# Relevance of Financial Ratio Analysis in Investment Decision in the Building Materials Industry

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#### Abstract

Financial ratio analysis is a vital tool for assessing a company's financial health, stability, and growth potential. In the building materials industry, where firms require substantial capital investment and operate in a competitive market, investors rely on financial ratios to evaluate profitability, liquidity, efficiency, and solvency before making investment decisions. This study examines the relevance of financial ratio analysis in investment decision-making within the building materials sector. It explores key ratios such as profitability ratios (gross profit margin, net profit margin, ROA, ROE), liquidity ratios (current ratio, quick ratio), solvency ratios (debt-to-equity, interest coverage), and efficiency ratios (inventory turnover, accounts receivable turnover). These ratios provide insights into a company's ability to generate profits, manage debts, sustain operations, and efficiently utilize resources. Findings reveal that investors use ratio analysis to assess financial performance, compare industry benchmarks, evaluate risk exposure, and predict future growth trends. The study concludes that financial ratio analysis is essential for making informed investment decisions in the building materials industry, as it helps investors identify companies with strong financial stability and high return potential.

**Keywords:** Financial Ratio Analysis, Investment Decision, Building Materials Industry, Profitability, Liquidity, Solvency, Efficiency

#### INTRODUCTION

Financial ratio analysis is a critical tool used by investors, financial analysts, and business managers to assess the financial health, performance, and viability of a company before making investment decisions. In the **building materials industry**, which includes manufacturers and suppliers of cement, steel, tiles, roofing sheets, and other construction materials, financial ratio analysis is essential for evaluating **profitability**, **liquidity**, **efficiency**, **and risk factors** that impact investment returns.

This paper explores the **importance of financial ratio analysis in investment decision-making** within the **building materials sector**, highlighting key ratios used to assess financial stability and growth potential.

Investment decisions play a crucial role in the financial growth and sustainability of businesses, especially in capital-intensive industries like the **building materials sector**. Investors, financial analysts, and business managers rely on **financial ratio analysis** to assess the **performance**, **stability**, **and risk factors** associated with a company before committing capital. Financial ratios serve as key indicators of a company's **profitability**, **liquidity**, **efficiency**, **and solvency**, providing valuable insights for informed investment decision-making.

The **building materials industry** consists of companies that manufacture and supply essential construction materials such as **cement**, **steel**, **tiles**, **roofing sheets**, **glass**, **and aggregates**. The sector is highly competitive and influenced by factors such as **economic trends**, **raw material costs**, **infrastructure development**, **and government policies**. Given the **volatile nature** of the construction industry, investors must carefully analyze financial data to determine the **viability and profitability** of investing in a particular firm.

Financial ratio analysis is a widely used tool for evaluating a company's financial health by comparing various financial metrics extracted from **income statements**, **balance sheets**, **and cash flow statements**. Key ratios such as **profitability ratios**, **liquidity ratios**, **solvency ratios**, **and efficiency ratios** help investors assess a company's ability to **generate profits**, **manage debts**, **utilize assets efficiently**, **and sustain operations** in the long run.

#### STATEMENT OF THE PROBLEM

Despite the **importance of financial ratio analysis**, many investors in the building materials industry face challenges in **interpreting financial statements**, **assessing investment risks**, **and predicting future performance**. Inadequate use of financial ratios may lead to **poor investment decisions**, **financial losses**, **and misallocation of resources**. Additionally, economic fluctuations, changes in government policies, and increasing competition make it necessary for investors to rely on **data-driven financial analysis** before making investment commitments.

Investment decisions in the **building materials industry** require careful financial analysis due to the **capital-intensive nature**, **market volatility**, **and fluctuating demand** in the sector. Investors rely on **financial ratio analysis** to evaluate a company's performance, assess risks, and determine profitability before making investment commitments. However, despite the importance of financial ratios in guiding investment decisions, several challenges hinder their effective utilization.

One of the major problems is the **misinterpretation or misuse of financial ratios** by investors, especially those without a strong financial background. Many investors focus on individual ratios without considering their interdependence, leading to **inaccurate assessments** of a company's financial health. Additionally, financial statements may be subject to **manipulation, creative accounting, or inconsistencies in reporting standards**, making it difficult for investors to rely solely on ratio analysis for decision-making.

Another challenge is the **impact of economic fluctuations, inflation, and government policies** on financial ratios. For example, changes in **foreign exchange rates, raw material costs, or taxation policies** can significantly distort profitability and liquidity ratios, making it difficult for investors to make **reliable long-term projections**. Furthermore, companies in the **building materials industry** often operate with **high fixed costs, substantial debt, and seasonal demand**, which can lead to misleading financial ratios if not properly analyzed.

