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Intellectual Capital, Political Connection, and Firm Performance: Exploring from Indonesia

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Abstract: The relationship between intellectual capital and firm performance represents a critical facet of corporate governance, warranting comprehensive investigation. By analyzing data from 1151 non-financial firms listed on the Indonesia Stock Exchange over the period from 2018 to 2022, the authors utilize fixed effect regression analysis to test their hypothesis. This study's findings reveal a positive and significant relationship between intellectual capital and firm performance. Additionally, the interaction model incorporating political connections yields statistically significant results, indicating that political connections can moderate the relationship between intellectual capital and firm performance. This study makes a substantial contribution to the literature, particularly by advancing the understanding of corporate governance through the lens of intellectual capital's influence on firm performance. It offers both theoretical and practical insights into the Indonesian context, highlighting the moderating role of political connections. Notably, this study is the first to incorporate interaction models to assess the impact of political connections on this relationship.

Keywords: intellectual capital; firm performance; political connection; corporate governance



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1. Introduction

The contemporary landscape of knowledge-based enterprises underscores the escalating significance of intellectual capital (IC) in maintaining technological prowess and competitiveness amidst the fluidity of modern business environments. Recent economic paradigms have acknowledged both tangible and intangible assets as pivotal reservoirs of competitive advantage for organizations (Marr et al. 2003). The strategic discourse, particularly within realms such as accounting and finance, has spotlighted corporate resources—whether material or immaterial—as conduits for organizational prosperity (Pew Tan et al. 2007). Nevertheless, recent shifts in economic dynamics have engendered a heightened scrutiny of the political dimensions interwoven within business operations. Consequently, it can be posited that the potential influence of IC on corporate performance may not manifest in a direct manner but may instead be mediated by political affiliations shaping strategic decision-making processes aimed at enhancing overall efficacy (Sun and Zou 2021; Cahyono et al. 2023). Hence, it behooves organizations to discern the latent political ramifications inherent in their internal assets, including IC, and to orchestrate their utilization in a manner that augments overall performance. Through such discernment and strategic maneuvering, enterprises can adeptly navigate the intricate contours of the contemporary business milieu and cultivate enduring growth trajectories.

Numerous preceding investigations have elucidated the significance of value creation and its ramifications on corporate financial performance and productivity, particularly concerning intellectual capital (IC) mobilization, which has garnered considerable scholarly interest. Nonetheless, the empirical inquiry into the nexus between IC and corporate financial performance is hampered by a dearth of exogenous factors, notably stemming from top management activities, such as high-level political affiliations. Indeed, extant

literature underscores the multifaceted impacts of top management's political relations mechanisms, which are posited to significantly benefit a company's financial performance. For instance, [Harymawan and Nowland \(2016\)](#) demonstrate that political connections tend to diminish earnings quality, thereby exerting an influence on company performance. Subsequently, [Harymawan et al. \(2019\)](#), in a follow-up study, ascertained that companies possessing familial ownership within political networks witness improvements in performance. Conversely, [Nasih et al. \(2020\)](#) furnished empirical support indicating that politically affiliated companies exhibit tendencies towards mitigating excessive investment levels. Hence, the presence of political connections within a company yields marginal benefits for its outcomes. Consequently, this study undertakes an examination of political connections as a moderating factor in the relationship between intellectual capital and firm performance within the Indonesian context.

The resource-based view posits that the optimal utilization of a company's strategic resources, especially intangible assets, is vital for achieving competitive advantage and superior performance ([Hsu and Wang 2012](#)). Strategic resources, whether tangible or intangible, gain significance in ensuring high competitiveness and performance to the extent that they are valuable, rare, non-transferable, impermeable, and irreplaceable ([Riahi-Belkaoui 2003](#)). Empirical studies indicate that the characteristics defining competitive strategic resources are derived from intellectual capital (IC) ([Molodchik et al. 2012](#); [Riahi-Belkaoui 2003](#)). Intellectual capital, an intangible strategic asset, is identified as a driver of superior corporate performance ([Riahi-Belkaoui 2003](#)). Therefore, as IC is regarded as a competitive strategic resource, it should exhibit a positive correlation with enhanced company performance. In conclusion, the resource-based view underscores the importance of effectively leveraging a company's strategic resources, particularly intangible assets like IC, to secure competitive advantage and superior performance. By recognizing IC as a pivotal strategic resource, firms can utilize it to improve their performance and achieve sustainable competitive advantage in the contemporary fast-paced business environment.

It is essential to recognize that the impact of intellectual capital (IC) on firm performance is complex. The effective management of IC is increasingly critical for companies. Firms with political connections can leverage their IC to achieve organizational objectives more efficiently ([Hang Chan 2009](#); [La Rocca et al. 2022](#)). Such politically connected companies benefit from maximizing the potential of their intangible resources, receiving objective recognition of their value and profitability ([Saeed et al. 2016](#)). Thus, the relationship between intellectual capital and company performance is strengthened when a company has strong political connections. These connections facilitate the integration of inputs from intangible assets with public trust, long-term financing, and potential investors who have a vested interest in the company's future business expansion.

This study examines a sample of non-financial public companies in Indonesia from 2018 to 2022, encompassing a total of 1151 firm-year observations. The analysis reveals a positive relationship between intellectual capital and firm performance. Additionally, the findings provide empirical evidence that politically connected companies enhance the relationship between intellectual capital and firm performance. These results suggest that political connections significantly bolster the effectiveness of intellectual capital utilization, thereby improving firm performance. Consequently, political relations emerge as a strategic asset for companies, aiding in the optimization of intellectual capital and enhancing competitiveness and overall performance. The implications of this research underscore the necessity of incorporating political relations analysis in studies of intellectual capital and firm performance to attain a comprehensive understanding of the factors influencing corporate success in Indonesia. Furthermore, this study's robustness and causality tests yielded consistent results, reinforcing the validity of the findings.

This research offers significant contributions to the existing body of literature. Primarily, it expands upon the resource-based theory framework by formulating a comprehensive model that integrates the influence of political connections as a fundamental catalyst for realizing the advantages of intellectual capital (IC) and enhancing corporate performance.

This conceptualization enhances the comprehension of the intricate dynamics governing the correlation between IC and organizational performance. Secondly, the study furnishes practical insights beneficial for companies endeavoring to capitalize on their IC to augment their operational effectiveness. While prior research has contended that political connections outweigh other factors, this investigation underscores the pivotal role IC can assume in driving organizational success. Lastly, this research illuminates the discourse encompassing both IC and corporate performance by presenting empirical findings derived from an emerging market context. This endeavor not only advances our comprehension of the locale-specific determinants shaping these associations but also contributes to broader theoretical dialogues within the domain.

