



The impact of intellectual capital and company risk on stock returns with size as a moderator

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ABSTRACT

This study aims to investigate the interaction between Intellectual Capital and company risk in influencing stock returns, as well as how company size may moderate this relationship. By gaining a deeper understanding of these dynamics, companies are expected to make more informed decisions regarding the management of Intellectual Capital, risk management, and the optimization of stock returns. The primary objective is to assess the impact of Intellectual Capital and company risk on stock returns, and to determine whether company size strengthens or weakens the relationship between these factors and stock returns. The research employs a quantitative approach, focusing on manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange from 2021 to 2023. The sample is selected using purposive sampling, and data analysis includes Multiple Linear Regression, Correlation, and Determination tests. The data is processed using the Eviews 12 statistical tool. The findings reveal that Intellectual Capital significantly affects stock returns, while company risk does not have a significant impact. Additionally, company size enhances the influence of Intellectual Capital on stock returns, but does not moderate or weaken the effect of company risk on stock returns.

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1. INTRODUCTION

The role of Intellectual Capital (IC) is increasingly critical in facing modern business challenges, particularly in the food and beverage manufacturing industry. In this sector, where innovation speed, product differentiation, and efficient processes are vital, Intellectual Capital acts as the backbone of competitiveness. Companies must optimize their human capital, structural capital, and relational capital to adapt to rapid market shifts, regulatory requirements, and consumer behavior trends. Failure to manage IC effectively can lead to stagnation and a decline in competitiveness, as evidenced in various industry cases (Ahmed et al., 2022).

Compared to other sectors such as banking or telecommunications, the nature of company risk in the food and beverage manufacturing industry is characterized more by operational uncertainties, such as supply chain disruptions, raw material price volatility, and shifts in consumer demand. While financial risks dominate capital-intensive sectors, and technological risks are more

prominent in the IT industry, manufacturing firms in the food and beverage subsector must primarily manage risks related to quality assurance, logistics, and regulatory compliance. This comparison underlines the importance of context-specific risk management strategies when analyzing their influence on stock returns (Lehenchuk et al., 2024).

The collapse of major Japanese companies such as Sony, Panasonic, and Sharp in 2012, often referred to as "the death of samurai" (Jatimupdate.id, 2024), was highlighted in a report on August 13, 2024. This failure was attributed to these companies' inability to prioritize intellectual capital. Panasonic, a prominent player in Japan's electronics industry, was not immune to this issue. The decline of the Japanese electronics sector was driven by errors in cultural harmony, seniority systems, and outdated practices. These companies struggled because they could not keep pace with technological advancements, largely due to weak intellectual capital and a lack of investment in it. Businesses lacking strong intellectual capital face challenges competing with more innovative and adaptable firms. Without the ability to adapt to technological progress, companies risk losing customers and market share, ultimately leading to their downfall, (Secundo et al., 2020).

In today's era of globalization, manufacturing companies face intense competition and must secure a sustainable competitive edge. One key strategy to achieve this advantage is by enhancing intellectual capital and effectively managing corporate risk, (Setyawati & Irwanto, 2020). Intellectual Capital (IC) is widely recognized as a key driver of competitive advantage and corporate value. It encompasses intangible assets such as knowledge, employee skills, innovation, and brand reputation. These assets are vital in enhancing productivity, efficiency, and a company's ability to adapt to market changes. However, effectively measuring and managing Intellectual Capital remains a challenge for many manufacturing companies, primarily due to its complex and intangible nature, (Ozkan et al., 2017).

Intellectual Capital represents a company's wealth and the driving force behind its value, encompassing knowledge, experience, skills, reputation, and technological capabilities. It has garnered significant attention across various fields, including management, information technology, sociology, and accounting, (de Villiers & Sharma, 2020). Intellectual capital can be divided into three main components: first, capital employed, which refers to the financial resources used by the company to fund its operations; second, human capital, which involves efforts to develop and manage human resources; and third, structural capital, which encompasses the company's ability to fulfill needs in routine business processes and support employee efforts to achieve optimal performance, (Nimtrakoon, 2015). Intellectual Capital (IC) is an intangible asset that encompasses knowledge, skills, innovation, and the company's relationships with its stakeholders. In today's highly competitive business environment, Intellectual Capital plays a crucial role in generating added value for the company. In the manufacturing industry, particularly in the fast-moving food and beverage sub-sector, success hinges on product innovation, process efficiency, and effective consumer relationship management, (Alvino et al., 2021).

