

# Krause Fund Research Fall 2022

**Current Price: \$49.24** 

**Target Price: \$59-\$66** 

18th November 2022

**Stock Rating:** 

Model Price Projections



# Pfizer Inc. (NYSE: PFE)

### **Healthcare - Biopharmaceutical**

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### **Investment Thesis**

**Analysts** 

We recommend a **BUY** rating for Pfizer Inc. with a potential of 33% upside in investment. We expect to see further rapid growth in revenue drawn from the COVID-19 vaccine product line, a continued creation of new revenue streams through products currently under development, and an overall greater emphasis on the Healthcare industry due to the global aging population.

### **Investment Drivers**

Creation of future cash flows: With the added boost of the Comirnaty and Paxlovid products (COVID-19 treatment), we project Pfizer to cross the \$100 billion revenue mark by year end 2022. Combined with 112 products in the current development pipeline, including 12 entering Stage Four<sub>2</sub>, we expect Pfizer to continue a high revenue total at least into 2026.

**Global Aging Population:** By 2030 one in six people worldwide will be aged 60 or over, a 400 million person increase from the current population<sup>1</sup>. This dramatic increase in elderly population will draw an increased importance of a strong treatment pipeline, boosting the importance of all Healthcare corporations.

### **Investment Risks**

**COVID-19 product revenue decrease:** As the pandemic comes to a close, there is the uncertainty that the revenue from Pfizer's leading revenue stream will remain strong. We project the sales from COVID related products to fall by 50% in 2022 and 2023, followed by a steady 10% decrease from 2025-2027, finally ending with a 5% decrease onwards.

**Product Patent Expiration:** Pfizer faces 16 major product patents expiration by 2030 throughout the United States and Europe<sub>2</sub>. This loss of revenue must be replaced by newer product streams as they expire. If Pfizer is unable to produce products to replace these pipelines, then earnings will suffer.

# Pfizer Inc (PFE) Price % Change SAP 500 ("SPX) Level % Change 0.00% -10.00% -30.00%

### **Financial Snapshot**

\$66
\$46
\$62

### Stock Data

Current Price:	\$49.25
52-week Low:	\$41.44
52-week High:	\$61.71
Market Capitalization:	276.40B
Shares Outstanding:	5.62B
Beta:	0.66

### **Financial Metrics**

2021 Revenue:	\$81,288 M
2022E Revenue:	\$107,540 M
2021 EPS:	3.92
2022E EPS:	5.86
Dividend Yield:	3.25%
WACC:	7.06%
R&D % of Sales 2021:	17.01%

### **Ratios**

ROA 2021:	13.09%
ROE 2021:	35.63%

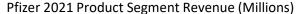
### **Company Overview**

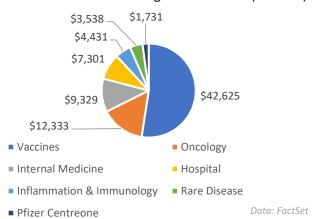
Pfizer researches, develops, manufactures, and distributes biopharmaceuticals. With a wide array of product pipelines, Pfizer is able to treat a variety of conditions across the globe including cancer, rare diseases, immune disorders, nervous disorders, vaccine implementation, and more. Currently, revenue is being primarily driven by the sale of Comirnaty (COVID-19 treatment). It alone accounted for 45% of Pfizer's revenue in 2021. This percentage is projected to stay stagnant into 2022. Furthermore, Pfizer invests heavily into the research and development of future product pipelines reaching just under \$14 billion in research and development expense in 2021. By investing into new product pipelines, Pfizer is able to generate new revenue streams, beating out competitors and increasing profits.

### **Company Analysis**

### **Revenue Analysis & Decomposition**

In 2021 Pfizer's total revenue was \$81.288 billion, a nearly 94% increase from 2020. This revenue is divided into eight major components. These include vaccines, oncology, internal medicine, hospital, inflammation & immunology, rare diseases, and Pfizer CentreOne.

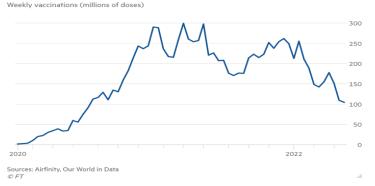




### Vaccines

Pfizer's vaccine segment is their largest stream of revenue accounting for nearly 53% of total revenue in 2021. This segment also contains the largest single product revenue stream, Comirnaty (COVID-19 vaccine). Comirnaty accounted for just over 45% of Pfizer's revenue in 2021. This large share of revenue saw a near \$36 billion increase from 2020 all drawn from the production of the new Comirnaty vaccine. As the pandemic is drawing to a close the initial surge of necessary vaccines has ended. Comirnaty's total revenue will fall.

### Covid vaccinations fall sharply



Due to this decrease in vaccination doses, we forecast the revenue for Comirnaty to begin diminishing, although not immediately since there will still be need for boosters and initial vaccinations for the public. Into 2022 we forecast the revenue to stay stagnant. In 2023 and 2024 we forecast 50% less in revenue streams to account for the sharp fall in vaccination totals, followed by 10% decreases through 2027, before finally settling on 5% decreases onwards. Although decreasing in revenue we forecast that from 2022-2025, Comirnaty will have surpassed \$100 billion in revenue by itself. Other notable vaccine revenue segments include the Prevnar Family, Nimenrix, TicoVac, and Trumenba.

### **Vaccine Patent Expiration**

The Prevnar Family Vaccine faces patent expiration by year end 2026. In 2021, the Prevnar Family accounted for over 12% of vaccine revenue. In 2027, we forecast this revenue to end and revenue for the Prevnar vaccine to subside.

### Oncology

Pfizer's Oncology segment accounted for just over 15% of revenues in 2021. With 16 notable oncology treatments there are many streams that draw in revenue. The Oncology segment revenue has grown consistently for the last five years. We forecasted this segment's future revenue using a historical growth percentage average, while tracking patent expiration.

### Oncology Patent Expiration

The Oncology segment faces several upcoming patent expirations. Inlyta (2025), Ibrance (2027), and Xtandi (2027) will have the largest impact on revenue with 8%, 44%, and 10% respective revenue portions of the Oncology segment. We forecast this segment revenue to remain strong before finally taking a sharp decline in 2028 once Ibrance expires at year end 2027.

### Internal Medicine

The Internal Medicine segment accounted for nearly 11.5% of Pfizer's total revenue. This segment consists of six main internal medicine components and has grown steadily in Pfizer's past. We forecasted future revenue streams using a historical average approach while tracking patent expirations.

### **Internal Medicine Patent Expiration**

The Internal Medicine treatment Eliquis faces patent expiration in 2026. Eliquis accounted for 64% of revenue for the Internal Medicine Segment. Without a replacement drug, the Internal Medicine segment we forecast losing a large revenue stream.

### **Hospital**

The Hospital segment accounted for nearly 9% of Pfizer's total revenue in 2021. This is projected to jump to nearly 30% of total revenue in 2022. This is due to the release of Paxlovid in 2022. Paxlovid is an antiviral medical prescription administered by hospitals to combat the effects of COVID-19. For quarter three ended November 1, 2022, Paxlovid's revenue stream has brought in \$17 billion. Projecting this through end of 2022, Paxlovid will become the second leading revenue stream for Pfizer and produce a forecasted \$24 billion total. This \$24 billion increase in sales from 2021 is why we forecast Pfizer crossing the \$100 billion total revenue mark for 2022. However, since this treatment is also directly tied to the pandemic, we have forecasted it to follow the same pattern as mentioned with Comirnaty through our forecast. The Hospital Segment has no upcoming patent expirations.

### Inflammation & Immunology

The Inflammation & Immunology segment accounted for about 5.5% of Pfizer's revenue in 2021. This revenue segment has seen little growth in the last five years. We have

forecasted the revenue to stay consistent as a percentage of total revenue.

### <u>Inflammation & Immunology Patent Expiration</u>

The Inflammation & Immunology segment faces patent expiration for Vyndaqel, only in Europe in 2028. This means that although there will be a decrease in segment revenue in 2028, we forecast only a 33% decrease in sales for Vyndaqel. Europe traditionally accounts for about one-third of product sales.

### Rare Diseases

The Rare Diseases segment accounted for just over 4% of Pfizer's total revenue stream. The Rare Disease segment has maintained a steady growth pattern. With no impending patent expirations, we expect this revenue stream to continue this growth pattern. We forecasted future revenues using a historical average approach.

### Pfizer CentreOne

Pfizer CentreOne is the global contract development and manufacturing organization backed by Pfizer Inc. Pfizer CentreOne accounted for just over 2% of Pfizer's revenue stream. Joining Pfizer's balance sheet in 2019 CentreOne is a newer revenue segment. We have projected it to grow on pace with an assumed inflation rate of 3% through our projection. There are no drugs for patents to expire for CentreOne.

### <u>Pfizer Production Pipeline - Future Revenue Streams</u>



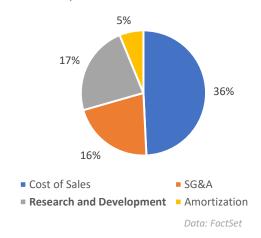
Pfizer's Pipeline has 112 Discovery Projects currently under development as of November 1, 2022<sub>6</sub>. The Development Projects have been categorized as 23 for Inflammation & Immunology, 14 for Internal Medicine, 34 for Oncology, 12 for Rare Disease, 18 for Vaccines, and 11 for Hospitals. All Discovery Projects are either a new product entity or enhancement to current products. With this large number of projects under development it is a positive indicator of future revenue streams for Pfizer. This heavy investment into Research and Development ensures as patents mentioned above expire, there is a suitable replacement that can fill the revenue hole.

Unfortunately, projects under current research and development are not included within our forecasts. It is impossible to pinpoint what price and popularity each product will hold once approved. This is due to the intense competition within the Healthcare industry. If the product is the first treatment option of its kind Pfizer can choose to price as they see fit. If it is a new drug for Pfizer but competitors offer a similar product, Pfizer may try to undercut competition prices and offer a cheaper alternative. Revenue is too unpredictable. It is instead more important to recognize that future revenue streams may be higher than we forecasted as new projects complete development. Our revenue forecasts have an upside due to this possibility of new product segments not currently included in our assumptions.

### **Expense Analysis**

In 2021 Pfizer's main categorical expenses, Cost of Sales, SG&A, Research & Development, and Amortization totaled to \$59.56 billion, about 73% of total revenue.

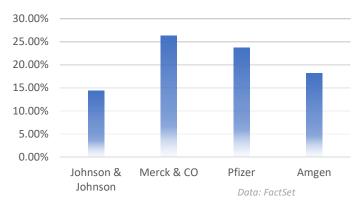
### 2021 Expense Percent of Total Revenue



Cost of Sales, SG&A, and Amortization have stayed relatively consistent historically as a percentage of revenue. We forecasted using the percent of sales average from 2017-2022.

However, the most notable expense category for Pfizer is the Research and Development expense segment. Research and Development is the main driver of the Healthcare industry. In order for the leading companies to stay competitive they must continue to focus on developing new products, faster than other corporations. By investing a large portion of revenue Pfizer is able to continue funding their Production Pipeline previously mentioned. We have forecasted this expense using the average percent of revenue from 2017-2022.

# AVERAGE R&D SPENDING HEALTHCARE INDUSTRY (% OF REVENUE 2017-2021)



Pfizer is on par with peer competitors in the Healthcare Industry. Johnson & Johnson, Merck & CO, and Amgen are of similar size with Pfizer and Pfizer is in a good position to continue producing new products and stay competitive.

