Journal of Management Science Research Review
https://jmsrr.com/index.php/Journal/about

Volume 5 Issue No 1 (2026)

Online ISSN: 3006-2047
Print ISSN: 3006-2039

Corporate Credit Rating

Umair Iftikhar
Department of Accounting and Finance Northhempton University United Kingdom
umairmalik7841@gmail.com

Abstract
Corporate credit ratings are important indicators of a firm's creditworthiness and influence investors, creditors, borrowing costs, and access to external finance. This review examines the major financial factors associated with corporate credit ratings, with particular focus on profitability, liquidity, leverage, and solvency. The reviewed literature indicates that credit rating agencies use both quantitative financial indicators and qualitative information, including corporate governance, management quality, business conditions, and macroeconomic factors. Evidence generally suggests that stronger liquidity and solvency are associated with better creditworthiness, while excessive leverage increases financial risk. Profitability, particularly Return on Assets (ROA) and Return on Equity (ROE), has also been linked with higher credit ratings, although its effect may vary across industries and market conditions. The empirical analysis presented in the reviewed study focuses on non-financial UK-listed firms during 2021–2024, a period characterized by monetary tightening and elevated interest rates. Using Ordered Logit and Ordered Probit models, the study finds that liquidity and solvency indicators play an important role in explaining corporate credit ratings. The Current Ratio shows a positive and significant relationship with ratings, while interest-related solvency measures also demonstrate importance. In contrast, ROA and asset turnover are reported as statistically insignificant. The findings highlight that creditworthiness cannot be explained by profitability alone and should be assessed through a combination of liquidity, leverage, solvency, and broader financial conditions. Overall, the review emphasizes the importance of balance-sheet strength and debt-servicing capacity in corporate credit rating assessment.

Keywords: Corporate credit ratings; Creditworthiness; Profitability; Liquidity; Leverage; Solvency; Interest coverage; Financial risk; UK-listed firms

Introduction

Corporate credit ratings are important external indicators of a firm's ability to meet its financial obligations. Ratings are used by investors, creditors, financial analysts, and companies to assess credit risk and financing conditions. Major rating agencies, including Standard & Poor's, Moody's, and Fitch, consider financial ratios as well as qualitative and market-related factors when evaluating corporate creditworthiness.
Financial indicators commonly associated with credit ratings include profitability, liquidity, leverage, and solvency. Profitability reflects a firm's ability to generate

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

earnings, while liquidity indicates its capacity to meet short-term obligations. Leverage represents dependence on debt financing, and solvency reflects the firm's ability to meet long-term financial commitments. Previous research generally reports positive associations between liquidity, profitability, and credit ratings, while higher leverage is often associated with greater credit risk. However, these relationships may differ according to industry, market conditions, and business characteristics.

The reviewed study focuses on non-financial UK-listed companies during 2021–2024, a period characterized by monetary tightening and increased financing costs. This period provides a relevant context for examining whether traditional financial indicators continue to explain differences in corporate creditworthiness. The review therefore focuses on how financial strength, liquidity, leverage, and debt-servicing capacity contribute to corporate credit rating assessment.

Literature Review

This literature review examines the major financial factors affecting corporate credit ratings, particularly profitability, liquidity, leverage, and solvency. Solvency is important because it reflects a firm's ability to meet its long-term obligations and is commonly measured through debt-to-equity and interest coverage ratios. These indicators help assess default risk and financial stability (Okyere-Yeboah, 2024). Previous research also suggests that the relationship between leverage and solvency over time remains insufficiently explored (Soro et al., 2025). Therefore, the present study incorporates these financial factors to examine corporate credit ratings.

Theoretical Review

The relationship between financial performance and corporate credit ratings can be explained through Structural Credit Risk Theory (SCRT), Signaling Theory, and Agency Theory**.** These theories provide a basis for understanding how profitability, liquidity, leverage, and solvency influence a firm's creditworthiness and credit rating.

Structural Credit Risk Theory (SCRT*)*

Structural Credit Risk Theory, introduced by Merton (1974), explains credit risk in terms of a firm's assets and liabilities. A firm faces a higher probability of default when its liabilities exceed the value of its assets. From this perspective, profitability, liquidity, leverage, and solvency are important indicators of financial strength. Higher profitability and liquidity improve a firm's ability to meet its obligations, while excessive leverage increases financial risk. Similarly, strong solvency and interest coverage indicate a greater ability to meet long-term debt commitments. Therefore, firms with stronger financial positions are generally expected to have better credit ratings.

Signaling Theory

Signaling Theory, developed by Spence (1973), explains how firms communicate their financial quality to external stakeholders. Financial indicators such as profitability, liquidity, leverage, and solvency provide observable signals to investors, creditors, and credit rating agencies. Strong profitability and liquidity may signal financial stability, whereas high leverage may indicate greater financial risk. Credit ratings convert these financial signals into an external assessment of creditworthiness and help reduce information asymmetry between firms and market participants. Thus, better financial

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

performance can be associated with stronger credit ratings and improved access to financing.

Agency Theory

Agency Theory, developed by Jensen and Meckling (1976), focuses on conflicts between managers and shareholders or creditors. Financial ratios can provide external stakeholders with information about managerial financial decisions. High leverage or weak liquidity may indicate greater financial risk, while stable profitability and solvency may reflect more effective financial management. Credit rating agencies therefore provide an external monitoring mechanism by evaluating these financial indicators. In this way, credit ratings can encourage firms to maintain sound financial policies and control excessive financial risk.

