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A financial analysis report of three typical biopharmaceutical companies in UK

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Abstract: *Due to the impact of COVID-19 in recent years, more and more people are beginning to turn their attention to the development of pharmaceutical companies. In particular, some investors have shifted their investment targets to the pharmaceutical sector. In addition, they actively study the financial data and non-financial performance of companies in related fields in order to make reasonable investment decisions in line with investment expectations. At the same time, due to the impact of COVID-19, the business and performance of pharmaceutical companies have changed from the previous year. Therefore, this paper selects three typical UK pharmaceutical groups, AstraZeneca, Glaxo Smith Kline and Hikma Pharmaceuticals (Forbes, 2020)[16], to analyze their financial and non-financial performance in order to bring information users some usable information for investment.*

Keywords: *Ratio Analysis, Non-financial performance, Accounting Policies, Pharmaceutical Companies*

1. Introduction

According to the reports provided by PwC about pharmaceuticals 2020, the incidence rate of chronic diseases is increasing, but most drugs for treatment are expensive and not in the health care system (pwc.com, 2020)[11]; demand for medicines would grow fast in developing countries over the next 13 years; and many governments shift the focus to disease prevention (pwc.com, 2020)[10] . Thus, companies in the biopharmaceutical industry may have to cut prices to meet the economic value of treating chronic diseases, take advantage of high market demand in developing countries and make new developments in health management.

This report selects three typical UK pharmaceutical groups, AstraZeneca (AZN), GlaxoSmithKline (GSK) and Hikma Pharmaceuticals (HIK), to analyze them from non-financial and financial aspects from 2017 to 2019, and gives appropriate recommendations for improvement. Non-financial aspects mainly use the corporate social responsibility model to evaluate the sustainable development of enterprises. Financial aspects mainly analyze the influence of the choice and change of accounting policies and standards on companies and investors, and the financial indicators related to investment, profitability, activities and capital structure. Suggestions are mainly based on the weaknesses of the company found in the above analysis and the background of COVID-19, and mainly about operation and financing.

2. Background information of the selected pharmaceutical groups

AZN is a global innovation-driven biopharmaceutical company and was created by the merger of Swedish Astra AB and British Zeneca Group in 1999. Its headquarters is located in London, UK. And its strategy focuses on the delivery of life-changing medicines that are fueling growth and contributing value to patients and society. Moreover, the company's products cover a wide range, from cancer, neuroscience to respiratory systems. Recently, one of the hottest issues is the development of a vaccine for COVID-19. According to BBC News, the total effective rate of the vaccine developed by the company has reached about 70%. In addition to the strong innovation power (Gallagher and Triggle, 2020)[5], AZN is also characterized by its democratic corporate culture and high employee satisfaction. For example, the company has been committed to construct the 'Speak up' culture and use of the '3H' (Healthy workplace, Healthy you and Healthy Organization) model to enable employees to work in good conditions (Sohu.com, 2017)[15]. Through these efforts, AZN has made some achievements in these two aspects. According to Glassdoor's data of 2017, AZN ranked 10th on the best employers list for pharmaceutical companies with a score of 3.6 out of 5.

Coincidentally, GSK also ranked top 10 with the same score of 3.6 in this list. GSK is one of the

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multinational leading pharmaceutical companies in the world with a long history of 300 years and formed in December 2000 by a consortium of Glaxo Welcome and SmithKline. After the merger, it has grown into the world's largest pharmaceutical group, according to the list of 'The World's Largest Public Companies 2019 ranking' published by Forbes in March 2020. Especially, the company has performed well in the field of vaccine development (Fortune.com, 2014)[7]. In 2014, GSK applied for regulatory approval for the first malaria vaccine, which means the end of an era in which malaria kills more than 650,000 people a year, particularly in Africa. As a result, the successful development of the vaccine seems to explain the company's purpose of 'to help people do more, feel better, live longer' in a way.

HIK has been founded more than 40 years by Samih Darwazah, which aims to provide high-quality, affordable medicines to a certain population. After a long period of development, in 2005, the Group listed on the London Stock Exchange, raising gross proceeds of US$124 million. Until now, its operations cover the Middle East, Europe, the United States, and many other regions. During the development, the company upholds the value of 'Integrity, Excellence, Respect, and Transparency'. Guided by this positive attitude, it produces more than 690 a broad range of branded and non-branded generic products to patients worldwide.

3. Analysis of non-financial aspects

In order to provide more non-financial information about the three pharmaceutical companies, this sector uses the international corporate social responsibility (CSR) pyramid model as shown in Figure 1 and combines it with the sustainability reports of the three companies in 2019 to analyze.