Further information regarding R&D peer comparisons can be found in the Industry Analysis Section

### **Capital Structure**

### **Capital Expenditures**

Pfizer saw a large increase of CapEx spending from 2020-2021 at around 21.52%. Additionally, they are expecting to further increase CapEx in 2022, which is once again around a 21-22% increase from the prior year. These increases are unprecedented over the last five years and are a result of their higher profits and R&D costs. Once Revenue figures fall to a more stable rate, we forecast this CapEx spending to become more stable.

### **Debt Structure**

As of December 2021, long term totaled \$36.195 billion with a rating of A2 from Moody. The current portion of long-term debt totaled \$1.636 billion with a rating of P-1 from moody. Pfizer had a Debt-equity ratio of 0.49. The operating cash flow from 2021 totaled \$32.580 billion. This will sufficiently cover any future debt obligations and will cause no concern looking forward.

### **Industry Analysis**

The Healthcare industry contains a wide variety of sub industries and accounts for roughly 14.5% of the S&P 500 index, the second largest sector. Over the last ten years up to 2022, Healthcare is one of three industries to outperform the S&P 500<sub>14</sub>. Over that time period Healthcare outperformed the S&P 500 by 34%<sub>14</sub>. The investment into Research and Development is what drives profit throughout corporations in this industry. The firm that can develop a drug first or develop a product that is more effective will be able to dominate the given market for that product.

### Peer Comparison

The firms with similar size and comparable figures to Pfizer include Johnson & Johnson, Merck & CO, and Amgen. All dominate a large portion of the industry and excel at investing in themselves to produce future revenue streams.

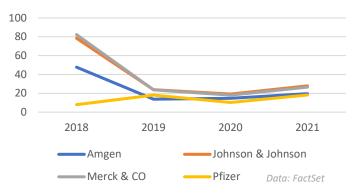
Peer Comparison   ▼	Johnson 8	Johnson	Amgen	▼	Mer	k&CO ▼	Pfiz	er 🔻
Market Cap (\$ Billions)	\$	446.88	\$	139.03	\$	195.55	\$	276.40
Revenue	\$	93,758	\$	25,979	\$	48,704	\$	81,288
Revenue Growth Change		13.55%		2.18%		17.31%		95.16%
Profit Margin		22.27%		22.68%		26.79%		27.04%

All Data from FactSet, 2021

After analyzing the above comparable metrics, we can see Pfizer is better positioned than their current competition. While it does not have the highest market cap it still holds a large portion of the industry. Similarly, Pfizer ranks second in revenue. Where Pfizer currently excels is its revenue growth change and its profit margin. Pfizer can handle its costs more efficiently than the competition, generating more profit. Pfizer's revenue growth also is much higher than its competition. While this is due to the Comirnaty vaccine introduction in 2021 it bodes well for Pfizer to maintain at least a portion of this high revenue figure in the future.

Another metric that we analyzed is the P/E ratios across the selected companies from 2018-2021.

### Healthcare Industry PE Ratios

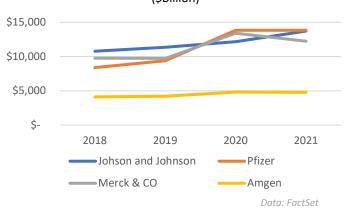


By examining the industry's PE ratios over the last four years Pfizer is keeping pace with the current industry trends. In 2021 Pfizer does rank last, but all ratios are within eight points of each other. Competition will stay high for the future share of profitability in the market.

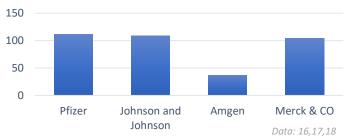
### In Depth Research and Development Driver

The main driver for the Healthcare industry is how each company choses to use their research and development strategy. We chose to further compare how much each competing company is spending as well as how that translates into their production pipeline.

# Healthcare Research and Development Spending (\$Billion)



Number of Products in Production Pipeline (As of October 18, 2022)



Pfizer has become a frontrunner in research and development leading all competitors in total spending by 2021 as well as leading current products under development during 2022. We forecast this investment for research and development for the healthcare industry to continue growing. We forecast Pfizer reaching just under \$14 billion in R&D expense by 2023.

Pfizer currently also leads competitors in products under development. Pfizer is positioning itself to dominate the future revenue streams of unreleased products. By leading competitors, they are ensuring that they will be the best positioned going forward.

### **Porters Five Forces**

### **Bargaining Power of Buyers: LOW**

In the Healthcare industry consumers have little to no bargaining power. They do not have the option deny products due to price. Many of the products are a personal health necessity. This is especially true when a company has a monopoly on a particular drug. Once the company controls the patent, they can set the price accordingly to what they see fit. The customer must instead rely upon their own healthcare insurance, which is heavily regulated by the government, further reducing their bargaining power.

### Competition Rivalry: HIGH

The competition throughout the biopharmaceutical landscape is extremely competitive. Corporations are very protective of their intellectual property as that is what drives their revenue streams. Firms are also in a constant competition to be the one to release the newest innovative product. Often the corporation that can release a drug or product first is the one that can control that section of the market.

### Threat of Substitutes: MODERATE

There is a constant threat that a new product can outperform and replace current products. As newer products are released older products become obsolete. This is also due to the patent expiration process. As products expire, they must be replaced by an alternative, either from the same corporation or a competitor. However, it takes several years for corporations to go through the entire development process and reach approval. It also takes a considerable amount of investment.

### Bargaining Power of Suppliers: MODERATE

The raw materials needed to produce products are extremely important and often specific to each pharmaceutical company. For this rationale, supplier relationships are important to all corporations within the industry. However, many of the raw materials required are easily sourced. This means that the suppliers must keep their prices enticing and competitive or a pharmaceutical company may choose to switch suppliers.

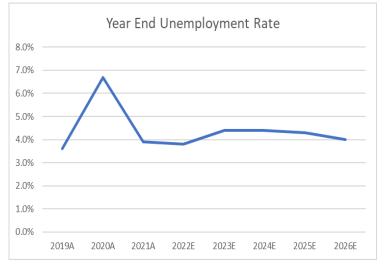
### Threat of new Entrants: LOW

The barrier to enter the pharmaceutical landscape is very high. The entrant must have an immense amount of capital that can be funneled into the development of new products. They must also be able to handle if a product fails during the development stages. It is often the case that smaller firms are bought out by the titans of the industry. Furthermore, Healthcare being a highly regulated industry, each new entrant must pass through all FDA and various other regulation requirements. This makes it very difficult for new firms to enter the industry.

### **Economic Analysis**

### **Unemployment and Labor Force Rates**

The unemployment rate is a significant driver of the biopharmaceutical industry as most Americans get their health insurance through their employer. During the COVID-19 pandemic, the unemployment rate peaked at around 14.7%. As of October 2022, the current unemployment has returned to prepandemic levels of around 3.7%. While the unemployment rate has returned to normalcy, the labor force participation rate remains 1.2 percentage points below its value in February 20208. However, as the Fed continues to roll out large rate hikes, they predict that the unemployment rate will float around 4.3-4.4% from 2023-2025 and level off at around 4.0% in the long run9. This is important because people who have health insurance coverage are more likely to seek medical care than those who do not<sub>7</sub>. Those who do not seek medical care cannot be prescribed medication to treat their illnesses which hinders revenue for the biopharmaceutical industry. While an unemployment rate of 4.3-4.4% may sound like bad news given the increase, it is important to note that the average rate over the last 10 years (excluding 2020) is 5.3%.

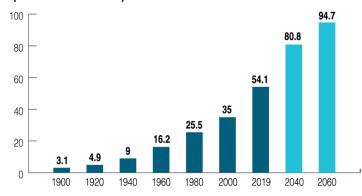


Data: [9]

### Aging Population and Life Expectancy

The aging population in the United States offers opportunity for the biopharmaceutical industry as older populations require considerably more spending on healthcare than younger populations. This is because older populations are more likely to suffer from chronic diseases and illnesses. It is estimated that 90% of adults over the age of 65 experience one or more chronic conditions and therefore need special treatments and medical care<sub>10</sub>. Examples of common conditions that disproportionately affect those aged 65+ are heart disease, diabetes, and arthritis. By 2030, one-fifth of all Americans and one-sixth of the world's population will be 65 years old and over<sub>1</sub>. The growing median age of the US and world population will bring an increased demand for new healthcare products and technologies, thus increasing revenue for the Healthcare industry.

## Number of Persons Age 65 and Older, 1900 - 2060 (numbers in millions)



Note: Increments in years are uneven. Lighter bars (2040 and 2060) indicate projections.

Data: [1]

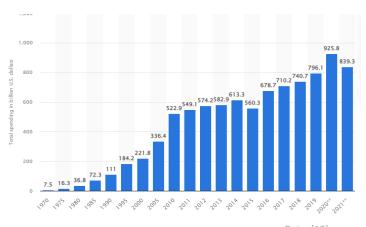
Source: U.S. Census Bureau, Population Estimates and Projections

In addition to the unprecedented number of the global population reaching 65 years of age, worldwide life expectancy has steadily been increasing. While the United States has seen a small decrease in life expectancy, emerging markets have been making big strides as access to better healthcare has increased. On a global scale, average life expectancy has increased by over six years from 2000 to 2019 –from 66.8 years in 2000 to 73.4 years in 2019<sub>12</sub>. This is especially important as the biopharmaceutical industry looks to continue increasing its presence in emerging markets which was greatly accelerated by vaccines and treatments for COVID-19.

### **Federal Funding for Medicare and Medicaid**

Medicare and Medicaid are federal and state government programs in the United States that aim to assist limited income individuals with their healthcare costs. When federal funding to these programs is increased, it creates an additional guaranteed source of revenue for biopharmaceutical companies. Currently, the CMS (Centers for Medicare & Medicaid Services) expects Medicare spending to grow at an average annual rate of 8.2% from 2022-2031. To put this number in perspective, from 1985-2021 Medicare spending grew at an average annual rate of 7.0%13.

As seen in the graph below, we saw unprecedented spending on Medicare in 2020. This was due to the Families First Coronavirus Response Act (FFCRA) as a response to the COVID-19 pandemic. In 2021, total spending returned to levels more consistent with the long-term growth rate mentioned above.



Data: [13]

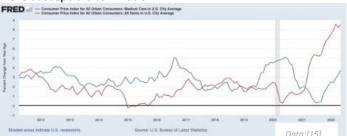
Medicaid spending growth is expected to drop considerably in 2023 to 2.7% due to states continually cutting their enrollments<sub>13</sub>. However, many states are expected to expand enrollment in 2024, which is forecasted to bring a growth rate of around 5.6% per year until 2030 which is closer to the long-term annual growth rate<sub>13</sub>.

Assuming these forecasts are accurate, this would have a positive impact on the healthcare industry. Because of this, the biopharmaceutical industry stands to see an increase in revenue growth from Medicare and Medicaid as a result of the forecasted increase in spending until 2031.

### Inflation

Inflation is a broader driver of the healthcare industry than the others. The impact of inflation is felt across all industries, but for healthcare specifically, it drives up prices for labor, equipment, research, and other important components. As the Federal Reserve continues to raise interest rates to combat inflation, highly leveraged companies suffer the most.

Currently, inflation is growing at its highest rate since the 1980's. However, as seen in the graph below, the prices of prescription drugs, hospital care, dental services, and all other medical services are increasing at slower rates. This means that healthcare companies will likely see revenues grow at slower rates when compared to other companies in other industries more susceptible to inflation.



However, one advantage that the healthcare industry holds over others is the necessity for its products and services. Health issues do not cease to exist during periods of high inflation, so the demand for life-saving treatments should remain relatively unaffected.

