HEALTHCARE SECTOR VS COVID: BOOM OR DOOM?

Analyzing the impact of COVID-19 on stock market returns and taking a deep-dive into the healthcare sector.

AGENDA

Objective

Top Performers

Healthcare Sector & Market vs. Covid

Diff-in-Diff Test

Healthcare vs. Market

Market Cap & Returns

SPY vs. IYH

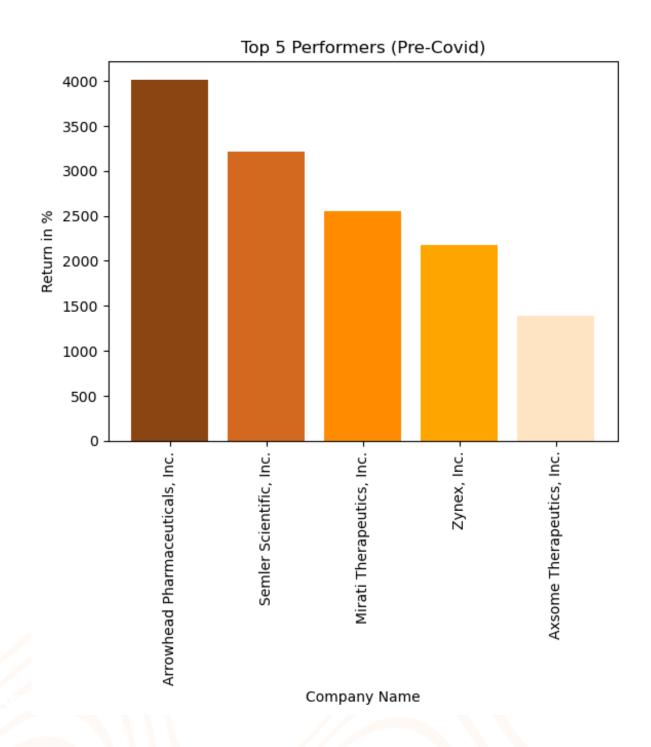
Conclusion

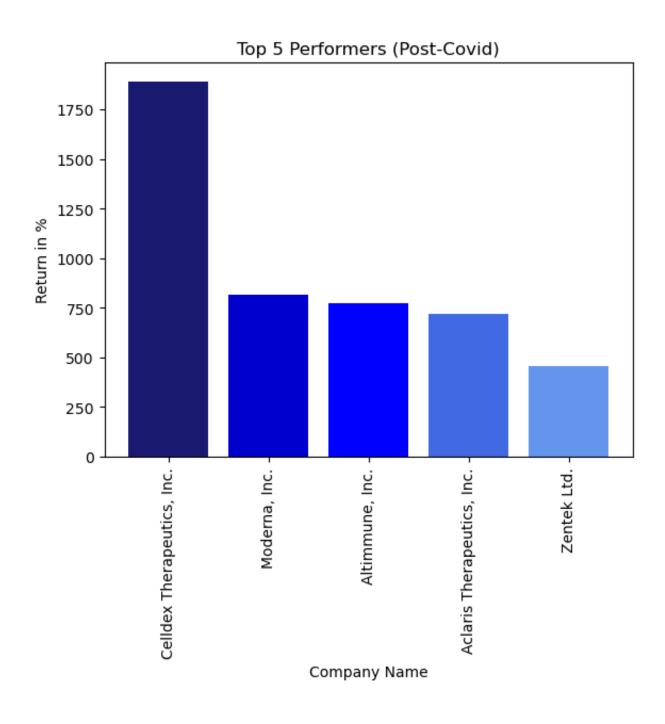


Objective of this Project

COVID-19 was one of the most impactful events of the century, with long-lasting effects on the economy and capital markets. In this analysis, we wanted to find out how COVID affected the stock market, and specifically see how the healthcare industry was impacted. Many believed that the healthcare sector flourished in a post-covid world, and we wanted test if the healthcare sector is truly a good investment in times of healthcare crises.

Which healthcare companies did best?





