

An In-Depth Financial Analysis of Pfizer Inc

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Abstract. This paper analyzes the economic performance of Pfizer, a leading biopharmaceutical company, from a business perspective. Pfizer has a long history of innovation and significant contributions to the global healthcare industry for over 170 years. Despite facing challenges such as the loss of patent exclusivity for some key products and the impact of the COVID-19 pandemic on its business operations, Pfizer has continued to perform well financially. Using Pfizer's most recent annual report, this essay examines the company's financial performance in 2022, where it had total revenues of \$100.3 billion, an increase of 30% from the previous year. The company's net income was \$31.4 billion, a significant increase from \$22 billion in 2021. The report also indicates that Pfizer's financial performance was driven by growth in key therapeutic areas, including oncology, inflammation and immunology, and rare diseases. Additionally, the company's COVID-19 vaccine, which received emergency use authorization from regulatory agencies around the world, played a significant role in Pfizer's financial performance. Looking ahead, Pfizer has a strong pipeline of potential new medicines in the fields of oncology, immunology, neurology, and other therapeutic areas. The company's commitment to innovation is evident in its investments in research and development, which have enabled it to bring many important new treatments to market. Despite the challenges faced by the industry and the world due to the COVID-19 pandemic, Pfizer's financial performance has remained strong, and the company is well-positioned to continue its success in the future.

Keywords: Fundamental analysis; pharmaceutical and biotechnology industry; COVID-19 pandemic.

1. Introduction

Pfizer is a leading biopharmaceutical company that has been making significant contributions to the global healthcare industry for over 170 years. Founded in 1849, the company has a rich history of innovation and a strong commitment to improving people's lives through the development of lifesaving and life-enhancing medicines. With operations in more than 90 countries and a workforce of over 100,000 employees, Pfizer is one of the largest pharmaceutical companies in the world. The company's portfolio includes prescription medicines, vaccines, and consumer health products, and it has a strong pipeline of potential new medicines in the fields of oncology, immunology, neurology, and other therapeutic areas.

Pfizer's commitment to innovation is evident in its investments in research and development, which have enabled the company to bring many important new treatments to market. For example, Pfizer has been at the forefront of the fight against cancer, and it has developed several groundbreaking treatments that have improved outcomes for patients with various types of cancer. In addition, Pfizer has made several strategic acquisitions and partnerships that have helped the company to expand its product portfolio and reach new markets. Recently, Pfizer announced its acquisition of Seagen for approximately \$43 billion, with Pfizer paying \$229 per Seagen share in cash. This move is set to reinforce Pfizer's position as a top player in the Oncology industry. Seagen's expertise in Antibody-Drug Conjugates (ADCs) and its portfolio of medicines, alongside its late-stage development programs, are said to complement Pfizer's Oncology portfolio, positioning the company for even greater success in the field [1]. The COVID-19 pandemic has highlighted the importance of Pfizer's work, as the company developed a vaccine in partnership with the German biotechnology

company BioNTech. This vaccine has received emergency use authorization from regulatory agencies around the world, and it is playing a key role in the global effort to control the pandemic [2]. Pfizer's response to the COVID-19 pandemic is just one example of the company's commitment to improving people's lives and making a positive impact on the world.

However, this major pharmaceutical company, predicts a substantial decrease in revenue for the current year due to reduced demand for its COVID-19 vaccine and treatments, as well as the United States government's decision to discontinue purchasing them. This decrease is a result of fewer individuals seeking vaccines to combat the disease. Despite generating over half of Pfizer's record-breaking revenue of \$100.3 billion in 2022 from COVID-19 vaccines and Paxlovid, an oral antiviral, the company is expecting a significant decrease in revenue for these products in 2023. Pfizer anticipates bringing in only \$13.5 billion in revenue for Comirnaty, its COVID-19 vaccine, and \$8 billion for Paxlovid in the upcoming year [3].

Despite a sharp decline in demand for COVID-19 vaccines, the market for vaccines remains active due to the emergence of new variants every few months. As the SARS-CoV-2 virus has spread globally, it has evolved in ways that make it more transmissible and better at evading pre-existing immunity generated by vaccination and prior infection. In response to this viral evolution, newer COVID-19 "bivalent" vaccines have been developed to target both the original strain of the virus and newer, more immune-evasive variants [4]. Pfizer has recently developed a bivalent vaccine that is the first booster to be approved in Australia, specifically targeting Omicron subvariants BA.4 and BA.5 [4].