The rest of the paper is structured as follows. Section 2 presents a comprehensive review of the relevant literature and hypothesis development. Section 3 describes the data and research methods used in this study. Section 4 displays the empirical results. Finally, Section 5 summarizes the key findings and conclusions of this study.

2. Literature Review and Hypothesis Development

2.1. Intellectual Capital and Firm Performance: The Study from Resource-Based View Theory and Political Connections

From the perspective of the resource-based view, organizations are delineated by their distinctive asset composition (Marr et al. 2003), with a growing recognition of the significance of intellectual capital therein (Marr et al. 2003). Intellectual capital is acknowledged as a strategic asset facilitating organizations in attaining competitive advantage and superior performance by means of value augmentation (Clarke et al. 2011; Marr et al. 2003; Sharabati et al. 2010). Consequently, the effective identification, cultivation, and utilization of intellectual capital are deemed imperative for organizational success (Marr et al. 2003).

Scholarly inquiry into the nexus between intellectual capital (IC) and corporate performance has revealed a discernible correlation between the constituents of IC and the efficacy of organizational operations. Nevertheless, the precise character and potency of this association are contingent upon contextual factors specific to industries and nations, such as cultural disparities and economic circumstances. As advocated by Kamukama et al. (2010), recognition of these variations is imperative in scrutinizing the interplay between IC and corporate performance. Additionally, Molodchik et al. (2012) contend that the presence of diverging factors within an enterprise can modulate the influence of IC on its performance outcomes. Furthermore, the utilization of disparate methodologies and metrics across these inquiries poses challenges in directly juxtaposing their findings (Clarke et al. 2011; Xu and Li 2022).

A considerable body of literature underscores a negative association between intellectual capital and firm performance (Pitelli Britto et al. 2014). Nevertheless, contrasting findings have been reported by other investigations, such as those conducted by Chu et al. (2011) and Hang Chan (2009), which have indicated a feeble or inconsequential association between intellectual capital and firm performance. Additionally, divergent methodologies and metrics have been employed in prior research endeavors to explore the nexus between intellectual capital and performance, thereby impeding direct comparability of findings (Apostu and Gigauri 2023; Clarke et al. 2011; Soewarno and Tjahjadi 2020).

Moreover, the impact of political affiliations significantly influences the advancement of intellectual capital and augments enterprise performance. This assertion finds support in extant academic literature, particularly within the framework of agency theory. For instance, Chaney et al. (2011) conducted a study revealing that the ramifications of political connections vary across different national contexts. Specifically, their analysis of forward-looking firms demonstrated that politically affiliated entities tend to underperform compared with their non-affiliated counterparts. They attribute this phenomenon to factors such as reduced tax burdens and heightened control mechanisms among politically connected firms, albeit at the expense of diminished performance metrics. Likewise, Fan et al. (2007) uncovered a similar trend among Chinese firms, where those led by politically affiliated CEOs demonstrated subpar performance.

The second strand of scholarly investigations aligns with the predictions posited by the resource-based theory. A consensus emerges from empirical research indicating that political affiliations hold intrinsic value, as affiliations with governmental entities afford firms a competitive edge, thereby enhancing their operational efficacy. Such advantages encompass enhanced access to a broader spectrum of resources, including loans from financial institutions under preferential terms (Claessens et al. 2012; Xu and Wang 2018; Permatasari et al. 2024). Notably, the potency of political affiliations as a resource is likely influenced by governmental ownership, given the authoritative control over resources vested in state-owned enterprises vis-à-vis their privately owned counterparts. Specifically, state-owned enterprises maintain a direct nexus with governmental bodies, thus securing privileged status in securing bank loans (Brandt and Li 2003; Claessens et al. 2012).

2.2. Hypothesis Development

The tenets of the resource-based view theory advocate that the attainment of competitive advantage and sustained success for a firm is contingent upon its adeptness in cultivating and preserving a distinctive value generation process that eludes facile replication and lacks viable substitutes (Barney 1991). Within this theoretical framework, the effective management of intellectual capital is posited as imperative for the realization of competitive advantage and augmented value (Soeprajitno et al. 2023). Intellectual capital assumes a pivotal role as a catalyst for enduring value generation and competitive edge within firms, encompassing the entirety of employee knowledge and skills conducive to value augmentation and competitive superiority. Constituting a reservoir of intangible assets, capabilities, and competencies, mental capital emerges as a foundational element shaping organizational performance and value generation (Bayraktaroglu et al. 2019; Mohapatra and Pattanayak 2024). The adept management of this intangible resource, comprising informational assets and knowledge, is deemed essential for furnishing the firm with a competitive edge (Shleifer and Vishny 1997; Keter et al. 2024).

The notion of intellectual capital pertains to the strategic leveraging of human capital, physical capital, and structural capital with the aim of optimizing their inherent value. Firms endowed with exemplary intellectual capital are esteemed by stakeholders owing to its capacity to align the interests of diverse parties. Notably, investors within the capital market exhibit a propensity to favor enterprises characterized by robust intellectual capital, thereby enhancing the likelihood of investment. Consequently, intellectual capital assumes a pivotal role in enhancing organizational performance, serving as a strategic asset that significantly impacts the attainment of corporate objectives (Junus et al. 2022).

Intellectual capital (IC) delineates the amalgamated reservoir of knowledge, competencies, expertise, and personal aptitudes embodied by individuals within an organization, which can be strategically harnessed to realize corporate objectives and engender economic value (Cohen et al. 2014). Wang et al. (2014) and Sardo and Serrasqueiro (2017) posit that IC encompasses a spectrum of competencies, knowledge domains, innovative propensities, attitudinal orientations, and steadfast commitments among personnel, constituting a reservoir of individual cognizance pivotal for organizational goal attainment and the accrual of corporate wealth. Scholarly inquiries underscore the consistent finding that investments in human capital augmentation and the cultivation of employee proficiencies yield superior returns and exert a pronounced influence on organizational performance trajectories (Nimtrakoon 2015; Xu and Li 2022; Agustia et al. 2022). This tenet is underscored by the pivotal role of effectively harnessing human resources in propelling organizational performance to elevated echelons, thereby fostering the cultivation of superior products and services. Consequently, grounded in the foregoing elucidation, we proffer the ensuing hypothesis:

H1. *Ceteris paribus, there is a positive relationship between intellectual capital and firm performance.*

Prior research has yielded mixed findings concerning the capacity of intellectual capital (IC) to augment organizational performance, prompting subsequent investigations aiming

to validate and broaden these outcomes by integrating additional variables (Soetanto and Liem 2019; Singla 2020). Nevertheless, we posit that the correlation between an organization's demand for IC and its capacity to ameliorate performance may not be straightforward, potentially subject to the influence of diverse contextual elements. Specifically, we advocate for a reassessment of the influence of political affiliations on fortifying the nexus between IC and organizational performance, positing that such scrutiny may unveil novel perspectives on the impact of external factors in shaping the significance of IC for organizations.