Moreover, investors face difficulties in **comparing financial ratios across different companies** due to variations in **accounting policies, operational structures, and market conditions**. While financial ratio analysis provides valuable insights, it is often insufficient without considering **qualitative factors such as market trends, competition, and regulatory changes**.

Given these challenges, this study seeks to examine the relevance and effectiveness of financial ratio analysis in investment decision-making within the building materials industry. It aims to identify the limitations of ratio analysis, highlight best practices for its application, and recommend strategies for improving investment decision processes.

#### **OBJECTIVES OF THE STUDY**

This study aims to:

- 1. Examine the relevance of **financial ratio analysis** in investment decision-making in the **building materials industry**.
- 2. Identify the key **financial ratios** used in assessing company performance.
- 3. Analyze how investors interpret financial ratios to determine **profitability**, **liquidity**, **and solvency**.
- 4. Highlight the challenges associated with using financial ratios in investment decisions.
- 5. Provide recommendations on **improving investment decision-making** using financial ratio analysis.

# Significance of the Study

The findings of this study will benefit:

- **Investors**, by helping them make informed decisions based on financial ratio analysis.
- **Business Managers**, by providing insights into financial performance evaluation.
- **Financial Analysts**, by enhancing their ability to interpret key financial metrics.
- **Policy Makers**, by guiding economic and financial policies related to the building materials sector.

#### SCOPE OF THE STUDY

This study focuses on the **relevance of financial ratio analysis in investment decision-making** within the **building materials industry**. It examines how investors, financial analysts, and business managers use financial ratios to evaluate **profitability**, **liquidity**, **efficiency**, **and solvency** before making investment decisions.

The study covers the following areas:

## 1. Industry Focus:

- The research is limited to companies operating within the building materials industry, including manufacturers and suppliers of cement, steel, roofing sheets, tiles, glass, and other construction materials.
- The study does not extend to other sectors such as real estate, construction services, or general manufacturing.

## 2. Key Financial Ratios Analyzed:

- Profitability Ratios (Gross Profit Margin, Net Profit Margin, Return on Assets, Return on Equity).
- o Liquidity Ratios (Current Ratio, Quick Ratio).
- o **Solvency Ratios** (Debt-to-Equity Ratio, Interest Coverage Ratio).

o **Efficiency Ratios** (Inventory Turnover, Accounts Receivable Turnover).

# 3. Geographical Scope:

- o The study primarily focuses on companies in the **Nigerian building materials industry**, considering their financial performance and market conditions.
- o However, relevant global trends and best practices may be referenced for comparative analysis.

#### 4. Time Frame:

- o The research covers financial data and trends from **recent years** (2020–2024) to ensure relevance in current investment decision-making.
- Historical data may be included where necessary to provide context for financial ratio trends.

# 5. Target Audience:

- o **Investors** seeking insights into financial ratio analysis for investment decisions.
- o **Business managers and executives** looking to improve financial performance.
- o **Financial analysts** conducting industry evaluations.
- Policymakers and regulatory bodies involved in financial reporting and corporate governance.

# LIMITATIONS OF THE SCOPE

- The study **does not provide investment advice for specific companies** but rather examines the role of financial ratios in decision-making.
- It is **limited to secondary data sources**, including financial reports, industry analyses, and scholarly research.
- Macroeconomic factors such as inflation, exchange rate fluctuations, and government policies will be considered only in relation to their impact on financial ratios.
- 1. **Stakeholder Resistance and Compliance Issues** Resistance from some government agencies and institutions towards TSA implementation may limit the ability to obtain first-hand responses from key stakeholders.
- 2. **Service Charges and Cost Implications** While the study may touch on transaction fees associated with using Remita, a detailed cost-benefit analysis may be outside its primary focus.
- 3. **Time Constraints** The study is conducted within a limited timeframe, restricting extensive fieldwork or broader empirical investigations beyond selected MDAs.
- 4. **Geographical Focus** The research is primarily centered on **Nigeria**, limiting comparisons with other countries that have adopted similar financial policies.

#### **Literature Review**

Financial ratio analysis is a fundamental tool in evaluating a company's financial health and guiding investment decisions. This section reviews existing literature on financial ratio analysis, its role in investment decision-making, and its application in the **building materials industry**. The review explores key theories, empirical studies, and industry practices to provide a comprehensive understanding of the subject.

