Business Strategy and Earnings Management: Financial vs Non-Financial Firms

Taqwa Al Mawaali[1][0009-0001-8410-3001], Omar Nasser Khamis Al Hashar[2], Noof Al Alawi[3][0009-0003-5035-0826] Tamanna Dalwai [4][0000-0001-5754-5384], Syeeda Shafiya Mohammadi[5][0000-0001-5929-8145], and Maroua Ben Maaouia[6]

[1,2,3,4,5,6] Muscat College, Ruwi, 2910, Sultanate of Oman
tamanna@mucatcollege.edu.om

Abstract.

This study investigates the impact of business strategy on earnings management practices for financial and non-financial firms in Oman. To assess the research objective, 430 firm-year observations from 2015 to 2019 were employed in the study. Using regression analysis, the findings suggest that differentiation strategy positively affects earnings management in financial sector firms. In addition, cost leadership strategy positively affects earnings management in non-financial sector firms. This indicates that business strategy is associated with company leaders managing their earnings while they are trying to survive through competition. These findings are useful for regulators, as they can introduce mechanisms to curb earnings management practices and instil more faith in investors.

Keywords: Business Strategy, Earnings Management, Emerging Country, Financial Sector, Non-Financial Sector, Cost Leadership, Differentiation.

1 Introduction

According to Magerakis and Habib [1] business strategy defines the organization's strategic moves intended to acquire a competitive advantage [2, 3]. Having a well-defined, clear business strategy in place impacts any organization with certainty and, moreover, has great importance in aiding an organization’s success [4]. In order to achieve better business functioning, strategies are generally concentrated on the actions required to create customer value in the firm's target markets. Numerous studies examine and reach conclusions on how various business strategies impact a company's success in several countries, although a lack of data is apparent on listed firms predominantly in the Sultanate of Oman. Therefore, this paper investigates this objective to close the gap. In a study examining publicly traded Chinese firms, it was found that prospectors and companies with an innovation-based strategy had a greater wage disparity than those with a cost leadership approach, also known as defenders [5].

The use of accounting methods to create financial statements that positively overstate a company's business operations and financial situation is known as earnings management. According to agency theory [6], the primary reason for having earnings management is a dispute or disagreement between management and the owners in an organization. Due to the discrepancies in contracts, and lack of accurate information, management may have strong reasons to participate in earnings management to match analysts' forecasts and smooth overall outcomes. The distinctive tone used specifically during earnings conference calls and the increased usage of earnings management by businesses to exceed or meet a firm's earnings were found to be positively correlated, according to a study on tone and earnings management conducted in the UK by Kayed and Meqbel [7]. This illustrates how tone modulation can be used to successfully manage audience perception. In terms of cost leadership and differentiation business strategies, earnings management and firm bankruptcy risk are interrelated, therefore both techniques significantly lower the chance of bankruptcy [8]. The overall long-term business strategy may incorporate earnings management, which is considered an opportunistic and resourceful tool for enterprises [9]. Martínez-Ferrero, Banerjee [10] have uncovered that corporate social responsibility (CSR) has a stronger positive influence on the cost of capital in companies that demonstrate earnings management, indicating that the market is unaware of situations in which CSR approaches are used to conceal earnings management.

This study adds to the body of knowledge by investigating the impact of various business strategies, primarily cost-based and differentiation strategies, on earnings management in financial and non-financial listed firms in the Sultanate of Oman. The 2040 vision of Oman states long-term goals, which include targets to encourage all Omani-based businesses to develop efficient business plans and strategies to focus on diversifying the nation's economy and lessen its current reliance on the Omani oil sector, thus representing the importance of strategic goals in business. According to Dalwai and Salehi [11] organizations must adapt to survive and make the most of the environmental prospects based on their strengths and shortcomings since business strategies aim to increase the competitive position of the company's offerings in its sector. Despite the economic, social, and cultural importance of emerging economy businesses around the world and in Oman, there is a shortage of literature that helps to understand how these businesses operate in emerging economy markets, and how strategy implementation and market forces might help to enhance their earnings management. Over the past twenty years, several authors have developed typologies to differentiate companies according to their strategies [12-15]. A company's strategy represents choices of objectives and means that strategic units decide to implement them after an assessment of their strengths and weaknesses, both internally and in their external environment [12]. Two typologies aim to classify business organizations according to their competitive strategy [12, 14]. This study aims to identify the different business strategies related to earning management. The research attempts to identify which strategy and market forces are the most influential on strategy and business performance in the context of Oman.