Although previous studies have not extensively tested these variables, evidence suggests that political associations can impact a company's reputation among stakeholders (Dženopoljac et al. 2016; Nadeem et al. 2018; Cahyono et al. 2023). Companies with political associations may use their influence to exploit the potential of their position in public control, thereby increasing the efficiency and productivity of their intellectual capital (Smriti and Das 2018). Recent studies have emphasized the role of political associations in expanding the capabilities of a company's intangible resources, leading to positive future outcomes. Therefore, we propose the following hypothesis:

H2. *Ceteris paribus, political connections strengthen the positive relationship between intellectual capital and firm performance.*

3. Data and Research Methodology

3.1. Data and Sample

This study utilized data from 1151 non-financial companies listed on the Indonesia Stock Exchange from 2018 to 2022. Purposive sampling technique was used to select the sample, which excluded financial companies and incomplete data. The sample criteria are presented in Table 1. Table 2 displays the distribution of the sample according to industry classification and year. The sample was divided into politically connected (PCON) and non-politically connected (NON-PCON) companies based on the criteria. Table 2 shows that out of the total sample, 150 companies (71.43%) were politically connected while 60 companies (28.57%) were not. Manufacturing companies (SIC 3) and Health and Consulting Services (SIC 8) had the most PCON and NON-PCON observations with 32 and 31 observations, respectively.

Table 1. Sample Selection Criteria.

Sample Criteria	Amounts
The number of firm-years listed on IDX period 2018–2022	1.230
Disqualified:	
Exclude data financial companies	(65)
Missing data intellectual capital	(14)
Final observations	1151

Table 2. Sample Distribution.

SIC	Industries	Companies Have Political Connection		Companies Do Not Have Political Connection		Total	
		N	%	N	%	N	%
0	Agriculture, forestry, and fisheries	18	12.0	7	11.67	25	100
1	Mining	15	10.0	8	13.33	23	100
2	Construction industries	19	12.67	8	13.33	27	100
3	Manufacturing	25	16.67	7	11.67	32	100
4	Transportation, communication, and utilities	19	12.67	8	13.33	27	100
5	Wholesale and retail trade	22	14.67	7	11.67	29	100
7	Service industries	18	12.0	8	13.33	26	100
8	Health, legal, and educational services and consulting	14	9.3	7	11.67	31	100
Total		150	71.43	60	28.57	210	100

3.2. Specification of Empirical Model

To test the hypothesis regarding the relationship between intellectual capital and corporate values with moderated political connections by employing fixed-effect regression as according to the Hausman Test, we developed a specification model as follows:

Model 1:

$$ROA_{it} = \alpha + \beta_1 MVAIC_{it} + \beta_2 PCON_{it} + \beta_3 BODSIZE_{it} + \beta_4 LNSUBS_{it} + \beta_5 FIRMSIZE_{it} + \beta_6 LOSS_{it} + \beta_7 LEVERAGE_{it} + \beta_8 LIQUIDIITY_{it} + \beta_9 RECINV_{it} + \beta_{10} FIRMAGE_{it} + \varepsilon \quad (1)$$

Model 2:

$$ROA_{it} = \alpha + \beta_1 MVAIC_{it} + \beta_2 PCON_{it} + \beta_3 MVAIC_{it} * PCON_{it} + \beta_4 BODSIZE_{it} + \beta_5 LNSUBS_{it} + \beta_6 FIRMSIZE_{it} + \beta_7 LOSS_{it} + \beta_8 LEVERAGE_{it} + \beta_9 LIQUIDIITY_{it} + \beta_{10} RECINV_{it} + \beta_{11} FIRMAGE_{it} + \varepsilon \quad (2)$$

Model 3:

$$ROE_{it} = \alpha + \beta_1 MVAIC_{it} + \beta_2 PCON_{it} + \beta_3 BODSIZE_{it} + \beta_4 LNSUBS_{it} + \beta_5 FIRMSIZE_{it} + \beta_6 LOSS_{it} + \beta_7 LEVERAGE_{it} + \beta_8 LIQUIDIITY_{it} + \beta_9 RECINV_{it} + \beta_{10} FIRMAGE_{it} + \varepsilon \quad (3)$$

Model 4:

$$ROE_{it} = \alpha + \beta_1 MVAIC_{it} + \beta_2 PCON_{it} + \beta_3 MVAIC_{it} * PCON_{it} + \beta_4 BODSIZE_{it} + \beta_5 LNSUBS_{it} + \beta_6 FIRMSIZE_{it} + \beta_7 LOSS_{it} + \beta_8 LEVERAGE_{it} + \beta_9 LIQUIDIITY_{it} + \beta_{10} RECINV_{it} + \beta_{11} FIRMAGE_{it} + \varepsilon \quad (4)$$

The dependent variable is ROA_{it} and ROE_{it} , independent variable is $MVAIC_{it}$, and moderating variable is $PCON$. In addition, control variable includes $BODSIZE_{it}$, $LNSUBS_{it}$, $FIRMSIZE_{it}$, $LOSS_{it}$, $LEVERAGE_{it}$, $LIQUIDIITY_{it}$, $RECINV_{it}$, $FIRMAGE_{it}$. Refer to Table 3 for definitions and measurement of the variables.

Table 3. Variable Definition and Measurements.

Variables	Measurement	Source
Dependent Variable		
ROA	Natural logarithm of total return on assets (Singla 2020)	Annual Report
ROE	Natural logarithm of total return on equity (Hang Chan 2009)	Annual Report
Independent Variable		
MVAIC	The intellectual capital formula through MVAIC calculation (Clarke et al. 2011)	Annual Report
Moderating Variable		
PCON	Dummy variable, 1 if the CEO has a political background in accordance with BI regulation No. 12 of 2010	Annual Report
Control Variable		
BODSIZE	Total directors on board of directors (Foster et al. 2022)	Annual Report/OSIRIS
LNSUBS	Natural logarithm of subsidiary company (Foster et al. 2022)	Annual Report/OSIRIS
FIRMSIZE	Natural logarithm of total assets (Nadeem et al. 2018)	Annual Report/OSIRIS
LOSS	Dummy variable, 1 if the company has a negative profit at $t - 1$, and 0 otherwise (Bayraktaroglu et al. 2019)	Annual Report/OSIRIS
LEVERAGE	Ratio of total debt and assets (Bayraktaroglu et al. 2019)	Annual Report/OSIRIS
LIQUIDIITY	Ratio of current assets and current liabilities (Nadeem et al. 2018)	Annual Report/OSIRIS
RECINV	The ratio of total inventory and accounts receivable divided by total assets (Foster et al. 2022)	Annual Report/OSIRIS
FIRMAGE	the number of years incorporation from company (Foster et al. 2022)	Annual Report/OSIRIS

3.3. Variable Definitions and Measurement

To measure the dependent variable, we utilized the natural logarithm of ROA and ROE as proxies to assess firm performance. The independent variable for this study is intellectual capital (MVAIC), which refers to the knowledge and skills of employees, including company

infrastructure, customer relations, information systems, and the ability to innovate and be creative (Madininos et al. 2011). To measure MVAIC, we employed the VAIC method, initially introduced by Pulic in 1998, and further modified and developed by Ulum, Ghozali, and Purwanto in 2014, called the Modified Value Added Intellectual Coefficient (MVAIC). This modified version adds one component, namely RCE (relational capital efficiency), to the VAIC calculation. The calculation stages for MVAIC are presented in Table 4 below. Finally, political connections (PCON) are utilized as the moderating variable.