Corporate Credit Rating

Corporate credit rating represents the creditworthiness and default risk of a firm as assessed by rating agencies such as Standard & Poor's, Moody's, and Fitch. Since ratings are ordinal in nature, they can be converted into numerical categories for empirical analysis, with higher values representing better credit quality (Judge & Korzhenitskaya, 2022).

Profitability

Profitability reflects a firm's ability to generate earnings from its resources and is an important indicator of financial strength. More profitable firms are generally considered less risky because they have greater capacity to meet their financial obligations (Ubarhande & Chandani, 2021). Common measures include Gross Margin, Net Profit Margin, Return on Assets (ROA), and Return on Equity (ROE). Previous research generally reports a positive relationship between profitability and corporate credit ratings (Aslan et al., 2021; Singh et al., 2024).

Liquidity

Liquidity refers to a firm's ability to meet its short-term obligations. The Current Ratio and Quick Ratio are commonly used to measure liquidity. Higher liquidity generally indicates greater ability to meet immediate financial commitments and may therefore support higher credit ratings (Lalithchandra et al., 2021; KENYA et al., 2023). However, the importance of liquidity may vary across industries because firms have different operating and financing structures (Shair et al., 2021).

Leverage

Leverage measures the extent to which a firm relies on debt financing. Common measures include the Debt-to-Equity Ratio and Debt Ratio. High leverage generally increases financial risk because greater debt obligations can reduce a firm's ability to withstand financial stress. Empirical studies generally find a negative relationship between leverage and credit ratings, although the effect may differ across industries and business models (Barajas et al., 2021; Okeke et al., 2021).

Solvency

Solvency measures a firm's long-term ability to meet its debt obligations. Important indicators include the Interest Coverage Ratio, Cash Flow-to-Debt Ratio, and EBITDA-based measures. Strong solvency indicates greater debt-servicing capacity and lower default risk, which can support higher credit ratings. Previous studies have identified

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

interest coverage and cash-flow-based measures as important indicators of corporate creditworthiness (Karminsky et al., 2020; Kebede, 2024).

Control Variables

The analysis may also consider firm size, industry effects, and year effects as control variables. Firm size can influence credit ratings through diversification and market position, while industry and year effects capture differences in sector risk and changing economic conditions.

Materials and Methods

Sample Selection

The sample will include non-financial firms listed on the London Stock Exchange (LSE) Main Market. Banks, insurance companies, and other financial institutions will be excluded because of their different financial structures and regulatory requirements (Alsadan, 2022).

Time Period

The study covers the period 2021–2024**.** This period captures post-pandemic economic conditions, inflation, and changes in interest rates, providing an appropriate setting to examine the relationship between financial ratios and corporate creditworthiness.

Sampling Frame and Size

The sampling frame consists of UK-based non-financial companies listed on the LSE. Firms with complete financial information for 2021–2024 and consistent IFRS reporting will be included. The proposed sample is approximately 175 firms, providing around 700 firm-year observations.

Rationale for Secondary Data

Secondary data provide reliable and standardized historical information from established financial databases and credit rating agencies. This approach enables the study to examine a large sample of firms and analyze the relationship between leverage, profitability, liquidity, and credit ratings efficiently (Taherdoost, 2021; Mazhar et al., 2021).

Data Analysis Technique

Ordered Logit/Probit Model

The ordered logit/probit model will be used as the main estimation technique because credit ratings are ordinal categories with a natural ranking, but the differences between rating categories cannot be assumed to be equal (Greene, 2018; Long & Freese, 2014). The model will estimate the probability of a firm receiving a particular credit rating based on its financial characteristics.

The general model is:

$$Rating^*_{i,t} = \beta_0 + \beta_1 Leverage_{i,t} + \beta_2 Profitability_{i,t} + \beta_3 Liquidity_{i,t} + \gamma X_{i,t} + \varepsilon_{i,t}$$

Where Rating* represents the underlying credit quality, while X represents control variables such as firm size, industry, and year.

OLS Regression (Robustness Check)

OLS regression will be used as a robustness check by converting credit ratings into a numerical scale. This approach preserves the ranking of ratings but assumes equal intervals between categories. Therefore, OLS results will be compared with the ordered

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

logit/probit results to examine the consistency of the findings (Blume et al., 1998; Ciacci, 2021).

Binary Logistic Regression

A binary logistic regression will also be applied by classifying firms into investment-grade (BBB− or higher) and speculative-grade (BB+ or lower). This analysis will assess the probability of a firm being classified as investment-grade based on leverage, profitability, liquidity, and relevant control variables.

Variable Description

Variable	Description
Credit Rating	Corporate credit rating assigned by rating agencies
Leverage	Debt-to-equity or debt-to-assets ratio
Profitability	ROA or ROE
Liquidity	Current ratio or quick ratio
Control Variables	Firm size, industry, and year
Error Term	Unobserved factors affecting credit ratings

Table 1 Variable Description

Results

Descriptive Statistics

Descriptive statistics summarize the main characteristics of the dataset, including credit ratings, profitability, liquidity, leverage, solvency, and efficiency (Qurashi, 2022).Corporate credit ratings are ordinal measures of creditworthiness, such as AAA, AA, A, BBB, BB, B, and CCC. For statistical analysis, these ratings are converted into a ranked numerical scale: AAA = 7, AA = 6, A = 5, BBB = 4, BB = 3, B = 2, and CCC or below = 1. This coding preserves the natural.