The remainder of the paper is organized as follows: Section 2 presents the literature review and hypothesis development. Section 3 discusses the methodology presented in the study. Section 4 presents the results and discussion of the data analyzed. Lastly, Section 5 discusses the conclusion and recommendations.

2 Literature Review

2.1 Business Strategy

The literature in strategic management has given rise to the concept of business strategy and led to numerous typologies intended to define and categorize these business strategies. This development began with the observation that several firms using very different strategies achieve a high level of performance in a given field of activity [16]. Among these typologies, those of Porter [3], Miles, Snow [12], and Youndt and Snell [17] come up more particularly in management books and practices because of their accuracy, ease of implementation, and explanatory power. Porter [3] typology refers to three fundamental strategies: cost dominance, differentiation, and focus strategy. The Miles, Snow [12] typology proposes four types of strategic configuration (prospectors, defendants, analysts, and reagents) based on their organization, efficiency, process, responsiveness, and products. Finally, the typology of Youndt and Snell [17] distinguishes three types of strategies; cost strategies, quality strategies, and flexibility strategies. Besides, it has already been established that strategy plays a key role in the development of earning management systems [16, 18]. The objective of this article is to try to understand the extent to which a company's strategy influences decisions about earning management measures, established in management accounting systems using Porter [3] framework.

2.2 Hypothesis development

Porter [14] claims that the cost leadership strategy and the differentiation strategy are two different types of business strategies. To compete in the market, the cost leadership strategy emphasizes cost efficiency [6, 8]. Cost-effectiveness is attained by limiting the expenses associated with the business' operating activities. High-cost tasks are typically avoided using this method. The cost leadership technique is frequently applied to minimize production costs in developing nations like Indonesia, where labour costs are lower. The differentiation strategy places a focus on the uniqueness that enhances the value of a good or service. To set the company's product or service apart from its rivals, it can offer uniqueness in the form of design, features, technology, or customer service. Businesses that adopt a product differentiation approach frequently make significant investments in the facilities or activities that support this strategy, such as R&D, employee development, and brand creation [8, 19]. As a result, the production costs associated with this differentiation strategy are typically high. Business strategy may be regarded as an important factor in motivating managers to use earnings management [20]. The choice of an earnings management approach can vary depending on variances in business strategies like cost leadership and differentiation initiatives.

Earnings management is the process of modifying accrual earnings to reflect the desired corporate performance, influencing the favourable opinions of users of the company's financial statements [21]. Earnings management practices can be carried out through accruals or the company's actual activities [22, 23]. Managerial discretionary accruals are used to manage accrual earnings. In this scenario, managers have the authority to choose accrual policy decisions, such as the depreciation method, uncollectible accounts, inventory, and policy estimations in provisions. The methodology and volume of accrual transactions are subject to some managerial discretion. Prior to the release of financial statements, accrual adjustments are often used to perform accrual earnings management. As a result, this type of earnings management does not affect cash flow [23, 24]. Managers use accrual forms of earnings management to either reduce costs or increase profits.

Real earnings management is the activity taken by a manager to achieve profit goals through operational, or real-world, decision-making. To reach the required sales statistics, true earnings management practices are used, such as providing exorbitant discounts or more accommodating credit conditions, resulting in increased profits. Real profit management can also be accomplished by raising or lowering discretionary spendings like R&D, marketing and advertising, and general and administrative expenses to meet profit goals. The management of real earnings can be done at any time of the year and directly affects the company's cash flow. Previous studies [24-26] claimed that real-world earnings management practices were more expensive than accrual earnings management.

Therefore, after having reviewed the prior studies, the following relationship is hypothesized:

H1. The cost leadership strategy is positively related to earnings management.

H2. Differentiation strategy is negatively related to the level of earnings management.

