



2021

POLARIS®



Financial Valuation & Analysis of Polaris Inc. (PII)

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Polaris Inc.

At your request, I have performed a security analysis and valuation engagement, as defined in the FIN-498 Capstone Project Instructions. The valuation is for Polaris Inc. as of 12/31/2020. This valuation was performed to evaluate the financial stability and to estimate the intrinsic value of Polaris Inc.'s stock. The estimate of value that results from a valuation engagement is expressed as a conclusion of value.

We were restricted or limited in the scope of all work or data available for analysis as follows:

- Data is as of 12/31/2020

We have estimated the Fair Market Value on a controlling interest, non-marketable basis for 100% of Polaris Inc. voting diluted common shares as 12/31/2020 as described within the valuation report.

Our conclusion is \$159.09 Per Share, as summarized below. This conclusion is subject to previous market conditions and market assumptions as of 12/31/2020.

In arriving at this opinion of value, we relied on a "value in use" or a going-concern premise. This premise assumes that Polaris Inc. is an ongoing business enterprise with management operating rationally to maximize shareholder value.

We hope you find this detailed information useful.

Understanding & Analysis: Polaris Inc.

Understanding the Business:

Polaris Inc., a corporation founded in 1941 specializes in designing, engineering, and manufacturing powersport vehicles. Originally named Polaris Industries Inc. but was renamed in 2019 to Polaris Inc. where they operate under two divisions, Polaris Defense and Polaris Commercial. Specific vehicles they manufacture include Off-Road Vehicles for recreational and utility use, including side-by-side vehicles, On-Road Vehicles, Snow Vehicles, Commercial, Government and Defense Vehicles, and Boats, together with the Parts, Garments, and Accessories (PG&A) as well as Polaris Adventures. Polaris Inc. Sells their products through dealers and distributors who are located in the United states, Canada, Western Europe, Australia, and Mexico.

Polaris Inc. Key Products:

- **Off-Road Vehicles**

Polaris Inc. On-Road Vehicles include Polaris Inc. brand side by sides, ATVs, and single-seat vehicles. Polaris GENERAL, SPORTSMAN ACE, RANGER, RZR, plus a segment of Hammerhead Off-Road Vehicles are included in their lineup of all Off-Road's. Off-Road Vehicles primary use is for recreation and such sports as fishing and hunting as well As for trail undo riding, and utility purposes on worksites farmland and various other utility-based jobs.



- On-Road Vehicles

Polaris Inc. takes innovation on the road with the legendary motorcycle brand, a radical three-wheel roadster, an electric vehicle from personal transport and a personal quadricycle for international markets. Products included are Indian Motorcycles, Slingshot Open-Air Roadster, GEM Electric Low-Speed Vehicles, Aixam Quadricycles, and GOUPiL Industrie Electric Utility Vehicles.



- Snow Vehicles

Founders of Polaris Inc. developed the first snowmobile in 1955 and the company has continued to innovate in this industry ever since. Even branching out into the exciting new sport of snow

biking. Their segment of snowmobile products includes Polaris Snowmobiles and Polaris Timbersled Snow Bikes.



- Commercial, Government & Defense

Polaris Inc. has an extensive lineup of passenger and utility vehicles that fit a variety of commercial, government, and defense applications. Polaris Commercial line of products include Polaris PRO XD, GEM Electric Low-Speed Vehicles, and Taylor-Dunn Vehicles. While their Government & Defense lineup includes vehicles specific for Defense, Fire & Rescue and Law Enforcement.



TAYLOR-DUNN®



- Boats

Polaris Inc. Boat product portfolio features a lineup of highly recognizable pontoon, deck and cruiser boats from Bennington, Godfrey and Hurricane.



Polaris Inc. Key Customers and Suppliers, Competitors, and Business Cycle:

Polaris Inc. key customers include those within the auto and truck parts industry, the rental and leasing industry, and the automotive aftermarket industry. Their products are sold through the network of approximately 1800 independent dealers in North America, and approximately 1700 independent international dealers through 23 subsidiaries and approximately 75 distributors in over 100 countries outside of domestic markets. In addition to these markets, Polaris sells vehicles directly to military and government agencies in other national counts. Polaris sells their products under contractual arrangements pursuant to which the dealer or distributor is authorized to market specific products and with this, they're required to uphold performance within warranties and other services. They aim to grow their customer base with an expansion into many new countries with new product lines.

Polaris Inc. has suppliers in over 25 different industries where the supplier industries with the largest sales growth include those in the Recreational Products Industry, Miscellaneous Fabricated Product Industry, Scientific & Technical Instruments Industry, Auto & Truck Parts Industry, Food Processing Industry, Legacy Industry, and Communications Equipment Industry.

Polaris Inc. supplier's efficiency and growth tends to trend in the same direction as Polaris's data does.

Polaris Inc. competitors include Arctic Cat Inc., Fomo Corporation, Harley Davidson Inc., Kandi Technologies Group Inc., Trane Technologies Plc., Textron Inc., Yamaha Corporation, and Honda Motor Company. Their key competitors vary from each line of products that Polaris Inc. possesses.

Polaris Inc. business lifecycle is seemingly in the recovery phase which is due to the economic recession the United States faced from the COVID-19 pandemic in 2020. Polaris aims to continue to extend its sales and profitability so that they can reach an expansionary point and their business cycle. Over the past year they have continued to show growth in all sectors of their firm.

Over the last decade, Polaris has been evolving as a firm. They have positioned themselves away from a traditional discretionary spending business to a more diversified industrial Corporation that is more prominent in other sectors and worldwide. Despite the massive economic recession of 2020, Polaris has shown to be able to recover and sustain an efficient firm. This can be attributed to its globally leading production and innovation, which has LED way for stimulation in demand and has allowed Polaris to maintain a market leading spot in many of its product categories. As Polaris exited this economic turmoil, they had some of the best returns on invested capital figures within their industry. Polaris has reinforced their brand by becoming a strategic acquirer of other various businesses over the last decade airfare prices which has placed them in a much more beneficial position in comparison to their competitors. These strategic acquisitions along with new product introductions and innovation has helped their market position with continued revenue growth over the past decade. Polaris is acquisitions

have helped them broaden their global brand awareness and cross selling reach among many different sectors within the vehicle market.

PESTEL Analysis:

- *Political Factors that Impact Polaris Inc.:*
 - Political stability an importance of the Recreational Vehicle, and Auto & Truck manufacturing industries within the country's economy.
 - Increased political stability provides a friendly and balanced business environment while being able to predict market trends
 - Increased political issues may cause shareholder's and investor's trust in the firm to decrease
 - Within the current global political market, all tension and instability affect Polaris by limiting opportunities for growth and expansion
 - Bureaucracy in the Recreational Vehicle, and Auto & Truck Manufacturing industry by the government.
 - Bureaucracy, as well as corruption, has the protentional to negatively affect Polaris' business environment. Operating in global economies with higher levels of this corruption makes their business setting increasingly unpredictable for Polaris.
 - Tariffs and regulations related to the trade of Consumer Goods
 - Higher trade restrictions naturally can lead to a more complex business setting with the effects on exports and relationships among foreign trade partners
 - The inability for Polaris to efficiently trade with distributors due to tariffs or trade restrictions can lead to higher expenses for the firm, causing a detriment to net income
 - Taxation
 - As Polaris continues to enter new markets while they expand, countries with higher taxation levels will affect their profitability. A result of this is the effects on their international trade preventing exports.
 - Industrial safety regulations in the Consumer Goods sector

- Mandatory employee benefits

▪ *Economic Factors that Impact Polaris Inc.:*

- Type of economic system and stability of that system in countries of operation will affect the ability for Polaris to grow within that market.
 - Economic development directly impacts the performance of Polaris.
 - The rate of GDP growth in foreign markets has a direct impact on Polaris's ability to capture its long-term strategy for financial, operational and investment growth.
- Exchange rates and stability of host country currency.
- Interest rates within the global economy.
 - The ability for Polaris to assess how much investors are willing to lend and borrow, will allow them to take on future investments yielding higher growth for the firm
- Skill level of workforce in Recreational Vehicles industry.
- Unemployment rates, inflation rates, discretionary income levels, and economic growth rates have an impact on Polaris's operating, financing, and investing activities.
 - An increased unemployment rate allows Polaris to capture a more expansive working force for lower wage employees.
 - High economic growth rates allow for Polaris to assess their potential and existing consumers' ability and willingness to spend more on their products.
- Business Cycle Stage of Polaris along with competitors.
 - Polaris must be aware of the state of their current business cycle as well as their industry's cyclical movement

▪ *Social Factors that Impact Polaris Inc.:*

- Demographics and skill level of the population largely impacts whether Polaris's products could be marketed to specific markets

- Being able to understand customer demographics lead way for Polaris to notice certain trends within the demographics of the market, customer spending patterns, customer skill levels, the effectiveness of marketing strategies, and achieve their firm's objectives
- Leisurely interests.
 - Disruptions or changes in leisurely activities pose a threat to certain Polaris' products.
 - Understanding leisure trends amongst consumer in the market allows Polaris to stay a step ahead and target appropriate markets.
- Class distribution and income levels pertaining to class structure, hierarchy, and power structure within society are of importance to Polaris' ability to promote leisure and premium products to the public
 - Polaris may need to rely on niche marketing if most of the public was of lower class.
 - Global markets provide distinct consumer behavior.
 - Market segmentation based on social classes could be less effective where social class stratification is less than other areas where it is high.
- Technological Factors that Impact Polaris Inc.:
 - Recent technological developments pertaining to current and future products offered by Polaris as well as advancements made by their competitors.
 - To stay ahead of their competition, Polaris must continue to adapt to the fast moving and disrupting technological culture.
 - These advancements allow Polaris to deliver a more thorough consumer experience that could bode well for growth.
 - Impact of cost structures in Recreational Vehicles industry.
 - Impact on value chain structure in Consumer Goods sector.
 - Rate of technological diffusion.
 - The rapid pace of new technology has shown to shorten the cycle of the development of new product offerings.
 - Research and Development within Technologies.

- Such research and development efforts are extremely important to stay ahead of the competition as well as produce disruptive technologies that allow them to set a benchmark for technological advancements within their sectors, leading to maximization of revenue with possible reinvestment opportunities following.
- *Environmental Factors that Impact Polaris Inc.:*
 - Weather conditions could significantly impact Polaris's ability to manage the transportation of both the resources and finished products, which in turn, will affect the delivery dates of their products, ultimately affecting their customer satisfaction.
 - Changes in weather and climate conditions can influence the efficiency of their business.
 - Constant harsh weather conditions could increase Polaris's cost of operations and force them to make their value chain more adaptable to these weather conditions.
 - Laws regulating environment pollution caused by manufacturing plants could affect total cost of operations.
 - Air and water pollution regulations in Recreational Vehicles industry
 - It is important that Polaris adheres their products to the ever-changing pollution regulations placed upon vehicles in their industry.
 - If Polaris contributes to further the endangerment of species and environmental areas, they may face not only the consequences from the law but also negative adverse reactions from the general public and their existing customer base which could lead to a decrease in sales and the public's positive recognition.
 - Climate change could cause some products to become obsolete.
 - Attitude toward and the support for renewable energy.
 - Recycling of products.
- *Legal Factors that Impact Polaris Inc.:*
 - Discrimination laws, employment laws, health and safety laws, copyright, patent, and intellectual patent laws.

- With efforts of increased global expansion, Polaris must adhere to the employment and discrimination laws of countries that they intend to be involved in. Increases and safer and more secure work environments lead to a greater moral and ethical presence for the consumer of Polaris.
- Consumer protection and e-commerce security.
 - Data protection has proved to become a more important issues in recent years.
 - Polaris must adhere to protection regulations as they continue to study data security.
- Intellectual Property Laws.
 - These laws are necessary to ensure the privacy and security of Polaris's customers
 - If Polaris shows an inability to adhere to these laws, legal action will be taken place causing a loss in competitive advantage in the industry.
- Impact resulting from the lack of protection about gathering, using, and selling the consumer's data.
- Anti-trust laws within the Recreational Vehicle industry as well as the overall laws within the economy.