Table 4. The Formula to Calculate Modified Value Added Intellectual Coefficient (MVAIC).

Components	Definition	Measurement
Value Added (VA)	Determine the company's ability to create added value (Pulic 1998)	$VA = Total\ Revenue - Total\ Cost$
Human Capital Efficiency (HCE)	The contribution made by every rupiah invested in human capital to the value-added of the organization (Ulum et al. 2014)	$HCE = \frac{Total\ Compensation\ and\ Development\ Exp}{Human\ Capital\ Efficiency}$
Structural Capital Efficiency (SCE)	The amount of structural capital needed to generate 1 rupiah of added value and indicates how successful structural capital is in creating value (Clarke et al. 2011)	$SCE = \frac{Value\ Added - Human\ Capital}{Value\ Added}$
Relational Capital Efficiency (RCE)	The investment efficiency in relational aspects (Foster et al. 2022)	$RCE = \frac{Marketing\ Cost}{Value\ Added}$
Modified Value Added Intellectual Coefficient (MVAIC)	To calculate the Modified Value Added Intellectual Coefficient (MVAIC) (Foster et al. 2022)	$MVAIC = HCE + SCE + RCE$

To further elucidate the moderating variable, political relations are defined in accordance with BI Regulation No 12/3/PBI/2010, which establishes specific categories for directors or commissioners deemed to possess political relations. Companies are considered to have a special political relationship if they meet certain criteria, including the following:

1. The firm where shareholders are individuals or entities with familial or significant business ties to public officials, political party officials, or individuals with political influence.
2. The firm managed or controlled by individuals with relationships to public officials, political party officials, or individuals with political influence.
3. The firm whose directors or commissioners are public officials, political party officials, or individuals with political influence.
4. The firm engaged in substantial transactions or contracts with the government or governmental entities, suggesting political connections.
5. The firm receiving benefits or special facilities from the government or governmental entities.
6. The firm that directly or indirectly fund political activities or campaigns. Companies involved in significant lobbying or political activities aimed at influencing government policies or regulatory decisions.
7. The firm receiving benefits or preferential treatment not granted to other companies within the same industry, indicating potential political influence.

A dummy variable is employed to indicate whether a company meets these criteria as per the regulation, assigning a value of 1 to companies that fulfill these criteria and a value of 0 to those that do not. Additionally, to control for potential confounding factors, several control variables were included in the model: BODSIZE, LNSUBS, FIRMSIZE, LOSS, LEVERAGE, LIQUIDITY, RECINV, and FIRMAGE. These variables were selected based on their relevance to the study and their potential impact on the relationship between intellectual capital and firm performance.

4. Empirical Result and Discussion

4.1. Descriptive Statistic

Table 5 presents the descriptive statistics of the variables used in this study. ROA and ROE were used as proxies to measure firm performance. The results indicate that the average values of ROA and ROE are 4.888 and 4.682, respectively. This suggests that the average firm performance in the sample does not vary significantly between ROA and ROE. The MVAIC and PCON variables have mean values of 0.061 and 7.781, respectively, across all observations. Moreover, the minimum and maximum values of ROA are 18,862 and 23,908, respectively, while the corresponding values for ROE are 7317 and 9334, respectively. On the other hand, the minimum values for MVAIC and PCON are 0.000 and 5.782, respectively, while the maximum values are 1000 and 5510, respectively. These descriptive statistics provide a clear picture of the range and distribution of the variables used in this study.

Table 5. Descriptive Statistic.

	Mean	Median	Minimum	Maximum
ROA	4.888	3.650	18.862	23.908
ROE	4.682	4.982	7.317	9.334
MVAIC	0.061	0.000	0.000	1.000
PCON	7.871	6.782	5.782	5.510
BODSIZE	9.468	9.000	4.000	21.000
LNSUBS	12.941	8.000	1.000	103.000
FIRMSIZE	2.200	2.197	1.386	2.996
LOSS	0.249	0.000	0.000	1.000
LEV	0.529	0.489	0.008	9.470
LIQUIDITY	5.588	1.415	0.000	2726.489
FIRMAGE	3.377	2.950	−87.980	52.660

Table 6 presents the results of mean-based tests (T-test) for the different groups in the study. Panel A displays the results for companies with political connections (PCON) and those without political connections (Non-PCON) on the variable ROA. The results indicate that the mean intellectual capital and political connection are significantly different for companies with PCON and those without PCON. Panel B shows the results for companies with PCON and Non-PCON on the variable ROE. The results indicate that the mean intellectual capital and political connection are significantly different for companies with PCON and those without PCON on ROE.

Table 6. Independent T-test.

Panel A: ROA				
	Companies Have Political Connection	Companies Do Not Have Political Connection	Coeff.	t-value
MVAIC	24.850	24.412	0.438 **	2.103 **
PCON	24.781	24.684	0.097 **	2.037 **
Panel B: ROE				
	Companies Have Political Connection	Companies Do Not Have Political Connection	Coeff.	t-value
MVAIC	21.086	21.233	−0.146 ***	−2.967 ***
PCON	24.205	24.776	−0.572 **	−2.497 **

t statistic in parentheses ** $p < 0.05$, *** $p < 0.01$.

Table 7 shows the Pearson correlation results, which indicate a positive relationship between the MVAIC and PCON variable and the firm performance proxy (ROA and ROE) at a significant level of 10%, 5%, 5%, and 10%. The relationship between the MVAIC and

PCON variable and the firm performance proxy (ROA and ROE) is positively significant at the 1%, 5%, 10%, and 1% levels. It is shown that MVAIC and PCON will increase the firm value, whereas this association will be higher if MVAIC is moderated by PCON. This finding has a significant level at 1% and 5%. The Pearson's correlation results show that the strength of the relationship between MVAIC and ROA is at a significance level of 1% while the strength of MVAIC's relationship with ROE is at a significance level of 1% as well. In addition, the strengths of the PCON relationships with ROA and ROE both have a significance rate of 1%. This provides sufficient strong evidence that the relationship between MVAIC and PCON has a strong correlation.

