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## Introduction

This report presents a financial analysis of GlaxoSmithKline plc (GSK) using the ratio calculation that was performed in an Excel spreadsheet. A total of 16 ratios are used to measure the performance of the company. Each ratio provides an explanation of the overall performance of the company over the period from 2017 to 2020. Analyzing a company's performance can help it grow faster.

In this analysis report, we have calculated the ratios that are Profitability, Liquidity, Investment, Gearing, and Efficiency. GSK is a pharmaceutical company that discovers, develop, and manufactures new medicine to protect the health of people. By using this report GSK can determine if they are utilizing their full resources to find new medicines and sell them. As in this era where we are getting introduced to new viruses it is necessary for a pharmaceutical company to keep on innovating new medicines to treat people, for this they should be aware of their financial condition so this analysis is important.

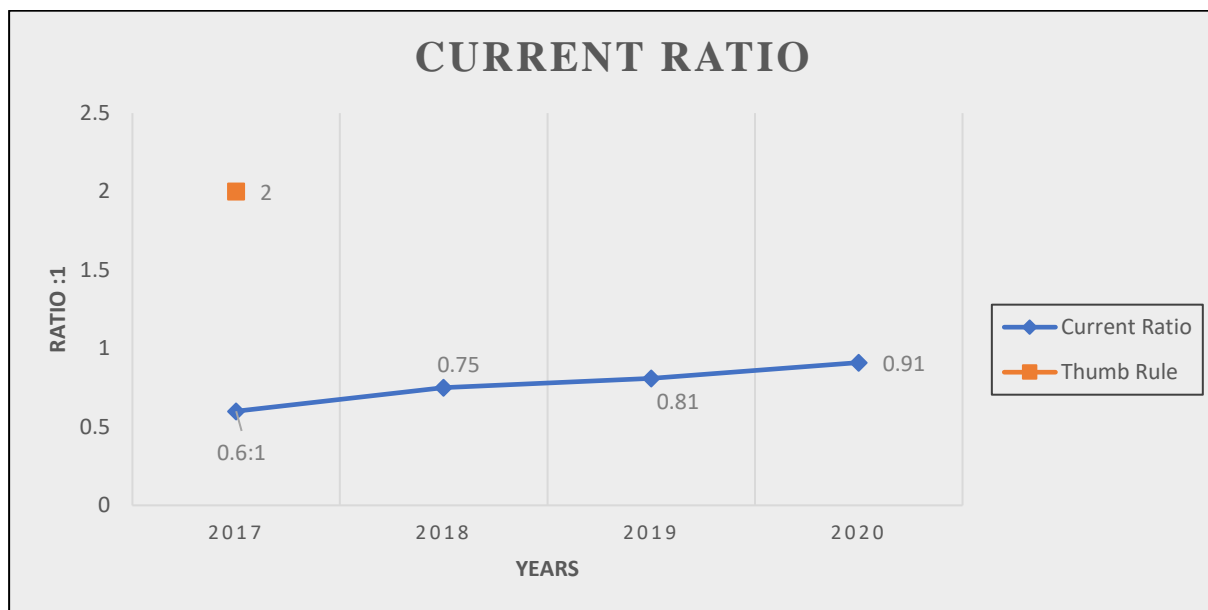
This report can also help the investor to analyze company performance and invest in the company if its financial performance is improving and the company can also generate money.

## Liquidity and Solvency (including Gearing)

Years	Current Ratio	Gearing (%)	Interest Cover(times)
2017	0.6	80	4.51
2018	0.75	85	6.27
2019	0.81	56	6.95
2020	0.91	53	8.06

Investors use liquidity ratios and solvency ratios to make investment decisions. A company's liquidity ratio measures its ability to convert its assets into cash. Solvency focuses to find the long-term and short-term financial problems and liquidity; it focuses on short-term and on current assets that can be converted into cash to pay short-term debts. Under Liquidity and Solvency, we have calculated 3 ratios and are the current ratio, gearing, and interest cover.

