ISSN: 2617-4138
DOI: 10.32898/ibmj.01/8.3article04
www.ijarke.com

INTERNATIONAL JOURNALS OF ACADEMICS & RESEARCH
(IJARKE Business & Management Journal)

Firm Characteristics and Profitability of Non-financial Firms Listed at the Nairobi Securities Exchange: A Theoretical Review

Imaana Kimathi Andrew, Kenyatta University, Kenya
Jagongo Ambrose, Kenyatta University, Kenya

Abstract

The Kenya's economic growth is greatly influenced by listed non-financial firms which mobilize long term capital to finance innovation, production, and infrastructure development. The profitability of listed non-financial firms has shown a fluctuating trend which raises concerns on the stability of these firms. Return on assets was 0.84% in 2020, it declined to 0.80% in 2021, it then increased to approximately 1.10% in 2022, return on assets in 2023 slightly declined to 0.95% and in 2024 it increased to 1.30%. The study's main objective is to investigate the effect of firm characteristics on the profitability of non-financial firms listed at the Nairobi securities exchange, Kenya. Additionally, the study established the moderating effect of operating environment on the relationship between firm characteristics and profitability of non-financial firms listed at the Nairobi Securities Exchange, Kenya. The study is anchored on the following theories: Economic efficiency theory, Agency theory, Resource-based view theory, and Contingency theory. Empirical literature was also incorporated.

Key words: *Firm Characteristics, Profitability, Capital adequacy, Asset quality, Management Efficiency, Liquidity, Kenya*

1. Introduction

The profitability of non-financial firms across the globe is exposed to different macroeconomic and industry related factors. Arai and Hiroti (2023) highlights that profitability and longevity of non-financial firms, differs across national borders. A study conducted on 47 countries regarding the Fortune Global 500 firms discovered a cross-country difference in profitability. The profitability of firms, especially in industries such as energy, is greatly affected by external factors, including energy commodity prices and interest rates, global financial and macroeconomic conditions (Orlando *et al.* 2024).

According to Ki and Ahan (2020) non-financial firms globally are highly reliant on financial revenues and investments. Non-financial firms in Indonesia demonstrate that firm size, liquidity, efficiency, and working capital management have a significant impact on ROA and ROE (Yosef *et al.*, 2024). Regionally economic trends and market conditions have a major impact on profitability. Internal forces, such as debt management, financial leverage, capital adequacy determine the profitability of emerging markets such as Serbia, Sri Lanka, Malawi, and Nigeria (Ogunode *et al.*, 2022).

According to Milosev *et al.* (2021) debt ratios had a positive impact on ROA in non -financial companies in Serbia. In Sri Lanka, financial leverage has a great influence on the profitability of listed non-financial firms (Ravindran & Kengatharan, 2021). Profitability was found to be crucial to effective resource allocation and higher prices of shares in firms listed at the Malawi Stock Exchange (Banda & Edriss, 2022). Locally, the performance of listed non-financial firms indicates concerning trends of low performance and sustained losses. Obongo *et al.* (2024) indicates that many non-financial firms are failing to exist due to profitability challenges, and a study by Musyimi *et al.* (2025) suggests a pattern of extensive financial and operational risk. According to Mutui and Sporta (2023) decisions of capital structure including leverage and liquidity have a positive effect on the market performance. Local companies are moving towards strategies such as cost leadership, differentiation, and higher levels of innovation to survive and even enhance their profitability.

1.1 Financial Performance of Non-financial Sector

The non-financial firms worldwide have had financial performance that was marked with extreme volatility due to the COVID-19 pandemic, and then an unusual recovery characterized by high supply chain disruptions and high inflation rates. Industries like technology and e-commerce performed well, others such as travel, hospitality, and conventional retail industries had poor performance. According to research conducted by the Financial Stability Board (2024), Non-Bank Financial Intermediation (NBFI) assets had been growing, however, the non-financial corporate leverage had, in most areas, risen significantly, leaving the sustainability of debts at risk as the interest rates began to rise in 2023-2024.

According to OECD 2022 report sustainability ESG integration has turned out to be a decisive factor in ensuring valuation because companies with high scores on ESG are more resilient. The financial performance of non-financial firms in the developing economies is greatly strained by the depreciation of the currency and reduced access to capital markets. According to Ominde (2020) globalization strategies present potential growth and are threats to financial performance during economic recessions.

Yasmin *et al.* (2024) highlights that Jordan based firms during the Covid-19 Pandemic that possessed a greater amount of cash were in a better position to survive. In Kenya, a similar situation was observed where non-financial companies listed on the NSE had a decline on their financial performance (IPRJB, 2025). According to Mutui and Sporta (2023) short-term and long-term debt, as well as retained earnings, played an important role in market performance. According to IRJP report (2024) better management reporting controls were needed to enhance the financial performance during the post-pandemic phase.

1.2 Financial Performance of Non-financial firms Listed at the Nairobi Securities Exchange

Financial performance of non-financial firms has a slow and uneven recovery after the major economic shocks caused by the COVID-19 pandemic. The first effects in 2020-2021 experienced a steep drop in profitability. Most companies reported losses and warned about profits being hit by supply chain disruptions, declining consumer demand, and constrained liquidity. According to CMA (2022); NSE (2023) reports, the overall business enterprise value experienced a downturn with some industries recovering and liquidity levels continue to be a major problem to businesses that strive to settle their immediate liabilities. Research shows that retained earnings are relied on by non-financial firms, and equity turnover decreased from 5% in 2020 to 3% in 2023 (NSE, 2023).

Although there is a trend of some of the firms successfully utilizing leverage to expand their operations, some are failing giving rise to a scenario where two out of three non-financial firms either have had to encounter financial distress or have experienced severe profitability difficulties (CMA, 2022). Therefore, the issue of debt balance, and the enhancement of cash management are the concerns that management teams pay more and more attention to regain the investor confidence and increase the firm value (Mtuaruchiu & Ringui, 2024). Ngei (2022) discovered that both capital structure and asset quality has a positive effect on the performance of non-financial firms listed at the NSE. According to Mbiti (2020) Covid-19 pandemic had a negative statistically significant effect on the performance of listed firms among high volatility firms. According to Chirchir *et al.* (2024) asset quality and age of the firm had a negative influence on ROA.

