

Study on Financial Performance of Amgen Inc. and
GlaxoSmithKline plc.

By

Saloni Gupta

*Dissertation submitted in partial fulfillment of the requirements of the degree
MBA Hospital and Health Management*

Academic year, 2017-2019



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TO WHOMSOEVER MAY CONCERN

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The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

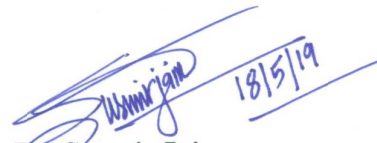
The Internship is in fulfilment of the course requirements.

I wish her all success in all her future endeavours.



Dr. Ashok Kaushik
Dean, Academics and Student Affairs
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18 May 19



Dr. Susmit Jain
Associate Professor & Guide
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April 30, 2019

EXPERIENCE CERTIFICATE

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We wish you all the success in future endeavors.

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Office Managing Principal

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CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **A study on Financial Performance of Amgen Inc. And GlxoSmithKline plc.** and submitted by **Saloni Gupta** Enrollment No **0656** under the supervision of **Dr. Susmit Jain (Associate Professor)** for award of MBA Hospital and Health Management of the University carried out during the period from **4th Feb 2019** to **30th April 2019** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.


Signature

ABSTRACT

A Study on Financial Performance of Amgen Inc. and GlaxoSmithKline plc.

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1. INTRODUCTION

The pharmaceutical industry has become a highly competitive, which is why performance represents the key element to stay on a market. Evaluating the performance of the economic entities from this sector is of high importance for the management, shareholders, trading partners and creditors. This study focuses on Investigating and analyzing the financial statements of two global pharmaceutical companies. The analysis is based on data from companies' annual and financial reports. Pharmaceutical sector is one the promising & growing industry. This study attempts basically to measure the financial performance of the Amgen Inc. and GlaxoSmithKline plc., two of the world's top 10 pharmaceutical companies based on revenue. The Financial Evaluation , ratio analysis was done on liquidity, profitability, debt coverage, assets management and market value.

Keywords: Pharmaceutical; Profitability; Liquidity; Consistency; Debt coverage; Asset Management; Market Value

2. OBJECTIVE: To assess and compare the selected Pharmaceuticals firms over a period of two financial year (2017 and 2018) on their performance related to-

- Liquidity ratios
- Profitability ratios
- Debt coverage ratios
- Asset management ratios
- Market value ratios

3. MATERIAL AND METHODS:

- **Study Design:** Exploratory and Descriptive
- **Type of data:** Secondary Data
- **Setting:** ZS Associates, Gurugram.
- **Data Collection Tools:**
 - Method for data collection: Following data collection tool will be used to derived key information to calculate financial ratio's for FY2017 and FY2018 for the selected pharmaceutical firms:
 - Balance sheet
 - Income statement

- Cash Flow
 - Annual report, 10 K filling
 - Company website
 - Internet
 - Confidential sources
- **Duration of Study:** 3 Months (4 Feb,2019 to 30 April, 2019)
 - **Sampling Technique:** Convenient sampling technique will be applied to select pharmaceutical companies from the list of top 10 pharmaceutical companies around the globe, based on revenues.
4. **RESULTS:** Amgen's performance was better overall, but we can see in liquidity ratios there is a decreasing trend in 2018. GSK's performance is in a better shape as increasing trend is observed in all the ratios in 2018.
5. **CONCLUSION:** From the study it is found that Amgen Inc. performed better than GlaxoSmithKline plc. on liquidity, profitability and debt coverage whereas GSK comparative performance for the FY2018 in market value was significantly better than Amgen. On asset management parameter both the companies performed same.

Acknowledgments

I started off my training with a vision in my mind so as to be able to learn about the aspects of Healthcare Consultancy in a detailed manner.

I am thankful to **Ms. Nidhi Khatura** (Knowledge Management -Associate Consultant, ZS Associates, Gurgaon) for giving me the opportunity to carry out my dissertation and for her constant support and encouragement. I am thankful to her for the time and efforts she spent from her busy schedule. I wish to express my sincere gratitude to **Ms.Nupur** (Knowledge Management-Associate ZS Associates, Gurgaon) for her supervision, advice and guidance. She was a continuous source of ideas which inspired and enriched my growth as a student, a researcher. I am indebted to her, for her faith in me and providing the right direction

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Regards,
Saloni Gupta

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List of Abbreviations

- CAGR - Compound annual growth rate
- CAPEX - Capital Expenditures
- COB - Close of Business
- EPS - Earnings per share
- FY – Financial year
- LLC - Limited Liability Company
- MTD - Month-to-Date
- NAV - Net Asset Value
- NCND - Non-Circumvent and Non-Disclosure
- NDA - Non-Disclosure Agreement
- P&L - Profit and Loss
- P/E - Price-to-earnings ratio
- QTD - Quarter-to-Date
- ROA - Return on assets
- ROCE - Return On Capital Employed
- ROE - Return on Equity
- ROI - Return on Investment
- ROIC - Return on Invested Capital
- RONA - Return on net assets
- ROS - Return on Sales
- SIV - Structured Investment Vehicle
- TSR - Total Shareholder Return
- WC - Working capital
- YTD - Year-to-date

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1. INTRODUCTION

An accounting ratio is a calculations of selected numerical values taken from an enterprise's financial statements. It is the way of systematically manipulating figures taken from the financial statements of a company to generate information that are used as a part of investment decision making process.

Time series or Trend Analysis: To evaluate the performance of one firm, its current ratios will be compared with its past ratios. It gives an indication of changes and reflects whether the firm's financial performance has changed over that period of time

Cross-Sectional Analysis: To compare ratios of one firm with another firm in the same industry at the same point in time. This is conducted to evaluate the relative performance of a firm.

Industry Analysis: To determine the financial condition and performance of a firm, its ratios may be compared with average ratios of the industry to which the firm belongs. It helps to ascertain the financial standing and capability of the firm in the industry to which it belongs

Financial analysis includes examining historic data for information about the current and future financial health of a company. It can be applied in a variety of situations to give business managers the information for making critical decisions. Finance is a business language. Goals and objectives of a Business are set in financial terms and its outcomes are measured in financial terms.

Finance involves analysis financial statements to understand information valuable for management decision.

Financial statement analysis is important to identify the trends and relationships between items in the financial statement. Both internal management and external users (analysts, creditors, and investors) of the financial statements need to evaluate a company's profitability, liquidity, and solvency.

Documents used in financial analysis:

1. Balance Sheet: The balance sheet outlines the financial and physical resources that a company has available for business activities in the future
2. Cash Flow Statement: The cash flow statement is similar to the income statement in that it records a company's performance over a specified period of time

3. Income statement: it is a statement reporting a company's financials over a specified period.

Financial performance is assessed by giving a summary of how the business incurs its revenues and expenses through both operating and non-operating activities

Elements of financial health:

- I. **Liquidity**: it is the companies' ability to meet its short term liabilities. Liquidity ratios greater than 1 indicate that the company is in good financial health and it is less likely to fall into financial difficulties

- **Current Ratio**
It measures a company's ability to pay short-term and long-term obligations. The more the current ratio, the more capability of the company to pay its obligations
- **Quick Ratio**
It measures a company's ability to meet its short-term obligations with its most liquid assets. The higher the ratio, the more financially secure a company is, in the short term. A common rule companies with a quick ratio greater than 1.0 are sufficiently able to meet their short-term liabilities
- **Cash Ratio**
A company's ability to pay current liabilities using only cash and cash equivalents on hand. A cash ratio of one means that the company has equal amount of current liabilities as it does cash and cash equivalents to pay off debts. If it's less than 1, there is insufficient cash on hand to pay off short-term debt and vice versa

- II. **Profitability**: Profitability ratios show a company's overall efficiency and performance

- **Net profit margin**
net profit margins show how much of each dollar collected by a company as revenue translates into profit.
- **Gross Profit margin ratio**
is calculated to analyze a business's financial health and business model by revealing the proportion of money left over from revenues after accounting for the cost of goods sold.
- **Return on Total Assets**
The ratio is considered to be an indicator of how effectively a company is using its assets to generate earnings before contractual obligations must be paid.
- **Return on common stock equity**
It measures a corporation's profitability by measuring how much profit a company generates with its investors' money

- Operating Profit Margin
a measurement of what proportion of a company's revenue is left over after paying for variable costs of production such as wages, raw materials, etc.

III. Debt coverage:

- Debt Ratio
Measures of a company/consumer's leverage. The higher this ratio, the more leveraged the company is, implying greater financial risk
- Time interest earned
Used to measure a company's ability to meet its debt obligations.
- Book value per share
Is a measure used by owners of common shares in a firm to determine the level of safety associated with each individual share after all debts are paid accordingly.

IV. Asset management:

- Total assets turnover
Used as an indicator of the efficiency, which a company is deploys in its assets in generating revenue.
- Fixed assets ratio
Measures Company's ability to generate net sales from fixed-asset investments, namely property, plant and equipment (PP&E), net of depreciation. higher fixed-asset turnover ratio indicates that a company has more effectively utilized investment in fixed assets to generate revenue.

U. Market value:

- Earnings per share ratio
Earnings per share serves as an indicator of a company's profitability
- Market/Book ratio
used to find the company valuation
- P/E Ratio:
- The price-earnings ratio is used for valuing a company that measures its current share price relative to its per-share earnings

1.1BACKGROUND

The pharmaceutical industry dates back to the time when its roots lies in the near hit and miss range of treatment and cure based on knowledge passed on by folks. The scientific evolution with the idea of rationalism and experimentation started in 17th century and helped the

industrial evolution which took place in late 18th century thus providing a stepping stone for the Pharmaceutical industry that established in the 19th century. Later the concept of human health was developed.¹

Merck (the Merck&co of today) in Germany was one of the earliest companies to work in this direction of human health. Originated as a pharmacy in Darmstadt in 1668, it was later in 1827 that Heinrich Emanuel Merck began to transit toward industrial and scientific revolution with the manufacturing and selling of alkaloids.

Similarly, GlaxoSmithKline's can be traced back to 1715 when its founder Beecham became involved in the industrial production of medicine, also started producing patent medicine in 1842 and in fact was the world's first factory producing only medicines in 1859.

Meanwhile in US, in 1849 Pfizer was founded by two German immigrant brothers, initially as a business of fine chemicals but their business expanded after American civil war as the demand for painkillers and antiseptic rocketed.

During the same time, Lily, a pharmaceutical chemist tried his hand at farming after his military career. Lily established a pharmaceutical business in 1876, he was a pioneer of new methods and was one of the first's to focus on research and development along with manufacturing.

In the second half of 19th century, Switzerland saw rapid development in its home grown. Swiss was a home to textile and dyes when they realized that their dyes had antiseptic properties and they started manufacturing them as pharmaceuticals.. Switzerland's total lack of patent laws led to it being accused of being a "pirate state" in the German Reichstag.

In 1863, Bayer was founded as a dye maker in Wuppertal, later entered medicines by commercializing medicine around the turn of 20th century and became one of the one successful pharmaceutical of that time.

The time between 1918 and 1939 was marked by two important breakthroughs that presaged the arrival of the pharmaceutical industry as we know it today. The first was insulin and the second penicillin.

Post war, arrival of social healthcare system helped in forming a structured system,U.K's National Health Services was one of them. The US pharma industry boomed as its economy, growth was supported with generous fund raising by government which reached upto \$100million.

Pharmaceutical industry has come a long way to where it stands today, and they have been the top performers in an era of aging population, high healthcare cost and ongoing development of profitable costly medicines. Investors seeking to invest in pharmaceutical company have a wide variety of publicly traded companies to choose from. To take wise decision, they need to consider key financial ratios that are helpful in the analysis and equity evaluation of pharma firms. Financial ratio plays a very important role in analysis and

comparison of financial performance, stability, overall profitability, weakness and future trend of a firm.