The impact of Intellectual Capital on stock returns is mediated by improvements in operational performance, product innovation, and competitiveness, which ultimately lead to increased profitability. Companies with robust Intellectual Capital are generally better equipped to navigate market dynamics, potentially resulting in higher stock returns, (Xu & Li, 2019). The presence of Intellectual Capital enables a company to generate added value, enhancing its performance. As the company's performance improves, the market tends to respond by increasing its value, (Abualoush et al., 2018). A study by (Berliana et al., 2024), provides strong empirical evidence that Intellectual Capital has a significant positive impact on stock returns. This finding is crucial for both investors and company managers. For investors, Intellectual Capital should be an important consideration when assessing a company's investment potential. For managers, enhancing IC can be a valuable strategy to boost company value and stock returns.

Effective management of Intellectual Capital in food and beverage manufacturing companies can offer a competitive edge. Strong Intellectual Capital has the potential to enhance market perceptions of a company's ability to create value, which is often reflected in higher stock returns.

Therefore, investing in the development of Intellectual Capital not only boosts internal performance but also increases the company's appeal to investors, ultimately benefiting stock prices. Based on this, the author proposes the following hypothesis: H₁: Intellectual Capital significantly influences Stock Return.

Corporate risk refers to the uncertainty that can adversely affect the achievement of a company's objectives. This uncertainty may arise from various internal and external factors., (Putri et al., 2020). Corporate risk refers to the variability in a company's earnings, which can be quantified using the standard deviation formula. Essentially, corporate risk represents the deviation in earnings—either falling short of expectations (*downside risk*) or exceeding expectations (*potential upside*). A larger standard deviation in earnings indicates higher corporate risk. The level of risk also reflects the executive's character, revealing whether they are risk-takers or risk-averse., (Kouloukoui et al., 2019). Corporate risk refers to the potential for events that could negatively affect the company's value and, consequently, its stock price. This risk can stem from various factors, such as: Business risk, which includes competition, economic conditions, regulatory changes, and natural disasters. Financial risk, which arises from high debt levels, poor capital structure, and limited access to capital. Operational risk, which involves supply chain disruptions, product quality concerns, and data security breaches, (Wu et al., 2021).

Corporate risk and stock returns are crucial concepts in stock investment. Understanding their relationship can assist investors in making more informed choices. Typically, investors expect higher returns as compensation for taking on greater risk. In general, there is a positive correlation between corporate risk and stock returns, meaning that as company risk increases, investors expect higher stock returns. This is because investors are willing to take on more risk when investing in companies with higher risk levels, (Shrestha & Lamichhane, 2022).

Corporate risk is a key factor that influences stock returns. In the context of the capital market, investors view risk as an indicator of the uncertainty surrounding the return on their investments, (Sun et al., 2020). A study by (Palisungan, 2018) demonstrates that business risk has a positive and significant impact on stock returns. A high level of business risk indicates that the company has been successful in generating profits from its capital. Profit is crucial information for investors when making investment decisions. Financial theories like the Capital Asset Pricing Model (CAPM) suggest that higher risk is generally balanced by the potential for higher returns. However, in practice, excessive risk can diminish investor confidence, leading to a negative effect on stock returns, (Lee et al., 2021).

This study seeks to investigate the impact of corporate risk on stock returns in manufacturing companies within the food and beverage subsector. The findings are anticipated to offer valuable insights into the connection between effective risk management and a company's ability to generate value for shareholders. Therefore, proper risk management not only ensures the company's financial stability but also enhances its appeal to investors, ultimately boosting stock returns. Based on this, the author proposes the following hypothesis: H₂: Corporate Risk significantly influences Stock Return.