Industry & Competitive Analysis:

Many competitors are involved in the sustainability of the Recreational Vehicle, and Auto and Truck manufacturing industries' profitability. Three large competitors of Polaris Inc. include Harley Davidson Inc., Kandi technologies Group Inc., and Textron Inc. Harley Davidson Inc. has a market share of 21.11%. Kandi Technologies Group Inc. has a much smaller market share which is only 0.51% while Textron Inc. has a 19.33% market share. Harley Davidson Inc. bodes over 5,900 employees while having over \$4.054 billion in revenue. Kandi Technologies Inc. is responsible for only 557 employees and has \$106 million in revenue. Another competitor of Polaris Inc. is Textron responsible for over 35,000 employees and had revenues of \$13.423 billion.

The Auto and Trucking Manufacturing Industry has experienced economic turmoil within the industry over the past five years leading up to 2020. The Auto sector overall is expected to grow with general improvements in the economy as well as large amounts of buying from downstream markets. Despite the inconsistencies of markets in 2020 due to the global pandemic, future growth is still expected within in each sector of vehicles due to industry advancements and industry demand.



Using Porter's Five Forces for Polaris Inc. their industry structure can be broken down and characterized. Porter's Five Forces analyzes the threats of new entrants, the bargaining power of supplier's comma the bargaining power of buyers, the threat of substitute products or services, in the rivalry of among the existing competitors. The competitive analysis focuses on how Polaris can build sustainable competitive advantages within the Recreational Vehicle and Auto and Truck Manufacturing industries in which there are prominently involved in.

- *Threats of New Entrants:*
 - Through the innovation of new services and products.
 - Entry within Polaris is industry requires substantial capital and resource investment.
 - Polaris faces a lower threat of new competition if regulatory structures impose certain challenges to new firms contemplating new market entry. Also, comma

the discouragement of entry arises when new entrants are required to fulfill strict and time-consuming regulatory requirements.

- Increasing capacities and money spent on research and development.
- This threat of new entrants is low is psychological switching costs for consumers is high and existing brands have established an increased loyal customer base.
- Polaris will face a higher threat of new entrants if existing competitors aid in the entry of new enterprises as well as if new regulation changes support the entry of new firms.

▪ *Bargaining Power of Suppliers:*

- By building a more efficient supply chain strategy with different and multiple suppliers.
- Creating strategic alliances with suppliers whose business expenditures depend on those relationships with Polaris.
- Through the experimentation of different product designs using different materials so that if the prices rise of raw material, then Polaris can adapt appropriately and find alternatives.
- Supplier bargaining power will increase if they have concentrated into a specific region and that concentration outweighs the concentration of buyers.
- Once supplies products are scarce and in high demand, the supplier can leverage this position among their buyers.

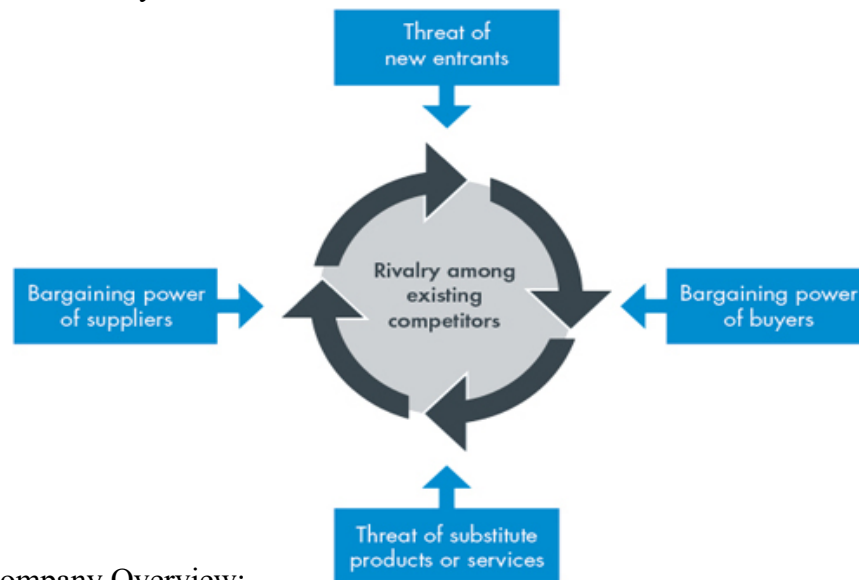
▪ *Bargaining Power of Buyers:*

- Continued innovation of new product offerings at fast paces.
- Increasing new products will aid in the reduction of defection of existing customers of Polaris to its competitors.
- A more concentrated customer base will increase any bargaining power against Polaris.
- Low price sensitivity will decrease bar bargaining power.
- building larger customer bases comma so that the bargaining power of buyers will reduce as well as lead way for an opportunity for Polaris to create more efficient operations and sales processes.

▪ *Threats of Substitute Products or Services:*

- Increasing marketing to ensure existing and potential customers have the proper knowledge of Polaris and the idea that Polaris is service oriented rather than just product oriented.
- Targeting the customers core needs instead of just the face to face of what customers are buying.
- Increasing the cost for customers to switch to other products in competing companies.
- Decreases to this threat will be apparent if consumers cannot receive the same satisfaction.

- *Rivalry Among the Existing Competitors:*
 - Increasing product differentiation.
 - Focus on scaling the business operations and product offerings so that it will fare better in competition within the industry.
 - Through the use of cooperation and collaboration of industry competitors so that Polaris can focus on increasing the market size which will allow an increase in sales and revenue.
 - Rivalry among existing firms will be minimized if there are a limited number of competitors within the industry.
 - It will be low if the industry is expanding rapidly and there is a forerunner within the industry.



Summary of Company Overview:

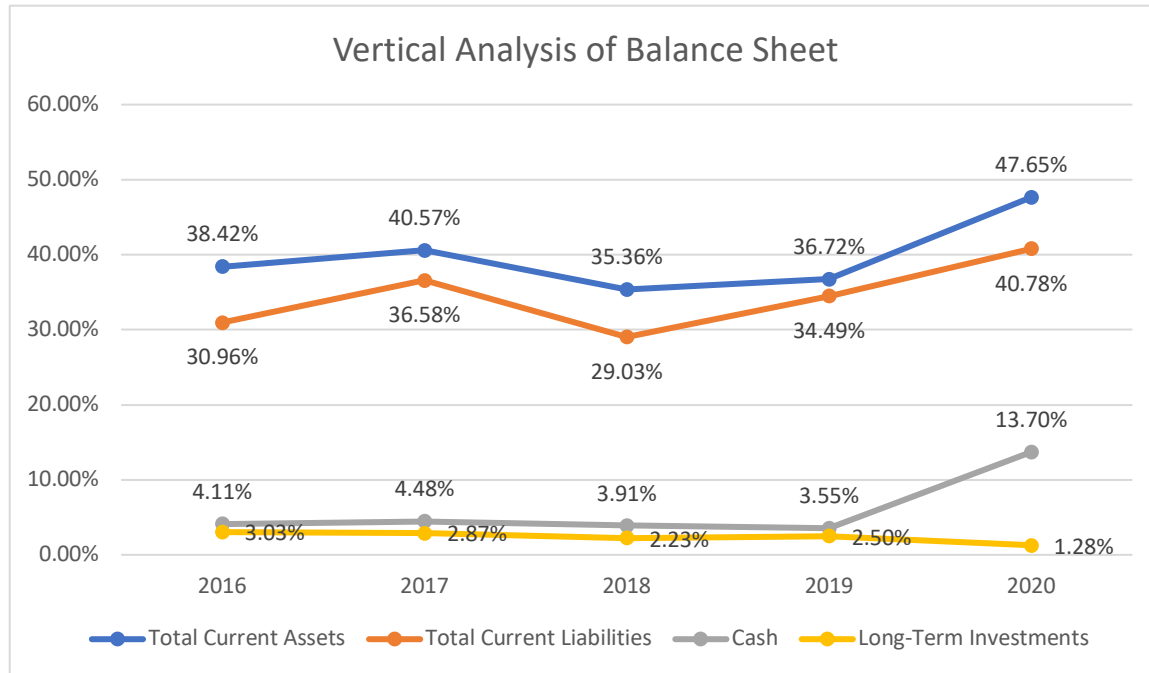
Polaris Inc. Uses many different strategies and facets to differentiate itself from industry competitors. Polaris focuses on its drivers of success which include an innovative culture, applications engineering, flexible manufacturing, and speed. Their specific strategic objectives are to be the best in Powersports PLUS, to grow through adjacency's, to have global market leadership, to maintain a competitive advantage within their operations, and to strengthen their financial performance. Polaris also attributes its competitive advantage to a realignment and manufacturing. This plan created “four centers of excellence”, located in Roseau, Minnesota; Spirit Lake, Iowa; Osceola, Wisconsin; and Monterrey, Mexico, which allowed Polaris to scale

their growth and reduce production and manufacturing costs while becoming an industry front runner in distribution.

The offered vehicle, snowmobile, motorcycle, boat, public mobility and work utility solutions, and aftermarket industries in the United states, Canada, and other global markets are highly competitive. Polaris Inc. powersport vehicles competition primarily comes from North American, European, and Asian manufacturers. Polaris Inc. boat competition primarily comes from just North American and European manufacturers. As for their aftermarket business, their competition is highly fragmented across the retail and online channels. Competition in such markets is based upon several factors, including price, quality, reliability, styling, product features, and warranties. At the dealer level, competition is based on sales and marketing support programs. Polaris feels that their products are competitively priced and their sales and marketing support programs for dealers are comparable to those provided by their competitors which is why they are able to continue to show they are a leader within their industry. Based on Polaris's willingness to expend millions of dollars each year on research and development they have been able to maintain their competitive advantage in product innovation where they produce products that differentiate themselves from their competition throughout all sectors of their business. Polaris is operational aspects are a large part of their competitive advantage. They also gain a competitive advantage over industry competitors by the acquisition of other companies, improved productivity, and better cost controls. Polaris Inc. continues to spotlight its safety and quality as a competitive advantage along with other factors mentioned as they move into the future and continue to grow.