3 Methodology

This study uses data from the S&P Capital IQ database. The sample has been collected for financial and non-financial firms listed in the Muscat Stock Exchange, i.e there are 430 firm observations (130 financial and 300 non-financial firms) for the 5 years from 2015 to 2019. To execute the research model and classify an association between the dependent variable and the independent variable, STATA version 17 software is used for conducting multiple linear regression analysis.

3.1 Research Model

Earnings Management$_{i,t}$ = β_0 + β_1 Cost Leadership$_{i,t}$ + β_2 Differentiation$_{i,t}$ + β_3 Cash Holding$_{i,t}$ + β_4 ROA$_{i,t}$ + β_5 Firm Size$_{i,t}$ + β_6 Leverage$_{i,t}$ + β_7 Tangibility$_{i,t}$ + β_6 SalesGrowth$_{i,t}$ + β_6 Firm Age$_{i,t}$ + α (Equation 1)

Earning management (EM) is dependent, while the business strategy variables cost leadership and differentiation strategy are independent research variables. EM is the discretionary accruals measure that is derived from the prior study of Kothari, Leone [27]. As suggested by the work of Hambrick [28] and David, Hwang [29], cost leadership is a technique employed by cost leaders to establish a competitive advantage in pricing through the reduction of costs carried together by the development of operational excellence. It is measured with the proxy of asset turnover of operations, which is the ratio of operating sales divided by average operating assets. The differentiation business strategy aims to gain a competitive advantage over competitors by making products and services that differentiate themselves from their competitors. Differentiation is measured using the proxy of profit margin, calculated with the formula operating income plus R&D expenses divided by sales [6].

In addition to the independent and dependent variables already indicated, the study model also includes several control variables chosen in light of the existing literature [6, 8, 30]. Leverage is the ratio of a company's total liabilities to its total assets, and is a measure of its utilization of debt from creditors in the capital structure of the company [31]. The size of a firm is calculated using the natural logarithm of the firm's total assets to determine its relative size in comparison to other businesses operating in the same industry [32]. When a company's total assets are higher, the size of the company is larger, which in turn correlates to different patterns of behaviour and different financial conditions, and should comply with different regulatory requirements that the company has. The return on assets (ROA), which is calculated as net profit divided by total assets, is used as the control variable in this study [33]. Return on Assets (ROA) quantifies the productiveness of asset use over earning profits. The natural logarithm of the firm's age represents the age of the company [34].

4 Results and Discussion

4.1 Descriptive Statistics

Table 1. Descriptive Statistics

	Financial Sector			**Non-Financial Sector**		
Variables	**N**	**Mean**	**SD**	**N**	**Mean**	**SD**
Earnings Management	130	-0.029	0.075	300	0.013	0.093
Cost Leadership	130	0.801	0.240	300	0.880	0.176
Differentiation	130	0.088	0.166	300	0.071	0.151
Cash holding	130	0.129	0.140	300	0.118	0.163
ROA	130	1.343	1.897	300	2.221	3.740
Size	130	5.574	0.776	300	4.960	0.615
Leverage	130	0.288	0.392	300	0.301	0.345
Tangibility	130	0.095	0.230	300	0.477	0.306
SalesGrowth	130	0.932	19.031	300	-2.476	16.447
FirmAge	130	27.885	13.615	300	27.033	11.640

Table 1 presents the descriptive statistics of the variables in Equation 1. The mean value of Earnings Management is -0.029 for the financial sector and in comparison a positive mean value of 0.013 is shown for the non-financial thus reflecting the varying degrees of earning management of listed companies vary greatly across the firms. The mean value for the independent variables i.e. cost leadership and differentiation is 0.801 and 0.088 respectively for the financial sector while the mean value is 0.880 and 0.071 respectively for the non-financial sector. The data suggests that financial sector firms are generally large-sized (Size) in comparison to the non-financial sector. Non-financial sector firms hold more tangible assets in comparison to the financial sector.