Table 7. Pearson Correlation.

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
[1] ROA	1.000												
[2] ROE	0.853 *** (0.000)	1.000											
[3] MVAIC	0.917 *** (0.000)	0.865 *** (0.000)	1.000										
[4] PCON	0.810 *** (0.000)	0.706 *** (0.000)	0.859 *** (0.000)	1.000									
[5] BODSIZE	0.046 * (0.075)	0.055 ** (0.036)	0.053 ** (0.042)	0.044 * (0.093)	1.000								
[6] LNSUBS	−0.077 *** (0.003)	−0.065 ** (0.013)	−0.046 * (0.077)	−0.068 *** (0.009)	0.078 *** (0.003)	1.000							
[7] FIRMSIZE	−0.039 (0.139)	−0.076 *** (0.004)	−0.054 ** (0.038)	−0.028 (0.279)	0.004 (0.876)	0.028 (0.279)	1.000						
[8] LOSS	0.038 (0.147)	−0.012 (0.642)	0.017 (0.504)	0.035 (0.174)	−0.024 (0.358)	−0.028 (0.282)	0.666 *** (0.000)	1.000					
[9] LEVERAGE	0.055 ** (0.035)	0.008 (0.761)	0.061 ** (0.020)	0.074 *** (0.004)	−0.039 (0.133)	0.037 (0.153)	0.108 *** (0.000)	0.104 *** (0.000)	1.000				
[10] LIQUIDITY	−0.047 * (0.070)	−0.020 (0.438)	−0.042 (0.111)	−0.071 *** (0.006)	0.099 *** (0.000)	0.010 (0.699)	0.226 *** (0.000)	0.080 *** (0.002)	−0.002 (0.947)	1.000			
[11] FIRMAGE	0.038 (0.142)	0.040 (0.122)	0.021 (0.415)	0.026 (0.321)	−0.106 *** (0.000)	−0.017 (0.509)	−0.173 *** (0.000)	−0.072 *** (0.006)	−0.021 (0.418)	−0.631 *** (0.000)	1.000		

This table reports the Pearson correlation test result on 1.151 observations. This test was conducted after winsorizing the data for 1 and 99 percent. *p*-values in parentheses * *p* < 0.1, ** *p* < 0.05, *** *p* < 0.01.

4.2. Main Analysis

Table 8 shows the OLS regression results for MVAIC and MVAIC moderating by PCON with the firm performance. The MVAIC variable in line with ROA is 0.107 (*t* = 2.31) and is significant at the 5% level. The MVAIC variable's coefficient value to ROE is 0.165 (*t* = 2.96) and is significant at the 1% level. In addition, the MVAIC*PCON variable in line with ROA is 0.481 with (*t* = 2.08) and is significant at the 5% level. Furthermore, the coefficient value of the MVAICxPCON variable still in line with ROE is 0.277 (*t* = 2.57) and is significant at the 5% level. These results for several regressions indicate that intellectual capital has a positive relationship with firm performance on the level of significance as well as above.

Furthermore, the moderating effect of political connection also strengthens the relationship between intellectual capital and firm performance. This gives our hypothesis some clear evidence that the firm with intellectual capital superiority will be impacted on balancing the needs of stakeholders against the firm performance (Xu and Li 2022; Rahman and Liu 2023; Wong and Hooy 2018). Meanwhile, it is not a clear explanation of the second hypothesis. These relationships are consistent while the firm has a political connection with several board members occupying the board posts. Our findings are in line with Ibarra-Cisneros et al. (2023) and Ardianto et al. (2024) that the political connection will produce several benefits for the corporate outcomes and indicate that when the firm has more political connections in the boardroom, then the decision-making will better capture the differences of interest from several stakeholders and implicate firm value.

Table 8. The result for MVAIC, PCON, and Firm Performance.

	VIF	(1) ROA	(2) ROA	(3) ROE	(4) ROE
MVAIC	1.24	0.107 ** (2.31)	0.591 *** (2.71)	0.093 * (1.76)	0.165 *** (2.96)
PCON	0.89	0.411 * (2.00)	0.583 (1.06)	0.975 ** (2.08)	0.011 (0.10)
MVAICxPCON	1.32		0.481 ** (2.08)		0.277 ** (2.57)
BOARDSIZE	1.02	−0.218 ** (−2.24)	−0.774 * (−1.84)	0.088 ** (2.36)	0.090 ** (2.22)
LNSUBS	1.78	0.110 *** (3.00)	0.320 ** (1.98)	0.015 (0.53)	0.020 (0.70)
FIRMSIZE	0.95	0.018 (0.66)	−0.036 (−0.27)	−0.238 (−0.76)	−0.697 ** (−2.02)
LOSS	1.27	−0.128 (−0.44)	1.302 (1.01)	−0.022 (−0.33)	−0.060 (−0.78)
LEVERAGE	1.65	0.040 (0.60)	0.409 (1.36)	0.046 ** (2.31)	0.037 * (1.78)
LIQUIDITY	0.72	0.037 ** (2.03)	0.164 * (1.92)	−0.032* (−1.69)	−0.000 (−0.01)
FIRMAGE	1.57	−0.047 ** (−2.51)	−0.348 *** (−4.01)	24.953 *** (66.03)	18.890 *** (47.51)
CONSTANT		21.766 *** (61.44)	29.799 *** (19.05)	22.836 *** (63.74)	28.682 *** (21.15)
Year FE		Included	Included	Included	Included
Industry FE		Included	Included	Included	Included
R ²		0.068	0.071	0.089	0.097
N		1151	1151	1151	1151

t statistics in parentheses * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

4.3. Discussion

Intellectual capital, political connections, and firm performance are three elements that are often linked in various previous studies. Intellectual capital, which includes the knowledge, skills, and experience possessed by individuals within a company, is considered a crucial asset for creating value and competitive advantage. Several studies show that high intellectual capital can increase a company's innovation capabilities and operational efficiency, and ultimately improve company performance (Saeed et al. 2016; Wong and Hooy 2018; Xu and Wang 2018). Optimal use of intellectual capital can help companies in developing new products and services, as well as in better decision-making processes.

On the other hand, political connections refer to the relationship a company has with the government or political officials. Previous studies show that political connections can provide significant benefits for companies, such as easier access to resources, business opportunities, and information that is not available to the public (Harymawan et al. 2019; Kweh et al. 2021; Wang et al. 2019). Companies with strong political ties often receive better treatment from regulators, including easier access to licenses and government contracts. Political connections can also protect companies from unfair competition and provide stability in a dynamic business environment.

