



## **Financial Statement and Analysis for NVIDIA Corporation**

Nvidia Corporation is a leading global designer and producer of semiconductor chips, graphics processing units (GPUs), and related technologies. The corporate office of the company is situated in Santa Clara, California. The main activities of Nvidia are the creation, marketing, and sales of high-performance GPUs and related products for the gaming, data center, professional visualization, and automotive markets on a global scale.

The primary objective of the organization is to develop state-of-the-art technologies for a range of applications, such as artificial intelligence, gaming, data centers, and the automotive industry.

In a market where there is fierce competition, Nvidia's main rivals are AMD, Intel, and other semiconductor manufacturers.

The company's ability to create cutting-edge products, along with its well-known brand and marketing initiatives in the GPU and AI computing markets, are major contributors to its success.

With a market capitalization of more than \$2 trillion as of March 2024, Nvidia is the third most valuable company in the world and the seventh publicly traded American company to be valued at more than \$1 trillion.

**Nvidia is a product-driven company** that mainly produces and markets GPUs, semiconductor chips, and associated hardware items. The company's main products are physical items that businesses and consumers can buy and incorporate into different computer systems and applications.

key points about Nvidia's product focus:

1. **GPU Hardware Products:** The majority of Nvidia's income comes from GPUs used in professional visualization, gaming, data centers, and AI/accelerated computing applications.
2. **Accelerated Computing Platforms:** Nvidia bundles its GPUs into hardware/software platforms such as EGX edge computing platforms and DGX AI systems, which are aimed at verticals such as cloud AI, autonomous cars, etc.
3. **Software and Services:** Nvidia provides GPU software tools such as CUDA-X libraries, simulation software, mapping software, etc. that go hand in hand with its hardware products, but they still make up a very small percentage of its revenue.
4. **Limited-Service Revenue:** Compared to other tech companies, Nvidia currently makes relatively little money on a recurring basis from software subscriptions, cloud services, or other service offerings.

5. Chip Design and Manufacturing: Nvidia creates its own GPU chips and uses TSMC and other foundry partners to produce the actual chips.

The great majority of Nvidia's revenue and operations are focused on the design, production, and distribution of physical semiconductor products, even though the company does offer some software and services linked to its hardware products, such as cloud computing services and CUDA programming tools. Nvidia is easily categorized as a product-based business due to its obvious focus on product offerings.

There are several indicators that show how their **business performance compares to other companies'** and explain why consumers choose Nvidia's products over those of rivals:

**Technological Innovation:** Nvidia is renowned for its state-of-the-art research and development initiatives, consistently pushing the limits of GPU performance, energy efficiency, and customized architectures for cutting-edge uses like autonomous driving and artificial intelligence.

Nvidia regularly contrasts its revenue growth and market share for data center GPUs with AMD's data center division. Nvidia reported data center revenue growth of 11% year over year in the most recent quarter, while AMD's revenue was estimated to have decreased.

**Performance and Efficiency:** Nvidia is well known for its high-performance GPUs, which allow for excellent graphics rendering, parallel computing, and acceleration for a variety of applications, including machine learning, scientific simulations, gaming, and professional visualization.

To compare its gaming revenue performance to the larger market, Nvidia may use aggregate PC gaming market data from outside sources, such as Jon Peddie Research, for their gaming segment.

**Brand Recognition and Reputation:** Nvidia's products are well-known for their high caliber, dependability, and performance in the professional and gaming markets, where the company has established a strong brand identity.

**Ecosystem and Software Support:** To help developers and researchers fully utilize the capabilities of its GPU hardware, Nvidia provides a vast ecosystem of software tools, libraries, and development platforms. This not only fosters a thriving community but also accelerates adoption across a range of industries.

Without offering precise revenue comparisons, Nvidia will talk about the qualitative momentum

among the big cloud providers, such as Microsoft, Amazon, Google, and so on, in relation to their data center segment.

The business of **Nvidia is very capital-intensive**, requiring large sums of money for both capital expenditure and research and development.

- **R&D Expenditure:** Nvidia spent \$3.6 billion, or roughly 16% of its \$26.9 billion in revenue, on research and development in the fiscal year 2023. The development of new GPU architectures, semiconductors, and accelerated computing technologies depends on this R&D investment.
- **Leading-Edge Manufacturing:** To push manufacturing boundaries, Nvidia must make significant investments in engineering capabilities.
- **High Capital Expenditures:** Nvidia spent \$3.5 billion on facilities, data centers, advanced fabrication equipment, and other long-term assets that were essential to its GPU product roadmaps in the fiscal year 2023.

- Facilities and Infrastructure: To support its engineering and production efforts, Nvidia maintains a global network of design centers, testing facilities, data centers, and other establishments.