1.3 Profitability of Non-financial firms listed at the Nairobi Securities Exchange

Profitability refers to the ability of a company to generate revenue that exceeds its costs and expenses over a specified period (Ocholla & Jagongo). It is a key measure of the efficiency of a firm and long-term sustainability. Profitability of listed non-financial companies at the NSE is defined by Mutui and Sporta (2023) using ROA as the most robust and popular accounting-based ratio to evaluate financial performance. Nguyen (2020) used ROE to determine the profitability against money invested by shareholders by dividing net income by the sum of shareholders evidences. Tobin's Q is used to estimate the value of assets that are held by a company and use it against the replacement cost (Alhomaidi *et al.,* 2020).

ROA is used in this study as the measure of profitability. The trend analysis shows that there is an overall decrease in the profitability indicators like the net profit margins of most of the firms during COVID-19 pandemic with some industries incurring severe losses and even profit warnings. Irrespective of such hurdles, research has revealed that good management of capital structure, especially a balanced management of debt and more liquidity is among the critical controllers of financial performance by such companies. On a localized basis, the financial performance of non-financial companies fell between higher levels to approximately 3.0% in 2023 according to the equity turnover (NSE Report, 2023). Many listed companies have experienced a decrease in valuations, and the average Tobin-Q ratio of non-financial companies is now as low as 0.81 in 2022, compared to its 2020 level of 4.64 (CMA Report, 2022).

1.4 Non-financial firms listed at the Nairobi Securities Exchange

Non-financial companies are organizations that are mainly involved in the production of goods and services. According to Kosgei and Ngaba (2024) they are other organizations besides banks and other financial institutions whose share quotations are on the NSE. Wanjira (2022) goes further to explain them as companies that engage in the manufacture of goods and services to the market. Ater *et al.* (2020) specifically selected banking, insurance, and real estate investment trusts to separate the companies with similar operating and regulatory properties. These firms were defined by Ochingo and Muturi (2024) as firms with board features with the primary focus on the company that is not covered by the financial services industry. The NSE is an important avenue to such firms where they can access capital markets to finance and invest. NSE assists in the trading of their securities, and the regulation of a secure capital formations environment. Non-financial firms play a significant role in the Kenyan economy by promoting industrial growth, innovation, and employment (Keronga *et al.,* 2022).

Their activity is extremely crucial to the economy as it offers basic goods and services based to enable the functioning of a society and the growth of the economy. Although their role as firms is critical, such firms usually encounter difficulties in their financial performance and hence reduce their investment abilities (Cheruiyot & Jagongo, 2022). The financial success that these firms generate is directly attached on their ability to invest, expand, and persist with their economic inputs. Several studies suggest that, although there are difficulties, the strategic asset management and viable application of internal financing are essential determinants about the financial outlook of the non-financial firms at the NSE currently.

Muli and Ibrahim (2024) reported that the retained earnings produced a strong positive impact on the financial performance of non-financial firms. Obongo *et al.* (2024) determined that the current asset structure had a significant impact on the financial performance of the non-financial companies listed on the NSE, Kenya. Agembe *et al.* (2024) discovered that retained earnings have a positive and significant impact on financial performances of listed non-financial companies.

1.5 Firm Characteristics

The firm characteristics refer to a broad set of attributes that identify a company as a unique operational, financial, and structural entity. According to Wafula *et al.* (2020) firm characteristics are capitals adequacy, asset quality, management efficiency and liquidity. Masila *et al.* (2024) define firm characteristics as firm age, firm size, etc. that moderate the relationship between sustainability reporting and financial performance of firms listed at the NSE, and these characteristics demonstrate the impact of them on the financial results.

Musembi and Jagongo (2024) defined firm characteristics as firm-specific internal attributes that affect financial performance which include size, liquidity, leverage, and firm age. The firm characteristics were also defined as internal features that differentiate firms based on structure and resources (Halim *et al.*, 2023). Capital adequacy is an indicator of the financial stability of a firm to ensure that it has enough capital reserves to absorb any unexpected losses and to maintain solvency (Wanjiru *et al.*, 2024).

Asset quality is a measure of riskiness of assets, management efficiency is the measure of efficiency of resources utilization and liquidity is the measure of ability to pay short term obligations within a specified period (Shrestha & Gnawali 2025). Majority of researchers operationalized firm characteristics through financial and structural proxies, where firm size was measured using the natural log of total assets, sales, or employees to capture the effect of scale (Matias *et al.*, 2024); firm age is the number of years following the incorporation of a firm to capture the effects of experience and learning (Orando *et al.*, 2024) and liquidity was measured using the current ratio.

1.6 Operating Environment

Operating environment is the external economic, regulatory, competitive, and institutional environment where a firm operates and makes strategic decisions. Wanjiru *et al.* (2020) noted that the competitive position, consumer behavior and accessibility to resources are part of the external operating environment which determines the influence of strategic choices on firm outcomes.

Makini *et al.* (2020) also defines the environment under operation as external ecosystem that subject firms to opportunities, as well as threats, and influences their strategic response and performance. Firms are not in a vacuum and are in a constant process of being impacted by external forces that define how internal capabilities are converted into performance outcomes. The operating environment moderates the relationship between firm characteristics and profitability by determining the effectiveness with which firm specific attributes convert into financial performance in different economic, regulatory, and competitive environments on listed non-financial firms. Positive operating environment enhance a positive effect of firm characteristics on profitability, whereas a negative operating environment undermine or alter the effect.

Makini *et al.* (2020) discovered that the association between corporate governance and performance of firms of the NSE-listed companies was highly mediated by the operating environment, such that the external conditions altered how the governance practices yielded the profitability results. Similarly, Ogola *et al.* (2024) established that the operating environment was a significant moderator between the big data technology capability and performance of Kenyan commercial banks, which indicated that the external conditions could improve or reduce the impact of firm characteristics on performance.

According to Mweta *et al.* (2024) when relevant economic and regulatory environments are favorable, the positive association between firm characteristics and profitability are stronger and external negative pressures tend weaken such associations.