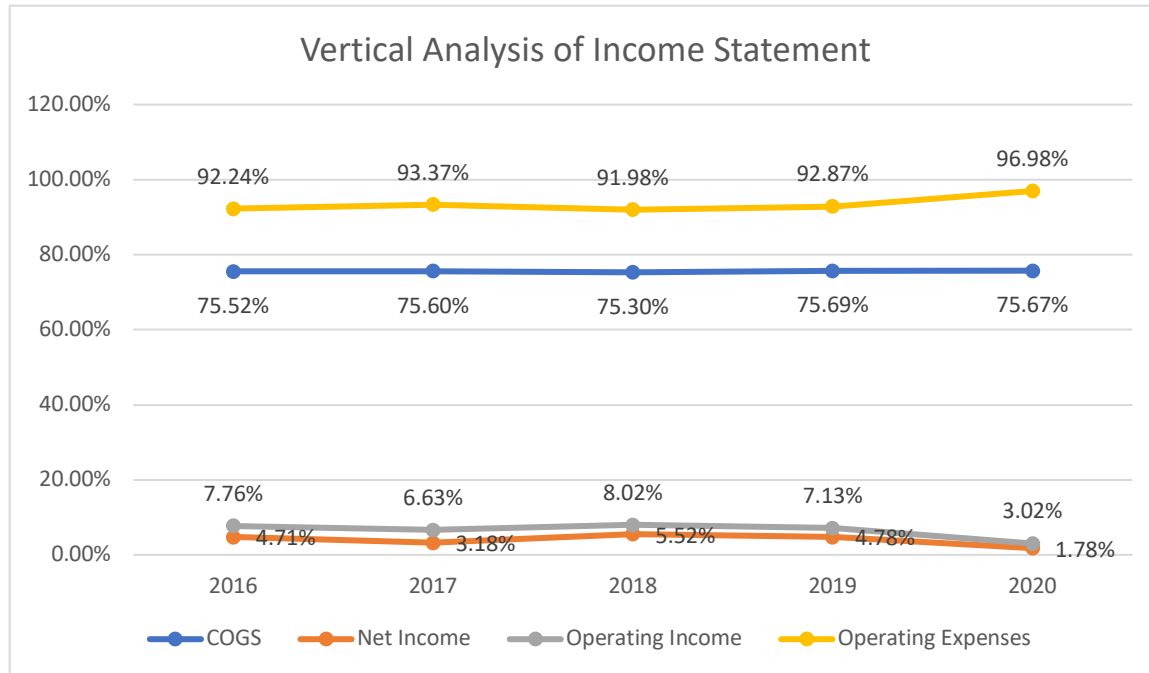
Analysis of Financial Statements: Polaris Inc.**Vertical Analysis of Balance Sheet (All Dollar Values in Millions):**

Polaris's cash was generally the same year to year as a percentage of total assets until this past year where it increased drastically. In 2016, cash as the percentage of total assets was 4.11%, then slightly increased in 2017 to 4.48%, slightly decreased in years 2018 to 3.91% and 2019 to 3.55%. Then, in 2020 took a large jump up to 13.70% of total assets was cash. This increase could be attributed to the simple fact of the drastic increase in cash for Polaris from 2019 to 2020. Their current liabilities average is around 35% of their total liabilities, however, this percentage has increased by over 5% each of the last two years. This could be attributed to their decrease in long term liabilities as well as an increase in their current liabilities. Current assets as a percentage of total assets have trended in generally the same direction as cash has. Nearly the entire increase in total current assets is attributed to the drastic increase in cash for Polaris which drove their percentage of total assets up. Polaris is long term investments have decreased from year 2016 to 2020. This result of payoffs of their prior long-term investments as a percentage in relation to their total liabilities and shareholder's equity. Overall, they have maintained steady numbers while continuing to grow their firm.



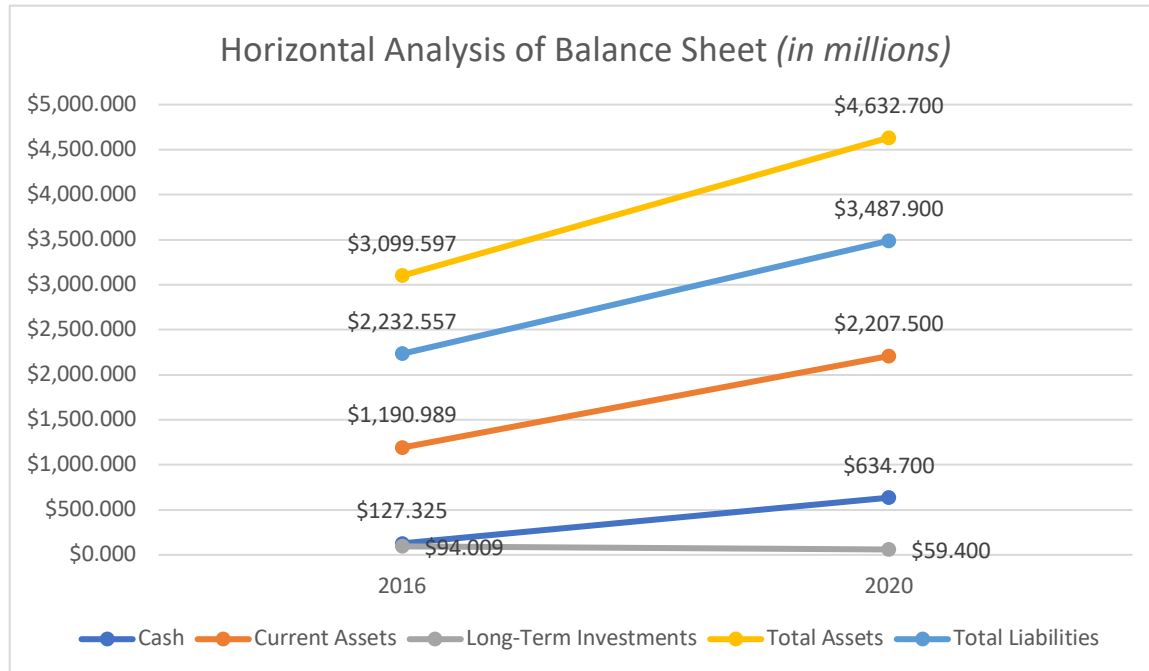
Vertical Analysis of Income Statement (All Dollar Values in Millions):

Polaris has maintained their cost of goods sold as a percentage of total sales steady over the past five years. This can be attributed to as sales increase, the cost of goods sold continue to increase at generally the same rate. Polaris's operating income and net income as a percentage of total revenue has trended in almost identical fashion over the past five years. Polaris's ability to maintain reasonably the same percentages in relation to revenue emphasizes their ability to run a sustainable operation. The Polaris's net income as a percentage of revenue hovered around 4.5% but this past year dropped a little to 1.8% and operating income as a percentage of revenue for the years 2016 to 2019 was around 7% and similarly to net income, decreased in 2020 to around 3%. Polaris's operating expenses as a percentage of revenue slightly increased from years 2016 to 2020. this is normal for a large firm to possess high operating expenses when working on such a high scale operation like Polaris Inc. does.



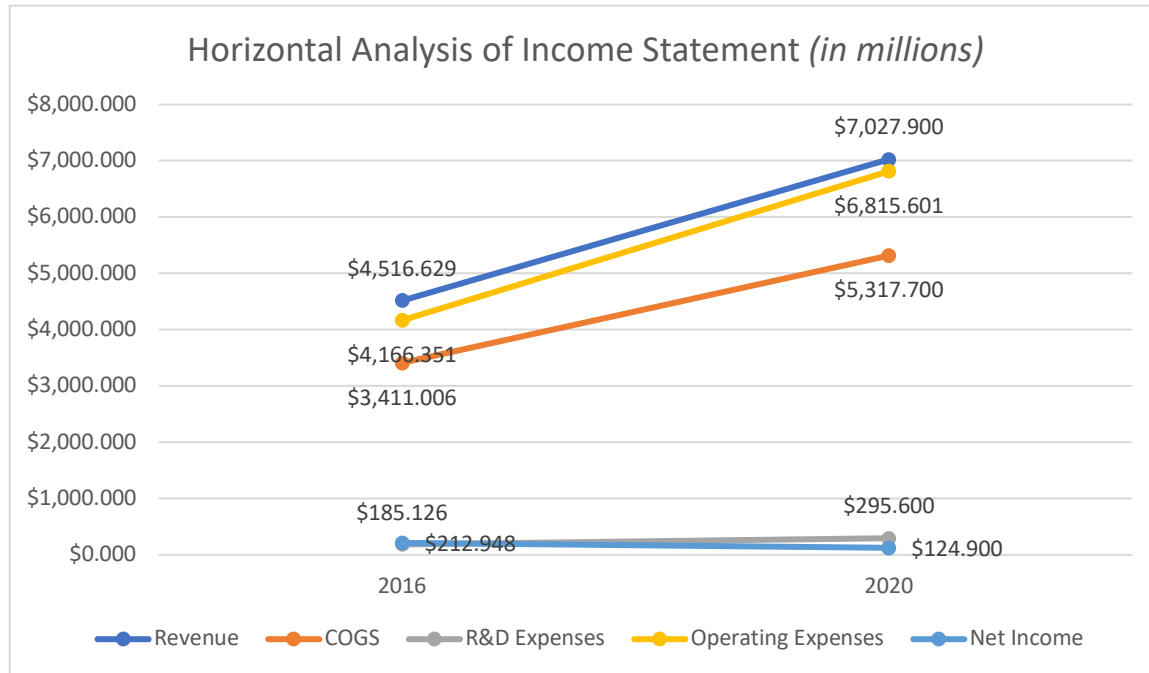
Horizontal Analysis of Balance Sheet (All Dollar Values in Millions):

The horizontal analysis identifies the change in dollar amount as well as percentage change based on a designated base year, which in this case was 2016. Based on the balance sheet data, Polaris's cash drastically increased from 2016 to 2020 by nearly 400% while the change from other years was less than 20% in each year. Their total liabilities increased at nearly same rates each year since from 2017 to 2020 which was about 10% increases in each year after the 50% increase from years 2016 to 2017. Polaris's long-term investments decreased from 2016 from 2020 by 36.81%. The increase in cash holdings from years 2016 to 2020 can be due to Polaris's possible settlements of their long-term investments and keeping cash on hand because of the pandemic in 2020. Total assets and current both continually increased throughout the years from 2016 and 2020. Identified by the horizontal analysis, Polaris showed increases throughout much of their balance sheet data.



Horizontal Analysis of Income Statement (All Dollar Values in Millions):

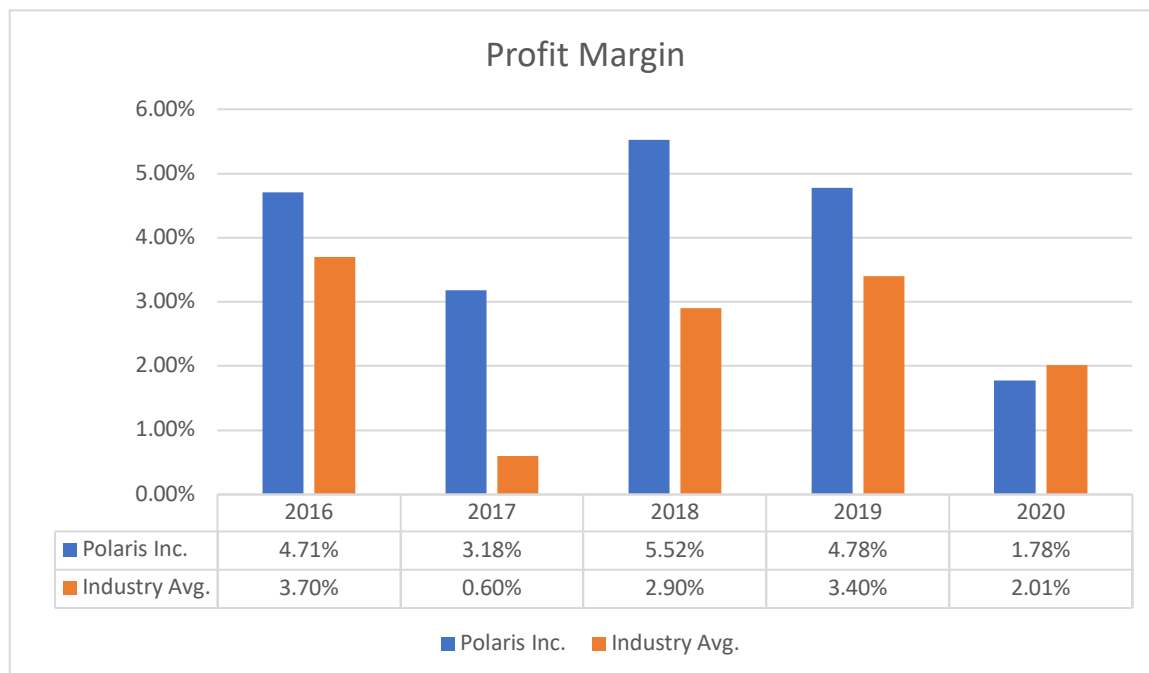
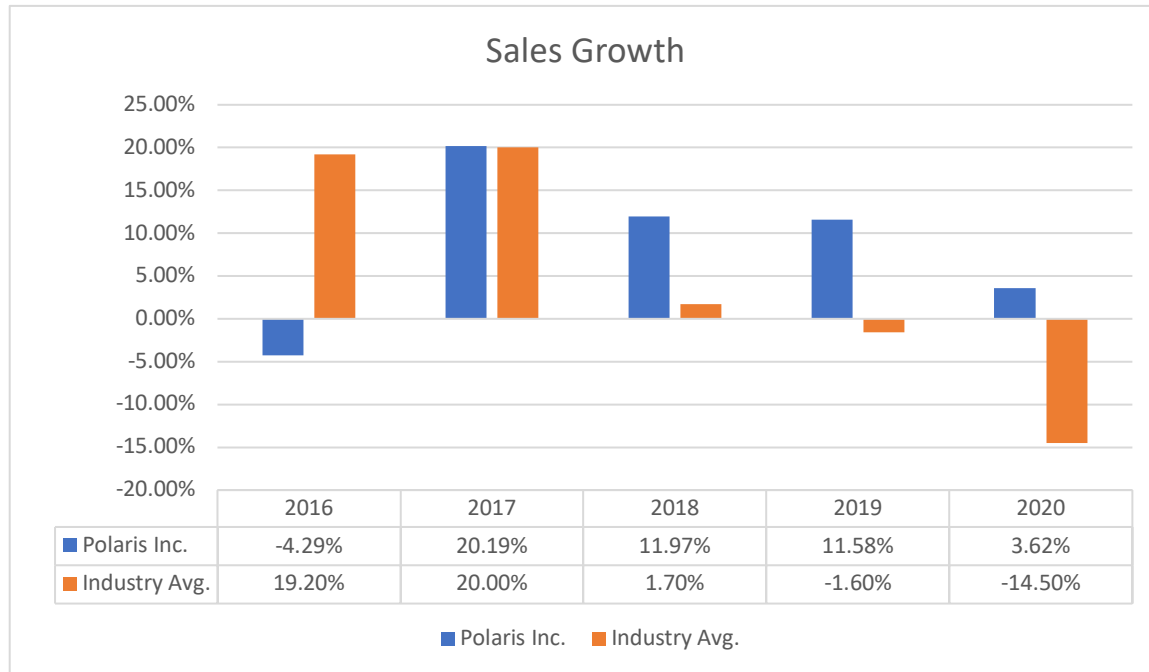
The horizontal analysis of Polaris's income statement emphasizes their continual growth in nearly all aspects of their income statement. Revenue, cost of goods (COGS) and operating expenses all have similarly increase around 50% since 2016. While research and development expenses have slightly increased year to year while net income has slipped since 2016. It is common as revenue increases that expenses will increase as well due to cogs and other expenses within the firm that allow them to succeed. A noteworthy aspect of this analysis is the fact that Polari's R&D expenses increased by nearly 60% from 2016 to 2020. This is telling the point that are investing in this so they can make products superior to competition which is also why their net income may have faltered since 2016.