### Current Ratio

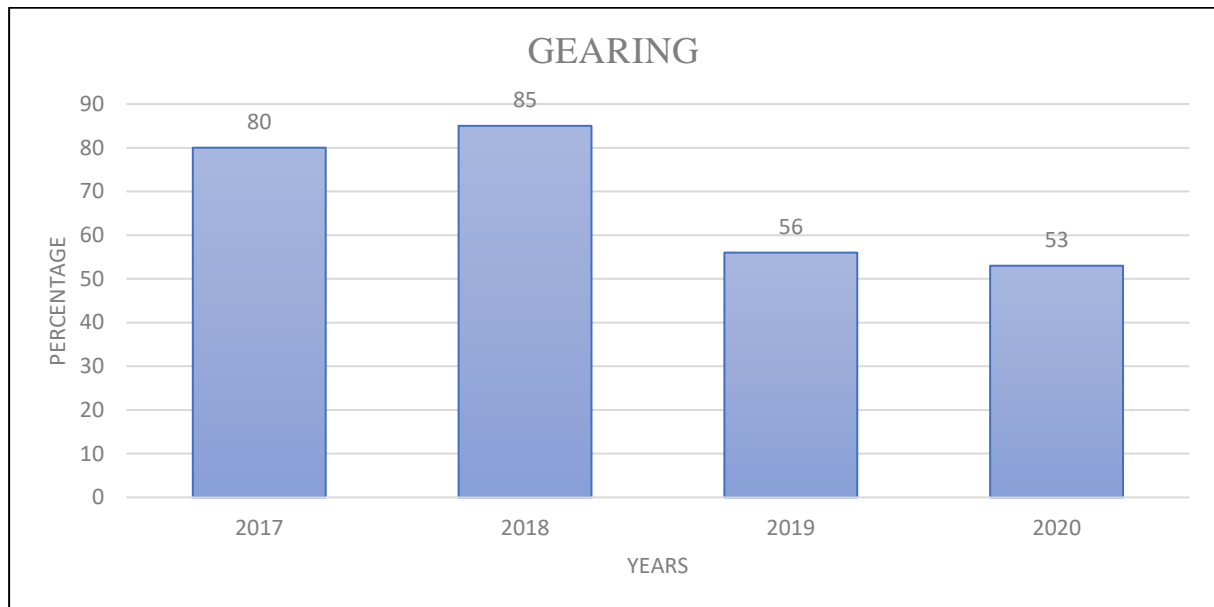


Graph 1: Current Ratio from 2017-2020

All of a company's current assets are compared to its current liabilities when calculating the current ratio. Current assets are defined as cash or the asset that is going to convert in cash within the year or less and liabilities are paid within a year or less. Current ratios help investors quickly evaluate a company's ability to pay its short-term debt with its current assets as well as compare its performance against competitors. As we can observe in the above graph, GSK is having a major liquidity problem. The thumb rule is 2:1 ratio. The company should have at least a 1:1 ratio to pay its short-term debt. In four years, period, the performance of GSK is below average. In 2017 the ratio is 0.6:1, in 2018 the ratio is 0.75:1, in 2019 the ratio is 0.81:1, in 2020 the ratio is 0.91:1. It represents that company has £0.60, £0.75, £0.81, £0.91 for the debt of £1. There is growth in current in the years but is not sufficient to pay the debt. This means that the company is

overtrading and it is risky for the company and can affect to gain more investors. As it is a manufacturing company so it is important to be at or near to the thumb rule 2:1.

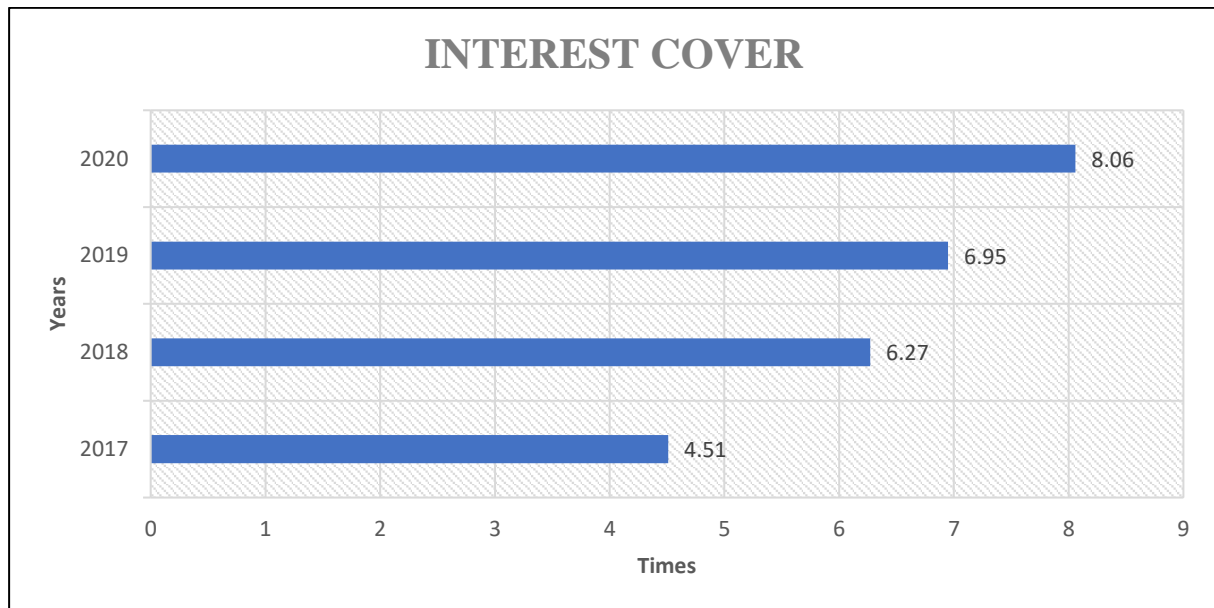
## Gearing Ratio



**Graph 2: Gearing Ratio from 2017-2020**

Gearing is the ratio, between a company's debt-to-equity (D/E) and its equity capitalization. It shows how much of a company's financial resources are provided by lenders versus its shareholders. If the company is high leverage, then the company is at high risk. It is considered that debt is riskier than equity because if a company miss to repay the debt, then the company can be bankrupt but equity can generate the chance to gain some cash to pay short-term debts. The ratio should be below 60% if it is above 60% then it is considered as high risk. As observed in the above graph, in 2017 and 2018 the ratio was above 60% it was at high risk as there was less equity. But in 2019 and 2020 company has focused on selling more shares and it lead to reducing the ratio below 60%. Investors are also more interested in investing in a company that has low leverage as it is less riskier.

