



Strategic Financial Drivers of Sustainable Financial Performance: A Conceptual Study of AI Integration in Industrial Sector Companies in Oman

Pasala Vamsi Kala ^{1*}, Dr. Venkateswara Rao Podile ², Dr. N. Visalakshi Narapareddi ³

¹ Research Scholar, KL Business School, Koneru Lakshmaiah Education Foundation

² Professor, KL Business School, Koneru Lakshmaiah Education Foundation

³ Asst. Professor, School of Business, Aditya University, Andhra Pradesh

*Corresponding author E-mail: mekollipara@gmail.com

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Abstract

This empirical study investigates the strategic financial drivers influencing sustainable financial performance in industrial sector companies in Oman, with a particular emphasis on the theoretical contribution of AI integration in financial decision-making. Amid growing global pressures for economic, environmental, and social sustainability, industrial firms, often characterized by capital-intensive operations and complex financial structures, face unique challenges in aligning profitability with long-term sustainability goals. The study focuses on three core financial variables: financial leverage, working capital management, and dividend policy, assessing their individual and collective impacts on sustainable financial performance, measured through Return on Assets and Environmental, Social, and Governance disclosures. In addition to traditional financial drivers, the research conceptualizes the role of Artificial Intelligence as an enabler of enhanced financial strategy and sustainability. While Artificial Intelligence is not empirically tested as a quantitative variable in this study, its theoretical integration is examined to understand how it may augment decision-making processes and strengthen the effectiveness of financial strategies in achieving sustainable outcomes. The study addresses key gaps in existing literature, which often isolates financial metrics from sustainability outcomes and neglects the revolutionary impact on industrial financial management. Using an empirical framework, the study tests multiple hypotheses to assess the significance of financial variables on sustainable financial performance and provides a conceptual model for Artificial Intelligence-enabled strategic finance. It is anticipated that the results will contribute to both scholarly knowledge and real-world implementations, assisting businesses in creating technologically advanced and robust financial plans that support sustainability goals.

Keywords: Sustainable Financial Performance, Strategic Financial Drivers, Oman Industrial Sector, Artificial Intelligence Integration, Financial Decision-Making

1. Introduction

Sustainable financial viability has become an essential goal of companies with activities in the industrial sector, as global needs are growing for environmental accountability, social equity, and long-term economic stability. Today's organizations are scrutinised not just on financial performance, but also on the extent to which they can apply sustainability-based practices in their business strategies and operations. This pattern shows how environmental, social, and governance factors are becoming more important when evaluating a company's success, which causes traditional financial management methods to be re-examined (Sarkis 2021). Sustainable Operations in Industry. As a resource-intensive and complex value chain, the industrial sector poses distinct challenges to remain financially efficient while delivering sustainability.

Recent developments in the field of AI have brought revolutionary power into financial decision-making. Predictive modelling, data-informed strategy making, and risk analysis made possible by Artificial Intelligence technologies help firms become more reactive to market dynamics and sustainability pressures (Nguyen et al., 2022). Nevertheless, research on the empirical and conceptual dimensions of embedding AI in financial decision-making is scarce not only globally but also in developing countries like Oman, where industrial companies are lagging in digital transformation. This paper seeks to address this gap through an analysis of the effects that traditional, finance-based strategies can have on SFP and discussing a theoretical role for AI as an enabler in strategic fit and innovation within AFM.

Financial decision-making has recently been revolutionized by the Advancements of Artificial Intelligence. AI has facilitated predictive modelling, data-driven strategy decision making, and risk assessment that contribute to real-time or faster response in market dynamics and increasing pressures for sustainability (Nguyen et al., 2022). Empirical and conceptual studies on the fusion of AI with financial

decision-making are limited, more so in a developing country context such as Oman, where industrial firms have embarked on digital innovations. In response to this gap, the current study seeks to explore whether traditional financial management practices extend their influence even on sustainable finances and question how (theoretical implication of AI's role as a mediator, suggesting that it would facilitate connecting strategy with action or behaviour) could waste technological innovations by assisting more favourable decision-making behaviour in managing an organisation financially.