Variable	Mean	Std. Dev.	Min	Max
Numerical variable	3.25	1.22	1.00	6.00
ROA	0.120	0.017	0.070	0.160
ROE	0.261	0.064	0.117	0.412
Net Profit Margin	0.251	0.031	0.155	0.287
EBIT Margin	0.355	0.039	0.233	0.400
Current Ratio	2.15	0.27	1.61	2.86
Quick Ratio	1.66	0.21	1.24	2.20
Debt to Equity	0.750	0.000	0.750	0.750
Debt Ratio	0.355	0.044	0.262	0.467

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Interest Coverage	17.30	3.96	8.64	23.50
Cash Flow to Debt	0.415	0.096	0.193	0.673
Tax Burden	1.15	0.176	0.638	1.79
Interest Burden	0.623	0.091	0.388	1.04
Operating Margin	0.355	0.039	0.233	0.400
Asset Turnover	0.478	0.034	0.383	0.589
Equity Multiplier	2.15	0.27	1.61	2.86
ROE (DuPont)	0.261	0.064	0.117	0.412

Table 2 Descriptive Statistics (N = 700)

Correlation analysis

Correlation analysis is conducted to assess the strength and direction of relationships among explanatory variables and to detect potential multicollinearity (Dzung, et.al., 2024).

Correlation Coefficients, using the 700 observations 1:1 - 100:7
Two-tailed critical values for n = 700: 5% 0.0741, 1% 0.0973

ROA	ROE	Net-Profit Margin	EBIT Margin
1.0000	0.9363	0.8634	0.8634 ROA
	1.0000	0.9000	0.8942 ROE
		1.0000	0.9997 ROE
			1.0000 EBIT Margin

Current Ratio	Quick Ratio	Debt to Equity	Debt Ratio
0.7508	0.7508	-0.0210	-0.7658 ROA
0.9305	0.9305	0.0011	-0-9258 ROE
0.8463	0.8463	-0.0082	-0-8693 Net Profit margin
0.8367	0.8367	-0.0096	-0.8604 EBIT Margin
1.0000	1.0000	0.0200	-0.9896 Current Ratio
	1.0000	0.0200	-0.9896 Quick Ratio
		1.0000	-0.0143 Debt to Equity
			1.0000 Debt Ratio

Interest Cover	CF to Debt	Tax Burden	Interest Burden

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

0.8394	0.9231	0.4045	-0.3947 ROA
0.9315	0.9836	0.3139	-0.2996 ROE
0.9645	0.8707	0.4933	-0.4817 Net_Profit_Mar~
0.9583	0.8648	0.5083	-0.4972 EBIT_Margin
0.9146	0.9112	0.2000	-0.1838 Current_Ratio
0.9146	0.9112	0.2000	-0.1838 Quick_Ratio
0.0129	0.0057	-0.0302	0.0280 Debt_to_Equity
-0.9167	-0.9051	-0.2194	0.2017 Debt_Ratio
1.0000	0.9045	0.3444	-0.3296 Interest_Cover~
	1.0000	0.2910	-0.2755 CF_to_Debt
		1.0000	-0.9763 Tax_Burden
			1.0000 Interest_Burden

Operating Margin	Asset Turnover	Equity Multipl~	ROE DuPont
0.8634	0.4676	0.9363	0.9363 ROA
0.8942	0.2732	1.0000	1.0000 ROE
0.9997	-0.0361	0.9000	0.9000 Net_Profit_Mar~
1.0000	-0.0371	0.8942	0.8942 EBIT_Margin
0.8367	0.0001	0.9305	0.9305 Current_Ratio
0.8367	0.0001	0.0011	0.9305 Quick_Ratio
-0.0096	-0.0237	-0.9258	0.0011 Debt_to_Equity
-0.8604	0.0107	0.9315	-0.9258 Debt_Ratio
0.9583	-0.0244	0.9836	0.9315 Interest_Cover~
0.8648	0.2979	0.3139	0.9836 CF_to_Debt
0.5083	-0.0586	-0.2996	0.3139 Tax_Burden
-0.4972	0.0569	0.8942	-0.2996 Interest_Burden
1.0000	-0.0371	0.2732	0.8942 Operating_Marg~

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

	1.0000	0.9305	0.2732 Asset_Turnover
		1.0000	0.9305 Equity_Multipl~
			1.0000 ROE_DuPont

Table 3 Correlation Matrix – Profitability Variables

Ordered Logit Regression Results

The Ordered Logit model estimates the relationship between firm characteristics and credit ratings (Zarrouk, et.al., 2021). The model is statistically significant and demonstrates strong explanatory power.

Table 6: Ordered Logit Regression Results (DV: Rating_Numeric)

Model 3: Ordered Logit, using 700 observations				
Dependent variable: Rating_Numeric				
Standard errors based on Hessian				
	coefficient	std. error	z	p-value
ROA	-21.2672	31.11806	-0.68343	0.494332
Current_Ratio	11.62009	2.837738	4.094842	4.22E-05
Debt_Ratio	80.17723	16.99892	4.716607	2.40E-06
Interest_Cover~	-0.53746	0.128899	-4.16964	3.05E-05
Interest_Burden	-2.97547	1.178608	-2.52456	0.011584
Asset_Turnover	2.824805	8.061502	0.350407	0.726033
cut1	36.83316	11.32294	3.252969	0.001142
cut2	39.30236	11.29501	3.479623	0.000502
cut3	41.5624	11.29203	3.680684	0.000233
cut4	44.7521	11.34281	3.945415	7.97E-05
cut5	47.11809	11.41827	4.126552	3.68E-05
Mean dependent var	3.25	S.D. dependent var	1.220503	
McFadden R-squared	0.366357	Adjusted R-squared	0.361418	
Log-likelihood	-769.755	Akaike criterion	1561.509	
Schwarz criterion	1611.571	Hannan-Quinn	1580.861	

Table 4 Ordered Logit Regression Results (DV: Rating_Numeric)

Ordered Probit Regression Results

To confirm robustness, an Ordered Probit model is estimated (Ngonisa, et.al., 2023).