## Interest Cover Ratio



**Graph 3: Interest Cover Ratio from 2017-2020**

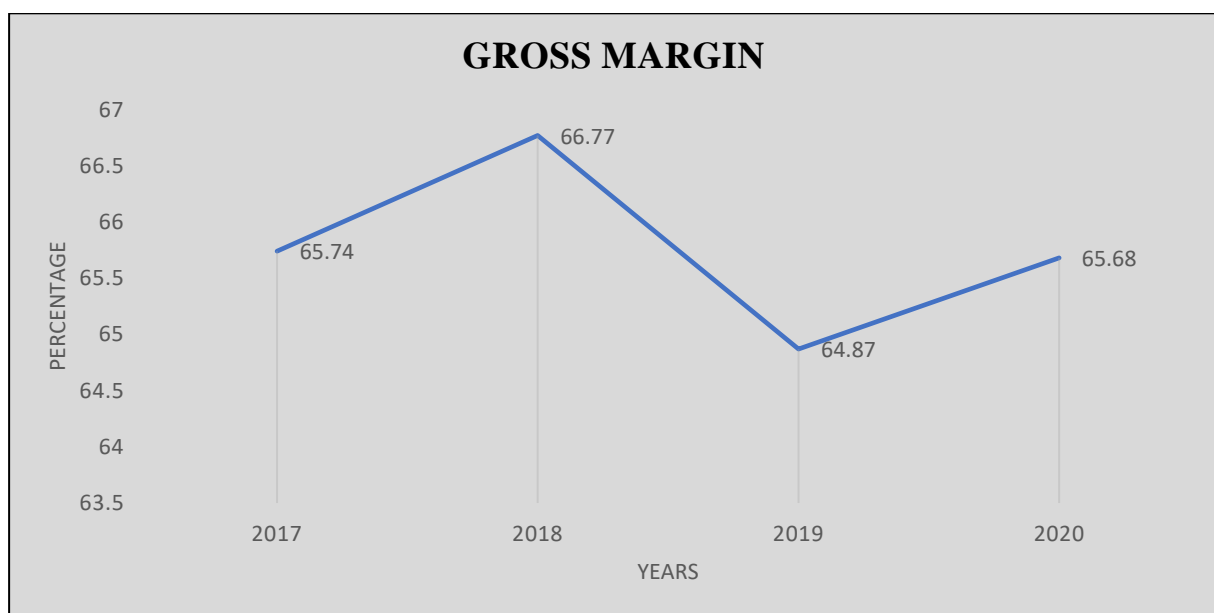
In order to measure how well a firm can pay its outstanding debts, the interest coverage ratio is used. Interest cover is calculated by taking the amount a company earns before interest and taxes (EBIT) is divided by the amount of interest expense for a given period. Generally high-interest cover is good for the company it means that the company is capable of paying its outstanding debts. It is good if the interest cover is above the ratio of 1.5 or 2.5 if it is below, then it seems that the company is having a liquidity problem. As we can observe in the graph, it looks like the company has a very good interest cover and it is increasing constantly. In 2017 it is 4.51 times and till 2020 it is increased to 8.06 times. So, it concludes that GSK is paying their debts and showing good performance, the company is not at risk to become bankrupt.

## Profitability Ratio

Years	Gross Margin	Net Margin	Sales to assets	Return on assets
2017	65.74	11.68	54	6.25
2018	66.77	15.57	53	8.27
2019	64.87	18.44	42	7.81
2020	65.68	20.43	42	8.66

Profitability ratios are financial metrics that are used to estimate a company to grow its earnings by finding its operating costs, revenue, balance sheet, or shareholder's equity over time, based on data collected at a specific point in time. It is effective to maintain and compare the profit and sales from the previous period data. It focuses on 3 ratios gross margin, net margin, and sales to assets.