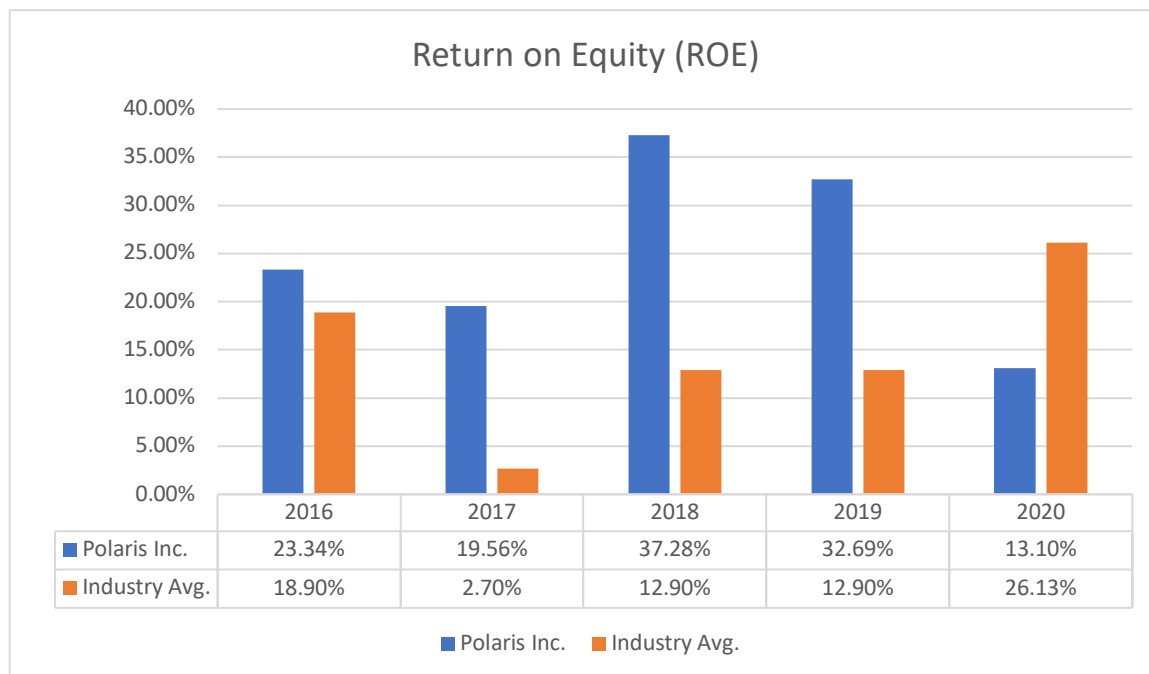
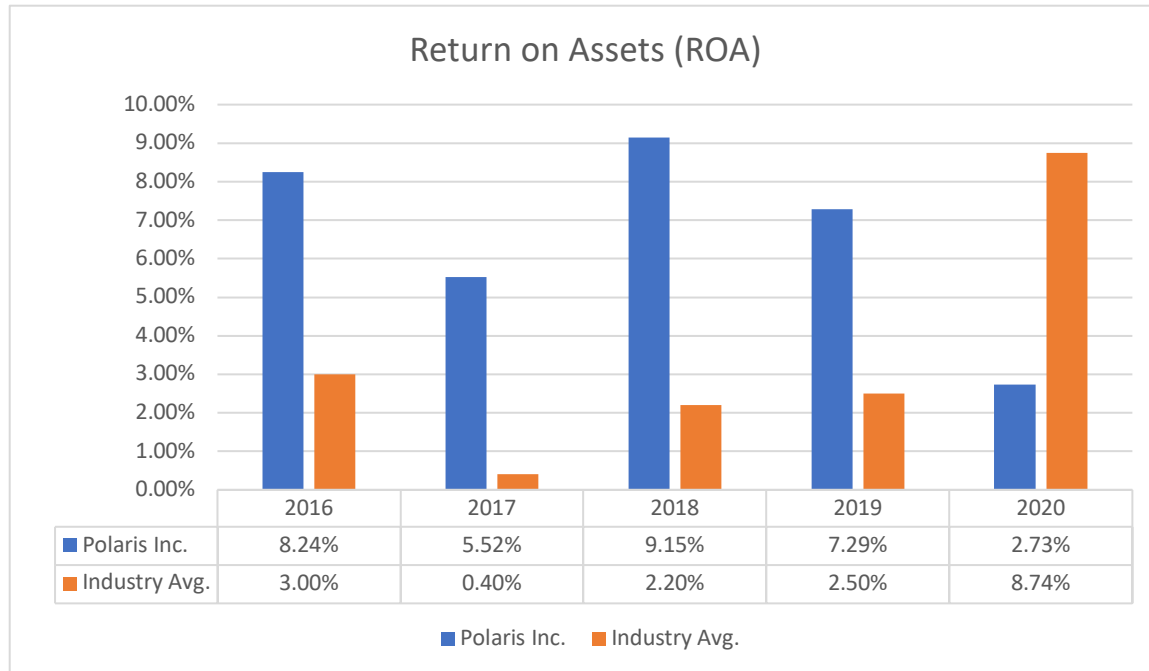


Key Ratio Analysis & Comparison to Industry Average:

Comparing key ratios of Polaris financials to the averages of the industry can be a beneficial way to understand Polaris's advantages and disadvantages within the industry. When looking at sales growth ratio, since 2016 Polaris has maintained growth while average sales growth within the industry has begun to decline. Profit margin ratio tells us the ratio between a firm's net income and net sales. Polaris had shown to have the upper hand in this ratio from years 2016 to 2019 but in 2020 the industry proved to fare better in this profitability ratio category. The same thing can be said as we identify return on assets (ROA) and return on equity (ROE) between Polaris and the industry averages. Return on assets shows how profitable a company is relative to its total assets while return on equity shows how profitable they are relative to their total liabilities. Despite Polaris having lower profitability ratios in year 2020, they have shown to be a leader within their industry in growth ratios. 2020 was a challenging year for many firms due to the pandemic so the details of years prior can indicate where Polaris

will grow to in coming years and be back to being above industry averages in nearly all ratio categories whether it is growth, liquidity, solvency, activity, profitability, or market ratios.





Summary of Financial Statement Analysis:

There are three accounts to highlight within the common size of Polaris' income statement. Since 2016 sales have increased over 55%, 2016 being \$4,516,629,000 and 2020 revenue being \$7,027,900,000. This is a change and over \$2.5 million and just spam of five

years. Cost of goods sold have also increased around the same amount percentage wise, which has been 55.90% increased since 2016. Also, Polaris' research and development expenses have increased nearly 60% since 2016. These increases can be attributed to Polaris' urge and success of growing the firm and all aspects since 2016. The only cause for concern deals with Polaris' income growth in 2020. Polaris's net income has decreased over 40% since 2016 but this is a direct outcome of the worldwide pandemic that was faced in 2020. Throughout all the years Polaris's net income has shown to be slightly volatile which could be a cause for concern when looking at their financial stability and longevity. When detailing Polaris's income statement and balance sheet, the vertical analysis of each emphasized only a few key changes in accounts. Compared to prior years accounts on the income statement such as operating expenses, operating income, and net income showed changes from prior years in terms of their percentage of the firms' total revenue. As detailed also by the horizontal analysis operating expenses increased relative to total revenue while operating income and net income decreased relative to total revenue in due part to the dollar changes in these accounts from 2019 to 2020.

When analyzing the balance sheet for Polaris there are a few accounts that should be recognized. These accounts are cash, total current assets, long term investments, and total current liabilities. Polaris has had nearly a 400% increase in cash since 2016 where most of this increase came in 2020. The dollar change of their cash was over \$507 million. Polaris's long term investments has decreased over 35% since 2016 while total current assets has increased over 85% since 2016. Also, Polaris's total current liabilities has increased over 96% since 2016. A reason for Polaris they have such a large increase in cash, majority of this increase coming from 2019 to 2020 could be in large part 2020 preparations for future investments where they would not need to borrow money for. To add to this idea the significant decrease in long term investments

for Polaris could also testify to the notion of possible upcoming investments. The increases in total current assets and total current liabilities can be attributed to Polaris is continued growth since 2016. The vertical analysis also entails the specific percent increase in these accounts relative to Total Assets or Total Liabilities & Shareholder's Equity in 2020 compared to years prior.

There are four main ratios to highlight that will help understand Polaris's firm compared to their industry. These ratios are sales growth, profit margin, return on assets, and return on equity. Since 2016 Polaris has showed to be better than their industry average in terms of sales growth. This is promising when trying to predict Polaris's future competitive advantage amongst industry competitors. Despite Polaris's significant sales growth in comparison to the industry average the profitability margins of Polaris compared to the industry we're extremely promising from years 2016 to 2019 but fared poorly in the year 2020. Polaris had a poor year in 2020 in terms of net income which is why their profitability ratios are poor compared to industry averages. Polaris had only a slightly lower profit margin compared to industry average in 2020 since their revenues were still high in comparison to the industry. When detailing Polaris' return on assets (ROA) and return on equity (ROE), we understand that Polaris has always fared well but in 2020 significantly fell below industry averages. This may be concerning but market instability due to the pandemic caused the firm to have poor net income while not having the usual data in total assets as well as shareholder's equity.

Overall, Polaris' financials emphasize their ability to maintain, grow and survive market irregularities caused by the market turmoil in 2020. As Polaris moves forward, their ability to increase their net income will allow them to regain a great financial standing in comparison to their industry.

