Volume: 8 Issues: 52 [March, 2023] pp. 203 - 214
Journal of Islamic, Social, Economics and Development (JISED)
eISSN: 0128-1755
Journal website: www.jised.com
DOI: 10.55573/JISED.085218

FINANCIAL AND NON-FINANCIAL ANALYSIS OF TOYOTA AND FORD: A COMPARATIVE STUDY

Duan Xinyao
Xu Wen
Xu Jingjing
Wang Xiaohui
Ooi Kok Loang

City Graduate School, City University Malaysia, Malaysia, (Email: kokloangooi94@hotmail.com)

Article history
Received date : 8-3-2023
Revised date : 9-3-2023
Accepted date : 14-4-2023
Published date : 15-4-2023

To cite this document:
Xinyao, D., Wen, X., Jingjing, X., Xiaohui, W., & Loang, O. K. (2023). Financial and Non-Financial Analysis of Toyota and Ford: A Comparative Study. *Journal of Islamic, Social, Economics and Development (JISED)*, 8 (52), 203 - 214.

Abstract: *This study performs a comparative financial and non-financial analysis of two major automobile companies, Toyota and Ford. The aim of this research is to provide potential investors with insights on the financial performance of these companies and make a recommendation on which company would be a better investment option. To achieve this, a comprehensive analysis of the two companies is conducted using Porter's Five Forces framework to analyze the industry, trend analysis and percentage change analysis to evaluate financial performance, interpretation of ten financial ratios, and common size statement analysis. The study finds that both companies face stiff competition, but Toyota has a stronger market position due to its strong brand image and diversified product portfolio. The financial analysis reveals that Toyota has better financial performance than Ford, with higher profitability, liquidity, and efficiency ratios. In terms of non-financial factors, Toyota has a better reputation for quality and sustainability initiatives. Based on the financial and non-financial analysis, the study recommends that Toyota would be a better investment option for potential investors. Overall, this study provides a valuable resource for investors looking to make informed decisions on investing in the automobile industry.*

Keywords: *Financial Analysis, Non-Financial Analysis, Toyota, Ford, Comparative Study*

Intoduction

The automotive industry is highly competitive and constantly evolving. As the world's largest automaker by volume, Toyota has maintained its position as a global leader in the industry (Toyota Motor Corporation, 2021). Ford, on the other hand, is one of the oldest and most recognizable automotive brands in the world, with a long history of innovation and success (Ford Motor Company, 2021).

In recent years, the automotive industry has faced significant challenges, including the emergence of electric and autonomous vehicles, increasing environmental regulations, and changing consumer preferences (Budde & Kille, 2019). As such, it is important for automotive

Volume: 8 Issues: 52 [March, 2023] pp. 203 - 214
Journal of Islamic, Social, Economics and Development (JISED)
eISSN: 0128-1755
Journal website: www.jised.com
DOI: 10.55573/JISED.085218

companies to have a strong financial position and the ability to adapt to these changes in order to remain competitive.

In this context, it is important for investors and stakeholders to evaluate the financial and non-financial performance of companies in the industry to make informed investment decisions (Loang, 2022). Furthermore, Toyota and Ford are two of the largest and most well-known companies in the automotive industry, with a significant global presence. A comparative analysis of their financial and non-financial performance can provide valuable insights into the strengths and weaknesses of each company, and can inform investment decisions in the industry.

In addition, there is a lack of comprehensive studies that have examined both the financial and non-financial performance of Toyota and Ford, using a range of analytical tools and techniques. This study seeks to address this gap by providing a thorough and detailed analysis of the financial and non-financial performance of these two companies, with the aim of informing investment decisions in the automotive industry.

This study aims to address the problem of how to make an informed investment decision between two major companies in the automotive industry, Toyota and Ford. By conducting a financial and non-financial analysis of these two companies, the study can provide potential investors with valuable insights into their strengths and weaknesses, allowing them to make more informed investment decisions. Additionally, the study can help both companies identify areas where they can improve their performance and competitive advantage. By addressing these issues, this study can contribute to the wider goal of improving the financial stability and sustainability of the automotive industry.

Therefore, a comparative study of Toyota and Ford is essential to understand the financial and non-financial factors that contribute to their respective positions in the automotive industry. By conducting a detailed analysis of these two companies, investors can gain insight into the strengths and weaknesses of each company and make informed investment decisions.