Firm size is a crucial variable in financial and management research, as it reflects the company's capacity, resources, and economic strength, (Sánchez et al., 2020). Firm size is considered significant because larger companies typically have greater selling power. The size of a company also affects the extent of mandatory financial statement disclosures. According to the political cost hypothesis, larger companies face higher political costs due to their prominence in the media and consumer attention within the capital market. To mitigate these political costs, such companies are more likely to provide more comprehensive financial statement disclosures, (Munjal et al., 2019). Larger companies typically face greater public demand for information compared to smaller companies. As a result, they are more likely to provide more detailed and comprehensive disclosures than their smaller counterparts, (Rinanda, 2022). Firm size is a key factor that can influence the relationship between intellectual capital and stock returns. Large and small companies have distinct characteristics that can affect how they leverage intellectual capital and generate stock returns.

Investors should take company size into account when assessing the impact of intellectual capital on potential stock returns, (Mubeen et al., 2021).

The larger a company's assets, the greater its ability to fund activities that enhance human resources, such as training, development, research, and innovation, which in turn boost intellectual capital. As a result, companies with larger assets are better positioned to invest in human resource improvement, ultimately strengthening their intellectual capital. When intellectual capital is effectively implemented and disclosed, it can positively influence shareholder confidence, potentially leading to higher stock prices. In other words, the implementation and disclosure of intellectual capital can increase investor confidence in the company's profit-generating potential, driving stock prices upward, (Mahmood et al., 2019). A study by (Slamet, 2021) indicates that Intellectual Capital, measured using the Value Added Intellectual Coefficient (VAIC) variable, has a significant positive impact on stock returns. Additionally, company size is found to moderate the relationship between Intellectual Capital and stock returns.

Company size, as a moderator in the relationship between company risk and stock returns, can assist investors in making more informed investment decisions. Investors can factor in company size along with other risk elements when assessing a company's potential stock returns, (Wang et al., 2018). Investors can incorporate company size as a key factor in their portfolio allocation strategy. For instance, those seeking growth may prioritize smaller companies, while those looking for stability might favor larger companies. In the context of risk and stock returns, company size is crucial for investors, analysts, and company management. By taking company size into account, market participants can make more informed investment choices and manage risk more effectively, (Munjal et al., 2019). Small companies typically offer higher stock returns but come with higher risks. On the other hand, large companies tend to have more stable and diversified stock returns, although they may offer lower growth potential. Investors must consider a range of factors, including company size, risk profile, growth potential, and industry conditions, before making investment decisions.

A study by (Windasari & Purwanto, 2020) reveals that company size can moderate the relationship between market risk and stock returns. The presence of company size as a moderating variable strengthens the link between market risk and stock returns. A well-performing company, characterized by stable asset ownership, can positively influence the level of stock returns received by shareholders.

This study aims to examine the impact of Intellectual Capital and Company Risk on stock returns, and whether firm size enhances this relationship. The findings are expected to offer insights for companies on how to better manage Intellectual Capital, particularly in larger firms, and provide guidance for investors in evaluating potential investment returns based on Intellectual Capital and company size. Therefore, effective management of Intellectual Capital, supported by a sufficient company scale, can be crucial in improving stock market performance. In addition, sound risk management, especially in large companies, can lead to more stable and attractive stock returns for investors. Based on this, the author proposes the following hypotheses: H3: Firm size moderates the impact of Intellectual Capital on Stock Returns. H4: Firm size moderates the impact of Company Risk on Stock Returns.

2. RESEARCH METHOD

This study employs a quantitative approach, utilizing secondary data sourced from the official Indonesia Stock Exchange website, www.idx.co.id, in the form of financial reports from food and beverage manufacturing companies listed on the IDX for the period 2021-2023. The selection of the 2021-2023 period aims to capture post-pandemic economic recovery and recent industrial dynamics. This period reflects a phase of business adaptation, particularly in the food and beverage manufacturing sector, which experienced supply chain disruptions and shifts in consumer behavior. Therefore, this period is considered relevant in examining the role of intellectual capital and corporate risk in driving stock performance. The study includes two independent variables: X₁

(Intellectual Capital) and X₂ (Company Risk), one dependent variable: Y (Stock Return), and one moderating variable: M (Size). The indicators for each variable are as follows:

