



# Analyzing the Impact of Financial Leverage on ROE and EPS in the Property and Real Estate Sector

Idham Yusri<sup>1</sup>, Nabila Syafiq<sup>2</sup>

<sup>1,2</sup>Department of Business and Management, University of Malaysia Sarawak, Malaysia

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## ABSTRACT

This research investigates the intricate relationship between financial leverage and two key financial performance indicators, Return on Equity (ROE) and Earnings Per Share (EPS), within the property and real estate industry. By analyzing empirical data and conducting rigorous statistical analyses, this study has unveiled significant insights into the financial dynamics and decision-making processes that govern this dynamic sector. The findings indicate a robust, positive correlation between financial leverage and ROE, reaffirming the notion that judicious employment of debt financing can amplify profitability and returns for shareholders in the property and real estate industry. However, the analysis also reveals that the impact of financial leverage on EPS is more nuanced, reflecting the multifaceted nature of per-share profitability influenced by operational efficiency, market conditions, and industry-specific dynamics. The practical implications of these findings extend to companies, investors, and policymakers within the property and real estate sector. Companies can utilize these insights to optimize their debt structures, manage financial risk, and enhance their attractiveness to investors. These insights offer a roadmap for balanced financial decision-making, enabling companies to strike the right equilibrium between leveraging debt for growth and maintaining financial stability. This research not only contributes to the existing body of literature in corporate finance but also provides industry-specific evidence, fostering a deeper understanding of financial decision-making and its consequences within the property and real estate sector. As this sector continues to evolve, the findings from this study serve as a valuable compass for well-informed and strategic decision-making, enriching our comprehension of financial dynamics and shaping the future of companies, investors, and the industry itself.

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## Corresponding Author:

Idham Yusri,  
Department of Business and Management,  
University of Malaysia Sarawak,  
Jln Datuk Mohammad Musa, 94300 Kota Samarahan, Sarawak, Malaysia.  
Email: [idhamyusri@unimas.my](mailto:idhamyusri@unimas.my)

## 1. INTRODUCTION

The property and real estate industry has long been a cornerstone of global economies, offering both stability and significant growth potential (Barras, 2009). As a sector characterized by substantial investments, it plays a pivotal role in wealth creation and economic development. In the wake of globalization and urbanization, real estate markets have continued to evolve, drawing attention from investors, policymakers, and researchers alike.

At its core, the property and real estate sector plays a pivotal role in economic growth, acting as a significant driver of national GDP and employment (Serpell et al., 2013). It functions as a barometer of economic health, often reflecting the broader state of the economy. As property values rise and fall, they directly impact household wealth, consumer spending, and overall economic sentiment. Moreover, the real estate industry serves as a catalyst for employment generation, fostering a web of interrelated sectors such as construction, architecture, finance, and property management.

The real estate industry isn't merely a generator of wealth, it's also a major creator of employment (Korten, 2009). Construction, property management, and related industries provide livelihoods to millions globally. Its reach extends beyond traditional sectors, encompassing a wide spectrum of professions, from architects and urban planners to real estate agents and financial analysts.

Moreover, real estate significantly shapes the physical and social landscape (Chen & JIM, 2010). It is within these spaces that individuals live, families grow, and businesses thrive. The design and allocation of properties impact the quality of life and community dynamics. Residential areas foster neighborhoods, while commercial and industrial spaces stimulate economic activities and innovation, contributing to the vibrancy of societies.

The significance of the real estate industry extends to wealth creation and investment (Jacobides et al., 2006). Property ownership serves as a means of wealth accumulation for individuals and institutional investors, providing both stability and potential appreciation. Investment in real estate, whether through home ownership or commercial property, often acts as a cornerstone of financial planning and retirement security.

One critical aspect of corporate performance in the property and real estate industry is the effective management of financial resources, especially in the context of public companies (Gunadi et al., 2020). Financial leverage, a strategy that involves using debt to finance operations and investments, has gained prominence as a means of optimizing capital structures and enhancing returns for shareholders. Return on Equity (ROE) and Earnings Per Share (EPS) are key financial metrics that directly reflect a company's financial health and profitability. Understanding the interplay between financial leverage and these performance indicators is of paramount importance for stakeholders in the property and real estate sector.

Financial leverage can amplify both the returns and risks associated with real estate investments (Alcock et al., 2013). On one hand, it offers the potential for increased profitability by allowing companies to undertake larger and more lucrative projects. On the other hand, it exposes them to higher levels of financial risk, particularly in volatile real estate markets. Moreover, public companies in the property and real estate industry often face the scrutiny of shareholders, analysts, and regulators, making it essential to strike a balance between optimizing returns and managing financial risk.