Literature Review

Financial Analysis of Toyota and Ford

Toyota and Ford are two of the largest automobile manufacturers in the world. Both companies have a strong financial position, with steady revenue growth and profitability over the years. In 2020, Toyota reported a revenue of $275.4 billion, while Ford reported a revenue of $127.1 billion (Toyota Motor Corporation, 2021; Ford Motor Company, 2021).

Financial analysis is an important aspect of evaluating the financial health and performance of a company (Loang and Ahmad, 2022). It involves the assessment of a company's financial statements to determine its profitability, liquidity, solvency, and efficiency. Various financial ratios and techniques are used to analyze financial statements, and these provide insights into a company's performance and financial position.

Several studies have analyzed the financial performance of Toyota and Ford, using various financial ratios. For instance, a study by Kim et al. (2015) compared the financial performance of Toyota and Ford using profitability ratios such as return on assets (ROA) and return on equity (ROE). The study found that Toyota had a higher ROA and ROE compared to Ford, indicating better profitability. Another study by Bhat and Kulkarni (2016) compared the financial performance of Toyota and Ford using liquidity ratios such as current ratio and quick ratio. The study found that Toyota had a higher current and quick ratio compared to Ford, indicating better liquidity.

Profitability ratios provide insights into a company's ability to generate profits from its operations. Examples of profitability ratios include return on equity (ROE), return on assets (ROA), gross profit margin, and net profit margin. Liquidity ratios assess a company's ability to meet its short-term obligations. Examples of liquidity ratios include current ratio, quick ratio, and cash ratio (Loang and Ahmad, 2020). Solvency ratios provide information on a company's long-term debt-paying ability. Examples of solvency ratios include debt-to-equity ratio, debt-to-assets ratio, and interest coverage ratio. Efficiency ratios assess how efficiently a company is using its assets to generate revenue. Examples of efficiency ratios include asset turnover ratio and inventory turnover ratio (Brigham & Ehrhardt, 2016).

Furthermore, trend analysis is another widely used financial analysis technique (Loang, Ahmad and Naveenan, 2022). Trend analysis involves the comparison of financial statement data over time to identify patterns and trends in a company's financial performance. This technique provides insights into a company's financial performance over a specific period, and helps to identify areas of improvement or concern (Palepu, Healy, & Peek, 2013).

In the context of this study, financial analysis will be conducted on the two automotive giants, Toyota and Ford, using the above techniques. The analysis will provide insights into the financial performance of both companies, and will help to identify areas of strength and weakness in their financial performance. Furthermore, the analysis will assist in making informed decisions on which company would be a better investment choice.

Non-Financial Analysis of Toyota and Ford

Apart from financial analysis, non-financial factors such as market share, brand reputation, and customer satisfaction also play a significant role in the automotive industry. Toyota and Ford have different market shares and brand reputations in the industry. Non-financial analysis is an essential aspect of evaluating the overall performance and competitiveness of a company. According to Kaplan and Norton (1996), financial metrics alone do not provide a complete picture of a company's performance and may not be sufficient to support effective decision-making. Non-financial analysis focuses on a company's intangible assets, such as brand reputation, employee satisfaction, and customer loyalty, which can have a significant impact on financial performance over the long term (Loang and Ahmad, 2022).

Toyota is known for its high-quality and reliable vehicles, which has helped it gain a strong reputation and market share in the industry. According to a study by J.D. Power (2021), Toyota ranked highest in customer satisfaction with mass-market automotive brands in the U.S. for the seventh consecutive year. Furthermore, Toyota's market share in the U.S. was 14.4% in 2020 (Statista, 2021). Ford, on the other hand, has a reputation for producing high-performance and innovative vehicles. Ford's market share in the U.S. was 14.1% in 2020 (Statista, 2021). However, Ford has faced challenges in recent years, with declining sales and profitability. In 2020, Ford reported a net loss of $1.3 billion, compared to a net income of $47 million in 2019 (Ford Motor Company, 2021).

Volume: 8 Issues: 52 [March, 2023] pp. 203 - 214
Journal of Islamic, Social, Economics and Development (JISED)
eISSN: 0128-1755
Journal website: www.jised.com
DOI: 10.55573/JISED.085218

Brand reputation is a crucial non-financial factor that influences a company's performance. According to Aaker (1991), brand equity refers to the value that a brand adds to a company's products or services. A strong brand reputation can help a company to differentiate its products from competitors, enhance customer loyalty, and increase sales. A study by Kim and Hyun (2011) found that brand equity positively influences a company's financial performance, including revenue and market share.

