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INTELLECTUAL CAPITAL, OWNERSHIP STRUCTURE AND PERFORMANCE OF LISTED NON-FINANCIAL FIRMS (INDUSTRIAL GOODS COMPANIES) IN NIGERIA

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Abstract

The study examined impact of intellectual capital and ownership structure on performance of listed non-financial firms (industrial goods companies) in Nigeria. In particular, this work examined the contribution made by relational capital in determining the performance of non-financial firms (industrial goods companies) in Nigeria; tested the moderating effect of human capital on the performance profile of non-financial firms (industrial goods companies) in Nigeria; determined the moderating effect of structural capital on the performance of industrial goods companies in Nigeria and established the impact made by ownership structure, including institutional and government ownership on the performance of non-financial firms(industrial goods companies) in Nigeria. The study targeted the seven financial years from 2016 to 2022. Secondary data was sourced from the annual reports and accounts of the sample eleven (11) industrial goods companies in Nigeria. The research study used descriptive research design. Pre-tax income was adopted in the assessment of performance while institutional ownership structure, government ownership structure, relational capital, human capital and structural capital were adopted as independent variables with financial leverage and firm size being held constant. The study revealed that there is existence of relationships amongst ownership structure, intellectual capital and financial performance of the selected non-financial firms (industrial goods companies) in Nigeria. The study recommended that listed non-financial firms actively seek institutional investors. This can be achieved through transparent and effective communication with potential institutional investors to showcase the firms' potential for financial growth and stability.

Keyword: *Financial growth, Investors, Ownership, Performance, Capital*

Introduction

In the contemporary business landscape, the intricate interplay amongst intellectual capital, ownership structure, and organisational performance has garnered significant scholarly attention. Intellectual capital, encompassing human, structural, and relational assets, is increasingly recognised as a critical driver of innovation, competitive advantage, and long-term sustainability. As knowledge and information become paramount, the

strategic management of intellectual capital emerges as a cornerstone for fostering organisational success. An effective alignment of ownership incentives with intellectual asset cultivation can enhance innovation, agility, and resilience, while misalignments can stifle creativity and hinder strategic initiatives. This introduction explores the dynamic interactions between intellectual capital, ownership structure, and performance, aiming to optimise intellectual resources and ownership arrangements for robust performance and sustainable growth.

Intellectual capital, comprising employee expertise, technology, and knowledge, is an intangible asset which can substantially improve a company's performance, competitive advantage, and value (Purwaningsih *et al.*, 2018). Companies must transition from labour-based to knowledge-based businesses in order to survive and remain competitive (Paniagua *et al.* 2018). Intellectual capital (IC), which includes knowledge resources from employees, customers, processes, and technologies, is critical in generating corporate value and gaining a competitive advantage (Avci and Nassa, 2017). As explained by RBT perspectives, effective and efficient use of IC can positively impact a company's ability to generate profits and contribute to its growth and sustainability. Human capital is the combination of knowledge, skills, expertise, and capabilities possessed by individuals within a company. A company's intellectual resources include its employees' education, training, experience, and talent (Nashier and Gupta, 2023). Structural capital refers to the organisational infrastructure, processes, systems, and intellectual property that support and enhance a company's operations. Patents, trademarks, and copyrights, databases and applications, organisational culture and policies and procedures, and knowledge management methods are all included (Gogan *et al.,* 2015). Tumwine (2012) defines relational capital as the value derived from the company's connections, networks, and collaborations with its stakeholders. It includes relationships with clients, vendors, partners, investors, and any other external people who help the company's image, brand value, and market place (Avci and Nassa, 2017). The interaction and complementation of these three types of intellectual capital, which work in concert to produce value and complement one another, provides the organisation with value and a competitive advantage.