### Commodity Characteristics:

- Graphics processing units (GPUs), which are essentially semiconductor chips, can be thought of as somewhat standardized hardware components. These are Nvidia's main products.
- With every new generation of chips, there is pressure on prices and a constant need to deliver more performance per watt.

**But Nvidia stands out in the semiconductor market**, especially in the GPU and specialized processor segments, and it's typically capital-intensive because of these things:

- High R&D expenditures to create cutting-edge GPU architectures and AI software functionalities. To keep its technological edge, Nvidia makes significant investments in R&D.
- Establishing an ecosystem centered on AI/HPC acceleration libraries and the CUDA programming model.
- Vertical integration with AI workload-optimized systems such as DGX servers.
- Proprietary designs and patented technologies power the semiconductor industry, requiring large expenditures in engineering and research.

To sum up, Nvidia's chip products have commodity dynamics, but they want to go beyond this by developing cutting-edge R&D and an AI/accelerated computing platform. The industry continues to require a significant amount of capital to sustain its leadership in GPU architectures and semiconductor manufacturing processes.

**Nvidia's previous outlooks have been more upbeat**, highlighting the company's strong position, technological leadership, and growth prospects in emerging markets. To preserve its competitive advantages, it does, however, also recognize the necessity of ongoing innovation, intellectual property protection, and skillful navigating of geopolitical and regulatory issues.

In contrast to its explosive growth **in the last few years, the company's business outlook now seems cautious** and a bit muted.

A few significant points:

- Nvidia's revenue in the fourth quarter of its fiscal 2023 dropped 21% year over year to \$6.05 billion, falling short of Wall Street's projections. Its gaming and data center businesses saw sharp declines, which was the main cause of this.
- Macroeconomic challenges, such as decreasing consumer demand and inventory adjustments that affect Nvidia's gaming division specifically, were acknowledged by CEO Jensen Huang.
- Nvidia did, however, voice optimism about AI's potential to fuel future growth for their new products and data center GPUs. AI will be "catalyzing" for computing going forward, according to the CEO. Another positive point mentioned by Nvidia was the high demand for data centers from US cloud service providers.

Nvidia balanced expectations by cautioning about ongoing gaming weakness and headwinds, setting a cautious tone for the near future. However, the business also expressed confidence that, in the long run, growing AI

adoption will drive demand for their chips and platforms. The outlook for overcoming present obstacles and seizing upcoming AI opportunities combines caution and optimism.

**Nvidia's quarterly and annual report footnotes:**

- Revenue Breakdown: information about the revenue composition by product category, clientele, region, etc.
- Justifications for any modifications to non-GAAP measures or adjustments to accounting procedures.
- Expense breakdowns with extra context, such as those for marketing, R&D, etc.
- Details on equity, share counts, and outstanding debt.
- Non-GAAP metrics, such as operating income and gross margins, are reconciled to GAAP.
- Disclosures regarding court cases, obligations, and backup plans.
- For every reportable business unit, segment reporting should include revenue and operating profit.
- Information on tax rates and justifications for quarters with unusually high effective tax rates.

**The Competitive Environment and Prospects**

The company's main rivals consist of:

- AMD is Nvidia's closest competitor in the GPU market. Recent years have seen AMD make tremendous progress, undermining Nvidia's hegemony in some market sectors.
- Nvidia may face competition from Intel due to its extensive resources and market share in the enterprise and data center sectors.
- Other Semiconductor Companies like Qualcomm, Samsung, and other fabless semiconductor companies in particular product categories or market niches, like mobile GPUs, AI accelerators, or specialized processors for cutting-edge applications.

Although Nvidia's competitors are not directly compared in the financial data, it provides market share, rates of relative revenue growth, claims about performance and capability and references for customer adoption.

To place itself in relation to rivals such as AMD in markets such as discrete desktop GPUs, data center accelerators, etc., Nvidia may use third-party market share data. The company will talk about how its revenue growth compares to the overall growth rates of end markets such as data centers and gaming, this enables comparisons to be inferred.

Executives make general claims about Nvidia's GPU performance, AI prowess, or platform advantages over legacy technologies or unidentified rival products. Without providing specifics, Nvidia emphasizes the growing uptake of its GPUs and AI platforms by cloud providers in comparison to previous generations and alternatives.

Future success for Nvidia is expected to depend on its capacity to uphold its position as a leader in technology, preserve its robust ecosystem and brand, and take advantage of new growth prospects in industries like Edge computing, data centers, autonomous cars, and artificial intelligence.