## Gross Margin

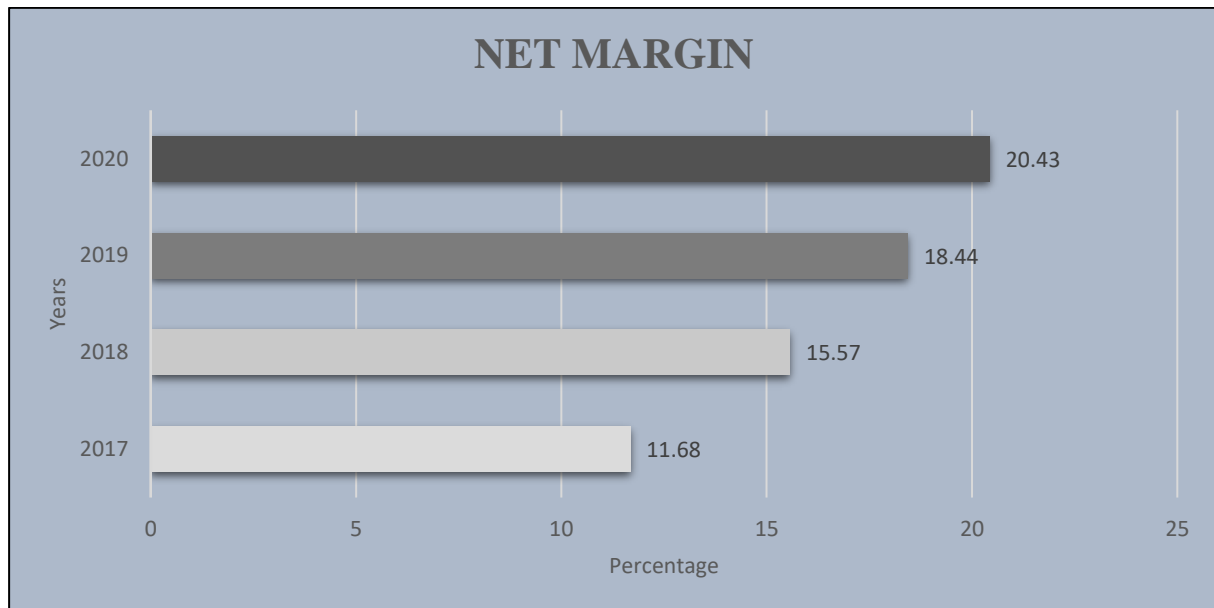


Graph 4: Gross Margin from 2017-2020

Gross margin is calculated by subtracting net sales from the cost of goods sales. Gross margin is also known as gross profit margin. Gross margin is the money a company retains after incurring the direct costs associated with producing the goods or products it sells. The higher the gross margin, the more guarantee that the company can repay the debts. As it is observed in the graph, in 2017 the gross margin is 65.74% which means £0.65 is retained from every pound it generates in revenue. There is a slight change in the gross margin from 2017 to 2020. In 2017 it is 65.74%, in 2018 it is 66.77%, in 2019 it is 64.87% and in 2020 it is 65.68%.

AS GSK is a manufacturing company the gross margin will always be lower as it has a large cost of goods sales. So, we can say that the company is performing well in growing revenue.

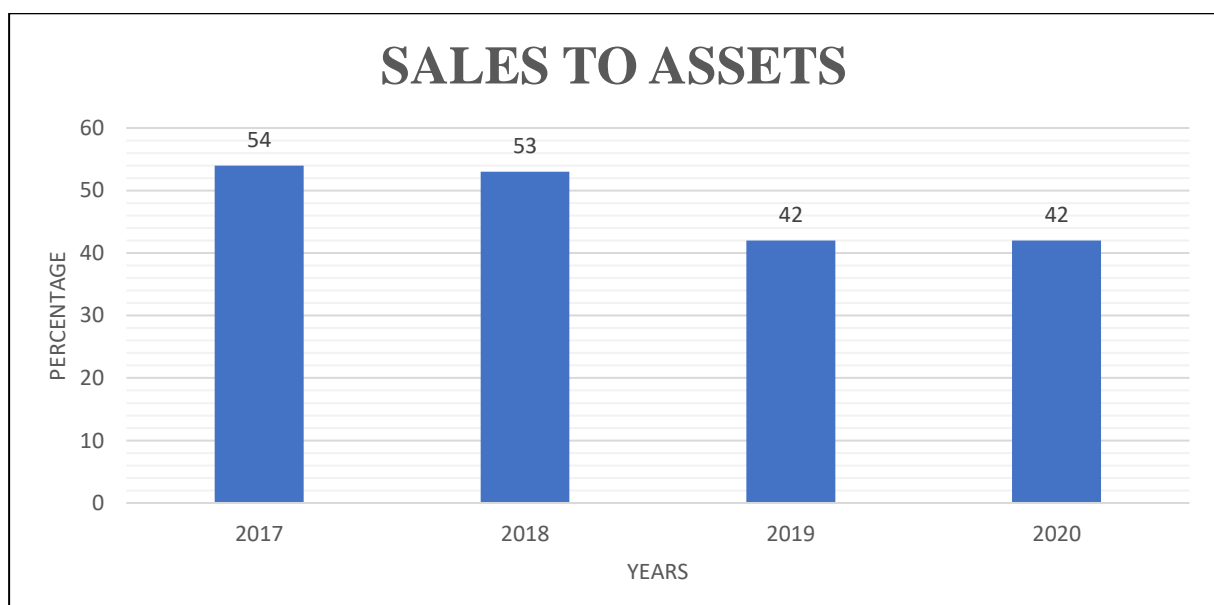
## Net Margin



**Graph 5: Net Margin from 2017-2020**

The net margin shows how the net income is generated from the percentage of revenue. The most important indicator is to check if the financial condition is positive or negative. A company can observe the increase or decrease in the revenue and also can check if the current practice is working properly or not. As we can observe in the above graph, there is a constant increase in the net margin. The main reason for the growth in the net margin is COVID as it is a pharmaceutical company and there was a need for medicines in this period so in a faster increase in 2019 and 2020. In 2017 the net margin was 11.68% and in 2020 it went up to 20.43%. There is steady performance in the net margin. As per growth, it is showing that the company is in a good position and will keep growing in the future.