1. Intellectual Capital (X₁), The indicator for measuring the Intellectual Capital variable is based on a formula from (Wahyuni, 2022), using the Ratio Scale for measurement. The formula applied is as follows:

$$VAIC^{TM} = VACA + VAHU + STVA$$

2. Company Risk (X₂), The Company Risk variable is measured using the Debt to Equity Ratio (DER), which is calculated by dividing Total Liabilities by Total Equity. The scale applied is the Ratio Scale. The formula for DER is as follows: (Fazrin et al., 2019):

$$DER = \frac{\text{Total liabilitas}}{\text{Total aset}}$$

3. Stock Return (Y), The indicator for measuring the Stock Return variable is based on a formula from (Setyawati & Irwanto, 2020), with the ratio scale used for measurement. The formula applied is as follows:

$$\frac{(Pt - Pt - 1)}{Pt - 1}$$

4. Size (M), The indicator for measuring the moderating variable in this study is based on a formula from (Subaki & Sonjaya, 2021), using the Ratio Scale for measurement. In this study, the formula applied is as follows:

$$\text{Company Size} = \ln(\text{Total Assets})$$

The population in this study consists of 42 food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange during 2021–2023. The sample was selected using the purposive sampling method, with criteria focusing on the completeness and consistency of data during the observation period. As a result, 21 companies were selected. Purposive sampling is considered appropriate for this study, as it ensures that only companies with complete and comparable financial information are included. While it may not represent the entire population, this method enhances data quality and relevance, particularly for analytical models involving multiple variables such as Intellectual Capital, Risk, and Size. Data analysis techniques were conducted quantitatively using: (1) Multiple Linear Regression Analysis; (2) Multiple Correlation; and (3) the Determination Test. For data processing, this study uses EViews 12 as the statistical tool. The conceptual framework is outlined as follows:

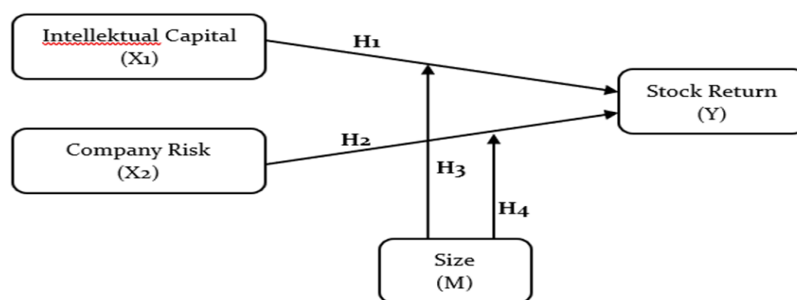


Figure 1. Framework of Thinking

3. RESULTS AND DISCUSSIONS

Results

Multiple Linear Regression Analysis

The statistical analysis conducted in this study involves multiple linear regression, utilizing panel data to examine the impact of intellectual capital and company risk on stock returns in food and beverage companies listed on the Indonesian Stock Exchange from 2021 to 2023. The results of the multiple regression analysis, performed using Eviews 12 software, are as follows:

Dependent Variable: SR
 Method: Least Squares
 Date: 09/13/24 Time: 21:15
 Sample: 1 63
 Included observations: 63

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.028098	0.089327	0.314551	0.7542
IC	0.189538	0.082182	2.306311	0.0247
RP	-0.193234	0.985959	-0.195986	0.8453
IC_SIZE	-0.007616	0.003427	-2.221938	0.0302
RP_SIZE	0.005570	0.036571	0.152318	0.8795
R-squared	0.182526	Mean dependent var		-0.012102
Adjusted R-squared	0.126148	S.D. dependent var		0.357941
S.E. of regression	0.334604	Akaike info criterion		0.724299
Sum squared resid	6.493659	Schwarz criterion		0.894389
Log likelihood	-17.81541	Hannan-Quinn criter.		0.791196
F-statistic	3.237565	Durbin-Watson stat		1.464831
Prob(F-statistic)	0.018223			