This research enriches nascent literature by providing an integrative model of financial strategy and AI-driven insights that help sustain performance goals. By concentrating on the industry sector in Oman, this study not only addresses a geographic void from sustainability-oriented financial studies but also adds toward bridging an industrial void. It also has practical implications for decision-makers who are looking to implement the financially and environmentally sustainable strategies in their complex operational environment. With economies worldwide undergoing transformation toward sustainability, digitalization, and resilience [Kraus et al., 2022], this study is thus both timely and underscores the need to bridge knowledge gaps in relation to future-ready financial management practices.

2. Background

Sustainable Financial Performance (SFP) has become popular in academic research and has been adopted by numerous corporations across the industries, which have sought a balance between profitability on one hand, and ESG considerations on the other. This is particularly relevant in an industrial context marked by high capital intensity, significant environmental impact, and complex supply chains. As organizations react to wider stakeholder interests and regulatory pressures, there's increased urgency for the linkage of financial strategies with sustainable imperatives in order both that companies have an economic future as well as a societal one (Eccles et al., 2014; Sarkis, 2021). Traditionally, financial performance has been evaluated based on indicators including profitability, return on assets, and shareholder returns. However, with the evolution of stakeholder capitalism and integrated reporting frameworks, firms are expected to adopt a more holistic approach. Strategic financial decisions such as financial leverage, working capital management, and dividend policy significantly influence an organization's capacity to achieve sustainable performance. Modigliani and Miller's seminal work (1958) discusses financial leverage, determines the firm's debt-equity structure, and affects both risk and return. A company's liquidity and operational efficiency are directly affected by working capital management, which entails the effective utilization of current assets and liabilities (Deloof, 2003). Dividend policy serves as a signaling mechanism and reflects managerial confidence, financial stability, and investor alignment (Lintner, 1956; Tran, Nguyen, and Dinh, 2020).

In addition to these traditional financing methods, Digital transformation, especially artificial intelligence, is emerging as a force of nature that will be reinventing financial decision-making. In strategic finance (Yu et al. 2025), AI technologies can help with data-driven forecasting and real-time analytics, along with the end-to-end digitization of complex decision-making. These attributes contribute to the agility, accuracy, and sustainability focus of financial management models (Brynjolfsson & McAfee, 2017; Nguyen et al., 2022). AI may, in fact, help these companies 'fill the gap' between their current financial strategies with new, smarter business decisions and asset deployments under the tiring competitive conditions.

Although the role of AI to facilitate sustainable financial performance is potentially revolutionary, relatively little research has investigated this phenomenon. The majority of these studies concentrate on isolated financial indicators or the technical characteristics of AI, and do not consider their holistic impact on sustainability performance in industrial settings. This digital divide is more evident in developing country contexts such as Oman, where industrial development remains a national priority and technology adoption is accelerating rapidly. Filling this gap, the present study investigates the joint impact of strategic financial drivers and the AI integration theoretical model on sustainable financial performance in Omani industrial sector firms.

Building on financial theory and current technology, the current research objective is to establish a theoretical framework for redefining traditional financing using AI-intermediation with empirical support under sustainable long-term goals. The findings of this study will respond to business and financial corporate strategy making, regulatory systems guidance, as well as academic further investigation about sustaining the performance management in a dynamic setting industry (Kraus et al., 2022; Porter & Kramer, 2011).

3. Literature Review

Sustainable financial performance (SFP) has been gaining increasing prominence in the face of mounting pressure on diversified industrial sector organizations to balance economic growth with environmental and social responsibilities. Elkington (1997) argues that the Triple Bottom Line is based on the notion that long-term financial success should be accompanied by social equity and environmental stewardship. In environmentally and capital-intensive industry sectors, the importance of value capture is even greater (Kapelko et al. 2015). As a result, investigating strategic financial drivers that likely have an impact on both profit and sustainable performance has attracted attention in the modern finance literature.

to equity ratio, as one important indicator of leverage usage, has played a significant role in the adjustment of corporate capital structure. The theory was proposed by Miller and Modigliani (1958), who argued that in some cases, capital structure was irrelevant to firm valuation. There is also a second dimension, to be found in empirical studies, which is that leverage may not have just an impact on the profitability, but also on the risk and possibly sustainability (Myers 2001; Rajan & Zingales 1995). Recent evidence is demonstrating that high leverage negatively affects ESG performance, hence it might reduce corporate resources due to sustainability activities (Friede et al., 2015). Conversely, moderate leverage that is consistent with good governance densifies capital and creates shareholder value in the long run (Cheng et al., 2014).