## Sales to Assets

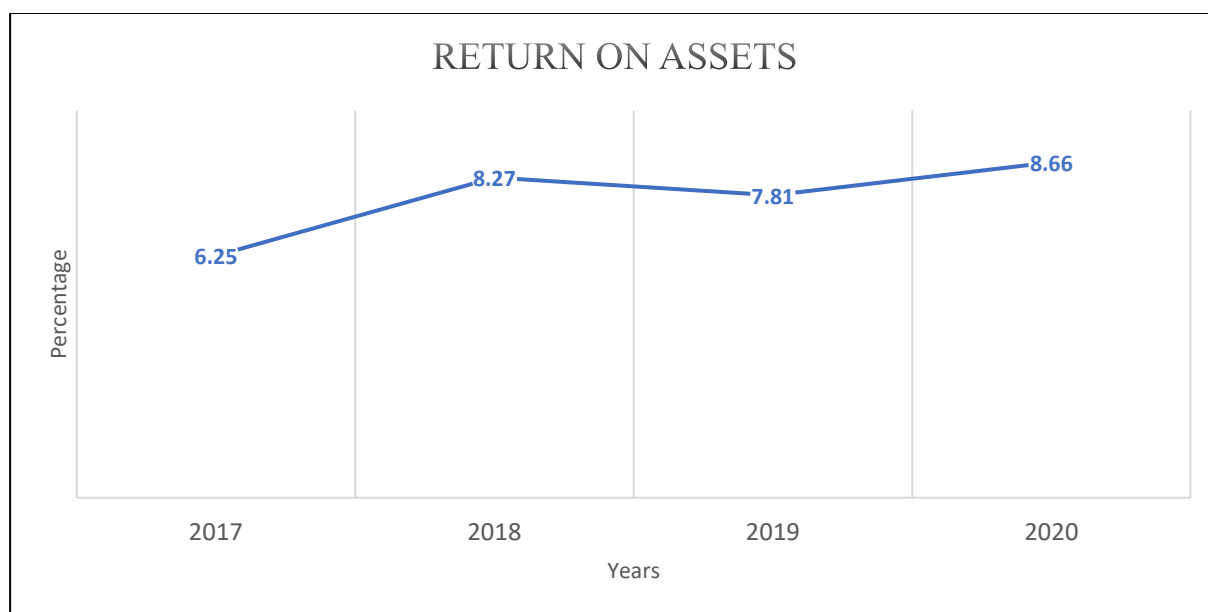


**Graph 6: Sales to Assets from 2017-2020**



Asset to sales ratios determines a company's efficiency in managing its assets to generate enough sales for the assets to be worthwhile. This ratio helps in determining whether or not a company is efficient in managing its assets to generate enough sales. As observed in the above graph, there is little decrease in the asset sales from 2017 to 2018 of about 1% but their drastic fall in between 2018 to 2019, 2020 the fall is of 11%. The reason for the drop in the year 2019 may be due to Covid-19 as the company needed to install new machinery to produce a maximum number of medicines for the patient. Another reason would be company may not utilize full resources of assets. But still, this trend is very bad as the company is not able to generate sales from the assets. This can also affect investors to not invest in the company.