### **Valuation Analysis**

### **Revenue Decomposition Summary**

When looking at the revenue totals after forecasting through each revenue segment there is a noticeable pattern in our forecast. After continuing to see unprecedented revenue growth we predict Pfizer to peak in revenue in 2022 and garnish over \$107 billion. After, we forecast Pfizer will begin to return to a more sustainable revenue figure. It is not likely that the surge in revenue from Pfizer's COVID-19 products will continue. We forecast a gradual decline. The total revenue will decrease, we forecast it settling around \$64 billion a year in 2030. This is also without possible approved drugs from the production pipeline. Pfizer will continue being an industry leader, with an upside of even higher revenue figures than forecasted. implied share price of \$65.64. We believe that this model is the most representative of the current value for Pfizer's as it uses our assumption throughout near all of our forecasts.

### WACC

The WACC is used to calculate the implied intrinsic value of Pfizer. In order to reach the WACC figure we had to make assumptions for our risk-free rate, beta, and equity risk premium. For the risk-free rate, we used the 10-year Treasury bond yield of 4.01%. For the equity risk premium, we used Damodaran's website and selected the October 2022 calculation of 5.3% as we felt it would be the most realistic. Finally for the beta we used a 5-year monthly beta calculated from Bloomberg of 0.66.

### **Cost of Equity**

The overall cost of equity was calculated to be 7.51%. We used the capital assets pricing model (CAPM) to solve for our cost of equity.

### Cost of Debt

To solve for the cost of debt we assumed a pre-tax cost of debt of 4.78%. This was the yield-to-maturity of Pfizer's 20-year corporate bond issued in 2016. We then added the implied default premium and multiplied by our calculated marginal tax rate. We found the after-tax cost of debt to by 4.06%.

Finally adding the market value of shares outstanding and the market value of total debt for Pfizer. We solved for the market value weights, multiplied by their respective cost, and ultimately calculated a WACC of 7.06%.

### DCF and EP

Using our economic profit and discounted cash flow models, we have calculated an implied share price of \$65.64 for Pfizer. The assumptions made for this calculation were a CV growth of NOPLAT, CV year ROIC, WACC, and the cost of equity. For the CV growth of NOPLAT, we used a rate of 2.5%, which is slightly higher than the average annual GDP growth rate since 1990. For the ROIC, WACC, and cost of equity, we used 52.92%, 7.06%, and 7.51%, respectively. These three values were previously calculated in our forecasts and models. Using these assumptions along with our estimates of Pfizer's FCF's, EP's, and non-operating adjustments through 2030 resulted in the implied share price of \$65.64. We believe that this model is representative of the current value of Pfizer's stock as it incorporates nearly all of our forecasts.

### **Dividend Discount Model**

Using the dividend discount model, we calculated an implied share price of \$46.37 for Pfizer. Pfizer has a very consistent dividend payout policy as the \$0.40 fourth-quarter 2022 dividend will be the 336th consecutive quarterly dividend paid by the company. Pfizer also has consistent dividend growth over the last ten years averaging a 1-2 cent increase every year. However, with the influx of cash from their increased revenue streams, we forecast that they will increase this figure from 1-2 cents per year to 2-4 cents per year until 2030. With that being said, a large driver of the dividend discount model is the CV growth of EPS. Historically, Pfizer's EPS has been extremely sporadic with

various highs and lows. This makes it difficult to forecast a rate that we feel confident with. Because of this, we are putting less emphasis on the dividend discount model when considering Pfizer's target price range.

### **Relative Valuation**

To find the relative valuation of Pfizer, we used 5 of their competitors within the industry. The companies included were Amgen, Johnson & Johnson, Merck, Moderna, and Regeneron. To find Pfizer's implied relative value for 2022 and 2023, we used the price-to-earnings multiple. To do this, we found EPS estimates for each competitor on Yahoo Finance [4] and removed any values that were deemed outliers. Pfizer's EPS for 2022 and 2023 were pulled from our calculations on the forecasted income statement. For 2022, we removed Merck's estimated EPS of 6.56 as it was well below the average of the remaining 4 competitors at 16.17. For 2023, we did not remove any EPS estimates. Using this model, we found calculated an implied relative price of \$94.83 for 2022 and \$61.84 for 2023.

We believe that Pfizer's implied relative price for 2022 is inflated due to the unprecedented increase in revenue from COVID-19 vaccines and treatments. This increased revenue led to an EPS estimate of 5.86 for 2022, which we expect will diminish to 3.58 in 2023. Therefore, we put little emphasis on the 2022 price-to-earnings multiple when estimating Pfizer's target price range.

### **Sensitivity Analysis**

### Cost of Equity vs. Marginal Tax Rate

We tested cost of equity against the marginal tax rate to compare their impact on Pfizer's intrinsic value. We found that the marginal tax rate has a moderate impact on the stock's intrinsic value while the cost of equity has a relatively low impact. The high sensitivity of Pfizer's stock price to its marginal tax rate is an advantage because pharmaceutical companies generally have lower tax rates.

				(	Cost of Equity	/		
	65.64	6.90%	7.10%	7.30%	7.51%	7.70%	7.90%	8.10%
	12.00%	67.81	67.92	68.04	68.16	68.27	68.38	68.49
Rate	13.00%	66.98	67.09	67.20	67.32	67.43	67.54	67.65
Tax F	14.00%	66.14	66.25	66.37	66.48	66.59	66.70	66.81
al	15.00%	65.31	65.42	65.53	65.64	65.75	65.86	65.97
Marginal '	16.00%	64.47	64.58	64.69	64.80	64.91	65.02	65.13
Mar	17.00%	63.63	63.74	63.85	63.96	64.06	64.17	64.28
_	18.00%	62.79	62.90	63.01	63.12	63.22	63.32	63.43

### Average SG&A as % of Sales vs. Dividend Yield

The average selling, general, and administrative expenses as a percentage of sales have a moderate impact on the intrinsic value of Pfizer's stock. Being the driver of the industry, this is expected. The dividend yield, however, interestingly has a very limited impact on the intrinsic value of the stock.

	Average SG&A as % of Sales													
	65.64	-22%	-23%	-24%	-25.23%	-26%	-27%	-28%						
5	3.20%	72.25	70.31	68.38	65.99	64.50	62.56	60.63						
5	3.40%	72.13	70.20	68.26	65.88	64.39	62.46	60.52						
	3.60%	72.01	70.08	68.15	65.77	64.28	62.35	60.42						
	3.83%	71.87	69.94	68.02	65.64	64.16	62.23	60.31						
2	4.00%	71.77	69.84	67.92	65.55	64.07	62.14	60.22						
	4.20%	71.65	69.72	67.80	65.44	63.96	62.04	60.12						
3	4.40%	71.53	69.61	67.69	65.33	63.85	61.93	60.02						

	Average COGS % of Sales												
	65.64	-18.00%	-19.00%	-20.00%	-21.00%	-22.00%	-23.00%	-24.00%					
-	6.70%	77.89	75.81	73.73	71.66	69.58	67.50	65.42					
1	6.80%	76.26	74.23	72.19	70.16	68.13	66.09	64.06					
-	6.90%	74.70	72.71	70.72	68.73	66.74	64.75	62.75					
1	7.02%	72.93	70.98	69.04	67.10	65.15	63.21	61.27					
-	7.10%	71.79	69.88	67.97	66.05	64.14	62.23	60.32					
1	7.20%	70.43	68.55	66.67	64.80	62.92	61.05	59.17					
ı	7.30%	69.12	67.28	65.44	63.60	61.76	59.92	58.08					

### Beta vs. Equity Risk Premium

The beta and equity risk premium are important in calculating a firm's WACC. We found that an incremental increase in both the beta and the equity risk premium have a moderate impact on the intrinsic value of Pfizer's stock. Similarly, as the beta and equity risk premium become safer investments the intrinsic value rises moderately.

Equity Risk Premium

					Beta			
	65.64	0.57	0.60	0.63	0.66	0.69	0.72	0.75
ſ	4.85%	74.69	72.67	70.77	70.77	67.30	65.71	64.20
- 1	5.00%	73.49	71.48	69.60	69.60	66.16	64.58	63.09
- 1	5.15%	72.33	70.34	68.47	68.47	65.06	63.50	62.02
- 1	5.30%	71.21	69.24	67.38	67.38	64.00	62.46	60.99
-[	5.45%	70.13	68.17	66.34	66.34	62.99	61.45	60.01
-	5.60%	69.09	67.15	65.33	65.33	62.01	60.49	59.06
ı	5.75%	68.09	66.16	64.35	64.35	61.06	59.56	58.14

### CV Growth of NOPLAT and Risk-free-rate

We compared the CV growth of the NOPLAT and the risk-free rate because they are both highly correlated to the condition of the economy. In our models, we assumed that the CV growth of the NOPLAT was equal to the future GDP growth rate, and the risk-free rate was equal to the yield on the 10-year treasury. This table therefore gives us insight on the intrinsic value of Pfizer's stock price if the GDP differs from our forecast, and/or if the yield on the 10-year treasury fluctuates. We found that both of these factors have a significant impact on the intrinsic value of Pfizer's stock.

CV Growth of NOPLAT

65.64	1.75%	2.00%	2.25%	2.50%	2.75%	3.00%	3.25%
3.40%	66.11	68.14	70.41	72.97	75.86	79.16	82.97
3.60%	64.11	65.98	68.05	70.36	72.97	75.94	79.33
3.80%	62.26	63.96	65.86	67.97	70.33	73.00	76.04
4.01%	60.43	62.00	63.73	65.64	67.78	70.19	72.90
4.20%	58.89	60.34	61.93	63.70	65.66	67.85	70.32
4.40%	57.36	58.70	60.17	61.78	63.58	65.57	67.81
4.60%	55.92	57.16	58.51	60.00	61.65	63.47	65.50

### **Important Disclaimer**

This report was created by students enrolled in the Applied Equity Valuation class at the University of Iowa. The report was originally created to offer an internal investment recommendation for the University of Iowa Krause Fund and its advisory board. The report also provides potential employers and other interested parties an example of the students' skills, knowledge and abilities. Members of the Krause Fund are not registered investment advisors, brokers or officially licensed financial professionals. The investment advice contained in this report does not represent an offer or solicitation to buy or sell any of the securities mentioned. Unless otherwise noted, facts and figures included in this report are from publicly available sources. This report is not a complete compilation of data, and its accuracy is not guaranteed. From time to time, the University of Iowa, its faculty, staff, students, or the Krause Fund may hold a financial interest in the companies mentioned in this report.