Valuation of Polaris Inc. – Public Comparables Methodology

Description of Analysis and Advantages of Approach:

The public comparable analysis approach is used as a relative valuation technique to value Polaris Inc. by comparing their company's valuation multiples to a selected peer group. These multiples are ratios of some valuation metric to a financial performance measure this allows comparative analysis to take place to see if Polaris, when compared to similar companies, trades at similar multiples. Using this method provides a very reasonable valuation range whereas using other types of valuation methods requires many previous assumptions to be present period this approach has advantages over other methods which include ease of calculation because of the vast amounts of available data on public companies comma the ability to determine a benchmark value for multiples used comma and the ability to provide a useful way to assess market assumptions based off of fundamental characteristics that are woven into the valuation of the firm.

The analysis done on Polaris Inc. uses the EV/Sales, EV/EBITDA, P/E, P/B, and P/S multiples as valuation metrics. EV/Sales is the enterprise value of the company divided by the sales (revenue). P/E is not only an equity model but also the price to earnings ratio in is calculated by dividing the market price by the company's earnings per share (EPS). P/B is the price to Buck ratio for the farming is calculated by dividing the share price by at book value per share. P/S is the price to sales ratio, and it's calculated by dividing the share price by the net sales per share. using median and mean values for each of these call mark comparisons can be made between the five other companies and Polaris. The analysis provides insight to see how Polaris Inc. performs against the other companies as well as how they perform compared to the recreational vehicle industry.

Selection of Peer Group:

When conducting a market comparable analysis, it is key to select a peer group that would provide comparable data when conducting this analysis. The specific firms selected within the peer group are ones within the same industry as Polaris and possesses similar data points. The five companies I selected for my peer group were Paccar Inc. (PCAR), Navistar International Corporation (NAV), Nikola Corporation (NKLA), Oshkosh Corporation (OSK), and Yamaha Motor Co., Ltd. (YAMHF). For a relative valuation rests on the comparison of these firms. These firms are all competitors of Polaris, have a similar business model as well as similar financials which makes the analysis more accurate and useful. Including Polaris Inc., all six firms have similar market capitalization values which range from about \$4.38 billion to \$29.90 billion with a median market capitalization value of \$5.94 billion and a mean value of \$9.86 billion. Also, all the firms share similar enterprise values ranging from \$5.06 billion to \$35.76 billion. The median enterprise value of all the firms is \$7.46 billion whereas the mean enterprise value is \$11.85 billion. Overall, these five companies share similar industry and fundamental characteristics to those of Polaris. Polaris Inc. enterprise value hovers around the middle of the comparable companies' values. Polaris is a forerunner for stock price, within their peer group with the market price of \$139.96 while only one of the comparable firms possess a current market price over \$100.

Equity & Enterprise Value Multiples:

When conducting the market comparable analysis, in some situations, the data of the selected peer group could be warranted to be excluded from the calculation of the peer average, or median. Identifying firms with comparable market capitalization, EV, EV/EBITDA, EV/Sales, P/S, FWD P/E and P/Book was necessary to conduct this analysis. I had to exclude

Nikola Corporation. (NKLA) FWD P/E data in my calculations due to the inability to find this data. Also, I excluded the EV/EBITDA data of Navistar International Corporation (NAV) and Nikola (NKLA) from the median and mean calculations due to their data being outliers where this could have provided a less accurate analysis. In my calculations, I found that Polaris has a higher value when comparing to the median of the peer groups' EV/Sales, EV/EBITDA, P/S, FWD P/E, and P/Book along with the mean of the groups' P/S and P/Book. The only two data measurements where Polaris had a lower value in comparison to the peer group was with the mean data of EV/Sales and FWD P/E. Overall, the analysis was reliable since I based it upon the median and mean of the peer groups' data while excluding any outlying data that would have caused an inaccurate value which would not have been warranted when attempting to conduct the analysis of Polaris Inc.

Multiples Selection:

For the analysis, the P/E, P/S, P/Book, EV/EBITDA, and EV/Sales were used as multiples. These multiples were used within Polaris is valuation because of their similarity and value to those of their comparable multiples. The DCF perpetuity growth method multiple was not used because its range of implied share price value was significantly lower than the other multiples. Not using certain multiples allows for the most accurate and appropriately weighted final valuation of implied share price to be made.

Final Range of Values Using Comparable Analysis:

Company Name (In Billions)	Market Cap	EV	EV/Sales	EV/EBITDA	P/S	FWD P/E	P/Book	Sales	EBITDA	Earnings	BV of Equity	Net Debt
Paccar Inc. (PCAR)	\$ 29.90	\$ 35.76	6.42	12.59	1.55	16.47	2.94					
Navistar International Corporation (NAV)	\$ 4.38	\$ 7.87	4.34	163.95	0.58	29.24	1.93					
Nikola Corporation (NKLA)	\$ 5.97	\$ 5.06	15.98	-13.83	0.041	N/A	5.53					
Oshkosh Corporation (OSK)	\$ 5.88	\$ 6.12	3.88	10.32	0.86	17.01	2.06					
Yamaha Motor Co., Ltd. (YAMHF)	\$ 7.13	\$ 9.23	0.02	7.56	0.51	12.95	1.09					
Polaris Inc. (PII)	\$ 5.90	\$ 7.05	3.27	8.27	0.89	12.67	6.22	\$ 2.16	\$ 0.85	\$ 0.47	\$ 0.95	\$ 1.15
Current Price (PII)	\$ 139.96											
Shares Outstanding	63 Million (.063 Billion)											
Median	\$ 5.94	\$ 7.46	4.34	10.32	0.58	16.74	2.06					
Enterprise Value			\$ 9.36	\$ 8.80								
Total Equity Value			\$ 8.21	\$ 7.65	\$ 1.25	\$ 7.80	\$ 1.95					
Equity Value Per Share			\$ 130.27	\$ 121.39	\$ 19.85	\$ 123.73	\$ 31.02					
Valuation Analysis			Over	Over	Over	Over	Over					
Mean	\$ 9.86	\$ 11.85	6.13	10.16	0.71	18.92	2.71					
Enterprise Value			\$ 13.21	\$ 8.66								
Total Equity Value			\$ 12.06	\$ 7.51	\$ 1.53	\$ 8.81	\$ 2.57					
Equity Value Per Share			\$ 191.46	\$ 119.18	\$ 24.23	\$ 139.83	\$ 40.80					
Valuation Analysis			Under	Over	Over	Under	Over					
Excluded From Median & Mean												
Multiples			EV/Sales	EV/EBITDA	P/S	P/E	P/Book					
High			15.98	12.59	1.55	29.24	5.53					
Median			4.34	10.32	0.58	16.74	2.06					
Average			6.13	10.16	0.71	18.92	2.71					
Low			0.02	7.56	0.04	12.95	1.09					
Equity Value												
High			\$ 528.61	\$ 152.11	\$ 53.04	\$ 216.13	\$ 83.26					
Median			\$ 130.27	\$ 121.39	\$ 19.85	\$ 123.73	\$ 31.02					
Average			\$ 191.46	\$ 119.18	\$ 24.23	\$ 139.83	\$ 40.80					
Low			\$ (17.57)	\$ 84.04	\$ 1.39	\$ 95.72	\$ 16.41					

Valuation of Polaris Inc. – Discounted Cash Flow Methodology

Description of Analysis and Advantages of Approach:

The discounting methodology evaluation aims to produce an appreciated terminal value that estimates the projection periods growth of the company. This valuation method goes through seven steps to provide a highly detailed estimate of the stocks intrinsic value. The seven steps are first to project the horizon., second, to calculate the free cash flow, third, to calculate the discount rate, fourth, to calculate the terminal value, fifth, to calculate the present values, sixth, to work in any adjustments, and seventh, to perform a sensitivity analysis to the stocks intrinsic value. Two different methods were used to accomplish this and include the perpetuity growth method and the exit multiple method. These methods allow an accurate value to be projected at the end of the horizon. As a specific amount of time must be used to forecast too, the terminal

value is then added to the cash flow of the final year of the projections and is then discounted to the present along with all other cashflows. Because of the confidence in the assumptions made, the discounted cash flow method provides a very detailed estimate of the stocks intrinsic value. There are many advantages when using the discounted cash flow method that include the ability to provide an extremely detailed estimate of the stocks intrinsic value, and ability to not require any comparable companies, the ability to include all major assumptions about the business, the ability to forward looking in depend on future expectations that surround the business and all operation, finance, and activity facets, rather than any historical results of the company. This method also allows for sensitivity analysis to be performed which is important to any valuation analysis. Even though this valuation method needs extensive research to be done on both the short-term and long-term prospects and operations, this valuation method can be conducted with then hopes of achieving a highly accurate estimation value. Lastly, another major advantage of using the discounted cash flow method is that many different business scenarios can be built in to surround the many other facets of the business.

Calculation of Free Cash Flows:

The goal with in calculating the free cash flow is to analyze and understand the firm's ability to generate money out of its business, its ability to strengthen its financial flexibility that it could potentially use to pay any outstanding debt it has in curd, and its ability to ultimately increase the value for shareholders.

The steps to calculate the free cash flows are as follows:

1. Multiply the earnings before interest and taxes (EBIT) by 1 minus the tax rate of 21%
2. Add depreciation and amortization
3. Add the change in net working capital

4. Subtract the changes in capital expenditures

A final formula can be derived to calculate free cash flows: $EBIT * (1-t) + D\&A + \Delta NWC - \Delta CAPEX$

Forecast Period Selection & Assumptions within the Discounted Cash Flow Model:

Since Polaris Inc. is a mature company within their industry as well as within their business cycle, Polaris carries a lower growth rate than any smaller faster growing firm within the auto and truck manufacturing industry or recreational vehicle industry. Due to this, a longer forecast period was selected based on historical performance, it is assumed that Polaris Inc. will continue to be a functioning company period of forecasts or horizon-period of 5 years was selected based on this.

When using the discounted cash flow valuation model many assumptions must be made before an appropriate estimate of the stocks intrinsic value. The first assumption is that all cashflows are treated as though they happen at the end of the year. The next assumption is that the discounted cash flow method treats the cash flows associated with the company's investment projects as though they were certain. Another assumption is the cash inflows are reinvested in other projects that aren't a return for the company. The last principal assumption of this model is that the discounted cash flow analysis assumes a perfect capital market.

Another very important part of this model is associated with an appropriate growth rate, that when applied represents the following factors. These factors are the size of the company, the time horizon, tax considerations, the riskiness of the business, and the company's ability to leverage its debt. Polaris is forecasted period uses a growth rate of 10%

Estimation of Terminal Value:Exit Multiple Method:

The exit multiple method is a valuation technique that uses the underlying assumption that the business will be valued on a market multiple basis at the ending year of projections. This method uses a value that is determined by using a multiple of EBITDA. The exit multiple method assumes that the market multiple bases of a fair method for valuing the business. This value is derived by multiplying EBITDA by an exit multiple factor that is representative of comparable companies.

The steps to estimate the terminal value using the exit multiple method are as follows:

1. Selecting create an appropriate horizon period.
2. Forecast the free cash flow.
 - a. Forecast the EBITDA using the assumed growth rate over the predetermined horizon period.
 - b. Forecast depreciation and amortization using the assumed growth rate over the predetermined horizon period.
 - c. Forecast the tax rate expense using the assumed growth rate over the predetermined horizon period.
 - d. Forecast capital expenditures using the assumed growth rate over the predetermined horizon period.
 - e. Forecast the change in net working capital using the assumed growth rate over the predetermined horizon period.
3. Calculate the unlevered cash flow.
 - a. Subtract depreciation and amortization from EBITDA to calculate EBIT
 - b. Subtract taxes from EBIT to calculate net income
 - c. Add back depreciation and amortization in capital expenditures then subtract the change in net working capital to calculate the unlevered cash flow.
4. Estimate the terminal value.
 - a. Determine appropriate exit multiple from an industry average EBITDA multiple.
 - b. Multiply that ending year's EBITDA by the selected EBITDA exit multiple.