The rankings have been provided on the basis of pharma division/franchise revenue of listed companies for year 2018: Last Updated (7th March 2019).

Rank	Company	Net Sales Revenue	Source
1	Pfizer Inc.	USD 53.647 Billion	Press release
2	Novartis AG	USD 51.90 Billion	Press release
3	Roche Holding AG	USD 45.5896 Billion	Press release
4	Johnson & Johnson	USD 40.734 Billion	Press release
5	Sanofi S.A	USD 39.288 Billion	Press release
6	Merck & Co., Inc.	USD 37.689 Billion	Press release
7	AbbVie Inc.	USD 32.753 Billion	Press release
8	Amgen	USD 23.7 Billion	Press release
9	GSK	USD 22.968 Billion	Press release
10	Bristol-Myers Squibb	USD 22.600 Billion	Press release

Over the years, investors and analysts have developed numerous analytical tools, techniques and concepts for comparing the relative strengths and weaknesses of companies. These form the basis of fundamental analysis.

Ratio analysis is developed to perform quantitative analysis of financial statements. This analysis is the key link between the three financial statements to offer figures that are comparable between companies, across industries and sectors. Ratio analysis is one of the most widely used fundamental analysis techniques.

Nevertheless, financial ratios vary across different industries and sectors and comparisons between completely different types of companies are often not valid. In addition, it is important to analyze trends in company ratios instead of solely emphasizing a single period's figures.

Ratio's are mathematical expression relating a number to another, also providing a relative comparison. Financial ratios form a basis of comparison between figures found on financial statements.

This study aims at calculating and analyzing these Amgen and GSK's Financials ratios to provide valuable information about their financial health along with comparing them both

About GlaxoSmithKline plc.:

- ☐ Headquarters – Brentford, United Kingdom
- ☐ Chief executive officer – Emma Walmsley
- ☐ Total employees – 100,000
- ☐ R&D expense – \$3.9 billion
- ☐ Product sales – \$22.5 billion
- ☐ Total revenue – \$30.82 billion

GSK has 3 global businesses that research, develop and manufacture innovative pharmaceutical medicines, vaccines and consumer healthcare products.

Their goal is to be one of the world's most innovative, best performing and trusted healthcare companies.

Their values and expectations are at the heart of everything we do and help define our culture - so that together we can deliver extraordinary things for our patients and consumers and make GSK a brilliant place to work.

Their values are Patient focus, Transparency, Respect, Integrity. Their expectations are Courage, Accountability, Development, Teamwork.

GSK aims to bring differentiated, high-quality and needed healthcare products to as many people as possible, with our 3 global businesses, scientific and technical know-how and talented people.

GSK's Pharmaceuticals business has a broad portfolio of innovative and established medicines with commercial leadership in respiratory and HIV. Our R&D approach focuses on science related to the immune system, use of genetics and advanced technologies.

GSK's Vaccines business has a broad portfolio and innovative pipeline of vaccines to help protect people throughout life. We deliver over two million vaccine doses per day to people living in over 160 countries.

GSK's Consumer Healthcare business develops and markets an innovative portfolio of consumer preferred and expert recommended brands in the Pain relief, Respiratory, Digestive health, Oral health, Nutrition and Skin health categories.

On 19 December 2018 we announced our agreement with Pfizer to form a new world-leading Consumer Healthcare Joint Venture. Within 3 years of the closing of the transaction, we intend to separate the Joint Venture via a demerger. With our future intention to separate, the transaction also presents a clear pathway forward for us to create a new global Pharmaceuticals/Vaccines company, and a new world-leading Consumer Healthcare company.

About Amgen Inc.:

- ☐ Headquarters – Thousand Oaks, California
- ☐ Chief executive officer – Robert A. Bradway
- ☐ Total employees – 21,000
- ☐ R&D expense – \$3.7 billion
- ☐ Product sales – \$22.5 billion
- ☐ Total revenue – \$23.7 billion

Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology.

Amgen's belief—and the core strategy—is that innovative, highly differentiated medicines that provide large clinical benefits in addressing serious diseases are medicines that will not only help patients, but also will help reduce the social and economic burden of disease in society today.

Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology innovator since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies, has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

Amgen has a presence in approximately 100 countries and regions worldwide and our innovative medicines have reached millions of people in the fight against serious illnesses. They focus on six therapeutic areas: cardiovascular disease, oncology, bone health, neuroscience, nephrology and inflammation. Their medicines typically address diseases for which there are limited treatment options, or they are medicines that provide a viable option to what is otherwise available.

Understanding the fundamental biological mechanisms of disease is a defining feature of Amgen's discovery research efforts—and a major contributor to the development of Amgen's deep and broad pipeline of potential new medicines. Amgen's "biology first" approach permits its scientists to first explore the complex molecular pathways of disease before determining what type of medicine, or modality, is most likely to deliver optimal efficacy and safety. With the advances in human genetics, Amgen continues to shed new light on the molecular roots of disease. Amgen subsidiary deCODE Genetics, a global leader in human genetics, is a powerful differentiator, greatly improving how we identify and validate human disease targets.

The treatment of millions of seriously ill patients worldwide depends on the safe and reliable production of biologic medicines, which are administered by injection or intravenously. A worldwide leader in biologics manufacturing, Amgen has an outstanding track record of reliably delivering high-quality medicines to patients who need them. Significant skill, experience,

vigilance and commitment are critical to help ensure the quality of a biologic medicine each time a new batch is made. At Amgen, robust quality control and a reliable supply of medicines for patients are every bit as important as scientific innovation.

1.2 LIMITATION

1. The present study will be largely based on ratio analysis which has its inherent limitations
2. As researcher being an external analyst, the scope of access to internal data related to the financial performance of Pharmaceutical industry was limited.
3. This study is based on secondary data taken from published annual reports of selected Pharmaceutical companies.

1.3 OUTLINE

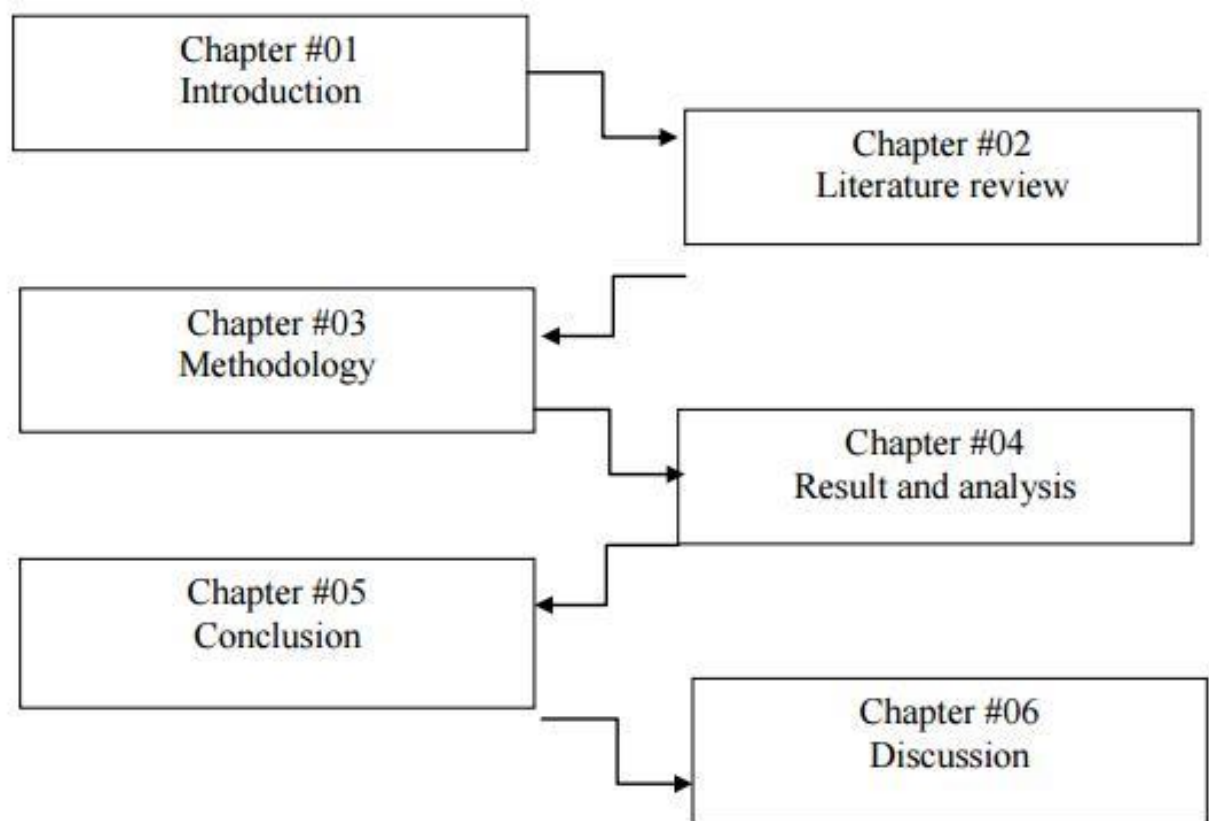


Figure 1.1 Outline of the Study

1.4 RATIONALE

The main rationale for doing this study was to provide valuable information about Amgen and GSK's financial health. The need of financial analysis is to interpret the information contained in financial statement so as to judge future earnings, ability to pay interest, debt maturities and profitability. The data gives an intuitive understanding of how the company conducts business. Stockholders can find out how management employs resources and whether they use them properly.

Ratio analysis helps to analyze trends in a business along with comparing its performance and condition with the average performance of similar business in the same industry.

- Ratio analysis provide all important early warning indications that helps to solve business problems. The purpose of this study is to evaluate and compare the financial health of the two selected pharmaceutical companies, Amgen and GSK.

1.5 OBJECTIVES

To assess the selected Pharmaceuticals firms over a period of two financial year (2017 and 2018) on their performance related to-

1. Liquidity ratios
2. Profitability ratios
3. Debt coverage ratios
4. Asset management ratios
5. Market value ratios

2. REVIEW OF LITERATURE

A non-systematic literature review was done to identify the financial ratios used in this study. To identify ratios in articles, journals and studies searches of databases using keywords such as “financial management”, “profitability” “liquidity” “debt coverage” and “ratio analysis” were undertaken.

The studies differentiate themselves by using different independent variables (financial ratios) and/or employing different statistical or machine learning based analysis techniques.

Horrigan (1965) believed that the development of financial ratios was thought to be a unique product of the evolution of accounting procedures and practices adding that the origin of financial ratios and their use goes back to the late 19th century. According to Ross, Westerfield, & Jordan, (2003) financial ratios, which are calculated by using variables commonly found on financial statements, can provide the following benefits.