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**Pfizer Inc.** *Revenue Decomposition* 

Name (millions)- Expiration (US Year, EU Year)

Fiscal Years Ending Dec. 31		2019		2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<u>Total Revenue</u>	\$	40,905	\$	41,651	81,288	107,540	80,920	69,966	73,286	74,539	66,549	63,211	58,467	63,699
Vaccines Total:	\$	6,504	\$	6,575	\$ 42,625	41,220	23,571	14,787	13,988	13,313	7,908	7,873	7,924	8,077
Comirnaty direct sales and alliance	\$			154	26701	25.264	17.602	0.041	7.057	7 161	6 445	6 122	F 017	E E36
revenues (COVID-19 Vaccine) Prevnar family- 2026	\$	- 5847		154 5850	36781 5272	35,364 5,200	17,682 5,129	8,841 5,059	7,957 4,990	7,161 4,922	6,445 -	6,123	5,817 -	5,526 -
Nimenrix		230		221	193	246	314	401	512	653	834	1,064	1,358	1,734
FSME-IMMUN/TicoVac		220		196	185	205	226	250	277	306	339	375	414	458
Trumenba		135		112	118	129	141	153	167	183	199	218	237	259
All other Vaccines		73		42	74	77	79	82	85	88	91	94	97	100
Oncology Total:	\$	9,014	\$	10,867	,	14,649	17,400	20,668	24,550	26,792	31,823	27,909	22,378	26,581
lbrance- 2027,2028 Xtandi alliance revenues- 2027		4961 838		5392 1024	5437 1185	6,458 1,408	7,671 1,672	9,112 1,986	10,823 2,359	12,855 2,802	15,270 3,328	9,069 3,953	- 4,696	- 5,577
Inlyta- 2025,2025		477		787	1002	1,408	1,414	1,679	2,339 1,995	-	-	- -	4,030	- -
Sutent		939		819	673	799	950	1,128	1,340	1,591	1,890	2,245	2,667	3,168
Bosulif		365		450	540	641	762	905	1,075	1,277	1,517	1,801	2,140	2,542
Xalkori- 2029,2027		530		544	493	586	696	826	981	1,166	1,385	822	977	1,160
Ruxience		-1		170	491	583	693	823	977	1,161	1,379	1,638	1,946	2,311
Retacrit		225		386	444	527	626	744	884	1,050	1,247	1,481	1,759	2,090
Zirabev		1		143	444	527	626	744	884	1,050	1,247	1,481	1,759	2,090
Lobrena		115		204	266	316	375	446	529	629	747	887	1,054	1,252
Aromasin		136		148	211	251	298	354	420	499	593	704	836	993
Trazimera		6		98	197	234	278	330	392	466	553	657	781	927
Besponsa- 2030,2028		157		182	192	228	271	322	382	454	539	641	761	904
•														
Braftovi- 2031		48		160	187	222	264	313	372	442	525	624	741	880
Bavencio alliance revenues- 2033,2032		49		80	178	211	251	298	354	421	500	594	705	838
Mektovi- 2031		49		142	155	184	219	260	309	366	435	517	614	730
All other Oncology		122		137	238	283	336	399	474	563	668	794	943	1,120
Internal Medicine Total:	\$	8,790	\$	9,003	9,329	9,630	9,941	10,262	10,594	10,936	4,064	4,196	4,331	4,471
Eliquis alliance sales- 2026,2026	<u> </u>	4220	•	4949	5970	6,163	6,362	6,568	6,780	6,999	-	-	<u> </u>	
Prematin family		734		680	563	581	600	619	639	660	681	703	726	750
•														
Chentix/Champix		1107		919	398	411	424	438	452	467	482	497	513	530
BMP2		287		274	266	275	283	293	302	312	322	332	343	354
Toviaz		250		252	238	246	254	262	270	279	288	297	307	317
Pristiq		176		171	187	193	199	206	212	219	226	234	241	249
All other Internal Medicine		2016		1758	1706	1,761	1,818	1,877	1,938	2,000	2,065	2,132	2,200	2,272
Hospital Total:	\$	6,695	\$	6,777	-	31,822	19,208	12,804	11,988	11,241	10,554	10,150	9,762	9,390
Sulperazon	\$	684	\$	618 \$		663	643	624	606	588	570 361	554 350	537	521 330
Medrol Zavicefta	\$	469 108	\$	402 \$ 212 \$		419 401	407 389	395 377	383 366	372 355	361 345	350 335	340 325	315
Fragmin	\$	253	\$	212 \$ 252 \$		296	287	279	270	262	255	247	240	233
Zithromax	ب خ		\$	276 \$		270	262	254	247	239	232	225	219	212
Vfend	\$	346	•	270 \$		259	251	244	237	230	223	216	210	204
Tygacil	\$	197	\$	160 \$		194	188	183	177	172	167	162	157	153
Precedex	,	155	,	260 \$		172	167	162	157	152	148	143	139	135
Zyvox	\$	251	\$	222 \$	173	168	163	158	153	149	144	140	136	132
Paxlovid		_		_ \$	76	24,812	12,406	6,203	5,583	5,024	4,522	4,296	4,081	3,877
IVIg Products		275		376 \$	430	417	405	393	381	370	359	349	338	328
All other Anti-infectives	\$	1,396	\$	1,294	1,453	1,410	1,368	1,328	1,289	1,250	1,214	1,178	1,143	1,109
All other Hospital	\$	2,225	\$	2,435	5 2,412	2,341	2,271	2,204	2,139	2,076	2,014	1,955	1,897	1,841
Inflammation & Immunology (I&I) Total:	\$	4,733	\$	4,567	4,431	4,447	4,462	4,478	4,494	3,796	3,809	3,822	3,836	3,849
Xeljanz- N/A,2028	\$	2,242	\$	2,437	2,455	2,464	2,472	2,481	2,490	1,785	1,791	1,797	1,803	1,810
Enbrel (outside US and Canada)	\$	1,699	\$	1,350	•	1,189	1,193	1,198	1,202	1,206	1,210	1,214	1,219	1,223
Inflectra All other I&I	\$ \$	625 167	\$ \$	659 \$ 121 \$		659 134	662 135	664 135	666 136	669 136	671 137	673 137	676 138	678 138
	٠.	2,278		-										
Rare Disease Total: Vyndaqel/Vyndamax	\$	2,278 473	\$ \$	2,936 S		3,990 2,273	4,500 2,563	5,075 2,891	5,724 3,260	6,456 3,677	6,324 3,190	7,132 3,597	8,044 4,057	9,072 4,576
vyndaqei/ vyndamax BeneFIX	ş ¢	473	\$ \$	1,288 \$ 454 \$	-	2,273 494	2,563 557	628	3,260 709	3,677 799	3,190 901	3,597 1,017	4,057 1,146	1,293
Genotropin	<b>ب</b>	498	۶ \$	427 \$		434	495	558	629	733	801	903	1,140	1,293
Refacto AF/Xyntha	\$	426	'	370 \$		343	387	436	492	555	626	706	796	897
Somavert	\$	264	\$	277 \$		312	352	397	448	505	570	643	735	818
All other Rare Disease	\$	129	-	120 \$		130	146	165	186	210	237	267	301	339
PFIZER CENTREONE Total:	\$	910	\$	926 \$	5 1,731	1,783	1,836	1,892	1,948	2,007	2,067	2,129	2,193	2,259
		-	•	,	•	•	•	•	•	•	•	•	•	,

Pfizer Inc.
Income Statement
(millions)

(initions)	2010	2010	2020	2024	20225	20225	20245	20255	20265	20275	20205	20205	20205
Fiscal Years Ending Dec. 31	2018	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenues	53,647	51,750	41,908	81,288	107,540	80,920	69,966	73,286	74,539	66,549	63,211	58,467	63,699
Cost of Sales	(9,757)	(8,819)	(7,351)	(29,330)	(23,092)	(17,376)	(15,024)	(15,737)	(16,006)	(14,290)	(13,573)	(12,555)	(13,678)
Depreciation	1,491	1,400	1,341	1,491	1,540	1,661	1,719	1,772	1,819	1,861	1,899	1,933	1,964
Gross profit	42,399	41,531	33,216	50,467	82,908	61,883	53,223	55,777	56,714	50,398	47,738	43,979	48,057
Selling, informational and administrative expenses	(14,455)	(14,350)	(11,615)	(12,703)	(27,133)	(20,416)	(17,653)	(18,490)	(18,807)	(16,791)	(15,948)	(14,752)	(16,071)
Research and development expenses	(8,006)	(8,650)	(9,405)	(13,829)	(11,260)	(13,864)	(11,987)	(12,556)	(12,771)	(11,402)	(10,830)	(10,017)	(10,914)
Amortization of intangible assets	(4,893)	(4,610)	(3,436)	(3,700)	(4,758)	(2,936)	(2,686)	(2,500)	(2,449)	(1,913)	(1,589)	(1,272)	(1,024)
Restructuring charges and certain acquisition-related costs	(1,044)	(747)	(600)	(802)	(756)	(717)	(696)	(675)	(655)	(635)	(616)	(597)	(579)
Operating income	14,001	13,174	8,160	19,433	39,001	23,949	20,201	21,556	22,033	19,658	18,755	17,342	19,469
Gain on completion of Consumer Healthcare JV transaction	-	8,086	6	-	-	-	-	-	-	-	-	-	-
Interest income	333	226	73	36	563	795	796	793	790	796	775	746	704
Interest expense	(1,316)	(1,574)	(1,449)	(1,291)	(1,837)	(2,337)	(2,116)	(2,023)	(2,044)	(2,050)	(1,978)	(1,954)	(1,921)
Net interest expense	\$ (983)	\$ (1,348)	\$ (1,376)	\$ (1,255)	(1,274)	(1,542)	(1,320)	(1,230)	(1,254)	(1,254)	(1,204)	(1,208)	(1,217)
Other income (deductions), net	(2,116)	(3,578)	(669)	4,878	-	-	-	-	-	-	-	-	-
for Taxes on income	11,885	17,682	7,497	24,311	37,727	22,408	18,881	20,326	20,779	18,403	17,551	16,134	18,252
(Provision) benefit for taxes on income	(706)	(1,384)	(476)	(1,852)	(5,659)	(3,361)	(2,832)	(3,049)	(3,117)	(2,761)	(2,633)	(2,420)	(2,738)
Discontinued operations, net of tax	9	4	2,631	(434)	-	-	-	-	-	-	-	-	-
Net income attributable to noncontrolling interests	(35)	(29)	(36)	(46)	(39)	(37)	(37)	(39)	(40)	(38)	(38)	(38)	(39)
Net income attributable to Pfizer Inc.	11,153	16,273	9,616	21,979	32,029	19,010	16,012	17,238	17,623	15,605	14,881	13,675	15,475
Preferred stock dividends, net of tax	(1)	(1)	-	-	-	-	-	-	-	-	-	-	-
Net income attributable to Pfizer Inc. common shareholders	11,152	16,272	9,616	21,979	32,029	19,010	16,012	17,238	17,623	15,605	14,881	13,675	15,475
Net Income per Common Share													
Total Shares Outstanding	5,552	5,548	5,578	5,623	5,463	5,310	5,157	4,999	4,846	4,699	4,557	4,420	4,288
Net earnings (loss) per common share - basic	1.9	2.92	1.73	3.92	5,463	3.58	3.10	3.45	3.64	3.32	3.27	3.09	3.61
	1.36	1.44	1.73	1.56							\$ 1.84		
Dividends per Share	1.30	1.44	1.52	1.56	\$ 1.60	\$ 1.64	\$ 1.68	\$ 1.72	\$ 1.76	φ 1.δ0	Φ 1.84	φ 1.00	\$ 1.92

Pfizer Inc.
Balance Sheet
(millions)