Perpetuity Growth Rate Method:

Commonly known as the Gordon growth perpetuity model, this valuation technique assumes that the growth of the business will continue and that the necessary new capital will provide a return that is more than its cost. The perpetuity growth rate method also assumes that the cash will grow at a stable and constant rate forever that starts from a specific point in the future. To provide an accurate valuation I added a 40% increase to the reported 2020 EBIT for Polaris. This number had been increasing by 40% in years prior but in 2020 had decreased by 40%. I felt this was an outlying data point which could be attributed to unrealistic economic circumstances of 2020. For this reason, I added the 40% increase to the number to more accurately forecast future EBIT data and provide a more accurate Perpetuity Growth rate valuation for Polaris.

The steps to estimate the terminal value using the perpetuity growth rate method are as follows:

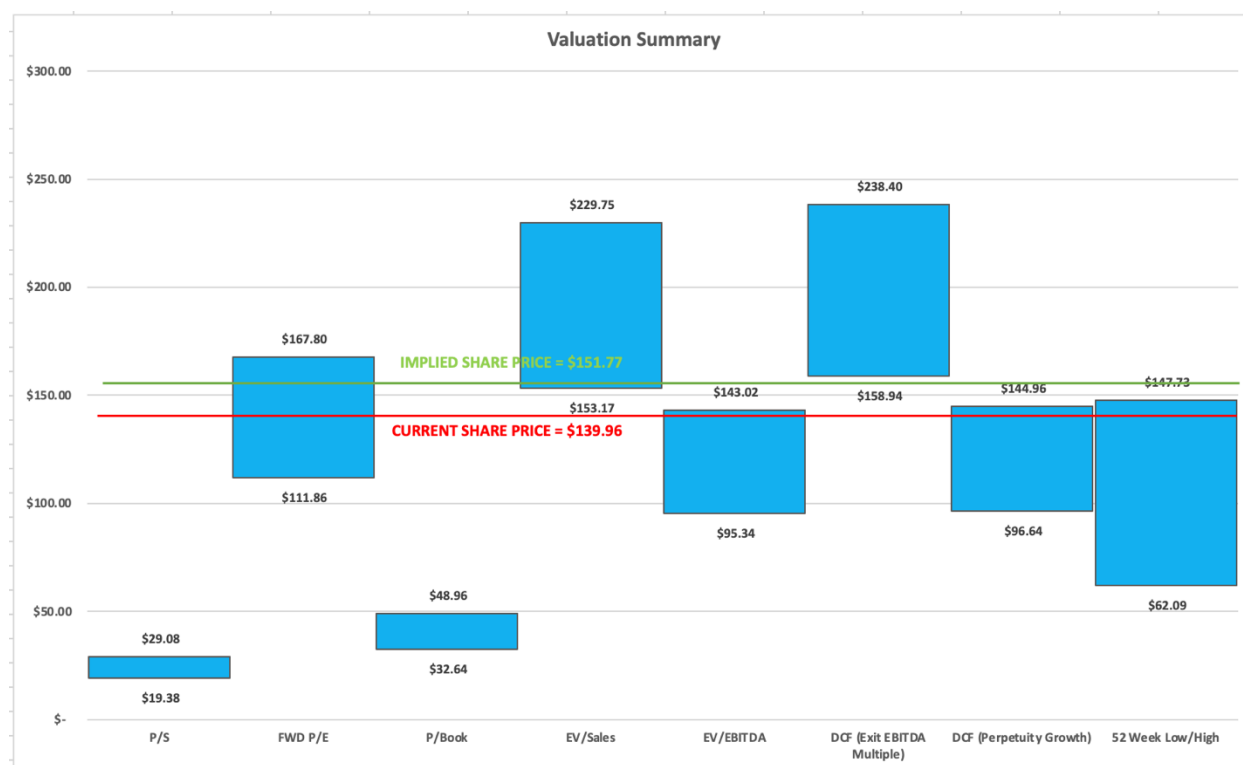
1. Select and create an appropriate horizon period.
2. Forecast the free cash flows.
 - a. Forecast the sales using the assumed growth rate over the predetermined horizon period.
 - b. Forecast the EBIT using the assumed growth rate over the predetermined horizon period.
 - c. Forecast the taxes using the assumed growth rate over the predetermined horizon period.
3. Calculate the OCF by subtracting taxes from the EBIT.
4. Calculate the free cash flow by subtracting the change in net working capital and change in capital expenditures from the OCF.
5. Estimate the terminal value.
 - a. Divide the forecasted ending years free cash flow by the cost of capital minus the ending years growth rate.

Results of Sensitivity Analysis:

Sensitivity Analysis						
Perpetuity Growth Method						
		WACC				
	\$ 120.80	10.70%	11.20%	11.70%	12.20%	12.70%
Growth Rate	8.00%	\$ 294.84	\$ 170.07	\$ 118.69	\$ 90.66	\$ 73.02
	9.00%	\$ 297.53	\$ 171.60	\$ 119.75	\$ 91.46	\$ 73.66
	10.00%	\$ 300.22	\$ 173.13	\$ 120.80	\$ 92.26	\$ 74.29
	11.00%	\$ 302.90	\$ 174.66	\$ 121.86	\$ 93.06	\$ 74.93
	12.00%	\$ 305.59	\$ 176.20	\$ 122.92	\$ 93.86	\$ 75.57
Sensitivity Analysis						
Exit Multiple Method						
		WACC				
	\$ 198.67	10.70%	11.20%	11.70%	12.20%	12.70%
Exit Multiple	5.00	\$ 171.69	\$ 169.92	\$ 168.19	\$ 166.51	\$ 164.87
	6.00	\$ 187.64	\$ 185.50	\$ 183.43	\$ 181.41	\$ 179.44
	7.00	\$ 203.58	\$ 201.09	\$ 198.67	\$ 196.31	\$ 194.02
	8.00	\$ 219.52	\$ 216.68	\$ 213.91	\$ 211.22	\$ 208.60
	9.00	\$ 235.46	\$ 232.27	\$ 229.15	\$ 226.12	\$ 223.17

Summary of Values – Provided by Different Methodologies

Football Field Valuation Chart



Investment Recommendation:

According to the analysis provided, the intrinsic value of Polaris Inc.'s stock is undervalued as of April 30th, 2021. The economic troubles of 2020 could have led to the misrepresentation of price for Polaris. Polaris has potential to grow based on prior years despite the challenges of 2020. However, with current market conditions and an implied shared price of \$151.77, Polaris Inc. is undervalued by \$11.81.

Investors must realize that Polaris stock has steadily increased the past six months and has potential to continue this trend. Potential investors should look forward to the growth when buying any type of stock, especially the stock of Polaris Inc. where continued growth is a real possibility. I recommend investors with either short or long-term positions to purchase Polaris Inc. (PII) stock based on the steady growth within not just the past year but past six months.

Weighted Method Valuation			
Polaris Inc.			
Method	Valuation	Weight	Weighted Value
P/S	\$ 24.23	0.03	\$ 0.70
FWD P/E	\$ 139.83	0.17	\$ 23.42
P/Book	\$ 40.80	0.05	\$ 1.99
EV/Sales	\$ 191.46	0.23	\$ 43.90
EV/EBITDA	\$ 119.18	0.14	\$ 17.01
DCF (Exit EBITDA Multiple)	\$ 198.67	0.24	\$ 47.27
DCF (Perpetuity Growth)	\$ 120.80	0.14	\$ 17.48
<i>Total</i>	\$ 834.97	1.00	\$ 151.77

EXHIBITS**Exhibit 1.A – Income Statement**

Polaris Inc. Income Statement Years 2016-2020					
	12/31/20	12/31/19	12/31/18	12/31/17	12/31/16
Revenue	\$ 7,027,900,000	\$ 6,782,500,000	\$ 6,078,500,000	\$ 5,428,477,000	\$ 4,516,629,000
Cost of Goods Sold (COGS)	\$ 5,317,700,000	\$ 5,133,700,000	\$ 4,577,300,000	\$ 4,103,826,000	\$ 3,411,006,000
Gross Profit	\$ 1,710,200,000	\$ 1,648,800,000	\$ 1,501,200,000	\$ 1,324,651,000	\$ 1,105,623,000
Research And Development Expenses	\$ 295,600,000	\$ 292,900,000	\$ 259,700,000	\$ 238,299,000	\$ 185,126,000
SG&A Expenses	\$ 903,500,000	\$ 953,100,000	\$ 841,500,000	\$ 803,001,000	\$ 648,677,000
Other Operating Income or Expenses	\$ 80,400,000	\$ 80,900,000	\$ 87,400,000	\$ 76,306,000	\$ 78,458,000
Operating Expenses	\$ 6,815,601,000	\$ 6,298,800,000	\$ 5,591,100,000	\$ 5,068,820,000	\$ 4,166,351,000
Operating Income	\$ 212,299,000	\$ 483,700,000	\$ 487,400,000	\$ 359,657,000	\$ 350,278,000
Total Non-Operating Income/Expense	\$ (70,900,000)	\$ (75,900,000)	\$ (58,200,000)	\$ (40,866,000)	\$ (37,027,000)
Pre-Tax Income	\$ 141,400,000	\$ 407,800,000	\$ 429,200,000	\$ 318,791,000	\$ 313,251,000
Income Taxes	\$ 16,500,000	\$ 83,900,000	\$ 93,900,000	\$ 146,299,000	\$ 100,303,000
Income After Taxes	\$ 124,900,000	\$ 323,900,000	\$ 335,300,000	\$ 172,492,000	\$ 212,948,000
Other Income	\$ -	\$ -	\$ -	\$ -	\$ -
Income From Continuous Operations	\$ 124,900,000	\$ 323,900,000	\$ 335,300,000	\$ 172,492,000	\$ 212,948,000
Income From Discontinued Operations	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income	\$ 124,800,000	\$ 324,000,000	\$ 335,300,000	\$ 172,492,000	\$ 212,948,000
EBITDA	\$ 852,199,000	\$ 718,200,000	\$ 698,400,000	\$ 550,765,000	\$ 517,790,000
EBIT	\$ 212,299,000	\$ 483,700,000	\$ 487,400,000	\$ 359,657,000	\$ 350,278,000
Basic Shares Outstanding	\$ 62,000,000	\$ 61,000,000	\$ 63,000,000	\$ 63,000,000	\$ 64,000,000
Shares Outstanding	\$ 63,000,000	\$ 62,000,000	\$ 64,000,000	\$ 64,000,000	\$ 65,000,000
Basic EPS	\$ 2.02	\$ 5.27	\$ 5.36	\$ 2.74	\$ 3.31
EPS - Earnings Per Share	\$ 1.99	\$ 5.20	\$ 5.24	\$ 2.69	\$ 3.27