4.2 Regression Analysis

Table 2. Regression results of business strategy impact on earnings management

Variables	(1) Earnings Management Financial sector	(2) Earnings Management Non-financial sector
Constant	0.0868*	-0.0391
	(0.022)	(0.575)
Cost Leadership	0.0218	0.0560*
	(0.694)	(0.048)
Differentiation	0.0908*	0.00696
	(0.014)	(0.914)
Cash Holding	0.0800	0.119**
	(0.053)	(0.009)
ROA	-0.00846	-0.00837*
	(0.084)	(0.019)
Size	-0.0343***	0.00316
	(0.000)	(0.790)
Leverage	0.0296	-0.0122
	(0.180)	(0.472)
Tangibility	-0.0699	-0.0190
	(0.231)	(0.395)
SalesGrowth	-0.0000510	0.0000317
	(0.901)	(0.933)
FirmAge	0.000979	-0.0000276
	(0.065)	(0.962)
Year	Included	Included
Observations	130	300
R2	.343	.1703
Prob	0.000	0.00149
Wald chi2	75.57	33.40

p-values in parentheses $p<0.05$, ** $p<0.01$, *** $p<0.001$. Variables definition included in section 3.*

Table 2 presents the regression results of business strategies' impact on earnings management practices of financial and non-financial sector-listed companies in Oman. Result 1 is for 130 firm-year observations related to financial sector companies, and the R2 of 34.3% suggests the model's predictive power in explaining the variation in earnings management. As seen from the table the differentiation strategy is positively and statistically significant in its association with earnings management. Thus, financial sector firms are more reliant on differentiation strategies, and this leads to managers being encouraged to undertake more earnings management practices. This finding is consistent with Indonesia's listed non-financial firms, whose differentiation strategy is associated with earnings management [21]. However, other prior studies indicated that a differentiation strategy could result in good financial performance without engaging in real earnings management [35, 36]. Results 2 for 300 firm-year observations of non-financial sector firms have an explanatory power of 17% (R2). Cost Leadership strategy is significantly and positively associated with earnings management practices. Thus, due to the low-profit margins in this sector, the firms tend to manage their earnings to reflect better performance. This result is consistent with the findings of the Chinese listed firms [6].

4.3 Robustness Analysis

Table 3. Systems GMM regression results of business strategy impact on earnings management

	(1) Earnings Management Financial Sector	(2) Earnings Management Non-Financial Sector
L.CostLeadership	-0.0245	0.0210
	(0.505)	(0.345)
L.Differentiation	0.225**	-0.109**
	(0.004)	(0.009)
Cost Leadership	-0.111	0.117*
	(0.395)	(0.017)
Differentiation	0.0135	0.137
	(0.873)	(0.138)
Cash Holding	-0.388*	0.186***
	(0.012)	(0.000)
ROA	-0.0362***	-0.00759**
	(0.000)	(0.009)
Size	0.0292	-0.0312
	(0.534)	(0.239)
Leverage	0.0810	-0.00464
	(0.144)	(0.887)
Tangibility	0.105	-0.101***
	(0.053)	(0.001)
SalesGrowth	0.000486	-0.000251
	(0.226)	(0.158)
FirmAge	0.00154	-0.00356
	(0.865)	(0.267)
Year	Included	Included
Constant	-0.0859	0.175
	(0.824)	(0.257)
Observations	129	300
Chi2	818.6	77.73
P	6.65e-164	4.27e-10
AR1	0.035	0.002
AR2	0.550	0.627
Sargan	0.141	0.003
Hansen	0.957	0.129

p-values in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ *Variables definition included in section 3.*

To address endogeneity concerns, Table 3 presents a two-step system of generalized methods of moment (GMM) to produce efficient estimates and address biased estimator issues with a dynamic model of panel data [37]. The lagged independent variables are used as instruments, and their validity is confirmed through the autocorrelation test (AR2) and Hansen J test for overidentification. Both tests' null hypotheses cannot be rejected for alternate hypotheses, suggesting that the instruments are valid and consistent. The OLS results obtained for the non-financial sector are confirmed by GMM, as Cost Leadership is positively and significantly associated with earnings management.

5 Conclusion and Recommendations

This study investigates the impact of business strategies on the financial and non-financial sectors' earnings management practices in Oman. Porter [3] business strategies typologies cost leadership and differentiation were used in the study. Using a sample of 430 observations for the period 2015 to 2019, it was observed that the business strategies adopted by the firms in Oman had a significant impact on earnings management practices. The findings of this study suggest that the financial sectors' differentiation strategy and the non-financial sectors' cost leadership strategy impact their earning management practices, respectively.

