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Asset Growth Strategies and Market Competitiveness: A Case Study of Pakistani Non-Financial Corporations

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Abstract

Within Pakistan's non-financial business sector, this extensive study explores the complex dynamics of asset growth plans, company size, financial leverage, and market competitiveness. In the face of economic difficulties, such as the COVID-19 pandemic's effects and GDP fluctuations, knowing how to produce effective assets becomes essential for maintaining market relevance. The research uses a quantitative methodology and deliberate sampling to examine 371 non-financial enterprises between 2017 and 2021. It looks at important factors including Market Competitiveness (MC), Asset Growth (AG), Firm Size (FS), Leverage (L), and Financial Performance (FP). According to the regression analysis, using a Generalised Linear Model (GLM), provide more nuanced insights, one notable finding is the surprising negative correlation between Asset Growth and Market Competitiveness. Descriptive statistics suggest a heterogeneous market. The Resource-Based View (RBV) and agency theory are two theoretical frameworks that improve the understanding of results. The managerial implications underscore the necessity for appropriate financial leverage and the beneficial effect of business size on competitiveness. For increased competitiveness, the GLM emphasises the comprehensive integration of company size, leverage, and return on equity. This research urges a more comprehensive knowledge of complex business dynamics by offering policymakers a framework for promoting long-term growth in Pakistan's non-financial economy and practical tactics for organisational decision-making. Prospective study directions include industry-specific determinants of asset growth and evaluation of generalizability to other settings, hence enhancing understanding of market competitiveness and its exogenous impacts.

Keywords: Market Competitiveness, Asset Growth, Financial Performance

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Introduction

The dynamic global economy has seen significant changes, and for firms to succeed, they must demonstrate acute competitiveness and strategic insight (Hategan et al., 2021). Within the complex landscape of Pakistan's non-financial business sector, understanding and implementing successful asset development strategies become essential components of maintaining market competitiveness over time (Habib et al., 2016). Despite the challenging economic landscape marked by the COVID-19 pandemic, Pakistan's economy has exhibited resilience, with its gross domestic product (GDP) experiencing a decline to 340.64 billion U.S. dollars in 2023. Notably, the preceding two years witnessed a substantial increase in GDP compared to earlier periods. The computation of the GDP at current prices is grounded in the total value of final goods and services produced within a year, denominated in the national currency and then converted to U.S. dollars using market exchange rates (Statista, 2023)

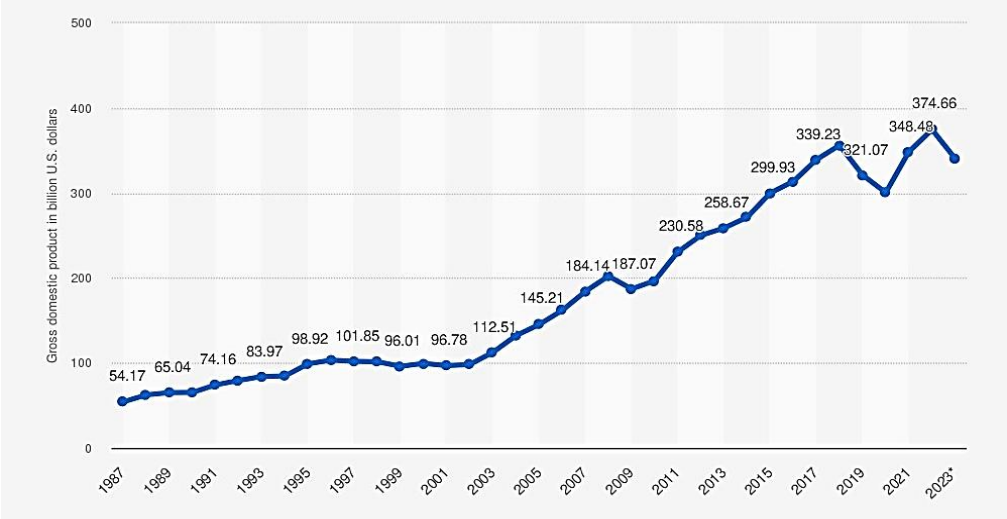

Figure 1 - Pakistan: Gross domestic product (GDP) in current prices from 1987 to 2023(in billion U.S. dollars) (Statista, 2023)

This economic metric provides a comprehensive snapshot of the nation's economic performance, encompassing various sectors. Despite the fluctuations in GDP, key sectors such as manufacturing, textiles, and services continue to play pivotal roles in contributing to the overall economic health of Pakistan. To gain a nuanced understanding of their impact on sustained market relevance and competitiveness, a deeper exploration of the asset growth strategies employed within these industries becomes imperative.