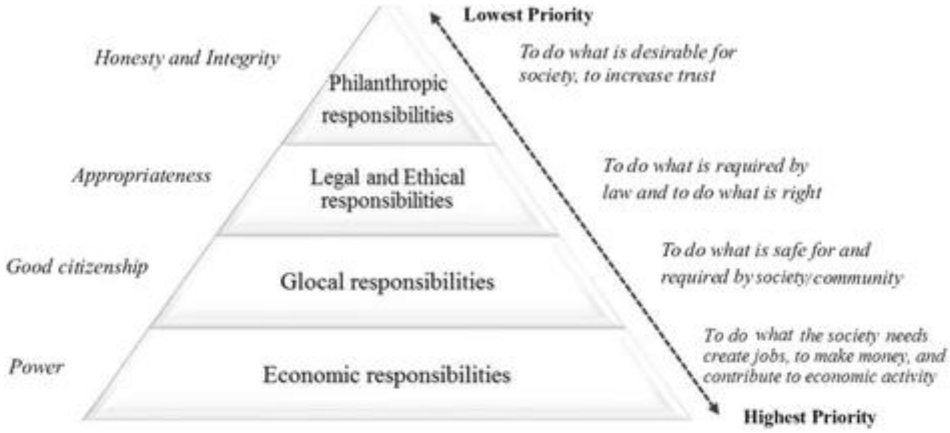

Figure 1: International Pyramid Model of CSR Source: Masoud, 2017[8]

It is necessary to consider corporate social responsibility (CSR) to make the enterprises develop sustainably. Corporate social responsibility (CSR) has been a priority faced by the management of the business in every country (Porter and Kramer, 2006)[12]. Although each of the three companies fulfills its responsibilities by the same methods, such as being guided by the code of conduct, enforcing an ethical code, respecting the principles of the Universal Declaration of Human Rights, especially guaranteeing the security of patients as pharmaceutical companies, et al., which have been involved in the four aspects of the international CSR model, each has the different focus. And their different conducts of the focus are detailed as follows.

AZN pays more attention to the 'Legal and Ethical responsibilities', which means it tends to do something to protect the right of employees on the moral side. Taking the 'Safety, Health and Environment' (SHE) strategy of AZN as an example, it provides an accurate framework for controlling environmental impacts and creating a safe, healthy, and active work environment. Since its inception in 2000, the company has reviewed its progress and updated the strategy and set new goals every five years. GSK focuses on making its products affordable and available, which is mainly involved in the top aspect of the pyramid. More to the point, GSK used different pricing methods in developed and less developing countries. For the latter, the patent costs were not added to ensure the people could obtain the medicines at low prices. HIK commits to the top and the third, global, parts of the pyramid. For instance, in 2019, it donated $3.1 million of medicine mainly in MENA and the US.

Above all, it is obvious that three companies try their best to perform the responsibility and gain more

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reputation through these activities. Because, for multinational corporates, undertaking social responsibility actively has the potential to be a safe way to balance the challenges and opportunities during the process of globalization (Latap íAgudelo, et al., 2019)[6]. Therefore, after fulfilling their social responsibilities, these three companies could consolidate the good brand image they have established to obtain more patients' trust and gain more opportunities to develop cooperation with local governments through getting more policy support and so on. On the other hand, economic responsibility is the base of corporate social responsibility (Carroll, 1991)[3], only by earning income and making profits could a company maintain its operations and make contributions in the field of social responsibility. Thus, these three companies seem to have a good ability to earn and maximize profits. And as for the detailed financial information would be provided and analyzed in the next sections of 'analysis of financial aspects'.

4. Evaluation of accounting policies

From 1 January 2018, these three companies all adopted IFRS15 to replace IAS18 to recognize the revenue, while the use of the new standards did not have a significant impact on the recognition of the revenue for these three companies. According to the information from their annual reports, the detailed reasons may be as follows. First, one of the differences between IFRS15 and IAS18 is that the new standards no longer distinguish transaction forms among product sales, service provision and construction contracts. And the company recognizes the construction contact income also with the "five-step model". So it has a great impact on the recognition of construction contract amount in the corresponding accounting period. However, these three companies' revenue mainly includes collaboration revenue and product sales. Collaboration revenue is created during the cooperation of the parent and subsidiaries. Product sales are from the consideration of the contract with customers. So it seems their 'contracts' do not include construction contracts with large amounts. Thus, they would be less affected by the new standard in construction contracts. Second, When the company recognizes revenue under IAS18, it not only considers the transition of the risks and rewards to customers, but also the reliability of the revenues and costs measurement. While the new standards only consider whether control has been transferred. According to the annual reports, the point at which control is transferred is mainly arranged by customers, generally at the time of delivery, which is the same as the risk and rewards transferred point of IAS18. And the formula（net invoice value-estimated rebates, returns and chargeables） for measuring income has not changed. So there was no significant change in recognition of the revenue timing and amount. Third, the new standard should consider the allocation of the transaction price. While these three companies' sales orders mainly include single obligation and the average duration of a sales order is mostly less than 12 months. So the recognition of income does not involve the distribution of different obligations and accounting periods. Above all, since the timing and the sales deductions under IFRS15 are consistent with those under IAS18, the companies' recognition of revenue should not be affected by the replacement.