2. Statement of the Problem

The profitability of listed non-financial firms has shown a fluctuating trend which raises concerns on the stability of these firms. According to the financial sector regulators report (2024) ROA was 0.84% in 2020, it declined to 0.80% in 2021 reflecting the effect of Covid-19 pandemic, it then increased to approximately 1.10% in 2022, ROA in 2023 slightly declined to 0.95% and in 2024 it increased to 1.30%. The unstable ROA trend raises a problem that necessitates an empirical investigation.

According to Mugo *et al* (2025); Mwangangi *et al.* (2023); Ochoki *et al.* (2023) Wamalwa & Oboka (2023) most listed companies reported sub-optimal ROE and asset utilization with statistics indicating drop in average profit margins and profitability ratios as economic and competitive pressure increased. Empirical studies have shown inconsistent trends in the performance of firms. According to Maina and Jagongo (2022) capital structure had a positive effect on firm performance while liquidity and firm size indicated that the internal financial policies alone help the listed non-financial firms to be profitable.

Mulekano and Miroga (2023) affirm that retained earnings had a significant positive influence on the profitability of listed manufacturing companies. Nevertheless, Kamau *et al.* (2024) demonstrate that profitability has a positive impact on the performance of the stock market, but external factors in the form of firm characteristics such as size also mediate the effects of these outcomes, meaning that profitability outcomes are not directly determined by internal financial ratios but also by such characteristics. These conflicting findings demonstrate that profitability determinants and findings of NSE firms are not consistent in all studies with some showing positive relationships and others revealing the relevance of moderating variables highlighting a conceptual gap. Several studies have used descriptive research designs and simple regression analyses without the application of advanced econometric methods to deal with some of the problems of endogeneity, unobserved heterogeneity, and dynamic relationships.

Maatwa *et al.* (2022) used multiple and simple regression analysis of unbalanced panel data to test the effect of capital structure and liquidity without taking advantage of the fixed effects and dynamic panel model in controlling firm-specific effects, which may bias the findings. Kosgei and Ngaba (2024) explored the impact of capital structure on financial performance using secondary data and descriptive design. A methodological gap exists since the studies used descriptive research design and the current study used explanatory research design.

3. Objective of the Study

The main objective of the study was to investigate the effect of firm characteristics on the profitability of non-financial firms listed at the Nairobi Securities Exchange, Kenya.

4. Literature Review

4.1 Theoretical Framework

4.1.1 Economic Efficiency Theory

Economic Efficiency Theory was proposed by Demetz (1973). It suggests that the reason why the profitability of firms differs is due to differences in operational and managerial efficiency and not due to market power. According to the theory, companies that distribute resources in a more efficient manner, use cost-cutting technologies, and capitalize on economies of scale make more profits. The main assumptions of the theory include: firms operate in a contestable or competitive markets where inefficiencies are a major cause of low profitability; the variation in profitability among firms is majorly determined by efficiency variation and not external market; firms could vary their inputs, processes as well as organizational practices to reduce costs and maximize output; and the contributions of technology and managerial skills play central roles in ensuring a sustained efficiency. The theory also holds that any firm which has been regularly efficient in its operations compared to the other firms had a better financial performance.

Kibe, Wamugo, and Atheru (2023) examined the effect of profitability, leverage, and efficiency to the financial distress of the State Corporations in Kenya's commercial and manufacturing sector. The study found that operational efficiency significantly affected financial distress, as more efficient companies were less likely to experience financial distress. This supports the efficiency theory basic principle which states that effective use of resources and management of cost contributes to financial stability and performance.

Gitari *et al.* (2024) determined the effect of financial structure on operating performance of non-financial companies listed in the Nairobi Securities Exchange, Kenya. The study found that operational efficiency was positively related to short-term debt, long-term debt, returned earnings, and share capital. This challenges the economic efficiency theory, which suggests that efficiency is not always enough, and financial leverage and the financing of a firm are relevant to firms achieving efficiency gains. Economic efficiency theory anchors this study which explains the effect of firm characteristics such as capital adequacy, asset quality, management efficiency, and liquidity on profitability. The theory also supports the moderating variable, which is operating environment; it either facilitates or limits the firm to adopt effective practices.

4.1.2 Agency Theory

Agency Theory was proposed by Jensen and Meckling (1976). It describes the interaction between principals, who are the shareholders, and agents, who are the managers, whose responsibility is controlling and running the firm. The theory assumes that

managers can work towards fulfilling their interests instead of ensuring the wealth of shareholders, which creates agency conflicts and agency costs. To reduce such conflicts, companies should establish governance systems that hold the managers accountable to the best interests of the owners. The essence of the agency theory is that efficient monitoring, alignment of incentives, and managerial discipline enhance operational efficiency, profitability, and the overall performance of the firm.

Al-Faryan (2024) conducted an integrative literature review to examine the relationship among the agency theory, corporate governance, and corruption. The study investigates the agency problems that lead to corruption due to the separation of ownership and control. The study found that independent boards and auditing are theorized to lower the agency costs, but their effectiveness was affected greatly by institutional and contextual factors. When operating in weaker institutions, the operating environment may moderate the assumptions of the agency theory to imply that the tools of governance are less effective in preventing corruption.

Abudu and Salman (2025) investigated the impact of corporate governance on shareholder value in listed firms of Ghana stock exchange. In the research, the sample size of 300 respondents among listed companies was employed together with the PLS-SEM data and survey data. The study found that total internal audit performance (IAP) was the only mediator between the governance mechanisms and value of the shareholders: a strong link between governance and IAP, which subsequently leads to value, was observed, but corporate governance has no significant impact. Such results provide a nuanced understanding to the agency theory that reveals that the formal systems of governance including boards and committees are never enough; it needs the internal audit role which operationalizes the monitoring and brings the actions of the managers into line with the interest of the shareholders. Agency theory is relevant to the independent variables that are management efficiency, asset quality, capital adequacy, and liquidity. Managerial decision-making and governance practices have a direct effect on these variables. Effective managers are more prone to choose resources optimally, have quality assets, sufficient capital buffer and have healthy liquidity status, which contribute to profitability. The moderating influence of the operating environment is consistent with the agency theory in that, external factors like regulation, competition and market forces affect the level of agency conflicts arising and the way the firms react.