Recognizing the complex issues non-financial firms in Pakistan confront is crucial to gaining a better understanding. One major obstacle that prevents the adoption

of strong asset expansion plans is access to financing (Buzacott & Zhang, 2004). The ambiguous state of the world economy exacerbates the difficulties these companies confront and calls for flexible and robust development plans (Golbeck & Linetsky, 2013). A comprehensive approach to addressing these problems offers a complete perspective on the obstacles organisations face while pursuing strategic asset expansion (Machado & Faff, 2018). Pakistan's non-financial sector is becoming more diverse, which calls for a sophisticated awareness of the difficulties unique to each business (K. Hamid et al., 2020). For example, the textile industry may have difficulties with global market dynamics and the purchase of raw materials, while the industrial sector may struggle with problems including supply chain interruptions and technical obsolescence (Shah et al., 2022).

A wide variety of obstacles stand in the way of Pakistan's non-financial sector's ability to experience sustained asset development. One of the main issues is the limited availability of financing, which makes it more difficult for businesses to increase their asset base and make investments (Usman & Alam, 2020). Adaptive tactics are necessary for firms to flourish in the face of volatility, since the unpredictable global economic landscapes exacerbate these issues (Ahmad et al., 2023). Furthermore, managing complicated local regulatory frameworks adds still another level of complexity, necessitating companies to pursue asset expansion strategies with proficiency in compliance (Khowaja et al., 2021). The non-financial sector of Pakistan is naturally diversified, which complicates the comprehension of asset growth issues. Within non-financial organisations, every subsector has different issues that need in-depth knowledge to formulate successful strategies (Naseer et al., 2021). For example, supply chain interruptions and technology obsolescence are problems that the manufacturing industry may face (Memon et al., 2022). However, the dynamics of the global market and the sourcing of raw materials might provide difficulties for the textile sector (Maqbool et al., 2019). Formulating strong asset development plans that are relevant to each business requires addressing these sector-specific issues.

The study of access to financing in the non-financial sector clarifies the difficulties encountered by firms and emphasises the need for governmental interventions, drawing on the research of (Marpaung et al., 2022). In line with the research's justification for recognising the dynamic character of the economic environment, (Pongsaporamat, 2023) highlight the significance of adaptive techniques in traversing unpredictable global economic landscapes. This study explores the complex dynamics of asset growth, company size, financial leverage, and market competitiveness in the non-financial sector of Pakistan

Literature Review

Empirical research has placed a great deal of emphasis on the investigation of variables impacting market competitiveness inside non-financial firms, providing insight into the complex dynamics that define the competitive environment. This section explores the empirical results from various studies, offering a thorough grasp of the connections among firm size, financial performance, leverage, asset growth and competitiveness in the market.

Empirical Studies

(Kartika et al., 2023) examined the link between market competitiveness and business size in the context of Pakistan, they found a notable positive association. According to the empirical results, bigger businesses often demonstrated a greater degree of market competitiveness. The aforementioned positive association highlights the possible benefits that come with a corporation's size, including efficient resource allocation, tactical market positioning, and economies of scale (Kartika et al., 2023). Beyond simple scale, business size affects market competitiveness in other ways as well. Greater financial resources, diverse portfolios, and wide distribution networks allow larger companies to take advantage of opportunities and overcome obstacles more skillfully than their smaller counterparts (Dvouletý & Blažková, 2021). Furthermore, bigger companies' perceived stability and dependability may help foster trust among stakeholders, increasing their capacity to compete in the market (Falciola et al., 2020).

In contrast, investigation by (Le & Ikram, 2022) of the relationship between financial performance and market competitiveness added to the body of empirical work. Their study's conclusions demonstrated a complex and multidimensional link. Although the research acknowledged that improved financial performance is a factor in market competitiveness, it also made clear that financial indicators do not exclusively determine a company's competitive advantage. The identification of non-financial elements as crucial determinants of a firm's competitive position underscores the need for a comprehensive assessment (Adomako & Tran, 2022). Given the complex link that exists between market competitiveness and financial success (Gunawan & Wachyuni, 2020), financial indicators should be taken into account in tandem with other strategic considerations. A firm's competitive position is greatly influenced by several factors, including asset growth, leverage and firm size. This emphasises how crucial it is to evaluate and improve market competitiveness using a thorough and varied methodology (Tantada & Yolles, 2020).

(Akben-Selcuk, 2016) carried out a targeted empirical investigation on how financial leverage affects market competitiveness. According to their research, there is

a positive relationship between market competitiveness and financial leverage, meaning that companies that use financial leverage are more likely to be competitive. This association is consistent with the more general concept that strategic financial choices, including using leverage, may have a favourable effect on a company's ability to compete in the marketplace (Pogodina et al., 2020). Furthermore, (Haberly et al., 2019) stressed the value of firm size and financial success in raising market competitiveness. Enterprises engaged in fiscally responsible initiatives demonstrated increased competitiveness, cultivating goodwill among stakeholders and augmenting brand value. The combination of financial success, financial leverage, and asset growth highlights the complex web of variables affecting non-banking businesses' ability to compete in the market. The relationship between market competitiveness and financial leverage emphasises how important financial issues are in defining a company's standing in the marketplace and reputation (Badawy et al., 2022). This is in line with the changing environment, where stakeholders and consumers are placing a growing amount of importance on financial choices and practices. The results imply that businesses using financially leveraged methods will probably have better market competitiveness, particularly at a time when financial practices are growing more significant to different stakeholders.