Fiscal Years Ending Dec. 31	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
ASSETS												
Cash & cash equivalents	1,305	1,784	1,944	20,306	28,117	30,890	29,364	29,261	29,437	27,525	24,689	20,509
Short-term investments	8,525	10,437	29,125	32,296	24,302	21,012	22,009	22,385	19,986	18,983	17,559	19,130
Trade accounts receivable	8,724	7,930	11,479	17,315	13,029	11,265	11,800	12,002	10,715	10,178	9,414	10,256
Inventories	8,283	8,046	9,059	16,081	12,100	10,462	10,959	11,146	9,951	9,452	8,743	9,525
Current tax assets	3,344	3,264	4,266	4,394	4,526	4,662	4,801	4,945	5,094	5,247	5,404	5,566
Other current assets	2,600	3,438	3,820	5,779.37	4,348.74	3,760.07	3,938.50	4,005.86	3,576.46	3,397.04	3,142.13	3,423.27
Assets held for sale	21	167	-	-	-	-	-	-	-	-	-	-
Total current assets	32,803	35,067	59,693	96,171	86,422	82,052	82,871	83,746	78,759	74,782	68,950	68,410
Equity-method investments	17,133	16,856	16,472	16,472	16,472	16,472	16,472	16,472	16,472	16,472	16,472	16,472
Long-term investments	3,014	3,406	5,054	5,270	5,496	5,731	5,976	6,232	6,499	6,777	7,067	7,370
Property, plant & equipment, net	13,967	13,900	14,882	16,053	16,620	17,128	17,583	17,992	18,358	18,686	18,980	19,244
Identifiable intangible assets	35,370	28,471	25,146	20,388	17,452	14,766	12,266	9,817	7,904	6,316	5,044	4,020
Goodwill	58,653	49,577	49,208	49,208	49,208	49,208	49,208	49,208	49,208	49,208	49,208	49,208
Noncurrent deferred tax assets & other noncurrent tax assets	2,099	2,383	3,341	5,234	6,358	7,306	8,326	9,368	10,292	11,173	11,982	12,898
Other noncurrent assets	4,450	4,569	7,680	4,681	4,981	5,430	5,632	5,851	5,475	5,638	5,774	5,844
ROU on operating leases (included within noncurrent assests)	1,313	1,393	2,839	3,062	3,171	3,267	3,354	3,432	3,502	3,565	3,621	3,671
Total assets	167,489	154,229	181,475	213,478	203,009	198,093	198,335	198,687	192,967	189,052	183,478	183,466
LIABILITIES												
Short-term borrowings	16,195	2,703	2,241	7,699	6,970	6,664	6,734	6,753	6,518	6,438	6,329	6,495
Trade accounts payable	4,220	4,309	5,578	9,221	6,938	5,999	6,284	6,391	5,706	5,420	5,013	5,462
Dividends payable	2,104	2,162	2,249	2283.20	2239.91	2230.04	2217.56	2199.48	2180.75	2161.46	2141.68	2121.48
Income taxes payable	980	1,049	1,266	6,157	3,657	3,081	3,317	3,391	3,003	2,864	2,633	2,979
Accrued compensation & related items	2,720	3,058	3,332	5,441	4,094	3,540	3,708	3,772	3,367	3,198	2,958	3,223
Deferred revenues	-	-	3,067	-	-	-	-	-	-	-	-	-
Other current liabilities	11,083	12,640	24,938	27,310	26,124	26,717	26,421	26,569	26,495	26,532	26,513	26,522
Total current liabilities	37,304	25,920	42,671	58,112	50,024	48,232	48,682	49,075	47,270	46,614	45,588	46,802
Long-term debt	35,955	37,133	36,195	41,192.85	37,294.72	35,654.90	36,032.12	36,128.91	34,871.87	34,444.47	33,860.77	34,749.55
Pension benefit obligations	5,638	4,766	3,489	3,140	2,791	2,442	2,093	1,745	1,396	1,047	698	349
Postretirement benefit obligations	1,124	645	235	212	188	165	141	118	94	71	47	24
Noncurrent deferred tax liabilities	5,578	4,063	349	350	350	351	351	352	352	352	353	353
Other taxes payable	12,126	11,560	11,331	11,107	10,887	10,671	10,459	10,252	10,049	9,850	9,655	9,464
Other noncurrent liabilities	6,317	6,669	9,743	7,154	7,361	7,672	7,951	8,216	7,901	8,055	8,198	8,306
Total liabilities	104,042	90,756	104,013	121,266	108,896	105,187	105,710	105,885	101,934	100,433	98,399	100,047
SHAREHOLDERS' EQUITY												
Preferred stock	\$ 17	-	-	-	-	-	-	-	-	-	-	-
Common Equity	\$ 87,896	\$ 89,144	\$ 91,064	91,566	92,068	92,419	92,419	92,419	92,419	92,419	92,419	92,419
Treasury stock	\$(110,801)	\$(110,988)	\$(111,360)	(120,048)	(128,735)	(137,423)	(146,111)	(154,798)	(163,486)	(172,174)	(180,861)	(189,549)
Retained earnings (accumulated deficit)	\$ 97,670	\$ 96,770	\$ 103,394	126,290	136,340	143,432	151,800	160,624	167,506	173,741	178,849	185,839
Accumulated other comprehensive income (loss)	\$ (11,640)	\$ (11,688)	\$ (5,897)	(5,897)	(5,897)	(5,897)	(5,897)	(5,897)	(5,897)	(5,897)	(5,897)	(5,897)
Total Pfizer Inc. shareholders' equity (deficit)	63,142	63,238	77,201	91,912	93,776	92,531	92,211	92,348	90,542	88,089	84,510	82,812
Equity attributable to noncontrolling interests	303	235	262	301	338	375	414	453	492	530	568	607
Total equity (deficit)	63,447	63,473	77,462	92,212	94,113	92,906	92,625	92,801	91,034	88,619	85,078	83,419
Total liabilities and equity	167,489	154,229	181,475	213,478	203,009	198,093	198,335	198,687	192,967	189,052	183,478	183,466

**Pfizer Inc.** *Historical Cash Flow Statement* 

Fiscal Years Ending Dec. 31	2017	2018	2019	2020	2021
Cash Flows from Operating Activities					
Net income before allocation to noncontrolling interests	21,355	11,188	16,302	9,652	22,025
Discontinued operations - net of tax	_	-	-	(2,631)	434
Net income (loss) from continuing operations before allocation to noncontrolling interests	_	_	_	7,021	22,459
Depreciation & amortization	6,269	6,384	6,010	4,777	5,191
Asset write-offs & impairments	634	3,398	2,953	2,049	276
Tax Cuts & Jobs Act ("TCJA") impact	(10,660)	(596)	(323)	-	_
Loss (gain) on completion of Consumer Healthcare JV transaction, net of cash conveyed	-	-	(8,233)	(6)	_
Deferred taxes from continuing operations	(2,410)	(2,205)	614	(1,468)	(4,293)
Share-based compensation expense	840	949	718	756	1,182
Benefit plan contributions in excess of expense or income	(961)	(1,095)	(336)	(1,790)	(3,123)
Other adjustments, net	105	(1,269)	(1,086)	(478)	(1,573)
Trade accounts receivable	259	(644)	(742)	(1,249)	(3,811)
Inventories	(357)	(717)	(1,050)	(736)	(1,125)
Other assets	(31)	(16)	795	(146)	(1,057)
Trade accounts payable	46	431	(564)	353	1,242
Other liabilities	(67)	98	267	2,741	18,721
Other tax accounts, net	1,446	(78)	(2,737)	(1,238)	(1,166)
Net cash flows from operating activities from continuing operations	-	-	-	10,586	32,922
Net cash flows from operating activities from discontinued operations	_	_	_	3,817	(343)
Net cash flows from operating activities	16,470	15,827	12,588	14,403	32,580
Cash Flows from Investing Activities					
Purchases of property, plant & equipment	(1,956)	(2,042)	(2,176)	(2,252)	(2,711)
Purchases of short-term investments	(14,596)	(11,677)	(6,835)	(13,805)	(38,457)
Proceeds from investments	15,959	19,908	16,340	12,730	20,008
Purchases of long-term investments	(3,537)	(1,797)	(201)	(597)	(1,068)
Acquisitions of businesses, net of cash acquired	(1,000)	-	(10,861)	-	-
Acquisitions of intangible assets	(261)	(154)	(418)	(539)	_
Other investing activities, net	650	288	205	274	(305)
Net cash flows from investing activities from continuing operations	-	-	-	(4,188)	(22,534)
Net cash flows from investing activities from discontinued operations	_	_	_	(82)	(12)
Net cash flows from investing activities	(4,741)	4,525	(3,945)	(4,271)	(22,546)
Proceeds from short-term borrowings	8,464	3,711	16,455	12,352	_
Principal payments on short-term borrowings	(9,990)	(4,437)	(8,378)	(22,197)	_
Net proceeds from (payments on) short-term borrowings with original maturities of three month	1,401	(1,617)	2,551	(4,129)	(96)
Proceeds from issuances of long-term debt	5,274	4,974	4,942	5,222	997
Principal payments on long-term debt	(6,154)	(3,566)	(6,806)	(4,003)	(2,004)
Purchases of common stock	(5,000)	(12,198)	(8,865)	-	-
Cash dividends paid	(7,659)	(7,978)	(8,043)	(8,440)	(8,729)
Proceeds from exercise of stock options	862	1,259	394	425	-
Other financing activities, net	(233)	(588)	(736)	(869)	16
Net cash flows from financing activities from continuing operations	(200)	-	-	(21,640)	(9,816)
Net cash flows from financing activities from discontinued operations	_	_	_	11,991	(5)525)
Net cash flows from financing activities  Net cash flows from financing activities	(13,035)	(20,441)	(8,485)	(9,649)	(9,816)
	, ,				
Effect of exchange-rate changes on cash & cash equivalents & restricted cash & cash equivalents	53 (4.225)	(116)	(32)	(8)	(59) 150
Net increase (decrease) in cash & cash equivalents & restricted cash & cash equivalents	(1,235)	(205)	125	475 1 350	159
Cash & cash equivalents & restricted cash & cash equivalents, at beginning of period	2,666	1,431	1,225	1,350	1,825
Cash & cash equivalents & restricted cash & cash equivalents, at end of period	1,431	1,225	1,350	1,825	1,983

**Pfizer Inc.**Forecasted Cash Flow Statement

Fiscal Years Ending Dec. 31	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Cash Flow From Operating Activities									
Net Income	32029	19010	16012	17238	17623	15605	14881	13675	15475
+Depr	1540	1661	1719	1772	1819	1861	1899	1933	1964
+Amortization	4758	2936	2686	2500	2449	1913	1589	1272	1024
Trade accounts receivable	(5,836)	4,286	1,764	(535)	(202)	1,286	538	764	(842)
Inventories	(7,022)	3,981	1,638	(496)	(187)	1,195	499	709	(782)
Current tax assets	(128)	(132)	(136)	(140)	(144)	(148)	(153)	(157)	(162)
Other current assets	(1,959)	1,431	589	(178)	(67)	429	179	255	(281)
Noncurrent deferred tax assets	(1,893)	(1,124)	(947)	(1,020)	(1,043)	(923)	(881)	(810)	(916)
Trade accounts payable	3,643	(2,283)	(939)	285	107	(685)	(286)	(407)	449
Dividends Payable	34	(43)	(10)	(12)	(18)	(19)	(19)	(20)	(20)
Income taxes payable	4,891	(2,500)	(576)	236	74	(388)	(139)	(231)	346
Accrued compensation & related items	2,109	(1,347)	(554)	168	63	(404)	(169)	(240)	265
Other current liabilities	2,372	(1,186)	593	(297)	148	(74)	37	(19)	9
Postretirement benefit obligations	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)	(24)
Pension benefit obligations	(349)	(349)	(349)	(349)	(349)	(349)	(349)	(349)	(349)
Other taxes payable	(224)	(220)	(216)	(211)	(207)	(203)	(199)	(195)	(191)
Net Cash Flow From Operating Activities	33941	24096	21250	18937	20043	19072	17403	16157	15963
Cash Flow From Investing Activities									
Short-term investments	(3,171)	7,995	3,290	(997)	(376)	2,400	1,003	1,424	(1,571)
Short-term borrowings	5,458	(729)	(306)	71	18	(235)	(80)	(109)	166
Identifiable intangible assets	-	-	-	_	-	-	-	-	
Long-term debt	4,998	(3,898)	(1,640)	377	97	(1,257)	(427)	(584)	889
Long-term investments	(216)	(226)	(235)	(245)	(256)	(267)	(278)	(290)	(302)
Property, plant & equipment, gross	(2,711)	(2,227)	(2,227)	(2,227)	(2,227)	(2,227)	(2,227)	(2,227)	(2,227)
Deferred revenues	(3,067)	-	-	-	-	-	-	-	(=/==- /
Other noncurrent assets	2,999	(300)	(449)	(202)	(219)	377	(163)	(135)	(71)
Noncurrent deferred tax liabilities	1	1	1	0	0	0	0	0	( · – /
Other noncurrent liabilities	(2,589)	207	311	279	264	(315)	154	143	108
Net Cash Flow from Investing Activities	1,701	823	(1,257)	(2,944)	(2,699)	(1,524)	(2,019)	(1,778)	(3,008)
Cash Flow From Financing Activities									
Common Equity	502	502	351	-	-	-	-	-	-
Treasury stock	(8,688)	(8,688)	(8,688)	(8,688)	(8,688)	(8,688)	(8,688)	(8,688)	(8,688)
Equity attributable to noncontrolling interests	39	37	37	39	40	38	38	38	39
Dividends payable	(9,133)	(8,960)	(8,920)	(8,870)	(8,798)	(8,723)	(8,646)	(8,567)	(8,486)
Net Cash Flow from Financing Activities	(17,280)	(17,108)	(17,219)	(17,519)	(17,446)	(17,372)	(17,295)	(17,216)	(17,135)
Net Change in Cash and equivalents	18,362	7,811	2,774	(1,527)	(102)	176	(1,911)	(2,837)	(4,180)
Cash at Beginning of Year	1944	20,306	28,117	30,890	29,364	29,261	29,437	27,525	24,689
Cash at End of Year	20,305.7	28,117	30,890	29,364	29,364	29,261	27,525	24,689	20,509
Cash at Ellu Di Teal	20,505.7	20,11/	30,690	29,304	29,201	29,437	27,525	24,089	20,509