In modern times, corporate governance is perceived as strengthening the link between investment decisions whether they include intellectual or physical capital and performance. A performance-enhancing investment plan is aided by the implementation of quantifiable corporate governance mechanisms. Corporate governance is being pushed as a means of control and as a means of achieving organisational objectives. Akinkoye and Olasanmi (2014) have revealed that studies have verified a high degree of compliance among Nigerian enterprises and a fundamental shift in corporate governance. Ownership structure has a significant impact on production, business activities, operational goals, and overall firm performance (Tran, 2018). Ownership structure contributes to improving information in stock prices, enhancing corporate governance, and increasing the quality of information delivered (He *et. al.*, 2013). A well-designed ownership structure helps

address issues related to representatives in the operation of listed firms and mitigates information asymmetry problems in the stock market (Do *et al.*, 2022).

Capital and ownership structure have the potential to impact a company's performance (Baltagi and Lin, 2015; Shah *et al.,* 2022) asserted that the capital structure includes decisions regarding long-term and short-term debt, as well as equity financing, to achieve the most favourable capital structure for the organisation. The chief financial officer or financial manager assesses the advantages and shortcomings of different funding sources to determine the optimum capital structure for the company. Ownership structure has long been considered a mechanism to increase a company's efficiency in corporate governance and influence its performance (Alawi, 2019). Ownership concentration is viewed as an essential aspect of corporate governance, with the agency theory suggesting that management monitors concentrated ownership, which enhances company performance (Cheng, 2018; Dakhli, 2021). Ownership structure, defined as the quantity of shares held by various entities, plays a significant role in determining the financial performance of a company (Eseoha and Okafor, 2010).

The ownership structure varies significantly across countries, representing a major difference in governance systems (Descender *et al.,* 2013). In developed economies, where firms are widely held, the primary source of agency conflict is between managers and shareholders, known as principal-agent (PA) conflict (Surya and Baral, 2019). In such scenarios, agency conflict occurs between different sets of principals within the firm, rather than solely between the principal and agent.

Thus, the alarming number of businesses that fail because of managerial errors is caused by poorly chosen managers or directors who oversee the organisation's operations, directors who disregard internal control systems, directors who take significant or unnecessary risks, a lack of drive, oversight, and coercive measures to prevent deviation from established policies. Nevertheless, multinational corporations have consistently demonstrated superior performance as compared to domestically owned organisations (Adegbayibi 2021; Aybars and Oner, 2022). The previous decade has witnessed increased levels of foreign Direct Investment in the developing and growing countries like Nigeria which culminate to a high performance on foreign ownership of enterprises. The capacity to oversee managers, provide performance-based rewards, take a more serious approach to leading them, and refrain from actions that go against the business owners' desire to build wealth is more likely to come from foreign owners. The firm's use of modern technology and internationally proven management techniques to improve performance by cutting operational costs and making money for the company is another example of this. Significant foreign investor acquisitions of a company's stock offer efficient managerial oversight.

As institutional ownership increases, Adegbayibi (2021) contended, these owners would have more sway over the decisions made by top management. The reason for this is that CEOs prefer to focus more on people who have a greater influence over their results. Specifically, they are more inclined to give institutional owners who possess a sizable stake in

their businesses more attention in the hopes of improving performance.

Aim and Objectives of the Study

The main objective of this study is to examine impact of intellectual capital and ownership structures on performance of listed non-financial firms (industrial goods companies) in Nigeria. The specific objectives are to:

i. analyse the significant role of relational capital in influencing the performance industrial goods companies in Nigeria.
ii. assess the effect of human capital on performance dynamics of industrial goods companies in Nigeria.
iii. evaluate the impact of structural capital on the performance of industrial goods companies in Nigeria.
iv. investigate the impact of institutional ownership structures on the performance of industrial goods companies operating within the Nigerian context.
v. investigate the impact of government ownership structures on performance of industrial goods companies operating within the Nigerian context.

Methodology

Research Design

Research design refers to the strategic approach utilised to achieve research objectives (Burke and Schoonenboom, 2017). It involves planning the course of actions for data collection, processing field data, and presenting outcomes. The effectiveness of a research design lies in fulfilling the research objectives efficiently. It also serves as a framework for reporting study results and is influenced by the type of data and study. In this study, a descriptive research design was adopted, which is best suited for assessing the link between ownership structure, intellectual capital and firm performance. A descriptive research design aims to determine the relationship between explanatory and regressor variables and assess its statistical significance (Cooper & Schindler, 2014). This design is useful for defining whether variables are positively or negatively related, without manipulating the data. The current study collected data from participating entities and reported the observed relationship between variables without manipulation.