Exhibit 1.B – Balance Sheet

Polaris Inc. Balance Sheet					
Years 2016-2020					
	12/31/20	12/31/19	12/31/18	12/31/17	12/31/16
Cash	\$ 634,700,000	\$ 157,100,000	\$ 161,164,000	\$ 138,345,000	\$ 127,325,000
Receivables	\$ 261,100,000	\$ 222,900,000	\$ 233,556,000	\$ 229,745,000	\$ 225,494,000
Inventory	\$ 1,177,600,000	\$ 1,121,100,000	\$ 969,511,000	\$ 783,961,000	\$ 746,534,000
Pre-Paid Expenses	\$ 134,100,000	\$ 125,900,000	\$ 121,472,000	\$ 101,453,000	\$ 91,636,000
Other Current Assets	\$ -	\$ -	\$ -	\$ -	\$ -
Total Current Assets	\$ 2,207,500,000	\$ 1,627,000,000	\$ 1,458,703,000	\$ 1,253,504,000	\$ 1,190,989,000
Property, Plant, And Equipment	\$ 888,800,000	\$ 899,800,000	\$ 843,122,000	\$ 747,189,000	\$ 727,596,000
Long-Term Investments	\$ 59,400,000	\$ 110,600,000	\$ 92,059,000	\$ 88,764,000	\$ 94,009,000
Goodwill And Intangible Assets	\$ 1,083,700,000	\$ 1,490,200,000	\$ 1,517,594,000	\$ 780,586,000	\$ 792,979,000
Other Long-Term Assets	\$ 90,200,000	\$ 99,400,000	\$ 98,963,000	\$ 104,039,000	\$ 105,553,000
Total Long-Term Assets	\$ 2,425,200,000	\$ 2,803,500,000	\$ 2,639,212,000	\$ 1,836,089,000	\$ 1,908,608,000
Total Assets	\$ 4,632,700,000	\$ 4,430,500,000	\$ 4,124,915,000	\$ 3,089,593,000	\$ 3,099,597,000
Total Current Liabilities	\$ 1,889,400,000	\$ 1,528,000,000	\$ 1,197,374,000	\$ 1,130,311,000	\$ 959,751,000
Long Term Debt	\$ 1,308,600,000	\$ 1,526,800,000	\$ 1,896,027,000	\$ 865,266,000	\$ 1,138,063,000
Other Non-Current Liabilities	\$ 193,200,000	\$ 185,600,000	\$ 158,009,000	\$ 152,229,000	\$ 125,616,000
Total Long Term Liabilities	\$ 1,598,500,000	\$ 1,794,300,000	\$ 2,060,526,000	\$ 1,027,623,000	\$ 1,272,806,000
Total Liabilities	\$ 3,487,900,000	\$ 3,322,300,000	\$ 3,257,900,000	\$ 2,157,934,000	\$ 2,232,557,000
Common Stock Net	\$ 600,000	\$ 600,000	\$ 609,000	\$ 631,000	\$ 631,000
Retained Earnings (Accumulated Deficit)	\$ 218,400,000	\$ 287,300,000	\$ 121,114,000	\$ 242,763,000	\$ 300,084,000
Comprehensive Income	\$ (58,400,000)	\$ (72,700,000)	\$ (62,973,000)	\$ (45,629,000)	\$ (83,837,000)
Other Shareholders' Equity	\$ -	\$ -	\$ -	\$ -	\$ -
Shareholders' Equity	\$ 1,144,800,000	\$ 1,108,200,000	\$ 867,015,000	\$ 931,659,000	\$ 867,040,000
Total Liabilities And Shareholders' Equity	\$ 4,632,700,000	\$ 4,430,500,000	\$ 4,124,915,000	\$ 3,089,593,000	\$ 3,099,597,000

Exhibit 2.A – Horizontal Analysis of IS

Horizontal Analysis (2016 to 2020)		Horizontal Analysis (2016 to 2019)		Horizontal Analysis (2016-2018)		Horizontal Analysis (2016 to 2017)	
\$ Change	% Change	\$ Change	% Change	\$ Change	% Change	\$ Change	% Change
\$ 2,511,271,000	55.60%	\$ 2,265,871,000	50.17%	\$ 1,561,871,000	34.58%	\$ 911,848,000	20.19%
\$ 1,906,694,000	55.90%	\$ 1,722,694,000	50.50%	\$ 1,166,294,000	34.19%	\$ 692,820,000	20.31%
\$ 604,577,000	54.68%	\$ 543,177,000	49.13%	\$ 395,577,000	35.78%	\$ 219,028,000	19.81%
\$ 110,474,000	59.68%	\$ 107,774,000	58.22%	\$ 74,574,000	40.28%	\$ 53,173,000	28.72%
\$ 254,823,000	39.28%	\$ 304,423,000	46.93%	\$ 192,823,000	29.73%	\$ 154,324,000	23.79%
\$ 1,942,000	2.48%	\$ 2,442,000	3.11%	\$ 8,942,000	11.40%	\$ (2,152,000)	-2.74%
\$ 2,649,250,000	63.59%	\$ 2,132,449,000	51.18%	\$ 1,424,749,000	34.20%	\$ 902,469,000	21.66%
\$ (137,979,000)	-39.39%	\$ 133,422,000	38.09%	\$ 137,122,000	39.15%	\$ 9,379,000	2.68%
\$ (33,873,000)	91.48%	\$ (38,873,000)	104.99%	\$ (21,173,000)	57.18%	\$ (3,839,000)	10.37%
\$ (171,851,000)	-54.86%	\$ 94,549,000	30.18%	\$ 115,949,000	37.01%	\$ 5,540,000	1.77%
\$ (83,803,000)	-83.55%	\$ (16,403,000)	-16.35%	\$ (6,403,000)	-6.38%	\$ 45,996,000	45.86%
\$ (88,048,000)	-41.35%	\$ 110,952,000	52.10%	\$ 122,352,000	57.46%	\$ (40,456,000)	-19.00%
\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%
\$ (88,048,000)	-41.35%	\$ 110,952,000	52.10%	\$ 122,352,000	57.46%	\$ (40,456,000)	-19.00%
\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%
\$ (88,148,000)	-41.39%	\$ 111,052,000	52.15%	\$ 122,352,000	57.46%	\$ (40,456,000)	-19.00%
\$ 334,409,000	64.58%	\$ 200,410,000	38.70%	\$ 180,610,000	34.88%	\$ 32,975,000	6.37%
\$ (137,979,000)	-39.39%	\$ 133,422,000	38.09%	\$ 137,122,000	39.15%	\$ 9,379,000	2.68%
\$ (2,000,000)	-3.13%	\$ (3,000,000)	-4.69%	\$ (1,000,000)	-1.56%	\$ (1,000,000)	-1.56%
\$ (2,000,000)	-3.08%	\$ (3,000,000)	-4.62%	\$ (1,000,000)	-1.54%	\$ (1,000,000)	-1.54%
\$ (1)	-38.97%	\$ 2	59.21%	\$ 2	61.93%	\$ (1)	-17.22%
\$ (1)	-39.14%	\$ 2	59.02%	\$ 2	60.24%	\$ (1)	-17.74%

Exhibit 2.B – Horizontal Analysis of BS

Horizontal Analysis (2016 to 2020)		Horizontal Analysis (2016 to 2019)		Horizontal Analysis (2016 to 2018)		Horizontal Analysis (2016 to 2017)	
\$ Change	% Change	\$ Change	% Change	\$ Change	% Change	\$ Change	% Change
\$ 507,375,000	398.49%	\$ 29,775,000	23.39%	\$ 33,839,000	26.58%	\$ 11,020,000	8.66%
\$ 35,606,000	15.79%	\$ (2,594,000)	-1.15%	\$ 8,062,000	3.58%	\$ 4,251,000	1.89%
\$ 431,066,000	57.74%	\$ 374,566,000	50.17%	\$ 222,977,000	29.87%	\$ 37,427,000	5.01%
\$ 42,464,000	46.34%	\$ 34,264,000	37.39%	\$ 29,836,000	32.56%	\$ 9,817,000	10.71%
\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%
\$ 1,016,511,000	85.35%	\$ 436,011,000	36.61%	\$ 267,714,000	22.48%	\$ 62,515,000	5.25%
\$ 161,204,000	22.16%	\$ 172,204,000	23.67%	\$ 115,526,000	15.88%	\$ 19,593,000	2.69%
\$ (34,609,000)	-36.81%	\$ 16,591,000	17.65%	\$ (1,950,000)	-2.07%	\$ (5,245,000)	-5.58%
\$ 290,721,000	36.66%	\$ 697,221,000	87.92%	\$ 724,615,000	91.38%	\$ (12,393,000)	-1.56%
\$ (15,353,000)	-14.55%	\$ (6,153,000)	-5.83%	\$ (6,590,000)	-6.24%	\$ (1,514,000)	-1.43%
\$ 516,592,000	27.07%	\$ 894,892,000	46.89%	\$ 730,604,000	38.28%	\$ (72,519,000)	-3.80%
\$ 1,533,103,000	49.46%	\$ 1,330,903,000	42.94%	\$ 1,025,318,000	33.08%	\$ (10,004,000)	-0.32%
\$ 929,649,000	96.86%	\$ 568,249,000	59.21%	\$ 237,623,000	24.76%	\$ 170,560,000	17.77%
\$ 170,537,000	14.98%	\$ 388,737,000	34.16%	\$ 757,964,000	66.60%	\$ (272,797,000)	-23.97%
\$ 67,584,000	53.80%	\$ 59,984,000	47.75%	\$ 32,393,000	25.79%	\$ 26,613,000	21.19%
\$ 325,694,000	25.59%	\$ 521,494,000	40.97%	\$ 787,720,000	61.89%	\$ (245,183,000)	-19.26%
\$ 1,255,343,000	56.23%	\$ 1,089,743,000	48.81%	\$ 1,025,343,000	45.93%	\$ (74,623,000)	-3.34%
\$ (31,000)	-4.91%	\$ (31,000)	-4.91%	\$ (22,000)	-3.49%	\$ -	0.00%
\$ (81,684,000)	-27.22%	\$ (12,784,000)	-4.26%	\$ (178,970,000)	-59.64%	\$ (57,321,000)	-19.10%
\$ 25,437,000	-30.34%	\$ 11,137,000	-13.28%	\$ 20,864,000	-24.89%	\$ 38,208,000	-45.57%
\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%
\$ 277,760,000	32.04%	\$ 241,160,000	27.81%	\$ (25,000)	0.00%	\$ 64,619,000	7.45%
\$ 1,533,103,000	49.46%	\$ 1,330,903,000	42.94%	\$ 1,025,318,000	33.08%	\$ (10,004,000)	-0.32%

Exhibit 3.A – Vertical Analysis of IS

Vertical Analysis				
2020	2019	2018	2017	2016
100.00%	100.00%	100.00%	100.00%	100.00%
75.67%	75.69%	75.30%	75.60%	75.52%
24.33%	24.31%	24.70%	24.40%	24.48%
4.21%	4.32%	4.27%	4.39%	4.10%
12.86%	14.05%	13.84%	14.79%	14.36%
1.14%	1.19%	1.44%	1.41%	1.74%
96.98%	92.87%	91.98%	93.37%	92.24%
3.02%	7.13%	8.02%	6.63%	7.76%
-1.01%	-1.12%	-0.96%	-0.75%	-0.82%
2.01%	6.01%	7.06%	5.87%	6.94%
0.23%	1.24%	1.54%	2.70%	2.22%
1.78%	4.78%	5.52%	3.18%	4.71%
0.00%	0.00%	0.00%	0.00%	0.00%
1.78%	4.78%	5.52%	3.18%	4.71%
0.00%	0.00%	0.00%	0.00%	0.00%
1.78%	4.78%	5.52%	3.18%	4.71%
-	-	-	-	-

Exhibit 3.B – Vertical Analysis of BS

Vertical Analysis				
2020	2019	2018	2017	2016
13.70%	3.55%	3.91%	4.48%	4.11%
5.64%	5.03%	5.66%	7.44%	7.27%
25.42%	25.30%	23.50%	25.37%	24.08%
2.89%	2.84%	2.94%	3.28%	2.96%
0.00%	0.00%	0.00%	0.00%	0.00%
47.65%	36.72%	35.36%	40.57%	38.42%
19.19%	20.31%	20.44%	24.18%	23.47%
1.28%	2.50%	2.23%	2.87%	3.03%
23.39%	33.64%	36.79%	25.27%	25.58%
1.95%	2.24%	2.40%	3.37%	3.41%
52.35%	63.28%	63.98%	59.43%	61.58%
100.00%	100.00%	100.00%	100.00%	100.00%
40.78%	34.49%	29.03%	36.58%	30.96%
28.25%	34.46%	45.97%	28.01%	36.72%
4.17%	4.19%	3.83%	4.93%	4.05%
34.50%	40.50%	49.95%	33.26%	41.06%
75.29%	74.99%	78.98%	69.85%	72.03%
0.01%	0.01%	0.01%	0.02%	0.02%
4.71%	6.48%	2.94%	7.86%	9.68%
-1.26%	-1.64%	-1.53%	-1.48%	-2.70%
0.00%	0.00%	0.00%	0.00%	0.00%
24.71%	25.01%	21.02%	30.15%	27.97%
100.00%	100.00%	100.00%	100.00%	100.00%