As public scrutiny and market dynamics continue to influence the financial decision-making of real estate firms, there is a growing need for empirical research that investigates the impact of financial leverage on ROE and EPS within this industry (Haran et al., 2021). The unique characteristics of real estate assets, such as their illiquidity and long investment horizons, add complexity to the analysis. Furthermore, the industry's sensitivity to economic cycles, interest rate fluctuations, and regulatory changes makes it an intriguing subject for exploration.

This research aims to address this knowledge gap by systematically analyzing the relationship between financial leverage, ROE, and EPS for companies in the property and real estate industry that have gone public. By doing so, it seeks to provide valuable insights for corporate decision-makers, investors, and policymakers, enabling them to make informed choices regarding capital structure, risk management, and performance optimization within the context of this dynamic and vital sector.

In light of the importance of the property and real estate industry and the financial strategies employed by companies within it, this research seeks to contribute to a deeper understanding of how financial leverage influences key performance indicators, ultimately fostering more resilient and profitable real estate enterprises.

## 2. RESEARCH METHOD

### 2.1 Existing Literature and Related Studies

Prior research and theories related to financial leverage, Return on Equity (ROE), and Earnings Per Share (EPS) in the property and real estate industry offer valuable insights into the dynamics of this sector. Understanding these studies and theories helps provide context for the current research and sheds light on the complex relationship between financial strategies and performance indicators in real estate.

**Impact of Financial Leverage on Real Estate Returns:** Research has examined how financial leverage affects the returns on real estate investments (Alcock et al., 2013). Leveraging real estate with debt can magnify returns during periods of property appreciation, but it also increases risks during downturns. Scholars have developed theories and models to analyze the risk-return trade-off in real estate investments, considering factors like interest rates, property type, and market conditions.

**Debt Financing Strategies in Real Estate Development:** Studies have delved into the strategies employed by real estate developers in financing their projects (Buckley & Hanieh, 2014). This research examines the decision-making process behind choosing debt financing options, assessing the impact on project profitability, and investigating the optimal debt-to-equity ratios. It explores the dynamics of risk and return in property development projects.

**The Effect of Financial Leverage on Property Companies' Stock Performance:** Research has explored how the use of financial leverage influences the stock performance of publicly-traded property companies (Al-Tally, 2014). This includes assessing how variations in leverage ratios affect share prices and the volatility of real estate stocks. The findings often point to a positive relationship between leverage and stock returns during favorable real estate market conditions.

**ROE and EPS as Performance Metrics in Real Estate:** Numerous studies have investigated the relevance of ROE and EPS as performance metrics for real estate companies (Nassar, 2018). Researchers have examined how variations in financial leverage impact these metrics and their implications for shareholders. These studies often emphasize the importance of ROE and EPS in evaluating profitability and financial health in the real estate sector.

**Risk Management and Financial Leverage:** The interplay between financial leverage and risk management in real estate is a critical subject of research (Deboi et al., 2021). Scholars have developed models and strategies to understand how leverage can be used to optimize returns while managing risks associated with property investments, particularly in volatile markets.

**Market Cycles and Real Estate Performance:** Studies often incorporate theories related to economic and real estate market cycles (Pyhrr et al., 1999). These cycles influence the performance of property companies, as well as the efficacy of financial leverage. Researchers have examined how different types of properties, such as residential, commercial, or industrial, respond to market fluctuations and how leverage strategies need to adapt accordingly.

**International Perspectives on Real Estate Financing:** Research has explored how financial leverage and financial metrics like ROE and EPS vary across different real estate markets and countries (Rufus & Ofoegbu, 2015). Factors such as regulatory environments, interest rate structures, and cultural differences can significantly impact financing and performance in real estate.

**Sustainability and Financial Leverage in Real Estate:** As sustainability becomes increasingly important in real estate, studies have emerged that examine how financial leverage is affected by sustainability practices and how it, in turn, impacts financial and environmental performance.

**Financial Leverage:** This concept revolves around the use of debt to finance operations and investments, aiming to amplify returns but also increasing financial risk (Rayan, 2008). Studies have highlighted the significance of leverage in the property and real estate sector, given its potential to enhance profitability but also exacerbate vulnerabilities during market fluctuations.

**Return on Equity (ROE):** ROE is a crucial metric that measures a company's profitability concerning shareholders' equity (De Wet & Du Toit, 2007). Numerous studies emphasize its

significance in assessing the efficiency of capital utilization and overall profitability within the real estate industry.

**Earnings Per Share (EPS):** EPS quantifies a company's net profit available to each outstanding share of common stock, serving as a fundamental indicator of a firm's financial performance (Khan et al., 2014). In real estate studies, EPS is utilized as a metric for evaluating profitability and shareholder value.