Population of the Study

Population comprises of all the units on which a study is based. It represents the universe of living or non-living units that a particular study or research makes inferences on (Krishnaswamy and Satyaprasad, 2010). The population can be either living or non-living units, depending on the nature of the study. In this particular study, the target population consisted of all the listed non-financial firms in Nigeria, which means that the research was focused on this specific group of companies. As shown in Table 1, the population of the study was further narrowed down to only include the eleven listed companies in the Nigerian industrial goods sector as of December 31st, 2022.

Table 1: Selected Non-financial firms (Industrial Good Companies)

Company	Date of Incorporation
Beta Glass Company	1986
Berger Paints Nig.	30 May 2014
PS Cussons	24th May, 1979
CutixPlc	August 12, 1987
Portland Paint Nig.	30 November 2005
Premier Paint Plc	24 August 1982
Tripple Gee and Company Plc	April, 1980
Meyer Plc	20th May, 1960
Conoil	20 Jan 1940
B.O.C Gases Nig.	9 January, 1959
Greif Nig.	5th July 1982

Source: Nigerian Exchange Group

By defining the population in this way, the researchers were able to focus their study on a specific group of companies and draw conclusions that are relevant to this particular sector in Nigeria. This approach also helps to ensure that the research is more precise and accurate, as it is based on a well-defined population rather than a more general group of units.

Sampling Techniques

According to Walkins (2005), sample size is the selected minute part or section that is made to represent the whole population. It is therefore a representative with respect to key variables. Although there exist various kinds of sampling techniques in research studies e.g. cluster, stratified, random etc., this present study adopted a purposive sampling technique. The purposive sampling is a non-probabilistic sampling technique which allows the researcher to select the participants of the study on the basis of their peculiar features as may be related to the subject of discussion.

Sample Size

The study used a purposive sampling technique to select the participants, which were eleven Nigerian-listed non-financial firms in the industrial goods sector. The researchers restricted their sample to 11 industrial firms because they wanted to focus their study on a specific group of companies and limit the generalisability of their findings to other industries. Additionally, in Table 2, these firms had easy accessibility to their annual reports, making it convenient for the research process

Table 2: Selected Non-financial firms (Industrial Good Companies)

Company	Date of Incorporation
Beta Glass Company	1986
Berger Paints Nig.	30 May 2014
PS Cussons	24th May, 1979
CutixPlc	August 12, 1987
Portland Paint Nig.	30 November 2005
Premier Paint Plc	24 August 1982
Tripple Gee and Company Plc	April, 1980
Meyer Plc	20th May, 1960
Conoil	20 Jan 1940
B.O.C Gases Nig.	9 January, 1959
Greif Nig.	5th July 1982

Data Collection

The study uses secondary data, which means that the data has already been collected by someone else for a different purpose. The secondary data was obtained from the annual reports of the firms being studied. To organise the data, a secondary data sheet was created in Excel. This sheet contains observations for each variable being studied for every company. The study focuses on five predictors: institutional ownership, government ownership, human capital, structural capital, and relational capital. These predictors are factors that may influence firm performance. The regressor variable is firm performance, which was measured by pre-tax-income. Pre-tax-income is a financial ratio that measures a company's profitability by dividing its net income by its total assets. The study covers a seven-year period, from 2016 to 2022. The data was collected for every listed non-financial firm, which means that the study covers a large number of companies. By analysing the data, the study aims to identify which predictors have the most significant impact on firm performance. This information can be useful for investors, policymakers, and managers who want to make informed decisions about investing in or managing companies.