- Measuring the performance of managers for the purpose of rewards
- Measuring the performance of departments within multi-level companies
- Predicting the future by interpreting historical information to existing or potential investors
- Providing information to creditors and suppliers
- Evaluating competitive positions of rivals
- Evaluating the financial performance of acquisitions

Singh and Pandey (2008) in their research mentioned about fixed as well as current asset playing an important role in the success of a business and also the impact of working capital management on profitability and liquidity of a business. In their research they found a significant impact of working capital management on profitability for Hindalco Industries Limited. Chakraborty and Bandopadhyay (2007) studied about strategic working capital management, and its role in corporate strategy development, which ensured the firm’s survival. They brought it to notice that current assets and current liabilities have a multi-dimensional impact on a company. Raheman and Nasr (2007) highlighted the effect of different variables of working capital management including average collection period, inventory turnover in days, average payment period, cash conversion cycle, and current ratio on the net operating profitability of Pakistani firms. It was found that the cash conversion cycle increases, profitability of firm decreased. Lazaridis and Tryfonidis (2006) conducted a cross sectional study on the Athens Stock Exchange for the period of 2001 - 2004 and found statistical relationship between profitability, measured through gross operating profit, and the cash conversion cycle and its components (accounts receivables, accounts payables, and inventory). Based on their results analysis of annual data by using correlation and regression tests, they suggest that managers can create profits for their companies

by correctly handling the cash conversion cycle and by keeping each component of the conversion cycle (accounts receivables, accounts payables, and inventory) at an optimal level. Eljelly (2004) examined the relationship between profitability and liquidity in his study, as measured by current ratio and cash gap (cash conversion cycle) on a sample of 929 joint stock companies in Saudi Arabia. Using correlation and regression analysis, it was found that significant negative relationship exist between firms profitability and its liquidity as measured by its current ratio. This relationship is pronounced for firms with high current ratios and long cash conversion cycles. At the industry level the cash conversion cycle or the cash gap is of more importance as a measure of liquidity than current ratio that affects profitability. The firm size also had a significant effect on profitability at the industry level. Ghosh and Maji, (2003) in their study made an attempt to examine the efficiency of working capital management of the Indian cement companies during the period between 1992 – 1993 to 2001 – 2002. For measuring the efficiency of working capital, utilization indices were calculated for using common working capital management ratios. Industry norms were set as target efficiency level for individual firms, this paper also tested the speed of achieving that target level of efficiency by an individual firm during the period of study. AmalenduBhunia (2010) “Financial Performance of Indian Pharmaceutical Industry a Case Study” analysed that the financial performance of the select pharmaceutical company’s liquidity position was strong compared to the other. Christina Sheila’s, Karthikeyan.K (2012) “Financial Performance of Pharmaceutical Industry in India using DuPont Analysis” found that Cipla pharmaceutical Company’s financial performance is high, followed by Dr.Reddy’s Laboratories and then Ranbaxy Pharmaceutical. The three companies are significant at their level. In conclusion, ROE & ROI is the most comprehensive measure of profitability of a firm. Faruk Hossan and Ahsan Habib entitled “Performance evaluation and ratio analysis of Pharmaceutical Company in Bangladesh” concluded that the Beximco Pharmaceutical Company shows the best performance than the Square Pharmaceutical Company. Dr. K.S. Vataliya (2012) “Profitability and Consistency Analysis of Pharmacy Sector in India” revealed that performance of the companies for its profitability Cipla secured the first rank & Dr.Reddy’s, Sun Pharma, Aurobindo followed by rest of companies. The performance of the companies for its consistency; Aurobindo secured the first rank & Sun Pharma, Dr. Reddy’s, Cipla followed by rest of companies try as a whole did not perform remarkably well during this period.

Liquidity: -in liquidity analysis, cash flow are considered more reliable than balance sheet or forthat matter income statement. Balance sheet are measured at a single point of time and hence are static whereas income statement on the other hand contains many arbitrary non-cash allocations (e.g., depreciation and amortization). On the other hand, the cash flow statement records the changes in the other statements and nets out the bookkeeping, focusing on what shareholders care about: cash available for operations and investments (Coltman&Jagels, 2001; Mills & Yamamura, 1998). The quick ratio and current ratio are also calculated at a particular interval in time. If the statement are unusually higher or lower on that date, those ratios may not reflect a normal situation. Cash flows from operations to current liabilities, an SCF-based ratio, overcomes this deficiency, because it requires the comparison of a cash-flow value from a period of time to the average of current liabilities (Mills & Yamamura, 1998; Schmidgall, Geller, & Ilvento, 1993). It company’s ability to generate resources to meet current liabilities. The higher

the ratio is, the greater the firm's liquidity (Coltman&Jagels, 2001).As a rule of thumb, current assets should exceed current liabilities on a ratio of two to one (Jagels&Coltman, 2004).

Profitability: - profitability measures such as gross profit margin, net profit margin, return onequity and return on investment have been identified and relationship with liquidity, solvency and corporate governance have tested by various studies in not only in one context but also all around the world (Kajanathan, 2012; Velnampy& Kajanathan,2013; Kajanathan&Achchuthan, 2013; Velnampy, 2005,2006 & 2013). The primary concern of management is operations (Jagels&Coltman, 2004; Schmidgall, Geller, &Ilvento, 1993). Two useful cash flow ratios that focus on operations are cash flow margin and cash flow from operations to net income. The cash flow margin is similar to the profit margin whose purpose is to reveal the profits (i.e., the amount of cash) generated per dollar sales. Since the customers spend dollars (i.e., cash), not profits (net income), in the hotel industry the cash flow margin should be a more useful ratio than profit margin (Coltman&Jagels, 2001; Schmidgall, Geller, &Ilvento, 1993). The cash flow margin shows the percentage of cash flows from operation activity per dollar of revenue. The higher this ratio is, the better, since this ratio evaluates the company's ability to translate sales into cash. The ratio of cash flow from operations to net income is indirectly related to operation performance (Schmidgall, Geller, &Ilvento, 1993). Net income alone cannot appropriately explain how well hotel companies are operated because its calculation involves subjective judgments in accruals, expense allocation, and valuation. Since cash flow from operations is pure cash, hotel managers might prefer to compare CFO to net income in order to determine the relationship between the two. The higher the ratio the better.

GopinathanThachappilly (2009), had discussed about the Financial Ratio Analysis for Performance evaluation. Typically done to make sense of the massive amount of numbers presented in company financial statements, It helps evaluate the performance of a company, so that investors can decide whether to invest in that company or not. Looking at the different ratio categories in separate articles on different aspects of performance such as profitability ratios, liquidity ratios, debt ratios, performance ratios, investment evaluation ratios. James Clausen (2009), he state that the Profitability Ratio Analysis of Income Statement and Balance Sheet Ratio analysis of the income statement and balance sheet are used to measure company profit performance. He also mentioned that in the learn ratio analysis of the income statement and balance sheet. The income statement and balance sheet are two important reports that show the profit and net worth of the company. It analyses shows how the well the company is doing in terms of profits compared to sales. And also how well the assets are performing in terms of generating revenue. He defines the income statement shows the net profit of the company by subtracting expenses from gross profit (sales – cost of goods sold). Furthermore, the balance sheet lists the value of the assets, as well as liabilities. The main function of the balance sheet is to show the company's net worth by subtracting liabilities from assets. He said that the balance sheet does not report profits, there's an important relationship between assets and profit. The business owner normally has a lot of investment in the company's assets. GopinathanThachappilly (2009), discussed about the Profitability Ratios Measure Margins and Returns such as gross, Operating, Pretax and Net Profits, ROA ratio, ROE ratio, ROCE ratio. However, he determines the Gross profit is the surplus generated by sales over cost of goods sold. He

discussion about the Gross Profit Margin = Gross Profit/Net Sales or Revenue. Moreover, Operating profits are arrived at by deducting 10 marketing, administration and depreciation and R&D costs from the gross margin. Nonetheless, He explains about the operating profit margin. Operating Profit Margin = Operating Profit/Net Sales or Revenue. Nevertheless, pretax profits are computed by deducting non-operational expenses from operating profits and by adding non-operational revenues to it. Pretax Profit Margin = Pretax Profit/Net Sales or Revenue

.Nonetheless, he also analysis about the net profit margin.Net Profit Margin = Net Profit/Net Sales or Revenue. He also explains that the returns on resources used dividend into three categories such as ROA, ROE, and ROCE: At first the Return on Assets = Net Profit/ (Total Assets at beginning of the period + Total Assets at the close of the period)/2) - The denominator is the average total assets employed during the year. Return on Equity = Net Profit/ (Shareholders' Equity at the beginning of the year + Shareholders' Equity at the close of the year)/2).ROCE ratio: Return on Capital Employed = Net Profit/ (Average Shareholders' Equity + Average Debt Liabilities) - Debt Liabilities. Maria Zain (2008), in this articles he discuss about the return on assets is an important percentage that shows the company's ability to use its assets to generate income. He said that a high percentage indicates that company's is doing a good utilizing the company's assets to generate income. He notices that the following formula is one method of calculating the return on assets percentage. Return on Assets = Net Profit/Total Assets. The net profit figure that should be used is the amount of income after all expenses, including taxes. He enounce that the low percentage could mean that the company may have difficulties meeting its debt obligations. He also short explains about the profit margin ratio – Operating Performance .He pronounces that the profit margin ratio is expressed as a percentage that shows the relationship between sales and profits. It is sometimes called the operating performance ratio because it's a good indication of operating efficiencies. The following is the formula for calculating the profit margin. Profit Margin = Net Profit/Net Sales. James Clausen (2009), in this article he barfly express about the liquidity ratio. He Pronounce that it is analysis of the financial statements is used to measure company performance. It also analyses of the income statement and balance sheet. Investors and lending institutions will often use ratio analyses of the financial statements to determine a 11 company's profitability and liquidity. If the ratios indicate poor performance, investors may be reluctant to invest. Therefore, the current ratio or working capital ratio, measures current assets against current liabilities. The current ratio measures the company's ability to pay back its short-term debt obligations with its current assets. He thinks a higher ratio indicates the company is better equipped to pay off short-term debt with current assets. Wherefore, the acid test ratio or quick ratio, measures quick assets against current liabilities. Quick assets are considered assets that can be quickly converted into cash. Generally they are current assets less inventory. GopinathanThachappilly(2009),he also stated that the Liquidity Ratios help Good Financial .He know that a business has high profitability, it can face short-term financial problems and its funds are locked up in inventories and receivables not realizable for months. Any failure to meet these can damage its reputation and creditworthiness and in extreme cases even lead to bankruptcy. In addition to, liquidity ratios are work with cash and near-cash assets of a business on one side, and the immediate payment obligations (current liabilities) on the other side. The near-cash assets mainly include receivables from customers and inventories of finished goods and raw materials. Coupled with, current ratio works with all the

items that go into a business' working capital, and give a quick look at its short-term financial position. Current assets include Cash, Cash equivalents, Marketable securities, Receivables and Inventories. Current liabilities include Payables, Notes payable, accrued expenses and taxes, and Accrued installments of term debt). $\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$. Similarly, Quick ratio excludes the illiquid items from current assets and gives a better view of the business' ability to meet its maturing liabilities. $\text{Quick Ratio} = (\text{Current Assets} - (\text{Inventories} + \text{Prepaid expenses} + \text{Deferred income taxes} + \text{other illiquid items})) / \text{Current Liabilities}$. In the final ratio under this article is cash ratio. Cash ratio excludes even receivables that can take a long time to be converted into cash. $\text{Cash Ratio} = (\text{Cash} + \text{Cash equivalents} + \text{Marketable Securities}) / \text{Current Liabilities}$. Jo Nelgadde (2010), in this article he briefly about the asset management ratio. It divided into different types of categories. He state that about the used to analyze accounts receivable and other working capital figures to identify significant changes in the 12 company's operations and financial accounts. He said that there are two categories about this ratio such as account receivable turnover and average age of account receive. He measurement the ratio as, $\text{Accounts receivable turnover} = \text{Sales} / \text{Average Accounts receivable}$. $\text{Average age of accounts receivable/ collection period} = 365 \text{ days} / \text{Accounts receivable Turnover}$. Jo Nelgadde (2009), He said that learn how to perform inventory analysis and inventory turnover analysis to better understand a business as well as to identify effective inventory management. He analyzing a company's financial performance definitely includes performing inventory analysis. He know that there are three types of business inventory: Raw Materials (RM), Work-In-Progress (WIP), Finished Goods (FG). He give idea two types formula of ratio such as $\text{Inventory Turnover} = \text{Cost of Goods Sold} / \text{Average Inventory}$, $\text{Average age of Inventory} = 360 \text{ days} / \text{Inventory Turnover}$. James Clausen (2009), He denotes that about the total asset ratio. The calculation uses two factors, total revenue and average assets to determine the turnover ratio. When calculating for a particular year, the total revenue for that year is used. Instead of using the year ending asset total from the balance sheet, a more accurate picture would be to use the total average assets for the year. Once the average assets are determined for the same time period that revenue is compared, the formula for calculating the asset turnover ratio is. $\text{Total Revenue} / \text{Average Assets} = \text{Asset Turnover Ratio}$. MunyaMtetwa (2010), in this article he short propose that about the fixed asset. He define that fixed assets are assets that are used in production or supply of goods or services and they are to be used within the business for more than one financial year. Consequently, fixed assets represent the company's long term income generating assets and they can either be tangible or non tangible. It includes land and buildings, plant and equipment, golf courses, casinos, football players, machinery and hotels depending on the nature of the business under consideration. $\text{Fixed asset turnover} = \text{Sales} / \text{Net fixed asset}$. 13 Diane White (2008), He refer that the accounts receivable is an important analytical tool for measuring the efficiency of receivables operations is the accounts receivable turnover ratio. Many companies sell goods or services on account. This means that a customer purchases goods or services from a company but does not pay for them at the time of purchase. Payment is usually due within a short period of time, ranging from a few days to a year. These transactions appear on the balance sheet as accounts receivable. Lucia Jenkins (2009), Understanding the use of various financial ratios and techniques can help in gaining a more complete picture of a company's financial outlook. He thinks the most important thing is fixed cost and variable cost.