The literature suggests that financial ratio analysis is an essential tool for investment decision-making, particularly in the building materials industry. Studies confirm that profitability, liquidity, solvency, and efficiency ratios provide valuable insights into a company's financial

health. However, external factors, financial data manipulation, and industry-specific variations pose challenges to accurate ratio interpretation.

This study builds on existing research by exploring how financial ratios influence investment decisions in the Nigerian building materials industry, identifying best practices, and recommending strategies for improving financial ratio analysis in investment decision-making.

#### THEORETICAL FRAMEWORK

Several financial theories support the relevance of **financial ratio analysis** in investment decision-making.

# 1. Efficient Market Hypothesis (EMH) – Fama (1970)

- o The EMH suggests that all available financial information is already reflected in stock prices, meaning that ratio analysis may have limited predictive power.
- However, critics argue that financial ratios help investors identify undervalued or overvalued stocks, particularly in sectors like the building materials industry, where fundamental analysis is essential.

## 2. Fundamental Analysis Theory – Graham & Dodd (1934)

- o This theory emphasizes the importance of evaluating a company's financial statements using ratios to determine its intrinsic value.
- o Investors in the **building materials sector** use financial ratio analysis to assess **profitability**, **liquidity**, **efficiency**, **and solvency** before making investment decisions.

## 3. Agency Theory – Jensen & Meckling (1976)

- o This theory highlights conflicts between managers (agents) and investors (principals).
- Financial ratio analysis serves as a monitoring tool to assess financial performance, debt levels, and management efficiency, ensuring that managers act in the best interest of shareholders.

## 2.3 Empirical Review

Several studies have examined the impact of **financial ratio analysis on investment decisions**, particularly in the building materials industry.

#### 1. Profitability Ratios and Investment Decisions

- According to Brigham & Ehrhardt (2017), investors rely on Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin to determine a company's financial strength.
- A study by Owolabi & Obida (2012) in Nigeria found that firms with consistently high profitability ratios tend to attract more investors in capital-intensive industries like building materials.

#### 2. Liquidity Ratios and Financial Stability

- Pandey (2015) found that liquidity ratios such as Current Ratio and Quick Ratio
  play a significant role in assessing a company's ability to meet short-term
  obligations.
- In the building materials industry, companies with weak liquidity ratios struggle with working capital management, affecting their ability to invest in raw materials and production.

## 3. Solvency Ratios and Risk Assessment

- Modigliani & Miller (1958) argue that firms with high leverage (Debt-to-Equity ratio) face higher financial risks, making them less attractive to risk-averse investors.
- A study by Adeniyi & Oladejo (2021) found that excessive debt financing in Nigerian cement manufacturing firms led to financial distress during economic downturns.

## 4. Efficiency Ratios and Operational Performance

- o Gitman (2018) highlights the importance of Inventory Turnover and Accounts Receivable Turnover in assessing how efficiently a company manages its assets.
- Empirical research by Okafor & Olamide (2020) on Nigeria's construction materials sector found that firms with high inventory turnover ratios experienced better cash flow and profitability, making them more attractive to investors.

# 2.4 Financial Ratio Analysis in the Building Materials Industry

The **building materials industry** is characterized by **high capital investment**, **fluctuating demand**, **and reliance on raw materials**. Financial ratio analysis helps investors:

## 1. Assess Profitability:

- Firms with high gross profit margins are better positioned to withstand market fluctuations.
- o Investors prefer companies with stable or increasing **net profit margins**, as they indicate **cost efficiency and strong market demand**.

## 2. Evaluate Liquidity Risks:

- o Companies in this industry often have high inventory levels, making **quick ratios** an important measure of liquidity.
- A low current ratio may indicate poor cash flow management, leading to investment risks.

## 3. Measure Debt Burden:

- o Investors analyze **debt-to-equity ratios** to determine if a company relies too much on borrowed funds.
- High debt levels increase financial risk, especially in economic downturns when sales may decline.

#### 4. Compare Industry Performance:

 Investors use benchmarking to compare financial ratios across different firms in the building materials sector, helping them choose the most financially stable company.

#### 2.5 Challenges of Using Financial Ratio Analysis

Despite its usefulness, financial ratio analysis has limitations:

## 1. Financial Data Manipulation:

- o Companies may use **creative accounting techniques** to present misleading financial ratios.
- o Investors must complement ratio analysis with **independent financial audits and qualitative research**.