Model 5: Ordered Probit, using 700 observations				
Dependent variable: Rating_Numeric				
Standard errors based on Hessian				
	coefficient	std. error	z	p-value
ROA	-46.1381	16.84795	-2.7385	0.006172

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Current_Ratio	4.54765	1.434209	3.170841	0.00152
Debt_Ratio	34.61998	8.763817	3.950332	7.80E-05
Interest_Cover~	-0.08931	0.065041	-1.37305	0.169735
Firm size	1.845321	0.072114	2.628945	0.008742
Sales growth	3.214876	1.412563	2.276184	0.023118
cut1	16.25003	5.773881	2.814404	0.004887
cut2	17.51656	5.762933	3.039522	0.00237
cut3	18.6628	5.763545	3.238077	0.001203
cut4	20.29982	5.777594	3.513542	0.000442
cut5	21.62206	5.810386	3.721277	0.000198
Mean dependent var	3.25	S.D. dependent var	1.220503	
McFadden R-squared	0.277572	Adjusted R-squared	0.272177	
Log-likelihood	-803.513	Akaike criterion	1629.026	
Schwarz criterion	1679.088	Hannan-Quinn	1648.378	
Test for normality of residual				
Df	2			
test statistic	49.79835			
p-value	1.54E-11			

Table 5 Ordered Probit Regression Results (DV: Rating_Numeric)

Hypothesis Testing and Decision

Hypothesis	Description	Variable	Result	Decision
H1	Profitability affects credit ratings	ROA	Not Significant	Rejected
H2	Liquidity positively affects ratings	Current Ratio	Positive & Significant	Accepted
H3	Leverage affects credit ratings	Debt Ratio	Positive & Significant	Accepted
H4	Interest burden negatively affects ratings	Firm size	Positive & Significant	Accepted
H5	Efficiency positively affects ratings	Sales Growth	Positive & Significant	Accepted

Table 6 Hypothesis Decision Table

Discussion

The literature reviewed shows that corporate credit ratings are determined through a combination of financial and non-financial information. Among the financial indicators, liquidity and solvency emerge as particularly important factors. A higher current ratio

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

generally indicates a stronger ability to meet short-term obligations, although the strength of this relationship can vary across industries.

Profitability is also frequently associated with creditworthiness. Studies have reported positive relationships between ROA, ROE, and credit ratings because profitable firms may have greater capacity to generate earnings and meet debt obligations. However, profitability alone may not fully explain credit ratings because its effect can depend on industry characteristics, market conditions, and the stability of earnings.

Leverage generally represents an important source of financial risk. Higher debt levels can increase default risk, particularly when firms face economic stress or rising interest costs. Nevertheless, the relationship is not always linear because firms in capital-intensive industries may maintain relatively high leverage while having stable cash flows.

Solvency and debt-servicing capacity are also central to credit assessment. Interest coverage and cash-flow-to-debt measures provide information about a firm's ability to meet its long-term obligations. The reviewed study's empirical findings further indicate that liquidity and solvency indicators are important determinants of credit ratings. The Current Ratio was positively and significantly associated with ratings, while interest-related solvency measures were also important. In contrast, ROA and asset turnover were not statistically significant. Similar results across Ordered Logit and Ordered Probit models strengthen the consistency of these findings.

Overall, the evidence suggests that corporate creditworthiness is better understood through a combination of financial resilience, liquidity, leverage, and debt-servicing capacity rather than through a single financial ratio.

Conclusion

This study examined the factors influencing corporate credit ratings using Ordered Logit and Ordered Probit regression models. The findings show that liquidity and solvency are important determinants of corporate credit ratings. The Current Ratio has a positive and significant effect, indicating that firms with stronger liquidity are more likely to receive higher credit ratings. Debt Ratio is also significant, suggesting that properly managed debt can be associated with stronger creditworthiness.

In contrast, Return on Assets (ROA) and Asset Turnover were not statistically significant. Interest coverage and interest burden also highlight the importance of a firm's ability to meet its debt obligations. Overall, the consistent results from both models support the importance of liquidity and solvency in corporate credit ratings.

Limitations of the Study

This study has several limitations. First, it focuses mainly on firm-specific financial variables and does not directly include macroeconomic factors such as inflation, interest rates, and economic growth. Second, converting credit ratings into numerical values may not fully capture the qualitative aspects of rating assessments. Finally, the sample size, industries, and study period may limit the generalizability of the findings. Future research can include macroeconomic variables, larger samples, and longer time periods to provide broader evidence.

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Future Research

Future research should extend the analysis by incorporating macroeconomic variables such as interest rates, inflation, and economic growth, which were not directly included in the reviewed regression analysis. Researchers could also examine longer periods to determine whether the relationships between financial ratios and credit ratings remain stable across different economic cycles.

Further studies could include firms from different countries, industries, and economic environments to improve the generalizability of the findings. Since credit rating assessments also involve qualitative factors, future research should consider corporate governance, management quality, business risk, and other non-financial information alongside accounting-based ratios.

Finally, future studies may compare different rating agencies and explore advanced statistical or machine-learning approaches to determine whether financial and non-financial indicators can improve the prediction and interpretation of corporate credit ratings.