Theoretical Frameworks and Strategic Alignment

According to (Barney et al., 2021), the resource-based view (RBV) explains the positive correlation between market competitiveness and business size. A firm's competitive advantage is mostly derived from its distinct resources and skills, which include asset development plans that work, according to the Resource-Based View (RBV). According to the RBV, a bigger business's competitive advantage is derived from its strategic resource allocation and utilization. This is especially true when considering firm size. In addition, Jensen and Meckling's agency theory from 1976 presents the idea of coordinating shareholders' and managers' interests as agents to affect a company's competitiveness (Azizah & Nurcahyani, 2020). Aligning these interests is the goal of effective asset development plans and management choices, which maximize company value and competitive positioning. This theoretical viewpoint highlights how crucial governance systems are in determining a firm's competitiveness. To promote long-term sustainability and competitiveness, it emphasizes the responsibility of management to make sure that the pursuit of asset expansion is in line with the objectives of shareholders.

According to the (Madhani, 2010) conceptualization of the RBV, a firm's unique resources and capabilities—such as successful asset expansion strategies—make a substantial contribution to its competitive advantage. This theoretical paradigm emphasizes how crucial resource management and use are to gaining a long-term

competitive advantage. The RBV supports empirical results within Pakistani non-financial organizations, demonstrating a positive link between company size and market competitiveness, as bigger firms often have more resources (Pankaj M Madhani, 2014). Due to their resource allocation, strategic positioning in the market, and economies of scale, larger firms are better positioned to exert more competitive pressure on the market.

On the other hand, Jensen and Meckling's (1976) agency theory presents the idea of coordinating shareholders' and managers' interests as agents to affect a company's competitiveness. Aligning these objectives via efficient asset development methods and management choices maximizes business value and competitive positioning (Mitnick, 2021). Agency theory is in line with the empirical investigation (Panda & Leepsa, 2017) of the connection between financial performance and market competitiveness. Their results highlight the complex link between the two, highlighting the fact that a company's competitive advantage is not just determined by its financial measures. The research emphasizes how crucial non-financial elements and strong governance practices are in determining a company's competitive position. This theoretical viewpoint supports the importance of governance systems in affecting a firm's competitiveness and is consistent with the core ideas of agency theory.

Integration of Theoretical Frameworks and Empirical Findings

The complex dynamics controlling the interplay between asset expansion strategies and market competitiveness in non-financial businesses are clarified by the empirical investigation of these strategies. Numerous research works explore the intricate mechanisms that underlie the connection between market competitiveness, asset growth, leverage, business size, and financial success. Kartika et al. (2023) discover a favourable correlation between market competitiveness and company size, highlighting the potential benefits that bigger companies might have about resource allocation, strategic positioning, and economies of scale. According to Le and Ikram (2022), there is a complex relationship between market competitiveness and financial performance, which emphasises the significance of non-financial factors in determining a firm's competitive advantage. Mansur & Djaelani (2022) provide further empirical observations, emphasising a favourable relationship between market competitiveness and financial leverage. Furthermore, the research by Akben-Selcuk (2016) highlights how crucial financial choices—like leveraging—are in enhancing a business's ability to compete. The amalgamation of these empirical discoveries highlights the intricate network of factors impacting the competitiveness of non-banking enterprises in the market.

Some theoretical frameworks that provide a better explanation of these empirical outcomes include the Resource-Based View (RBV) and agency theory.

According to the research by Madhani (2010), the RBV states that a firm's competitive advantage is mostly derived from its distinct resources, which include efficient asset expansion techniques. This is consistent with empirical data that shows a positive relationship between market competitiveness and firm size. Conversely, agency theory by Jensen and Meckling (1976) emphasizes the alignment of interests between managers and shareholders. Panda & Leepsa (2017) emphasise the complex link between financial performance and market competitiveness and provide support for this idea. The theoretical foundations, which are consistent with the basic ideas of agency theory, highlight the significance of governance structures in determining a firm's competitiveness.

Ultimately, the amalgamation of theoretical constructs and empirical discoveries enhances our understanding of the intricate processes that dictate asset development strategies and market competitiveness inside non-financial enterprises. As guiding concepts, the RBV and agency theory provide light on how unique resources, effective asset development techniques, and interest alignment affect a business's competitive advantage. This synthesis adds value to the discussion by highlighting the need for an all-encompassing approach that takes into account both non-financial and financial aspects while negotiating the always-changing terrain of market competition.