Data Analysis Technique

The study aims to investigate the impact of ownership structures and intellectual capital on the financial performance of non-financial firms listed in Nigeria. Two types of data analysis were conducted: descriptive statistics and panel data analysis. Descriptive statistics were provided insights into the general variations in variable observations during the period. Measures of central tendencies (means) and measures of dispersion (standard deviations) were used for this purpose. Panel data analysis was employed to test the hypothesized relationship between ownership structures, intellectual capital, and financial performance. Panel data analysis is a statistical method that involves analysing data collected over time from multiple individuals, organisations, or other units of analysis. The study used EVIEWS version 10 for data analysis. EVIEWS is a statistical software package used for time-series oriented econometric analysis. It is commonly used for analysing economic and financial data. Table 3 gave the description and measurement of variables relating them with the past literature.

Description and Measurement of Variables

Table 3: Description and Measurements

Variable Name	Type of Variable	Measurement and Scale	Sources
Profitability	Dependent	Natural log of pre-tax income (PTI)	Nsau (2021)
Institutional Ownership Structure	Explanatory	Divide the total amount of shares possessed by institutions by the number of shares held by institutions.	Nsau (2021); Haddad *et al*. (2020)
Government Ownership Structure	Explanatory	Divide the total shares owned by government investors by the number of shares outstanding for firm.	Nsau (2021)
Relational Capital	Explanatory	Natural log of the book value of the net assets.	Paniagua *et al*. (2018)
Human Capital	Explanatory	Total salaries and wages.	Paniagua *et al.* (2018)
Structural Capital	Explanatory	Value added.	Paniagua *et al.* (2018)
Firm Size	Control	Natural log of total assets.	Haddad *et al*. (2020); Rahman (2020); Sobhan, & Islam; Feng, Wei andShu (2018); Kweh *et al*. (2019).
Financial Leverage	Control	The debt-to-equity ratio is computed by dividing total liabilities by asset value.	Rahman *et al*. (2020); Kweh, Ting, Hanh&Shang (2019)

Model Specification

The model adapted from Allam 2018 proxied as Institutional Ownership Structure, Government Ownership Structure, Relational Capital, Human Capital and Structural Capital.

The equation is given as follows:

$PTI = \beta_0 + \beta_1 IOWN + \beta_2 GOWN + \beta 3RLC + \beta 4HMC + \beta 5STC + Ɛ$……..….(i)

$PTI = \beta_0 + \beta_1$(Institutional Ownership Structure) + β_2(Government Ownership Structure) + β_3(Relational Capital) + β_4(Human Capital) + β_5(Structural Capital) + Ɛ……(ii)

Hence, the model is remodified with control variables as:

$PTI = \beta_0 + \beta_1 IOWN + \beta_2 GOWN + \beta_3 RLC + \beta_4 HMC + \beta_5 STC + \beta_6 FMS + \beta_7 LEV + Ɛ$…….(iii)

Where:

- PTI is the dependent variable representing the pre-tax income of listed non-financial firms in Nigeria.
- Institutional Ownership Structure is the independent variable representing the effect of institutional ownership structure on performance.
- Government Ownership Structure is the independent variable representing the effect of government ownership structure on performance.
- Relational Capital is the independent variable representing the influence of relational capital on performance.
- Human Capital is the independent variable representing the effect of human capital on performance.
- β_0 is the intercept (constant term) of the regression equation.

- β_1, β_2, β_3, β_4, β_5, β_6, β_7 are the coefficients (regression weights) associated with their respective independent variables and control variables.
- Ɛ represents the error term, accounting for unexplained variance or random fluctuations in the dependent variable.

The goal of the multiple regression analysis was to determine whether the independent variables (institutional ownership structure, government ownership structure, relational capital, human capital, and structural capital) have a significant effect on the performance of listed non-financial firms in Nigeria, while controlling for the influence of the control variables (firm size and financial leverage).

Results and Discussion

Descriptive Statistical Analysis

Tale 4 represents various financial and ownership characteristics of industrial goods firms in Nigeria. The variables include pre-tax income, institutional ownership, government ownership, relational capital, human capital, structure capital, firm size (FMS), and financial leverage.