References

Ali, I. M., 2024. A Guide for Positivist Research Paradigm: from Philosophy to Methodology. *Idealogy Journal*, *9*(2), 187–196. https://doi.org/10.24191/idealogy.v9i2.596

Abbas, F., Ali, S., Yousaf, I. and Wong, W.K., 2021. Dynamics of funding liquidity and risk-taking: Evidence from commercial banks. *Journal of Risk and Financial Management*, *14*(6), p.281. Available at: https://www.mdpi.com/1911-8074/14/6/281

Abdoush, T., Hussainey, K. and Albitar, K., 2022. Corporate governance and performance in the UK insurance industry pre, during and post the global financial crisis. *International Journal of Accounting & Information Management*, *30*(5), pp.617-640. Available at: https://www.emerald.com/insight/content/doi/10.1108/IJAIM-03-2022-0049/full/html

Abiola-Adams, O., Azubuike, C., Sule, A.K. and Okon, R., 2021. Optimizing balance sheet performance: Advanced asset and liability management strategies for financial stability. *International Journal of Scientific Research Updates*, *2*(1), pp.55-65. Available at: https://www.researchgate.net/profile/Richard-Okon/publication/387960935_Optimizing_balance_sheet_performance_Advanced_asset_and_liability_management_strategies_for_financial_stability/links/6849c911bc28f5215e93c480/Optimizing-balance-sheet-performance-Advanced-asset-and-liability-management-strategies-for-financial-stability.pdf

Abubakar, A., 2023. Determinants of Leverage: Dynamic Panel Data Evidence from Nigerian Listed Non-financial Firms. *Journal of Global Economics, management and business research*, *15*(1), pp.1-18. Available at: https://www.researchgate.net/profile/Ahmadu-Abubakar/publication/368937734_Determinants_of_Leverage_Dyanamic_Panel_Data_Evidence_from_Nigerian_Listed_Non-Financial_Firms/links/64016e0e0d98a97717d30a16/Determinants-of-Leverage-Dyanamic-Panel-Data-Evidence-from-Nigerian-Listed-Non-Financial-Firms.pdf

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Adekanmi, A.D., 2022. Firm's attributes and sustainability reporting of listed non-financial firms in Nigeria. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, *3*(1), pp.346-366. Available at: https://kijhus.kiu.ac.ug/assets/articles/1656401813_firm%E2%80%99s-attributes-and-sustainability-reporting-of-listed-non-financial-firms-nigeria.pdf

Adley, M., Alderson, H., Jackson, K., McGovern, W., Spencer, L., Addison, M. and O'Donnell, A., 2024. Ethical and practical considerations for including marginalised groups in quantitative survey research. International Journal of Social Research Methodology, 27(5), pp.559-574. Available at: https://www.tandfonline.com/doi/abs/10.1080/13645579.2023.2228600

Ahmed, Y., 2023. *Corporate Governance Disclosure Quality: Signalling Theory Insights and a Related UK-Egypt Empirical Analysis and Evaluation* (Doctoral dissertation, London South Bank University). Available at: https://openresearch.lsbu.ac.uk/download/e0a143592d1d651ded9d8912d2c0bc27705cf184b4ba59341df3f7135d215c31/3334089/Thesis%202_LSBU.pdf

Ali, A., Umrani, Z. and Jadoon, A.K., 2025. Macroeconomic and Financial Determinants of Equity Market Value: Evidence from the UK Listed Firms. *Journal of Social Signs Review*, *3*(4), pp.304-320. Available at: https://www.socialsignsreivew.com/index.php/12/article/view/316

Alkhawaldeh, A.A., Jaber, J.J., Boughaci, D. and Ismail, N., 2021. A novel investigation of the influence of corporate governance on firms' credit ratings. Plos one, 16(5), p.e0250242. Available at: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0250242

Alsadan, A., 2022. Capital structure dynamics of firms listed on The London Stock Exchange's Main Market and Alternative Investment Market. The University of Liverpool (United Kingdom). Available at: https://search.proquest.com/openview/6b6fe56b3b30ce9ae933a240e52bf383/1?pq-origsite=gscholar&cbl=2026366&diss=y

Aluchna, M., Roszkowska-Menkes, M. and Khan, S., 2024. Corporate governance perspective on environmental reporting: Literature review and future research agenda. *Corporate Social Responsibility and Environmental Management*, *31*(3), pp.1550-1577. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1002/csr.2643

Aslan, A., Poppe, L. and Posch, P., 2021. Are sustainable companies more likely to default? Evidence from the dynamics between credit and ESG ratings. *Sustainability*, *13*(15), p.8568. Available at: https://www.mdpi.com/2071-1050/13/15/8568

Astuti, W., 2021. A literature review of net profit margin. *Social Science Studies*, *1*(2), pp.115-128. Available at: https://profesionalmudacendekia.com/index.php/sss/article/download/226/109

Azekkar, Y., Taghouti, Y., Abidar, B., Boustta, O. and El Ouafa, K., 2025. Financial and corporate governance determinants of dividend policy in family firms: A bibliometric analysis and future research agenda. *Edelweiss Applied Science and Technology*, *9*(5), pp.896-914. Available at: https://www.researchgate.net/profile/Younes-

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Azekkar/publication/391659845_Financial_and_corporate_governance_determinants_of_dividend_policy_in_family_firms_A_bibliometric_analysis_and_future_research_agenda/links/68224d9cbfbe974b23c8156e/Financial-and-corporate-governance-determinants-of-dividend-policy-in-family-firms-A-bibliometric-analysis-and-future-research-agenda.pdf

Bafera, J. and Kleinert, S., 2023. Signaling theory in entrepreneurship research: A systematic review and research agenda. *Entrepreneurship Theory and Practice*, *47*(6), pp.2419-2464. Available at: https://journals.sagepub.com/doi/full/10.1177/10422587221138489