Pfizer Inc.
Income Statement
(millions)

Fiscal Years Ending Dec. 31	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenues	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of sales	-19.7%	-20.7%	-37.9%	-21.5%	-21.5%	-21.5%	-21.5%	-21.5%	-21.5%	-21.5%	-21.5%	-21.5%
Gross profit	80.3%	79.3%	62.1%	77.1%	76.5%	76.1%	76.1%	76.1%	75.7%	75.5%	75.2%	75.4%
Selling, informational and administrative expenses	-27.7%	-27.7%	-15.6%	-25.2%	-25.2%	-25.2%	-25.2%	-25.2%	-25.2%	-25.2%	-25.2%	-25.2%
Research and development expenses	-16.7%	-22.4%	-17.0%	-10.5%	-17.1%	-17.1%	-17.1%	-17.1%	-17.1%	-17.1%	-17.1%	-17.1%
Amortization of intangible assets	-8.9%	-8.2%	-4.6%	-4.4%	-3.6%	-3.8%	-3.4%	-3.3%	-2.9%	-2.5%	-2.2%	-1.6%
Restructuring charges and certain acquisition-related costs	-1.4%	-1.4%	-1.0%	-0.7%	-0.9%	-1.0%	-0.9%	-0.9%	-1.0%	-1.0%	-1.0%	-0.9%
Operating income	25.5%	19.5%	23.9%	36.3%	29.6%	28.9%	29.4%	29.6%	29.5%	29.7%	29.7%	30.6%
Gain on completion of Consumer Healthcare JV transaction	15.6%	0.0%		_		_	_			_	_	_
Interest income	0.4%	0.0%	0.0%	0.5%	1.0%	1.1%	1.1%	1.1%	1.2%	1.2%	1.3%	1.1%
Interest expense	-3.0%	-3.5%	-1.6%	-1.7%	-2.9%	-3.0%	-2.8%	-2.7%	-3.1%	-3.1%	-3.3%	-3.0%
Net interest expense	-2.6%	-3.3%	-1.5%	-1.2%	-1.9%	-1.9%	-1.7%	-1.7%	-1.9%	-1.9%	-2.1%	-1.9%
Other income (deductions), net	-6.9%	-1.6%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Income from continuing operations before (provision)												
benefit for taxes on income	34.2%	17.9%	29.9%	35.1%	27.7%	27.0%	27.7%	27.9%	27.7%	27.8%	27.6%	28.7%
(Provision) benefit for taxes on income	-2.7%	-1.1%	-2.3%	-5.3%	-4.2%	-4.0%	-4.2%	-4.2%	-4.1%	-4.2%	-4.1%	-4.3%
Income from continuing operations	31.5%	16.8%	27.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Discontinued operations, net of tax	0.0%	6.3%	-0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net income before allocation to noncontrolling interests	31.5%	23.0%	27.1%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Net income attributable to noncontrolling interests	-0.1%	-0.1%	-0.1%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Net income attributable to Pfizer Inc.	31.4%	22.9%	27.0%	29.8%	23.5%	22.9%	23.5%	23.6%	23.4%	23.5%	23.4%	24.3%
Net income attributable to Pfizer Inc. common												
shareholders	31.4%	22.9%	27.0%	29.8%	23.5%	22.9%	23.5%	23.6%	23.4%	23.5%	23.4%	24.3%

Pfizer Inc.
Balance Sheet
(millions)

Fiscal Years Ending Dec. 31	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
ASSETS												
Cash & cash equivalents	0.78%	1.16%	1.07%	9.51%	13.85%	15.59%	14.81%	14.73%	15.25%	14.56%	13.46%	11.18%
Short-term investments	5.09%	6.77%	16.05%	15.13%	11.97%	10.61%	11.10%	11.27%	10.36%	10.04%	9.57%	10.43%
Trade accounts receivable	5.21%	5.14%	6.33%	8.11%	6.42%	5.69%	5.95%	6.04%	5.55%	5.38%	5.13%	5.59%
Inventories	4.95%	5.22%	4.99%	7.53%	5.96%	5.28%	5.53%	5.61%	5.16%	5.00%	4.77%	5.19%
Current tax assets	2.00%	2.12%	2.35%	2.06%	2.23%	2.35%	2.42%	2.49%	2.64%	2.78%	2.95%	3.03%
Other current assets	1.55%	2.23%	2.10%	2.71%	2.14%	1.90%	1.99%	2.02%	1.85%	1.80%	1.71%	1.87%
Assets held for sale	0.01%	0.11%	-	-	-	-	-	-	-	-	-	-
Total current assets	19.59%	22.74%	32.89%	45.05%	42.57%	41.42%	41.78%	42.15%	40.81%	39.56%	37.58%	37.29%
Equity-method investments	10.23%	10.93%	9.08%	7.72%	8.11%	8.32%	8.31%	8.29%	8.54%	8.71%	8.98%	8.98%
Long-term investments	1.80%	2.21%	2.78%	2.47%	2.71%	2.89%	3.01%	3.14%	3.37%	3.58%	3.85%	4.02%
Property, plant & equipment, net	8.34%	9.01%	8.20%	7.52%	8.19%	8.65%	8.87%	9.06%	9.51%	9.88%	10.34%	10.49%
Identifiable intangible assets	21.12%	18.46%	13.86%	9.55%	8.60%	7.45%	6.18%	4.94%	4.10%	3.34%	2.75%	2.19%
Goodwill	35.02%	32.15%	27.12%	23.05%	24.24%	24.84%	24.81%	24.77%	25.50%	26.03%	26.82%	26.82%
Noncurrent deferred tax assets	1.25%	1.55%	1.84%	2.45%	3.13%	3.69%	4.20%	4.72%	5.33%	5.91%	6.53%	7.03%
Other noncurrent assets	2.66%	2.96%	4.23%	2.19%	2.45%	2.74%	2.84%	2.95%	2.84%	2.98%	3.15%	3.19%
Total assets	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
LIABILITIES												
Short-term borrowings	9.67%	1.75%	1.23%	3.61%	3.43%	3.36%	3.40%	3.40%	3.38%	3.41%	3.45%	3.54%
Trade accounts payable	2.52%	2.79%	3.07%	4.32%	3.42%	3.03%	3.17%	3.22%	2.96%	2.87%	2.73%	2.98%
Dividends payable	1.26%	1.40%	1.24%	1.07%	1.10%	1.13%	1.12%	1.11%	1.13%	1.14%	1.17%	1.16%
Income taxes payable	0.59%	0.68%	0.70%	2.88%	1.80%	1.56%	1.67%	1.71%	1.56%	1.52%	1.44%	1.62%
Accrued compensation & related items	1.62%	1.98%	1.84%	2.55%	2.02%	1.79%	1.87%	1.90%	1.75%	1.69%	1.61%	1.76%
Deferred revenues	-	-	1.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other current liabilities	6.62%	8.20%	13.74%	12.79%	12.87%	13.49%	13.32%	13.37%	13.73%	14.03%	14.45%	14.46%
Total current liabilities	22.27%	16.81%	23.51%	27.22%	24.64%	24.35%	24.55%	24.70%	24.50%	24.66%	24.85%	25.51%
Long-term debt	21.47%	24.08%	19.94%	19.30%	18.37%	18.00%	18.17%	18.18%	18.07%	18.22%	18.45%	18.94%
Pension benefit obligations	3.37%	3.09%	1.92%	1.47%	1.37%	1.23%	1.06%	0.88%	0.72%	0.55%	0.38%	0.19%
Postretirement benefit obligations	0.67%	0.42%	0.13%	0.10%	0.09%	0.08%	0.07%	0.06%	0.05%	0.04%	0.03%	0.01%
Noncurrent deferred tax liabilities	3.33%	2.63%	0.19%	0.16%	0.17%	0.18%	0.18%	0.18%	0.18%	0.19%	0.19%	0.19%
Other taxes payable	7.24%	7.50%	6.24%	5.20%	5.36%	5.39%	5.27%	5.16%	5.21%	5.21%	5.26%	5.16%
Other noncurrent liabilities	3.77%	4.32%	5.37%	3.35%	3.63%	3.87%	4.01%	4.13%	4.09%	4.26%	4.47%	4.53%
Total liabilities	62.12%	58.84%	57.32%	56.80%	53.64%	53.10%	53.30%	53.29%	52.82%	53.12%	53.63%	54.53%
SHAREHOLDERS' EQUITY	0.00%	0.00%										
Preferred stock	0.01%	-	-									
Common stock	0.28%	0.30%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Common Equity	52.48%	57.80%	50.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Treasury stock	-66.15%	-71.96%	-61.36%	-56.23%	-63.41%	-69.37%	-73.67%	-77.91%	-84.72%	-91.07%	-98.57%	-103.32%
Retained earnings (accumulated deficit)	58.31%	62.74%	56.97%	59.16%	67.16%	72.41%	76.54%	80.84%	86.81%	91.90%	97.48%	101.29%
Accumulated other comprehensive income (loss)	-6.95%	-7.58%	-3.25%	-2.76%	-2.90%	-2.98%	-2.97%	-2.97%	-3.06%	-3.12%	-3.21%	-3.21%
Total Pfizer Inc. shareholders' equity (deficit)	37.70%	41.00%	42.54%	43.05%	46.19%	46.71%	46.49%	46.48%	46.92%	46.60%	46.06%	45.14%
Equity attributable to noncontrolling interests	0.18%	0.15%	0.14%	0.14%	0.17%	0.19%	0.21%	0.23%	0.25%	0.28%	0.31%	0.33%
Total equity (deficit)	37.88%	41.16%	42.68%	43.20%	46.36%	46.90%	46.70%	46.71%	47.18%	46.88%	46.37%	45.47%
Total liabilities and equity	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

