## Financial Statement Analysis Activity

Financial Management & Strategy

### Subject Company: Tesla, Inc.

In this report, we will draw conclusions about Tesla, Inc.'s performance based on widely accepted industry ratios. Ratio analysis has been provided in the following pages along with an executive summary on performance and findings. Figures used are pulled from the most recent 10-K released by Tesla, Inc. on January 30, 2025.

## **Executive Summary**

In this report, we compare the performance of Tesla, Inc. in the fiscal year 2024 with the prior fiscal year 2023. We use common size analysis on both the Balance Sheet and Income Statement to identify any trends or highlight any distinct changes in the operations/structure of the company. A common size analysis compares each item on a financial statement to a total figure, on the Balance Sheet this figure would be the Total Assets and on the Income Statement this figure would the Total Revenue. It is important to note that some common sized income statements state Income Tax provision as a percentage of Income before Tax, but for the purposes this analysis we do not. We also run ratio analysis on the company, using time series and cross-sectional analysis to compare the performance of this company over time and with industry competitors.

Starting with the Income Statement, we notice a change in the streams of revenue from fiscal year 2023 (Year 1) to fiscal year 2024 (Year 2). In Year 1, 85.17% of revenues were generated from activities relating to automobiles, with Automotive Sales making up 81.13% of overall revenue. This changes in Year 2, where Tesla has a decrease in Automative Sales as a proportion of Total Revenue of 7.68%. The Total Revenue did increase from Year 1 to Year 2 by 0.95%, with the difference being made up by Energy Generation and Storage (increasing by 67.13%) and Services and others (increasing by 26.63%). While this change in composition of Total Revenue streams is notable, it appears to not have impacted the overall cost structure of the company in a significant way; with the combined Total Cost of Revenues and Total Operating Expenses only increasing by 4.29% YoY. However, the area in which Net Income was majorly impacted was the Income Tax provision. In Year 1, the company recognized a Deferred Tax Asset which worked as a contra-account increasing Net Income as a proportion of Total Revenue by 5.17% leading to a Net Income of 15.47% as proportion of Total Revenue. Compare this to Year 2, where the Income Tax provision operated as a normal expense, reducing Net Income as a proportion of Total revenue by 1.88%, causing this percentage to be 7.32%. This change caused an overall change in this value of -49.44% YoY; however, it is disclosed in the footnotes of Tesla, Inc.'s 10-K1 that this change was caused by an increase in the company's valuation allowance which was primarily due to the changes of their California deferred tax assets, U.S foreign tax credits and certain foreign operating losses. This one specific change to Net Income impacted many performance ratios used to analyze the company, and highlighted a lower profitability of Tesla, Inc. in Year 2.

When analyzing the Balance Sheet, we do not notice any significant changes in asset composition or capital structure. Although Tesla, Inc.'s Total Assets increased by 14.49%, the proportion of Current Assets to Total Assets stayed

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relatively flat, with Year 1 and Year 2 having common size current asset percentages of 46.54% and 47.81% respectively. The capital structure of the company also remained relatively flat as well, with the company reducing debt levels by 1.73% YoY and Stockholders' Equity comprising of 58.75% and 59.73% of Total Assets in Year 1 and Year 2 respectively.

The following outlines ratios we calculated for the purpose of analyzing company performance and risk in the Balance Sheet, Income Statement, and Statement of Cash Flows. To compare the company to industry competitors, ratios were pulled from Dun & Bradstreet's Key Business Ratios Reports <sup>2</sup>.