Figure 2. Multiple linear regression analysis

Based on Figure 2, the Multiple Linear Analysis equation in this research is:

$$SR = 0,028 + 0,189 IC - 0,193 RP - 0,007 IC*UP + 0,005 RP*UP + e$$

Based on this equation, the following interpretations can be made: a) The constant value is 0.028098, indicating a positive relationship between the independent and dependent variables. This suggests that if all independent variables, such as Intellectual Capital (X_1) and Company Risk (X_2), are at zero percent or unchanged, the stock return would be 0.028098, or approximately 2.80%; b) The regression coefficient for Intellectual Capital is 0.189538, indicating a positive effect on stock returns. An increase in Intellectual Capital leads to a higher stock return, meaning that higher intellectual capital correlates with higher stock return values; c) The regression coefficient for Company Risk is -0.193234, showing a negative relationship with stock returns. This implies that as company risk increases, the expected stock return decreases. Companies with higher risk may need to consider strategies such as diversification to mitigate risk and attract investors; d) The regression coefficient for Intellectual Capital moderated by Company Size is -0.007616, suggesting a slight negative influence, similar to the effect of company risk. Company size has a minimal impact in weakening the relationship between intellectual capital and stock returns; e) The regression coefficient for Company Risk moderated by Company Size is 0.05570, indicating a positive relationship. This means that as company size increases, the effect of company risk on stock returns also tends to increase, although the increase is relatively small.

Correlation Test

Figure 2 presents the R-squared value, also known as the coefficient of determination. The R-squared value is 0.182. To calculate the correlation,

$$R = \sqrt{\text{squared}}$$

$$R = \sqrt{0,182}$$

$$R = 0,426$$

The results of the correlation test indicated a value of 0.426, suggesting a moderate relationship. This means that the variables of Intellectual Capital and Company Risk have a moderate correlation with Stock Returns in the Food and Beverage Sub-Sector companies listed on the IDX during the 2021-2023 period.

Coefficient of Determination Test

According to the results in Table 1, the R-squared value is 0.182 or 18.2%. This indicates that the independent variables, Intellectual Capital and Company Risk, explain 18.2% of the variation in the dependent variable, Stock Return, while the remaining 81.8% is attributed to other factors not included in the study.

Discussions

H₁: Intellectual Capital has a Positive and Significant Effect on Stock Return

The results of the study using Eviews 12 show that the Intellectual Capital variable (X_1) has a significance level of 0.0247, which is less than 0.05 ($0.0247 < 0.05$). Therefore, it can be concluded that Intellectual Capital significantly influences Stock Return in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. This means that **H₁ is accepted**.

(Setyawati & Irwanto, 2020) Intellectual capital represents a company's assets that drive the creation of value, encompassing knowledge, experience, skills, reputation, and technological expertise. (Wahyuni, 2022) A company's optimal intellectual capital leads to maximum value creation. The more effectively a company utilizes its intellectual capital, the greater the value it generates. A high company value indicates strong growth, and efficient management of intellectual capital enhances this value. As a result, a higher company value boosts stock prices, which in turn increases the returns received by shareholders. The findings of this study align with the research by (Berliana et al., 2024), which provides compelling empirical evidence that intellectual capital has a significant positive impact on stock returns.

H₂: Company Risk has no effect on Stock Return

Based on the results of the study using EViews 12, the company risk variable (X_2) has a significance level of 0.8453, which is greater than 0.05 ($0.8453 > 0.05$). Therefore, it can be concluded that company risk does not have a significant effect on stock returns in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. This means that **H₂ is rejected**.

(Abdillah & Nurhasanah, 2020) Company risk reflects the decisions made by company leaders, indicating whether they have a risk-taking or risk-averse character. A higher level of company risk suggests that the executives are more inclined to take risks, while a lower level of risk indicates a tendency toward being risk-averse.

The findings of this study are consistent with the research by (Palisungan, 2018), which indicates that company risk has a negative and insignificant impact on stock returns.

H₃: Size Moderates the Effect of Intellectual Capital on Stock Return

Based on the study results using Eviews 12, the company size variable moderates the relationship between Intellectual Capital and Stock Return with a significance level of 0.0302, which is less than 0.05 ($0.0302 < 0.05$). Therefore, it can be concluded that Company Size significantly moderates the effect of Intellectual Capital on Stock Return in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. This means **H₃ is accepted**.