Fixed costs are those costs that are always present, regardless of how much or how little is sold. Some examples of fixed costs include rent, insurance and salaries. Variable costs are the costs that increase or decrease in ratios proportion to sales. GopinathanThachappilly (2009), in this articles he express about debt management. He mention that the Ratio of Debt to Equity has Implications for return on equity debt ratios check the financial structure of the business by comparing debt against total capital, against total assets and against owners' funds. The ratios help check how "leveraged" a company is, and also the financial maneuverability of the company in difficult times. The concepts of leverage and other issues are examined below. The Debt Ratios formula is that $\text{Debt Ratio} = \text{Total Liabilities} / \text{Total Assets}$ (Total liabilities include even noninterest-bearing operational liabilities) and $\text{Debt to Equity Ratio (Debt Capital Ratio)} = \text{Total Liabilities} / \text{Shareholders' Equity}$. Capitalization (Term Debt Ratio) = $\text{Long-term Debt} / (\text{Long-Term Debt} + \text{Shareholders' Equity})$. Interest Coverage Ratio = $\text{Profit before Interest and Taxes (PBIT)} / \text{Interest Expense}$. Simultaneously, debt ratios and the related interest coverage ratio checks the soundness of a company's financing policies. One the one hand, use of debt funds can enhance returns to owners. On the other hand, high debt can mean that the company will find it difficult to raise funds during lean periods of business.

3. MATERIALS AND METHODS

3.1 Study Design:

Exploratory in nature (Quantitative and Descriptive).

3.2 Nature of Data (information) collected:

Secondary data

3.3 Sampling design:

Convenient sampling technique will be applied to select pharmaceutical companies from the list of top 10 pharmaceutical companies around the globe, based on revenues.

3.4 Study duration:

Three months i.e. 4th Feb 2019 to 30th April 2019.

3.5 Data collection tools:

3.5.1 Method for data collection: Following data collection tool will be used to derived key information to calculate financial ratio's for FY2015 and FY2016 for the selected pharmaceutical firms:

- Balance sheet
- Income statement
- Cash Flow

3.5.2 Sources of secondary data

- Annual report, 10 K filling
- Company website
- Internet
- Confidential sources

3.6 Model for financial performance evaluation

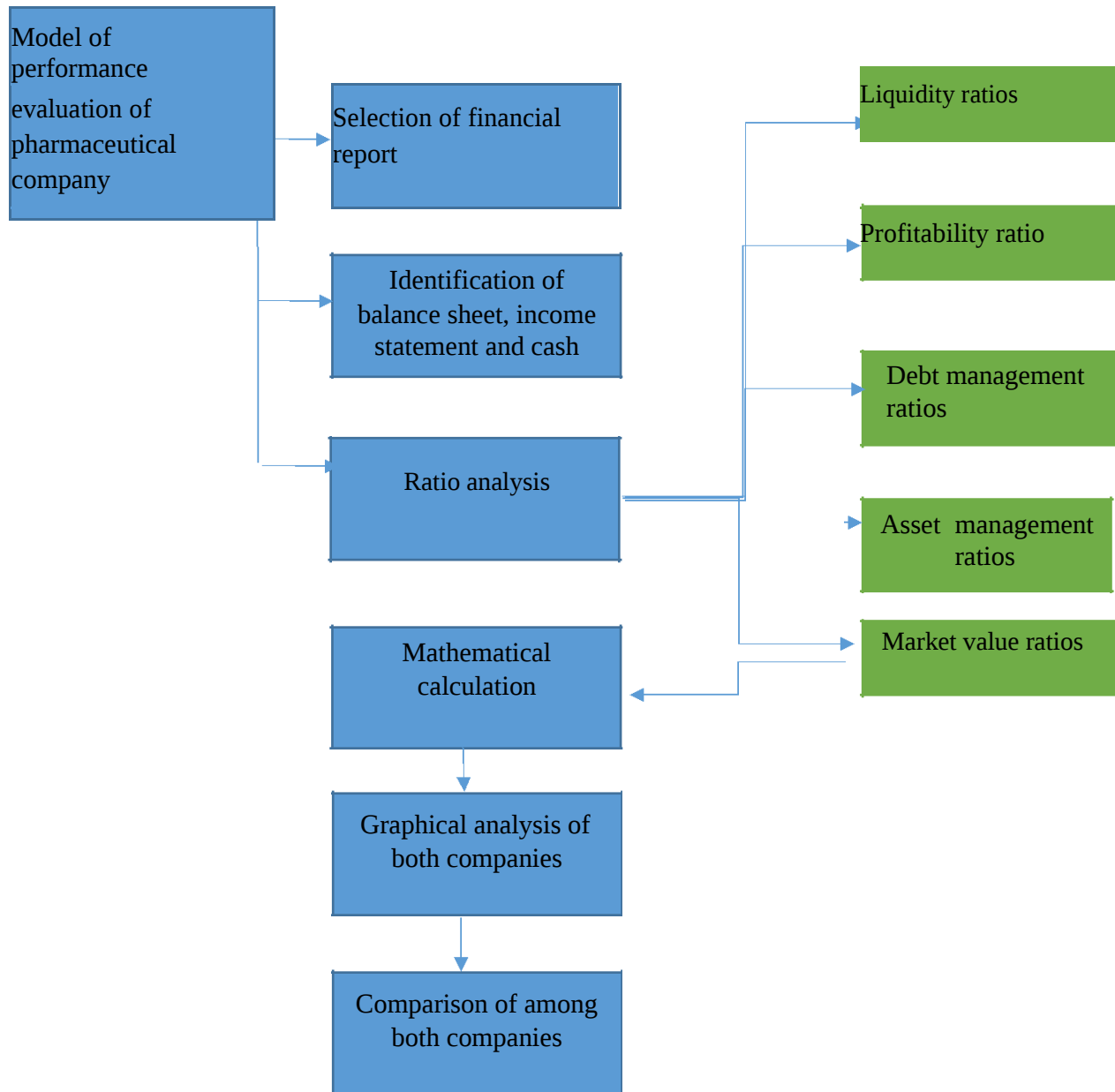


Figure 1.2 Process of Financial Performance Evaluation

3.7 Data Analysis Tools:

Formula used for Calculation-

3.7.1 Liquidity

- I. Current Ratio=Current assets /Current liabilities
- II. Quick Ratio=(Current Assets-Inventories)/Current Liabilities
- III. Cash Ratio=Cash / Current Liabilities

3.7.2 Profitability

- I. Net profit margin=Net profit after tax/sales
- II. Gross Profit margin ratio=Gross profit/sales
- III. Return on Total Assets=Net profits after taxes / total assets
- IV. Operating Profit Margin=Operating profits / Sales

3.7.3 Debt Coverage

- I. Debt Ratio =Total liabilities / Total assets
- II. Time interest earned = EBIT / Interest charged
- III. Book value per share = Common stockholder's equity / Outstanding shares

3.7.4 Assets Management

- I. Total assets turnover=sales/total assets
- II. Fixed assets ratio=sale/net fixed assets

3.7.5 Market Value

- I. Earnings per share ratio = Net income /weighted average number of share outstanding
- II. Market/Book ratio= Market price per share/Book value per share
- III. P/E ratio= Market value per share/earning

4. DATA ANALYSIS and RESULT:

4.1 Liquidity ratio:

Liquidity ratio refers to the ability of a company to interact its assets that is most readily converted into cash. Assets are converted into cash in a short period of time that are concerns to liquidity position. However, the ratio made the relationship between cash and current liability. The Liquidity ratio can be satisfy on the three ratios, they are:

- ☐ Current ratio
- ☐ Quick ratio or acid test
- ☐ Cash Ratio

Table 1: Liquidity Ratio

Liquidity Ratio	GSK		AMGEN	
	2018	2017	2018	2017
Current Ratio	0.75	0.59	2.78	5.48
Quick Ratio	0.50	0.38	2.57	5.17
Cash Ratio	0.17	0.14	2.17	4.62

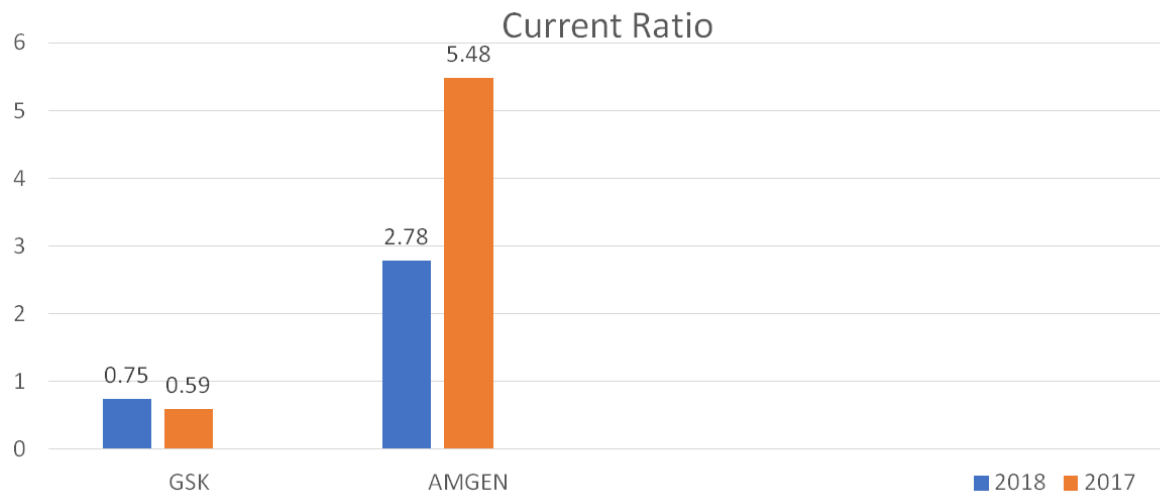
4.1.1 Current ratio:

The current ratio is a liquidity ratio that measures a company's ability to pay short-term and long-term obligations. To gauge this ability, the current ratio considers the current total assets of a company (both liquid and illiquid) relative to that company's current total liabilities.

- GSK's current ratio increased from 0.59 in 2017 to 0.75 in 2018. GSK's current ratio does not lie within industry standards.
- Amgen's current ratio decreased from 5.48 to 2.78 still does not lie within the range.

The current ratio is an indication of a firm's market liquidity and ability to meet short-term debt obligations and both the companies performed bad on this indicator.