		•	2020	2024		225	22225		20245	20255	20255	20275	22205	20005	20205
Fiscal Years Ending Dec. 31	201	.9	2020	2021	20	22E	2023E		2024E	2025E	2026E	2027E	2028E	<b>2029</b> E	2030E
NOPLAT:															
Total Revenues	\$ 51,75	0 \$	41,908	\$ 81,288	\$ 107,	540	\$ 80,920	\$	69,966	\$ 73,286	\$ 74,539	\$ 66,549	\$ 63,211	\$ 58,467	\$ 63,699
- COGS	\$ (10,21		(8,692)			92) \$		•	(15,024)						
- SGA&A	\$ (14,35)	•	(11,615)					-	(17,653)	\$ (18,490)					
- R&A Expense	\$ (8,65)		(9,405)		\$ (11,2	260) \$	(13,864)	\$	(11,987)	\$ (12,556)	\$ (12,771)	\$ (11,402)	\$ (10,830)	\$ (10,017)	\$ (10,914)
- Depreciation & Amortization Expense	\$ (4,610		(3,436)			'58) \$		\$	(2,686)						
- Restructuring charges	•	7) \$	(600)			'56) \$			(696)	, ,	,			,	
+Implied Interest on Operating Lease	\$ 62.70	•		\$ 135.70	•	39 \$	151.55	\$	156.18	\$ 160.34	\$ 164.06	\$ 167.40	\$ 170.39	\$ 173.07	\$ 175.48
EBIT	\$ 13,23	7 \$	8,227	\$ 19,569	\$ 40,6	87 \$	\$ 25,762	\$	22,077	\$ 23,488	\$ 24,016	\$ 21,686	\$ 20,825	\$ 19,448	\$ 21,608
Income Tax Provision	\$ 1,384.00	) \$	476.00	\$ 1,852.00	\$5,659	01	\$3,361.15	\$ :	2,832.15	\$3,048.90	\$3,116.84	\$2,760.52	\$2,632.72	\$2,420.09	\$2,737.74
+Shield on interest expense	\$ 256.50			\$ 1,832.00	\$ 275		\$ 350.55	\$	317.38	\$ 303.43	\$ 306.64	\$ 307.46	\$ 296.76	\$ 293.13	\$ 288.16
- Shield on interest income	\$ (36.84	•	(8.10)	•	•	.41) \$		•			•	•	•	•	•
+ Other income (deductions), net	\$ 583.2	•		\$ (863.41)			; (113.32) ;	\$	(113.33)	\$ (110.54)	\$ (110.40)	\$ (113.33) \$	¢ (110.13)	\$ (111.50)	\$ (103.33)
-Gain Consumer Healthcare JV	\$ (1,318.0)	•	(0.67)		¢ .		• - • -	\$	_	<b>,</b> -	<b>,</b> -	<b>,</b> -	; - ; -	<b>,</b> -	, - , -
+shield on operating lease interest	\$ 10.23	•		\$ 24.02	\$ 21	.96	22.73	\$	23.43	\$ 24.05	\$ 24.61	\$ 25.11	\$ 25.56	\$ 25.96	\$ 26.32
Adjusted Tax	879	<u> </u>	710	1,235	5,8	272	3,615		3,054	3,257	3,330	2,974	2,839	2,627	2,947
Aujusteu Tax	67:	,	710	1,233	3,0	0/2	3,013		3,034	3,237	3,330	2,974	2,833	2,027	2,547
Change in Deffered Tax NOPLAT	\$ 1,703		(1,799)			92) \$	, , ,		(947)	\$ (1,019)				. ,	
NOPLAT :	14,060.6	L	5,717.87	13,661.96	32,922	.64	21,022.65	13	8,076.06	19,211.30	19,644.61	17,789.57	17,105.74	16,011.56	17,745.79
Invested Capital (IC):															
+ Operating Current Assets															
Normal Cash	1,099	3	890	1,726	2,2	02	1,718		1,485	1,556	1,583	1,413	1,342	1,241	1,352
Trade accounts receivable	8,72		7,930	1,726	2,2 17,3		13,029		11,265	11,800	12,002	10,715	10,178	9,414	10,256
Inventory	8,28		8,046	9,059	16,0		12,100		10,462	10,959	11,146	9,951	9,452	8,743	9,525
Other current assets	2,600		3,438	3,820	5,7		4,349		3,760	3,938	4,006	3,576	3,432	3,142	3,423
Total Operating CA	20,70		20,304	26,084	41,4		31,196		26,973	28,253	28,736	25,656	24,369	22,540	24,557
- Operating Current Liabilities	20,70		20,501	20,001	,		31,130		20,373	20,233	20,730	23,030	2 1,505	22,310	21,557
Trade accounts payable	4,220	)	4,309	5,578	9,2	21	6,938		5,999	6,284	6,391	5,706	5,420	5,013	5,462
Accrued compensation	2,720		3,058	3,332	5,4		4,094		3,540	3,708	3,772	3,367	3,198	2,958	3,223
Deferred revenue	_,,_		-	3,067			-		-	-	-	-	-	-	-
Income taxes payable	980	)	1,049	1,266	6,1	57	3,657		3,081	3,317	3,391	3,003	2,864	2,633	2,979
Total Operating CL	7,920		8,416	13,243	20,8		14,690		12,621	13,309	13,554	12,077	11,483	10,605	11,664
+ Net PPE	13,96		13,900	14,882	16,0		16,620		17,128	17,583	17,992	18,358	18,686	18,980	19,244
+ Other Long-Term Operating Assets	=5/5 5		=5,555	,	,-		,		,	=: ,5 5 5			=5,555		- <b>-</b> /- · ·
Identifiable intagible assets	35,370	)	28,471	25,146	20,3	888	17,452		14,766	12,266	9,817	7,904	6,316	5,044	4,020
Other non-current assets (Less ROU Asset	3,13		3,176	4,841	1,6		1,810		2,163	2,278	2,419	1,973	2,074	2,153	2,173
Lease ROU assets	1,31		1,393	2,839	3,0		3,171		3,267	3,354	3,432	3,502	3,565	3,621	3,671
- Other Long-Term Operating Liabilities	6,31		6,669	9,743	7,1		7,361		7,672	7,951	8,216	7,901	8,055	8,198	8,306
Invested Capital (IC):	60,25		52,159	50,806	54,6		48,198		44,005	42,474	40,627	37,415	35,471	33,536	33,696
Free Cash Flow (FCF):															
NOPLAT	14,060.6	L	5,717.87	13,661.96	32,922	.64	21,022.65	18	8,076.06	19,211.30	19,644.61	17,789.57	17,105.74	16,011.56	17,745.79
Change in IC	1,48		(8,097)	(1,353)	-		(6,410)		(4,194)	(1,530)	(1,847)	(3,212)	•	•	•
FCF	12,573.3		13,814.82	15,014.86	29,120		27,432.58		2,269.66	20,741.63	21,492.02	21,001.36	19,049.60	17,946.97	17,585.44
Return on Invested Capital (ROIC):															
NOPLAT	14,060.6	1	5,717.87	13,661.96	32,922	2.64	21,022.65	1	18,076.06	19,211.30	19,644.61	17,789.57	17,105.74	16,011.56	17,745.79
Beginning IC	58,76		60,256	52,159	-	806	54,608		48,198	44,005	42,474	40,627	•	•	33,536
ROIC	23.93		9.49%	26.19%			38.50%		37.50%	43.66%	46.25%	43.79%	•		
Economic Profit (EP):															
Beginning IC	58,768	2	60,256	52,159	50,8	206	54,608		48,198	44,005	42,474	40,627	37,415	35,471	33,536
x (ROIC - WACC)	16.86		2.43%	19.13%	-		31.44%		30.44%	36.60%	39.19%	36.73%		•	
EP	9,910.93		1,463.17	9,978.99	29,335		31.44 <i>7</i> 0 17,166.73		4,672.76	16,104.11	16,645.47	14,920.88	14,463.84	13,506.92	15,377.81
⊾r -	9,910.9	,	1,403.17	2,270.33	43,333	<b>L</b> L	17,100.73	Τ,	7,072.70	10,104.11	10,043.47	14,320.00	14,403.04	13,300.92	10,11.01

**Pfizer Inc.**Weighted Average Cost of Capital (WACC) Estimation

Narket Value of the Firm	\$	318,152	100.00%
MV of Total Debt	Ş	41,275	12.97%
PV of Operating Leases	\$ <b>\$</b>	2,839	42.070/
Long-Term Debt	\$	36,195	
Current Portion of LTD	1		
Short-Term Debt	\$	2,241.00	
Market Value of Debt:			
MV of Equity	\$	276,877	87.03%
Current Stock Price	<u> </u>	\$49.24	07.020/
Total Shares Outstanding		5,623	
Market Value of Common Equity:			MV Weights
(millions)			
After-Tax Cost of Debt		4.06%	
Marginal Tax Rate		15%	
Pre-Tax Cost of Debt		4.78%	YTM of Pfizer's 10-year corporate bond issued in 202.
Implied Default Premium		0.77%	
Risk-Free Rate		4.01%	10-year Treasury bond
Cost of Debt:			
Cost of Equity		7.51%	
Equity Risk Premium		5.30%	Damodaran's October 2022 Cost of Equity
Beta		0.66	5-year monthly beta via Bloomberg
Risk-Free Rate		4.01%	10-year Treasury bond
Cost of Equity:			ASSUMPTIONS:

### Pfizer Inc.

Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

Key Inputs:

CV Growth of NOPLAT 2.50%
CV Year ROIC 52.92%
WACC 7.06%
Cost of Equity 7.51%

Fiscal Years Ending Dec. 31	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
DCF Model:									
Free Cash Flow (FCF)	29,120	27,433	22,270	20,742	21,492	21,001	19,050	17,947	
Continuing Value (CV)	23,120	27,433	22,270	20,742	21,432	21,001	13,030	17,547	370,689
PV of FCF	27,200	23,933	18,148	15,788	15,280	13,946	11,816	10,398	214,762
	_,,	20,000	20,2 .0	20,700	25,255	20,5 .0	,	20,000	,,,,,
Value of Operating Assets:	351,270.2								
Non-Operating Adjustments	,								
Plus: Excess Cash	218.1								
Plus: Other Non-Current Assets	7,680.0								
Plus: ST Investments	29,125.0								
Plus: LT Investments	5,054.0								
Less: ST Debt	(2,241.0)								
Less: LT Debt	(36,195.0)								
Less: Pension Obligations	(3,489.0)								
Less: Postretirment Obligations	(235.0)								
Less: Operating Lease Liab.	(2,839.0)								
Less: ESOP	(834.2)								
	` ,								
Value of Equity	347,514.1								
Shares Outstanding	5,463.2								
Intrinsic Value of Last FYE	63.6								
Implied Price as of Today	\$ 65.64								
EP Model:	20.225	47.467	44670	16.101	46.645	44004	44.464	40.507	45.070
Economic Profit (EP)	29,335	17,167	14,673	16,104	16,645	14,921	14,464	13,507	15,378
Continuing Value (CV)	27.400	14.077	11.057	12 250	11 024	0.000	0.071	7 025	337,154
PV of EP	27,400	14,977	11,957	12,258	11,834	9,908	8,971	7,825	195,333
Total PV of EP	300,464								
Invested Capital (last FYE)	50,806								
Value of Operating Assets:	351,270								
Non-Operating Adjustments	331,270								
Plus: Excess Cash	218.1								
Plus: Other Non-Current Assets	7,680.0								
Plus: ST Investments	29,125.0								
Plus: LT Investments	5,054.0								
Less: ST Debt	(2,241.0)								
Less: LT Debt	(36,195.0)								
Less: Pension Obligations	(3,489.0)								
Less: Postretirment Obligations	(235.0)								
Less: Operating Lease Liab.	(2,839.0)								
Less: ESOP	(834.2)								
203. 2301	(034.2)								
Value of Equity	347,514								
Shares Outstanding	5,463								
Intrinsic Value of Last FYE	\$ 63.61								
Implied Price as of Today	\$ 65.64								