Future Nvidia performance will be influenced by the following important factors:

- **Sustainable Innovation:** Nvidia's capacity to create and market state-of-the-art GPU architectures, specialized processors, and associated technologies will be essential to preserving its competitive advantage and meeting changing consumer needs.
- **Growth Market Expansion:** Revenue growth and diversification will depend on the company's ability to successfully enter and take a sizable market share in developing industries like artificial intelligence, data centers, and autonomous driving.
- **Ecosystem and Software Support:** To draw and keep developers, researchers, and clients from a variety of industries.
- **Forming Strategic Alliances and Collaborations:** Establishing alliances and collaborations with important stakeholders in sectors such as healthcare, scientific research, and automotive can lead to new opportunities for expansion and technology adoption.

## **Financial Ratios**

### 1. Profitability Ratios (ability to translate sales into profits)

a)  $\text{Net Profit Margin} = \text{Net Income} / \text{Revenue}$

Calculates the portion of each dollar of revenue that, after all costs, is turned into profit. Although a reasonable margin varies depending on the industry, higher is generally better. Manufacturing and other capital-intensive industries typically have smaller profit margins.

b)  $\text{Return on Investment (ROI)} = \text{Net Income} / \text{Total Investment}$

Demonstrates how profitable an investment is in relation to its cost. Greater ROI denotes a more efficient use of investment funds. Compare with competitors or industry standards.

### 2. Activity Ratios (tests of efficiency)

a)  $\text{Days' Sales Outstanding (DSO)} = \text{Accounts Receivable} / (\text{Annual Revenue}/365)$

Evaluates the speed at which the business receives payment after a sale. Faster cash collections result from lower DSO, which is desirable.

b)  $\text{Inventory Turnover} = \text{Cost of Goods Sold} / \text{Average Inventory}$

Shows the number of times that inventory is sold and replaced over time. A higher ratio denotes more effective inventory control.

### 3. Liquidity Ratios (test of solvency)

a)  $\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$

Evaluates a company's capacity to pay short-term obligations with short-term assets. A ratio greater than one is ideal.

b)  $\text{Acid Test (Quick) Ratio} = (\text{Current Assets} - \text{Inventory}) / \text{Current Liabilities}$

By removing inventory, it is more cautious than the current ratio. shows that having only cash, marketable securities, and receivables will be sufficient to meet current obligations.

#### 4. Leverage Ratios (ability to meet debt obligations)

a) Debt Ratio = Total Debt / Total Assets

Demonstrates the percentage of assets financed by debt. Less financial risk is indicated by a lower ratio.

b) Debt-to-Equity Ratio = Total Debt / Shareholders' Equity

Compares the amount of debt to equity. A higher ratio denotes a higher level of debt financing and risk exposure.

**The analysis suggests that Nvidia is a robust and financially sound company** that is well-positioned to maintain its leadership in the specialized semiconductor and GPU markets thanks to its strong brand equity and emphasis on innovation. From the financial report, several important points are evident:

- Nvidia's ability to successfully convert revenues into profits is demonstrated by its impressive profitability metrics, such as net profit margins and return on investment.
- The company's activity ratios, such as days sales outstanding and inventory turnover ratios, demonstrate its effective operations.
- Nvidia competes with rivals such as AMD and Intel in the fiercely competitive technology market. To preserve its competitive advantages, it will be essential to continue investing in R&D and innovation.
- Though they present potential growth avenues, emerging opportunities in artificial intelligence (AI), data centers, autonomous driving, and edge computing require strategic navigation of technological, regulatory, and competitive challenges.

#### References

1. EDGAR Filing Documents for 0001045810-14-000030 (sec.gov).
2. NVIDIA Revenue 2010-2023 | NVDA | Macrotrends.
3. NVIDIA Corporation - Financial Info - Annual Meeting

#### Appendices

Table 1: Net Profit Margin

| Year              | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   | 2023   |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Net Income        | 440    | 631    | 614    | 1666   | 3047   | 4141   | 2796   | 4332   | 9752   | 4368   |
| Revenue           | 4130   | 4682   | 5010   | 6910   | 9714   | 11716  | 10918  | 16675  | 26914  | 26974  |
| Net Profit Margin | 10.65% | 13.48% | 12.26% | 24.11% | 31.37% | 35.34% | 25.61% | 25.98% | 36.23% | 16.19% |