## Return on Assets



**Graph 7: Return on Assets from 2017-2020**

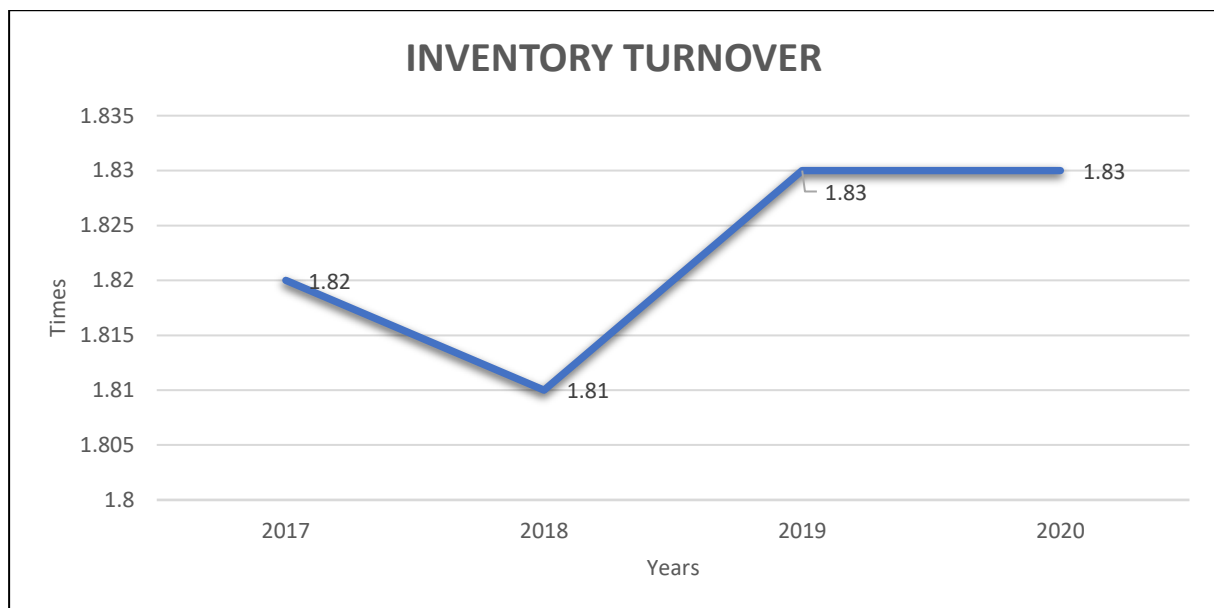
Return on assets measures a company's profitability in proportional to its overall assets. Companies can use return on assets to determine whether they use assets effectively to generate profits. Return on assets tells if profit is generated from the invested assets if assets are beneficial to the company. In other words, a higher ROA means a company can earn more while investing a smaller amount. In simple terms, a higher ROA means higher asset efficiency. As shown in the above graph, the company is achieving a small profit from the invested assets. In 2017 profit percentage is 6.25% which is not bad but it had increased to 8.27% in 2018 but in 2019 it slightly decreases to 7.81% but still, it is an excellent return on the invested assets. In 2020 it has increased to 8.66% and it is giving outstanding returns. It concludes that the company is getting good returns from the invested assets.

## Efficiency Ratio

Years	Inventory turnover	Inventory days
2017	1.82	200.7
2018	1.81	202
2019	1.83	199.7
2020	1.83	199.4

A company's efficiency ratio measures its ability to generate income from its resources. As part of an efficiency ratio analysis, a business is able to determine how well its assets and liabilities are utilized internally. An efficiency ratio is capable of calculating receivables turnover, liability repayments, equity quantity and use, and inventory distribution. The more the efficiency in a company leads to higher profit.

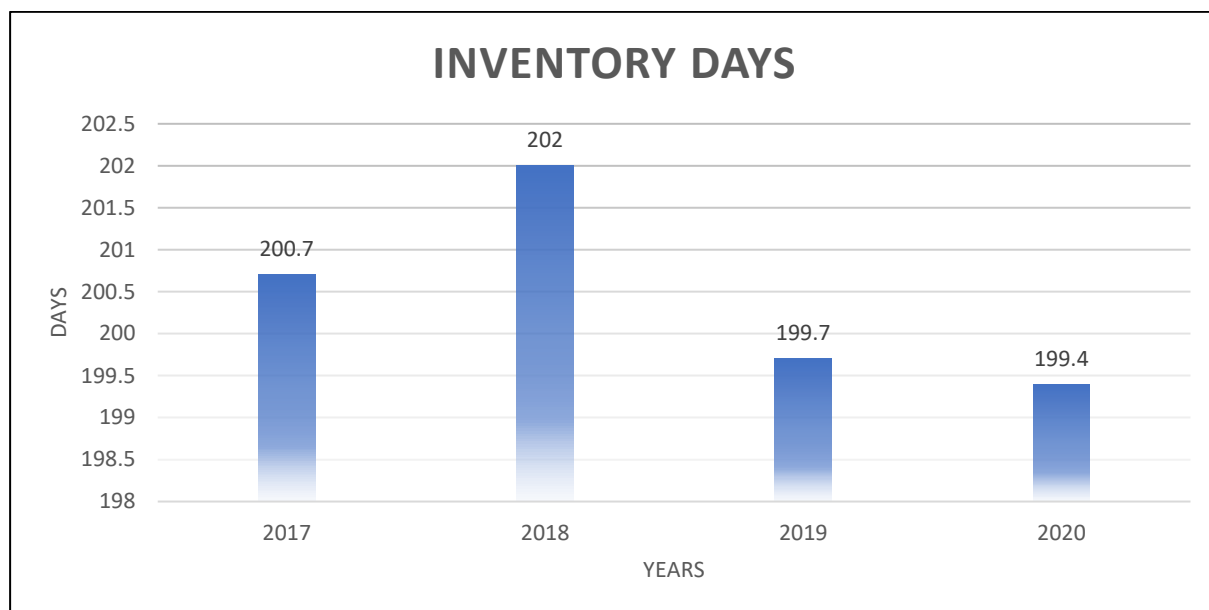
## Inventory Turnover



**Graph 8: Inventory Turnover from 2017-2020**

Inventory turnover is the amount of time in which a company replaces its goods sold in a given period. If the turnover rate is slow, it indicates weak sales and possibly excess inventory. If the turnover rate is fast, it indicates strong sales or insufficient inventory. As observed in the above graph, it is clear that GSK inventory turnover was facing difficulties to sell the stock in 2017 inventory turnover is 1.82, in 2018 it is 1.81, in 2019 it is 1.83, in 2020 it is 1.83 times the value doesn't have much difference. The reason for the low turnover is that there must be extra products on the inventory which is leading to the low rate of replacement of the product. To overcome this management has to analyze the most sold product and increase that in inventory and decrease the product that is not in demand so that the inventory turnover ratio will increase. For further growth company should sell the most required products to customers. This ratio shows the negative impact on the performance as there is instability in the graph.