(Rinanda, 2022) Company size reflects the scale of the organization, with larger companies typically facing higher public demand for information compared to smaller ones. As a result, larger companies are more likely to be transparent in disclosing information in their financial reports. A company's performance is optimized when it possesses a competitive advantage, which enables it to create value. Intellectual capital plays a key role in this process, as it encompasses human resources, knowledge, and technology within the company, all of which help the company compete effectively in the stock market, (Putri, 2021). The findings of this study are consistent with the research by (Fitria et al., 2024), which indicates that company size can moderate the relationship between intellectual capital and stock returns.

H4: Size does not moderate the effect of Company Risk on Stock Return

Based on the results of the study using Eviews 12, the Company Size variable does not moderate the relationship between Company Risk and Stock Return, with a significance level of 0.8795, which is greater than 0.05 ($0.8795 > 0.05$). Therefore, it can be concluded that Company Size does not have a significant moderating effect on the relationship between Company Risk and Stock Return in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. Hence, **H4 is rejected**.

Company size refers to a scale or measure that categorizes companies as large or small based on factors such as total assets, stock value, or log size. The size of a company is believed to impact its overall value, as larger companies are generally more capable of securing funding from both internal and external sources, (Florentia & Ekadjaja, 2022). The findings of this study align with the research by (Windasari & Purwanto, 2020), which indicates that company size does not moderate the relationship between company risk and stock returns.

4. CONCLUSION

This study concludes that Intellectual Capital has a positive and significant impact on Stock Return. Companies with high intellectual capital tend to be more innovative and capable of creating value-added products and services. This innovation increases the company's competitive advantage, which in turn enhances profitability and ultimately leads to higher stock prices. Company management is encouraged to continuously invest in and optimize intellectual capital, particularly in areas such as employee development, knowledge management, and process innovation. By doing so, companies can enhance operational efficiency and build long-term value, which is attractive to investors and beneficial for stock performance. On the other hand, Company Risk does not have a significant effect on Stock Return. This result suggests that broader macroeconomic conditions, such as interest rate fluctuations, inflation, and global market trends, have a greater influence on stock returns than internal company-specific risks.

Nonetheless, management should not neglect risk control. Strengthening risk management systems—such as improving financial ratios, managing debt levels, and maintaining transparency—can increase investor confidence, especially during periods of economic volatility. The findings also show that Company Size can moderate the relationship between Intellectual Capital and Stock Return. Larger firms are generally better positioned in terms of resources, infrastructure, and capabilities to manage and utilize intellectual capital effectively. This enhances their ability to generate returns from intellectual capital investments. These findings offer strategic insight for investors. Investors may consider company size as an important criterion when evaluating the potential return of intellectual capital. Larger firms with robust intellectual capital are likely to deliver more stable and higher returns.

Conversely, Company Size does not moderate the relationship between Company Risk and Stock Return. This implies that the impact of company-specific risk on stock returns is relatively uniform across companies of different sizes. The capital market may have already internalized such risks through public information, leading to similar investor responses regardless of firm size.

For investors, this suggests that risk factors should be analyzed independently of firm size. While large firms may offer stability, the perception and pricing of risk appear to be consistent across various company scales. Hence, careful evaluation of financial fundamentals and external market trends remains critical in making investment decisions.

REFERENCES

- Abdillah, m. R., & nurhasanah. (2020). Pengaruh risiko perusahaan, kualitas audit dan komite audit terhadap tax avoidance pada perusahaan manufaktur yang terdaftar di bursa efek indonesia tahun 2015-2018. *Dinamika ekonomi jurnal ekonomi dan bisnis*, 13(1), 82-98.
- Abualoush, s., masa'deh, r., bataineh, k., & alrowwad, a. (2018). The role of knowledge management process and intellectual capital as intermediary variables between knowledge management infrastructure and organization performance. *Interdisciplinary journal of information, knowledge, and management*, 13, 279-