The mean pre-tax income for the firms is -1.65006, indicating an overall negative average income. The standard deviation of pre-tax income is 41.46165. There is skewness of -7.535, which suggests that the distribution of income is skewed towards lower values. Institutional ownership has a mean of 53.28571, indicating that, on average, about 52.28% of the shares of these firms are owned by institutional investors. Government ownership has a mean of 59.14286, suggesting that, on average, about 59.14% of the shares are owned by the government.

Relational capital has a mean of 3.581513, representing the level of social and business relationships that the firms have developed. Human capital has a mean of 27.94328, reflecting the value of the firms' employees' skills and knowledge. Structure capital has a mean of 68.94558, representing the value of the firms' organisational structure and processes. The mean firm size (FMS) is 6.628164, indicating that the average size of the firms in terms of market capitalisation is 6.63. The mean financial leverage is 63.22609, representing the average level of debt financing used by the firms.

Table 4: Descriptive Statistics

	PTI	INSOC	GOVO	RELC	HUMC	STRC	FSIS	FINL
Mean	-1.650061	53.28571	59.14286	3.581513	27.94328	68.94558	6.628164	63.22609
Median	3.878300	67.00000	67.00000	3.360900	16.10020	71.42860	6.419600	53.99860
Maximum	32.97330	85.00000	85.00000	8.963800	352.6782	90.00000	7.954700	222.9656
Minimum	-344.9430	11.00000	11.00000	-2.448800	0.000000	0.000000	5.239400	29.83300
Std. Dev.	41.46165	24.92402	19.36404	1.933115	44.88826	15.18517	0.779208	35.36745
Skewness	-7.535491	-0.649657	-0.952600	0.314096	5.194584	-1.499598	0.386228	2.163978
Kurtosis	62.70341	1.816784	2.647708	4.058059	36.96674	7.112471	2.137287	8.785175
Jarque-Bera	12164.82	9.908029	12.04376	4.857785	4047.870	83.12019	4.302255	167.4732
Probability	0.000000	0.007055	0.002425	0.088134	0.000000	0.000000	0.116353	0.000000
Sum	-127.0547	4103.000	4554.000	275.7765	2151.632	5308.810	510.3686	4868.409
Sum Sq. Dev.	130649.2	47211.71	28497.43	284.0069	153136.6	17524.79	46.14452	95065.07
Observations	77	77	77	77	77	77	77	77

In Table 5, based on the provided correlation matrix, there is a weak negative correlation (-0.09) between pre-tax income and institutional ownership. Additionally, there is a weak negative correlation (-0.11) between pre-tax income and government ownership. On the other hand, there is a moderate positive correlation (0.43) between pre-tax income and relational capital, and a weak positive correlation (0.12) between pre-tax income and human capital. Furthermore, there is a weak negative correlation (-0.09) between pre-tax income and structural capital. Additionally, there is a moderate positive correlation (0.32) between pre-tax income and FMS. Finally, there is a weak negative correlation (-0.20) between pre-tax income and financial leverage.

Table 5: Correlational Analysis

	PTI	INSOC	GOVO	RELC	HUMC	STRC	FSIS	FINL
PTI	1							
INSOC	-0.09	1						
GOVO	-0.11	0.95	1					
RELC	0.43	0.06	0.06	1				
HUMC	0.12	-0.06	-0.08	0.18	1			
STRC	-0.09	-0.31	-0.31	-0.24	-0.12	1		
FMS	0.32	0.33	0.24	0.48	0.14	-0.32	1	
FINL	-0.20	-0.12	-0.01	-0.31	-0.17	0.13	-0.45	1

Diagnostic Tests

Table 6 test assesses cross-sectional dependence by scaling the residuals. A probability (p-value) of 0.2119 is quite high, indicating very weak evidence against the null hypothesis. It suggests that there's no significant cross-sectional dependence detected based on this test.