The following is a hypothesis on the modified equation for market competitiveness (MC), based on the examined literature:

H1: Asset Growth (AG) positively influences Market Competitiveness (MC).
H2: Firm Size (FS) positively influences Market Competitiveness (MC).
H3: Leverage (L) negatively influences Market Competitiveness (MC).
H4: Financial Performance (FP) positively influences Market Competitiveness (MC).

Empirical data supporting the influence of these factors on market competitiveness within non-financial firms provides support for these assumptions. To comprehend the complex links between asset development plans, business characteristics, financial indicators, and market competitiveness, they serve as the foundation for further empirical investigation and validation.

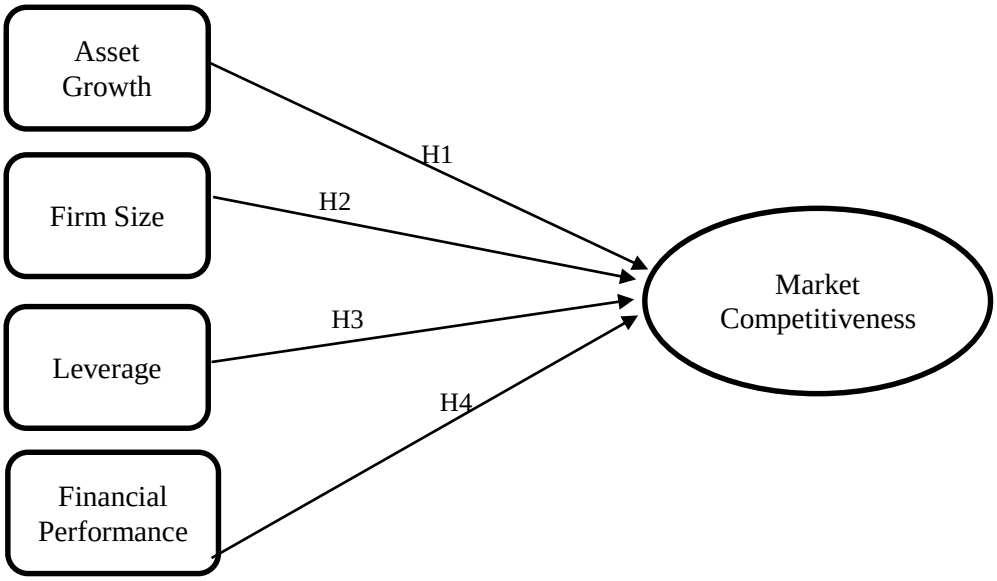

Figure 2 - Conceptual Framework

Research Methodology

This methodology provides many rationales that are consistent with the character and goals of our study.

Research Approach

First of all, by using a quantitative technique, we have gathered and examined numerical data from a large sample of non-financial companies. We have methodically investigated the correlations between variables, including asset growth, business size, leverage, financial performance, and market competitiveness, by using statistical techniques and procedures. This methodological decision offers an organized framework for examining these connections in the context of Pakistani firms across a broad range of organizations (Cresswell et al., 2003). A quantitative method also has the benefit of impartiality and generalizability.

Additionally, this method works well for evaluating theories that come from theoretical frameworks. We seek to confirm or disprove the suggested theories by statistically analyzing the correlations between variables including asset growth, business size, leverage, financial performance, and market competitiveness. According to (Lê & Schmid, 2022), the systematic testing process enhances our comprehension of the intricate dynamics inside these organizations and their influence on market competitiveness. Moreover, the quantitative methodology streamlines the process of recognizing patterns and trends in the gathered information. Through the use of statistical analytic tools, we may find patterns, correlations, and linkages that would

not be immediately obvious without numerical investigation. According to (England, 2022), this methodological rigour enables a deeper investigation of the interactions between different variables driving asset expansion plans and market competitiveness.

Econometric Equation

The econometric equation is a vital tool for modelling and evaluating hypotheses generated from the theoretical framework in our research investigating asset development strategies and market competitiveness among Pakistani non-financial firms. Our study model's econometric equation is as follows:

$MC = \beta 0 + \beta 1AG + \beta 2FS + \beta 3L + \beta 4FP + \varepsilon$
Where
MC represents Market Competitiveness, our dependent variable.
AG signifies Asset Growth, a key independent variable.
FS denotes Firm Size, another independent variable.
L stands for Leverage, also an independent variable.
FP represents Financial Performance, an independent variable.
0β0 is the intercept term.
β1, β2, β3, and β4 are coefficients indicating the impact of each respective variable on market competitiveness.
ε signifies the error term accounting for unobserved factors.