## 2. Industry-Specific Variations:

- The **building materials sector** has unique financial structures, making it difficult to compare ratios with other industries.
- External factors such as inflation, government policies, and exchange rate fluctuations can distort financial ratios.

## 3. Lack of Standardization in Reporting:

- o Different accounting practices affect financial ratio calculations, leading to inconsistencies in interpretation.
- Investors must ensure they compare companies using the same accounting principles.

#### RESEARCH METHODOLOGY

The study was conducted using both quantitative and qualitative methods of data collection Primary data were collected from the primary source which questionnaire was used as an instrument of data collection while secondary data were sources from textbooks, journals, newspapers and the internet were employed. The research design used in this report is descriptive design, utilizing questionnaire method to obtain information from the respondents for this project. A total of 200 (two hundred) respondents were selected for this study to represent the entire population of the study. For null hypotheses were formulated and tested using the one-way ANOVA and the t-test statistical tools at zero point zero five (0.05) level of significance. To analyze the data obtained, frequency and simple percentage and regression analysis was used. While hypothesis was tested using chi-square test.

#### RESEARCH GAP

Despite extensive research on **financial ratio analysis and investment decision-making**, several gaps remain, particularly in the **building materials industry**. This section identifies key areas where existing studies fall short and highlights the need for further investigation.

# 1. Limited Industry-Specific Research

• Most studies on financial ratio analysis focus on general manufacturing, banking, and oil & gas sectors, with limited attention to the building materials industry.

 Given the capital-intensive nature of the industry and its dependence on raw materials, economic policies, and infrastructure development, there is a need for more industryfocused research on how financial ratios influence investment decisions.

#### 2. Lack of Contextualized Studies in Nigeria

- Existing literature predominantly examines financial ratio analysis in **developed economies**, where financial reporting standards and economic conditions differ significantly from **Nigeria's business environment**.
- The Nigerian building materials sector faces unique challenges such as foreign exchange fluctuations, inflation, inconsistent government policies, and infrastructure deficits, which affect the interpretation of financial ratios.
- There is a need for research that **contextualizes financial ratio analysis** within **Nigeria's economic and regulatory framework**.

# 3. Limited Integration of External Factors in Ratio Analysis

- Traditional financial ratio analysis focuses on **internal company performance** but does not adequately consider the impact of **external economic factors** such as:
  - o Inflation and exchange rate volatility affecting material costs.
  - o Government policies and taxation impacting profitability and solvency ratios.
  - o Market demand fluctuations influencing liquidity and efficiency ratios.
- A more **holistic approach** that integrates these external factors into financial ratio analysis is needed for better investment decision-making.

#### 4. Insufficient Research on the Predictive Power of Financial Ratios

- Many studies focus on the **descriptive role** of financial ratios in evaluating past and present company performance but provide **limited insight into their predictive ability**.
- Investors require research that explores how historical financial ratios can forecast future profitability, risk exposure, and investment returns in the building materials industry.

# 5. Absence of Comparative Analysis with Alternative Investment Tools

- While **financial ratio analysis** is a widely used tool, other investment analysis methods, such as **Discounted Cash Flow (DCF)**, **Economic Value Added (EVA)**, and **Monte Carlo simulations**, provide additional insights into investment decisions.
- There is a research gap in comparing the **effectiveness and reliability of financial ratio** analysis against these alternative investment decision-making models.

## 6. Challenges of Financial Reporting and Data Accuracy

- The reliability of **financial ratio analysis** depends on the **accuracy and transparency of financial statements**.
- However, some companies in the building materials industry may engage in earnings manipulation, creative accounting, or inconsistent reporting standards, leading to misleading ratios.
- More research is needed to explore how **investors can detect and mitigate the risks** of relying on **manipulated financial data**.

## 7. Need for More Empirical Studies on Investor Behavior

- Most studies focus on theoretical frameworks and financial metrics but fail to explore how investors in the building materials industry actually use financial ratios in realworld decision-making.
- There is limited empirical research on how **individual and institutional investors interpret financial ratios**, what challenges they face, and how they adjust their investment strategies based on ratio analysis.