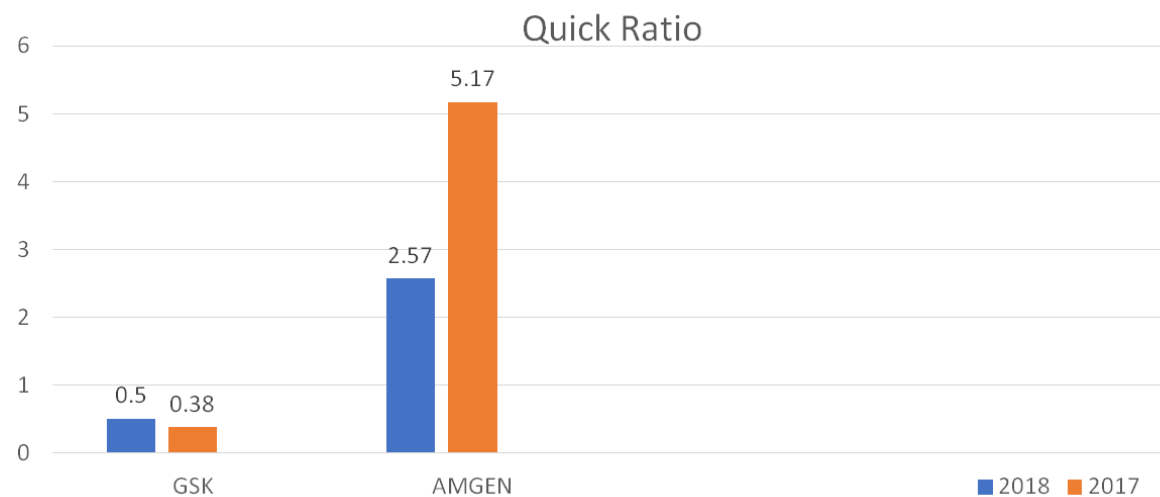
Figure 1.3: Current Ratio



4.1.2 Quick ratio:

The quick ratio is an indicator of a company's short-term liquidity. The quick ratio measures a company's ability to meet its short-term obligations with its most liquid assets. For this reason, the ratio excludes inventories from current assets.

Figure 1.4: Quick Ratio



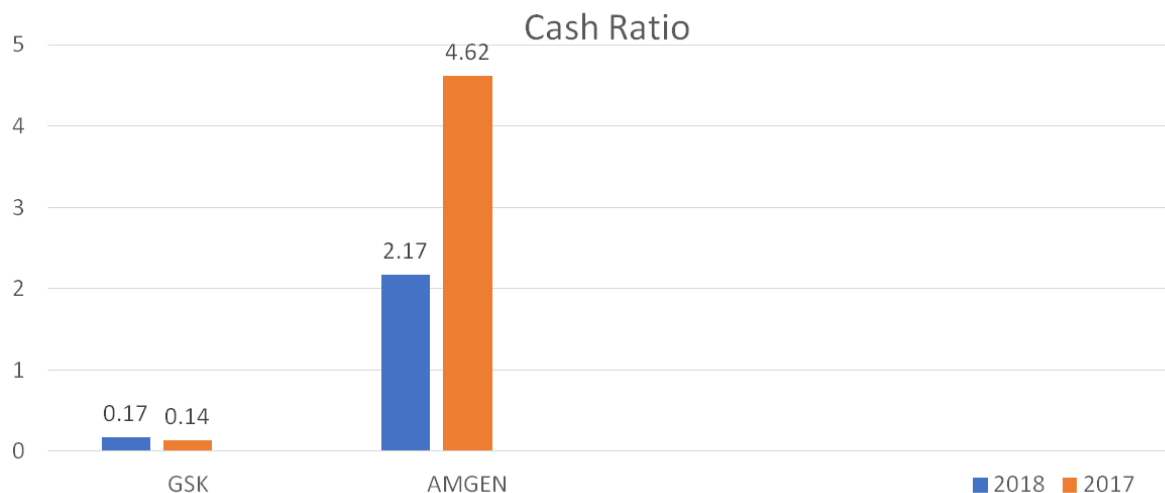
- Quick ratio of GSK in 2017 was 0.38. A quick ratio less than one suggests, that the company's liabilities are greater than its assets and it would be unable to pay off its obligations if they came due at that point. In 2018, it increased to 0.5 suggests that the company has 0.5\$ liquid assets to cover \$1 current liability.
- Amgen Inc. quick ratio decreased from 5.17 to 2.57. In 2017 Amgen had more liquid assets to cover its current liabilities compared to 2018

Quick ratio measures the ability of a company to use its "near cash" or quick assets to immediately extinguish its current liabilities and Amgen performed better on this indicator compared to GSK.

4.1.3 Cash Ratio:

The cash ratio is the ratio of a company's total cash and cash equivalents to its current liabilities.

Figure 1.5: Cash Ratio



- GSK's cash ratio increased from 0.14 in 2017 to 0.17 in 2018, but was still below the industry average of 1. Implies GSK has insufficient funds to cover its liability.
- Amgen Inc. had a cash ratio of 4.62 in 2017, and 2.17 in 2018. Amgen has sufficient funds to cover its liability.

4.2 Profitability ratio:

Profitability ratios designate a company's overall efficiency and performance. It measures the company how to use of its assets and control of its expenses to generate an acceptable rate of return. It also used to examine how well the company is operating or how well current performance compares to past records of both pharmaceutical companies. There are five important profitability ratios that we are going to analyze:

- Net Profit Margin
- Gross Profit Margin
- Return on Asset
- Operating profit margin

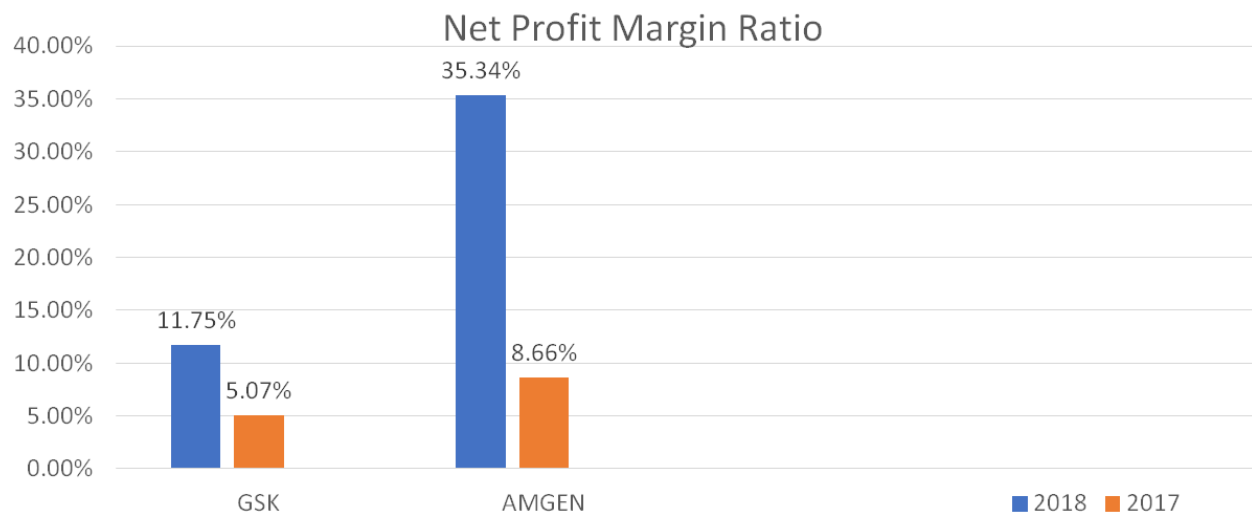
Table 2: Profitability Ratios

Profitability Ratio	GSK		AMGEN	
	2018	2017	2018	2017
Net Profit Margin	11.75%	5.07%	35.34%	8.66%
Goss Profit Margin	66.77%	65.73%	82.73%	82.19%
Return on Total Assets	6.96%	3.84%	12.63%	2.47%
Operating Profit Margin	17.89%	13.53%	43.21%	43.64%

4.2.1 Net Profit Margin:

Measures the overall success of the business and a higher net profit margin implies that a business is pricing its products correctly and is exercising good cost control

Figure 1.6: Net Profit Margin



- GSK's net profit margin increased from 5.07% in 2017 to reach 11.75% in 2018.
- Amgen Inc's net profit margin also increased from 8.66% in 2017 to 35.34% in 2018.

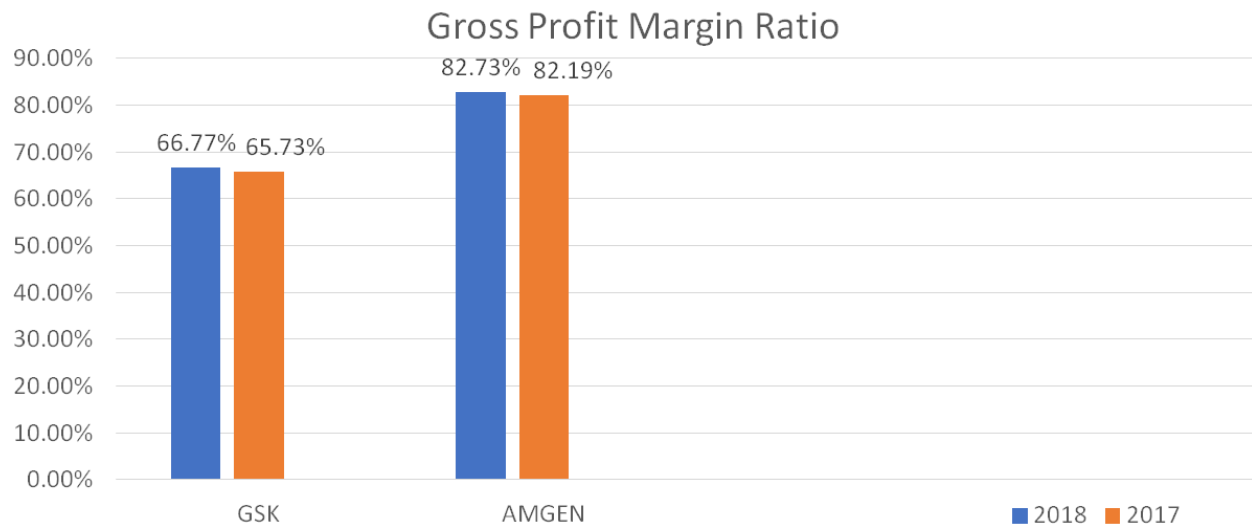
On this indicator Amgen performed better than GSK even though both are in excellent range.

4.2.2 Gross profit Margin:

It is a measure of the efficiency of a company using its raw materials and labor during the production process. It is a key financial indicator used to assess the profitability of a company's core activity, excluding fixed cost. Higher gross profit margin is considered better.

- From the table below we can see that Amgen had a better Gross Profit Margin than GSK, suggesting that Amgen was more efficient in making profit compared to GSK.

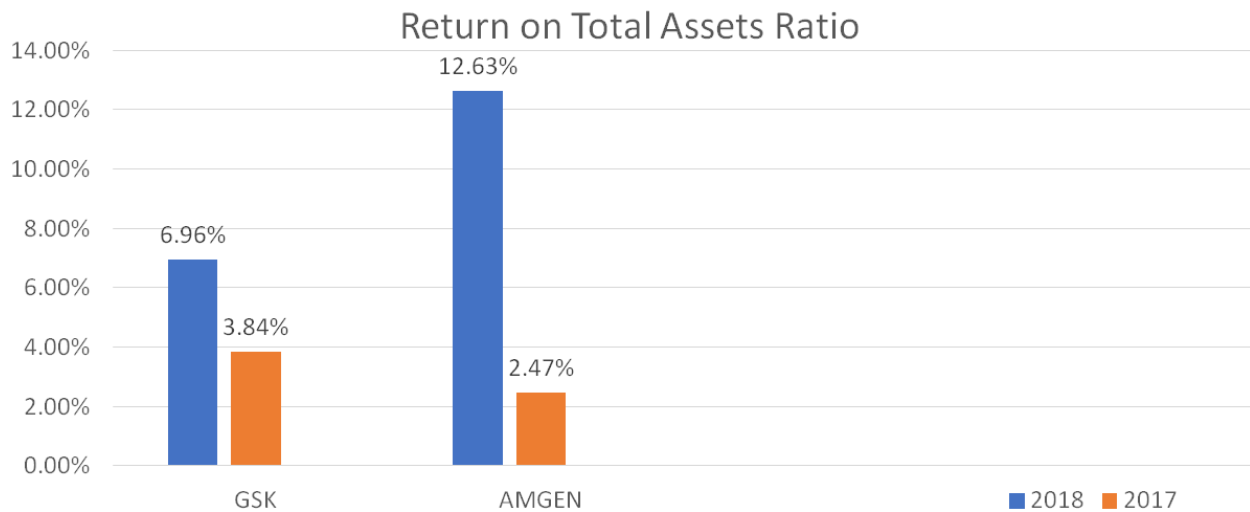
Figure 1.7: Gross Profit Margin



4.2.3 Return on total assets:

The ratio is considered to be an indicator of how effectively a company is using its assets to generate earnings before contractual obligations must be paid. The ROTA, provides insight into the how much money is generated from each dollar invested into the organization.