The study has several implications. The regulators can derive information on which strategy is associated with earnings management practices. For the non-financial firms, the results indicate that cost leadership is associated with low-profit margins, and the cost leaders would be under pressure to meet an earnings target. Thus, they are more likely to manage their earnings. Similarly, non-financial firms adopting differentiation strategies are also more likely to adopt earnings management. Thus, regulators are required to monitor such practices and develop rules that would prevent price competitions or cost competitions to deter cost leaders from manipulating earnings.

The study also suffers from certain limitations. The study was conducted for listed firms in Oman before COVID-19. This is a limitation, as during the pandemic there were other challenges due to which companies had to change their strategies for survival. This could have had a different impact on earnings management. The findings of this study can be generalized to other GCC countries but not to other emerging markets, as they differ from economic and social perspectives. Future studies can be extended to cover the pandemic period specifically and other emerging markets.

Acknowledgement: The authors are grateful for the financial support provided by Muscat College for attending this conference.

References

1. Magerakis, E. and A. Habib, *Business strategy and environmental inefficiency.* Journal of Cleaner Production, 2021. **302**: p. 127014.
2. Hambrick, D.C. and P.A. Mason, *Upper Echelons: The Organization as a Reflection of Its Top Managers.* Academy of Management Review, 1984. **9**(2): p. 193-206.
3. Porter, M.E., *Competitive strategy: Techniques for analyzing industries and competitors*. Editorial Free Pr, ISBN. Vol. 13. 1980, New York: Free Press. 300.
4. Patra, G. and R.K. Roy, *Business Sustainability and Growth in Journey of Industry 4.0-A Case Study*, in *New Horizons for Industry 4.0 in Modern Business*, A. Nayyar, M. Naved, and R. Rameshwar, Editors. 2023, Springer International Publishing: Cham. p. 29-50.
5. Kong, D., et al., *Business strategy and firm efforts on environmental protection: Evidence from China.* Business Strategy and the Environment, 2020. **29**(2): p. 445-464.

6. Wu, P., L. Gao, and T. Gu, *Business strategy, market competition and earnings management: Evidence from China.* Chinese Management Studies, 2015. **9**(3): p. 401-424.
7. Kayed, S. and R. Meqbel, *Earnings management and tone management: evidence from FTSE 350 companies.* Journal of Financial Reporting and Accounting, 2022. **ahead-of-print**(ahead-of-print).
8. Agustia, D., N.P.A. Muhammad, and Y. Permatasari, *Earnings management, business strategy, and bankruptcy risk: evidence from Indonesia.* Heliyon, 2020. **6**(2): p. e03317.
9. Dokas, I., et al., *Earnings management. An overview of the relative literature.* Bulletin of Applied Economics, 2021. **8**(2): p. 25-55.
10. Martínez-Ferrero, J., S. Banerjee, and I.M. García-Sánchez, *Corporate social responsibility as a strategic shield against costs of earnings management practices.* Journal of Business Ethics, 2016. **133**: p. 305-324.
11. Dalwai, T. and M. Salehi, *Business strategy, intellectual capital, firm performance, and bankruptcy risk: evidence from Oman's non-financial sector companies.* Asian Review of Accounting, 2021. **29**(3): p. 474-504.
12. Miles, R.E., et al., *Organizational Strategy, Structure, and Process.* The Academy of Management Review, 1978. **3**(3): p. 546-562.
13. Miller, D. and P.H. Friesen, *Porter's (1980) Generic Strategies and Performance: An Empirical Examination with American Data: Part I: Testing Porter.* Organization Studies, 1986. **7**(1): p. 37-55.
14. Porter, M.E., *Towards a dynamic theory of strategy.* Strategic Management Journal, 1991. **12**(S2): p. 95-117.
15. Scafarto, V., et al. *Digitalization and Firm Financial Performance in Healthcare: The Mediating Role of Intellectual Capital Efficiency*. Sustainability, 2023. **15**, DOI: 10.3390/su15054031.
16. Parnell, J.A. and P. Wright, *Generic Strategy and Performance: an Empirical Test of the Miles and Snow Typology.* British Journal of Management, 1993. **4**(1): p. 29-36.
17. Youndt, M.A. and S.A. Snell, *Human Resource Configurations, Intellectual Capital, and Organizational Performance.* Journal of Managerial Issues, 2004. **16**(3): p. 337-360.
18. Govindarajan, V. and J. Fisher, *Strategy, control systems, and resource sharing: Effects on business-unit performance.* Academy of Management journal, 1990. **33**(2): p. 259-285.
19. Mathew, D., N.C. Brintha, and J.T.W. Jappes, *Artificial Intelligence Powered Automation for Industry 4.0*, in *New Horizons for Industry 4.0 in Modern Business*, A. Nayyar, M. Naved, and R. Rameshwar, Editors. 2023, Springer International Publishing: Cham. p. 1-28.
20. Bentley, K.A., T.C. Omer, and N.Y. Sharp, *Business Strategy, Financial Reporting Irregularities, and Audit Effort.* Contemporary Accounting Research, 2013. **30**(2): p. 780-817.
21. Purba, G.K., C. Fransisca, and P.L. Joshi, *Analyzing earnings management preferences from business strategies.* Journal of Financial Reporting and Accounting, 2022. **20**(5): p. 979-993.