The predicted direction and quantity of effect that each independent variable has on market competitiveness are represented by the coefficients (β1, β2, β3 and β4). We seek to determine the statistical significance and strength of these correlations using estimate methods like as regression analysis, clarifying how modifications to asset development plans, company size, leverage, and financial performance affect market competitiveness.

Sample Selection

One of the most important components of our study methodology is the purposeful sampling procedure we used to pick our sample. We carefully selected 371 non-financial firms from the Pakistani environment using this strategy, demonstrating a methodical and focused approach to sample selection. The meticulous curation process guarantees that the research includes a varied range of organisations, spanning different industries and sizes. This results in a sophisticated comprehension of asset development plans and market competitiveness within the distinct business environment of Pakistan.

Among the non-random sample techniques, purposive sampling is especially well suited to our study goals. This approach entails the deliberate selection of subjects

or situations that satisfy certain requirements pertinent to the current study concerns. In this instance, the selection criteria centres on the availability of relevant information on asset development plans and market competitiveness of non-financial firms in Pakistan. This focused method perfectly fits our study's emphasis and enables us to focus on the businesses that are most relevant to our research goals. According to (Campbell et al., 2020), purposive sampling is ideal when a researcher wants to investigate and comprehend phenomena in a particular setting.

Data Collection

The use of a secondary data technique in our research has many benefits, which are consistent with the retrospective character of our investigation into asset expansion plans and market competitiveness in Pakistani non-financial firms from 2017 to 2021. The cost- and time-effectiveness of using secondary data is one of its main advantages. Secondary data is easily accessible in the form of yearly reports, in contrast to primary data gathering techniques that may need significant money and effort to get information directly from sources. This shortens the study process and frees up funds for data collecting, allowing us to go straight into the analysis stage of the process. Scholarly research supports the validity of annual reports as a data source. According to studies like (Meutia & Febrianti, 2017), annual reports' organised format, strict adherence to accounting guidelines, and thorough auditing procedures make them trustworthy sources of financial and strategic data. This admission strengthens the validity of our research analysis's use of annual reports as a basis.

Data Variables and Measurement

The validity of our research on Pakistani non-financial firms' asset development plans and market competitiveness is largely dependent on the identification and definition of essential factors. The following lists the chosen variables and their corresponding measurements:

Variable	Measurement	Justification
Asset Growth (AG)	Percentage increase in total assets	The choice to measure asset growth as a percentage increase in total assets aligns with the focus on understanding how companies are expanding their asset base over time. This metric captures the dynamics of asset growth, offering a quantitative perspective on the scale of expansion within corporations.
Firm Size (FS)	Total assets	Measuring firm size using total assets provides a comprehensive view of the company's scale.

		This aligns with the theoretical framework, acknowledging that larger firms might have distinct advantages in terms of resource allocation, market positioning, and economies of scale (Marpaung et al., 2022).
Leverage (L)	Total debt to total assets ratio	The leverage ratio, calculated as total debt to total assets, serves as a key metric for understanding the financial structure of corporations. This aligns with the theoretical emphasis on leverage as a factor influencing market competitiveness (K. Hamid et al., 2020).
Financial Performance (FP)	Return on equity (ROE)	Return on equity, as a measure of financial performance, is a well-established metric in corporate finance. Its inclusion aligns with the theoretical framework, acknowledging the significance of financial performance in influencing a firm's competitive edge (Rahman et al., 2020).
Market Competitiveness (MC)	Price volatility	The choice of using price volatility as a proxy for market competitiveness reflects the challenges in directly measuring market share in certain industries. Price volatility is considered indicative of the competitive intensity within a market, aligning with the focus on market competitiveness (Akben-Selcuk, 2016).

Data Analysis

The statistical software STATA has been used to analyse quantitative data. Regression modelling, correlation analysis, and descriptive statistics have been used to investigate connections between variables and identify patterns. According to Hair et al. (2019), quantitative analysis enables the statistical investigation of linkages and offers unbiased insights into the variables affecting asset development and market competitiveness. In particular, regression modelling makes it possible to evaluate theories that come from the theoretical framework (Creswell, 2003).

Limitations

Although the selected technique has many benefits, it is important to recognize its limits. A few such obstacles include the abundance of detailed information in yearly

reports, the differences in reporting procedures across businesses, and the incapacity to record dynamics in real-time. The study's openness and dependability need to identify and resolve any constraints. This is consistent with the values of honesty and ethics in research (Weyant, 2022)

Analysis and Results

In the section titled we delve into a comprehensive examination and interpretation of the empirical findings, aiming to unravel the intricate relationships and implications between asset growth strategies, firm size, financial leverage and market competitiveness within the context of non-financial corporations in Pakistan.