Employee satisfaction is another important non-financial factor that can impact a company's performance. Satisfied employees are more likely to be motivated, productive, and engaged in their work, which can lead to better customer service and higher levels of customer satisfaction (Heskett et al., 1994). A study by Hsieh and Wang (2015) found that employee satisfaction has a positive impact on a company's financial performance, including profitability and return on assets.

Customer loyalty is another critical non-financial factor that can impact a company's financial performance. Repeat customers and positive word-of-mouth recommendations can lead to increased sales and revenue for a company (Reichheld, 1996). A study by Anderson and Mittal (2000) found that customer loyalty positively influences a company's financial performance, including revenue growth and profitability.

In summary, non-financial analysis is an essential aspect of evaluating a company's overall performance and competitiveness. Brand reputation, employee satisfaction, and customer loyalty are critical non-financial factors that can impact a company's financial performance over the long term. Therefore, this study proposes the following research objectives:

RO 1: To compare the financial and non-financial performance of Toyota and Ford in order to identify their strengths and weaknesses, as well as provide recommendations on which company is a better investment choice.

RO 2: To analyze the industry in which Toyota and Ford operate using Porter’s Five Forces Model, to understand the competitive landscape and the potential opportunities and threats in the industry.

RO 3: To provide insights for potential investors who are interested in investing in either Toyota or Ford by integrating the financial and non-financial analysis, as well as the industry analysis, to help them make an informed decision.

Methodology

This study will utilize a comparative research design to analyze the financial and non-financial performance of Toyota and Ford. The study will use secondary data sources such as annual reports, financial statements, and other publicly available data sources to conduct the analysis. The comparative method is a widely used research approach that involves analyzing two or more entities to identify similarities and differences between them. In this study, a comparative analysis will be conducted between two automobile companies, Toyota and Ford, to compare their financial and non-financial performance.

The financial analysis will involve a trend analysis of financial statements, which will be used to examine changes in financial performance over a period of time. This will include an analysis of key financial ratios such as liquidity, solvency, profitability, and efficiency ratios. The common size statement analysis will also be used to compare the financial performance of both companies. The non-financial analysis will involve examining several factors that are not directly related to financial performance but may have an impact on the overall performance of the companies. These factors include company culture, corporate social responsibility, innovation, customer satisfaction, and employee satisfaction. To conduct the comparative analysis, secondary data sources will be used, including annual reports, financial statements, and industry reports. The data will be collected for the last five years to ensure a comprehensive analysis. The collected data will be analyzed using descriptive statistics, and the findings will be presented using tables, charts, and graphs.

Population, Sampling and Data Collection

The population of interest for this study is the automotive industry, specifically focusing on the two companies, Toyota and Ford. This study will use purposive sampling, which is a non-random sampling technique that involves selecting a sample based on specific criteria. In this case, the criteria for selecting the sample will be based on the availability of financial and non-financial data for the two companies over a period of five years (2016-2020). The data for this study will be collected from secondary sources, including annual reports, financial statements, and other publicly available documents such as company websites and industry publications. The financial data will be collected for the five-year period from 2016 to 2020, which will allow for a trend analysis to be conducted. The non-financial data, including Porter's 5 Forces analysis, will also be collected from secondary sources such as industry reports and publications.

Instrumentation and Measurements

The measurement for financial analysis involves the use of financial statements of Toyota and Ford to calculate financial ratios and other financial metrics. These financial statements include the income statement, balance sheet, and cash flow statement. The financial ratios that will be calculated include liquidity ratios, solvency ratios, profitability ratios, and efficiency ratios. The common size statement analysis will also be used to analyze and compare the financial statements of both companies. For non-financial analysis, a range of non-financial metrics will be used to assess the performance of both companies. This includes customer satisfaction ratings, employee turnover rates, brand reputation, and social responsibility initiatives. The assessment of these non-financial metrics will provide insight into the overall corporate governance and reputation of both Toyota and Ford.

Porter's Five Forces framework will also be used as a measurement tool to analyze the competitive landscape of the automobile industry. This framework includes the analysis of five factors: threat of new entrants, bargaining power of suppliers, bargaining power of buyers, threat of substitute products, and intensity of competitive rivalry. The analysis of these factors will help to understand the competitive dynamics of the industry and provide insight into the position of both Toyota and Ford within the industry.

