

FA Project-Ford VS Toyota

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Executive Summary:

The research project evaluates Ford and Toyota's financial positions using financial ratios. The project will entail finding and implementing key financial ratios such as liquidity ratios, profitability ratios, and leverage ratios to identify strengths and weaknesses. The research will help identify each company's strengths and flaws while also providing insight into its financial performance. The purpose is to evaluate whether the company has a better financial status, while other aspects such as market developments and competition should also be considered.

Company Overview:

FORD MOTOR COMPANY:

- Ford Motor Company is a multinational corporation that operates in the automotive, mobility, and financial services sectors.
- In 2020, the company had total revenues of \$156.7 billion.
- The company's revenue streams are primarily from automotive sales, which accounted for 95% of the total revenue in 2020.
- Ford's financial performance is vulnerable to economic downturns due to the cyclical nature of the automotive industry.
- Despite this, the company has continued to invest in new technologies to remain competitive, particularly in electric and autonomous vehicles.
- The company's future financial performance will be influenced by industry trends and its ability to adapt to changing market conditions.

TOYOTA MOTOR COMPANY:

- Toyota is a multinational automotive manufacturer based in Toyota, Japan, founded in 1937. It is the world's largest automotive manufacturer by production volume.
- Toyota operates through three main business segments: Automotive, Financial Services, and Others.
- In the fiscal year ending March 31, 2021, Toyota reported net revenues of ¥27.2 trillion (approximately \$250 billion).
- Global economic conditions heavily influence Toyota's financial performance, particularly in key markets such as the United States and China.
- Automotive sales accounted for 90% of Toyota's net revenue in the fiscal year 2021, with Financial Services and Other segments accounting for the remaining 10%.
- The company has invested in research and development, particularly in electrification and autonomous driving technology.

- Toyota's financial performance will continue to be influenced by industry trends and its ability to adapt to changing market conditions.

Financial Ratios:

Financial ratios are quantitative measures derived from a company's financial statements that reveal its financial performance and health. These ratios are utilized by investors, creditors, and analysts to assess a company's liquidity, profitability, solvency, and efficiency. Financial ratios are categorized into liquidity, profitability, leverage, and efficiency ratios, each serving a specific purpose. Comparing a company's financial ratios to industry benchmarks, competitors, or its historical data is a common practice. However, financial ratios should be viewed with other financial analysis tools and qualitative factors to provide a more comprehensive understanding of a company's financial position. It's essential to exercise caution when interpreting financial ratios as their meaning varies by industry and situation.

Comparison with Industry Ratios:

Current Ratio:

Total Current Assets / Total Current Liabilities

Ford = $116,476 / 96,866 = 1.2024$

Toyota = $23,722,290 / 21,842,161 = 1.08607$

A higher Current ratio is considered favorable as it shows the company's capacity to cover current liabilities with its current assets. Generally, a current ratio of 1.2 to 2.0 is a healthy range for most companies.

Toyota's ratio in 2021 = 1.06133

Ford's ratio in 2021 = 1.20136

Ford has a strong liquidity position because its ratio is almost greater than 1.2 but it is in the ideal range. However, based on both years, Toyota's improvement in liquidity position is more than Ford's.

Quick Ratio:

(Total Current Assets – Inventories) / Total Current Liabilities

Ford = $(116,476 - 14,080) / 96,866 = 1.0571$

Toyota = $23,722,290 - 3,821,356 / 21,842,161 = 0.911125$

Quick Ratio helps understand how a company can pay its current liabilities with its most liquid assets. Inventory is excluded in the quick ratio analysis as it cannot be easily converted to cash.

The ideal value for a quick ratio is 1:1 or higher. Ford has a good ability to pay off its short-term liabilities using its liquid assets. Whereas Toyota has a quick ratio of 0.9111, which represents a weak ability to pay off short-term liabilities.

Ford's Ratio in 2021 = 1.068380

Toyota's Ratio in 2021 = 0.92676

Both companies had a reduction in the quick ratio from 2021 to 2022. But still, Ford holds a good position when it comes to its ability to pay short-term liabilities using liquid assets.

As we can see that Ford Motor Company has a current ratio of less than 2 but a quick ratio greater than 1 which indicates that the company has a significant amount of inventory or other current assets that may not be as easily converted to cash as other current assets, such as accounts receivable.

Cash Ratio:

Cash and Cash Equivalents / Total Current Liabilities

Ford = $25,134 / 96,866 = 0.2595$

Toyota = $6,113,655 / 21,842,161 = 0.27990$

The cash ratio measures a company's ability to pay off its current liabilities with its cash and cash equivalents. Generally, a cash ratio of 0.5 or higher is a healthy range for most companies.

Both companies have a ratio of less than the ideal measure. So, they do not have a great ability to pay off liabilities with cash and cash equivalents. But Toyota is in a better position as compared to Ford in the case of paying liabilities with cash.

Ford's Ratio in 2021 = 0.22639

Toyota's Ratio in 2021 = 0.23768

Both automobile companies had an increase in the ratio, but Toyota had a slight improvement in the payoff ability as compared to Ford.

Debt-to-equity ratio:

Total Debt / Shareholder's Equity

Ford = $45,451 + 19,200 / 43,167 = 1.49769$

Toyota = $15,308,519 + 11,187,839 / 27,154,820 = 0.97575$

The debt-to-equity ratio measures a company's total debt relative to its shareholders' equity. It indicates the degree to which a company has borrowed to finance its operations and growth.