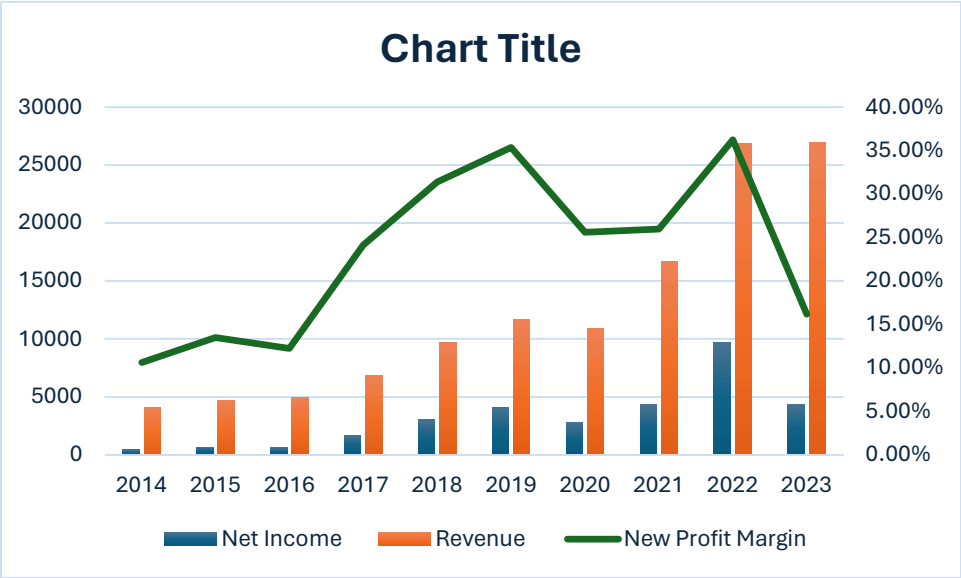


Table 2: Return on Investment (ROI)

| Year        | 2014  | 2015  | 2016  | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   | 2023   |
|-------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| Net Income  | 440   | 631   | 614   | 1666   | 3047   | 4141   | 2796   | 4332   | 9752   | 4368   |
| Total Asset | 7250  | 7201  | 7370  | 9841   | 11241  | 13292  | 17315  | 28791  | 44187  | 41182  |
| ROI         | 6.07% | 8.76% | 8.33% | 16.93% | 27.11% | 31.15% | 16.15% | 15.05% | 22.07% | 10.61% |

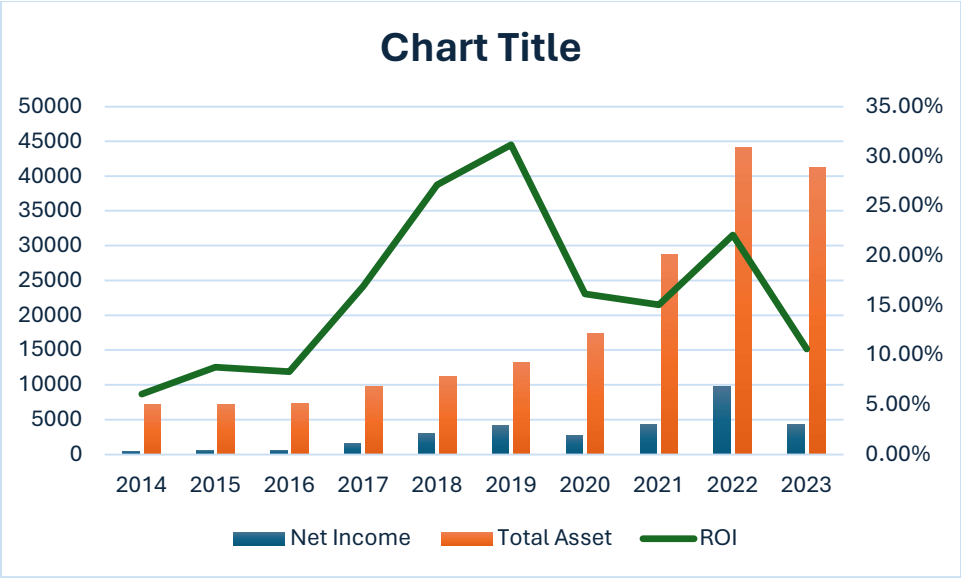


Table 3: Day’s Sales Outstanding (DSO)

| Year               | 2014     | 2015    | 2016    | 2017   | 2018    | 2019    | 2020    | 2021    | 2022   | 2023    |
|--------------------|----------|---------|---------|--------|---------|---------|---------|---------|--------|---------|
| Account Receivable | 426      | 474     | 505     | 826    | 1265    | 1424    | 1657    | 2429    | 4650   | 3827    |
| Revenue            | 4130     | 4682    | 5010    | 6910   | 9714    | 11716   | 10918   | 16675   | 26914  | 26974   |
| DSO                | 37.64891 | 36.9522 | 36.7914 | 43.631 | 47.5319 | 44.3633 | 55.3952 | 53.1685 | 63.062 | 51.7852 |