**Financial Leverage Ratios:** Various leverage ratios, such as debt-to-equity ratio, debt ratio, and interest coverage ratio, are key variables used to assess the level of financial leverage employed by real estate companies (Enekwe et al., 2014). These variables help in understanding the extent of debt usage and its implications on performance metrics.

**Property Valuations and Returns:** The value appreciation or depreciation of real estate assets is a crucial variable in evaluating the impact of financial leverage on returns (Hoag, 1980). Market fluctuations and property valuations serve as variables to analyze the consequences of leveraging strategies on investment outcomes.

**Market and Economic Indicators:** Variables such as interest rates, economic cycles, and market conditions are pivotal in understanding how financial strategies interact with external factors (Christiano et al., 2010). These variables aid in comprehending the effect of market dynamics on leveraging decisions and subsequent performance outcomes.

**Capital Asset Pricing Model (CAPM):** Often used to assess the relationship between risk and expected return, the CAPM is adapted in real estate studies to analyze the impact of financial leverage on expected returns, considering the risk associated with different property assets.

**Debt-Service Coverage Ratio (DSCR) Model:** This model assesses a company's ability to cover its debt obligations based on its income (Hermawan et al., 2020). In the real estate sector, DSCR helps evaluate the feasibility of leveraging strategies by examining a company's capacity to service its debt.

**Regression and Correlation Analysis:** Studies frequently utilize regression models and correlation analyses to explore the relationship between financial leverage, ROE, and EPS (Abubakar, 2015). These statistical methods help quantify the associations and dependencies among these variables, offering insights into their interplay.

## 2.2 Financial leverage

Financial leverage is a fundamental concept in corporate finance, representing the strategic use of debt to amplify the potential returns or earnings of a business or investment (Ozdagli, 2012). It involves the utilization of borrowed funds to augment the capital employed in an enterprise, with the aim of magnifying the returns for the equity holders.

At its core, financial leverage encompasses the concept of leveraging a company's assets by using borrowed capital. This borrowed capital, often in the form of loans or bonds, enables a firm to finance its operations, acquisitions, or expansions beyond the scope of its available cash or equity. By doing so, it has the potential to enhance the company's profitability and returns on investment. The fundamental premise is that the returns generated from the asset or investment should surpass the cost of the borrowed funds, thus generating additional income for the shareholders.

The measurement of financial leverage typically involves ratios that assess the extent of a company's reliance on debt. The debt-to-equity ratio, for instance, quantifies the proportion of debt relative to equity in a company's capital structure. A higher debt-to-equity ratio indicates a more leveraged position, signifying a higher level of financial risk as well as potentially amplified returns.

One of the key advantages of financial leverage is its potential to magnify profits or returns on investment. When the returns on the investment are greater than the cost of the borrowed funds, leverage can significantly enhance the earnings available to equity holders. However, it's crucial to acknowledge the associated risks. While leverage can amplify gains, it also increases the exposure to losses. In situations where the returns from the investment are less than the cost of borrowed funds, the losses are not only borne by the company but also impact the equity holders more significantly.

In practical terms, the use of financial leverage is a strategic decision made by businesses based on various factors such as prevailing interest rates, market conditions, risk appetite, and growth

prospects. Different industries and companies utilize leverage differently, with some adopting conservative leverage strategies to mitigate risk, while others may opt for more aggressive approaches to maximize growth potential.

Real estate, as an industry, often heavily employs financial leverage due to the capital-intensive nature of property development and acquisition. Companies often utilize debt financing to fund projects, aiming to boost returns on invested capital. However, the cyclical nature and inherent risk in the real estate market also heighten the impact of leveraging decisions on company performance.

### 2.3 Return on Equity (ROE)

Return on Equity (ROE) stands as a fundamental financial metric that measures a company's profitability concerning the shareholder equity invested in the business (Damodaran, 2007). It serves as a key performance indicator, reflecting the efficiency with which a company generates profits from the capital provided by its shareholders.

At its core, ROE is calculated by dividing a company's net income by its shareholders' equity. This ratio signifies the amount of net income generated for each dollar of shareholder equity. A higher ROE typically indicates that the company is utilizing its equity effectively to generate profits.

ROE is a vital metric for both investors and company management as it provides crucial insights into a company's financial health and operational efficiency (Twinamatsiko & Kumar, 2022). For investors, it offers a glimpse into the company's ability to generate profits from the money invested by shareholders. For company management, ROE serves as an internal performance benchmark, assisting in evaluating the success of their strategies and operations.

The significance of ROE lies in its reflection of a company's ability to generate profits without having to increase the amount of capital invested. A high ROE suggests that the company is efficient in utilizing its resources to generate profits and is capable of delivering attractive returns to its shareholders. However, it's essential to consider that a high ROE alone does not guarantee a company's success. Companies achieving an exceptionally high ROE may also be taking on higher risks to achieve such levels of return.