When intellectual capital and political connections are combined, the two can complement each other and strengthen the positive impact on company performance (Eissa and Eliwa 2021; Rahman and Liu 2023; Shahzad et al. 2021). Companies with high intellectual capital can take advantage of political connections to access new markets and secure government support for innovative projects. On the other hand, political connections can expand the reach and effectiveness of intellectual capital by opening more opportunities for research and development as well as collaboration with government institutions. This synergy between intellectual capital and political connections can encourage higher growth and profitability for the company. By managing intellectual capital effectively, companies

can increase operational efficiency, speed up the innovation process, improve product or service quality, and strengthen their competitive position in the market. Apart from that, intellectual capital can also help in making better decisions, increase customer satisfaction, and reduce business risks. All of these factors ultimately contribute to improving the company's financial performance and sustainability in the long term.

5. Robustness Test

There is a possibility that the variable MVAIC and PCON can be endogenous issues, where there is a possibility that there is a correlation between the MVAIC treatment variable (PCON) and the observable variable. To overcome the endogeneity problem of the correlation between the independent variables and other variables in the observations in this study, in additional analysis, the Coarsened Exact Matching (CEM) approach will be carried out. For this reason, this study will use CEM as an additional sensitivity analysis. In this study, the covariates were arranged into the same five strata, and using four covariates were included in the CEM model.

Table 9 Panel A shows a summary of CEM matching for firm performance with the proxy being ROA. In this test sample, there are 145 of 150 PCON observations, which are then matched with 55 out of 60 non PCON on the firm, so that the total sample is 200 observations. Whereas Panel B shows a summary of CEM matching for testing firm performance with the proxy as ROE, and in this test sample there are 143 out of 150 observations of CEOs who own shares of the company, which are then matched with 57 out of 60 observations of CEOs who do not own company shares so that a total sample is a number of 200 observations.

Table 9. Coarsened Exact Matching Summary.

Panel A: Matched CEM Sample—ROA		
	Companies Do Not Have Political Connection = 0	Companies Have Political Connection = 1
All	60	150
Matched	55	145
Unmatched	5	5
Panel B: Matched CEM Sample—ROE		
	Companies Do Not Have Political Connection = 0	Companies Have Political Connection = 1
All	60	150
Matched	57	143
Unmatched	3	7

Table 10 is the result of CEM regression on intellectual capital with the firm performance where the moderating variable is political connection. This table show that the relationship between intellectual capital and firm performance (ROA and ROE) has a significant positive relationship with the independent variable MVAIC and has a significant level variation of 5% (ROA) and 1% (ROA) if this regression combines with the moderating variable PCON. Furthermore, ROE has a positive and significant relationship, at 5% on both PCON moderating and non-PCON moderating variables; therefore, these results still support H1 and indicate that this model is free from endogeneity problems. In addition, this relationship also has a significant positive relationship with MVAIC if moderated by PCON on ROA and ROE at a significance of 5% and 1%, respectively. From our results, MVAIC still supports H2 and the model is also free from endogeneity issues.

Table 10. CEM Between Intellectual Capital and Firm Performance: Moderating Role by Political Connection.

	ROA	ROA	ROE	ROE
MVAIC	0.116 ** (2.41)	0.594 *** (2.62)	0.132 ** (2.57)	0.125 ** (2.24)
PCON	0.111 (1.14)	0.432 ** (2.42)	0.077 (0.85)	0.411 * (2.00)
MVAIC×PCON		0.541 ** (2.21)		0.207 *** (3.57)
BOARDSIZE	−0.192 * (−1.82)	−0.790 * (−1.72)	−0.265 ** (−2.45)	−0.245 ** (−2.08)
LNSUBS	0.112 *** (2.97)	0.339 ** (2.04)	0.099 ** (2.56)	0.098 ** (2.33)
FIRMSIZE	0.002 (0.06)	−0.137 (−0.92)	0.003 (0.10)	0.014 (0.41)
LOSS	−0.121 (−0.36)	0.642 (0.43)	−0.274 (−0.76)	−0.639 (−1.63)
LEVERAGE	0.040 (0.58)	0.331 (1.04)	−0.013 (−0.17)	−0.030 (−0.37)
LIQUIDITY	0.037 * (1.85)	0.179 * (1.92)	0.042 * (1.92)	0.032 (1.38)
FIRMAGE	−0.047 ** (−2.38)	−0.347 *** (−3.80)	−0.040 * (−1.96)	−0.010 (−0.47)
CONSTANT	21.760 *** (58.65)	29.896 *** (18.22)	25.073 *** (63.67)	19.067 *** (45.73)
Year FE	Included	Included	Included	Included
Industry FE	Included	Included	Included	Included
R-Squared	0.063	0.069	0.064	0.063
Adj-R Squared	0.047	0.053	0.048	0.047
N	200	200	200	200

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

6. Conclusions and Research Limitations

Based on the primary investigation presented in the preceding chapter, it can be concluded that intellectual capital significantly influences firm performance. The findings indicate that an increase in intellectual capital correlates with improved firm performance. These results align with previous studies conducted by [Berzkalne and Zelgalve \(2014\)](#), [Chen et al. \(2005\)](#), [Meditinos et al. \(2011\)](#). Furthermore, the moderating effect of political association positively impacts firm performance when moderated by intellectual capital. This suggests that political association contributes to the relationship between intellectual capital and firm performance by providing external resources that enhance internal capabilities, thereby mitigating potential downsides and improving overall firm performance.

This study contributes to the advancement of bookkeeping and financial analysis by examining the relationship between intellectual capital and its impact on firm performance. Specifically, this study adds to the understanding of intangible resources that can influence firm performance. The results align largely with those of [Chen et al. \(2005\)](#), who examined Taiwanese firms and found a small but positive impact of intellectual capital on performance. Similarly, both [Furer and Mitchell Williams \(2003\)](#) and [Hang Chan \(2009\)](#) concluded that firms and investors place greater importance on physical and financial capital compared with intellectual capital (human and structural capital) in South Africa and Hong Kong, respectively.

However, it is acknowledged that this study is not without limitations. Notably, this research does not encompass the entire manufacturing industry, thereby restricting the scope of the findings. Future research could benefit from incorporating a broader range of industries to provide a more comprehensive analysis. Additionally, the variables used to assess the influence on intellectual capital do not account for shareholder factors. It is

recommended that subsequent long-term studies address these limitations to enhance the robustness and breadth of future research.