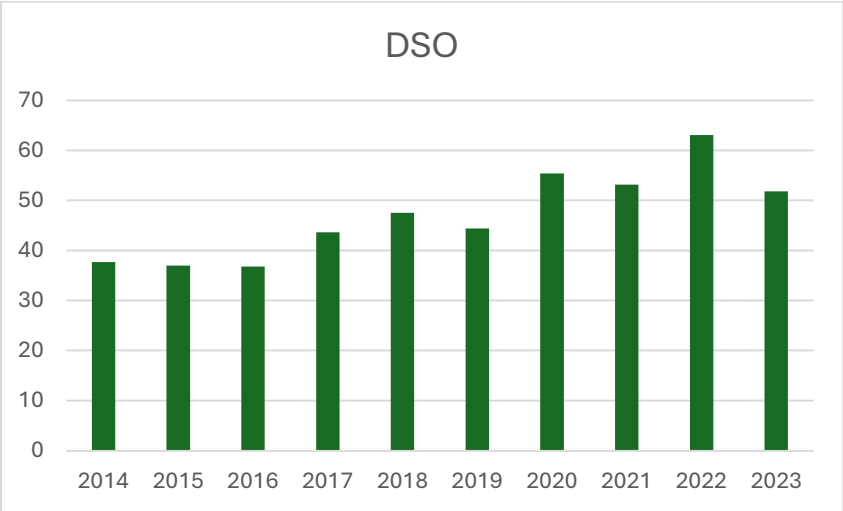
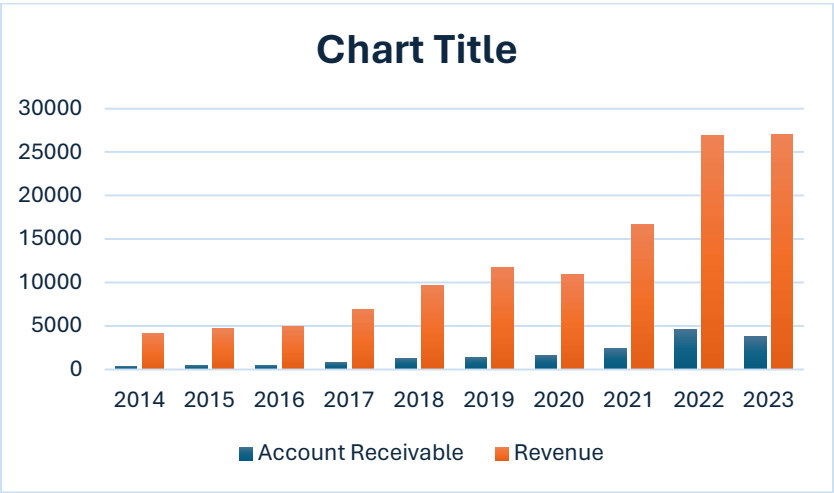


Table 4: Inventory Turnover

| Year               | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2021    | 2022    | 2023    |
|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Cost Of Revenue    | 1862    | 2083    | 2199    | 2847    | 3892    | 4545    | 4150    | 6279    | 9439    | 11618   |
| Average Inventory  | 387     | 483     | 418     | 794     | 796     | 1575    | 979     | 1826    | 2605    | 5159    |
| Inventory Turnover | 4.81137 | 4.31263 | 5.26077 | 3.58564 | 4.88945 | 2.88571 | 4.23902 | 3.43866 | 3.62342 | 2.25199 |



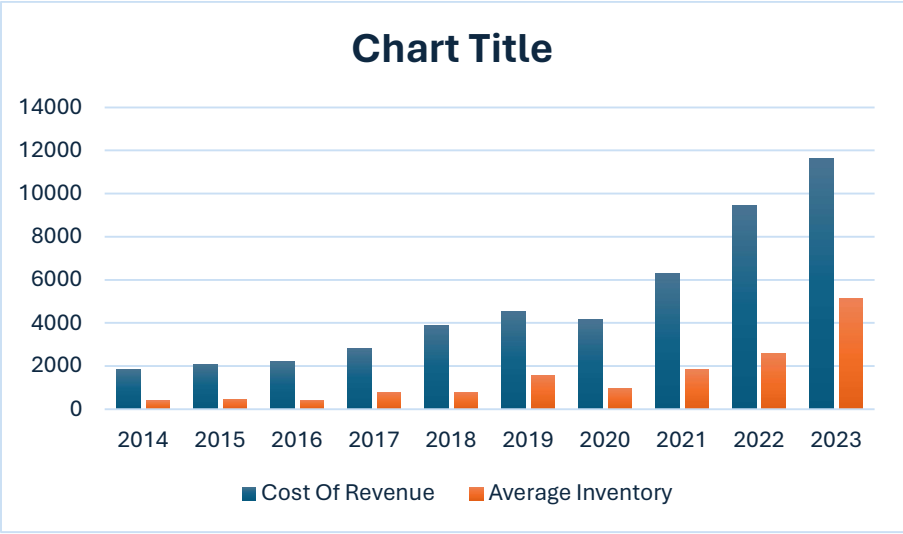


Table 5: Current Ratio

| Year                | 2014     | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2021    | 2022    | 2023    |
|---------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Current Assets      | 5624     | 5713    | 6053    | 8538    | 9255    | 10557   | 13690   | 16055   | 28829   | 23073   |
| Current Liabilities | 945      | 896     | 2351    | 1788    | 1153    | 1329    | 1784    | 3925    | 4335    | 6563    |
| Current Ratio       | 5.951323 | 6.37612 | 2.57465 | 4.77517 | 8.02689 | 7.94357 | 7.67377 | 4.09045 | 6.65029 | 3.51562 |