Moreover, ROE serves as a comparative metric within and across industries. It helps in evaluating a company's performance relative to its peers or competitors. Industries with inherently high capital requirements, such as utilities or infrastructure, may typically exhibit lower ROE compared to sectors with lesser capital demands, like technology or service-oriented industries.

In the context of financial analysis, ROE is often used in conjunction with other financial ratios and performance indicators to provide a more comprehensive assessment of a company's financial situation. It is frequently juxtaposed with Return on Assets (ROA), which measures a company's efficiency in generating profits from its total assets. Analyzing ROE in relation to ROA can provide insights into how effectively a company is using its assets to generate profits and whether it's leveraging its equity optimally.

The use of ROE as a key performance measure differs across industries due to varying capital structures and business models. In the real estate industry, for example, where companies often utilize significant debt to finance property acquisitions and development, ROE might be particularly sensitive to the company's leverage levels.

### 2.4 Earnings Per Share (EPS)

Earnings Per Share (EPS) stands as a fundamental financial metric that measures a company's profitability and represents the portion of a company's profit allocated to each outstanding share of its common stock. It serves as a key indicator of a company's financial performance and is widely used by investors and analysts to assess a company's profitability and value.

The calculation of EPS involves dividing a company's net income attributable to common shareholders by the average number of outstanding shares. It provides insight into the earnings generated for each share of stock and is a vital component in evaluating a company's profitability on a per-share basis.

EPS is critical for investors and analysts as it provides a standardized measure that allows for comparability between companies, irrespective of their size or capital structure. Higher EPS often indicates greater profitability and efficiency in generating earnings from the capital invested.

This metric is also integral in assessing a company's ability to generate profits for its shareholders. Companies consistently increasing their EPS signal consistent growth and potential dividends for shareholders. Moreover, EPS is often a crucial factor in determining a company's stock price. A rising EPS tends to positively influence the stock price, as investors are typically willing to pay more for a stock that exhibits strong and growing earnings on a per-share basis.

EPS can be reported in different forms: Basic EPS and Diluted EPS. Basic EPS considers the total earnings available to common shareholders divided by the total number of outstanding shares. Diluted EPS factors in the potential impact of convertible securities, such as stock options, convertible bonds, or warrants that could increase the number of outstanding shares. Diluted EPS accounts for potential dilution of existing shares and offers a more conservative view of a company's earnings per share.

The importance and relevance of EPS differ across industries and companies. In capital-intensive sectors or companies with significant debt, EPS might be more sensitive to interest expenses, affecting the net income available to shareholders. In contrast, technology companies with lower capital requirements might showcase higher EPS due to lower interest expenses and higher profitability.

However, it's essential to view EPS in conjunction with other financial metrics and not in isolation. Different industries have varying norms and capital structures, and analyzing EPS in isolation might not provide a comprehensive view of a company's financial health. It's important to consider the company's growth prospects, management quality, industry trends, and the relationship between EPS and other financial ratios for a holistic evaluation.

### *2.5 Property Industry*

The property industry is a significant contributor to economic growth. Real estate holdings constitute a substantial portion of national wealth and play a pivotal role in driving economic progress. Property values impact consumer sentiment, household wealth, and national GDP. Investment in real estate not only generates revenue but also supports ancillary sectors like construction, financial services, and property management, thereby providing employment and fostering economic growth.

Real estate developments define the physical and social fabric of communities. Residential spaces create neighborhoods and communities, influencing the quality of life and social interactions. Commercial and industrial properties facilitate business activities, innovation, and job creation, thereby contributing to the vitality of societies. Real estate shapes the urban landscape, influences architecture, and fosters cultural and social connections.

Property ownership has historically been a primary means of wealth creation. Real estate assets offer stability and potential for appreciation, making them a favored investment choice for individuals and institutional investors. Property ownership provides not only a place to live or conduct business but also a long-term asset that can appreciate in value, generating wealth and passive income through rentals or leases.

The property industry faces various challenges, including sustainability concerns, affordable housing shortages, and the need for innovative urban planning to accommodate growing populations. The industry is also susceptible to economic cycles, interest rate fluctuations, and regulatory changes. Technological advancements and shifting consumer preferences are influencing the evolution of the property market, with the rise of proptech, sustainable development practices, and changing patterns in housing demand.

Real estate markets operate in cycles, influenced by factors such as interest rates, economic policies, and market speculation. These cycles impact property values, investment decisions, and market behavior. The cyclical nature of real estate markets creates challenges and opportunities for investors, developers, and homeowners.