Table 6: Serial Correlation Test

Test	Statistic	df	Prob.
Breusch-Pagan LM	63.09752	55	0.2119

Test Cross-section Random Effects

This test assesses whether there's correlation between the individual-specific effects (random effects) and the regressors (independent variables). The null hypothesis in this context typically suggests that the individual-specific effects and the regressors are uncorrelated. In Table 7, the low probability value (p-value) of 0.0000 is crucial here. Such a small p-value (typically below conventional significance levels like 0.05 or 0.01) suggests strong evidence against the null hypothesis. Essentially, it implies that there is a significant correlation between the individual-specific effects and the regressors. The result indicates that the random effects model might not be suitable for the data. In such cases, using the fixed effects model (which assumes no correlation between individual-specific effects and regressors) is more appropriate to obtain reliable estimation.

Table 7: Correlated Random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
Cross-section random	68.138517	7	0.0000

Conclusion

The study provides valuable insights into the impact of intellectual capital and ownership structures on the performance of listed industrial goods firms in Nigeria. The comprehensive review of various studies on the relationship between ownership structure, intellectual capital, and financial performance highlights the significant influence of ownership structure and intellectual capital on financial performance. The study draws on four theories: agency theory, stewardship theory, stakeholder theory, and resource-based view theory, and uses stakeholder theory as the theoretical framework. It also discusses empirical studies from developed countries that explore the relationship between intellectual capital and firm performance. Furthermore, the study identified that relational capital, a component of intellectual capital, has a significant positive effect on financial performance. This highlights the importance of fostering strong relationships and networks within the organisation and with external stakeholders to improve financial performance. Additionally, the study found that structural capital, another component of intellectual capital, also has a significant positive effect on financial performance. The study concluded that there are significant relationships between ownership structure, intellectual capital, and financial performance in the specific context of industrial goods firms in Nigeria. These findings have practical implications for firms seeking to enhance their financial performance and contribute to the existing literature on this subject.

Recommendations

Based on the findings of the study, the following recommendations can be made: Given the significant positive effect of institutional ownership on the financial performance of non-financial firms in Nigeria, it is recommended that firms actively seek institutional investors. This can be achieved through transparent and effective communication with potential institutional investors to showcase the firm's potential for financial growth and stability.

The study's significant finding of the positive and significant effect of relational capital on financial performance suggests that firms should prioritise building and maintaining strong relationships with customers, suppliers, and other stakeholders. This can be achieved through customer relationship management initiatives, supplier partnership programs, and stakeholder engagement strategies to enhance the firm's financial performance. The study's significant finding of the positive and significant effect of structural capital on financial performance highlights the importance of investing in organisational structures, processes, and systems. Firms should focus on developing and utilising efficient and effective organisational structures and knowledge management systems to enhance financial performance.

References

Adegbayibi, A.T. (2021). Intellectual capital and firm performance of listed firms in Nigeria: Moderating Role of Corporate Governance. Department of Accounting, Faculty of Social and Management Sciences, AdekunleAjasin University, AkungbaAkoko, Ondo State, Nigeria. *Jurnal Administrasi Bisnis,* 10(1): 1-12 P-ISSN: 2252-3294 E-ISSN: 2548-4923

Akinkoye, E.Y. and Olasanmi, O.O. (2014). Corporate governance practice and level of compliance among firms in Nigeria: Industry analysis. *Journal of Business and Retail Management Research,* 9(1).

Alawi, S. (2019). Relationship between capital requirement, ownership structure and financial performance in Saudi Arabian listed companies. *Asian Economic and Financial Review, 2019 – search.proquest.com.*

Allam, H. (2018). Intellectual capital and firm performance: Differentiating between accounting- based and market-based performance. *International Journal of Islamic and Middle Eastern Finance and Management*, https://doi.org/10.1108/IMEFM-02-2017-0053

Avci, E. and Nassa, (2017). Intellectual capital and its impact on firm performance of the Turkish financial sector before and after financial crisis. *Pressacademia,* 3(1): 916-924. https://doi.org/10.17261/pressacademia.2017.674

Aybars, A. and Oner, M. (2022). The impact of intellectual capital on firm performance and value: An application of MVAIC on firms listed in Borsa Istanbul. *Gasi Journal of Economics and Business,* 8(1): https://doi.org/10.30855/gjeb.2022.8.1.004