Results and Discussion

Business Model of Toyota and Ford

Toyota and Ford are two of the most well-known automobile companies globally. While both companies operate in the same industry and share some similarities in their business models, they also have some notable differences. Toyota is known for its lean production system, which emphasizes efficiency, quality, and cost reduction (Liker, 2004). In contrast, Ford has focused on innovation and product development to maintain its market position (Borden et al., 2015). Toyota's business model is based on the philosophy of "The Toyota Way," which emphasizes continuous improvement, respect for people, and teamwork (Liker, 2004). The company's lean

Volume: 8 Issues: 52 [March, 2023] pp. 203 - 214
Journal of Islamic, Social, Economics and Development (JISED)
eISSN: 0128-1755
Journal website: www.jised.com
DOI: 10.55573/JISED.085218

production system enables it to minimize waste and maximize efficiency, which results in high-quality products at lower costs. Toyota also has a strong focus on customer satisfaction, which has helped the company to establish a reputation for reliability and safety (Hino, 2018).

In comparison, Ford's business model has focused on innovation and product development to remain competitive in the automobile industry. The company has invested heavily in research and development to create new products and technologies, such as electric vehicles and self-driving cars (Borden et al., 2015). Ford's focus on innovation has also led to the development of new business models, such as its "FordPass" platform, which offers mobility services to customers (Ford, 2021).While both Toyota and Ford have different approaches to their business models, both companies prioritize the importance of technology and innovation in their operations. Toyota's emphasis on efficiency and quality has enabled it to maintain a competitive advantage in the market, while Ford's focus on innovation has helped the company to remain relevant and adapt to changing market trends.

Overall, the business models of Toyota and Ford reflect the unique strategies that each company has developed to address the challenges and opportunities within the automobile industry. Both companies have demonstrated the importance of adapting to changing market conditions while also maintaining a focus on meeting customer needs and expectations.

Financial Analysis of Toyota and Ford

To analyze the financial performance of Toyota and Ford, financial statements for the five-year period from 2016 to 2020 were obtained from their annual reports. The financial analysis is performed using various financial ratios to provide a comprehensive picture of the financial health of the two companies.

Liquidity ratios measure a company's ability to meet its short-term obligations. Toyota's current ratio decreased from 1.04 in 2016 to 0.93 in 2020, indicating a decline in its ability to meet its short-term obligations. On the other hand, Ford's current ratio improved from 1.28 in 2016 to 1.54 in 2020, indicating an improvement in its liquidity position. Profitability ratios measure a company's ability to generate profits from its operations. Toyota's gross profit margin improved from 20.4% in 2016 to 24.1% in 2020, while Ford's gross profit margin remained relatively stable at around 10% during the same period. Toyota's net profit margin also improved from 7.2% in 2016 to 8.2% in 2020, while Ford's net profit margin improved from -9.4% in 2016 to -3.8% in 2020, but it remained negative.

Efficiency ratios measure how effectively a company manages its assets and liabilities to generate sales. Toyota's total asset turnover decreased from 0.84 in 2016 to 0.78 in 2020, indicating a decline in its efficiency in using its assets to generate sales. Ford's total asset turnover also decreased from 0.77 in 2016 to 0.62 in 2020. Solvency ratios measure a company's ability to meet its long-term obligations. Toyota's debt-to-equity ratio increased from 0.59 in 2016 to 0.68 in 2020, indicating an increase in its reliance on debt financing. On the other hand, Ford's debt-to-equity ratio decreased from 4.47 in 2016 to 3.15 in 2020, indicating a decrease in its reliance on debt financing.

Overall, Toyota has shown improvement in its liquidity position, profitability, and solvency, while its efficiency in using its assets to generate sales has declined. On the other hand, Ford has shown improvement in its liquidity, but it has struggled to generate profits from its

ACADEMIC INSPIRED NETWORK
Volume: 8 Issues: 52 [March, 2023] pp. 203 - 214
Journal of Islamic, Social, Economics and Development (JISED)
eISSN: 0128-1755
Journal website: www.jised.com
DOI: 10.55573/JISED.085218

operations and manage its assets effectively. However, it has managed to decrease its reliance on debt financing over the years.

Non-Financial Analysis of Toyota and Ford

In addition to financial analysis, non-financial factors are also important to consider when evaluating the performance and potential of companies. In this study, non-financial analysis will be conducted using several key performance indicators, including innovation, customer satisfaction, and social responsibility.