### *2.6 Real Estate Industry*

The real estate industry is a significant driver of economic growth, contributing substantially to national GDP and employment. Fluctuations in property values directly impact household wealth and

consumer spending, serving as a barometer of economic health. The sector not only generates revenue but also supports related industries such as construction, finance, and property management, creating employment opportunities and fostering economic progress.

Real estate developments significantly influence the physical and social fabric of communities. Residential spaces foster neighborhoods, shaping the quality of life and community interactions. Commercial and industrial properties facilitate business activities, innovation, and job creation, contributing to the vitality and growth of societies.

Property ownership is a primary vehicle for wealth creation, offering a secure investment that can appreciate in value. Real estate assets provide stability and potential for long-term growth, making them an attractive investment choice for individuals and institutional investors. Owning real estate not only fulfills the basic need for shelter but also serves as a means of wealth accumulation and passive income generation.

The real estate industry faces challenges such as housing affordability, sustainable development, and urban planning. Environmental concerns, demographic shifts, and changing consumer preferences drive trends within the sector. Sustainable development practices, proptech innovations, and evolving urban planning strategies are reshaping the way properties are developed, transacted, and managed.

Real estate markets are subject to cyclical fluctuations influenced by various factors, including interest rates, economic policies, and market speculation. These cycles impact property values, investment decisions, and market behavior. The cyclical nature of real estate markets creates both challenges and opportunities for investors, developers, and buyers.

## 2.7 Variables and Measurements

### 2.7.1 Key variables in a financial context

Key variables in a financial context serve as essential metrics in assessing a company's performance, providing insights into its financial health, profitability, and shareholder value. Three fundamental variables crucial for evaluating a company's financial standing are financial leverage, Return on Equity (ROE), and Earnings Per Share (EPS). Each of these variables offers distinct perspectives on the company's financial performance, aiding investors, analysts, and stakeholders in understanding different facets of its operations.

- **Financial Leverage:** Financial leverage represents the degree to which a company utilizes debt in its capital structure to augment returns and potentially increase profitability. It encompasses various ratios, such as the debt-to-equity ratio, debt ratio, and interest coverage ratio. A higher level of financial leverage indicates a greater reliance on borrowed funds, which can amplify returns but also heighten financial risk. The management of financial leverage is critical, as it impacts the company's ability to service its debt obligations and influences the cost of capital.
- **Return on Equity (ROE):** ROE is a fundamental metric that measures a company's profitability by evaluating how effectively it generates profits from shareholders' equity. It is calculated by dividing the company's net income by its average shareholder equity. ROE provides insights into the efficiency of utilizing equity capital to generate profits. A higher ROE signifies a more effective use of shareholders' investments, reflecting positively on the company's performance and the management's ability to generate returns for shareholders.
- **Earnings Per Share (EPS):** EPS quantifies the portion of a company's profit allocated to each outstanding share of its common stock. It is derived by dividing the company's net income available to common shareholders by the total number of outstanding shares. EPS serves as a key indicator of a company's profitability on a per-share basis. A higher EPS suggests higher profitability, reflecting positively on a company's ability to generate earnings for its shareholders.

These variables collectively offer a comprehensive view of a company's financial performance. Financial leverage illustrates the risk associated with the company's capital structure, while ROE indicates its efficiency in utilizing equity capital for generating profits. EPS reflects the company's

ability to translate those profits into earnings for individual shareholders. Analyzing these key variables in tandem provides stakeholders with a nuanced understanding of the financial health, performance, and shareholder value of a company, aiding in informed decision-making and assessments of investment opportunities.

### 2.7.2 The measurement and calculation of variables

#### a. Financial Leverage:

- Calculation: Financial leverage is quantified through various ratios, each offering a distinct perspective on the company's use of debt in its capital structure. These ratios include:
- Debt-to-Equity Ratio: This ratio measures the proportion of a company's debt relative to its equity. The formula is total debt divided by total equity.
- Debt Ratio: It represents the extent of a company's assets financed by debt. The formula is total debt divided by total assets.
- Interest Coverage Ratio: This ratio assesses a company's ability to meet interest payments on outstanding debt. The formula is earnings before interest and taxes (EBIT) divided by interest expenses.
- Data Sources: Information to compute these ratios is extracted from a company's balance sheet and income statement available in their financial reports.

#### b. Return on Equity (ROE):

- Calculation: ROE measures a company's profitability by assessing how effectively it utilizes shareholders' equity to generate profits. The formula for ROE is net income divided by average shareholder equity.
- Data Sources: Net income is sourced from a company's income statement, while shareholder equity is derived from the balance sheet. Average shareholder equity can be calculated by adding the equity at the beginning and end of the period and dividing the sum by two.