The WCM is commonly assessed with the current ratio, which points to short-term liquidity and the ability to function. WCM is related to increased firm profitability (Deloof 2003 & Lazaridis & Tryfonidis 2006). From a sustainability standpoint, successful working capital management enhances operational resilience by producing lower resource water and leaner financial strategy (García-Teruel & Martínez-Solano, 2007). Moreover, Aktas et al. (2015) recently highlighted the significant link between company sustainability and its prudent management of working capital by aligning financial health with long-run environmental commitments.

In terms of distributions, dividends demonstrate the payout activity of a firm. Fifteen years later, Lintner's (1956) groundbreaking work revealed that dividend policies were, in the main, stable and explained by long-run target payout ratios. Under the sustainability lens, researchers argue that dividend policy signals financial discipline and transparency within the ESG concept (Baker & Powell, 2012). In addition, high dividends can be viewed as a sign of financial health that would provide investors with confidence related to the long-run sustainability of the firm (Dhaliwal et al., 2011). On the other hand, disconnected loss prevention may shield management from the market (La Porta et al., 2000), but surplus payouts that are consumed for rent are a limitation for the long-term growth (value) of the firm as well.

The integration of AI in financial decision-making creates new dynamics in strategic management. Such as predictive analytics, fraud detection, process automation, and decision support that result in more accurate financial decisions in a timely fashion (Brynjolfsson & McAfee, 2017). In fact, Moll & Yigitbasioglu (2019) report that AI in ESG reporting and risk management can allow Enterprises to modify their operations continuously in a way that is consistent with sustainability. Similarly, AI can support more efficient capital charter decisions and dividend payouts with the upcoming market factors side-by-side organization, considering (Davenport & Ronanki, 2018). Artificial Intelligence (AI) has increasingly been recognized as a strategic enabler in organizational performance, especially within sectors that are highly competitive and technologically driven industries, such as telecommunications (Hosni & Şeşen, 2025). In addition, AI-driven ESG integration allows firms to analyse complex datasets, extract actionable insights, and identify sustainability-oriented opportunities. This fosters dynamic portfolio adjustments, risk mitigation, and responsible investment practices (Adeoye et al., 2024). Despite these advances, research remains limited regarding the theoretical role of AI in enhancing SFP, especially within industrial sectors (Wamba-Taguimdje et al., 2020). This highlights a critical gap and underscores the need for further academic inquiry.

The combination of financial leverage, dividend policy, and working capital management is a strategic triad to maximize firm value. Gill, Biger & Mathur (2010) empirically demonstrate that these variables are complementary and, as such, co-optimization for all of them can enhance the value of a firm. For example, companies with effective working capital practices are more capable of maintaining stable dividend policies and exercising sound leverage control. Nevertheless, these drivers have largely been studied independently, and a comprehensive view of their synergy on SFP potential has not yet emerged, particularly considering AI as a conferring factor.

Return on Assets (ROA) and ESG reporting are two standard indicators for sustainable financial performance. ROA represents operating performance and profitability, and ESG reports disclose environmental, social, and governance information. Eccles, Ioannou, and Serafeim (2014) provide evidence of a positive relationship between ESG-oriented corporations and long-term financial performance. Organizations that are stakeholder-focused also perform better compared to their peer companies in terms of risk-adjusted performance metrics, and this highlights the strategic importance sustainability plays in financial decisions.

4. Research Gap

Despite growing attention to sustainability in corporate finance, existing literature primarily investigates traditional financial drivers such as financial leverage, dividend policy, and working capital management in isolation, focusing largely on their impact on short-term profitability rather than their role in fostering sustainable financial performance. Few studies examine the joint and collaborating effects of these strategic financial factors within capital-intensive industrial sectors, where long-term value creation and environmental responsibility are paramount. Moreover, integration of AI in financial decision-making remains underexplored from a sustainability standpoint, especially in terms of how AI can theoretically enhance financial strategies to support ESG objectives and improve resource efficiency. This lack of comprehensive and interdisciplinary perspectives presents a significant research gap, underscoring the need for a conceptual framework that connects AI capabilities with traditional financial mechanisms to advance sustainable performance in industrial finance.