309. <https://doi.org/10.28945/4088>
- Ahmed, z., hussin, m. R. A., & pirzada, k. (2022). The impact of intellectual capital and ownership structure on firm performance. *Journal of risk and financial management*, 15(12). <https://doi.org/10.3390/jrfm15120553>
- Alvino, f., di vaio, a., hassan, r., & palladino, r. (2021). Intellectual capital and sustainable development: a systematic literature review. *Journal of intellectual capital*, 22(1), 76–94. <https://doi.org/10.1108/jic-11-2019-0259>
- Berliana, n., nistrina, r., wulan suci, a., & wahyu nugroho, m. P. (2024). The effect of intellectual capital on stock return through financial performance. *Return : study of management, economic and bussines*, 3(7), 429–439. <https://doi.org/10.57096/return.v3i7.238>
- De villiers, c., & sharma, u. (2020). A critical reflection on the future of financial, intellectual capital, sustainability and integrated reporting. *Critical perspectives on accounting*, 70, 101999. <https://doi.org/10.1016/j.cpa.2017.05.003>
- Fazrin, r., hermanto, h., & putra, i. N. N. A. (2019). Pengaruh intellectual capital terhadap return saham dengan profitabilitas sebagai variabel intervening. *E-jurnal akuntansi*, 29(1), 145. <https://doi.org/10.24843/eja.2019.v29.i01.p10>
- Fitria, j. D., das, n. A., & defitri, s. Y. (2024). Pengaruh intellectual capital dan konservatisme akuntansi terhadap kinerja keuangan dengan ukuran perusahaan sebagai variabel moderasi pada perusahaan farmasi yang terdaftar di bursa efek indonesia tahun 2018-2022. *Jurnal bina bangsa ekonomika*, 17(1), 323–330. <https://jbbe.lppmbinabangsa.id/index.php/jbbe/article/view/489/244>
- Florentia, e., & ekadjaja, a. (2022). *Florentia dan ekadjaja: pengaruh intellectual capital, capital structure, dan firm's...* 1v(4), 1523–1533.
- Jatimupdate.id. (2024). *The death of samurai: robohnya sony, panasonic, sharp, toshiba dan sanyo*. <https://jatimupdate.id/baca-8467-the-death-of-samurai-robohnya-sony-panasonic-sharp-toshiba-dan-sanyo>
- Kouloukoui, d., sant'anna, â. M. O., da silva gomes, s. M., de oliveira marinho, m. M., de jong, p., kiperstok, a., & torres, e. A. (2019). Factors influencing the level of environmental disclosures in sustainability reports: case of climate risk disclosure by brazilian companies. *Corporate social responsibility and environmental management*, 26(4), 791–804. <https://doi.org/https://doi.org/10.1002/csr.1721>
- Lee, c. C., lee, c. C., & xiao, s. (2021). Policy-related risk and corporate financing behavior: evidence from china's listed companies. *Economic modelling*, 94, 539–547. <https://doi.org/10.1016/j.econmod.2020.01.022>
- Lehenchuk, s., zakharov, d., vyhivska, i., makarovich, v., & sheveria, y. (2024). The impact of intellectual capital on company financial performance: evidence from the omani industrial sector. *Investment management and financial innovations*, 21(1), 343–355. [https://doi.org/10.21511/imfi.21\(1\).2024.26](https://doi.org/10.21511/imfi.21(1).2024.26)
- Mahmood, f., han, d., ali, n., mubeen, r., & shahzad, u. (2019). Moderating effects of firm size and leverage on the working capital finance-profitability relationship: evidence from china. *Sustainability (switzerland)*, 11(7), 19–22. <https://doi.org/10.3390/su11072029>
- Mubeen, r., han, d., abbas, j., álvarez-otero, s., & sial, m. S. (2021). The relationship between ceo duality and business firms' performance: the moderating role of firm size and corporate social responsibility. *Frontiers in psychology*, 12(december), 1–17. <https://doi.org/10.3389/fpsyg.2021.669715>
- Munjal, s., requejo, i., & kundu, s. K. (2019). Offshore outsourcing and firm performance: moderating effects of size, growth and slack resources. *Journal of business research*, 103, 484–494. <https://doi.org/10.1016/j.jbusres.2018.01.014>
- Nimtrakoon, s. (2015). The relationship between intellectual capital, firms' market value and financial performance. *Journal of intellectual capital*, 16(3), 587–618. <https://doi.org/10.1108/jic-09-2014-0104>
- Ozkan, n., cakan, s., & kayacan, m. (2017). Intellectual capital and financial performance: a study of the turkish banking sector. *Borsa istanbul review*, 17(3), 190–198. <https://doi.org/10.1016/j.bir.2016.03.001>
- Palisungan, w. (2018). Pengaruh risiko investasi terhadap return saham pada perusahaan otomotif yang terdaftar di bursa efek indonesia. *Prodi manajemen, fakultas ekonomi dan bisnis*, 66.
- Putri. (2021). Pengaruh intellectual capital, leverage, profitabilitas, dan likuiditas terhadap nilai perusahaan. *Current: jurnal kajian akuntansi dan bisnis terkini*, 2(2), 259–277. <https://doi.org/10.31258/jc.2.2.259-277>
- Putri, d. L., rahmat, a., & aznuriyandi. (2020). Pengaruh risiko perusahaan, proporsi dewan komisaris independen, komite audit dan konservatisme akuntansi terhadap tax avoidance pada perusahaan manufaktur yang terdaftar pada bursa efek indonesia tahun 2015-2017. *Jurnal akuntansi kompetif*, 3(1), 7–17. <http://repository.umy.ac.id/handle/123456789/10165>
- Rinanda, y. (2022). Pengaruh leverage, size, dan likuiditas terhadap luas pengungkapan sukarela dalam laporan tahunan. *Jurnal manajemen pendidikan dan ilmu sosial*, 3(2), 682–696.
- Sánchez, j. P., yañez-araque, b., & moreno-garcía, j. (2020). Moderating effect of firm size on the influence of