4.1.3 Resource-based View Theory

Resource-based View theory was first proposed by Wernerfelt (1984), and it was further developed by Barney (1991). According to the theory, a firm can gain the long-term competitive advantage and better performance due to its special internal resources and capabilities being valuable, rare, inimitable, and non-substitutable (VRIN). RBV assumes that firms are not homogenous in their resources, and these variations are not flowing as time passes by since some resources cannot be easily replicated or moved across firms. The theory also claims that having resources is not the only thing but the ability to organize and mobilize them effectively that can help a firm attain high level of profitability and performance. The main propositions in RBV consist of the concept that valuable resources enable the firms to capitalize on opportunities or counter threats, unique resources are a competitive advantage, as they make imitation by the competitor difficult, and inimitable and non-substitutable resources make competitive advantage sustainable.

Abel *et al*. (2025) analyzed RBV within the framework of digital transformation and highly turbulent markets. In their study, they discovered that although RBV still explains the nature of competitive advantage, it is too fixed and fails to provide a complete explanation of how the external environments, which change very fast, can, affect the utilization of resources. The authors state that the companies need to complement RBV with dynamic capabilities to successfully renovate, reassemble, and mobilize resources within a firm. Kero and Bogale (2023) explored the concept of the resource-based view and dynamic capabilities in various industries. The systematic literature review was carried out on 46 empirical studies. The research identified that the concept of RBV focuses on the importance of the valuable, rare, inimitable, and non-substitutable (VRIN) resource in conferring sustained competitive advantage but does not pay much attention to the way in which firms can adapt and renew these resources in a dynamic environment.

According to the authors, companies must combine the process of learning and innovation to have a competitive advantage in the long-term. Resource-Based View (RBV) supports the independent variables of the study especially, the management efficiency, quality of assets, liquidity, and capital adequacy. These variables according to the RBV are valuable, rare, and inimitable firm specific resources and capabilities that when well organized and used bring about competitive advantage which in turn leads to increased profitability. Efficiency in management is necessary to achieve maximum availability and coordination of resources and high-quality assets are necessary since they are a strategic advantage that cannot be easily duplicated by the competitors. Financial buffers are liquidity and capital adequacy which allow firms to take initiative in opportunities, absorb shocks and survive in uncertainty. It is also supporting the operating environment, which is the moderator; given that the external conditions define how effectively the resources can be further used.

4.1.4 Contingency Theory

Contingency theory was developed by Woodward (1954) it depicts that various production technologies cannot be organized using the same organizational design to give the best performance, an aspect that brought the basic concept of the best way of organizing a firm. The theory was further advanced by Fiedler (1964) who proposed that the effectiveness of a leader is related to

the compatibility between leadership style and situational influences like task structure, the relationship between the leader and the members and position power. Lawrence and Lorsch (1967) also added to the theory by stating that the external environmental uncertainty requires internal structures to be in line with them so that the firm may perform successfully. The main assumptions of the theory are as follows; no universally optimum way to lead or organize, organization effectiveness is determined by the consistency between the internal attributes and external circumstances, and organizations need to change their structure, processes, and leadership to perform better.

Kiplagat *et al.* (2024) examined the moderating role of external environment in the relationship between organizational performance and transformative leadership in Kenyan commercial state corporations. The contingency theory-based study argued that an organisation's situation or environment constraints its leadership and affected the extent of which it is effective. The external environment which is characterized by market stability, technological dynamics and regulatory changes significantly mediated the relationship between transformational leadership and firm performance basing on descriptive cross-sectional design among s senior managers. The findings supported the core proposition of contingency theory which states that the extent to which internal organizational features are effective is a function of their compatibility with external environmental requirements.

Kariuki *et al.* (2023) used contingency theory to examine the moderating effect of environmental turbulence on internal competence-performance of star-rated hotels in Nairobi County, Kenya. The effect of internal capabilities like innovation, employee competence and service process were dependent upon external environmental factors such as the intensity of competition, market volatilities and technological developments claimed in the study. Through structural equation modeling the study found that it was indeed environmental turbulence that significantly moderated the impact of core competences on firm performance. In the most turbulent of environments, the degree of relationship changed significantly, and those main effects were consistent with contingency expectations that organizational success results from internal competencies adjusting with external conditions. The study reiterated that internal strength is not enough, and firms require the ability to shape these strengths for them to be useful in their business environment. The moderating variable of the study is operating environment and is supported by contingency theory. The theory further suggests that the effectiveness of management, asset quality, and liquidity and capital adequacy of a firm in determining profitability depends on the external environment conditions. As an example, capital adequacy is high, or the management is effective in a stable regulatory or market environment but may perform differently in a highly turbulent market or a highly restricted regulatory environment.

4.2 Empirical Review

4.2.1 Capital Adequacy and Profitability

Bhattarai (2021) determined the influence of capital adequacy ratios on the financial performance of 26 banks providing money deposits. The research employed a descriptive and causal comparative research methodology using secondary data of annual audit reports. The results indicated that the core and additional capital ratios were slightly positively associated with ROA, whereas the core capital ratio was associated with the ROE in a low inverse way; in general, core capital adequacy had a positive effect on performance. A critique to this study is that it concentrated on money deposit banks that have a tailored regulatory framework therefore this research findings cannot be generalized to the non-financial companies listed in the NSE, Kenya.

Humta *et al.* (2024) investigated the relationship between capital adequacy and the profitability of banks the mediating effect of macroeconomic factors (inflation, interest rates, and exchange rates), with the quantitative panel data methodology based on the OIC statistics database of the banking sector in Malaysia, Indonesia, and Turkey (2010-2021). The results showed that the capital adequacy ratio, exchange rate and interest rate positively and significantly affected the profitability, and the inflation had a negative effect; inflation and interest rates had a significant moderating effect, but the overall effect of the macroeconomic variables was not significant. One criticism of the study is that it was conducted on the developed economies whose results cannot be extended to a developing economy such as NSE Kenya where the present study was conducted.

Linggadjya *et al.* (2025) concluded the influence of capital adequacy on bank-specific features of sustainable growth of 47 listed commercial banks in Indonesia between 2013 and 2022 based on the quantitative study design. The findings confirmed a strong negative effect of profitability, leverage, and efficiency, and liquidity on sustainable growth while capital adequacy had a positive effect. A critique to this study is that the research is confined to commercial banks in Indonesia and does not consider important variables such as possible mediators and moderators, which limits the applicability and completeness of the results to non-financial firms listed at the NSE, Kenya.