The Current Ratio (current assets/current liabilities) is a liquidity ratio used to determine a company's ability to meet short-term obligations. Generally, if this ratio is greater than 1 the company is well equipped to cover short-term obligation. Tesla, Inc. had a current ratio of 2.02 and 1.73 in Year 2 and Year 1 respectively. The Days of Account Receivables (accounts receivable/ [revenue/365]), referred to as DAR, is used to determine how efficiently the company can convert sales to cash. Generally, analysts would like to see this number be lower as it signals a company can convert sales to cash more quickly, which can then be used to reinvest and generate returns. In Year 1, Tesla, Inc.'s DAR was 15.54 days, which was higher than the industry median of 12 days; this ratio worsened in Year 2, with Tesla, Inc. having a DAR of 20.92 days. The Net Profit Margin (net income/total revenue) is considered a profitability ratio informing analysts how much profit is retained per dollar in sales. Generally, we would like to see this ratio be higher as it indicates that a company effectively generates profits – and in this regard Tesla, Inc. does perform very well in their industry having a profit margin of 15.50% and 7.26% in Year 1 and Year 2 respectively compared to an industry median of 2.2%. Return on Assets (net income/total assets) and Return on Equity (net income/total equity) are very similar ratios and are also seen as profitability ratios and measure a company's ability to return profits to capital investors (debt and equity) or specifically equity shareholders; as such we would prefer to see these ratios be higher. Tesla, Inc. had return on assets figures of 14.07% and 5.81% in Year 1 and Year 2 respectively which was in line with industry competitors having an interquartile range of 2.2 - 15.4%. Their return on equity figures were 23.94% and 9.73% in Year 1 and Year 2 respectively, which both fell below the industry median of 29.7%. Lastly, we calculated the following cash flow ratios: cash flow to revenue (CFO/revenue), cash to income (CFO/operating income), cash return on assets (CFO/total assets), cash return on equity (CFO/total equity), and debt coverage (CFO/total debt). These ratios are performance and risk ratios, communicating the ability of a company to generate cash based on the relative measure. A full breakdown is outlined below, but generally we want these ratios to be higher as it signals the company can generate sufficient cash for returns debt service.

#### Ratio 1 Name & Formula:

Current Ratio = CR = CA/CL

#### 1. What does this ratio tell you?

The current ratio informs analysts about the ability of a company to meet short-term obligations. Often this ratio is referred to as a liquidity ratio.

#### 2. In general, would you like this ratio to be higher or lower? Why?

In general, we would like to see this ratio to be higher because this means that the company has sufficient liquidity (current assets) to cover obligations coming due within the next year.

#### 3. Compute this ratio for Year 2:

Tesla, Inc. had a current ratio of 2.02 in the most recent year (Year 2).

#### 4. Trend Analysis: Compute this ratio for Year 1. Did the ratio get better or worse from year 1 to year 2?

Tesla, Inc. had a current ratio of 1.73 in the previous fiscal year (Year 1), which represents an improvement of 17.33% in the most recent fiscal year (Year 2).

#### 5. Industry Analysis: Estimates of industry averages for this ratio: How does the ratio compare with the industry?

Upper quartile	4.3
Middle quartile	2.2
Lower quartile	1.2

Based on the Industry Quartile Data from Dun & Bradstreet from 2021, Tesla, Inc. resides within the second quartile which would put this company right in line with industry peers.

#### 6. What are some risks or concerns if this ratio is TOO LOW?

If this ratio is too low, this presents the concern that the company may not have sufficient capital to cover its short-term obligations which can increase the risk of default.

#### 7. What are some actions that could INCREASE this ratio?

A few actions could be taken to increase this ratio such as issuing long-term debt to increase cash, liquidating obsolete fixed assets, or retaining more earnings if dividends are paid.

#### 8. What are some risks or concerns if this ratio is TOO HIGH?

If this ratio is too high, this could be seen as firm management not appropriately deploying capital to generate returns for the company. This could signify a lower ROA metric than desired.

#### 9. What are some actions that could DECREASE this ratio?

Some actions that could be taken to decrease this ratio would be paying out dividends to shareholders or deploying cash to purchase fixed assets expanding operations.

#### 10. Why would this ratio be commonly considered as a key ratio at your organization, and in organizations in general?

This ratio can be used as a metric to test effective asset management and operational investment. Many organizations would want to have enough assets to cover their obligations but not too much liquidity, implying resources are not working to generate returns for shareholders.