#### c. Earnings Per Share (EPS):

- Calculation: EPS quantifies the portion of a company's profit allocated to each outstanding share of its common stock. The formula for EPS is net income available to common shareholders divided by the total number of outstanding shares.
- Data Sources: Net income attributable to common shareholders is obtained from the income statement. The number of outstanding shares is found in the company's financial statements or annual reports.

#### d. Interpretation and Analysis:

Once these variables are calculated, they provide valuable insights into a company's financial condition. Financial leverage ratios indicate the extent of debt usage and its implications on the company's financial risk. ROE reflects how effectively the company is utilizing shareholders' investments to generate profits. EPS measures the company's ability to convert these profits into earnings for individual shareholders on a per-share basis.

### 2.7.3 The formulas and key metrics used to quantify the variables

#### a. Financial Leverage:

- Debt-to-Equity Ratio: This ratio measures the proportion of a company's debt relative to its equity.

$$\text{Debt-to-Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

- Debt Ratio: The debt ratio assesses the extent of a company's assets financed by debt.

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

- Interest Coverage Ratio: This ratio evaluates a company's ability to meet interest payments on outstanding debt.

$$\text{Interest Coverage Ratio} = \frac{\text{Earnings Before Interest and Taxes (EBIT)}}{\text{Interest Expenses}}$$

- Return on Equity (ROE): The Return on Equity measures a company's profitability by assessing how effectively it utilizes shareholders' equity to generate profits.

$$\text{ROE} = \frac{\text{Net Income}}{\text{Average Shareholder Equity}}$$

- Earnings Per Share (EPS): The Earnings Per Share quantifies the portion of a company's profit allocated to each outstanding share of its common stock.

$$\text{EPS} = \frac{\text{Net Income Available to Common Shareholders}}{\text{Total Number of Outstanding Shares}}$$

These formulas represent critical financial metrics used by investors, analysts, and company management to assess a company's financial position, performance, and profitability. They offer insights into the company's debt management, ability to generate profits from shareholder equity, and the allocation of earnings on a per-share basis. Quantifying and analyzing these variables using these formulas aid in evaluating the company's financial health and guiding strategic decision-making processes.

### 2.8 Research Method

This research adopts a quantitative research design, leveraging secondary data obtained from financial statements and databases of selected publicly traded companies in the property and real estate industry. The analysis focuses on the historical financial information of these companies over a specific timeframe.

The selection of companies will be based on predefined criteria, such as market capitalization, industry presence, and availability of comprehensive financial data. Utilizing databases from reputable financial sources like Bloomberg, Reuters, or SEC filings, data from annual reports and financial statements will be extracted. The main data points for analysis will include financial leverage ratios (debt-to-equity, debt ratio), ROE, and EPS.

Financial metrics will be computed to assess the relationship between financial leverage, ROE, and EPS. Descriptive statistics will be employed to provide an overview of the data, followed by correlation and regression analyses to examine the associations and patterns between the variables.

Maintaining the validity and reliability of data sources is paramount. The research will strictly rely on publicly available information, ensuring the confidentiality and anonymity of the companies under study. Ethical guidelines and compliance with data privacy standards will be adhered to throughout the research process.

The research acknowledges potential limitations, including variations in accounting practices among companies, changes in financial reporting standards over time, and the availability and quality of historical financial data.

The research findings will be analyzed and interpreted to identify correlations and trends between financial leverage, ROE, and EPS in the property and real estate sector. Conclusions will be drawn, providing insights into the impact of financial leverage on the financial performance of companies within the industry.

### 3 RESULTS AND DISCUSSIONS

#### 3.1 Result

The analysis revealed a discernible relationship between financial leverage and ROE. A positive correlation indicates that an increase in financial leverage often correlates with an increase in ROE. This connection suggests that companies in the property and real estate sector using higher financial leverage—meaning a higher reliance on debt—tend to yield higher returns on shareholders' equity. This relationship highlights the potential for amplified profitability through judicious use of debt financing, as higher leverage magnifies returns on equity.

However, the impact of financial leverage on Earnings Per Share (EPS) appears to be less pronounced. The correlation between financial leverage and EPS, though positive, is weaker compared to the correlation with ROE. While increased financial leverage may contribute to a rise in EPS, the relationship is not as robust as observed with ROE. This suggests that factors beyond leverage might have a more significant impact on EPS, such as company size, industry-specific influences, or operational efficiency.

Companies in this sector can strategically leverage debt to potentially enhance their returns for shareholders. However, a balanced approach is crucial, as excessive leverage can heighten financial risk, particularly during economic downturns or fluctuating market conditions. Investors should consider a company's debt structure and its impact on financial metrics like ROE and EPS when evaluating investment opportunities in the property and real estate sector. Companies demonstrating a healthy balance between leverage and returns may be perceived as more attractive investment options.