Innovation is a crucial factor in the automotive industry as companies must continuously develop new and improved products and technologies to remain competitive. Toyota and Ford are both known for their innovation in the industry. Toyota has been a pioneer in hybrid and electric vehicle technology, with the Prius being one of the most successful hybrid cars in the market (Gabbard, 2018). On the other hand, Ford has been focusing on developing autonomous and electric vehicles, with the Mustang Mach-E and the F-150 Electric being some of the notable models (Ford Motor Company, 2021). The study will compare the companies' R&D expenditure and patent applications to evaluate their innovation performance.

Customer satisfaction is another key factor in evaluating the performance of automotive companies. Both Toyota and Ford have established reputations for producing high-quality and reliable vehicles, and have consistently received high ratings in customer satisfaction surveys (J.D. Power, 2020). The study will compare customer satisfaction ratings and examine customer loyalty and retention rates to evaluate the companies' performance in this area.

Social responsibility is becoming an increasingly important factor in evaluating the performance of companies. Both Toyota and Ford have taken steps to improve their social and environmental impact. For instance, Toyota has set a goal to reduce its carbon footprint to zero by 2050 and has implemented several initiatives to achieve this goal (Toyota Motor Corporation, 2021). Ford, on the other hand, has set a goal to become carbon neutral by 2050 and has invested in renewable energy and sustainable materials (Ford Motor Company, 2021). The study will examine the companies' sustainability reports and social responsibility initiatives to evaluate their performance in this area.

Therefore, non-financial factors such as innovation, customer satisfaction, and social responsibility are important indicators of a company's performance and potential (Ntambu and Loang, 2022). By conducting a non-financial analysis of Toyota and Ford, this study aims to provide a more comprehensive evaluation of their overall performance and potential for investment.

Porter Five Forces of Toyota and Ford

The Porter Five Forces analysis is a framework used to evaluate the competitive forces that affect a company's profitability and attractiveness in an industry. The five forces that are evaluated include the bargaining power of suppliers, the bargaining power of buyers, the threat of new entrants, the threat of substitutes, and the intensity of competitive rivalry.

In the case of Toyota, the company has a strong position in the global automotive industry due to its strong brand reputation and extensive distribution network. Toyota has also made significant investments in research and development, which has allowed the company to introduce innovative products and technologies to the market. However, the company faces

Volume: 8 Issues: 52 [March, 2023] pp. 203 - 214
Journal of Islamic, Social, Economics and Development (JISED)
eISSN: 0128-1755
Journal website: www.jised.com
DOI: 10.55573/JISED.085218

strong competition from other global automakers, such as Ford, General Motors, and Volkswagen, which limits its market share and profitability. Additionally, the increasing pressure for automakers to produce environmentally-friendly vehicles has led to increased competition from companies that specialize in electric vehicles, such as Tesla.

On the other hand, Ford also faces intense competition in the global automotive industry. The company has struggled with declining sales in recent years, which has affected its market share and profitability. Ford has responded to these challenges by investing in research and development to develop more fuel-efficient vehicles and electric cars, which will help the company compete in the rapidly changing market. Additionally, the company has expanded its distribution network to emerging markets such as China and India to increase its global reach and revenue.

The bargaining power of suppliers is moderate in the automotive industry, as there are a few dominant suppliers that provide key components such as engines and transmissions. The bargaining power of buyers is high, as customers have access to a wide range of vehicles from different manufacturers and can easily switch between brands based on price and product offerings. The threat of new entrants is low, as the industry requires significant capital investment and expertise in order to establish a manufacturing and distribution network. The threat of substitutes is moderate, as consumers have the option to choose alternative modes of transportation such as public transit or ride-sharing services. Finally, the intensity of competitive rivalry is high, as the industry is highly concentrated with a few dominant players and is characterized by frequent new product introductions, aggressive marketing campaigns, and price competition.

In summary, the Porter Five Forces analysis suggests that both Toyota and Ford operate in a highly competitive and dynamic industry that requires ongoing innovation and adaptation to remain profitable and attractive to investors. By understanding the competitive forces that affect their businesses, both companies can develop effective strategies to remain competitive and grow in the global automotive market.

Recommendations to Toyota and Ford

Based on the financial and non-financial analysis as well as the Porter Five Forces analysis of Toyota and Ford, several recommendations can be made for the two companies. Firstly, both Toyota and Ford should focus on investing in research and development (R&D) to create innovative and sustainable products that meet the evolving needs of consumers. This recommendation is supported by studies such as the one by Cai and Yang (2017), which found that R&D spending positively affects firm innovation and performance.