Figure 1.8: Return on Total Asset



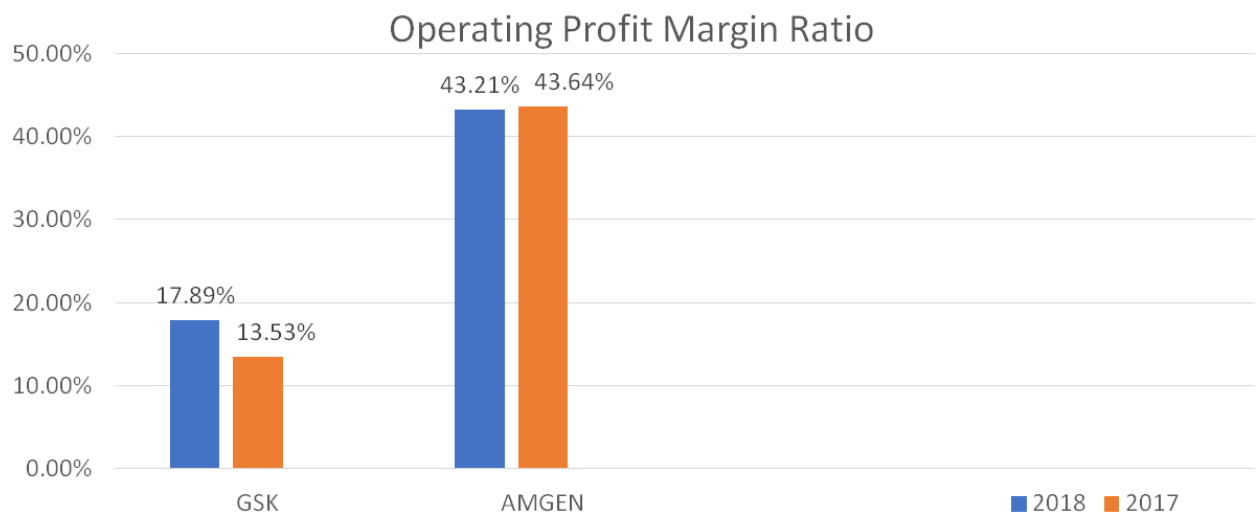
- GSK's ROTA increased from 3.84% in 2017 TO 6.96% in 2018
- On the other hand Amgen Inc.'s ROTA increased from 2.47% in 2017 to 12.63% in 2018

This suggests that Amgen's ROTA grew exponentially.

4.2.4 Operating Profit Margin:

It is profitability ratio showing operating income as a percentage of revenue

Figure 1.9: Operating Profit Margin



- GSK's operating profit margin increased to 17.89% in 2018, implying that the company was able to make a profit of 0.18 dollars on every 1 dollar of sales. An increase in operating margin ratio overtime means that the profitability is improving
- Amgen Inc.'s operating profit decreased from 43.64% to 43.21% in 2018, which was still higher than GSK. Amgen Inc. higher value of operating margin ratio is favorable which indicates that more proportion of revenue is converted to operating income

4.3 Debt Coverage Ratio:

Debt Coverage Ratio measures the percentage of the total asset provided by creditor. (Kieso, Weygandt, Warfield, 2001). If any company has realize their debt coverage ratio less than 1 then the company understand their income greater by a property is insufficient to collect their mortgage. So more than is 1 is best for any company. The Debt-coverage ratio we can satisfy on the three ratios, those are:

- Debt ratio
- Time interest earned
- Book value per share.

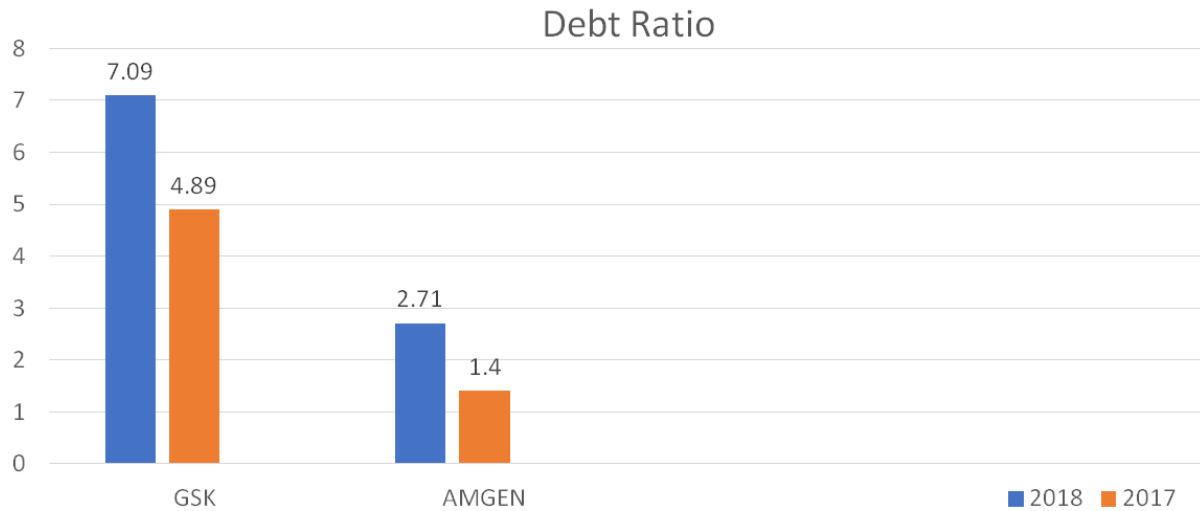
Table 3: Debt Coverage Ratios

Debt Coverage Ratio	GSK		AMGEN	
	2018	2017	2018	2017
Debt Ratio	7.09	4.89	2.71	1.40
Time Interest Earned	9.7	8.2	7.86	8.36
Book Value per Share	1.82	1.67	19.85	34.95

4.3.1 Debt ratio:

Debt shows how many assets the company must sell in order to pay off all of its liabilities

Figure 1.10: Debt Ratio



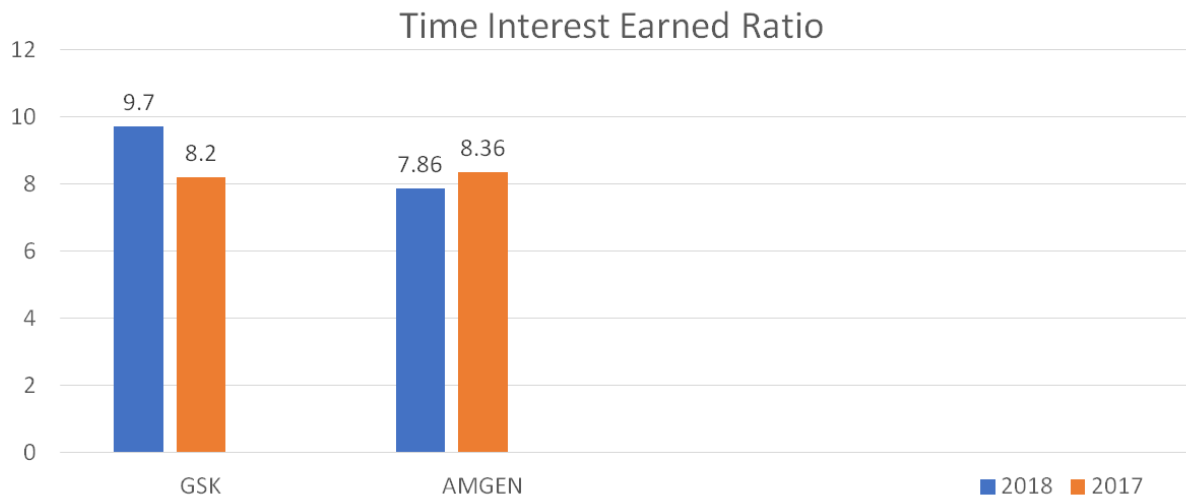
A lower debt ratio usually implies a more stable business with the potential of longevity because a company with lower ratio also has lower overall debt.

Both GSK and Amgen have a high debt ratio. Still Amgen has a lower debt ratio if compared to GSK.

4.3.2 Time interest earned:

It measures the proportionate amount of income that can be used to cover interest expenses in the future

Figure 1.11: Time Interest Earned

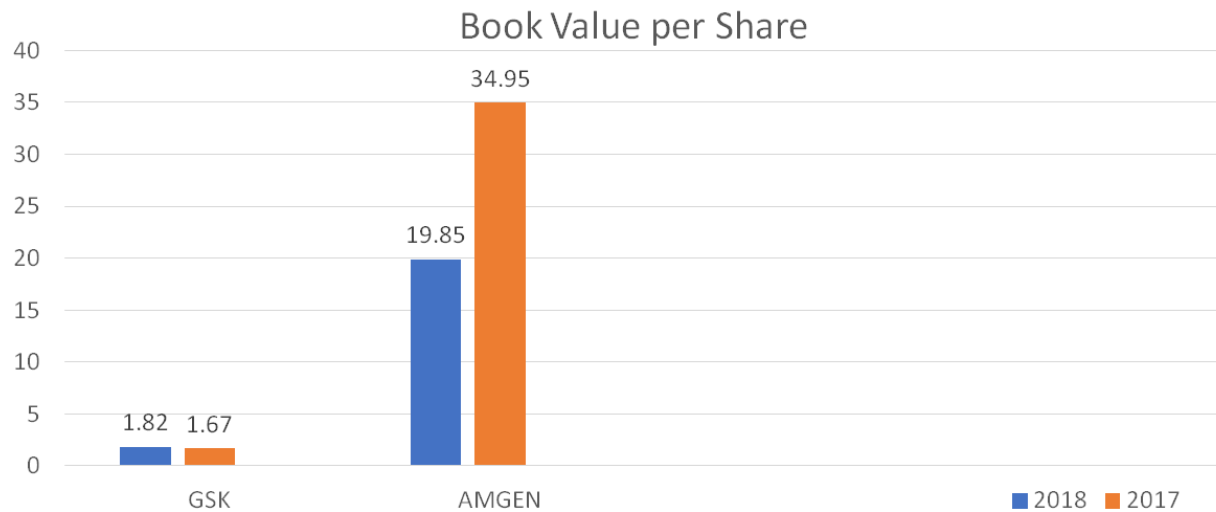


- GSK's income in 2018 was 9.7 times higher than its expense for the year, with an increase from 8.2 in the previous year.
- Amgen shows a decreasing trend as the time interest earned dipped to 7.86 in 2018 from 8.36 in 2017

4.3.3 Book value per share:

If the market value per share is lower than the book value per share, then the stock price may be undervalued. "Book value" represents a company's assets minus its liabilities and is sometimes referred to as stockholder's equity, owner's equity, shareholder's equity, or simply equity

Figure 1.12: Book Value per share



- Market value of shares of both the companies are higher than its book value, showing that market participants are willing to pay more for its common share
- Amgen's BVP is better than GSK's

4.4 Assets Management

Asset management ratios are most notable ratio of the financial ratios analysis. It measure how effectively a company uses and controls its assets. It is analysis how a company quickly converted to cash or sale on their resources. It is also called Turnover ratio because it indicates the asset converted or turnover into sales. Finally, we can recognize the company can easily measurement their asset because this ratio made up between assets and sales. Following are discussed seven types of asset management ratios:

- Fixed asset turnover
- Total asset turnover

Table 4: Asset Mnagement Ratio

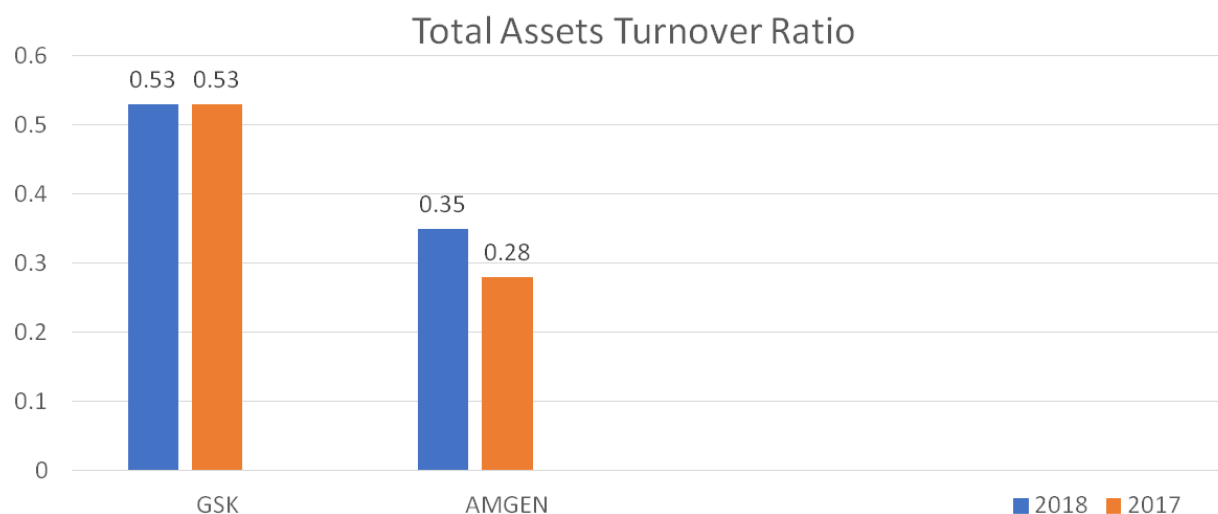
Assets Management	GSK		AMGEN	
	2018	2017	2018	2017
Total Assets Turnover	0.53	0.53	0.35	0.28
Fixed Assets Ratio	0.75	0.74	0.82	0.74

4.4.1 Total assets turnover:

The asset turnover ratio is an efficiency ratio that measures a company's ability to generate sales from its assets by comparing net sales with average total assets. In other words, this ratio shows how efficiently a company can use its assets to generate sales

- GSK's Total Assets Turnover remained constant across 2017 and 2018. This means that the company did not use its assets to generate any sales.
- Amgen's Total Assets Turnover increased from 0.28 in 2017 to 0.35 in 2018. However GSK's ratio was better.

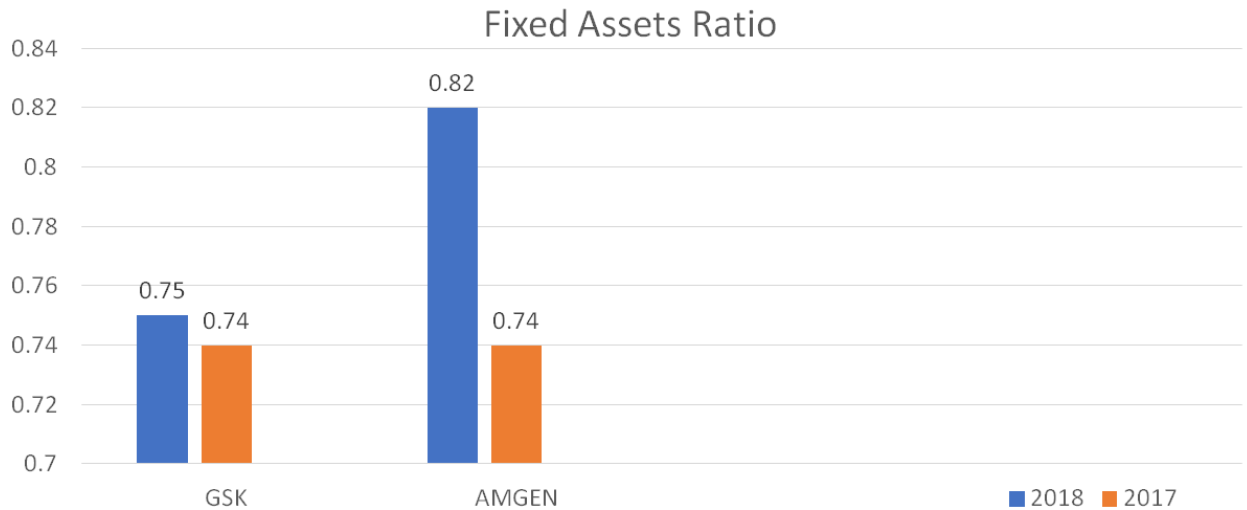
Table 16: Total Asset Turnover



4.4.2 Fixed assets turnover

It measures how able a company is to generate net sales from fixed-asset investments, namely property, plant and equipment (PP&E), net of depreciation

Figure 1.14: Fixed Asset Turnover Ratio



- GSK's fixed asset increased slightly from 0.74 in 2017 to reach 0.75 in 2018
- While Amgen's Fixed assets turn over reached 0.82 in 2018, considerably higher than GSK's

4.5 Market Ratio

The final ratios are the market value ratio. It also call share ownership ratio. It referred to the stockholder in analyzing present and future investment in a company. In this ratio the stockholders are interested in the way to certain variables affect the value of their holdings. In order to the stockholder is able to analyze the likely future market value of the stock market. There are two ratios under this ratio. They are as follows:

- Earnings per Share (EPS) ratio
- Market/Book ratio
- Price/earning Ratio

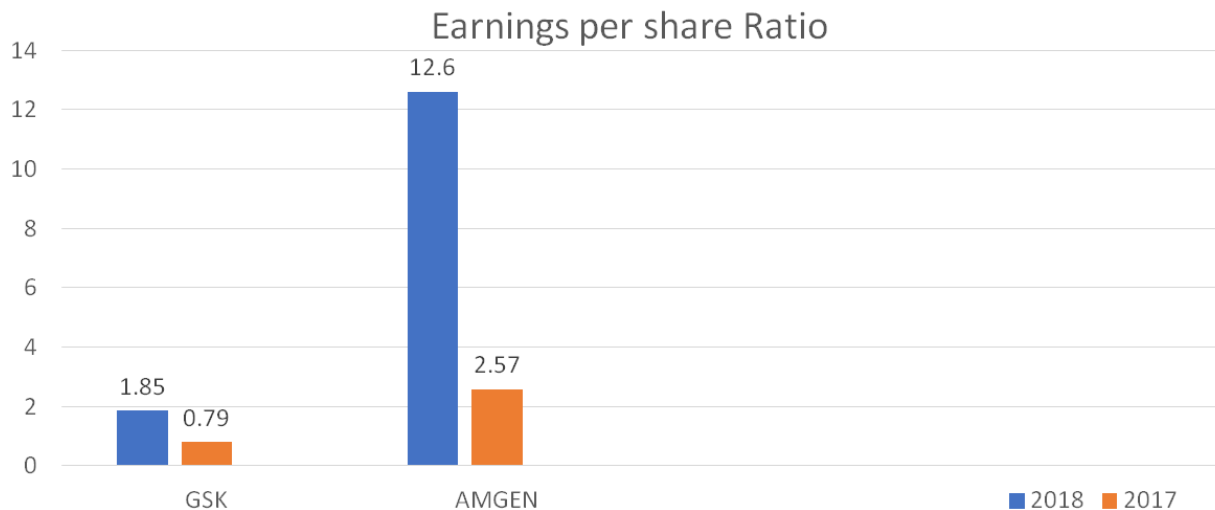
Table 5: Market Ratio

Market Value	GSK		AMGEN	
	2018	2017	2018	2017
Earnings per share Ratio	\$1.85	\$0.79	\$12.60	\$2.57
Price/Book Ratio	20.66	19.78	9.73	4.80
P/E Ratio	20.35	41.92	15.33	65.26

4.5.1 Earning per share ratio:

It essentially calculates the profit allocated to each outstanding share of the company

Figure 1.15: Earning per Ratio



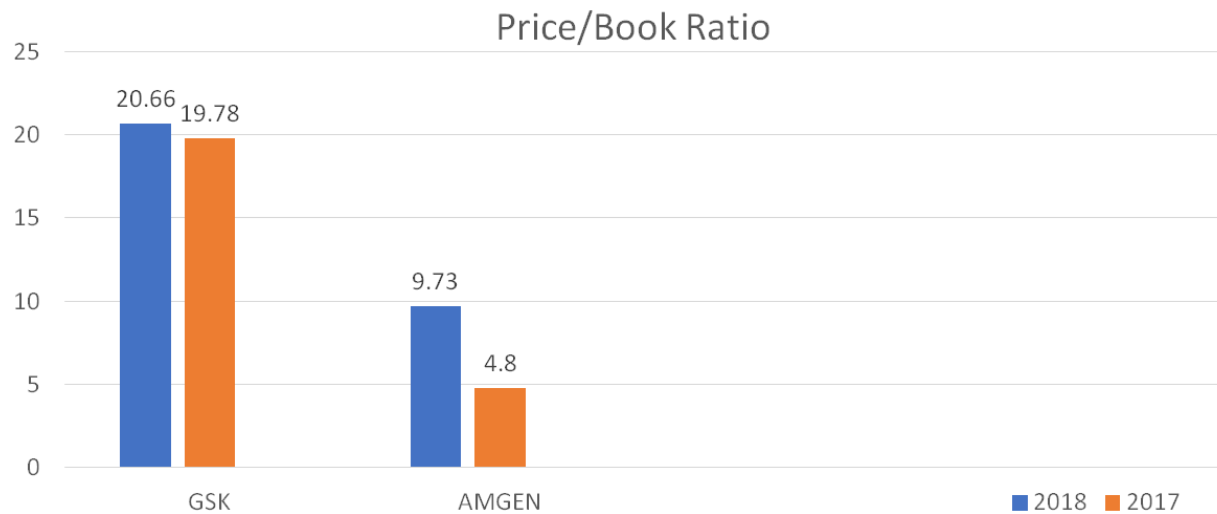
- GSK's EPS shows an increasing trend, and stands at 1.85 in 2018. A lower EPS is the sign of lower earnings, weak financial position and, therefore, an average company to invest in
- Amgen performs highly on this ratio, with an increasing trend from 2017. Pfizer Inc. Stands at 12.6 in 2018

4.5.2 Price/Book Ratio:

It is an indication of how much shareholders are paying for the net assets of a company. The ratio denotes how much equity investors are paying for each dollar in net assets

- GSK had a price to book ratio of 20.66 in 2018
- Amgen Inc. had a price to book ratio of 9.73 in 2018