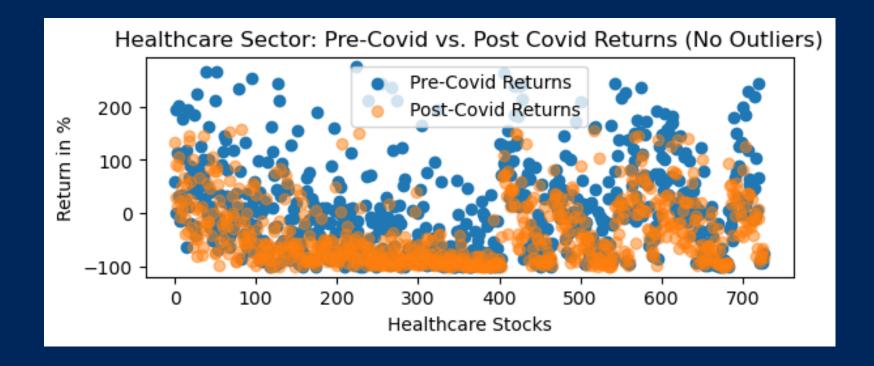
What was the impact of COVID on healthcare sector?

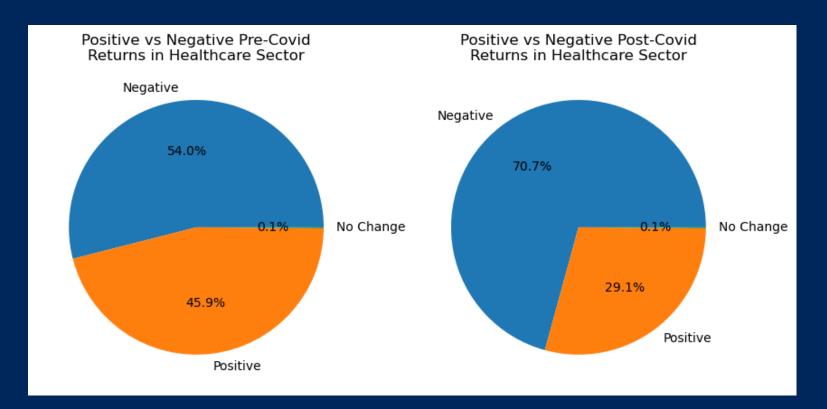
Are the results statistically significant?

Pre-Covid, the healthcare sector had an average return of <u>45.78%</u> with std. dev 267.67%.

Post-Covid, the market had an average return of <u>-16.37%</u>, with a std. dev of 121.20%.

Two sample t-test: p-value ~0.0000000013





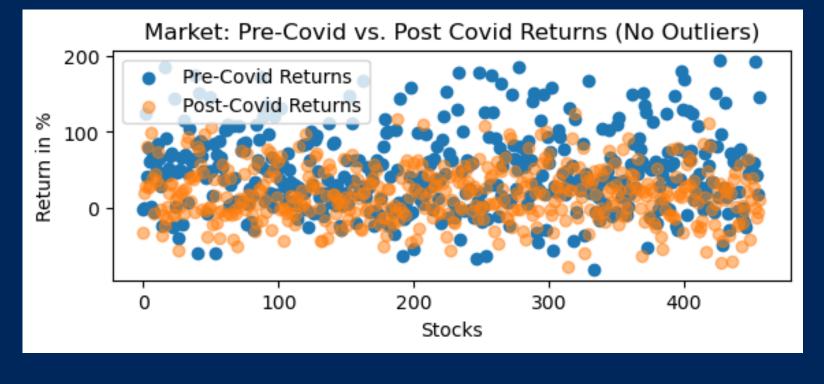
What was the impact of COVID on the market as a whole?

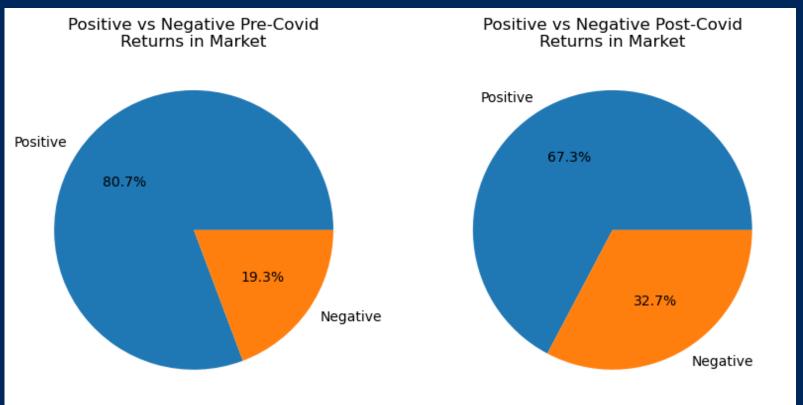
Are the results statistically significant?