Exhibit 4.A – Key Ratios

Key Ratios		2020		2019		2018		2017		2016		5 Year Avg.	
Growth Ratios:	Formula:	Polaris	Industry Avg.	Polaris	Industry Avg.	Polaris	Industry Avg.	Polaris	Industry Avg.	Polaris	Industry Avg.	Polaris	Industry Avg.
Sales Growth	(Current Year - Previous Year)/ Previous Year	3.62%	-14.50%	11.58%	-1.60%	11.97%	1.70%	20.19%	20.00%	-4.29%	19.20%	8.29%	7.25%
Income Growth	(Current Year - Previous Year)/ Previous Year	-61.48%	-56.45%	-3.37%		94.39%		-18.99%		-53.24%		-22.80%	-6.19%
Asset Growth	(Current Year - Previous Year)/ Previous Year	4.56%	N/A	7.41%		33.51%		-0.32%		29.93%		15.02%	
Liquidity Ratios:													
Current Ratio	Current Assets/ Current Liabilities	1.17	2.19	1.07		1.24		1.11		1.24		1.17	
Quick Ratio	(Current Assets - Inventory)/ Current Liabilities	0.55	1.56	0.33		0.43		0.42		0.46		0.44	
Leverage (Solvency) Ratios:													
Debt-to-Total Assets	Total Debts/ Total Assets	0.75	0.65	0.75		0.79		0.7		0.72		0.74	
Times Interest Earned	Operating Income/ Interest Expense	3.48	N/A	6.28		8.55		11.24		21.89		10.23	
Asset Management (Activity) Ratios:													
Asset Turnover	Net Sales/ Average Total Assets	1.55	1.14	1.59		1.69		1.75		1.64		1.64	
Inventory Turnover	Cost of Goods Sold (COGS)/ Average Inventory	4.63	4.87	4.91		5.22		5.36		4.68		4.96	
Profitability Ratios:													
Profit Margin	Net Income/ Net Sales	1.78%	2.01%	4.78%	3.40%	5.52%	2.90%	3.18%	0.60%	4.71%	3.70%	3.99%	4.15%
Return on Assets (ROA)	Net Income/ Total Assets	2.73%	8.74%	7.29%	2.50%	9.15%	2.20%	5.52%	0.40%	8.24%	3.00%	6.71%	10.10%
Return on Equity (ROE)	Net Income/ Shareholder's Equity	13.10%	26.13%	32.69%	12.90%	37.28%	12.90%	19.56%	2.70%	23.34%	18.90%	25.32%	28.19%
Market Ratios:													
Price-to Earnings (P/E)	Market Price Per Share/ Earnings Per Share (EPS)	73.76	23.28	18.95		13.78		42.44		22.64		34.31	
Price-to-Book (P/B)	Market Price Per Share/ Book Value Per Share (BVPS EPS = Total Earnings/ Outstanding Shares) (BVPS = Book Value/ Outstanding Shares)	7.20	6.42	5.46		5.07		7.73		5.39		6.17	

Exhibit 5.A – Market Comparables

Company Name (In Billions)	Market Cap	EV	EV/Sales	EV/EBITDA	P/S	FWD P/E	P/Book	Sales	EBITDA	Earnings	BV of Equity	Net Debt
Paccar Inc. (PCAR)	\$ 29.90	\$ 35.76	6.42	12.59	1.55	16.47	2.94					
Navistar International Corporation (NAV)	\$ 4.38	\$ 7.87	4.34	163.95	0.58	29.24	1.93					
Nikola Corporation (NKLA)	\$ 5.97	\$ 5.06	15.98	-13.83	0.041	N/A	5.53					
Oshkosh Corporation (OSK)	\$ 5.88	\$ 6.12	3.88	10.32	0.86	17.01	2.06					
Yamaha Motor Co., Ltd. (YAMHF)	\$ 7.13	\$ 9.23	0.02	7.56	0.51	12.95	1.09					
Polaris Inc. (PII)	\$ 5.90	\$ 7.05	3.27	8.27	0.89	12.67	6.22	\$ 2.16	\$ 0.85	\$ 0.47	\$ 0.95	\$ 1.15
Current Price (PII)	\$ 139.96											
Shares Outstanding	63 Million (.063 Billion)											
Median	\$ 5.94	\$ 7.46	4.34	10.32	0.58	16.74	2.06					
Enterprise Value			\$ 9.36	\$ 8.80								
Total Equity Value			\$ 8.21	\$ 7.65	\$ 1.25	\$ 7.80	\$ 1.95					
Equity Value Per Share			\$ 130.27	\$ 121.39	\$ 19.85	\$ 123.73	\$ 31.02					
Valuation Analysis			Over	Over	Over	Over	Over					
Mean	\$ 9.86	\$ 11.85	6.13	10.16	0.71	18.92	2.71					
Enterprise Value			\$ 13.21	\$ 8.66								
Total Equity Value			\$ 12.06	\$ 7.51	\$ 1.53	\$ 8.81	\$ 2.57					
Equity Value Per Share			\$ 191.46	\$ 119.18	\$ 24.23	\$ 139.83	\$ 40.80					
Valuation Analysis			Under	Over	Over	Under	Over					
Excluded From Median & Mean												
Multiples			EV/Sales	EV/EBITDA	P/S	P/E	P/Book					
High			15.98	12.59	1.55	29.24	5.53					
Median			4.34	10.32	0.58	16.74	2.06					
Average			6.13	10.16	0.71	18.92	2.71					
Low			0.02	7.56	0.04	12.95	1.09					
Equity Value												
High			\$ 528.61	\$ 152.11	\$ 53.04	\$ 216.13	\$ 83.26					
Median			\$ 130.27	\$ 121.39	\$ 19.85	\$ 123.73	\$ 31.02					
Average			\$ 191.46	\$ 119.18	\$ 24.23	\$ 139.83	\$ 40.80					
Low			\$ (17.57)	\$ 84.04	\$ 1.39	\$ 95.72	\$ 16.41					

Exhibit 6.A – WACC

WACC Calculation	MV (Total Equity)	Weight of Debt	Weight of Equity	After-Tax Cost of Debt	Beta	Risk-free rate	Market Risk Premium	Cost of Equity	WACC
Total Liabilities	\$ 3,487,900,000	0.2866	0.7134	3.68%	2.03	2.24%	6.25%	14.93%	11.70%
Current Stock Price	\$ 137.78								
# of Shares	63,000,000								
Long Term Debt	\$ 1,308,600,000								
Interest Expense	\$ 61,000,000								
Cost of Debt	4.66%								

Exhibit 8.A – Sensitivity Analysis

Sensitivity Analysis						
Perpetuity Growth Method						
		WACC				
	\$ 120.80	10.70%	11.20%	11.70%	12.20%	12.70%
Growth Rate	8.00%	\$ 294.84	\$ 170.07	\$ 118.69	\$ 90.66	\$ 73.02
	9.00%	\$ 297.53	\$ 171.60	\$ 119.75	\$ 91.46	\$ 73.66
	10.00%	\$ 300.22	\$ 173.13	\$ 120.80	\$ 92.26	\$ 74.29
	11.00%	\$ 302.90	\$ 174.66	\$ 121.86	\$ 93.06	\$ 74.93
	12.00%	\$ 305.59	\$ 176.20	\$ 122.92	\$ 93.86	\$ 75.57
Sensitivity Analysis						
Exit Multiple Method						
		WACC				
	\$ 198.67	10.70%	11.20%	11.70%	12.20%	12.70%
Exit Multiple	5.00	\$ 171.69	\$ 169.92	\$ 168.19	\$ 166.51	\$ 164.87
	6.00	\$ 187.64	\$ 185.50	\$ 183.43	\$ 181.41	\$ 179.44
	7.00	\$ 203.58	\$ 201.09	\$ 198.67	\$ 196.31	\$ 194.02
	8.00	\$ 219.52	\$ 216.68	\$ 213.91	\$ 211.22	\$ 208.60
	9.00	\$ 235.46	\$ 232.27	\$ 229.15	\$ 226.12	\$ 223.17

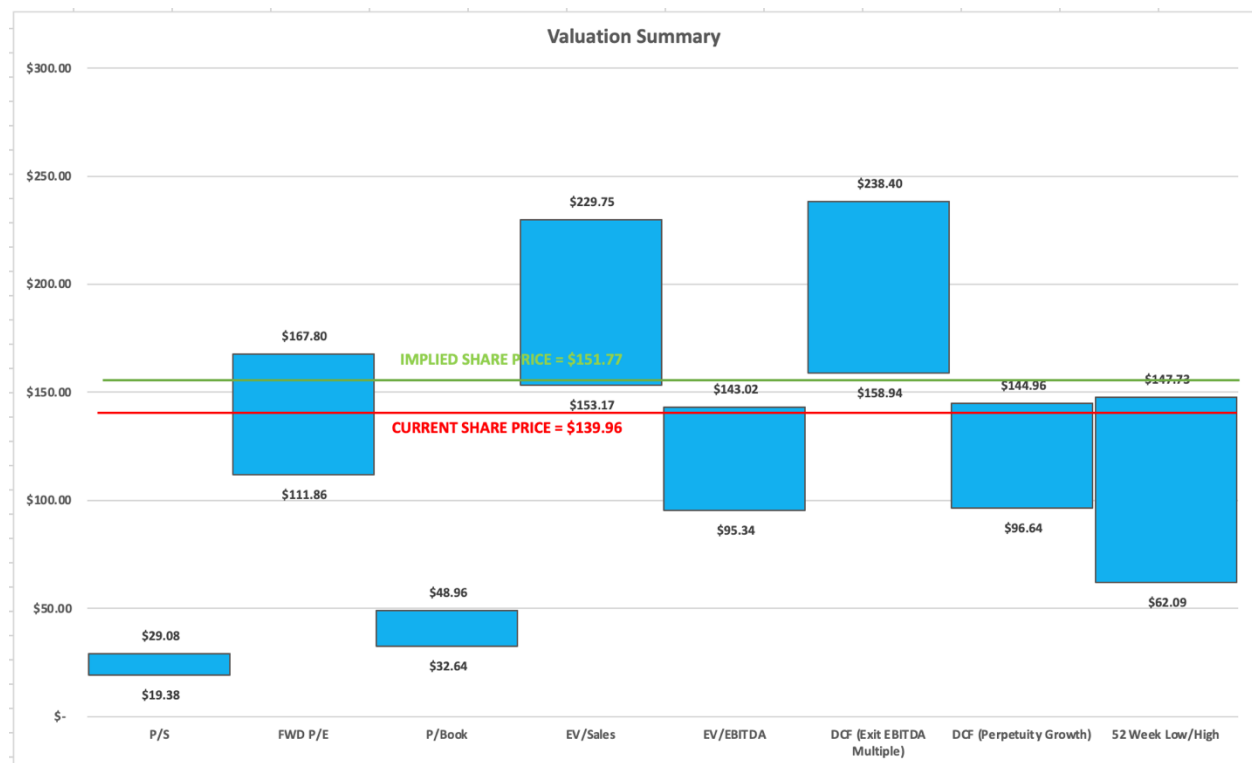
Exhibit 9.A – Football Field Chart

Exhibit 10.A – Valuation Analysis

Weighted Method Valuation			
Polaris Inc.			
Method	Valuation	Weight	Weighted Value
P/S	\$ 24.23	0.03	\$ 0.70
FWD P/E	\$ 139.83	0.17	\$ 23.42
P/Book	\$ 40.80	0.05	\$ 1.99
EV/Sales	\$ 191.46	0.23	\$ 43.90
EV/EBITDA	\$ 119.18	0.14	\$ 17.01
DCF (Exit EBITDA Multiple)	\$ 198.67	0.24	\$ 47.27
DCF (Perpetuity Growth)	\$ 120.80	0.14	\$ 17.48
<i>Total</i>	\$ 834.97	1.00	\$ 151.77

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