22. Cohen, D.A., A. Dey, and T.Z. Lys, *Real and Accrual-Based Earnings Management in the Pre- and Post-Sarbanes-Oxley Periods.* The Accounting Review, 2008. **83**(3): p. 757-787.
23. Cohen, D.A. and P. Zarowin, *Accrual-based and real earnings management activities around seasoned equity offerings.* Journal of Accounting and Economics, 2010. **50**(1): p. 2-19.
24. Zang, A.Y., *Evidence on the Trade-Off between Real Activities Manipulation and Accrual-Based Earnings Management.* The Accounting Review, 2012. **87**(2): p. 675-703.
25. Braam, G., et al., *Accrual-based and real earnings management and political connections.* The International Journal of Accounting, 2015. **50**(2): p. 111-141.
26. Badertscher, B.A., *Overvaluation and the Choice of Alternative Earnings Management Mechanisms.* The Accounting Review, 2011. **86**(5): p. 1491-1518.
27. Kothari, S.P., A.J. Leone, and C.E. Wasley, *Performance matched discretionary accrual measures.* Journal of Accounting and Economics, 2005. **39**(1): p. 163-197.
28. Hambrick, D.C., *Some Tests of the Effectiveness and Functional Attributes of Miles and Snow's Strategic Types.* Academy of Management Journal, 1983. **26**(1): p. 5-26.
29. David, J.S., et al., *The performance effects of congruence between product competitive strategies and purchasing management design.* Management Science, 2002. **48**(7): p. 866-885.
30. Habib, A. and M.M. Hasan, *Business Strategy and Labor Investment Efficiency.* International Review of Finance, 2021. **21**(1): p. 58-96.
31. Dalwai, T. and N.S. Sewpersadh, *Intellectual capital and institutional governance as capital structure determinants in the tourism sector.* Journal of Intellectual Capital, 2023. **24**(2): p. 430-464.
32. Dalwai, T., et al., *Does managerial ability and auditor report readability affect corporate liquidity and cost of debt?* Asian Review of Accounting, 2023. **ahead-of-print**(ahead-of-print).
33. Maji, S.G. and M. Goswami, *Intellectual capital and firm performance in emerging economies: the case of India.* Review of International Business and Strategy, 2016. **26**(3): p. 410-430.
34. Habib, A.M. and T. Dalwai, *Does the Efficiency of a Firm's Intellectual Capital and Working Capital Management Affect Its Performance?* Journal of the Knowledge Economy, 2023.
35. Widuri, R. and J.E. Sutanto, *Differentiation strategy and market competition as determinants of earnings management*. 2019, Atlantis Press.
36. Chun, S. and E. Cho, *Differentiation strategy, CSR, and real activities earnings management: Evidence from Korea.* Journal of Applied Business Research (JABR), 2017. **33**(4): p. 669-692.
37. Blundell, R. and S. Bond, *Initial conditions and moment restrictions in dynamic panel data models.* Journal of econometrics, 1998. **87**(1): p. 115-143.