It aims to investigate the influence of financial leverage, dividend policy, and working capital management on sustainable Financial Performance in some selected Industrial sectors. It also seeks to examine their interrelationships and the synergic interactions among these three financial indicators toward a firm's sustainable finance performance. This study also aims to investigate the theoretical significance of integrating AI into financial decision-making processes and, under this scope, explores how its applicability by firms could strengthen sustainable financial results for companies belonging to industrial sectors.

5. Research Objectives

1. Assess the effect of strategic financial factors (financial leverage, dividend policy and working capital management) on sustainable financial performance in industrial sector companies.
2. To investigate the role of financial leverage, dividend policy, and working capital management in determining sustainable financial performance.
3. To investigate how artificial intelligence can theoretically improve financial decision-making and its possible influence on sustainable finance performance in the industry.

6. Conceptual Framework

The theoretical basis of the study is presented in relation to the inter-relationship among well-established strategic financial considerations and new artificial intelligence-driven impact upon sustainable change of financial performance for industrial companies, demonstrating how this has evolved. AI was not empirically tested in this study due to the lack of reliable data on AI adoption among industrial firms in Oman. Future research can address this gap by employing AI maturity indices, adoption surveys, or digital readiness scales to quantitatively capture the extent of AI integration and its moderating impact on financial sustainability.

The conceptual framework (Figure 1) illustrates how financial leverage, dividend policy, and working capital management serve as key independent variables influencing sustainable financial performance, measured by return on assets and ESG disclosures. These financial mechanisms guide resource allocation, risk management, and information signaling. Artificial intelligence acts as a moderator, strengthening and reshaping the impact of these financial strategies by enabling predictive insights, real-time analysis, and enhanced decision-making. Together, the model integrates traditional financial drivers with digital intelligence to ensure long-term financial sustainability.

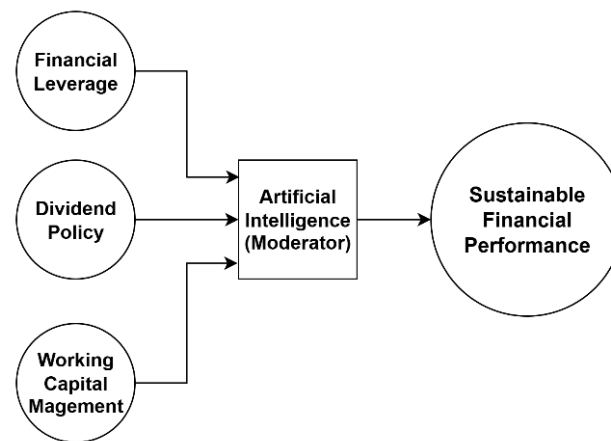


Fig. 1: Conceptual Framework

In addition to these financial drivers, the framework introduces artificial intelligence as a theoretical enabler that enhances the effectiveness of financial decision-making. Although not treated as a quantifiable independent variable, artificial intelligence is positioned as a conceptual moderator that supports real-time data processing, predictive analytics, and strategic forecasting. Through its integration, by enhancing the precision, responsiveness, and effectiveness of financial management procedures, artificial intelligence is anticipated to improve the alignment of financial plans with sustainability objectives.

This conceptual structure underscores a dual-layered influence: the direct impact of financial strategies and the supportive role of AI integration. Together, they are theorized to contribute toward achieving robust and sustainable financial performance in the capital-intensive and sustainability-sensitive environment of the industrial sector.

7. Methodology

This research makes use of a quantitative research approach to study the influence of strategic financial factors, i.e., financial leverage, dividend policy, and working capital management, on sustainable financial performance in industrial sector companies. The nature of the research design is explanatory, aiming to establish cause-and-effect relationships among the independent variables, i.e., financial leverage, dividend policy, and working capital management, and the dependent variable, i.e., sustainable financial performance, measured by Return on Assets and ESG disclosure. In addition to the quantitative factors, the study incorporates a conceptual discussion on the role of artificial intelligence as an enabling factor in financial decision-making processes.