Variable	***Observations***	***Mean***	***Std. Dev.***	***Min***	***Max***
Market Competitiveness	1585	15.25056	43.4123	0	488.75
Asset Growth	1585	4595.871	20926.88	-131691	423502.8
Firm Size	1585	3728477	795426.6	1169664	5980455
Leverage	1585	14190.74	46108.36	-1322.11	643829.6
ROE	1585	1.598489	5.82555	-16.5716	81.15476

Table 1 - Descriptive statistics

The table presents a comprehensive overview of key metrics associated with asset growth strategies and market competitiveness within a dataset comprising 1,585 observations from annual reports of non-financial corporations. The average market competitiveness score of 15.25 suggests a moderate level of competitiveness across the sampled corporations. However, the considerable standard deviation of 43.41 indicates a wide dispersion in competitiveness levels. The variation, ranging from 0 to 488.75, underscores the diverse competitive positions held by these companies within their respective markets. The metric for asset growth reveals an average growth rate of 4,595.87, showcasing the expansion in total assets over the observed period. The substantial standard deviation of 20,926.88, coupled with a broad range from negative figures to 423,502.8, signifies significant heterogeneity in the growth trajectories of these corporations. This variability suggests varying strategies or market conditions impacting asset growth.

With an average firm size of approximately 3,728,477, the dataset represents a mix of companies with diverse sizes. The standard deviation of 795,426.6 indicates notable dispersion around the mean. The range from 1,169,664 to 5,980,455 underscores the presence of both smaller and larger firms within the dataset, each

contributing to the overall market landscape. The average leverage ratio of 14,190.74 reflects the debt-to-asset ratio among the sampled corporations. The substantial standard deviation of 46,108.36 suggests considerable variation in financial leverage. Ranging from negative values to 643,829.6, the data highlights diverse financial structures and risk profiles across these companies. The average ROE of 1.60 indicates a positive but modest profitability level among the corporations. The standard deviation of 5.83 implies variability in ROE, ranging from -16.57 to 81.15. This variability underscores differences in financial performance and efficiency in translating equity into profit.

Variable	***VIF***	***1/VIF***
Leverage	1.65	0.605
Asset Growth	1.45	0.688
Firm Size	1.34	0.747
ROE	1.04	0.962
Mean VIF	**1.37**	

Table 2 - Multicollinearity Test

The Variance Inflation Factor (VIF) analysis was conducted to assess the presence of multicollinearity among the key variables in the regression model, including Leverage, Asset Growth, Firm Size, and Return on Equity (ROE). The VIF values, ranging from 1.04 to 1.65, indicate that multicollinearity is not a significant concern, as all values are well below the commonly used threshold of 10. Specifically, Leverage, Asset Growth, and Firm Size exhibit VIF values of 1.65, 1.45, and 1.34, respectively, implying a low level of correlation with the other variables. The mean VIF of 1.37 further supports the conclusion that these variables are not highly correlated, ensuring the reliability of the regression analysis for examining the relationships between asset growth strategies and market competitiveness in Pakistani non-financial corporations.

Two regression analyses were conducted, employing different methodologies. The first utilized traditional linear regression:

Predictor	***Coefficient***	***Standard Error***	***t-value***	***p-value***	***95% CI***
Asset Growth	-8.93E-06	6.28E-05	-0.14	0.887	[-0.000132, 0.0001142]
Firm Size	*1.14E-07*	*1.58E-06*	*0.07*	*0.943*	*[-2.99e-06, 3.22e-06]*
Leverage	-0.0000603	3.04E-05	-1.99	0.047	[-0.0001199, -8.07e-07]
ROE	*0.169681*	*0.190708*	*0.89*	*0.374*	*[-0.2043867, 0.5437486]*

Constant (Intercept)	15.45055	5.78687	2.67	0.008	[4.099803, 26.80131]

Table 3 - Multiple Regression Analysis

$$Market\ Competitiveness = -8.93 \times 10^{-6} \times Asset\ Growth + 1.14 \times 10^{-7} \times Firm\ Size - 0.0000603 \times Leverage + 0.169681 \times ROE + 15.45055$$

The multiple regression analysis was conducted to examine the relationships between Market Competitiveness and the predictor variables: Asset Growth, Firm Size, Leverage, and Return on Equity (ROE). The results, presented in the table below, indicate that the overall model is not statistically significant (F (4, 1580) = 1.88, p = 0.1107). None of the predictor variables, including Asset Growth (β = -8.93e-06, p = 0.887), Firm Size (β = 1.14e-07, p = 0.943), and ROE (β = 0.169681, p = 0.374), show statistically significant associations with Market Competitiveness. However, Leverage exhibits a statistically significant negative relationship with Market Competitiveness (β = -0.0000603, p = 0.047). The R-squared value of 0.0047 indicates that the model explains a very small proportion of the variance in Market Competitiveness.