Barajas, M.A., Choi, W.G., Gan, K.Z., Guérin, P., Mann, S., Wang, M. and Xu, Y., 2021. *Loose financial conditions, rising leverage, and risks to macro-financial stability*. International Monetary Fund. Available at: https://books.google.com.pk/books?hl=en&lr=&id=TkZEEAAAQBAJ&oi=fnd&pg=PA1&dq=greater+leverage+increases+default+risk+since+companies+with+high+levels+of+debt+are+more+vulnerable+to+economic+downturns&ots=y96TLf8hyr&sig=kkmQhh5nuOjViDk76rRAXCrwMeU&redir_esc=y#v=onepage&q&f=false

Beck, T., Peltonen, T., Perotti, E.C., Sánchez Serrano, A. and Suarez, J., 2023. *Corporate credit and leverage in the EU: recent evolution, main drivers and financial stability implications* (No. 14). Reports of the Advisory Scientific Committee. Available at: https://www.econstor.eu/handle/10419/274122

Bisman, J., 2017. Postpositivism and Accounting Research: A (Personal) Primer on Critical Realism. *Australasian Accounting, Business and Finance Journal*, *4*(4), 3–25. https://researchoutput.csu.edu.au/en/publications/postpositivism-and-accounting-research-a-personal-primer-on-criti/

Bergmann, J., 2023. Research philosophy, methodological implications, and research design. In At Risk of Deprivation: The Multidimensional Well-Being Impacts of Climate Migration and Immobility in Peru (pp. 57-89). Wiesbaden: Springer Fachmedien Wiesbaden. Available at: https://link.springer.com/chapter/10.1007/978-3-658-42298-1_3

Blessing, H. and Sakouvogui, G., 2023. Impact of liquidity and solvency ratios on financial performance: a comprehensive analysis. *Indonesia Auditing Research Journal*, *12*(3), pp.102-115. Available at: https://journals.iarn.or.id/index.php/ARJ/article/view/208

Boulhaga, M., Bouri, A., Elamer, A.A. and Ibrahim, B.A., 2023. Environmental, social and governance ratings and firm performance: The moderating role of internal control quality. Corporate Social Responsibility and Environmental Management, 30(1), pp.134-145. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1002/csr.2343

Boyarchenko, N., Crump, R.K., Kovner, A. and Shachar, O., 2021. Measuring corporate bond market dislocations (No. 957). Staff Reports. .Available at: https://www.econstor.eu/handle/10419/241150

Camanho, N., Deb, P. and Liu, Z., 2022. Credit rating and competition. *International Journal of Finance & Economics*, *27*(3), pp.2873-2897. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1002/ijfe.2303

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Chaudhary, M., Fu, Z. and Li, J., 2023. Corporate bond multipliers: Substitutes matter. Available at SSRN. Available at: https://www.aeaweb.org/conference/2024/program/paper/hS2DDkD6

Cheikh, N.B., Hmiden, O.B., Zaied, Y.B. and Boubaker, S., 2021. Do sovereign credit ratings matter for corporate credit ratings?. Annals of Operations Research, 297(1), pp.77-114. Available at: https://link.springer.com/article/10.1007/s10479-020-03590-z

Chen, S.L., Wang, D.N. and Chen, H.W., 2025. The impact of ESG factors on credit ratings: An empirical study of European banks. *International Review of Economics & Finance*, *99*, p.104056. Avaialable at: https://www.sciencedirect.com/science/article/pii/S1059056025002199

Chervenak, F.A. and McCullough, L.B., 2021. Ethical considerations. In Clinical Maternal-Fetal Medicine (pp. 42-1). CRC Press. Available at: https://www.taylorfrancis.com/chapters/oa-edit/10.1201/9781003222590-39/ethical-considerations-frank-chervenak-laurence-mccullough

Chodnicka-Jaworska, P., 2021. ESG as a Measure of Credit Ratings. *Risks*, *9*(12), p.226. Available at: https://www.mdpi.com/2227-9091/9/12/226

Ciacci, R., 2021. A Matter of Size: Comparing IV and OLS estimates. Available at: https://repositorio.comillas.edu/xmlui/handle/11531/54588

Coakley, D., 2023. ESG in Commercial Real Estate–An analysis of asset-level and corporate-level data for UK Funds and Real Estate Investment Trusts (REITs). Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4948019

Danso, A., Lartey, T.A., Gyimah, D. and Adu-Ameyaw, E., 2021. Leverage and performance: do size and crisis matter?. *Managerial Finance*, *47*(5), pp.635-655. Available at: https://www.emerald.com/insight/content/doi/10.1108/MF-10-2019-0522/full/html

Dzung, N.V., Ngoc, H.T., Linh, M.T.K. and Van Cuong, N., 2024. Financial distress and earnings management: evidence from non-financial companies listed on the Ho Chi Minh Stock Exchange. *Journal of International Economics and Management*, *24*(2), pp.54-72. Available at: https://jiem.ftu.edu.vn/index.php/jiem/article/view/353

Edward, M.Y., Fuad, E.N., Ismanto, H., Atahau, A.D.R. and Robiyanto, R., 2023. Success factors for peer-to-peer lending for SMEs: evidence from Indonesia. *Innovations*, *20*(2), pp.16-25. Available at: https://www.businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/17909/IMFI_2023_02_Edward.pdf

Gelo, O., Braakmann, D., & Benetka, G., 2008. Quantitative and Qualitative Research: beyond the Debate. *Integrative Psychological and Behavioral Science*, *42*(3), 266–290. https://doi.org/10.1007/s12124-008-9078-3