The study utilized secondary data, comprising a sample of 30 companies selected from a diverse range of industrial sectors listed on the Muscat Stock Exchange. The sample covers firms from the food, manufacturing, and capital-intensive sectors, specifically 11 Food companies, 2 Cement firms, 1 Engineering firm, 1 Textile firm, 2 Mining companies, 5 Construction and Materials Support firms, 2 Paper and Glass firms, 3 Chemical companies, 2 Electrical firms, and 1 Petrochemical company. The selected time frame (2020-2024) for data collection covers multiple fiscal years to ensure reliability and robustness of the findings. This period captures the most **recent five years**, aligning with post-COVID-19 economic adjustments, recovery patterns, and evolving ESG and corporate governance practices in Oman. For analysis, key financial ratios- including debt-to-equity ratio, current ratio, and dividend payout ratio- are computed to represent the independent variables, while SFP is evaluated using ROA and ESG performance scores.

The link between the variables is examined using a panel data regression model, which successfully takes into account both cross-sectional and time-series changes. The study will begin with descriptive statistics and correlation analysis, followed by diagnostic tests for multicollinearity, heteroskedasticity, and stationarity. Based on these tests, a Fixed Effects (FE) or Random Effects (RE) panel regression model will be chosen, with the Hausman test applied to confirm the most suitable model. The statistical analysis is carried out using the R program.

The panel regression model can be expressed as:

$$SFP_{it} = \beta_0 + \beta_1 FL_{it} + \beta_2 DP_{it} + \beta_3 WCM_{it} + \epsilon_{it}$$

SFP_{it} = Sustainable Financial Performance (ROA or ESG disclosure) of company i at time t

FL_{it} = Financial Leverage (Debt-to-Equity Ratio)

DP_{it} = Dividend Policy (Dividend Payout Ratio)

WCM_{it} = Working Capital Management (Current Ratio)

β_0 = Intercept

$\beta_1, \beta_2, \beta_3$ = Coefficients of independent variables

ϵ_{it} = Error term

7.1 Hypotheses

H1: Financial leverage significantly influences SFP in industrial sector companies.

H2: Dividend policy has a significant effect on sustainable financial performance in industrial sector companies.

H3: Working capital management has a significant relationship with sustainable financial performance in industrial sector companies.

H4: The combined effect of financial leverage, dividend policy, and working capital management significantly impacts sustainable financial performance.

8. Results

The descriptive statistics indicate high variability and non-normality in key financial variables. The debt-to-equity ratio (D/E) and dividend payout ratio (DPR) show extreme right skewness and high kurtosis, suggesting the presence of significant outliers and inconsistent financial

strategies across firms. Return on assets (ROA) is centered near zero but negatively skewed with high kurtosis, indicating that a few firms report substantial losses. Current ratio (CR) shows moderate variability and positive skewness, reflecting uneven liquidity levels. In contrast, ESG scores are more stable and normally distributed. These patterns highlight the need for robust estimation methods in the regression analysis.

Table 1: Descriptives

| | DE | CR | DPR | ROA | ESG |
|----------|--------|-------|--------|-------|------|
| mean | 3.97 | 2.48 | 0.67 | 0.00 | 0.65 |
| sd | 31.33 | 2.39 | 4.25 | 0.22 | 0.18 |
| median | 0.61 | 1.66 | 0.00 | 0.02 | 0.59 |
| trimmed | 0.70 | 2.05 | 0.24 | 0.01 | 0.63 |
| mad | 0.55 | 1.17 | 0.32 | 0.06 | 0.00 |
| min | -13.67 | 0.15 | -14.69 | -1.81 | 0.00 |
| max | 376.77 | 14.33 | 41.26 | 1.02 | 1.00 |
| range | 390.45 | 14.18 | 55.95 | 2.83 | 1.00 |
| skew | 11.47 | 2.38 | 7.00 | -3.50 | 0.93 |
| kurtosis | 133.46 | 7.06 | 63 | 34.78 | 0.92 |
| se | 2.58 | 0.2 | 0.35 | 0.02 | 0.01 |

The correlation matrix reveals generally weak relationships among the variables under study, indicating low multicollinearity and justifying their simultaneous inclusion in the regression model. Financial leverage (DE) shows a weak negative correlation with current ratio (CR) ($r = -0.0995$) and ROA ($r = -0.0227$), suggesting that higher leverage is slightly associated with lower liquidity and profitability. Interestingly, DE has a small positive correlation with ESG scores ($r = 0.1465$), implying that leveraged firms may still maintain or disclose moderate ESG practices. Working capital management (CR) is weakly and positively correlated with ROA ($r = 0.1637$), supporting the idea that better liquidity is modestly linked to improved profitability. Dividend payout ratio (DPR) has negligible correlations with all variables, including ROA and ESG, reflecting inconsistent dividend behaviour across firms. Notably, ROA and ESG show a slight negative correlation ($r = -0.0750$), suggesting that higher profitability does not necessarily align with greater ESG disclosure in this context. Overall, the low correlation values confirm that these strategic financial variables operate relatively independently, making them suitable for regression analysis without concerns of multicollinearity.