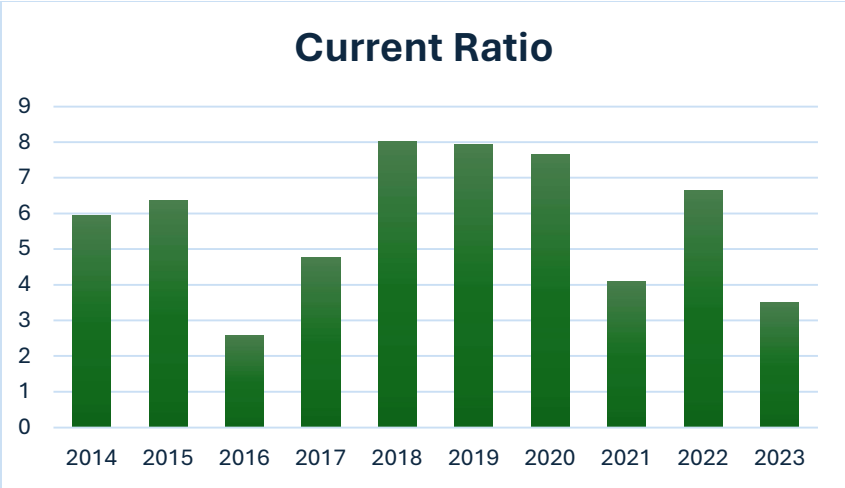
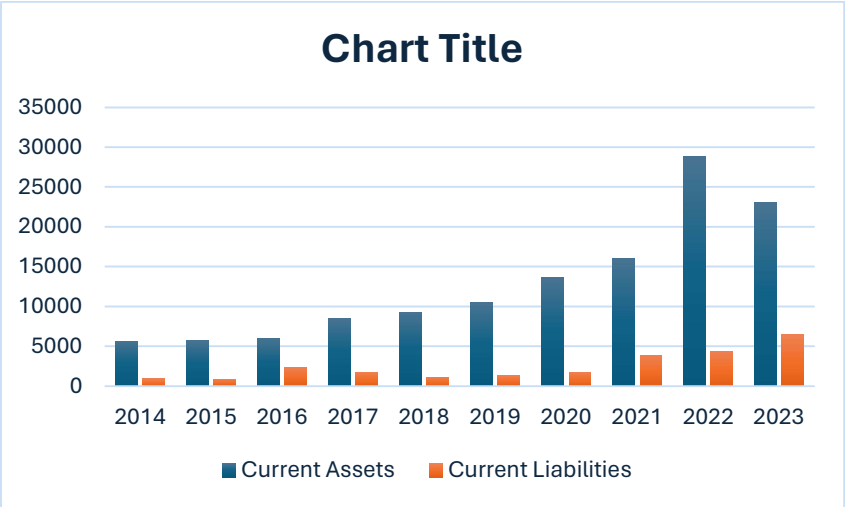


Table 6: Acid Test (Quick) Ratio

| Year                | 2014     | 2015    | 2016    | 2017   | 2018    | 2019    | 2020  | 2021    | 2022    | 2023    |
|---------------------|----------|---------|---------|--------|---------|---------|-------|---------|---------|---------|
| Current Assets      | 5624     | 5713    | 6053    | 8538   | 9255    | 10557   | 13690 | 16055   | 28829   | 23073   |
| Inventories         | 387      | 483     | 418     | 794    | 796     | 1575    | 979   | 1826    | 2605    | 5159    |
| Current Liabilities | 945      | 896     | 2351    | 1788   | 1153    | 1329    | 1784  | 3925    | 4335    | 6563    |
| Acid Test Ratio     | 5.541799 | 5.83705 | 2.39685 | 4.3311 | 7.33651 | 6.75847 | 7.125 | 3.62522 | 6.04937 | 2.72954 |