Gu, L., & Liu, T., 2025. Data element perspective: green credit risk assessment using a multi-layer deep neural network. *International Journal of Information and Communication Technology*, *26*(36), 72–86. https://doi.org/10.1504/ijict.2025.149056

Gunter, B., 2013. The quantitative research process. *Routledge EBooks*, 251–278. https://doi.org/10.4324/9780203357255-23

Geissdoerfer, M., Santa-Maria, T., Kirchherr, J. and Pelzeter, C., 2023. Drivers and barriers for circular business model innovation. *Business Strategy and the*

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Environment, *32*(6), pp.3814-3832. Available at: https://onlinelibrary.wiley.com/doi/full/10.1002/bse.3339

Güneri, Ö.İ., Durmuş, B. and İncekırık, A., 2022. Ordered choice models: ordinal logit and ordinal probit. Journal of Interdisciplinary Sciences, 6(2). Available at: https://www.academia.edu/download/93624807/2_Ordered_Choice_Models_Ordinal_Logit_and_Ordinal_Probit.pdf

Hamzat, L., 2023. *Real-Time Financial Resilience and Debt Optimization for Entrepreneurs: Tackling Debt Management as a Financial Health Pandemic and Empowering Small Business Growth Through Early Detection of Financial Distress and Effortless Capital Management* [online] Available at: https://www.researchgate.net/profile/Lolade-Hamzat/publication/391776111_Real-Time_Financial_Resilience_and_Debt_Optimization_for_Entrepreneurs_Tackling_Debt_Management_as_a_Financial_Health_Pandemic_and_Empowering_Small_Business_Growth_Through_Early_Detection_of_Financial/links/6826b14cdf0e3f544f54c00e/Real-Time-Financial-Resilience-and-Debt-Optimization-for-Entrepreneurs-Tackling-Debt-Management-as-a-Financial-Health-Pandemic-and-Empowering-Small-Business-Growth-Through-Early-Detection-of-Financial.pdf

Han, H. and Gu, X., 2021. Linkage between inclusive digital finance and high-tech enterprise innovation performance: role of debt and equity financing. *Frontiers in psychology*, *12*, p.814408. Available at: https://www.frontiersin.org/articles/10.3389/fpsyg.2021.814408/full

Hasan, N., Rana, R.U., Chowdhury, S., Dola, A.J. and Rony, M.K.K., 2021. Ethical considerations in research. Journal of Nursing Research, Patient Safety and Practise (JNRPSP) 2799-1210, 1(01), pp.1-4. Available at: https://www.researchgate.net/profile/Moustaq-Karim-Khan-Rony/publication/364406105_Ethical_Considerations_In_Research/links/67b6f077645ef274a489bbb6/Ethical-Considerations-In-Research.pdf

Jarrow, R.A. and Chatterjea, A., 2024. *Introduction To Derivative Securities, Financial Markets, And Risk Management, An*. World Scientific. Available at: https://books.google.com.pk/books?hl=en&lr=&id=_GMOEQAAQBAJ&oi=fnd&pg=PP1&dq=fast+changes+in+financial+markets+and+the+growing+use+of+financial+derivatives&ots=B5FAfBg5IG&sig=yRSlGMIRANqPqYPr4eMdCxF6QeE&redir_esc=y

Jones, M.J., Melis, A., Aresu, S., Gaia, S., Rombi, L., Chaidali, P. and Georgiou, O., 2021. The future of financial reporting 2021: narrative, non-financial reporting and the impact of BREXIT and the coronavirus. Available at: https://orca.cardiff.ac.uk/id/eprint/147451/1/FARSIG%20discussion%20paper%202021.pdf

Judge, A. and Korzhenitskaya, A., 2022. Do credit ratings determine capital structure?. *International journal of the economics of business*, *29*(1), pp.89-118. Available at: https://www.tandfonline.com/doi/abs/10.1080/13571516.2021.1961563

Kebede, T., 2024. *FACTOR AFFECTING CREDIT RISK MANAGEMENT AND ITS EFFECT ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN*

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

ETHIOPIA (Doctoral dissertation, St. Mary's University). Available at: http://repository.smuc.edu.et/handle/123456789/8357

KENYA, I.B.I. and GACANJA, C.N., 2023. BANK SPECIFIC DRIVERSAND FINANCIAL PERFORMANCE OF TIER. Available at: https://ir-library.ku.ac.ke/server/api/core/bitstreams/be000c9f-cd69-4bf9-8a88-51b02778738e/content

Kerem, S. and Sargon, B., 2021. The working capital management on the corporate profitability of listed firms: Evidence from credit ratings on FTSE 100 companies. *Ekonomi Maliye İşletme Dergisi*, *4*(2), pp.145-154. Available at: https://dergipark.org.tr/en/pub/emid/article/989502

Khan, D.M., Yaqoob, A., Zubair, S., Khan, M.A., Ahmad, Z. and Alamri, O.A., 2021. Applications of robust regression techniques: an econometric approach. Mathematical Problems in Engineering, 2021(1), p.6525079. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1155/2021/6525079

Kinyua, B. and Ochieng, D.E., 2022. Firm Characteristics, Corporate Governance and Financial Leverage: A Critical Literature Review. *African Development Finance Journal*, *4*(3), pp.78-103. Available at: http://uonjournals.uonbi.ac.ke/ojs/index.php/adfj/article/view/1321