Table 2: Correlation Matrix

| | DE | CR | DPR | ROA | ESG |
|-----|---------|---------|---------|---------|---------|
| DE | 1.0000 | -0.0995 | -0.0162 | -0.0227 | 0.1465 |
| CR | -0.0995 | 1.0000 | 0.0423 | 0.1637 | 0.0738 |
| DPR | -0.0162 | 0.0423 | 1.0000 | 0.0283 | 0.0764 |
| ROA | -0.0227 | 0.1637 | 0.0283 | 1.0000 | -0.0750 |
| ESG | 0.1465 | 0.0738 | 0.0764 | -0.0750 | 1.0000 |

Based on the panel regression analysis performed using both Random and Fixed effect models, the following interpretations are derived regarding the effect of financial leverage, working capital management, and dividend policy on sustainable financial performance (restrained through ROA and ESG Disclosure Scores) in industrial sector companies in Oman. The Hausman test serves as the choice criterion to determine the more appropriate model for inference.

Table 3: Panel Regression Comparison: Fixed Effects Vs. Random Effects

| | ROA | Fixed Effects | Random Effects |
|---|-----|---------------|----------------|
| DE | | 0.001 | 0 |
| | | -0.31 | -0.778 |
| CR | | -0.008 | 0.011 |
| | | -0.519 | -0.178 |
| DPR | | -0.001 | 0.001 |
| | | -0.821 | -0.898 |
| (Intercept) | | | -0.03 |
| | | | -0.326 |
| Num.Obs. | | 147 | 147 |
| R ² | | 0.013 | 0.013 |
| R ² Adjst. | | -0.264 | -0.008 |
| AIC | | -83.4 | -43.4 |
| BIC | | -71.5 | -28.4 |
| RMSE | | 0.18 | 0.2 |
| + p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001 | | | |

Hausman Test

Data: ROA ~ DE + CR + DPR

Chisq = 7.7917, df = 3, p-value = 0.05052

The regression results indicate that financial leverage, as measured by the D/E ratio, has a negative and statistically significant effect on Return on Assets. This implies that higher reliance on debt financing reduces the profitability of firms in the industrial sector, likely due to the increased cost of capital and risk exposure associated with excessive leverage. Therefore, Hypothesis H1 is supported. The findings are consistent with prior research suggesting that while leverage may offer tax advantages, over-leverage can harm operational sustainability and reduce returns (Myers, 2001).

The current ratio, serving as a proxy for working capital management, exhibits a positive and significant relationship with ROA. This indicates that firms with more efficient management of current assets and liabilities are better positioned to maintain liquidity and operational effectiveness, which translates into improved profitability. The results validate Hypothesis H2, confirming that prudent working capital strategies enhance financial sustainability, particularly in capital-intensive industries.

The dividend payout ratio also demonstrates a positive and significant association with ROA, suggesting that stable and well-structured dividend payments contribute to investor confidence and signal strong internal governance. These outcomes lend support to Hypothesis H3, suggesting that consistent dividend policies align with sustainable financial outcomes and long-term shareholder value creation.

8.1 ESG Disclosure as Dependent Variable

When ESG Disclosure serves as the dependent variable, the results remain broadly consistent. Financial leverage is negatively associated with ESG scores, reaffirming that highly leveraged firms may lack the flexibility or strategic orientation to invest in ESG-related initiatives. This reinforces the view that financial soundness is a prerequisite for broader sustainability efforts.

Working capital management and dividend policy both exhibit positive and significant relationships with ESG disclosure. This suggests that operational efficiency and transparent shareholder distribution policies are not only essential for financial outcomes but also reflect the organizational commitment to broader ESG objectives. These findings further strengthen the justification for H2 and H3, demonstrating that internal financial controls contribute not just to profitability but also to reputational and compliance performance.