2. Accounting Analysis

Because Pfizer released their 2022 Annual Report on 28 Feb 2023, the accounting policies are analyzed based on the 3rd Quarter Report from 2022, adjusting for any changes in accounting policies in the 2022 Preliminary Results. Three areas, revenue recognition, goodwill, and pensions, required management to exercise a higher degree of judgments or significant estimates. Pfizer, therefore, identified them as critical accounting policies in their 3rd Quarter Report from 2022. To compare accounting policies, four peers, including Merck, AbbVie, Eli Lilly and Company, were identified by reasonable judgments.

2.1 Revenue Recognition

In 2022, Pfizer recorded approximately \$100.3 billion in revenue, significantly outperforming its rivals. Nevertheless, the company's operations are intricate, as it derives income from courseware, assessments, and services, each of which encompasses a wide array of products and offerings. Furthermore, the sales figures reported in the income statement are crucial since they significantly impact investor-focused metrics such as operating profit (OP), profit before tax (PBT), and net income (NI). If revenue is not reasonably recognized and accurately measured, analysts' valuations of Pfizer may be unreliable, leading to misguided investment decisions. As a result, substantial judgment is necessary when measuring and recognizing revenue.

Pfizer has a clearly defined revenue recognition process, which involves identifying various revenue sources and specifying how to account for them under particular conditions. For product sales, revenue is recognized when the customer takes control of the product, typically when it is shipped or delivered, and the title is transferred to the customer. However, if the product is temporarily held under a bill-and-hold agreement, revenue is only recognized if certain conditions are met, such as the product being distinctly identified as the customer's and ready for physical transfer, while the entity cannot utilize or redirect the product to another customer. To determine when the customer takes control of the product, several indicators are considered, including the entity's right to payment, the transfer of title and significant risks and rewards of ownership, and whether the customer has accepted the product.

In comparison to its peers, Eli Lilly and Company does not classify its revenue as accurately as Pfizer, nor does it provide explanations about specific circumstances. AbbVie exhibits a similar level of revenue recognition accuracy as Pearson. However, Merck categorizes their revenue more comprehensively and makes more precise judgments than Pfizer. Pfizer's revenue recognition accounting policy appears to be sensible and in line with its peers. Nevertheless, due to the complex operations of Pearson, considerable judgment and estimates are necessary.

2.2 Pension

Pfizer faces a highly complex pension landscape, as it administers a variety of defined benefit and defined contribution retirement plans for its 83,000 employees globally. The company opts to establish several group pension plans, which are segmented to offer both defined benefit and defined contribution pension benefits. In comparison, the pension accounting of three peers is less complicated than Pfizer's, as they do not utilize distinct pension plans across different regions.

Pfizer reported retirement benefit obligations of \$2.2 billion on the balance sheet as of 31 Dec 2022. Most employees globally are covered by defined benefit pension plans, defined contribution plans, or both. In the U.S., there are IRC-qualified and supplemental (non-qualified) plans, as well as other postretirement benefit plans, mainly comprising medical insurance for retirees and eligible dependents. Key assumptions include the discount rate, inflation rate, salary growth, and life expectancy. Overfunded or underfunded statuses of defined benefit plans are recognized as assets or liabilities. Obligations are typically measured at the actuarial present value of benefits attributed to employee service, using assumptions like discount rate, expected rate of return on plan assets, employee turnover, and participant mortality. Pension plans may factor in future compensation assumptions, while other postretirement benefit plans may account for expected medical insurance costs and cost-sharing with employees or government programs. Plan assets are measured at fair value. In comparison to its three peers, Pfizer must make distinct sets of assumptions for each group pension plan, resulting in more complex estimates and management judgments.

Upon further evaluation, it is evident that Pfizer's pension accounting policy, while complex, demonstrates a comprehensive approach to managing its global workforce's retirement needs. The company's ability to navigate this complexity and establish tailored pension plans for different regions showcases its commitment to providing suitable benefits for its employees. Additionally, the thoroughness of Pfizer's assumptions and actuarial evaluations ensures a higher level of accuracy in estimating pension liabilities and assets. In light of these factors, Pfizer's accounting policy for pensions appears not only reasonable but also superior to that of its peers, reflecting a diligent and responsible approach to managing employee pensions.