## Inventory Days



**Graph 9: Inventory Days from 2017-2020**

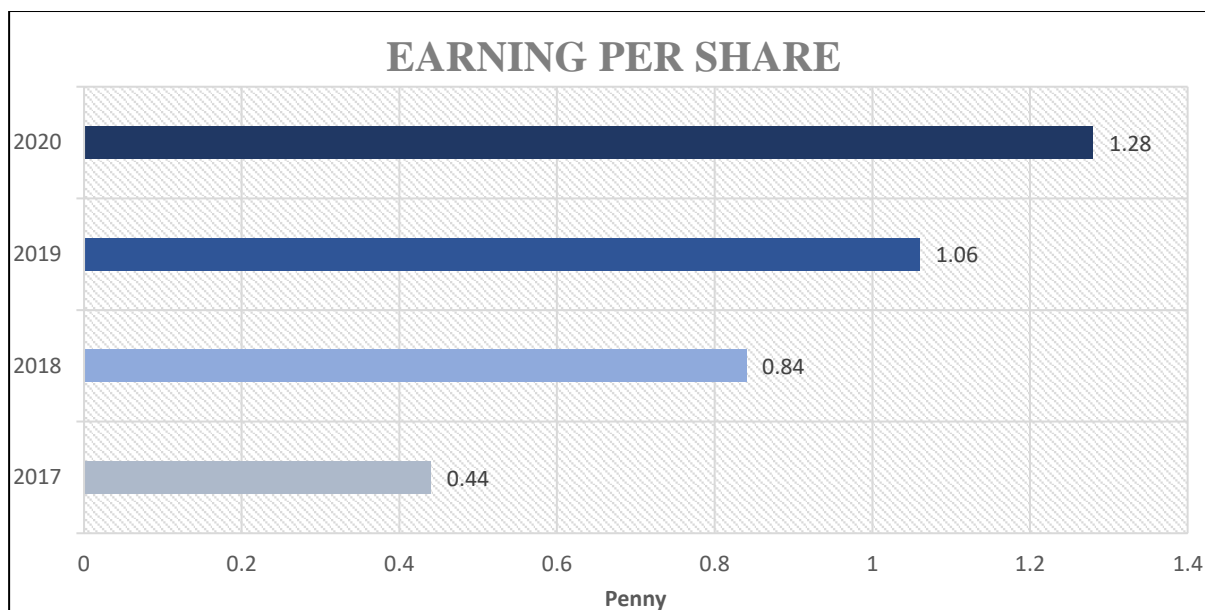
The inventory days ratio is a financial metric that measures the average number of days it takes for a company to sell its inventory, including goods in progress. When a company is able to sell its products within the shortest time frame, it is more efficient. As observed in the above graph, in 2017 it is taking a lot of days to replace the new products in the inventory with the sale product. And not in 2017 in four years the days are 199 – 202 days it means that product in the inventory is taking a long time to sell. There will be the same reason that is mentioned in the inventory turnover as it is directly dependent on it. If an old product didn't get sold then it will take time to replace it with a new product. The management should analyze the most sold product and increase that in inventory and decrease the product that is not in demand so that the inventory turnover ratio will increase. For further growth company should sell the most required products to customers. This shows the negative impact on the investors as there is no stability in the sale of goods from the inventory.

## Investment Ratio

Years	Earning per share	Price earning ratio	return on capital employed
2017	0.44	29.8	12.52
2018	0.84	17.67	19.78
2019	1.06	16.71	11.22
2020	1.28	10.45	12.41

The investment ratio is mostly used by investors. Investors used to analyze if they can buy the shares of the company. The ratio indicates the performance of the company in investment is the company is gaining profit on the invested assets. The investment ratio can provide information to investors if the company is worth to invest and can provide profit to them.

## Earning Per Share



**Graph 10: Earning Per Share from 2017-2020**

A company's earnings per share (EPS) are calculated by dividing its net profit by the number of shares it owns. A company's earnings per share indicate how much money it makes with each share, and it is a widely used measure of corporate value. Investors are more likely to pay a higher price for shares if they believe the company has higher profits compared to its share price. As it is observed in the graph, in 2017 per-share profit was 0.44 penny to the shareholder then gradually the price of per share increases in 2018 it is 0.84, in 2019 it is 1.06 and in 2020 it is 1.28 penny. It clearly indicates that the company is performing efficiently. An increase in share price can attract investors to invest in the shares of the company and will generate more money and also investors can make a profit.

