

A Project on
Financial Statement Analysis

Submitted By

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Management Accounting for Engineers
Financial Statement Analysis

- **Company reviewed: NVIDIA**
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Introduction

NVIDIA is one of the most dominant suppliers of AI hardware and software. It manufactures graphics processors (the so-called “NVIDIA graphics chips” are some of the most famous graphics cards in the market), IC Components (integrated circuits), gaming consoles, and high-end GPU’s. Ostensibly the company also has a large amount of inventory, turnovers, sales, costs and other factors associated with the process of building, coding, manufacturing and supplying the above-mentioned things they are famous for. The following report aims to analyse and quantify the progress of NVIDIA over the course of 5 different years (2018-2022). The process used mainly involves ratio analysis and how each ratio spins a story around the progress, or the potential lack, thereof, of NVIDIA. These ratios, let it be known to the readers, are present as a result of NVIDIA’s K10 form to the SEC (Securities and Exchange Commission, USA), thereby making that as the primary source of the financial statements collected in due process of making this investigative report.

On this note, the author will start the analysis of NVIDIA with a look into the calculated ratios, then break it down in order to highlight the importance of the same. Moreover, the analysis also includes prescriptive methods for the same.

Analysis

	2022	2021	2020	2019	2018
Current Ratio	6.6503	4.0904	7.6738	7.9436	8.0269
Debt Equity Ratio	0.4113	0.4122	0.1631	0.2128	0.2677
Operating Margin	37.3077	27.1784	26.0671	32.4684	33.0451
Inventory Turnover Ratio	3.6234	3.4387	4.239	2.8857	4.8894
Receivables Turnover	5.788	6.865	6.589	8.2275	7.6791
EBITDA Margin	41.6698	33.7631	29.5567	34.7047	35.0937
Day's Sales in Receivables	63.062	53.1685	55.3952	44.3633	47.5319
ROE- Return on Equity	36.6451	25.6438	22.9105	44.3267	40.7884
ROA - Return on Assets	22.0698	15.0464	16.1479	31.1541	27.1061
Profit Margin	36.2339	25.979	25.6091	35.3448	31.3671

a. Current Ratio: -

1. Describes the comparison between the assets and liabilities.
2. A higher ratio implies faster the meeting of short-term liabilities/obligations.
3. Here, the highest Current ratio of 8.0269 is observed in 2018, which then suffered a decline all the way up to 2021. However, the same again took a rise in 2022, implying a better capability to pay off short-term loans.

b. Debt Equity Ratio

1. Debt Equity Ratio shows whether a company is using debts to finance its operations. Higher the Debt Equity ratio, higher it displays the company's aggression towards financing its operations using debt.
2. In 2018 and 2019, the D-E ratio looks approximately equal/similar.
3. By 2020, the Debt Equity ratio reduces, implying a possibly increased shareholders equity to finance its operations.
4. However, 2021 and 22 brings forth a number of 0.4 as the debt equity ratio, implying a slight nudge towards debts to operate. However, in absolute terms, the debt equity ratio for a large venture like NVIDIA looks good enough.

c. Operating Margins

1. Measures how much profit a company makes on a dollar of its sales. This is post the deduction of operating expenses.
2. There is a decline in the operating margin in 2020 and 2021. However, this value picks up by 2022 again, leading to the highest OM value in the 5 year course of NVIDIA.

d. Inventory Turnover Ratio

1. This is a simple measure of efficiency. The inventory turnover ratio is a measure of how well the inventory has been turned over, with respect to the cost of goods sold (COGS) in a given timeframe.
2. It explains how efficiently NVIDIA uses its inventory by dividing the COGS by the average inventory value in that year.
3. The lowest ITR seen here is in the year 2019, with a value of 2.8857. The ITR picks up in 2020, but again drops slightly to 2021, 2022, possibly implying a poorer sales strategy in these years, compared to 2020.
4. For most industries, the prescribed ITR is 5-10, however, NVIDIA falls short of these norms in all of the 5 years. This implies a looming revamp of the sales, merchandise and inventory strategy that is necessary. One example of a competitor with a good value in this factor (ITR) is Microsoft, with an ITR of 21.7 as of 2023.

e. Receivables Turnover

1. This factor has more to do with the way the company handles its credit and accounts receivables.
2. A higher receivables turnover implies greater efficiency in collecting outstanding balances and receivables from clients.
3. A low ratio would mean inefficient collection processes and vice versa for a high RT value.
4. The highest receivables turnover for NVIDIA got showcased in 2019, with a value of 8.23 (approx.). The lowest this value went to was 5.788 in 2022, implying a decreasing efficiency in credit and debt collection.

5. On an average, the norms suggest 7.8 as a “good” measure of receivables turnover, and NVIDIA may have fallen short of it by a few points, but it has stayed in close proximity to it. With better receivables strategy, they will be able to improve on the current numbers further- including ways like on-time invoicing, providing discounts and rewards to early repayments, etc.

f. EBITDA Margin

1. Measure of a company’s operating profit as a measure of its revenue.
2. EBITDA margin measures how profitable the periodic operations of NVIDIA is.

This also showcases the cost-cutting methods a company like NVIDIA applies to its operations.
3. The lowest, this value has gone down to, is in 2020 with a value of 29.557. The highest being 41.6698 in the year 2022.
4. In this regard, NVIDIA has done well to cost-cut its operations. Considering how the market average of EBITDA margin is over 10, NVIDIA has crossed this value in all 5 years, despite its decline in 2020.
5. This also implies NVIDIA’s operating expenses are lesser than revenue generated.

g. Day's Sales in Receivables:-

1. DSR is a measure of the average number of days a business takes to collect payments following a sale, thereby the “receivables” in the name.
2. Also called Day's Sales Outstanding, NVIDIA has this value the highest in the year 2022.
3. The average value this can take is also said to be 45 days or below, and NVIDIA does not seem to be doing well in this regard. Further strategies need to be devised so as to collect the receivables .

h. ROE, Profit Margin

1. Also called the DuPont's ratio, ROE or Return on Equity showcases the profitability of NVIDIA by converting equity into profits.
2. NVIDIA has the biggest drop in ROE in 2020, 21, however it picks up the pace in 2022. However, the ROE in 2022 has still not reached the 40's of 2018, 2019, however, this increase implies a scope of possible improvement in the years to come, for NVIDIA.
3. Profit Margin is also a similar tool to analyse the profitability of NVIDIA in the sense that it gauges the percent of sales that have converted into profit. Highest PM value again shows up in 2022, thereby corresponding with the DuPont analysis involving ROE.

Conclusion

NVIDIA as a company is doing well in terms of profitability, efficient processes, proper cashflows and Debt management. However, it can be seen in the ratio analysis that the company has been affected by the pandemic years, demarcated by the 2020 and 2021 years. This implies that the condition of NVIDIA is still in the recovery stage. However, with proper planning, resource management and strategies, they will be able to surpass their competitors with ease.