3. Performance Evaluation

3.1 Liquidity

In the third quarter of FY2022, Pfizer placed itself in a strong liquidity position. From Table 1, it is evident to see that Pfizer had better quick ratio and current ratio than its competitors; this meant that Pfizer had more substantial capabilities to meet its short-term obligations, and the current liabilities were not able to threaten the company. Moreover, Pfizer also had the highest NWC to total assets ratio with the data of 0.134; this illustrated that the availability of extra money was the most significant relative to the company's size to finance operations. However, from the balance sheet in 10-Q form, cash and cash equivalents decreased significantly from 2021 to 2022 by \$1,298 million. This was due to COVID-19 impacts, and the company invested much capital into vaccine research and development. This led to Pfizer's cash ratio underperforming compared to its peers, with the lowest percentage of 2.9% throughout nine months in FY2022.

Table 1. Liquidity ratios of Pfizer and its competitors

	NWC to total assets	Current ratio	Quick ratio	Cash ratio
Pfizer	0.134	1.589	1.374	0.029
Abbvie	-0.017	0.928	0.831	0.362
Eli	0.042	1.127	0.882	0.167
Merck	0.099	1.459	1.215	0.485

3.2 Leverage

In Table 2, Pfizer had only a 0.26 long-term debt ratio, the lowest ratio among the four businesses. This is because the balance between long-term debts and total assets was satisfied during FY2022; Pfizer calculated and estimated well in their assets and did not borrow beyond their abilities. Moreover, Pfizer also had the lowest proportion in the total debt ratio. This meant that until the third quarter of 2022, Pfizer had the most vital ability to repay short-term and long-term debts. However, the behaviors of Pfizer in times-interest-earned and cash coverage rates could have been better. The times-interest-earned was the second lowest with a value of 1093 compared with its peers. Therefore, this showed the stakeholders that it was not easy to pay its debts using its current income, and the profitability of Pfizer could be healthier. Finally, in the cash coverage ratio, Pfizer could have been better. The ability of the company to pay the interest expense with its cash balance was less strong than the other businesses. This is the chain reaction of low cash and cash equivalents in Pfizer in 2022, and the company did not have enough money to repay the interest credits.

Table 2. Leverage ratios of Pfizer and its competitors

	Long-term debt ratio	Total debt ratio	Times-interest-earned	Cash coverage ratio
Pfizer	0.260	0.525	1092.519	1223.815
Abbvie	0.790	0.887	1261.500	1892.500
Eli	0.582	0.786	99.577	123.837
Merck	0.390	0.584	2155.167	2658.000

3.3 Profitability

In the profitability measurements, Pfizer did not behave well, especially in market value added and market-to-book ratio (see Table 3). Low MVA gave investors signals that Pfizer's added value was much lower than the other four businesses. This is because the value of the capital provided by the shareholders exceeds the value of the organizational operations within the business. Moreover, the lowest market-to-book ratio – which was about 8 times less than Eli showed to the shareholders that the current price of Pfizer in the stock market was not completable, again enhancing the poor performance of the business in the investors' impressions. However, Pfizer's return on capital and assets was 0.211 and 0.135 respectively, this data was the highest among the four companies in the same category. This indicates that Pfizer was able to make the best of its available capital and pursue the highest level of profitability; this gave the shareholders confidence that Pfizer was a good option to invest in.

Table 3. Profitability ratios of Pfizer and its competitors

	Market value added	Market to book ratio	ROC	ROE	ROA
Pfizer	217624.280	9.204	0.211	0.284	0.135
Abbvie	260464.720	28.850	0.123	0.585	0.066
Eli	312380.100	75.292	0.178	0.424	0.091
Merck	265031.900	23.828	0.158	0.258	0.107

3.4 Efficiency

Apparently, Pfizer had the most successful operating profit and net profit margin among the four businesses. It has reached around 30% in its margin in the first nine months of 2022. This is because huge amounts of vaccinations are demanded during the pandemic all over the world, contributing to significant profits for the company. In addition, the company's inventory was \$9,513 million, and the turnover was about 2.7, the highest compared with the other three. This showed the investors that Pfizer has the most vital ability to minimize the amount of money in their inventory. By increasing revenue compared to fixed expenses such as rental fees and cost of labor, high inventory turnover also supported boosting profitability. On the other hand, from Table 4, Pfizer's asset turnover ratio was not outstanding, with the data of 0.419, which was worse than Eli and Merck's.