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References

- Agustia, Dian, Iman Harymawan, and John Nowland. 2022. Join Board Management Meetings and Firm Performance. *Australasian Accounting Business and Finance Journal* 16: 119–33. [\[CrossRef\]](#)
- Apostu, Simona-Andreea, and Iza Gigauri. 2023. Mapping the Link between Human Resource Management and Sustainability: The Pathway to Sustainable Competitiveness. In *Reshaping Performance Management for Sustainable Development*. Bingley: Emerald Publishing Limited, pp. 31–59. [\[CrossRef\]](#)
- Ardianto, Ardianto, Nadia Anridho, Suham Cahyono, Abu Hanifah Md Noman Alam, and Iman Harymawan. 2024. The Role of Risk Management Committee on the Relationship between Corporate Carbon Emission Disclosure and Capital Structure. *Corporate Social Responsibility and Environmental Management* 31: 1–32. [\[CrossRef\]](#)
- Barney, Jay. 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management* 17: 99–120. [\[CrossRef\]](#)
- Bayraktaroglu, Ayse Elvan, Fethi Calisir, and Murat Baskak. 2019. Intellectual capital and firm performance: An extended VAIC model. *Journal of Intellectual Capital* 20: 406–25. [\[CrossRef\]](#)
- Berzkalne, Irina, and Elvira Zelgalve. 2014. Intellectual Capital and Company Value. *Procedia—Social and Behavioral Sciences* 110: 887–96. [\[CrossRef\]](#)
- Brandt, Loren, and Hongbin Li. 2003. Bank discrimination in transition economies: Ideology, information, or incentives? *Journal of Comparative Economics* 31: 387–413. [\[CrossRef\]](#)
- Cahyono, Suham, Tjiptohadi Sawarjuwono, and Wendi Wendi. 2023. Masa Jabatan CEO, Keragaman Dewan Direktur, dan Pengungkapan CSR: Eksplorasi Studi Kepustakaan Indonesia. *Jurnal Akuntansi El-Muhasaba* 14: 54–68. [\[CrossRef\]](#)
- Chaney, Paul K., Mara Faccio, and David Parsley. 2011. The quality of accounting information in politically connected firms. *Journal of Accounting and Economics* 51: 58–76. [\[CrossRef\]](#)
- Chen, Ming-Chin, Shu-Ju Cheng, and Yuhchang Hwang. 2005. An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *Journal of Intellectual Capital* 6: 159–76. [\[CrossRef\]](#)
- Chu, Samuel Kai Wah, Kin Hang Chan, Ka Yin Yu, Hing Tai Ng, and Wai Kwan Wong. 2011. An empirical study of the impact of intellectual capital on business performance. *Journal of Information and Knowledge Management* 10: 11–21. [\[CrossRef\]](#)
- Claessens, Stijn, M. Ayhan Kose, and Marco E. Terrones. 2012. How do business and financial cycles interact? *Journal of International Economics* 87: 178–90. [\[CrossRef\]](#)
- Clarke, Martin, Dyna Seng, and Rosalind H. Whiting. 2011. Intellectual capital and firm performance in Australia. *Journal of Intellectual Capital* 12: 505–30. [\[CrossRef\]](#)
- Cohen, Sandra, Vassilios-Christos Naoum, and Orestes Vlismas. 2014. Intellectual capital, strategy and financial crisis from a SMEs perspective. *Journal of Intellectual Capital* 15: 294–315. [\[CrossRef\]](#)
- Dženopoljac, Vladimir, Stevo Janošević, and Nick Bontis. 2016. Intellectual capital and financial performance in the Serbian ICT industry. *Journal of Intellectual Capital* 17: 373–96. [\[CrossRef\]](#)
- Eissa, Aref M., and Yasser Eliwa. 2021. The effect of political connections on firm performance: Evidence from Egypt. *Asian Review of Accounting* 29: 362–82. [\[CrossRef\]](#)
- Fan, Joseph P. H., Tak Jun Wong, and Tianyu Zhang. 2007. Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics* 84: 330–57. [\[CrossRef\]](#)
- Firer, Steven, and S. Mitchell Williams. 2003. Intellectual capital and traditional measures of corporate performance. *Journal of Intellectual Capital* 4: 348–60. [\[CrossRef\]](#)
- Foster, Bob, Jhonson Saputra, Muhammad Djohry Johansyah, and Zaid Muhammad. 2022. Do intellectual capital and environmental uncertainty affect firm performance? A mediating role of value chain. *Uncertain Supply Chain Management* 10: 1055–64. [\[CrossRef\]](#)
- Hang Chan, Kin. 2009. Impact of intellectual capital on organisational performance: An empirical study of companies in the Hang Seng Index (Part 1). *The Learning Organization* 16: 4–21. [\[CrossRef\]](#)