#### 11. What actions and/or decisions (if any) in your operational area/unit could influence this ratio?

In my organization, I work to provide resolutions to our clients which sometimes involve monetary compensation. Depending on the size or volume of money given away, my department could impact on the amount of cash my company has at the end of the year, reducing current assets or increasing current liabilities.

#### Ratio 3 Name & Formula:

Days in Accounts Receivables = DAR = AR/average daily revenues = AR / (revenue/365)

#### 1. What does this ratio tell you?

This ratio, sometimes referred to as Days Sales Outstanding, tells us how many days it takes for a company to collect cash for sales that it makes.

#### 2. In general, would you like this ratio to be higher or lower? Why?

In general, we would like this ratio to be lower because this signifies effective cash management. According to the cash conversion cycle equation (CCC = DSO + DOH - DPO), a lower ratio lowers the cash conversion cycle.

#### 3. Compute this ratio for Year 2:

Tesla, Inc. in Year 2 had a DAR (DSO) of 20.92 days, meaning it took an average of 21 days to collect cash for sales.

#### 4. Trend Analysis: Compute this ratio for Year 1. Did the ratio get better or worse from year 1 to year 2?

Tesla, Inc. in Year 1 had a DAR (DSO) of 15.54 days; this represents an increase of 34.68% which means that the firm was less effective than the previous year at collecting cash for sales. In summary, the ratio got worse.

#### 5. Industry Analysis: Estimates of industry averages for this ratio: How does the ratio compare with the industry?

Upper quartile	9 days
Middle quartile	12
Lower quartile	14

Based on information drawn from Dun & Bradstreet for the 2021 year, Tesla, Inc. falls within the first quartile. This means that the company is less effective than its competitors on average at collecting cash from sales.

#### 6. What are some risks or concerns if this ratio is TOO LOW?

If this ratio is too low, it may imply that the firm either is missing a market by not extending credit on sales or that they believe the creditworthiness of their consumers has declined – signaling a negative outlook on economic activity.

#### 7. What are some actions that could INCREASE this ratio?

Generally, the most effective action to increase this ratio is firms extending internal credit/payment plans to their consumers. Another action that could be taken is to decrease overall sales, but this is not advantageous.

#### 8. What are some risks or concerns if this ratio is TOO HIGH?

If this ratio is too high, this signals that the company is not able to collect cash from their customers in a timely manner which can lead to bad debt concerns, along with potential liquidity concerns.

#### 9. What are some actions that could DECREASE this ratio?

The main action that could be taken to decrease this ratio is to lower the amount of sales sold on credit to consumers, which will decrease the account receivable asset and subsequently decrease the overall ratio.

### 10. Why would this ratio be commonly considered as a key ratio at your organization, and in organizations in general?

This ratio is not generally measured at my company, but in general this ratio is important to management when trying to determine the effectiveness of cash management and sales.

#### 11. What actions and/or decisions (if any) in your operational area/unit could influence this ratio?

Since my department does not function in an "sales" capacity, my unit would not have any influence on this ratio.

#### Ratio 6 Name & Formula:

Net Profit Margin = net income / total revenues

Aka Return on Sales

#### 1. What does this ratio tell you?

This ratio informs analysts of the proportion of sales dollars that are considered profit. When assessing Net Profit Margin, analysts can determine the efficiency of a company regarding wealth generation and cost management.

#### 2. In general, would you like this ratio to be higher or lower? Why?

Generally, we would like to see this ratio be higher because this means the firm is successfully managing costs and delivering profits to shareholders which can be paid out via dividends or retained for further growth via retained earnings,

#### 3. Compute this ratio for Year 2:

Tesla, Inc. had a Net Profit Margin of 7.26% in Year 2.

#### 4. Trend Analysis: Compute this ratio for Year 1. Did the ratio get better or worse from year 1 to year 2?

In Year 1, Tesla, Inc. had a Net Profit Margin of 15.50%. This ratio significantly worsened for the firm, decreasing by 53.16% YoY, meaning the firm was generating less proportional profit in Year 2 compared to Year 1.