**Pfizer Inc.**Dividend Discount Model (DDM) or Fundamental P/E Valuation Model

Fiscal Years Ending Dec. 31	2022E		2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E 2031	E
EPS	\$ 5.86	\$	3.58	\$ 3.10	\$ 3.45	\$ 3.64	\$ 3.32	\$ 3.27	\$ 3.09	\$ 3.61	
Key Assumptions											
CV growth of EPS	2.50%										
CV Year ROE	18.19%										
Cost of Equity	7.51%										
Future Cash Flows											
P/E Multiple (CV Year)										17.22	
EPS (CV Year)										\$ 3.61	
Future Stock Price								Ī		\$ 62.16	
Dividends Per Share	\$ 1.60	\$	1.64	\$ 1.68	\$ 1.72	\$ 1.76	\$ 1.80	\$ 1.84	\$ 1.88		
Discounted Cash Flows	\$ 1.49	\$	1.42	\$ 1.35	\$ 1.29	\$ 1.23	\$ 1.17	\$ 1.11	\$ 1.05	\$ 34.835	
Intrinsic Value as of Last FYE	\$ 44.94										
Implied Price as of Today	\$ 46.37	1									

**Pfizer Inc.** *Relative Valuation Models* 

			EPS	EPS		
Ticker	Company	Price	2022E	2023E	P/E 22	P/E 23
AMGN	Amgen	\$289.65	\$17.66	\$18.59	16.40	15.58
JNJ	Johnson & Johnson	\$172.45	\$10.04	\$10.37	17.18	16.63
MRK	Merck	\$101.59	\$7.38	\$7.59	13.77	13.38
MRNA	Moderna	\$150.97	\$23.02	\$6.57	<del>6.56</del>	22.98
REGN	Regeneron	\$742.95	\$42.81	\$41.75	17.35	17.80
			Δ	verage	16.17	17.27
				_		
PFE	Pfizer Inc.	\$49.24	5.86	3.58	8.4	13.8

**Implied Relative Value:** 

P/E (EPS22) \$ 94.83 P/E (EPS23) \$ 61.84

**Pfizer Inc.** *Key Management Ratios* 

Fiscal Years Ending Dec. 31	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Liquidity Ratios:												
Current Ratio (CA/CL)	0.88	1.35	1.40	1.65	1.73	1.70	1.70	1.71	1.67	1.60	1.51	1.46
Cash Ratio (Cash & Cash Equivalents/Current Liab.)	0.03	0.07	0.05	0.35	0.56	0.64	0.60	0.60	0.62	0.59	0.54	0.44
Quick Ratio (Current Assets - Inventory) / Current Liab.	0.66	1.04	1.19	1.38	1.49	1.48	1.48	1.48	1.46	1.40	1.32	1.26
Asset-Management Ratios:												
Inventory Turnover (COGS/Avg Inventory)	1.29	1.06	3.60	1.84	1.23	1.33	1.47	1.45	1.35	1.40	1.38	1.50
Days Sales Inventory (365/Inventory Turnover)	282.01	342.85	101.28	198.68	295.98	274.07	248.42	252.04	269.43	260.89	264.48	243.74
Receivables Turnover (Sales/Avg. Receivables)	6.18	5.03	8.38	7.47	5.33	5.76	6.35	6.26	5.86	6.05	5.97	6.48
Financial Leverage Ratios:												
Debt to Equity (Total Liab./Total Equity)	1.64	1.43	1.34	1.32	1.16	1.13	1.14	1.14	1.12	1.13	1.16	1.20
Equity Multiplier (Total Assets/Total Equity)	2.64	2.43	2.34	2.32	2.16	2.13	2.14	2.14	2.12	2.13	2.16	2.20
Debt to Capital (SD+LD)/(SD+LD+SE)	0.45	0.39	0.33	0.35	0.32	0.31	0.32	0.32	0.31	0.32	0.32	0.33
Profitability Ratios:												
Return on Equity (NI/Beg TSE)	25.52%	15.16%	34.63%	41.35%	20.62%	17.01%	18.55%	19.03%	16.82%	16.35%	15.43%	18.19%
Return on Assets (NI/Assets)	9.96%	5.98%	13.09%	16.22%	9.13%	7.98%	8.70%	8.88%	7.97%	7.79%	7.34%	8.43%
Gross Profit Margin ((Rev-COGS)/Rev)	80.25%	79.26%	62.08%	78.53%	78.53%	78.53%	78.53%	78.53%	78.53%	78.53%	78.53%	78.53%
Payout Policy Ratios:												
Dividend Payout Ratio (Dividend/EPS)	49.32%	87.86%	39.80%	27.29%	45.81%	54.11%	49.88%	48.40%	54.20%	56.35%	60.76%	53.20%
Total Payout Ratio (Divs+Repurchases)/NI	103.91%	87.77%	39.72%	55.64%	55.10%	92.63%	109.66%	101.44%	98.80%	111.08%	115.95%	125.58%
Retention Ratio (1-Dividend Payout)	0.51	0.12	0.60	0.73	0.54	0.46	0.50	0.52	0.46	0.44	0.39	0.47

# **Pfizer Inc.** *Sensitivity Tables*

WACC

					Beta			
٤	65.64	0.57	0.6	0.63	0.66	0.69	0.72	0.75
	4.85%	74.69	72.67	70.77	70.77	67.3	65.71	64.2
remium	5.00%	73.49	71.48	69.6	69.6	66.16	64.58	63.09
Prer	5.15%	72.33	70.34	68.47	68.47	65.06	63.5	62.02
Risk F	5.30%	71.21	69.24	67.38	67.38	64	62.46	60.99
	5.45%	70.13	68.17	66.34	66.34	62.99	61.45	60.01
Equity	5.60%	69.09	67.15	65.33	65.33	62.01	60.49	59.06
Eq	5.75%	68.09	66.16	64.35	64.35	61.06	59.56	58.14

Average	COGS	%	٥f	Sal	٥ د
Avelage	COOS	/0	υı	Jair	=:

65.64	-18.00%	-19.00%	-20.00%	-21.00%	-22.00%	-23.00%	-24.00%
6.70%	77.89	75.81	73.73	71.66	69.58	67.5	65.42
6.80%	76.26	74.23	72.19	70.16	68.13	66.09	64.06
6.90%	74.7	72.71	70.72	68.73	66.74	64.75	62.75
7.02%	72.93	70.98	69.04	67.1	65.15	63.21	61.27
7.10%	71.79	69.88	67.97	66.05	64.14	62.23	60.32
7.20%	70.43	68.55	66.67	64.8	62.92	61.05	59.17
7.30%	69.12	67.28	65.44	63.6	61.76	59.92	58.08

### Average SG&A as % of Sales

	65.64	-22%	-23%	-24%	-25.23%	-26%	-27%	-28%
Yield	3.20%	72.25	70.31	68.38	65.99	64.5	62.56	60.63
Υi	3.40%	72.13	70.2	68.26	65.88	64.39	62.46	60.52
lenc	3.60%	72.01	70.08	68.15	65.77	64.28	62.35	60.42
Dividend	3.83%	71.87	69.94	68.02	65.64	64.16	62.23	60.31
	4.00%	71.77	69.84	67.92	65.55	64.07	62.14	60.22
Current	4.20%	71.65	69.72	67.8	65.44	63.96	62.04	60.12
Cur	4.40%	71.53	69.61	67.69	65.33	63.85	61.93	60.02

### CV Growth of NOPLAT

	65.64	1.75%	2.00%	2.25%	2.50%	2.75%	3.00%	3.25%
Risk-free rate	3.40%	66.11	68.14	70.41	72.97	75.86	79.16	82.97
	3.60%	64.11	65.98	68.05	70.36	72.97	75.94	79.33
	3.80%	62.26	63.96	65.86	67.97	70.33	73	76.04
	4.01%	60.43	62	63.73	65.64	67.78	70.19	72.9
	4.20%	58.89	60.34	61.93	63.7	65.66	67.85	70.32
	4.40%	57.36	58.7	60.17	61.78	63.58	65.57	67.81
	4.60%	55.92	57.16	58.51	60	61.65	63.47	65.5

### Cost of Equity

	65.64	6.90%	7.10%	7.30%	7.51%	7.70%	7.90%	8.10%
Marginal Tax Rate	12.00%	67.81	67.92	68.04	68.16	68.27	68.38	68.49
	13.00%	66.98	67.09	67.2	67.32	67.43	67.54	67.65
	14.00%	66.14	66.25	66.37	66.48	66.59	66.7	66.81
	15.00%	65.31	65.42	65.53	65.64	65.75	65.86	65.97
	16.00%	64.47	64.58	64.69	64.8	64.91	65.02	65.13
	17.00%	63.63	63.74	63.85	63.96	64.06	64.17	64.28
	18.00%	62.79	62.9	63.01	63.12	63.22	63.32	63.43

**Present Value of Operating Lease Obligations** 

Fiscal Years Ending Dec. 31	2016	2017	2018
Year 1	220.0	209.0	300.0
Year 2	188.0	172.0	252.0
Year 3	163.0	150.0	210.0
Year 4	138.0	136.0	267.0
Year 5	125.0	123.0	248.0
Thereafter	967.0	891.0	2040.0
Total Minimum Payments	1801.0	1681.0	3317.0
Less: Cumulative Interest	436.9	399.6	890.6
PV of Minimum Payments	1364.1	1281.4	2426.4
Implied Interest in Year 1 Payment		65.2	61.3
Pre-Tax Cost of Debt	4.78%	4.78%	4.78%
Years Implied by Year 6 Payment	7.7	7.2	8.2
Expected Obligation in Year 6 & Beyond	125	123	248
Present Value of Lease Payments			
PV of Year 1	210.0	199.5	286.3
PV of Year 2	171.2	156.7	229.5
PV of Year 3	141.7	130.4	182.6
PV of Year 4	114.5	112.8	221.5
PV of Year 5	99.0	97.4	196.4
PV of 6 & beyond	627.7	584.7	1310.2
Capitalized PV of Payments	1364.1	1281.4	2426.4

### Pfizer Inc.

Effects of ESOP Exercise and Share Repurchases on Common Stock Account and Number of Shares Outstanding (millions)

Number of Options Outstanding (shares):45Average Time to Maturity (years):2.70Expected Annual Number of Options Exercised:17

Current Average Strike Price: \$ 30.20
Cost of Equity: 7.51%
Current Stock Price: \$49.24

Fiscal Years Ending Dec. 31	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Increase in Shares Outstanding:	17	17	12							
Average Strike Price:	\$ 30.20 \$	30.20 \$	30.20 \$	30.20 \$	30.20 \$	30.20 \$	30.20 \$	30.20 \$	30.20 \$	30.20
Increase in Common Stock Account:	502	502	351	-	-	-	-	-	-	-
Share Repurchases (\$)	8,688	8,688	8,688	8,688	8,688	8,688	8,688	8,688	8,688	8,688
Expected Price of Repurchased Shares:	\$ 49.24 \$	51.05 \$	52.93 \$	54.88 \$	56.89 \$	58.99 \$	61.16 \$	63.41 \$	65.74 \$	68.15
Number of Shares Repurchased:	 176	170	164	158	153	147	142	137	132	127
Shares Outstanding (beginning of the year)	5,623	5,463	5,310	5,157	4,999	4,846	4,699	4,557	4,420	4,288
Plus: Shares Issued Through ESOP	17	17	12	0	0	0	0	0	0	0
Less: Shares Repurchased in Treasury	176	170	164	158	153	147	142	137	132	127
Shares Outstanding (end of the year)	5,463	5,310	5,157	4,999	4,846	4,699	4,557	4,420	4,288	4,160