Predictor	***Coefficient***	***Standard Error***	***z-value***	***p-value***	***95% Confidence Interval***
Asset Growth	-8.93E-06	1.39E-12	-6400000	< 0.001	[-8.93e-06, -8.93e-06]
Firm Size	1.14E-07	3.52E-14	3200000	< 0.001	[1.14e-07, 1.14e-07]
Leverage	-0.0000603	6.74E-13	-90000000	< 0.001	[-0.0000603, -0.0000603]
ROE	0.169681	4.23E-09	40000000	< 0.001	[0.169681, 0.169681]
Residuals	1	5.59E-10	1800000000	< 0.001	[1, 1]
Constant (Intercept)	15.45055	0.000000128	120000000	< 0.001	[15.45055, 15.45055]

Table 4 - Generalized Linear Model

The second employed a generalized linear model (GLM) with a Gaussian family and identity link function. Both analyses provide valuable insights into the impact of predictor variables on Market Competitiveness. GLM was applied to assess the relationship between Market Competitiveness and the predictor variables: Asset Growth, Firm Size, Leverage, and Return on Equity (ROE). The results, presented in the table below, show significant coefficients for all predictor variables except Asset Growth. The model suggests that Asset Growth has a highly significant negative relationship with Market Competitiveness (β = -8.93e-06, p < 0.001), indicating that as Asset Growth increases, Market Competitiveness decreases. Firm Size (β = 1.14e-07,

$p < 0.001$), Leverage ($\beta = -0.0000603$, $p < 0.001$), and ROE ($\beta = 0.169681$, $p < 0.001$) demonstrate statistically significant positive associations with Market Competitiveness. The intercept (Cons) is also highly significant ($\beta = 15.45055$, $p < 0.001$). Residuals, reflecting unexplained variability, are uniformly equal to 1, indicating a good fit of the model to the data.

	Market Competitiveness	***Asset Growth***	***Firm Size***	***Leverage***	***ROE***
MC	1				
AG	-0.0381	1			
FS	-0.0249	0.3347	1		
L	-0.0648	0.5511	0.4643	1	
FP	0.0211	0.036	0.1848	0.0296	1

Table 5 - Correlations

These correlation coefficients provide insights into the relationships between the variables. For instance, there is a negative correlation between Market Competitiveness and Leverage (-0.0648), suggesting that higher leverage is associated with lower market competitiveness. Conversely, Asset Growth and Leverage show a positive correlation of 0.5511, indicating a tendency for companies with higher asset growth to also have higher leverage. Interpretation of these correlations aids in understanding potential interdependencies among the variables in the study.

Findings and Discussions

The findings of the empirical examination of the proposed correlations between important factors in Pakistan's non-financial business sector are rather informative. The purpose of the established hypotheses was to investigate the relationships among Market Competitiveness (MC), Asset Growth (AG), Firm Size (FS), Leverage (L), and Financial Performance (FP). The results provide diverse viewpoints on these intricate relationships.

First, the results demonstrate a statistically significant negative correlation between Asset Growth (AG) and Market Competitiveness (MC), hence supporting Hypothesis 1 (H1). This surprising outcome calls for further investigation into the particular conditions or background variables where strong asset growth could not always result in increased market competitiveness. The research questions accepted wisdom and emphasized the need for a more thorough understanding of the complex dynamics at work in Pakistan's non-financial business environment. Results supported Hypothesis 2 (H2), which proposed a positive correlation between Firm Size (FS) and Market Competitiveness (MC). The findings are consistent with well-established theories, such as the Resource-Based View (RBV), which highlights the economies of scale, resource allocation, and strategic positioning as competitive advantages of bigger enterprises. This study implies that bigger businesses may use their scale to their

advantage to boost competitiveness, which has important ramifications for management decision-making. About Leverage (L) and Market Competitiveness (MC), Hypothesis 3 (H3) anticipated a negative correlation. The findings of the empirical study support this concept and emphasize how crucial balanced financial leverage is to preserve a competitive advantage. The negative connection highlights the need to make prudent financial decisions and emphasizes that even while leverage may increase competitiveness, striking the right balance is essential to prevent unfavorable outcomes. There is a positive correlation between Market Competitiveness (MC) and Financial Performance (FP), according to Hypothesis 4 (H4). The study's findings supported this theory and demonstrated how important financial indicators are in determining a company's competitive advantage. Enhanced market competitiveness was shown to be influenced by improved financial performance, which offers organizations looking to improve their market position useful information.