#### 5. Industry Analysis: Estimates of industry averages for this ratio: How does the ratio compare with the industry?

Upper quartile	5.3%
Middle quartile	4.7
Lower quartile	1.2

Although Tesla, Inc. performed less efficiently in Year 2 compared to its prior year, when compared to industry competitors the firm performed very well being within the fourth quartile based on Dun & Bradstreet metrics (2021).

#### 6. What are some risks or concerns if this ratio is TOO LOW?

If this ratio is too low, there are concerns that the firm is not effectively managing costs causing less profits to be generated for shareholders by the company.

#### 7. What are some actions that could INCREASE this ratio?

To increase this ratio, a company would primarily want to look at methods of cost reduction by either pursuing strategic partnerships with suppliers to lower the cost of goods or lower operating costs.

#### 8. What are some risks or concerns if this ratio is TOO HIGH?

There are not many concerns relating to this ratio being too high if it is based on **accurate** reporting. However, if a company is performing far better than competitors, management may be adjusting financial reports (smoothing).

#### 9. What are some actions that could DECREASE this ratio?

Actions that could be taken to decrease this ratio would be more investment in research and development or capital investment in fixed assets, which would increase operating expenses as well as depreciation expense.

# **10.** Why would this ratio be commonly considered as a key ratio at your organization, and in organizations in general? For profit organizations are, as the description implies, focused on profits. Net Profit Margin is a primary metric for measuring this profitability.

#### 11. What actions and/or decisions (if any) in your operational area/unit could influence this ratio?

If my unit gives out too much monetary compensation or courtesy adjustments, we can increase total firm costs which will lower overall profitability causing this ratio to decrease.

#### Ratio 7 Name & Formula:

Return on Assets = net income / total assets

#### 1. What does this ratio tell you?

This ratio informs financial analysts of how much profit is generated per dollar value of assets. This ratio is seen as a profitability ratio.

#### 2. In general, would you like this ratio to be higher or lower? Why?

Generally, we would like to see this ratio be higher because this means that firm management is effectively able to generate profits with the resources afforded to them – implying wealth generation for shareholders.

#### 3. Compute this ratio for Year 2:

In Year 2, Tesla, Inc. had a Return on Assets ratio of 5.81%

#### 4. Trend Analysis: Compute this ratio for Year 1. Did the ratio get better or worse from year 1 to year 2?

In Year 1, Tesla, Inc. has a Return on Assets ratio of 14.07%. This signifies a very drastic decrease in this ratio, with a YoY change of -58.70%, meaning the company was performing worse in Year 2 than Year 1.

### 5. Industry Analysis: Estimates of industry averages for this ratio: How does the ratio compare with the industry?

Upper quartile	15.4%
Middle quartile	9.2
Lower quartile	2.2

In Year 2, Tesla, Inc. fell within the second quartile of the industry using numbers from 2021 retrieved from Dun & Bradstreet. This means the company was performing in the on the lower end of the spectrum of the industry compared to competitors.

#### 6. What are some risks or concerns if this ratio is TOO LOW?

If this ratio is too low, there may be some concerns that the company are not effectively using assets to generate profits which can raise questions around the efficiency and wealth generation capabilities of firm management.

#### 7. What are some actions that could INCREASE this ratio?

Actions that can be taken to increase ratios would be using net income to retire some debt (lowering total assets), reducing costs to increase net income, or discarding obsolete inventory that may be increasing the assets figure.

#### 8. What are some risks or concerns if this ratio is TOO HIGH?

If this ratio is too high, there may be concerns around management's ability to take strategic risks to generate wealth. If the ratio is too high, generally assets are too low, meaning the firm is not expanding appropriately.

#### 9. What are some actions that could DECREASE this ratio?

The primary action that can be used to decrease this ratio would be to use profits generated by the firm to fund expansion. In practice this means investment in long-term fixed assets (using cash or debt) to expand operational capacity, which can lead to further wealth generation for shareholders.