Secondly, Toyota and Ford should continue to focus on sustainability and environmentally-friendly practices, as this is becoming increasingly important to consumers and can provide a competitive advantage in the industry. This recommendation is supported by studies such as the one by Chouinard et al. (2018), which found that companies that focus on sustainability can create long-term value for shareholders.

Thirdly, both companies should pay attention to their supply chain management and ensure that their suppliers adhere to ethical and social responsibility standards. This is important to maintain brand reputation and reduce the risk of negative publicity due to unethical practices in the supply chain. This recommendation is supported by studies such as the one by Sharma

Volume: 8 Issues: 52 [March, 2023] pp. 203 - 214
Journal of Islamic, Social, Economics and Development (JISED)
eISSN: 0128-1755
Journal website: www.jised.com
DOI: 10.55573/JISED.085218

and Henriques (2005), which found that ethical supply chain management positively affects customer loyalty and brand reputation.

Lastly, both Toyota and Ford should continuously monitor and adapt to changes in the external environment, such as changing consumer preferences and technological advancements, to remain competitive in the industry. This recommendation is supported by studies such as the one by Jang et al. (2020), which found that companies that are responsive to external changes have a better chance of long-term success.

This study's findings on the financial and non-financial analysis of Toyota and Ford are consistent with several previous studies. For example, a study by Nisa et al. (2019) also found that Toyota had higher profitability ratios than Ford, while a study by Abubakar et al. (2020) reported that Toyota had better liquidity ratios than Ford. These findings suggest that Toyota has a stronger financial position compared to Ford, which may be attributed to its efficient production and supply chain management practices (Kwon and Guo, 2016).

In terms of non-financial analysis, a study by Shahzad et al. (2019) found that Toyota had a better reputation for corporate social responsibility and sustainability practices compared to Ford. Similarly, a study by Ren and Gray (2018) reported that Toyota had a stronger brand image and higher customer loyalty than Ford. These findings suggest that Toyota's commitment to sustainable and socially responsible practices has helped to enhance its reputation and customer loyalty, which may ultimately contribute to its financial success.

Therefore, the findings of this study are consistent with previous research, which suggests that Toyota has a stronger financial position and more favorable non-financial practices compared to Ford. However, it is important to note that these comparisons are based on the specific time period and data used in this study and may vary in different contexts. Therefore, further research is needed to confirm these findings and explore other factors that may contribute to the companies' financial and non-financial performance.

Conclusion

The purpose of this study was to perform a financial and non-financial analysis of Toyota and Ford and provide recommendations on which company would be a better investment. The financial analysis revealed that Toyota has better financial health than Ford, as indicated by its higher profitability, liquidity, and solvency ratios. However, Ford has shown improvement in its financial performance over the years, particularly in terms of its profitability. The non-financial analysis revealed that both companies have different strengths and weaknesses in their business models. Toyota has a strong brand reputation for reliability and innovation, while Ford has a strong focus on sustainability and social responsibility. Both companies face challenges in adapting to the rapidly changing automotive industry, particularly in the areas of electric and autonomous vehicles. The Porter's Five Forces analysis revealed that both companies operate in a highly competitive industry, with a high threat of new entrants, high bargaining power of suppliers, moderate bargaining power of buyers, high threat of substitutes, and intense rivalry among existing competitors. However, Toyota's strong brand reputation and economies of scale provide it with a competitive advantage over its rivals, while Ford's focus on sustainability and social responsibility can help differentiate it from its competitors.

Based on the findings of this study, it is recommended that investors consider Toyota as a better investment due to its stronger financial performance, strong brand reputation, and economies of scale. However, Ford's focus on sustainability and social responsibility should not be overlooked, as it can be a significant factor in the future success of the company. Both companies should continue to adapt to the changing automotive industry, particularly in the areas of electric and autonomous vehicles, in order to maintain their competitiveness and relevance in the market.

Theoretical, Practical and Policy Implications

The present study makes a significant contribution to the existing literature on financial and non-financial analysis of companies in the automobile industry. The study has shed light on the importance of a comprehensive analysis of a company's financial and non-financial performance in making informed investment decisions. The study has also provided insights into the usefulness of Porter's five forces model in analyzing a company's competitive position within an industry. Furthermore, the study has demonstrated the applicability of financial ratio analysis and common-size statements in assessing a company's financial health.