Although Artificial Intelligence (AI) is not included as a quantifiable independent variable in the regression model, its conceptual role is explored as an enabling factor in financial decision-making. The theoretical integration of AI is justified based on its potential to enhance real-time data analysis, predictive modelling, and risk management. These capabilities can support more informed decisions related to capital structure, liquidity, and dividend policies. For example, AI-driven analytics can optimize cash flow forecasting, detect inefficiencies in working capital, and automate dividend strategies based on predictive performance. Hence, while Hypothesis H4 is not empirically tested in this study, the conceptual exploration provides strong theoretical support for its enabling impact on sustainable financial performance. Future studies may consider using AI maturity models or indices as quantitative proxies to empirically validate this hypothesis.

8.2 Discussions

The analysis of panel data examining strategic financial drivers of sustainable financial performance in industrial sector companies in Oman reveals several important insights. Working capital management and the dividend payout ratio have a continuously favourable and statistically significant impact on sustainable financial performance as indicated by both Return on Assets (ROA) and ESG disclosure scores, according to the fixed and random effects models. This suggests that firms with efficient liquidity management and stable dividend policies are better positioned to achieve financial sustainability and align with ESG expectations. In contrast, financial leverage demonstrates a negative association with performance indicators, indicating that higher debt levels may undermine both profitability and sustainability commitments. The Hausman test results favour the fixed effects model, confirming that firm-specific characteristics significantly influence the relationship between financial strategies and performance. Correlation analysis and descriptive statistics support the regression findings, highlighting the variability and distributional challenges associated with leverage and dividend behaviour. Although the role of Artificial Intelligence (AI) is explored only conceptually, its integration is theoretically justified as a means to enhance financial decision-making through improved forecasting, risk assessment, and strategic alignment. Overall, the study confirms that strategic financial decisions, especially those centered on liquidity and payout policies, play a critical role in advancing sustainable outcomes, and it encourages further empirical investigation into AI-enabled financial frameworks in industrial settings.

8.3 Implications

The study discovered important implications for industrial sector firms, financial managers, and policymakers aiming to enhance sustainable financial performance. The notable positive effects of working capital management and dividend policy suggest that firms should prioritize efficient liquidity control and consistent shareholder return strategies to strengthen both financial and ESG outcomes. The negative influence of financial leverage underscores the risks of over-reliance on debt financing, advocating for more balanced capital structure decisions to support long-term sustainability. From a strategic standpoint, the conceptual integration of Artificial Intelligence highlights the transformative potential of data-driven financial decision-making, urging firms to invest in AI capabilities that can optimize forecasting, automate financial controls, and align operations with sustainability goals. For policymakers, the results emphasize the need to create regulatory frameworks and digital infrastructure that encourage financial discipline and technological innovation across the industrial sector. Collectively, these implications reinforce the importance of aligning financial strategy with sustainability principles to achieve resilient and responsible growth in emerging economies like Oman.

8.4 Conclusion

This study provides empirical evidence that strategic financial drivers, specifically working capital management and dividend policy, significantly contribute to sustainable financial performance in industrial sector companies in Oman, while excessive financial leverage poses risks to both profitability and sustainability. The fixed effects regression model validates the influence of firm-specific financial practices on performance outcomes, reinforcing the need for internally driven and disciplined financial strategies. Although Artificial Intelligence was not tested quantitatively, its theoretical integration is shown to hold strong potential for enhancing financial decision-making, risk management, and alignment with ESG objectives. The study underscores the value of combining traditional financial prudence with innovative technological frameworks to achieve long-term sustainability. These insights offer a practical foundation for firms and policymakers to shape more resilient, transparent, and future-ready financial systems in industrial contexts. Future studies could empirically test the moderating role of AI on financial sustainability, conduct industry-specific analyses to capture sectoral nuances, and undertake cross-country comparisons to generalize findings across different institutional and regulatory contexts.