- Harymawan, Iman, and John Nowland. 2016. Political connections and earnings quality: How do connected firms respond to changes in political stability and government effectiveness? *International Journal of Accounting and Information Management* 24: 339–56. [CrossRef]
- Harymawan, Iman, Mohammad Nasih, Muhammad Madyan, and Diarany Suchayati. 2019. The role of political connections on family firms' performance: Evidence from Indonesia. *International Journal of Financial Studies* 7: 55. [CrossRef]
- Hsu, Li-Chang, and Chao-Hung Wang. 2012. Clarifying the Effect of Intellectual Capital on Performance: The Mediating Role of Dynamic Capability. *British Journal of Management* 23: 179–205. [CrossRef]
- Ibarra-Cisneros, Manuel Alejandro, Juan Benito Vela Reyna, and Felipe Hernández-Perlines. 2023. Interaction between Knowledge Management, Intellectual Capital and Innovation in Higher Education Institutions. *Education and Information Technologies* 28: 9685–708. [CrossRef]
- Junus, Onong, Mohammad Nasih, Muslich Anshori, and Iman Harymawan. 2022. Politically connected independent board and firm performance. *Cogent Economics and Finance* 10: 2069638. [CrossRef]
- Kamukama, Nixon, Augustine Ahiauzu, and Joseph M. Ntayi. 2010. Intellectual capital and performance: Testing interaction effects. *Journal of Intellectual Capital* 11: 554–74. [CrossRef]
- Keter, Charles Kiprono Sang, Josephat Yegon Cheboi, and David Kosgei. 2024. Financial Performance, Intellectual Capital Disclosure and Firm Value: The Winning Edge. *Cogent Business and Management* 11: 2302468. [CrossRef]
- Kweh, Qian Long, Wen-Min Lu, Irene Wei Kiong Ting, and Hanh Thi My Le. 2021. The cubic S-curve relationship between board independence and intellectual capital efficiency: Does firm size matter? *Journal of Intellectual Capital* 23: 1025–51. [CrossRef]
- La Rocca, Maurizio, Francesco Fasano, Francesco Cappa, and Neha Neha. 2022. The relationship between political connections and firm performance: An empirical analysis in Europe. *Finance Research Letters* 49: 103157. [CrossRef]
- Maditinos, Dimitrios, Dimitrios Chatzoudes, Charalampos Tsairidis, and Georgios Theriou. 2011. The Impact of Intellectual Capital on Firms' Market Value and Financial Performance. *Journal of Intellectual Capital* 12: 132–51. [CrossRef]
- Marr, Bernard, Dina Gray, and Andy Neely. 2003. Why do firms measure their intellectual capital? *Journal of Intellectual Capital* 4: 441–64. [CrossRef]
- Mohapatra, Swati, and Jamini Kanta Pattanayak. 2024. Unraveling the Dynamics of Intellectual Capital, Firm Performance, and the Influential Moderators—BIG4 Auditors and Group Affiliation. *International Journal of Financial Studies* 12: 29. [CrossRef]
- Molodchik, Mariya, Elena Shakina, and Anna Bykova. 2012. Intellectual capital transformation evaluating model. *Journal of Intellectual Capital* 13: 444–61. [CrossRef]
- Nadeem, Muhammad, Christopher Gan, and Cuong Nguyen. 2018. The Importance of Intellectual Capital for Firm Performance: Evidence from Australia. *Australian Accounting Review* 28: 334–44. [CrossRef]
- Nasih, Mohammad, A. S. A. Al-Cholili, Iman Harymawan, Imran Haider, and Nadia Klarita Rahayu. 2020. Political connections, overinvestment and governance mechanism in Indonesia. *Cogent Economics and Finance* 8: 1790220. [CrossRef]
- Nimtrakoon, Sirinuch. 2015. The relationship between intellectual capital, firms' market value and financial performance: Empirical evidence from the ASEAN. *Journal of Intellectual Capital* 16: 587–618. [CrossRef]
- Permatasari, Yani, Suham Cahyono, Amalia Rizki, Nurul Fitriani, and Khairul Anuar Kamarudin. 2024. Accounting Background and Cross-Membership Effects on Investment Efficiency in Islamic Banks: A Study of Islamic Supervisory Board Members. *Journal of Financial Reporting and Accounting*. [CrossRef]
- Pew Tan, Hong, David Plowman, and Phil Hancock. 2007. Intellectual capital and financial returns of companies. *Journal of Intellectual Capital* 8: 76–95. [CrossRef]
- Pitelli Britto, Daniel, Eliane Monetti, and Joao da Rocha Lima, Jr. 2014. Intellectual capital in tangible intensive firms: The case of Brazilian real estate companies. *Journal of Intellectual Capital* 15: 333–48. [CrossRef]
- Pulic, Ante. 1998. *Measuring the Performance of Intellectual Potential in Knowledge Economy*. Hamilton: McMaster University.
- Rahman, Md Jahidur, and Hongyi Liu. 2023. Intellectual capital and firm performance: The moderating effect of auditor characteristics. *Asian Review of Accounting* 31: 522–58. [CrossRef]
- Riahi-Belkaoui, A. 2003. Intellectual capital and firm performance of US multinational firms: A study of the resource-based and stakeholder views. *Journal of Intellectual Capital* 4: 215–26. [CrossRef]
- Saeed, Abubakr, Yacine Belghitar, and Ephraim Clark. 2016. Do Political Connections Affect Firm Performance? Evidence from a Developing Country. *Emerging Markets Finance and Trade* 52: 1876–91. [CrossRef]
- Sardo, Filipe, and Zelia Serrasqueiro. 2017. A European Empirical Study of the Relationship between Firms' Intellectual Capital, Financial Performance and Market Value. *Journal of Intellectual Capital* 34: 1–5. [CrossRef]
- Shahzad, Faisal, Asif Saeed, Ghazanfar Ali Asim, Fiza Qureshi, Ijaz Ur Rehman, and Saba Qureshi. 2021. Political connections and firm performance: Further evidence using a generalised quantile regression approach. *IIMB Management Review* 33: 205–13. [CrossRef]
- Sharabati, Abdel-Aziz Ahmad, Shawqi Naji Jawad, and Nick Bontis. 2010. Intellectual capital and business performance in the pharmaceutical sector of Jordan. *Management Decision* 48: 105–31. [CrossRef]
- Shleifer, Andrei, and Robert W. Vishny. 1997. A Survey of Corporate Governance. *The Journal of Finance* 52: 737–83. [CrossRef]
- Singla, Harish Kumar. 2020. Does VAIC affect the profitability and value of real estate and infrastructure firms in India? A panel data investigation. *Journal of Intellectual Capital* 21: 309–31. [CrossRef]
- Smriti, Neha, and Niladri Das. 2018. The impact of intellectual capital on firm performance: A study of Indian firms listed in COSPI. *Journal of Intellectual Capital* 19: 935–64. [CrossRef]

- Soeprajitno, Raden Roro Widya Ningtyas, Sri Ningsih, Iman Harymawan, Bablu Kumar Dhar, and Suham Cahyono. 2023. The School-ties Between Top Management Executive and Audit Partner: Exploring From Earnings Management in Indonesia. *SAGE Open* 13: 1–20. [[CrossRef](#)]
- Soetanto, Tessa, and Pei Fun Liem. 2019. Intellectual capital in Indonesia: Dynamic panel approach. *Journal of Asia Business Studies* 13: 240–62. [[CrossRef](#)]
- Soewarno, Noorlailie, and Bambang Tjahjadi. 2020. Measures that matter: An empirical investigation of intellectual capital and financial performance of banking firms in Indonesia. *Journal of Intellectual Capital* 21: 1085–106. [[CrossRef](#)]
- Sun, Rui, and Ganna Zou. 2021. Political connection, CEO gender, and firm performance. *Journal of Corporate Finance* 71: 101918. [[CrossRef](#)]
- Ulum, Ihyaul, Imam Ghozali, and Agus Purwanto. 2014. Intellectual Capital Performance of Indonesian Banking Sector: A Modified VAIC (M-VAIC) Perspective. *Asian Journal of Finance & Accounting* 6: 103. [[CrossRef](#)]
- Wang, Yizhong, Chengxue Yao, and Di Kang. 2019. Political connections and firm performance: Evidence from government officials' site visits. *Pacific Basin Finance Journal* 57: 101021. [[CrossRef](#)]
- Wang, Zhining, Nianxin Wang, and Huigang Liang. 2014. Knowledge Sharing, Intellectual Capital and Firm Performance. *Management Decision* 52: 230–58. [[CrossRef](#)]
- Wong, Wai-Yan, and Chee-Wooi Hooy. 2018. Do types of political connection affect firm performance differently? *Pacific Basin Finance Journal* 51: 297–317. [[CrossRef](#)]
- Xu, Jian, and Binghan Wang. 2018. Intellectual capital, financial performance and companies' sustainable growth: Evidence from the Korean manufacturing industry. *Sustainability* 10: 4651. [[CrossRef](#)]
- Xu, Jian, and Jingsuo Li. 2022. The Interrelationship between Intellectual Capital and Firm Performance: Evidence from China's Manufacturing Sector. *Journal of Intellectual Capital* 23: 313–41. [[CrossRef](#)]

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