- corporate social responsibility in the economic performance of micro-, small- and medium-sized enterprises. *Technological forecasting and social change*, 151, 119774. <https://doi.org/10.1016/j.techfore.2019.119774>
- Secundo, g., ndou, v., vecchio, p. Del, & de pascale, g. (2020). Sustainable development, intellectual capital and technology policies: a structured literature review and future research agenda. *Technological forecasting and social change*, 153, 119917. <https://doi.org/10.1016/j.techfore.2020.119917>
- Setyawati, e. P., & irwanto, a. (2020). Pengaruh intellectual capital terhadap return saham perusahaan manufaktur di indonesia. *Jurnal ekonomi dan bisnis airlangga*, 30(2), 100. <https://doi.org/10.20473/jeba.v30i22020.100-113>
- Shrestha, p. M., & lamichhane, p. (2022). Effect of firm-specific variables on stock returns: evidence from nepal. *Quest journal of management and social sciences*, 4(2), 249–259. <https://doi.org/10.3126/qjmss.v4i2.50320>
- Slamet, m. F. (2021). Pengaruh intellectual capital terhadap return on asset dengan ukuran perusahaan sebagai variabel jimea | jurnal ilmiah mea (manajemen , ekonomi , dan akuntansi). 5(3), 2612–2621.
- Subaki, a., & sonjaya, a. (2021). The influence of profitability, company risk, company size and company growth on corporate social responsibility disclosure. *Advance : jurnal accounting*, 8(2), 1–19. <http://e-journal.stie-aub.ac.id>
- Sun, y., yang, y., huang, n., & zou, x. (2020). The impacts of climate change risks on financial performance of mining industry: evidence from listed companies in china. *Resources policy*, 69, 101828. <https://doi.org/10.1016/j.resourpol.2020.101828>
- Wahyuni, i. (2022). *Unars, f e b*. 1(4), 838–853.
- Wang, j., zhang, y., & goh, m. (2018). Moderating the role of firm size in sustainable performance improvement through sustainable supply chain management. *Sustainability (switzerland)*, 10(5). <https://doi.org/10.3390/su10051654>
- Windasari, d., & purwanto, a. (2020). Pengaruh risiko kredit, risiko pasar, risiko likuiditas, dan risiko modal terhadap return saham dengan ukuran perusahaan sebagai variabel moderating. *Diponegoro journal of accounting*, 9(3), 1–12. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Wu, f., zhang, d., & ji, q. (2021). Systemic risk and financial contagion across top global energy companies. *Energy economics*, 97, 105221. <https://doi.org/10.1016/j.eneco.2021.105221>
- Xu, j., & li, j. (2019). The impact of intellectual capital on smes' performance in china. *Journal of intellectual capital*, 20(4), 488–509. <https://doi.org/10.1108/jic-04-2018-0074>