4.2.2 Asset quality and Profitability

Auma and Okiro (2021) examined the impact of asset quality on the financial performance of Kenyan NSE money deposit banks. The study utilized descriptive research method and a review of secondary data in annual financial reports of 12 commercial banks and CBK reports between 2017 and 2020. It was found that the quality of assets had a significant effect on the performance of banks at the NSE. The limitation of this research is that it was conducted on commercial banks which are a much regulated industry with specialized laws; this created a contextual gap leading to the fact that its results cannot be generalized to non-

financial firms that are listed in the NSE because their market dynamics, capital structures, and regulatory pressures are entirely different.

Barakat *et al.* (2024) analyzed the impact of asset quality on the bank profitability (ROA, ROE) through the ten commercial banks over the year 2017-2021 using the pooled effects regression, fixed effects regression and random effects regression. The results indicated that good asset quality management, with increased provisioning and decreased NPLs, is significantly and positively linked with bank performance, with statistically significant coefficients and strong explanatory power. The criticism points out that regardless of the methodological rigor of panel data method, the study has limitations in its small sample size, the current study used 36 non-financial firms listed at the NSE, Kenya.

Orando *et al.* (2024) determined the effect of asset quality on financial performance of 11 listed commercial banks in Kenya in the period 2017 to 2021 with a descriptive design and testing the relationship between the two variables through correlation and regression analysis. The results indicated that the relationship was significant and positive, and that asset quality accounts 40 percent of performance variation, which prompts the conclusion that high asset quality increases bank profitability. A critique of this study is the use of a small sample size the current study used a large sample size of 36 non-financial firms listed at the NSE, Kenya.

4.2.3 Management Efficiency and Profitability

Ahmed *et al.* (2021) investigated the relationship between the managerial efficiency and the non-performing loans of Pakistani commercial banks conducted during 2008 to 2018, as well as applying the GMM method. The results showed that net interest margin, credit growth, management efficiency and bank diversification had significant and positive impacts on the reduction of NPLs. The critique of this study is that it results in a contextual gap: the results of this study could only be applied to Pakistani commercial banks using data between 2008-2018, which is incredibly country-specific and less representative of the current investigation, which considers Kenyan non-financial firms listed on the NSE and a more contemporary, more volatility financial timeframe of 2020-2024.

Idrees and Siddiqui (2021) determined the effect of the different efficiency ratios on the profitability of the firms in the textile composite industry of Pakistan and had a panel regression model on 31 listed firms during the period 2015-2019. The findings revealed that the significant positive impact on profitability had the receivable turnover, inventory turnover, and capital employed turnover, and the other measurements (such as payable turnover and total asset turnover) were not significant. The criticism observes that, even with the multiplicity of efficiency measures and panel regression, the research is plagued with a small sample frame (31 companies in five years), a narrow sectoral focus (textile composite), the current study was done on 36 non-financial firms listed at the NSE, Kenya.

Okeke *et al.* (2021) examined the relationship between management efficiency (measured by three turnover ratios) and profitability (ROA) of Nigerian foods and beverage manufacturing companies, designed as ex post facto with panel regression analysis of data of 8 firms between 2010 and 2019. The findings showed that inventory turnover and total asset turnover affected ROA positively and significantly, and the effect of the accounts receivable turnover on the ROA was statistically insignificant. The criticism is that the research has a very small sample size (8 firms) and does not include strong checks (such as panel diagnostics or endogeneity checks), limiting the belief in the external validity of the results to the overall causal effect of management efficiency on profitability. The current study was done on 36 non-financial firms.

4.2.4 Liquidity and Profitability

Mennawi (2020) determined the impact of the liquidity risk on the performance of Sudanese Islamic banks over the years 2008-2018 through panel regression on 13 banks. The result showed that the liquidity risk has had a positive and significant impact on the performance. The criticism highlights a geographical distance and a time difference: whereas the method is identical (a panel regression), the study was conducted in Sudan with the data set covering 2008-2018, which makes the findings geographically and contextually different than the present study, which involves Kenyan non-financial companies listed on the NSE and a more recent time frame of 2020-2024 to indicate the recent changes on the non- financial firms listed at the NSE, Kenya.

Religiosa and Surjandari (2021) examined the impact of liquidity on earnings management during the 2014-2018 periods in the Indonesian banking sector based on multiple regression, where the authors used a purposive sample of eight listed banks. The result showed that the effect of liquidity on the earnings management of banking companies was significant and negative. A critique of this study is that it used multiple regression analysis which presents a methodological gap; the proposed investigation used panel regression technique.

Alqemzi (2022) examined the impact of the liquidity risk management on the financial performance of all eight UAE-based insurance banks (2008-2020) through a panel regression approach and profitability as a moderating variable. The result was that financial performance was positively and significantly affected by liquidity risk management. A critique of this study is that it was

ISSN: 2617-4138
DOI: 10.32898/ibmj.01/8.3article04
www.ijarke.com

moderated with profitability and was conducted in the period between 2008-2020 unlike the current study which was moderated by operating environment and a more recent and relevant study period of 2020-2024.

4.2.5 Firm Characteristics, Operating Environment and Profitability

Ocholla and Jagongo (2021) examined the effect of SASRA prudential guidelines (capital adequacy, asset quality, and liquidity) on the performance of Deposit-Accepting SACCOs in Nairobi City County, Kenya, on a cross-sectional and descriptive design that utilized a combination of secondary and primary data. The results were that the prudential standards enhanced the SACCO performance greatly in regulatory standards, general efficiency, loan cycle, and membership. The critique observes that there is a conceptual gap because the study focuses on SASRA guidelines as the independent variable and the current investigation is focusing on capital adequacy, asset quality, management efficiency, and liquidity on profitability of non-financial firms listed at the NSE, Kenya.