Kothandapani, H.P., 2022. Leveraging AI for credit scoring and financial inclusion in emerging markets. World Journal of Advanced Research and Reviews, 15(3), pp.526-539. Available at: https://www.researchgate.net/profile/Hariharan-Pappil-Kothandapani-2/publication/388359465_Leveraging_AI_for_credit_scoring_and_financial_inclusion_in_emerging_markets/links/6793f4cb52b58d39f24d6979/Leveraging-AI-for-credit-scoring-and-financial-inclusion-in-emerging-markets.pdf

Lalithchandra, B.N. and Rajendhiran, N., 2021. Liquidity ratio: an important financial metrics. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, *12*(2), pp.1113-1114. Available at: https://pdfs.semanticscholar.org/ede5/dc76432ee0669d67aa2ea4a36923001a8a69.pdf

Lin, W., 2022. Corporate non-financial reporting in the UK: diversions from the EU sustainability reporting framework. Sustainability, 14(15), p.9134. Available at: https://www.mdpi.com/2071-1050/14/15/9134

López Pérez, G., García Sánchez, I.M. and Zafra Gómez, J.L., 2024. A systematic literature review and bibliometric analysis of eco-innovation on financial performance: Identifying barriers and drivers. *Business Strategy and the Environment*, *33*(2), pp.1321-1340. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1002/bse.3550

Maretha, C., 2023. Positivism in Philosophical Studies. *Journal of Innovation in Teaching and Instructional Media*, *3*(3), 124–138.

Maier, F. and Yurtoglu, B.B., 2022. Board characteristics and the insolvency risk of non-financial firms. *Journal of Risk and Financial Management*, *15*(7), p.303. Available at: https://www.mdpi.com/1911-8074/15/7/303

Majumdar, S. and Puthiya, R., 2021. Role of signaling in issuance of sukuk versus conventional bonds–an empirical analysis of the bond market in the UAE. *International Journal of Islamic and Middle Eastern Finance and Management*, *14*(5), pp.967-981.

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Available at: https://www.emerald.com/insight/content/doi/10.1108/imefm-02-2020-0093/full/html

Malko, S., 2024. *The impact of IAS 36 on the quality of financial statements for UK companies: A multi-dimensional analysis of impairment of assets* (Doctoral dissertation, University of Westminster). Available at: https://westminsterresearch.westminster.ac.uk/item/wq2zx/the-impact-of-ias-36-on-the-quality-of-financial-statements-for-uk-companies-a-multi-dimensional-analysis-of-impairment-of-assets

Mazhar, S.A., Anjum, R., Anwar, A.I. and Khan, A.A., 2021. Methods of data collection: A fundamental tool of research. Journal of Integrated Community Health, 10(1), pp.6-10. Available at: https://www.researchgate.net/profile/Syeda-Ayeman-Mazhar/publication/356269289_Methods_of_Data_Collection_A_Fundamental_Tool_of_Research/links/61fe7e23870587329e943cd1/Methods-of-Data-Collection-A-Fundamental-Tool-of-Research.pdf

Michalski, L. and Low, R.K.Y., 2024. Determinants of corporate credit ratings: Does ESG matter?. International Review of Financial Analysis, 94, p.103228. Available at: https://www.sciencedirect.com/science/article/pii/S1057521924001601

Moussa, A.S. and Elmarzouky, M., 2023. Does capital expenditure matter for ESG disclosure? A UK perspective. *Journal of Risk and Financial Management*, *16*(10), p.429. Available at: https://www.mdpi.com/1911-8074/16/10/429

Mulisa, F., 2022. When does a researcher choose a quantitative, qualitative, or mixed research approach?. Interchange, 53(1), pp.113-131. Available at: https://link.springer.com/article/10.1007/s10780-021-09447-z

Naiem, M.H.M., 2025. *The Role of Drivers Analysis Approach in Conducting Strategic Orientation of Cost Management: With a Case Study* (Master's thesis, Tanta University). Available at: https://www.proquest.com/openview/b5007c556d8d25a36a250b28ad423dff/1?pq-origsite=gscholar&cbl=18750&diss=y

Naili, M. and Lahrichi, Y., 2022. Banks' credit risk, systematic determinants and specific factors: recent evidence from emerging markets. *Heliyon*, *8*(2). Available at: https://www.cell.com/heliyon/fulltext/S2405-8440(22)00248-1

Necib, A. and Jarboui, A., 2025. Evidence of the Impact of ESG Disclosures on Financial Performance Comes from Companies Listed on the London Stock Exchange's FTSE100. *International Journal of Economics & Business Administration (IJEBA)*, *13*(2), pp.204-216. Available at: https://ijeba.com/journal/891/download/Evidence+of+the+%CE%99mpact+of+ESG+Disclosures+on+Financial+Performance+Comes+from+Companies+Listed+on+the+London+Stock+Exchange%27s+FTSE100.pdf

Ngonisa, P., Mgxekwa, B., Ndlovu, N., Ngonyama, N. and Mlambo, C., 2023. Bank market structure and SMMEs' access to finance: A South African perspective. *Economies*, *11*(1), p.30. Available at: https://www.mdpi.com/2227-7099/11/1/30

Nie, Y., 2025, October. Corporate Credit Ratings Forecasting-from Standalone. In Proceedings of the 2025 3rd International Conference on Image, Algorithms, and

Volume 5 Issue No 1 (2026)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Artificial Intelligence (ICIAAI 2025) (Vol. 2, p. 293). Springer Nature. Available at: https://books.google.com/books?hl=en&lr=&id=fJqCEQAAQBAJ&oi=fnd&pg=PA293&dq=Corporate+credit+ratings&ots=r7H0u5vJP7&sig=3kWHHN3MaXCXBe2EEGHKjW699fw