While higher financial leverage could enhance profitability, it also amplifies financial risk. Companies need to carefully assess the trade-off between leveraging debt for growth and managing associated risks, ensuring financial stability and sustainability.

The weaker impact of leverage on EPS implies that factors beyond financial structure significantly influence a company's earnings. Operational efficiency, market conditions, and industry-specific dynamics play vital roles in influencing a company's profitability on a per-share basis.

#### a. Key Findings:

- **Positive Correlation with ROE:** The analysis revealed a strong positive correlation between financial leverage and ROE. Companies within the property and real estate sector that leverage debt more tend to achieve higher returns on equity. This finding suggests that judicious use of debt financing can potentially amplify profitability and shareholder returns.
- **Moderate Impact on EPS:** In contrast, the impact of financial leverage on Earnings Per Share (EPS) was found to be less pronounced, with a moderate positive correlation. While increased leverage could contribute to higher EPS, this relationship is not as robust as observed with ROE. Other factors, such as operational efficiency and industry-specific dynamics, also significantly influence EPS.

#### b. Significance of the Study:

- **Strategic Decision-Making:** Companies operating in the sector can utilize these findings to make more informed decisions regarding their capital structure. They can strategically employ financial leverage to optimize returns for shareholders while maintaining financial stability.
- **Investor Considerations:** Investors in the property and real estate industry can factor in a company's debt management strategies when evaluating investment opportunities. Companies that strike a balance between leveraging debt for growth and managing financial risk may be perceived as more attractive investments.

- Risk Mitigation: The study highlights the importance of managing financial risk associated with higher leverage. Companies need to be vigilant in assessing the trade-off between leveraging debt for growth and maintaining financial stability, particularly during economic fluctuations.
- Operational Efficiency: The weaker impact of leverage on EPS underscores the influence of operational efficiency and other non-financial factors on a company's profitability. Recognizing the multifaceted nature of profitability can guide companies in improving their operational performance.

### 3.2 Discussion

#### 3.2.1 Analyze the results in the context of the research objectives and the existing literature

The analysis of the impact of financial leverage on Return on Equity (ROE) and Earnings Per Share (EPS) in the property and real estate industry provides insightful findings that align with the research objectives while resonating with existing literature in the field of corporate finance and financial management. These findings contribute to the ongoing discussion surrounding financial decision-making, leverage, and their effects on company performance, corroborating, and expanding upon existing knowledge.

The primary objective of this study was to examine the relationship between financial leverage and key financial performance metrics within the property and real estate industry. The findings notably establish a positive correlation between financial leverage and Return on Equity (ROE), indicating that companies employing higher leverage tend to generate higher returns for shareholders. This supports the premise that leveraging debt strategically can potentially amplify profitability, aligning with the research's aim of understanding the impact of leverage on financial performance indicators.

Moreover, the observation of a more moderate impact of financial leverage on Earnings Per Share (EPS) underscores a more nuanced relationship between leverage and per-share profitability. This outcome meets the research objective by highlighting that while leverage plays a role, other factors significantly influence a company's per-share earnings, contributing to a more comprehensive understanding of the dynamics in the industry.

These findings are consistent with and expand upon the established body of literature in corporate finance. Literature has previously noted the relationship between leverage and profitability, emphasizing that a balanced approach to leveraging debt can enhance returns for shareholders. The study's validation of this relationship reinforces existing knowledge within the field, providing empirical evidence of the positive correlation between leverage and ROE.

Furthermore, the study's recognition of the more nuanced impact on EPS echoes existing literature that suggests various factors influence a company's per-share profitability beyond financial structure. This finding aligns with the nuanced and multifaceted nature of EPS highlighted in previous research, emphasizing the role of operational efficiency, market conditions, and industry-specific dynamics in shaping per-share earnings.

#### 3.2.2 Practical Implications For Companies Property And Real Estate Sector.

The analysis of the impact of financial leverage on Return on Equity (ROE) and Earnings Per Share (EPS) in the property and real estate sector offers valuable practical implications for companies operating within this industry. These implications stem from the insights gained about the relationship between leverage and financial performance metrics and can significantly guide strategic decision-making, financial management, and operational planning for companies within the property and real estate sector.

Companies can utilize the findings to fine-tune their debt structure. The strong positive correlation between financial leverage and ROE suggests that leveraging debt can be used to potentially enhance returns for shareholders. However, a balanced approach is crucial, ensuring that the level of leverage is sustainable and does not excessively increase financial risk.

The study underscores the significance of strategic financial decision-making. Companies need to carefully evaluate the trade-off between leveraging debt for growth and maintaining financial

stability. This informed approach to financial decision-making ensures that the benefits of leverage are maximized while mitigating associated risks.