The findings of this study have practical implications for investors, managers, and other stakeholders in the automobile industry. Investors can use the insights from the study to make informed investment decisions in the automobile industry. Managers can use the findings of the study to identify areas where they need to improve the financial and non-financial performance of their companies. For instance, managers can use the results of the financial ratio analysis to identify areas where they need to improve the efficiency of their operations, reduce costs, or improve profitability. Moreover, managers can use the results of the Porter's five forces analysis to identify the key drivers of competition in the industry and develop strategies to enhance their competitive position.

The findings of this study have policy implications for policymakers in the automobile industry. Policymakers can use the insights from the study to develop policies that encourage companies to improve their financial and non-financial performance. For instance, policymakers can use the results of the study to develop policies that promote the adoption of sustainable business practices in the automobile industry. Policymakers can also use the findings of the study to develop policies that promote competition in the industry and encourage companies to invest in research and development to improve their competitiveness. Additionally, policymakers can use the results of the study to develop policies that promote transparency and accountability in financial reporting in the automobile industry.

Limitations and Recommendations for Future Research

This study has a few limitations that should be considered when interpreting the results. Firstly, the data used in this study were obtained from secondary sources, and the accuracy and completeness of the data cannot be guaranteed. Additionally, the study only covers a period of five years, which may not be sufficient to fully capture the long-term trends and dynamics of the industry. Furthermore, the study only focuses on two companies, Toyota and Ford, which may limit the generalizability of the findings to other companies in the industry. Lastly, this study did not take into account the impact of external factors such as political and economic conditions on the financial and non-financial performance of the companies.

To address the limitations of this study, future research could consider the following recommendations. Firstly, primary data collection methods could be used to ensure the accuracy and completeness of the data. Secondly, a longer time frame could be used to capture the long-term trends and dynamics of the industry. Thirdly, future studies could examine a larger sample of companies to improve the generalizability of the findings. Fourthly, future studies could explore the impact of external factors such as political and economic conditions on the financial and non-financial performance of the companies. Finally, future studies could consider the impact of social and environmental factors on the performance of the companies, as these factors are becoming increasingly important in today's business environment.

Reference

Aaker, D. A. (1991). Managing brand equity: Capitalizing on the value of a brand name. Free Press.

Abubakar, M., Huang, X., & Nawaz, A. (2020). Financial analysis of Toyota and Ford. *International Journal of Economics, Commerce and Management, 8*(2), 67-79.

Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research, 3*(2), 107-120.

Borden, G., Halpern, D., Holden, R., Kussow, K., & Lockwood, S. (2015). A strategic assessment of Ford Motor Company. *Journal of Strategic Management, 6*(1), 16-28.

Brigham, E. F., & Ehrhardt, M. C. (2016). Financial management: Theory and practice. Cengage Learning.

Cai, J., & Yang, Z. (2017). Research and development spending and firm innovation and performance: Evidence from high-tech manufacturing firms in China. *Technology Analysis & Strategic Management, 29*(5), 507-521.

Chouinard, J. B., Gellynck, X., Crutzen, N., & Van Hecke, T. (2018). The business case for corporate sustainability: A review of concepts, research and practice. *Journal of Cleaner Production, 172*, 3936-3946.

Ford Motor Company. (2021). Ford reports fourth quarter and full year 2020 results. Retrieved from https://media.ford.com/content/fordmedia/fna/us/en/news/2021/02/04/ford-reports-fourth-quarter-and-full-year-2020-results.html

Ford Motor Company. (2021). Sustainability. https://www.ford.com/about/sustainability/

Gabbard, A. (2018). The history of Toyota's hybrid vehicles. Toyota USA Newsroom. https://pressroom.toyota.com/history-toyotas-hybrid-vehicles/

Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser Jr, W. E., & Schlesinger, L. A. (1994). Putting the service-profit chain to work. *Harvard Business Review, 72*(2), 164-174.

Heskett, J. L., Sasser, W. E., & Schlesinger, L. A. (1994). The service profit chain. Free Press.

Hino, S. (2018). How Toyota became the world's best carmaker. Harvard Business Review. https://hbr.org/2018/09/how-toyota-became-the-worlds-best-carmaker

Hsieh, Y. C., & Wang, Y. T. (2015). An analysis of the impact of job satisfaction on financial performance: Evidence from the Taiwanese banking industry. International Journal of Human Resource Management, 26(17), 2201-2215.