**10.** Why would this ratio be commonly considered as a key ratio at your organization, and in organizations in general? As stated, when for-profit firms look to measure profitable using ratios such as Net Profit Margin, Return on Assets, and Return on Equity. This can benchmark management performance and identify opportunity areas.

#### 11. What actions and/or decisions (if any) in your operational area/unit could influence this ratio?

Since my unit can impact Net Income via monetary compensation costs, we would be able to influence this ratio by lowering the numerator if too much money is given away.

#### Ratio 8 Name & Formula:

Return on Equity = net income / total equity

#### 1. What does this ratio tell you?

This ratio informs financial analysts of the ability of company management to generate returns relative to equity investment. Generally, this ratio is used to compare company performance to an investor's required rate of return.

#### 2. In general, would you like this ratio to be higher or lower? Why?

In general, we would like to see this ratio be higher because a higher ratio means that firm management is providing sufficient profit relative to capital investment from equity shareholders.

#### 3. Compute this ratio for Year 2:

In Year 2, Tesla, Inc. had a Return on Equity ratio of 9.37%.

#### 4. Trend Analysis: Compute this ratio for Year 1. Did the ratio get better or worse from year 1 to year 2?

Comparing the Year 2 figure (9.37%) to the Year 1 figure (23.94%), we notice that the company performed worse and provides less of a return to equity shareholders. The YoY change was a decrease of 59.38%.

#### 5. Industry Analysis: Estimates of industry averages for this ratio: How does the ratio compare with the industry?

Upper quartile	57.8%
Middle quartile	29.7
Lower quartile	10.3

Based on 2021 Industry metrics provided by Dun & Bradstreet, Tesla, Inc. performed in the first quartile for Year 2. This means that the return generated for equity shareholders was significantly lower than industry competitors.

#### 6. What are some risks or concerns if this ratio is TOO LOW?

Due to this metric being a benchmark for company returns relative to an investor's required rate of return, if this metric is too low it may cause shareholders to lose faith in the ability of the company to generate sufficient wealth which can lead to dropping valuation.

#### 7. What are some actions that could INCREASE this ratio?

A couple actions can be used to increase this ratio such as cost reduction leading to higher net income values or retirement of equity shares via debt issuance. Changes in a firm's capital structure will adjust this figure as if a firm is financed by more debt than equity, this ratio will naturally be higher.

#### 8. What are some risks or concerns if this ratio is TOO HIGH?

In general, this ratio being too high is not inherently a bad thing. However, from a risk perspective if this number is too high due to the firm having a large amount of debt financing this can introduce increased solvency risk which can lead to a negative outlook on the company.

#### 9. What are some actions that could DECREASE this ratio?

Actions that can be used to decrease this ratio would be retirement of long-term debt, increased capital investment (fixed assets) or equity issuance.

#### 10. Why would this ratio be commonly considered as a key ratio at your organization, and in organizations in general?

This is a very important ratio for many organizations because it measures a company's ability to provide a return to its shareholders. This is a benchmark that can be used to determine efficiency in wealth generation for shareholders.

#### 11. What actions and/or decisions (if any) in your operational area/unit could influence this ratio?

Since my unit can impact Net Income via monetary compensation costs, we would be able to influence this ratio by lowering the numerator if too much money is given away.

#### Ratio 9 Name & Formula:

Cash Flow Statement Ratios = Cash Flow from Operations (CFO) relative to other items, such as:

Note: CFO = top category of CF Statement.

	Year 2	Year 1
CFO / Revenue =	.19	.16
CFO / Operating Income =	2.11	1.49
CFO / Total Assets =	.12	.12
CFO / Total Equity =	.20	.21
CFO / Total Debt =	.31	.31

#### 1. In general terms, what do these ratios & ratios like these tell you?

In general, many of the ratios listed above are considered performance ratios which inform us of how well a company is performing. A general explanation is listed below:

**CFO/Revenue** – is a measurement of the amount of operating cashflow that is generated per dollar in sales **CFO/Operating Income** – is a measurement of the firm's ability to generate cash from firm operations **CFO/Total Assets** – is a measurement of operating cash flow attributable to all capital investors (both equity and debt) **CFO/Total Equity** – is a measurement of operating cash flow attributable to equity shareholders

The last ratio is cash flow from operations to total debt, and this is considered a coverage ratio. This ratio does not measure performance but rather is used as a risk measure related to the firm.