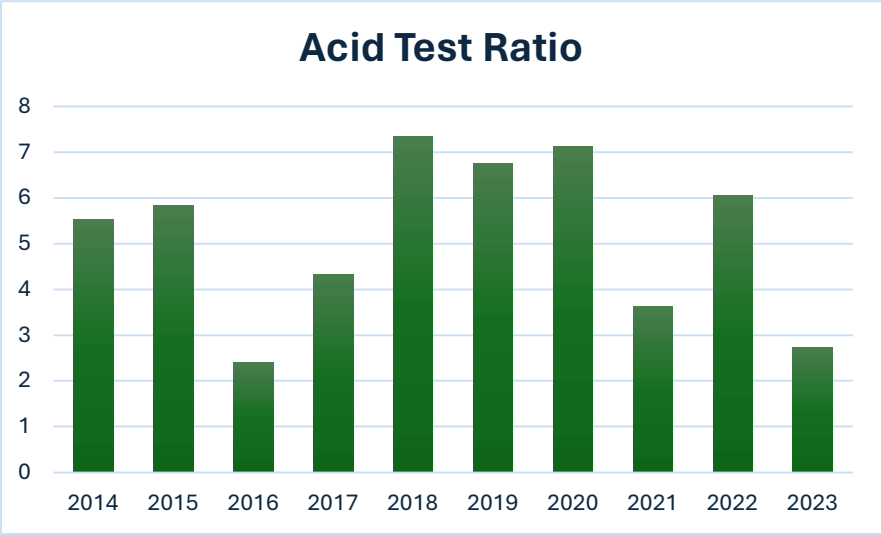
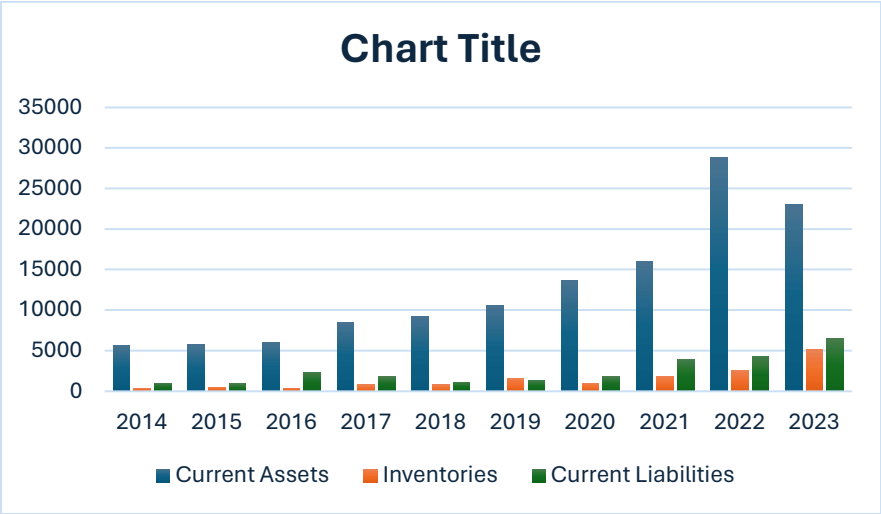


Table 7: Debt Ratio

| Year        | 2014   | 2015   | 2016  | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   | 2023   |
|-------------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|
| Total Debt  | 1848   | 1887   | 463   | 2260   | 2617   | 2621   | 3327   | 7973   | 13240  | 12518  |
| Total Asset | 7250   | 7201   | 7370  | 9841   | 11241  | 13292  | 17315  | 28791  | 44187  | 41182  |
| Debt Ratio  | 25.49% | 26.20% | 6.28% | 22.97% | 23.28% | 19.72% | 19.21% | 27.69% | 29.96% | 30.40% |