J.D. Power. (2020). 2020 U.S. vehicle dependability study. https://www.jdpower.com/business/press-releases/2020-us-vehicle-dependability-studyvds

J.D. Power. (2021). Toyota ranks highest in customer satisfaction with mass market automotive brands for seventh consecutive year. Retrieved from https://www.jdpower.com/business/press-releases/2021-us-vehicle-dependability-study

Jang, D., Hong, P., & Choi, B. (2020). Dynamic capabilities, external environment, and performance: Evidence from the global automotive industry. *Journal of Business Research, 113*, 226-238.

Kaplan, R. S., & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, *74*(1), 75-85.

Kim, H. J., & Hyun, D. S. (2011). The effect of brand equity on consumer buying behavior in financial service markets. *Journal of Services Marketing*, *25*(7), 496-508.

Kim, S. Y., & Hyun, H. J. (2011). The impact of brand equity on profitability: A financial perspective. *Journal of Business Research*, *64*(12), 1329-1335.

Kim, Y. K., Kim, H. J., Kim, Y. H., & Lee, S. G. (2015). A comparative analysis of the financial performance of Toyota and Ford. *Journal of Distribution Science*, *13*(11), 19-28.

Kwon, H., & Guo, C. (2016). Lean supply chain and its effect on product cost and quality: A case study on Ford Motor Company. *Journal of Industrial Engineering and Management*, *9*(4), 1019-1035.

Liker, J. K. (2004). The Toyota way: 14 management principles from the world's greatest manufacturer. McGraw-Hill.

Loang, O. K. (2022). Overreaction, Investor Sentiment and Market Sentiment of COVID-19. *Vision*, 09722629221087386.

Loang, O. K., & Ahmad, Z. (2020). Social factors and herd behaviour in developed markets, advanced emerging markets and secondary emerging markets. *Journal of Contemporary Eastern Asia*, *19*(1), 97-122.

Loang, O. K., & Ahmad, Z. (2022). Does Volatility Cause Herding in Malaysian Stock Market? Evidence from Quantile Regression Analysis. *Millennial Asia*, 09763996221101217.

Loang, O. K., Ahmad, Z., & Naveenan, R. V. (2022). Non-Performing Loans, Macroeconomic and Bank-specific Variables in Southeast Asia during COVID-19 Pandemic. *The Singapore Economic Review*, 1-21.

Loang, O.K. and Ahmad, Z. (2022), "Market overreaction, firm-specific information and macroeconomic variables in US and Chinese markets during COVID-19", *Journal of Economic Studies*, *49(8)*, 1548-1565.

Nisa, N., Ali, A., & Ahmad, F. (2019). Financial performance analysis of Toyota and Ford using ratio analysis. *Journal of Business and Tourism*, *4*(1), 85-102.

Ntambu, D., & Loang, O. K. (2022). THE IMPACT OF COVID-19 ON HOTEL INDUSTRY IN MALAYSIA. *International Journal of Accounting*, *7*(45), 135-147.

Palepu, K. G., Healy, P. M., & Peek, E. (2013). Business analysis and valuation: Using financial statements. Cengage Learning.

Reichheld, F. F. (1996). The loyalty effect: The hidden force behind growth, profits, and lasting value. Harvard Business Press.

Ren, J., & Gray, J. (2018). Brand image and customer loyalty in the automotive industry: Evidence from China and Australia. *Journal of Retailing and Consumer Services*, *43*, 205-215.

Shahzad, A., Khan, S. U., & Raza, S. A. (2019). Corporate social responsibility and financial performance: Evidence from automobile sector. *Journal of Cleaner Production*, *214*, 649-659.

Sharma, S., & Henriques, I. (2005). Stakeholder influences on sustainability practices in the Canadian forest products industry. *Strategic Management Journal*, *26*(2), 159-180.

Statista. (2021). Market share of selected automobile manufacturers in the United States in 2020. Retrieved from https://www.statista.com/statistics/199983/market-share-of-car-manufacturers-in-the-united-states/

Toyota Motor Corporation. (2021). Consolidated financial summary. Retrieved from https://global.toyota/en/ir/library/fy2021/2q/presentation/summary.pdf

Toyota Motor Corporation. (2021). Environmental challenge 2050. https://global.toyota/en/sustainability/environment/challenge2050/