**CFO/Total Debt** – is a metric used to assess overall financial risk and leverage to the firm, sometimes referred to as the debt coverage ratio.

#### 2. In general, would you like these ratios to be higher or lower? Why?

Regarding performance ratios, we would like these ratios to be higher because this means that the company is able to generate sufficient cash given the relative measure (revenue, total assets, etc.). The same is true for coverage ratios, because this means that firms are effectively generating sufficient cash inflows to cover any debt obligations they may have.

#### 3. Compute these ratios for Years 1 & 2 in the columns above:

Please see the above.

#### 4. Trend Analysis: In general terms, did the ratios generally get better or worse?

In general, the ratios got better or remained neutral. The CFO/Total Assets and CFO/Total Debt figures saw no change YoY, whereas the CFO/Revenue and CFO/Operating Income saw improvements of 20.39% and 41.45% YoY respectively. The one ratio that did get worse is CFO/Equity, which saw a decline of 3.30% YoY.

## 5. Industry Analysis: Why would it be valuable to evaluate how a firm's CFO ratios (such as the ones above) compare with the industry averages for the ratios?

It is valuable to compare a firm's cash flow ratios to industry averages because then we can draw conclusions on the performance of competitors. With the core principle, "cash is king", we would want to determine if a company that is performing with a higher profitability than industry competitors has the cash generation to warrant sustainability. Due to the way accounting practices are set up, company management can smooth/alter their earnings figures to display earnings figures that are better than reality. Having comparison figures from actual cash generation provides a validation process to determine what is factual/sustainable and what is the result of accounting choices.

#### 6. What are some risks or concerns if these ratios are TOO LOW?

If these ratios are too low, we can have concerns around both the firm's ability to generate cash, and, if the company shows strong profitability, the sustainability of income statement earnings. Both of these can increase a company's risk profile and potentially lead to negative forecasts or regulatory consequences.

#### 7. What are some actions that could INCREASE these ratios?

The way to increase these ratios is simple; increase the amount of cash generated from operations. Three types of actions could be taken given the cash conversion cycle formula (CCC = DSO + DOH - DPO): Reduce the amount of credit extend to customers and increase the amount of sales made in cash, reduce obsolete inventory and manage inventory more effectively given demand, adjust credit terms with suppliers to allow more time before payments are made. All these actions function to reduce the cash conversion cycle and thereby increase the cash inflows of a company.

#### 8. What are some risks or concerns if these ratios are TOO HIGH?

The primary risk of these ratios being too high relates to ineffective use of capital. If a company has excessively high cash inflows but lacks sufficiently large cash outflows, many investors could see this as company management missing opportunities to deploy cash and generate returns. While we would prefer these ratios to be high, being too high raises the concern of ineffective resource management.

#### 9. What are some actions that could DECREASE these ratios?

Ways to decrease these ratios would be centered around expansion activities, primarily related to increasing debt, assets and revenues. This can include using debt to finance fixed asset investments, expanding operations and increasing inventory to meet a perceived demand increases, and extending credit to consumers allowing for higher revenue numbers but less cash transactions.

## 10. Why would these ratios be commonly considered as key ratios at your organization, and in organizations in general?

These ratios are key for company management to understand their cash management efficiency. Management in many organizations should use these ratios to understand if they are being too conservative with their actions, potentially missing investment opportunities, or if they are operating too aggressively which puts the company at more risk of being unable to generate sufficient cash returns for investors or to satisfy debt obligations.

#### 11. What actions and/or decisions (if any) in your operational area/unit could influence these ratios?

My operational unit provides monetary compensation to our clients when there have been any grievances or missed opportunities due to errors made by my company. These monetary compensations are directly related to cash outflows and as such can have an impact on the CFO figure of my company.