.746% and 71.505% of the extracted variance, respectively ( $>50\%$ ), indicate that 76.746% and 71.505% of the variation in the data can be attributed to these four and five observed factors. Bartlett's test has statistical significance (Sig.  $< 0.05$ ). As a result, it may be concluded that the study's indicators meet the EFA analysis's requirements (Hoang & Chu, 2008; Hair et al., 2009; Hair et al-2014).

These statistics demonstrate that research data analysis for factor discovery is appropriate. Through the quality assurance of the scale and the test of the EFA model, we have identified four components of acquiring knowledge of and five components of the external social capital of logistics firms (Hoang & Chu, 2008; Hair et al., 2014).

**Table 3: KMO and Bartlett's Test**

AK			KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.839	
Bartlett's Test of Sphericity	Approx. Chi-Square		490.585	
	Df		6	
	Sig.		.000	
ESC			KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.886	
Bartlett's Test of Sphericity	Approx. Chi-Square		583.341	
	Df		10	
	Sig.		.000	

Source: Prepared by the authors (2024) and SPSS software.

**Table 4:** Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
<b>AK</b>						
1	3.070	76.746	76.746	3.070	76.746	76.746
2	0.362	9.042	85.788			
3	0.324	8.092	93.880			
4	0.245	6.120	100.000			
<b>ESC</b>						
1	3.575	71.505	71.505	3,575	71.505	71.505
2	0.427	8.544	80.049			
3	0.375	7.497	87.546			
4	0.330	6.601	94.148			
5	0.293	5.852	100.000			

Extraction Method: Principal Component Analysis.

Source: Prepared by the authors (2024) and SPSS software.

**Table 5:** Component Matrix<sup>a</sup>

	Component
<b>AK</b>	1
AK2	0.893
AK4	0.882
AK3	0.870
AK1	0.859
<b>ESC</b>	Component
	1
ESC5	0.865
ESC2	0.844
ESC3	0.841
ESC4	0.839
ESC1	0.838

Source: Prepared by the authors (2024) and SPSS software.

#### 4.4. Correlation Analysis

These statistics demonstrate that research data analysis for factor discovery is appropriate. Through the quality assurance of the scale and the test of the EFA model, we have identified four components of acquiring knowledge of and five components of the external social capital of logistics firms (Hoang & Chu, 2008; Hair et al., 2014).

**Table 6:** Correlations

		Product innovation	External social capital
Acquire knowledge	Pearson Correlation	1	-0.095
	Sig. (2-tailed)		0.175
	N	205	205
External social capital	Pearson Correlation	-0.095	1
	Sig. (2-tailed)	0.175	
	N	205	205

Source: Prepared by the authors (2024) and SPSS software.

As a result, it is impossible to draw any conclusions regarding how external social capital affects logistics companies' ability to acquire knowledge. Subsequent studies ought to go deeper into the independent factors that impact logistics enterprises' acquisition of knowledge, aside from external social capital. To further improve the dependability of the research findings, additional research should be done in the future with larger sample sizes and wider geographic scopes.

## 5. DISCUSSION AND IMPLICATIONS

Various research methodologies are employed by logistics firms based on their individual objectives, which may include market expansion, service launches, media campaigns, etc. To guarantee the provision of accurate and comprehensive information, market research is a necessary activity in all circumstances. Based on this information, businesses can establish rational strategic plans and achieve excellent business performance.

Logistics companies will encounter a number of unfamiliar and challenging situations prior to being ready to enter a new market, including unanticipated hazards. Because of this, this procedure necessitates a thorough comprehension of the state of the economy, market demands, applicable laws, rival businesses, and target audience. By doing out market research, businesses may reduce avoidable errors.

Logistics companies need to do a thorough market analysis and choose the appropriate target audience before introducing new services. This will assist businesses in identifying the wants and needs of their customers, enabling them to improve their products to better satisfy their needs. Conducting market research and making service improvements before to launching are crucial. It aids logistics companies in raising the likelihood of successful service delivery.

It's critical for logistics companies to investigate and comprehend their target market thoroughly. Find out about the demands of your clients, their demographics, the state of the economy, consuming patterns, and other things. Use online tools like Google Forms and SurveyMonkey to create and administer surveys to get feedback and data from customers, or conduct surveys in-person. Ask detailed inquiries regarding the needs, preferences, issues, and ways in which the client would like to receive better service.



Customers provide feedback to logistics companies following each transaction or service use. Logistics companies ought to offer avenues for feedback, such as email, phone, social media, or customer care systems, so that clients can express thoughts, ideas, and remarks. Firms will gain a better understanding of the demands and issues that customers are encountering thanks to this feedback. Sincere consumer feedback should be listened to and taken in. Consider and apply these suggestions to enhance goods, services, and consumer interactions.

For any business, sustainable development is the key to success since it allows for better partner growth, customer satisfaction, and brand enhancement. Companies in the logistics sector that support sustainable services are becoming increasingly appealing to investors, customers, and society at large.

### **Ethical considerations**

Not applicable.

### **Conflict of Interest**

The authors declare that they have no conflict of interest.

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