Nzisaa and Mbugua (2022) assessed the impact of external environmental variables (market power, exchange rate, rate of inflation and technology use) on the financial performance of listed commercial banks in Kenya through a descriptive design and secondary data that were analyzed with a VECM because of the assumption of non-stationarity. The results showed that the overall change in the environmental factors of one unit has a positive impact on the performance, although only two factors were important in explaining the long-term fluctuations in the financial performance of listed banks. The critique highlights a contextual gap because the study was done on Kenyan banking sector and thus the findings of the study were not as relevant to the current study being conducted on non-financial firms listed at the NSE, Kenya with a larger set of variables and different population.

Amarasuriya *et al.* (2024) explored the association between financial profitability and corporate environmental performance (lower carbon emissions) through the moderating influence of operational competitiveness on 1,738 global companies (2011-2020). The results showed that the low carbon emission enhances profitability, which was more significant among those firms that showed greater operational productivity; leverage reduced, and profitability was strengthened by the R&D. The criticism is that, although the study is methodologically sound, it is probably affected by disclosure bias (only large/global companies provide emissions data) this restricts its applicability to less visible emerging markets such as Kenya.

4.3 Conceptual Framework

The conceptual framework in figure 1 below illustrates how firm characteristics which consist of: Capital adequacy, asset quality, management efficiency, and liquidity affect the profitability of non-financial firms listed at the NSE, Kenya. The study will also determine moderating effect of operating environment on the relationship between firm characteristics and profitability of non-financial firms listed at the NSE, Kenya.

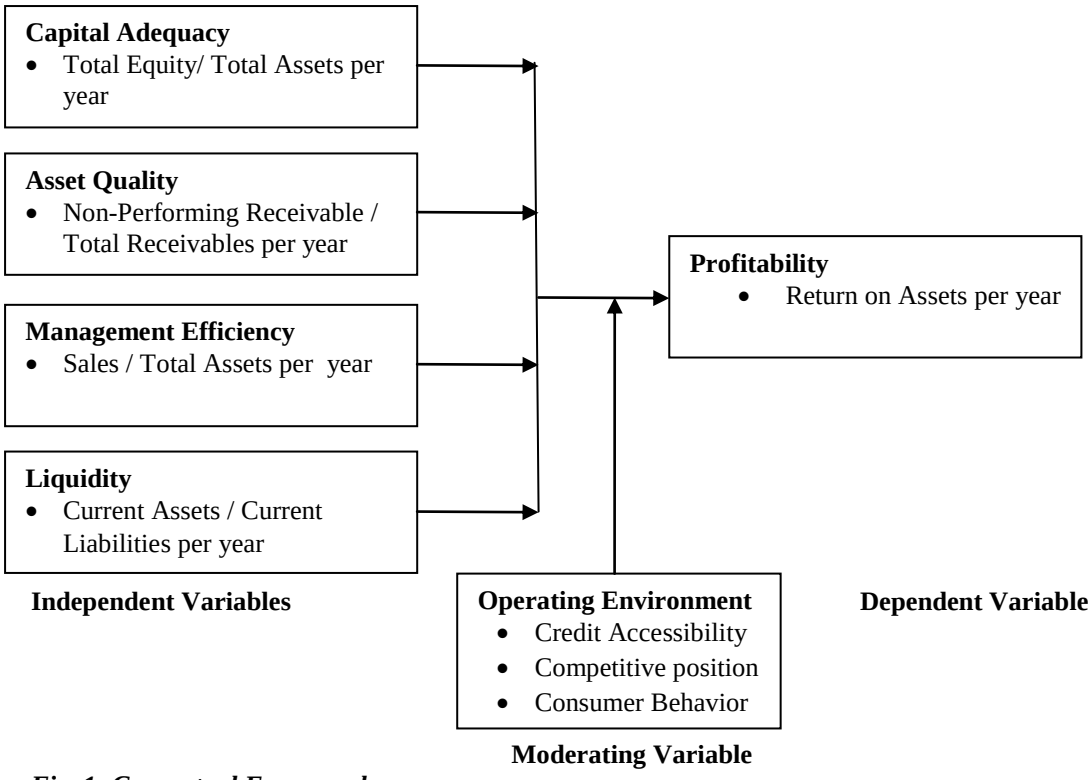


Fig. 1: Conceptual Framework

ISSN: 2617-4138
DOI: 10.32898/ibmj.01/8.3article04
www.ijarke.com

5. Conclusion

The literature demonstrates that while capital adequacy generally exerts a positive influence on financial performance and sustainability, its impact is nuanced and often moderated by specific regulatory frameworks and macroeconomic conditions. Specifically, studies by Bhattarai (2021) and Humta et al. (2024) highlight that although higher capital ratios can enhance Return on Assets (ROA), their relationship with Return on Equity (ROE) may be inverse and external factors like inflation and interest rates play a significant role in determining final profitability. However, a persistent gap remains in the literature, as most current findings focus on developed economies or specialized banking sectors. Consequently, there is a clear need for further research that bridges these findings to the unique economic context of non-financial companies within the Nairobi Securities Exchange (NSE) in Kenya to provide more localized and generalizable insights.