From 1 January 2019, these three groups all adopted IFRS16 instead of IAS17. Since the new standard no longer distinguishes between operating lease and finance lease, and only recognizes the right to use assets and lease liabilities when the lease occurs. Thus, compared with the year using the IAS17, the EBIT would increase due to the reduction of lease expenses. All three groups have leases for more than 12 months, so such a change could lead to changes in many financial indicators. Therefore, investors should consider whether accounting policy changes have an impact on the data when judging the company's situation through financial indicators.

As for the inventory valuation method, both AZN and GSK always adopted the first-in, first-out (FIFO) method, while HIK did not disclose. For investors, under this method, the cost of inventory is subject to great price fluctuations (Suvannasing and Kazimoto, 2020)[14]. For example, when the market price is rising, the stocks' cost would be higher than the shipped previously, which may cause the overestimation of current profits and inventory value. So investors should consider this when assessing the inventories' value.

5. Ratio analysis

5.1 Ratio analysis about the financial performance

The analysis of this part would mainly focus on the data from the income statement of these three companies, in 2017, 2018 and 2019. And ROCE, two profit margins and assets turnover would be used

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to evaluate the return for investors, profitability and utilization of assets. During the analysis, it may mention other ratios, and all the data involved are included in the appendix with source and calculation methods.

5.1.1 ROCE

ROCE is usually used to measure how well the management uses existing resources to earn money (Camelia, 2013)[2]. For these three companies, AZN had the lowest ratio and kept it about 4%, which means that AZN did not make full use of the capital to create profits. For HIK, because of the large expenses in exceptional items pre OP account, its EBIT had a significant decrease from positive £245k in 2016 to negative £552k in 2017 and led to the negative ROCE ratio of -28.48% directly in 2017. However, the expenses of exceptional items are normally one-off, so the ratio increased to a similar level of 11.27% as in previous years in 2018. And in 2019, because of the decrease of the assets employed and the increase of the EBIT, the ratio has reached 19.97%. For GSK, its ratio has been around 12% in the past three years, which means that its ability to make earnings with resources has been good and stable. Above all, as HIK's ROCE ratio has been climbing year by year, it is increasingly able to make profits from the assets invested by investors. And as a result of GSK's stable ROCE data, it also performs well in this aspect.

On the other hand, because ROCE ratio could be divided into EBIT profit margin multiplying assets turnover, the changes of ROCE are related to the fluctuation of profit margin and assets turnover. And more information on the profit margin and assets turnover is in the next.

5.1.2 Gross profit margin and net profit margin

Profit margin is mainly used to assess the ability of the enterprise for profit and the effectiveness of the management of a company (Sagala, 2019)[13]. And the analysis of profit margin mainly includes gross profit margin and net profit margin (Net profit refers to EBIT, operating profit).

These three companies all showed the phenomenon of a high gross profit margin with a low net profit margin. Taking AZN as an example, its gross margin was around 80% and the net margin was around 15%, from 2017 to 2019. The gross margin was nearly 5 times the net margin. There seem to be two important reasons to explain this point. First, the low cost of sales, especially the cost of raw material led to the high gross margin. Second, because of the need of developing new products, pharmaceutical companies generate a lot of research and development (R&D) expenses. Before being capitalized, R&D expenses need to be amortized in operating expenses. AZN, GSK and HIK's annual reports all showed no R&D expenses reached capitalization criteria in these three years. Therefore, a large number of operating costs are generated to offset profits, causing low net profits.

However, for HIK, besides the common reasons mentioned above, another reason for the huge gap between its gross profit margin (49.93%) and net margin (-38.55%) in 2017 was the huge one-off expenses mentioned in the ROCE analysis previously. The one-off expenses were the impairment of goodwill about £8m of the west-ward project due to the unfavorable industry development. However, the one-off expenses do not appear regularly, so its profitability got well in 2018 and 2019.