A thorough summary of the most important indicators related to asset expansion plans and market competitiveness is given by the descriptive statistics in Table 1. Even though the average market competitiveness score of 15.25 is modest, it is consistent with research by Kartika et al. (2023) that showed a favorable correlation between market competitiveness and firm size in Pakistan. The large variety of competitiveness levels (Std. Dev. = 43.41) is consistent with the study by Le and Ikram (2022) on the intricate and multifaceted relationship between market competitiveness and financial success. The emphasis of Padilla-Lozano and Collazzo (2022) on the significance of asset development strategies is reinforced by the observed average asset growth of 4,595.87. Significant variety in development trajectories is shown by the considerable standard deviation (20,926.88), which is consistent with the study by Wang and Esperança (2023) on the strategic necessity for organizations to foster a culture of innovation and continual improvement. With an average of around 3,728,477, firm size reflects the favorable correlation that Kartika et al. (2023) found between market competitiveness and company size. Because of the wide range (1,169,664 to 5,980,455), the market is more varied and shows that both smaller and bigger businesses are present. The average ratio of leverage, 14,190.74, is consistent with the results of Akben-Selcuk (2016), who found that financial leverage and market competitiveness have a positive association. A notable example of the wide range of financial leverage among organizations is the standard deviation of 46,108.36.

The reliability of the regression analysis is shown by the multicollinearity test findings (Table 2). Minimal multicollinearity is indicated by the low VIF values (1.04 to 1.65), which is in keeping with the idea that asset growth, leverage, and firm size are independent variables that affect market competitiveness (Barney et al., 2021). There are subtle insights provided by the regression analysis (Table 3). The results of Mansur and Djaelani (2022), which highlight the positive association between financial

leverage and market competitiveness, are supported by the statistically significant negative relationship between leverage and competitiveness. The positive correlation between market competitiveness and company size shown in Kartika et al.'s (2023) study is not the case for asset growth, firm size, or return on equity. Firm Size, Leverage, and ROE all have significant coefficients in the GLM findings (Table 4), which paint a different picture. Contrary to earlier research, Asset Growth and Market Competitiveness have a negative association. This suggests that this novel discovery warrants further investigation.

To get a better understanding of the correlations between variables, see the correlation matrix (Table 5). The study by Akben-Selcuk (2016) highlights the influence of financial choices on market competitiveness, and the negative link between leverage and market competitiveness is consistent with their results. The notion that businesses with more asset growth often have higher leverage is supported by the positive link between asset growth and leverage, as shown by Padilla-Lozano and Collazzo (2022). The link between market competitiveness, business size, financial performance, and leverage is complex, as shown by empirical research (Kartika et al., 2023; Le & Ikram, 2022; Mansur & Djaelani, 2022). The relationships between market competitiveness and company size and between market competitiveness and financial leverage are favorable, according to Kartika et al. (2023) and Akben-Selcuk (2016). The identification of non-financial factors as critical drivers by Le and Ikram (2022) is consistent with the complex relationships that our research reveals.

We may better comprehend these empirical findings by using theoretical frameworks like agency theory and the RBV. By highlighting the strategic resource allocation and utilization of bigger businesses, the RBV (Barney et al., 2021; Madhani, 2010) explains the positive association between market competitiveness and company size. Effective asset development plans are crucial for balancing the interests of managers and shareholders, as highlighted by agency theory (Jensen & Meckling, 1976). These theoretical foundations provide support for the empirical results, emphasizing the crucial roles that resource management and governance structures play in a firm's ability to compete.

Conclusion

We conclude that, in the context of Pakistani non-financial firms, our research thoroughly examined the complex links and consequences between asset expansion plans, company size, financial leverage, and market competitiveness. The empirical results illuminated the complex nature of market competition and offered a sophisticated understanding of these processes.

The consequences of these results for management decision-making are multifaceted. First off, the correlation between market competitiveness and company size is positive, indicating that bigger companies might profit from economies of scale, strategic positioning, and effective resource allocation. Smaller company managers may think about tactics like focused marketing, innovation, and strategic partnerships that help them stand out in the market. Regression and correlation studies both revealed a strong negative association between market competitiveness and financial leverage, which suggests that businesses should carefully consider their leverage strategy. Financial leverage may increase competitiveness, but it's important to find a balance to prevent any negative consequences on one's position in the market. Managers should take a comprehensive strategy, according to the GLM findings, which show a positive correlation between market competitiveness and company size, leverage, and ROE. Leverage balance, asset expansion strategy, and improved financial performance may all work together to make a business more competitive.

Even while this study offers insightful information, it also creates opportunities for further research. Further investigation is necessary into the unexpectedly negative association between asset expansion and market competitiveness. Future research might look at the particular circumstances or business environments where asset expansion could not have a beneficial effect on market competitiveness. Furthermore, the study's emphasis on Pakistani non-financial firms begs the issue of its generalizability to other settings. To evaluate the strength of the found correlations, future studies may expand the study to include other sectors, geographical areas, or economic situations. Furthermore, there is still much to learn about the influence of outside variables like market structures and regulatory regimes. Policymakers and practitioners alike may benefit from a more thorough grasp of how these external influences interact with internal dynamics to determine market competitiveness.

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