Generally, a lower D/E ratio indicates a lower degree of financial leverage, while a higher D/E ratio indicates a higher degree of financial leverage. The ideal value of the D/E ratio is 2 and represents good financial health.

Toyota has a debt-to-equity ratio of 0.975 which is less than 1 whereas Ford has a D/E ratio of 1.49 which is greater than 1. This indicates that Ford has a better leverage ability compared to Toyota.

Gross profit margin:

$(\text{Revenue} - \text{Cost of Goods Sold}) / \text{Revenue} \times 100\%$

Ford = $((158,057 - 134,397) / 158,057) \times 100 = 14.9693\%$

Toyota = $31,379,507 - 24,250,784 / 31,379,507 \times 100 = 22.71776\%$

The gross profit margin measures the percentage of revenue that remains after deducting the cost of goods sold (COGS). The ratio is used to assess a company's ability to generate profits from its sales activities. The higher a company's gross profit margin, the more profitable it is.

As Toyota has a higher gross profit margin, it is more profitable compared to Ford. But we might need to do more research as it also depends on other factors such as company size and business model.

Inventory turnover ratio:

$\text{Cost of Goods Sold} / \text{Average Inventory}$

Ford = $134,397 / 13,072.5 = 10.2809$

Toyota = $24,250,784 / 3354692 = 7.2289$

The inventory turnover ratio measures the number of times a company sells and replaces its inventory during a period. It shows how efficiently a company manages its inventory. The higher the inventory turnover ratio, the more efficiently a company is managing its inventory.

This means that Ford sells and replaces its inventory approximately 10 times a year and Toyota sells and replaces its inventory 7 times a year.

Ford has a higher inventory turnover ratio than Toyota, indicating that it is more efficient in managing its inventory. Ford is likely better at forecasting demand and managing its inventory levels compared to Toyota, as it can sell and replace its inventory more frequently.

The difference in inventory turnover ratio between the two companies may be due to a variety of factors, including differences in sales volume, product mix, or inventory management practices.

Asset turnover ratio:

$\text{Net Sales} / \text{Average Total Assets}$

Ford = $115,790 / 2,56,459.5 = 0.4515$

Toyota = $2,84,03,530 / 6,49,77,955.5 = 0.437125$

The asset turnover ratio measures how efficiently a company uses its assets to generate sales. It shows how much revenue a company generates per dollar of assets. The asset turnover ratio helps to

evaluate how efficiently a company uses its assets to generate sales and how effectively it manages its assets.

Both companies have almost the same asset turnover ratio. This means that Ford generates \$0.45 in revenue for every dollar of assets and Toyota generates \$0.44 in revenue.

Therefore, both companies are similarly efficient in using their assets to generate revenue.

Other factors affect the ratio like the company size, business model, financial structure, and more.

Analysing the Qualitative Factors:

Business strategy:

Toyota and Ford have distinct business strategies. Toyota has a reputation for manufacturing high-quality, dependable vehicles and has recently focused on developing fuel-efficient hybrid vehicles. Ford, on the other hand, has expanded its product line to include trucks and SUVs, as well as investments in electric vehicles and self-driving technology.

Geographical presence:

Toyota and Ford have geographically distinct footprints. Toyota is a Japanese firm with a strong Asian presence, whereas Ford is an American company with a strong North American presence. Toyota is likewise well-represented in Europe, whereas Ford is well-represented in South America.

Production costs:

Toyota and Ford have different production costs. Toyota is known for its lean manufacturing techniques and has a reputation for efficient production processes. Ford, on the other hand, has struggled with high production costs in recent years.

Brand image:

Toyota and Ford have different brand images. Toyota is often associated with reliability, quality, and fuel efficiency, while Ford is often associated with American heritage and toughness.

Financial performance:

Toyota and Ford have different financial performances. Toyota has consistently been profitable in recent years, while Ford has struggled with declining profits and restructuring efforts.

Corporate culture:

Toyota and Ford have different corporate cultures. Toyota has a strong culture of continuous improvement and a focus on quality, while Ford has a more traditional American corporate culture.

Inventory Methods:

The cost of our inventories is determined by costing methods that approximate a first-in, first-out ("FIFO") basis.

FIFO (first in, first out) is a value system that assumes that commodities purchased or manufactured first are sold first. It means that the oldest merchandise is supplied to clients first, followed by fresher inventory.

Whereas Toyota uses a system known as JIT or Just in Time.

JIT is a type of inventory management that demands close collaboration with suppliers to ensure that raw materials arrive when manufacturing is scheduled to begin, but not earlier. The idea is to keep as little inventory on hand as possible to meet demand.

Conclusion:

The financial ratios provide vital information about Ford and Toyota's financial performance. Toyota has demonstrated some level of steady profitability and financial stability, as evidenced by the high-profit ratio. Ford's financial statistics, on the other hand, are good at handling its inventory and long-term assets. However, it is important to note that financial ratios should not be the only element considered when assessing a company's financial health, as other qualitative factors such as industry trends and competitive positioning are equally important. Finally, investors and analysts should make informed decisions about investing in these automotive behemoths by combining financial ratios and qualitative analyses.

References:

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Note:

The currency in Toyota's and Ford's financial reports is different.

Toyota = yen

Ford = Dollars