In general, though AZN has maintained the highest gross profit rate in the past three years, its net profit margin has been decreasing year by year. And GSK's net margin showed an increasing trend from 13.54% to 20.62% with a stable high gross margin around 65%. Thus, judging from two types of profit margin and the changing trends, GSK's profitability may be relatively better.

5.1.3 Assets turnover

Assets turnover ratio, as an asset management ratio, measures the efficiency of the company of using and controlling its assets (Faruk and Habib, 2010)[4]. AZN and HIK's turnover ratios kept growing in the past three years, because of the greater growth of the turnover than that of assets employed. For GSK, its ratio has fallen twice in the past three years. For the first decrease, the main reason was the sharp decrease of the current liabilities from £27m to £22m. The second decrease was due to the significant increase of the use of the assets. This increase also caused the increase of both long-term lease liabilities and short-term lease liabilities, while the long-term ones raise more sharply. In short, due to the increasing trend and the large ratio (around 0.8), HIK's had higher efficiency.

5.2 Ratio analysis of financial position

In this sector, current ratio, quick ratio and interest coverage rate would be used to assess the short-term and long-term liquidity from the data mainly shown on the balance sheet, which indicates the capital structure. And all data sources and methods of calculation would be disclosed in the Appendix.

5.2.1 Current ratio and quick ratio

The current ratio and the quick ratio as important liquidity ratios were used to refer to the possibility of the assets, which are easy to be switched to cash, to meet its debts on time (Breuer, et al., 2012)[1]. It is worth noting that the current ratios of AZN and GSK were both less than 1 in the past three years, which means they did not have sufficient current assets to service current liabilities. The reason for the low ratio may be that AZN and GSK have paid huge dividends in the past three years, reaching about 2700K and 3900K each year, respectively. Judging from the cash flow statement, these dividends took cash out of companies and affected their short-term solvency. Although the current ratio and quick ratio of GSK were lower than those of AZN in each year, the two ratios of GSK kept an upward trend, which means that its short-term solvency was gradually getting stronger. For HIK, its current ratio remained between 1 and 2 from 2017 to 2019, which means its current assets could cover its current liabilities until 2019. However, its inventory turnover was around 3.9 less than that of the other two companies in the past three years. A low inventory turnover rate indicates that its inventory turnover capacity maybe not good. Overstocked inventories may make its current ratio look large merely on the surface. This point could be seen more clearly when analyzed in conjunction with the quick ratio. The quick ratio of HIK had a substantial decrease compared with the current ratio. Especially in 2019, its quick ratio was 0.87 less than 1. In other words, HIK has a large number of inventories, while the ability of the inventories being turned into wash seems weak, which would affect the short-term solvency. But compared with AZN and GSK, its liquidity was relatively better.

5.2.2 Interest coverage ratio

The interest coverage ratio is used to measure the ability of the profits gained to pay the interest of creditors, which reflects the extent to which the interests of creditors are protected (Ji, n.d.)[9]. Based on the data presented by the three companies, GSK may be the best performer. Its ratio has stayed above 4 (5.80 (2017), 7.02 (2018), 7.82 (2019)), seemingly protecting the interests of investors to a great extent. This performance was due to its rapid profit growth, which allowed it to maintain a high coverage rate, though its long-term debt increased year by year. As for AZN, its ratios were 2.48 (2017), 2.40 (2018) and 2.08 (2019). This low coverage ratio indicates that the company may face the debt repayment risk and difficulties in borrowing next time. The reason for the sharp drop from 2.40 to 2.08 was mainly due to the poor control of the operating costs in 2019, which reduced the profit before interest, though long-term debt fell in 2019. As for HIK, Due to the negative EBIT analyzed above, the ratio was negative in 2017. But the ratio showed a sharp rise, from 4.65 in 2018 to 8.40 in 2019. The main reason was the sharp reduction in long-term debt from 440k to 80k. But what is worth noting is that it has longer debtor collection periods (about 110 days) than the other two companies (about 50 days). This means that the company may be unable to use the trade receivables to pay interest on time. So this high ratio also may carry some risk.

6. Conclusions

Based on the above analysis and the background of Covid-19, the following recommendations are proposed for the above three companies. First, for AZN and GSK, they paid a large number of cash dividends these years, they should reduce this amount. Due to the outbreak of the epidemic, the government has paid more attention to the research and development of vaccines and innovative drugs. AZN and GSK should seize this market opportunity, reduce the dividend payment to retain more funds to develop vaccines and new products. Second, for HIK, it should strengthen inventory management and adjust credit policies. As a result of Covid-19, companies should change their production and manage inventories based on the current market demand for various drugs. The company should also consider that affected by Covid-19, the customer's repayment ability may be distributed due to the deteriorated business caused by Covid-19.

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