Table 4. Efficiency ratios of Pfizer and its competitors

	Asset turnover	Inventory turnover	Receivables turnover	Operating profit margin	Profit margin
Pfizer	0.419	2.726	6.624	0.388	0.347
Abbvie	0.293	2.653	4.309	0.293	0.218
Eli	0.435	1.308	3.183	0.222	0.203
Merck	0.430	2.273	4.924	0.285	0.253

4. Strategy and Risk Management

The strategic analysis is essential to contribute to future research on finances and management for Pfizer Pharmaceuticals. It suggests whether an equity investor can add Pfizer to his/her stock fund [5]. Pfizer's strategy is centered around its commitment to innovation and its focus on improving patient outcomes. The company invests heavily in research and development and has a strong pipeline of potential new medicines in oncology, immunology, neurology, and other therapeutic areas. Pfizer also seeks to expand its product portfolio and reach new markets through strategic acquisitions and partnerships. Due to COVID-19, the most important step they have taken in recent years is research and developments against the virus. Pfizer has invested heavily in BNT162b2 vaccinations and miracle pills. As the data shows to the public, after the first dose of the Pfizer vaccine, the efficiency was about 52%, and after seven or more days after the second dose, the efficiency would reach 95% [6]. Therefore, the strategy has been highly successful, as the Pfizer vaccine has been widely used worldwide.

Moreover, it also focuses on strategic acquisitions and partnerships. It seeks to enhance its capabilities and acquire companies that generate substantial profits [7]. The most recent acquisition was the acquisition of the Sanford, North Carolina, Manufacturing Site from Abzena [8]. This action allows Pfizer to accelerate its innovative pipelines and improve complex biotech technology marketing. However, M&A may not always be successful. For example, as evidence shown by Fiori and Tinelli (2016), due to the intervention of the U.S. Treasury and the U.S. Department of Justice, the merger between Pfizer and Pharmacia failed on April 6th, 2016 [9]. In addition, Pfizer also seeks to manage its costs and improve its financial performance through various initiatives, including productivity improvements and cost-saving measures.

Regarding risks, Pfizer faces several difficulties that could influence its financial results and ability to accomplish its strategic goals. Pfizer's 10-K final report in 2021 has shown that the general risks are related to the COVID-19 pandemic, market fluctuations in their equity and other investments, cost and expense control and non-ordinary events, intangible assets, goodwill and equity-method investments, and changes in laws and accounting standards [10]. These are the main factors that influence the company's financial performance. Although Pfizer put the COVID-19 negative impact in its report in the first place, until 2023, the effect has become smaller as most people worldwide already have immunity to the virus. Therefore, investors can take COVID-19 less into account. In addition, risk factors that have existed for a long time are relevant to business development,

intellectual property, technology and security, government regulation, business, industry, and operations. Overall, investors with incentives to put capital into Pfizer should access the report and carefully analyze whether the risks outweigh the strategic benefits of the business.

5. Conclusion

In conclusion, Pfizer's economic performance in recent years has been impressive, despite challenges such as the loss of patent exclusivity and the impact of the COVID-19 pandemic on its business operations. The company's financial performance has been driven by growth in key therapeutic areas, including oncology, inflammation and immunology, and rare diseases, as well as its COVID-19 vaccine. Pfizer's commitment to innovation is evident in its investments in research and development, which have enabled it to bring many important new treatments to market.

Looking ahead, Pfizer's strong pipeline of potential new medicines in various therapeutic areas positions the company for continued growth and success. The recent acquisition of Seagen, with its expertise in Antibody-Drug Conjugates and portfolio of medicines, alongside its late-stage development programs, further reinforces Pfizer's position as a top player in the oncology industry. Furthermore, the market for vaccines remains active, with the emergence of new variants driving the development of newer COVID-19 "bivalent" vaccines such as Pfizer's, which target both the original strain and newer, more immune-evasive variants. From an investor perspective, Pfizer's strong financial performance and strategic investments make it an attractive long-term investment opportunity. With a robust pipeline of potential new medicines and a strong commitment to innovation, Pfizer is well-positioned to continue its success and generate long-term value for its shareholders.

Overall, Pfizer's economic performance is a testament to the company's leadership and dedication to improving people's lives through the development of life-saving and life-enhancing medicines. As the healthcare industry continues to evolve, Pfizer is poised to remain a top player and deliver significant returns for its investors.

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