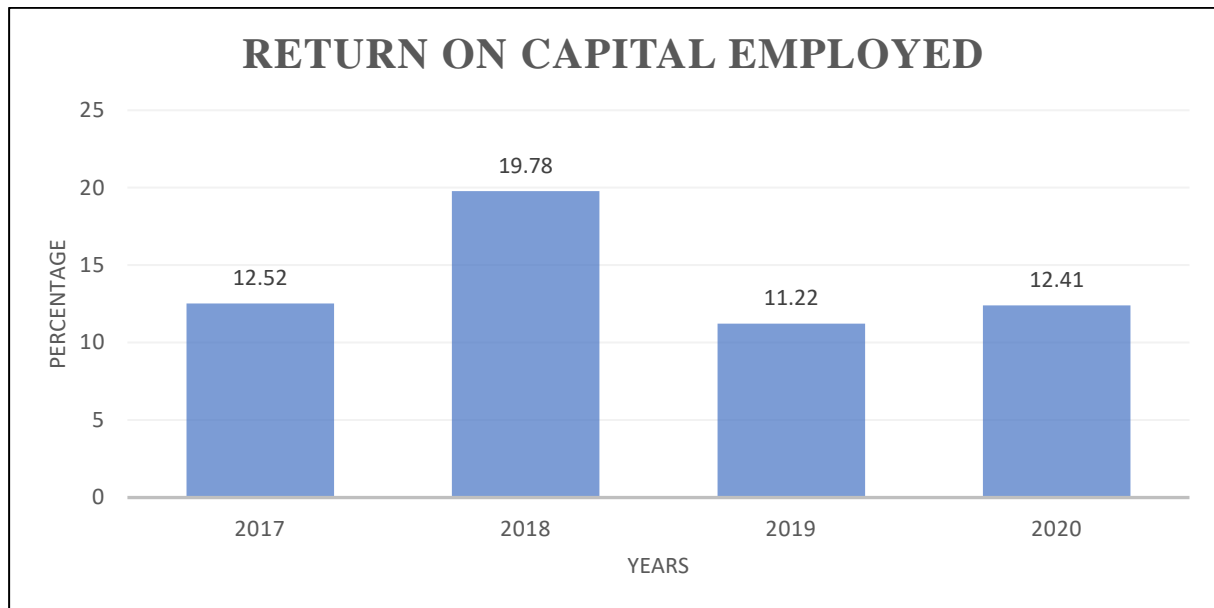
## Price Earning Ratio



**Graph 11: Price Earning Ratio from 2017-2020**

Price earning ratio is used by the investors before investing in the shares of the company. Share price and earnings per share are related by the price-to-earnings (P/E) ratio. In the case of a high P/E ratio, the stock of a company could be overvalued, or investors may expect higher growth rates in the future. There are 2 types of P/E ratios i.e. forward and trailing. AS it is observed in the above graph, the trend is falling down which means that position of the company is not stable but it's not true because the per-share price is increasing. In 2017 it was 29.8 and the per-share price was 0.44 penny and in 2020 it has dropped to 10.45 but the per-share price is increased to 1.28 penny which means that the share is undervalued and investors will be interested to invest as the share price is increasing.

## Return On Capital Employed



**Graph 12: Return on Capital Employed from 2017-2020**

The return on capital employed is a financial ratio that measures how profitable a business is based on its total capital. If the return on capital employed is high then profit is also high. The investors use this ratio to analyze the stability and high profit on investing in the company. As it is observed in the above graph, there are more fluctuations in the four years. In 2017 ROCE is 12.52% and it is increased in 2018 to 19.78%. In 2019 it is decreased to 11.22% and in 2020 it is increased to 12.41%. The investors hesitate to invest in a company where the ROCE is not stable, they are afraid of losing their money. GSK is not working efficiently in the ROCE.

## Conclusion

In conclusion, it seems that GSK is having a major liquidity problem. The current ratio of the GSK is below the 2:1 ratio which means a company is can face difficulties paying short-term debts by overtrading and falling company to risk position. In gearing, the company was performing worst in 2017 and 2018 as there was high leverage but in 2019 and 2020 the has focused on selling more shares which lead to low leverage and investors gets motivated to invest. But in interest cover, GSK is performing best and the interest cover ratio is increasing throughout the years. This indicates the company is not going to be bankrupt. Overall company is performing well in liquidity ratio.

The profitability ratio is growing at a positive trend. The gross margin and net margin are increased in the four years which means that company is able to pay its short-term and long-term debts. As still, the company is a manufacturing company its gross margin will always be low but GSK's gross margin is steady which is a good thing. The sales to assets drop in 2019 but it is due to an increase in machinery. GSK is also earning from the invested assets and the profit is increasing through the years. Overall, it shows that the company is in a stable position and can grow revenue in the future.

The efficiency ratio is not performing well. The inventory turnover and inventory days show a negative trend in the performance of the company as it takes a long time for the company to replace or add new goods after selling the old goods and inventory turnover is also less the reason can be the management has not analyzed the most sold product and also have kept the extra not in-demand product. The management should manage the product properly and should not load extra product that is not in demand. This affects the efficiency ratio of the company.

The investment ratio is satisfying investors and motivates them to invest in GSK shares. As the valuation of the company share is low and its shares are giving profit the is increasing steadily. The investors are encouraged to invest in the GSK as its shares are giving more profit and with low valuation.

The company is in a stable position and can grow its revenue in the future.

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