References

1. Abel, J., Kinyua, P., and Mwangi, D. (2025). Resource-based view in digital transformation: Implications for firm performance in turbulent markets. *Journal of Strategic Management*, *12*(2), 45–67.
2. Abudu, S., and Salman, H. (2025). Corporate governance and shareholder value: Evidence from the Ghana Stock Exchange. *International Journal of Finance and Accounting*, *14*(1), 78–95.
3. Agembe, J. M., Kariuki, P. W., and Otieno, R. O. (2024). Retained earnings and financial performance of listed non-financial firms in Kenya. *International Journal of Finance and Accounting Studies*, *8*(2), 41–55.
4. Ahmed, N., Majeed, A., Thalassinos, E., and Thalassinos, I. (2021). Investigating the effect of managerial efficiency on non-performing loans of commercial banks: Evidence from Pakistan. *Archives of Economic and Business Review*, *1*(1), 1-13.
5. Al-Faryan, S. (2024). Agency theory, corporate governance, and corruption: An integrative literature review. *Corporate Governance Review*, 20(1), 1–22.
6. Alhomaidi, E. A., Tabash, M. I., Ahmad, A., and Farhan, N. H. (2020). The determinants of profitability of Indian commercial banks: A panel data approach. *Cogent Economics & Finance*, *8*(1), 1–17.
7. Alqemzi, A. A. (2022). Liquidity risk management and financial performance of insurance banks in the UAE: The moderating role of profitability. *International Academic Journal of Economics and Finance*, *4*(3), 164-193.
8. Amarasuriya, H., Burke, J., and Hsu, C. (2024). Operational competitiveness and the relationship between corporate environmental and financial performance. *Journal of Business Ethics*, *192*(4), 779-798.
9. Arai, M., and Hiroti, Y. (2023). Cross-country differences in profitability and survival of non-financial firms. *Journal of International Business Studies*, *54*(3), 489–507.
10. Ater, D. K., Kibet, J. K., and Ngeno, V. (2020). Corporate governance and financial performance of firms listed at the Nairobi Securities Exchange. *Journal of Business and Economic Development*, *5*(2), 23–38.
11. Auma, W. and Okiro, K. (2021). *Asset quality and financial performance of money deposit banks listed at Nairobi Securities Exchange, Kenya*. Kenyatta University, Nairobi, Kenya.
12. Banda, A., and Edriss, A. K. (2022). Firm profitability and share price behaviour at the Malawi Stock Exchange. *African Journal of Economic Review*, *10*(1), 77–95.
13. Barakat, A., Elwahab, A., Yassin, F. M., Ibrahim, M., Ismail, B., and Eldin, H. (2024). Asset quality and banks performance: A panel data analysis of commercial banks. *Journal of Accounting and Finance*, *24*(1), 1-15.
14. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120.
15. Bhattarai, N. (2021). Capital adequacy ratios and financial performance of money deposit banks in Nepal. *Journal of Business and Social Sciences*, *4*(1), 1-15.
16. Capital Markets Authority. (2022). *Capital markets soundness report*. CMA.
17. Chirchir, K. J., Kiptoo, J. K., and Rono, L. J. (2024). Asset tangibility, firm age and return on assets of non-financial firms listed at the NSE. *Journal of Accounting and Finance Research*, *12*(1), 61–75.
18. Fiedler, F. E. (1964). A contingency model of leadership effectiveness. *Advances in Experimental Social Psychology*, 1, 149–190.
19. Financial Sector Regulators. (2024). *Financial sector stability report*. Government of Kenya.
20. Financial Stability Board. (2024). *Global monitoring report on non-bank financial intermediation*. FSB.
21. Gitari, P., Agong, S., and Kariuki, L. (2024). Effect of financial structure on operational efficiency of non-financial firms listed at Nairobi Securities Exchange. *African Journal of Accounting and Finance*, *15*(2), 55–73.
22. Halim, S., Noor, R. M., and Saad, R. A. (2023). Firm-specific attributes and financial performance: Evidence from emerging markets. *Asian Journal of Business and Accounting*, *16*(2), 129–150.
23. Humta, E. Z., Sahin, B., and Ghafourzay, G. M. (2024). Capital adequacy and banks' profitability: The moderating impact of macroeconomic variables. *Journal of Islamic Banking and Finance*, *12*(3), 45-60.
24. Idrees, A., and Siddiqui, A. (2021). The impact of efficiency management on the profitability of the firms: Textile composite sector. *Journal for Business Education and Management*, *5*(2), 1-15.
25. Jensen, M. C., and Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360.

ISSN: 2617-4138
DOI: 10.32898/ibmj.01/8.3article04

26. Kamau, J. M., Wambui, E. M., and Githinji, J. K. (2024). Profitability and stock market performance in Kenya: The moderating role of firm characteristics. *Journal of Finance and Investment Analysis, 13*(2), 94–112.
27. Kariuki, J., Kinyua, G. M., and Waithaka, P. (2023). The moderating effect of environmental turbulence on the relationship between core competences and firm performance of star rated hotels Nairobi City County, Kenya. *International Journal of Managerial Studies and Research, 11*(4), 1–17.
28. Kero, T., and Bogale, B. (2023). Resource-based view and dynamic capabilities: A systematic literature review. *International Journal of Management Studies*, 30(1), 14–38.
29. Ki, Y., and Ahan, M. (2020). Financial income dependence and performance of non-financial corporations. *Journal of Corporate Finance, 62*, 101–119.
30. Kibe, J., Wamugo, P., and Atheru, R. (2023). Operational efficiency, leverage, and financial distress in Kenya's state corporations. *Journal of Business and Public Policy*, 9(1), 88–106.
31. Kiplagat, G. J., Ngui, T., and Keino, D. (2024). Moderating effect of external environment on the relationship between transformational leadership and performance of commercial state corporations in Kenya. *Journal of Strategic Management, 8*(3), 19–33.
32. Kosgei, P. K., and Ngaba, M. D. (2024). Capital structure and financial performance of non-financial firms listed at the Nairobi Securities Exchange. *African Journal of Finance, 6*(1), 33–48.
33. Lawrence, P. R., and Lorsch, J. W. (1967). *Organization and environment: Managing differentiation and integration*. Harvard University Press.
34. Linggadjya, A., Permata, D., and Sari, D. (2025). Capital adequacy and sustainable growth in Indonesian commercial banks. *Journal of Finance and Banking, 8*(1), 1-14.
35. Maina, J., and Jagongo, A. (2022). *Effect of capital structure on financial performance of small- tiered deposit-taking savings and credit cooperative societies in Nairobi County*. Kenyatta University.
36. Makini, E. N., Wanyoike, D. M., and Muriithi, J. G. (2020). Operating environment and firm performance of companies listed at the NSE. *International Journal of Strategic Management, 5*(3), 14–29.
37. Masila, J. M., Kibet, J. K., and Tanui, E. (2024). Firm characteristics, sustainability reporting and financial performance of firms listed at the NSE. *Journal of Sustainable Finance, 9*(1), 1–17.
38. Matias, F., Baptista, C., and Salsa, L. (2024). Firm size and profitability: Evidence from panel data. *European Journal of Business Economics, 13*(2), 85–101.
39. Mbiti, J. M. (2020). Effect of COVID-19 pandemic on the performance of firms listed at the Nairobi Securities Exchange. *Journal of Economics and Finance, 11*(4), 22–35.
40. Mennawi, H. S. (2020). Liquidity risk and performance of Sudanese Islamic banks. *Journal of Islamic Finance and Banking, 10*(2), 1-15.
41. Milosev, M., Vukovic, B., and Djuric, S. (2021). Debt structure and profitability of non-financial companies in Serbia. *Journal of Economic Research, 34*(1), 1453–1468.
42. Mtuaruchiu, P. M., and Ringui, M. K. (2024). Liquidity management and firm value of non-financial firms listed at the NSE. *Journal of Financial Management, 9*(1), 52–68.
43. Mugo, S., Githui, T., and Mwangi, E. (2025). Effect of capital structure on return on assets of commercial and service firms listed at the Nairobi Securities Exchange. *International Journal of Finance and Accounting*.
44. Mulekano, K. K., and Miroga, J. B. (2023). Retained earnings and profitability of manufacturing firms listed at the NSE. *Journal of Accounting and Taxation, 15*(2), 44–59.
45. Muli, D. K., and Ibrahim, M. Y. (2024). Internal financing and financial performance of non-financial firms listed at the NSE. *International Journal of Economics and Finance Studies, 16*(1), 97–112.
46. Musembi, M. K., and Jagongo, A. O. (2024). Firm-specific attributes and financial performance of listed firms in Kenya. *Journal of Finance and Accounting Research, 10*(2), 58–74.
47. Mutui, J. and Sporta, M. (2023). Capital structure decisions and market performance of listed firms in Kenya. *Journal of Finance and Investment Studies, 7*(3), 71–88.
48. Mwangangi, R., Kinyua, H. W., and Wanyoike, C. G. (2023). Effect of capital structure on financial performance of firms listed on the Nairobi Securities Exchange. *International Journal of Social Sciences and Management Review, 6*(4), 45–62.
49. Nairobi Securities Exchange. (2023). *NSE annual statistical bulletin*. NSE.
50. Ngei, J. M. (2022). Capital structure, asset tangibility and firm performance of non-financial firms listed at the NSE. *Journal of Economics and Sustainable Development, 13*(5), 101–115.
51. Nguyen, T. T. (2020). Return on equity and shareholder value creation in emerging markets. *Journal of Asian Finance, Economics and Business, 7*(9), 319–329.
52. Nzisaa, M., and Mbugua, S. (2022). External environmental factors and financial performance of listed commercial banks in Kenya. *Journal of Economics and Finance, 14*(4), 1-10.
53. Ochingo, M. O., and Muturi, W. M. (2024). Board characteristics and performance of non-financial firms listed at the NSE. *Journal of Corporate Governance Studies, 11*(1), 34–50.
54. Ochoki, S. N., Ochieng, H. O., Mwabaka, P. M., and Kamau, C. G. (2023). Effects of cost of capital on firm performance in Kenya. *East African Finance Journal, 1*(1), 17–24.