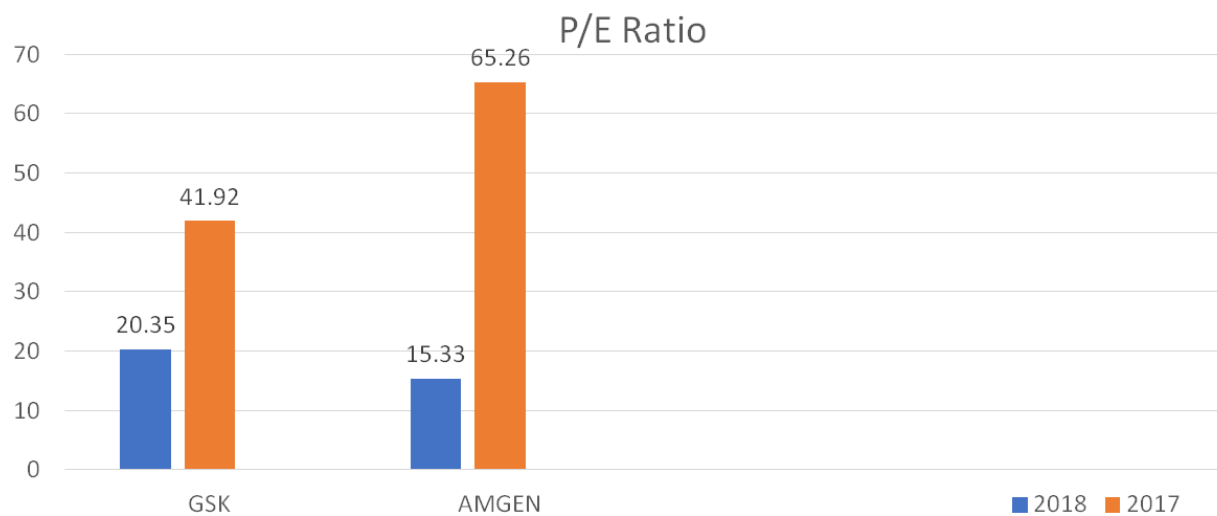
Figure 1.16: Price/Book Ratio



4.5.3 Price/Earnings Ratio:

The price-earnings ratio (P/E Ratio) is the ratio for valuing a company that measures its current share price relative to its per-share earnings

Figure 1.17: Price/Earnings Ratio



- GSK's P/E ratio is 20.35, this means that investors are willing to pay 20.27 dollars for every dollar of earnings. In other words, this stock is trading at a multiple of 20.27
- Amgen Inc. P/E ratio is 15.33, lower than GSK,

GSK's P/E ratio in the year 2018 is higher than Amgen's. A higher ratio means that investors anticipate higher performance and growth in the future.

5. CONCLUSION:

Indicator	sub-indicator	GSK	Amgen	Better Performer
Liquidity Ratio	Current Ratio	↑	↓	Amgen Inc.
	Quick Ratio	↑	↓	
	Cash Ratio	↑	↓	
Profitability ratio	Net Profit Margin	↑	↑	Amgen Inc.
	Gross Profit Margin	↑	↑	
	Return on Total Assets	↑	↑	
	Operating Profit Margin	↑	↓	
Debt coverage ratio	Debt Ratio	↑	↑	Amgen Inc.
	Time interest earned	↑	↓	
	Book value per share	↑	↓	
Assets Management	Total Assets Turnover	↑↓	↑	Amgen/GSK
	Fixed Assets Turnover	↑	↑	
Market Value	Earning per share Ratio	↑	↑	GSK
	Price/Book Ratio	↑	↑	
	Price/earnings ratio	↓	↓	

Figure 2.1: Conclusion

(Legend in Appendix)

CONCLUSION : From the study it is found that Amgen Inc. performed better than GlaxoSmithKline plc. on liquidity, profitability and debt coverage whereas GSK comparative performance for the FY2018 in market value was significantly better than Amgen. On asset management parameter both the companies performed same.

6. DISCUSSION:

Liquidity Ratio Amgen outperformed GSK on this indicator

Current Ratio	Acceptable current ratio lies above 1.5. GSK had 0.59 as it's ratio in 2017 and 0.75 in 2018 Amgen had 5.48 in 2017 and 2.78 in 2018
Quick Ratio	Acceptable range is above 1, Amgen's quick ratio was 2.78, suggesting it had more asset to cover its liabilities. GSK had 0.38 in 2017 and 0.50 in 2018 as it's quick ratio.
Cash Ratio	Acceptable range is above 1. Amgen's performance was considered high on this front implying the company had enough funds to cover its liabilities.

Profitability Ratio Amgen Inc. had a better overall profitability compared to GSK

Net profit margin	Higher net profit margin is considered better. When we compared Amgen with GSK, GSK had a lower net profit margin in 2018 compared to Amgen. Over the two year study period both company's margin has increased.
Gross profit margin	The GPM has increased for both the companies, but Amgen is leading on this indicator.
Return on total assets	Amgen was able to earn more on every dollar invested compared to GSK.
Operating profit margin	GSK's showed an increasing trend in operating profit margin suggesting an improvement in profitability.

Debt Coverage Ratio Amgen outperformed GSK suggesting more stability

Debt Ratio	A lower debt ratio suggests more stable business, none of the company's debt ratio was in the reasonable range but Amgen's was lower as compared to GSK's
Time interest earned	Higher time interest ratio earned are considered favorable as it shows the company can

afford to pay its interest payments when they come due. GSK performed better than Amgen.

Asset Management Ratio	Both the companies stand at equal footing here
Total asset turnover	GSK was more efficient in generating sales from its assets compared to Amgen with the total assets ratio of 0.53 in 2018
Fixed asset turnover	Amgen is better utilizing its fixed assets to generate sales compared to GSK.

Market Value Ratio	While Amgen stock's P/E ratio is less than GSK's suggesting that the company's earnings may be peaking but the market expects a decline in its growth expectations
Earning per ratio	Amgen's EPS was considerably higher than GSK suggesting Amgen a stronger financial position and, therefore, a reliable company to invest money
Price/Book ratio	A high P/B Ratio means that the investors have high expectations from the company. GSK clearly has a better P/B Ratio than Amgen.
Price/earning ratio	GSK's P/E ratio is 20.35, higher than Amgen, a higher ratio suggests that investors anticipate higher performance and growth from GSK in the future

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Appendix

GSK Balance Sheet

Currency in GBP. All numbers in thousands

Period Ending	12/31/2018	12/31/2017
Current Assets		
Cash And Cash Equivalents	3,874,000	3,833,000
Short Term Investments	419,000	78,000
Net Receivables	5,946,000	5,950,000
Inventory	5,476,000	5,557,000
Other Current Assets	658,000	118,000
Total Current Assets	16,927,000	15,907,000
Long Term Investments	1,563,000	1,109,000
Property Plant and Equipment	11,058,000	10,860,000
Goodwill	5,789,000	5,734,000
Intangible Assets	17,202,000	17,562,000
Accumulated Amortization	-	-
Other Assets	5,527,000	5,209,000
Deferred Long Term Asset Charges	3,887,000	3,796,000
Total Assets	58,066,000	56,381,000
Current Liabilities		
Accounts Payable	3,645,000	3,528,000
Short/Current Long Term Debt	1,367,000	2,040,000
Other Current Liabilities	5,081,000	13,913,000
Total Current Liabilities	22,491,000	26,569,000

Long Term Debt	20,227,000	14,221,000
Other Liabilities	11,632,000	12,059,000
Deferred Long Term Liability Charges	-	-
Minority Interest	-688,000	3,557,000
Negative Goodwill	-	-
Total Liabilities	54,394,000	52,892,000

Stockholders' Equity

Misc. Stocks Options Warrants	-	-
Redeemable Preferred Stock	-	-
Preferred Stock	-	-
Common Stock	1,345,000	1,343,000
Retained Earnings	-2,122,000	-6,920,000
Treasury Stock	2,046,000	2,490,000
Capital Surplus	3,091,000	3,019,000
Other Stockholder Equity	2,046,000	2,490,000
Total Stockholder Equity	4,360,000	-68,000
Net Tangible Assets	-18,631,000	-23,364,000

GSK Income Statement

Currency in GBP. All numbers in thousands

Revenue	12/31/2018	12/31/2017
Total Revenue	30,821,000	30,186,000

Cost of Revenue	9,714,000	9,317,000
Gross Profit	21,107,000	20,869,000

Operating Expenses

Research Development	3,798,000	3,925,000
Selling General and Administrative	9,366,000	9,256,000
Non Recurring	-	-
Others	309,000	799,000
Total Operating Expenses	23,187,000	23,297,000
Operating Income or Loss	7,634,000	6,889,000

Income from Continuing Operations

Total Other Income/Expenses Net	-2,834,000	-3,364,000
Earnings Before Interest and Taxes	7,634,000	6,889,000
Interest Expense	-754,000	-720,000
Income Before Tax	4,800,000	3,525,000
Income Tax Expense	754,000	1,356,000
Minority Interest	-688,000	3,557,000
Net Income From Continuing Ops	4,046,000	2,169,000

Discontinued Operations	-	-
Extraordinary Items	-	-
Effect Of Accounting Changes	-	-

Other Items	-	-
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Net Income

Net Income	3,623,000	1,532,000
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Preferred Stock And Other Adjustments	-	-
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Net Income Applicable To Common Shares	3,623,000	1,532,000
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Amgen Balance Sheet

All numbers in thousands

Period Ending	12/31/2018	12/31/2017
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Current Assets

Cash And Cash Equivalents	6,945,000	3,800,000
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Short Term Investments	22,359,000	37,878,000
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Net Receivables	3,580,000	3,237,000
Inventory	2,940,000	2,834,000
Other Current Assets	1,794,000	1,727,000
Total Current Assets	37,618,000	49,476,000
Long Term Investments	683,000	1,027,000
Property Plant and Equipment	4,958,000	4,989,000
Goodwill	14,699,000	14,761,000
Intangible Assets	7,443,000	8,609,000
Accumulated Amortization	-	-
Other Assets	1,015,000	1,092,000
Deferred Long Term Asset Charges	-	-
Total Assets	66,416,000	79,954,000
Current Liabilities		
Accounts Payable	1,207,000	1,352,000
Short/Current Long Term Debt	4,419,000	1,152,000
Other Current Liabilities	1,449,000	1,408,000
Total Current Liabilities	13,488,000	9,020,000
Long Term Debt	29,510,000	34,190,000
Other Liabilities	10,918,000	11,503,000
Deferred Long Term Liability Charges	-	-
Minority Interest	-	-
Negative Goodwill	-	-

Total Liabilities	53,916,000	54,713,000
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Stockholders' Equity

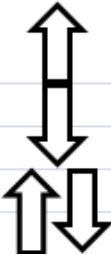
Misc. Stocks Options Warrants	-	-
Redeemable Preferred Stock	-	-
Preferred Stock	-	-
Common Stock	31,246,000	30,992,000
Retained Earnings	-17,977,000	-5,072,000
Treasury Stock	-769,000	-679,000
Capital Surplus	-	-
Other Stockholder Equity	-769,000	-679,000
Total Stockholder Equity	12,500,000	25,241,000
Net Tangible Assets	-9,642,000	1,871,000

Amgen Income Statement

All numbers in thousands

Revenue	12/31/2018	12/31/2017
Total Revenue	23,747,000	22,849,000
Cost of Revenue	4,101,000	4,069,000
Gross Profit	19,646,000	18,780,000
Operating Expenses		
Research Development	3,737,000	3,562,000

Selling General and Administrative	5,332,000	4,938,000
Non Recurring	-	
Others	26,000	8,000
Total Operating Expenses	13,196,000	12,577,000
Operating Income or Loss	10,551,000	10,272,000
Income from Continuing Operations		
Total Other Income/Expenses Net	-1,006,000	-675,000
Earnings Before Interest and Taxes	10,551,000	10,272,000
Interest Expense	-1,392,000	-1,303,000
Income Before Tax	9,545,000	9,597,000
Income Tax Expense	1,151,000	7,618,000
Minority Interest	-	
Net Income From Continuing Ops	8,394,000	1,979,000
Non-recurring Events		
Discontinued Operations	-	
Extraordinary Items	-	
Effect Of Accounting Changes	-	
Other Items	-	-
Net Income		
Net Income	8,394,000	1,979,000
Preferred Stock And Other Adjustments	-	
Net Income Applicable To Common Shares	8,394,000	1,979,000

	Neutral performance
	Good performance(in comparison to the other company)
	Poor performance (in comparison to the other company)
	Increase in Ratio in 2018 compared to 2017
	Decrease in Ratio in 2018 compared from 2017
	No change in 2018 compared to 2017

Legend for Figure