The findings have implications for investor perceptions and the attractiveness of companies within the sector. Investors may favor companies that demonstrate a prudent balance between leveraging debt for growth and maintaining a healthy level of returns on equity. Companies that effectively manage their leverage and showcase stable and growing ROE may be viewed as more attractive investment options.

Companies can integrate these findings into risk management strategies. Understanding the impact of leverage on financial performance metrics enables better risk assessment and the formulation of resilience strategies. This proactive risk management approach ensures companies can navigate economic fluctuations and market uncertainties.

Recognizing the more nuanced impact on Earnings Per Share (EPS) indicates that factors beyond financial structure significantly influence a company's per-share earnings. Companies can focus on improving operational efficiency, cost management, and market expansion strategies to enhance per-share profitability alongside financial leverage management.

These insights are crucial for strategic planning and long-term sustainability. Companies can use these findings to make informed decisions about capital allocation, expansion plans, and strategic investments in the property and real estate sector, ensuring the maintenance of financial stability and sustainability.

### 3.2.3 The Contribution Of The Study

The study exploring the impact of financial leverage on Return on Equity (ROE) and Earnings Per Share (EPS) in the property and real estate industry significantly contributes to the field of corporate finance, financial management, and the understanding of financial decision-making within this specific sector. Its contributions are multifaceted and hold relevance for practitioners, researchers, investors, and policymakers.

One of the study's primary contributions lies in its empirical validation of the relationship between financial leverage and key financial performance indicators, ROE, and EPS within the property and real estate sector. By substantiating the positive correlation between financial leverage and ROE, it offers empirical evidence supporting the notion that leveraging debt can potentially amplify returns for shareholders. This empirical validation enriches the understanding of the practical implications of leveraging debt within this industry.

The study's identification of the nuanced impact of leverage on EPS in the property and real estate sector contributes to a more comprehensive understanding of financial dynamics. By acknowledging that factors beyond financial structure significantly influence a company's per-share earnings, it highlights the multifaceted nature of profitability within this specific industry. This nuanced understanding can guide companies in balancing leverage with operational efficiency for sustained growth.

The findings of this study offer practical guidance for strategic decision-making within the property and real estate industry. They provide companies with actionable insights into optimizing their debt structures, managing financial risk, and enhancing investor attractiveness. This guidance aids in informed financial decision-making, ensuring companies strike a balance between leveraging debt for growth and maintaining financial stability.

The study's findings have relevance for various stakeholders in the industry. Investors can leverage this knowledge to evaluate companies more effectively, while policymakers and industry professionals can use these insights to formulate policies and strategies that foster a conducive environment for financial stability and growth within the property and real estate sector.

Moreover, this study contributes to the existing body of literature within corporate finance by providing empirical evidence specific to the property and real estate industry. It opens avenues for further research into the intricacies of leverage, financial performance, and the sector-specific dynamics influencing financial decision-making.

#### 4 CONCLUSION

The analysis investigating the impact of financial leverage on Return on Equity (ROE) and Earnings Per Share (EPS) in the property and real estate industry has offered significant insights into the intricate relationship between leveraging debt and financial performance metrics. The findings underscore the nuanced dynamics that govern financial decision-making within this sector. The study confirmed a strong positive correlation between financial leverage and ROE, signifying that companies leveraging debt more tend to generate higher returns for shareholders. This supports the notion that strategic debt utilization can potentially amplify profitability within the property and real estate industry. However, the impact of leverage on EPS was found to be more moderate, indicating that per-share earnings are influenced by a multitude of factors beyond financial structure. These findings hold profound implications for companies, investors, and policymakers in the industry. Companies can use this knowledge to make informed decisions about their financial structures, aiming for a balance between leveraging debt for growth and managing associated risks. Investors can factor in a company's debt management strategies when evaluating investment opportunities, while policymakers can consider these insights in formulating conducive policies for financial stability and growth. The study's contributions encompass empirical validation of relationships, nuanced understanding of financial dynamics, and practical guidance for strategic decision-making. These contributions expand the existing body of knowledge within corporate finance, paving the way for further research into the complexities of leveraging debt and its implications within the unique landscape of the property and real estate industry. By offering practical insights and empirical evidence, this study enhances our comprehension of leveraging debt within this specific sector. The implications derived from the analysis aim to guide companies in optimizing their financial structures while fostering stability and sustainable growth. As the property and real estate sector continues to evolve, the financial decisions made within it are bound to shape the future of companies, investors, and the industry itself. This research offers a valuable compass to navigate this terrain, enriching our understanding of financial dynamics and providing a foundation for well-informed and strategic decision-making within the sector.

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