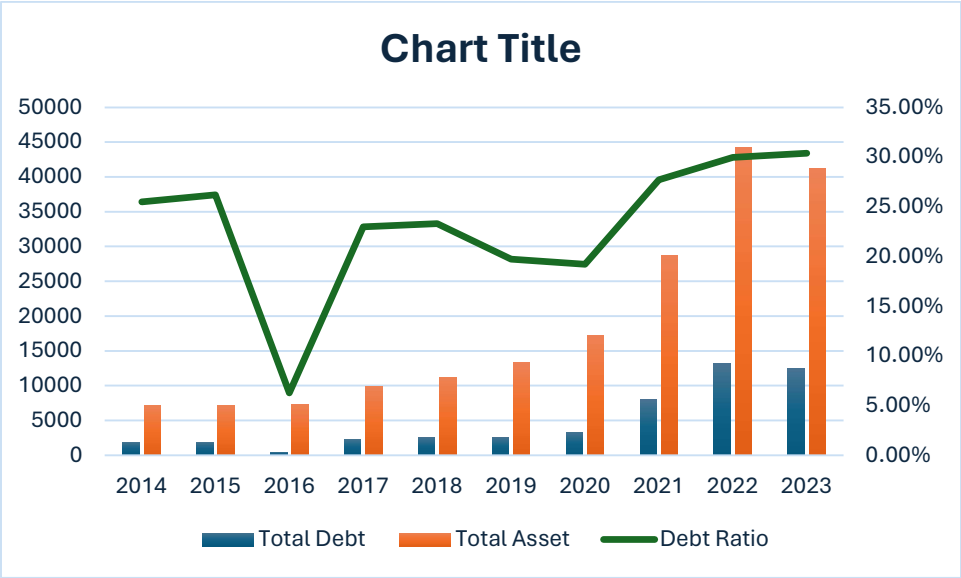


Table 8: Debt-to-Equity Ratio

| Year                 | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   | 2023   |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total Debt           | 1848   | 1887   | 463    | 2260   | 2617   | 2621   | 3327   | 7973   | 13240  | 12518  |
| Shareholders' Equity | 4456   | 4418   | 4469   | 5762   | 7471   | 9342   | 12204  | 16893  | 26612  | 22101  |
| Debt to equity Ratio | 41.47% | 42.71% | 10.36% | 39.22% | 35.03% | 28.06% | 27.26% | 47.20% | 49.75% | 56.64% |

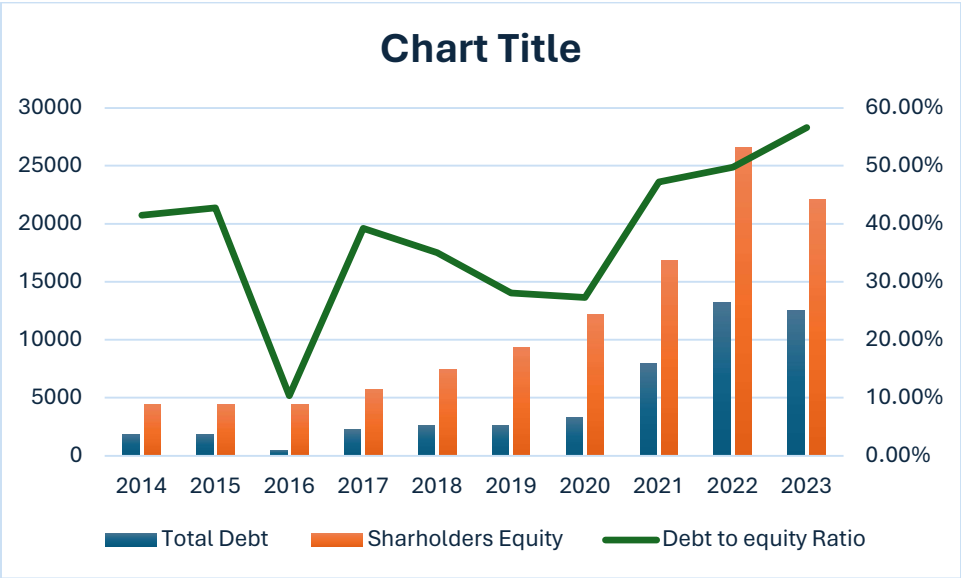


Table 9: Financial Ratios

| Financial Ratios     | Year                 | 2014     | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2021    | 2022    | 2023    |
|----------------------|----------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Profitability Ratios | Net Profit Margin    | 10.65%   | 13.48%  | 12.26%  | 24.11%  | 31.37%  | 35.34%  | 25.61%  | 25.98%  | 36.23%  | 16.19%  |
| Profitability Ratios | ROI                  | 6.07%    | 8.76%   | 8.33%   | 16.93%  | 27.11%  | 31.15%  | 16.15%  | 15.05%  | 22.07%  | 10.61%  |
| Activity Ratios      | DSO                  | 37.64891 | 36.9522 | 36.7914 | 43.631  | 47.5319 | 44.3633 | 55.3952 | 53.1685 | 63.062  | 51.7852 |
| Activity Ratios      | Inventory Turnover   | 4.81137  | 4.31263 | 5.26077 | 3.58564 | 4.88945 | 2.88571 | 4.23902 | 3.43866 | 3.62342 | 2.25199 |
| Liquidity Ratios     | Current Ratio        | 5.951323 | 6.37612 | 2.57465 | 4.77517 | 8.02689 | 7.94357 | 7.67377 | 4.09045 | 6.65029 | 3.51562 |
| Liquidity Ratios     | Acid Test Ratio      | 5.541799 | 5.83705 | 2.39685 | 4.3311  | 7.33651 | 6.75847 | 7.125   | 3.62522 | 6.04937 | 2.72954 |
| Leverage Ratios      | Debt Ratio           | 25.49%   | 26.20%  | 6.28%   | 22.97%  | 23.28%  | 19.72%  | 19.21%  | 27.69%  | 29.96%  | 30.40%  |
| Leverage Ratios      | Debt to equity Ratio | 41.47%   | 42.71%  | 10.36%  | 39.22%  | 35.03%  | 28.06%  | 27.26%  | 47.20%  | 49.75%  | 56.64%  |