# SUMMARY OF FINDINGS SUMMARY OF FINDINGS

This study examined the relevance of financial ratio analysis in investment decision-making within the building materials industry, with a focus on profitability, liquidity, solvency, and efficiency ratios. The findings are summarized below:

- 1. Financial Ratio Analysis is Crucial for Investment Decisions
  - Investors in the building materials industry rely heavily on financial ratios to assess the financial health and growth potential of companies before making investment decisions.
  - Profitability ratios (e.g., Return on Equity (ROE), Gross Profit Margin) are key determinants in evaluating investment attractiveness.
- 2. Profitability Ratios Influence Investor Confidence
  - Firms with consistently high net profit margins and return on assets (ROA) tend to attract more investment.
  - The study found that building materials companies with strong profit margins are more likely to secure funding and expand their operations.
  - However, some companies manipulate financial statements to inflate profitability figures, leading to misleading investment decisions.
- 3. Liquidity Ratios are Essential but Often Overlooked
  - Investors tend to focus on profitability metrics while neglecting liquidity ratios like the current ratio and quick ratio.
  - The study found that firms with poor liquidity management struggle to meet short-term obligations, affecting their ability to sustain operations.
  - Some highly profitable companies in the industry faced liquidity crises due to high debt levels and poor cash flow management.
- 4. Solvency Ratios Indicate Financial Stability and Risk
  - Debt-to-Equity Ratio (D/E) is a crucial factor for investors in determining financial stability.
  - The study found that some companies in the Nigerian building materials industry have high debt burdens, making them vulnerable to economic downturns and interest rate hikes.
  - Investors are cautious about firms with excessive debt, as it increases financial risk and reduces dividend payouts.
- 5. Efficiency Ratios Show Operational Strength
  - Inventory turnover and accounts receivable turnover are key indicators of operational efficiency in the building materials sector.
  - Firms with higher inventory turnover tend to generate better cash flow and profitability.
  - Some companies, however, struggle with high inventory costs due to supply chain disruptions, leading to inefficiencies and investment risks.

- 6. External Factors Affect the Reliability of Ratio Analysis
  - Macroeconomic factors such as inflation, foreign exchange rates, and government policies significantly influence financial ratios in the industry.
  - Investors must consider these external variables alongside financial ratios for a more accurate investment analysis.
- 7. Financial Ratio Manipulation is a Risk for Investors
  - Some companies alter financial statements to present better-than-actual ratios, misleading investors.
  - The study highlights the need for independent financial audits and cross-verification before relying on ratio analysis for investment decisions.

#### **CONCLUSION**

This study explored the **relevance of financial ratio analysis in investment decision-making** within the **building materials industry**, focusing on profitability, liquidity, solvency, and efficiency ratios. The findings confirm that **financial ratios serve as a critical tool for investors** in assessing a company's financial health and investment potential.

# **Key conclusions include:**

- 1. Financial ratio analysis is essential for evaluating company performance and investment viability. Investors rely on profitability, liquidity, solvency, and efficiency ratios to make informed decisions.
- 2. Profitability ratios (e.g., ROE, ROA, and Net Profit Margin) significantly influence investor confidence. Companies with strong profitability metrics attract more investments.
- 3. Liquidity ratios (e.g., Current Ratio, Quick Ratio) are often overlooked but are crucial in determining a company's ability to meet short-term obligations. Poor liquidity management can lead to financial distress, even for profitable firms.
- 4. Solvency ratios (e.g., Debt-to-Equity Ratio) are key indicators of financial stability. High debt levels increase financial risk, making companies less attractive to risk-averse investors.
- 5. **Efficiency ratios (e.g., Inventory Turnover) reflect operational performance.** Firms with efficient asset utilization are more likely to achieve sustainable profitability.
- 6. External economic factors (e.g., inflation, foreign exchange fluctuations, and government policies) significantly impact financial ratios. Investors must consider these variables alongside ratio analysis for a more comprehensive investment evaluation.
- 7. **Financial data manipulation is a major concern.** Some companies engage in creative accounting to present misleading ratios, emphasizing the need for independent audits and cross-verification of financial statements.

#### Recommendations

Based on the findings of this study, the following recommendations are proposed to enhance the effectiveness of financial ratio analysis in investment decision-making within the building materials industry:

- 1. Investors Should Use Financial Ratios Alongside Other Analytical Tools
  - Financial ratios provide valuable insights, but they should be complemented with other investment evaluation techniques such as:

- Discounted Cash Flow (DCF) analysis
- Economic Value Added (EVA)
- o Industry benchmarking
- o Macroeconomic assessments
- This will help investors make more balanced and informed decisions.
- 2. Companies Should Improve Financial Transparency and Accountability
  - Building materials companies should adopt international financial reporting standards (IFRS) to ensure transparent and reliable financial data.
  - Independent audits should be conducted regularly to prevent financial statement manipulation.
  - Regulatory agencies like the Financial Reporting Council of Nigeria (FRCN) and Securities and Exchange Commission (SEC) should enforce stricter compliance measures.
- 3. Greater Attention to Liquidity and Solvency Ratios
  - Investors often focus on profitability ratios while overlooking liquidity and solvency.
  - Companies should ensure strong liquidity positions to avoid financial distress, and investors should prioritize these metrics when making decisions.
  - Debt financing should be monitored closely to prevent excessive leverage that could make firms financially unstable.
- 4. Consideration of External Economic Factors
  - Investors must factor in external variables such as:
    - o Inflation and exchange rate fluctuations
    - o Government policies and tax regulations
    - o Market demand and industry competition
  - A holistic investment approach that includes both financial ratios and macroeconomic trends will lead to better decision-making.
- 5. Strengthen Investor Education on Financial Ratio Interpretation
  - Many investors rely on basic profitability ratios without understanding the full implications of liquidity, efficiency, and solvency metrics.
  - Financial literacy programs should be encouraged through investor education seminars, workshops, and online resources.
- 6. Use Technology for More Accurate Financial Analysis
  - Companies and investors should adopt financial analytics tools and software to enhance the accuracy and efficiency of financial ratio calculations.
  - Artificial Intelligence (AI) and Big Data analytics can help identify trends, risks, and opportunities that may not be visible through traditional ratio analysis.

## SUGGESTIONS FOR FURTHER RESEARCH

Based on the findings of this study, several areas emerge where further research could provide valuable insights and contribute to the body of knowledge on financial ratio analysis and investment decision-making in the building materials industry. The following areas are suggested for future studies:

1. Comparative Study of Financial Ratio Analysis in Different Industry Sectors

- Further research could compare the use of financial ratio analysis in the building materials industry with other capital-intensive sectors, such as construction, manufacturing, and real estate.
- This would provide a cross-industry comparison of which financial ratios are more predictive and reliable in investment decisions across sectors with different operational challenges and risk profiles.
- 2. Impact of External Economic Shocks on Financial Ratios in the Building Materials Industry
  - While this study explored the influence of macroeconomic factors on financial ratios, further research could focus on how economic shocks (e.g., inflation, exchange rate volatility, and changes in government policy) affect the financial health of companies in the building materials industry.
  - Research could also explore how companies adapt their financial strategies to manage these external shocks.
- 3. The Role of Corporate Governance in Enhancing the Reliability of Financial Ratios
  - Future studies could investigate how corporate governance practices, such as board independence, transparency, and internal controls, affect the reliability of financial ratios.
  - This research could explore the relationship between strong corporate governance and reduced financial manipulation, ensuring that financial data used in ratio analysis is accurate and trustworthy.
- 4. Behavioral Biases in Financial Ratio Analysis by Investors
  - Further research could explore the psychological and behavioral factors that influence how investors interpret and use financial ratios in making investment decisions.
  - Understanding the impact of investor biases, such as overconfidence or anchoring, could help develop more effective investor education programs to improve decision-making.
- 5. Integration of Non-Financial Indicators with Financial Ratios
  - Future research could investigate the integration of non-financial indicators (e.g., environmental, social, and governance (ESG) factors) with financial ratio analysis to assess their combined impact on investment decisions.
  - Understanding how sustainability and corporate social responsibility (CSR) initiatives influence the investment attractiveness of building materials companies could be a valuable area for further exploration.
- 6. Longitudinal Studies on Financial Ratio Trends in the Building Materials Industry
  - A longitudinal study could track the performance of financial ratios over several years to determine the long-term trends in the building materials industry.
  - This could provide a deeper understanding of how financial health, risk, and performance evolve over time, offering more insights into the sustainability of investment decisions based on financial ratios.
- 7. Effectiveness of Alternative Investment Models in Comparison to Financial Ratios
  - Future research could focus on comparing the effectiveness of financial ratio analysis with other investment models, such as Discounted Cash Flow (DCF), Monte Carlo simulations, or the use of artificial intelligence (AI) in financial forecasting.

- This would assess whether financial ratios remain the most reliable tool for investment decisions or whether emerging tools offer better predictive power and risk management capabilities.
- 8. Investigating the Impact of Digital Transformation on Financial Ratios in the Building Materials Industry
  - As the industry undergoes digital transformation, future studies could explore how the use of digital tools and financial technologies (FinTech) affect the calculation and interpretation of financial ratios.
  - This research could examine whether digital platforms improve financial transparency, reduce errors, and enhance the predictive power of financial ratio analysis.

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