ISSN: 2617-4138
DOI: 10.32898/ibmj.01/8.3article04

55. Ocholla, K. and Jagongo, A. (2021). Impact of SASRA prudential guidelines on performance of deposit-accepting SACCOs in Nairobi City County, Kenya. *Journal of Co-operative and Development Studies, 2*(1), 1-18.
56. OECD. (2022). *ESG integration and corporate resilience*. OECD Publishing.
57. Ogola, J. O., Were, S., and Wanyoike, D. (2024). Big data capability, operating environment, and performance of commercial banks in Kenya. *Journal of Information Systems and Business Performance, 8*(1), 1–15.
58. Ogunode, O., Adekunle, A., and Ajayi, M. (2022). Financial leverage and profitability of firms in emerging economies. *Journal of Emerging Market Finance, 21*(2), 215–233.
59. Okeke, R., Ude, A., and Okafor, J. (2021). Effect of management efficiency on profitability of foods and beverage manufacturing firms in Nigeria. *Advance Journal of Management, Accounting & Finance, 10*(3), 1-12.
60. Ominde, K. M. (2020). Globalization strategies and financial performance of firms in COMESA region. *African Journal of Economic Policy, 27*(1), 55–72.
61. Orando, R., Nyangau, A., and Maobe, S. (2024). Effect of asset quality on financial performance of listed commercial banks in Kenya. *International Journal of Finance and Accounting, 5*(1), 1-10.
62. Orlando, F., Marino, I., and Rinaldi, G. (2024). Commodity price shocks and profitability of energy firms. *Energy Economics, 124*, 106–118.
63. Ravindran, R., and Kengatharan, L. (2021). Financial leverage and profitability of listed non-financial firms in Sri Lanka. *Journal of Asian Business and Economic Studies, 28*(3), 199–215.
64. Religiosa, A., and Surjandari, S. (2021). Liquidity and earnings management in the Indonesian banking industry. *International Journal of Research in Business and Social Science, 10*(4), 1-10.
65. Shrestha, S., and Gnawali, K. (2025). Capital adequacy, liquidity, and firm stability in emerging markets. *International Journal of Banking and Finance, 14*(1), 1–18.
66. Wafula, M. K., Ngugi, K., and Mbugua, J. (2020). Firm characteristics and financial performance of listed firms in Kenya. *International Journal of Economics, Commerce and Management, 8*(6), 231–247.
67. Wamalwa, W. R., and Obokoh, L. (2024). The effects of working capital management on the financial performance of commercial and service firms listed on the Nairobi Securities Exchange in Kenya. *Risks, 12*(8), 119.
68. Wanjira, M. W. (2022). Corporate operations and financial performance of non-financial firms in Kenya. *Journal of Business Management Studies, 9*(2), 65–79.
69. Wanjiru, B. N., Jagongo, A. O., and Ndede, F. W. S. (2024). Effect of capital adequacy on financial performance of commercial banks in Kenya. *The Strategic Journal of Business & Change Management,* 11 (2), 327 – 349.
70. Wanjiru, E. N., Mutuku, C., and Kimani, D. (2020). Competitive environment and strategic performance of firms in Kenya. *Journal of Strategic Management, 5*(4), 21–35.
71. Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
72. Woodward, J. (1954). *Industrial organization: Theory and practice*. London: Oxford University Press.
73. Yosef, A., Pratama, R., and Nugroho, A. (2024). Firm size, liquidity, and profitability of non-financial firms in Indonesia. *Asian Economic and Financial Review, 14*(2), 118–134.