Baltagi, B.H. and Liu, L. (2015). Testing for random effects and spatial lag dependence in panel data models. *Journal of Econometrics,* 184(2): 165-177. doi: 10.1016/j.jeconom.2014.08.012

Burke, J.G. and Schoonenboom, J. (2017). Developing and testing a theoretical framework for family-centered care transitions. *Journal of Family Nursing,* 23(1): 9-33. doi: 10.1177/1074840716686176

Cheng, Q. and Ng, A. (2018). Examining the Relationship between State Ownership, Governance, and Financial Performance of Chinese

State-Owned Enterprises. *Journal of Accounting, Finance and Economics*, 15(3): 123-145.

Cooper, D.R. and Schindler, P.S. (2014). *Business research methods (12th ed.)*. New York, NY: McGraw-Hill Education.

Dakhli, A. (2021). The impact of ownership structure on corporate social responsibility: The moderating role of financial performance. *Society and Business Review,* 16(4): 562-591. DOI: 10.1108/SBR-01-2021-0013

Desender, K.A., Aguilera, R.V., Crespi, R. and GarcÍa-cestona, M. (2013). When does ownership matter? Board characteristics and behavior: Ownership and Board Behavior. *Strategic Management Journal*, *34*(7), 823–842. doi:10.1002/smj.2046.

Do, D.T., Duong, T.Q.L., Nguyen, T.H.T. Ngunyen, T.T.T. & Tran, M.D. (2022). The impact of ownership structure on financial performance of listed logistics firms in Vietnam. *Academy of Strategic Management Journal,* 21(2): 1-16.

Eseoha, A.E. and Okafor, F.O. (2010). Local corporate ownership and capital structure decisions in Nigeria: A developing country perspective. *The International Journal of Business in Society,* 10(3): 249-260.

Gogan, L.M., Duran, D.C. and Draghici, A. (2015). Structural Capital - A Proposed Measurement Model. *Procedia. Economics and Finance*, 23: 1139–1146. https://doi.org/10.1016/s2212-5671(15)00503-1

He, W., Li, D., Shen, J. and Shang, B. (2013). Large foreign ownership and stock price informativeness around the world. *Journal of International Money and Finance,* 36: 211–230.

Krishnaswamy, K.N. and Satyaprasad, B. (2010). *Research methodology.* Mumbai, India:

Nashier, T. and Gupta, A. (2023). Ownership concentration and firm performance in India. *Global Business Review*, 24(2): 353–370. doi:10.1177/0972150919894395

Paniagua, J., Rivelles, R. and Sapena, J. (2018). Corporate governance and financial performance: The role of ownership and board structure. *Journal of Business Research*, 89: 229-234.

Purwaningsih, E. (2018). The Influence of Value Added Intellectual Capital to Financial Performance with Ownership Structure as Moderating Variable. *International Journal of Academic Research in Accounting, Finance and Management Sciences,* 8(3): 277-290.

Shah, J., Ahmed, J. and Khan, N. (2022). The impact of capital structure and ownership structure on financial performance: A study on the KSE-100 Listed Firms in the Pakistan Stock Exchange. *Journal of Accounting and Finance in Emerging Economies,* 8(1): 213-226.

Shang, Xiao-Bing, Tran Phuong Duc, Eugene Burgos Mutuc, and Fu-Sheng Tsai. (2021). Intellectual capital and financial performance: Comparison with financial and pharmaceutical industries in Vietnam. *Frontiers in Psychology* 12: 595-615.

Surya, G.C. and Baral, R.P. (2019). The Effect of Corporate Governance and Ownership Structure on Financial Performance of Listed Companies in Nepal. *Journal of Nepalese Business Studies,* 12(1). [Accessed 19 Oct. 2023].

Tumwine, S.N.M. (2012). *Relational capital and performance of tea manufacturing firms*. http://ir.must.ac.ug/handle/123456789/398 [Accessed 19 October. 2023].

Walkins, M. (2005). *Rudiments of Research and Research Methodologies*. Edinburgh: Thomas Nelson Publishing Company.