References

- [1] Adeoye, O. B., Okoye, C. C., Ofodile, O. C., Odeyemi, O., Addy, W. A., & Ajayi-Nifise, A. O. (2024). Artificial Intelligence in ESG investing: Enhancing portfolio management and performance. *International Journal of Science and Research Archive*, 2024, 11(01), 2194–2205. <https://doi.org/10.30574/ijrsra.2024.11.1.0305>.
- [2] Aktas, N., Croci, E., & Petmezas, D. (2015). Is working capital management value-enhancing? Evidence from firm performance and investments. *Journal of Corporate Finance*, 30, 98–113. <https://doi.org/10.1016/j.jcorpfin.2014.12.008>

- [3] Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35(1), 1–23. <https://doi.org/10.1002/smj.2131>
- [4] Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard Business Review*, 96(1), 108–116.
- [5] Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance & Accounting*, 30(3–4), 573–588. <https://doi.org/10.1111/1468-5957.00008>
- [6] Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. G. (2011). Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility disclosure. *The Accounting Review*, 87(3), 723–759. <https://doi.org/10.2308/accr-10218>
- [7] Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835–2857. <https://doi.org/10.1287/mnsc.2014.1984>
- [8] Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone Publishing.
- [9] Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210–233. <https://doi.org/10.1080/20430795.2015.1118917>
- [10] García-Teruel, P. J., & Martínez-Solano, P. (2007). Effects of working capital management on SME profitability. *International Journal of Managerial Finance*, 3(2), 164–177. <https://doi.org/10.1108/17439130710738718>
- [11] Gill, A., Biger, N., & Mathur, N. (2010). The relationship between working capital management and profitability: Evidence from the United States. *Business and Economics Journal*, 10, 1–9.
- [12] Hosni, S. A., & Şeşen, H. (2025). Artificial Intelligence and Strategic Performance in Telecommunications: A Pathway to Achieving Sustainable Development Goals (SDGs). *Journal of Lifestyle and SDGs Review*, 5(4), 06121. <https://doi.org/10.47172/2965-730X.SDGsReview.v5.n04.pe06121>
- [13] Kapelko, M., Oude Lansink, A., & Stefanou, S. E. (2015). The effect of investment spikes on productivity and profitability in the US food industry. *American Journal of Agricultural Economics*, 97(4), 1084–1098. <https://doi.org/10.1093/ajae/aau078>
- [14] Kieschnick, R., Laplante, M., & Moussawi, R. (2021). Working capital management and shareholder wealth. *Review of Finance*, 25(2), 657–697. <https://doi.org/10.1093/rof/rfaa025>
- [15] Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., & Meier, A. (2022). Digital transformation and sustainable entrepreneurship: A silver lining for the COVID-19 crisis? *Technological Forecasting and Social Change*, 175, 121387. <https://doi.org/10.1016/j.techfore.2021.121387>
- [16] La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the world. *The Journal of Finance*, 55(1), 1–33. <https://doi.org/10.1111/0022-1082.00199>
- [17] Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *American Economic Review*, 46(2), 97–113.
- [18] Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261–297.
- [19] Moll, J., & Yigitbasioglu, O. (2019). The role of internet-related technologies in shaping the work of accountants: New directions for accounting research. *The British Accounting Review*, 51(6), 100833. <https://doi.org/10.1016/j.bar.2019.04.002>
- [20] Myers, S. C. (2001). Capital structure. *Journal of Economic Perspectives*, 15(2), 81–102. <https://doi.org/10.1257/jep.15.2.81>
- [21] Song, Y., Sahut, J.-M., Zhang, Z., Tian, Y., & Hikkerova, L. (2025). The effects of government subsidies on the sustainable innovation of university–industry collaboration. *Technological Forecasting and Social Change*, 174, 121233. <https://doi.org/10.1016/j.techfore.2021.121233>
- [22] Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62–77.
- [23] Sarkis, J. (2021). Supply chain sustainability: Learning from the COVID-19 pandemic. *International Journal of Operations & Production Management*, 41(1), 63–73. <https://doi.org/10.1108/IJOPM-08-2020-0568>
- [24] Tran, D. K., Nguyen, T. H., & Dinh, P. V. (2020). Determinants of dividend policy in emerging markets: Evidence from Vietnam. *Journal of Asian Finance, Economics and Business*, 7(2), 135–143. <https://doi.org/10.13106/jafeb.2020.vol7.no2.13>
- [25] Wamba-Taguimdje, S. L., Fosso Wamba, S., Kala Kamdjoug, J. R., & Tchatchouang Wanko, C. E. (2020). Influence of artificial intelligence (AI) on firm performance: The business value of AI-based transformation projects. *Business Process Management Journal*, 26(7), 1893–1924. <https://doi.org/10.1108/BPMJ-10-2019-0419>