Pre-Covid, the market had an average return of **59.35%** with std. dev 127.02%.

Post-Covid, the market had an average return of **27.95%**, with a std. dev of 72.20%.

Two sample t-test: p-value ~0.0000002



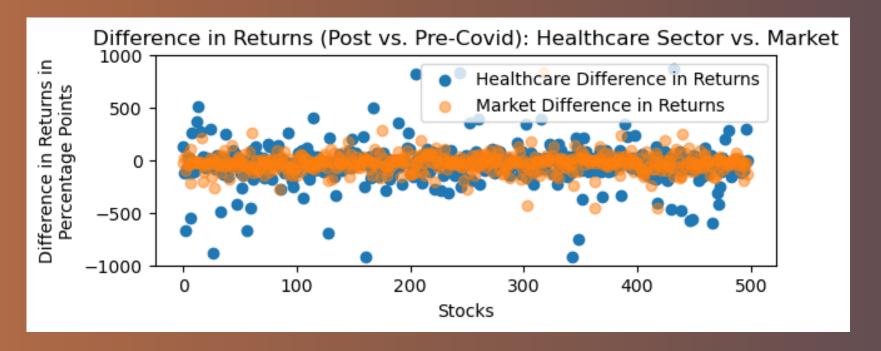


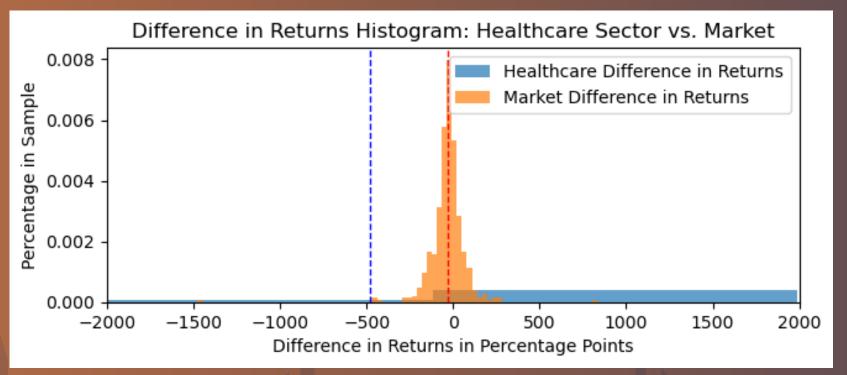
Is the impact on the healthcare sector significantly different than the market?

On average, the market returns dropped by 31.41 percentage points after covid. In contrast, the healthcare sector returns dropped by an average of 62.15 percentage points.

Does that mean COVID impacted the healthcare sector more than the other sectors?

Diff-in-diff t-test: p-value ~ 0.28



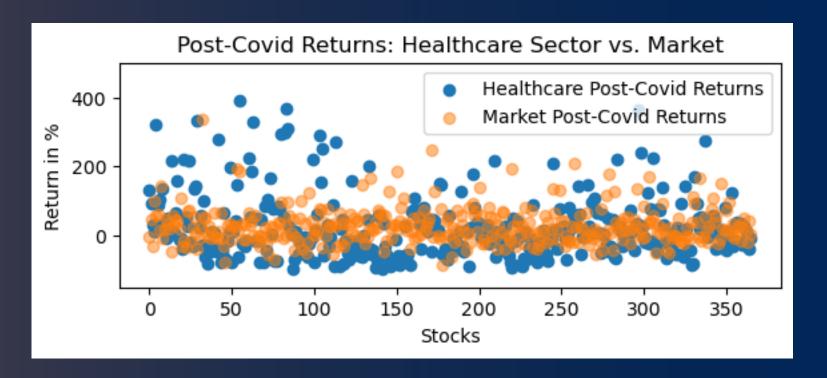


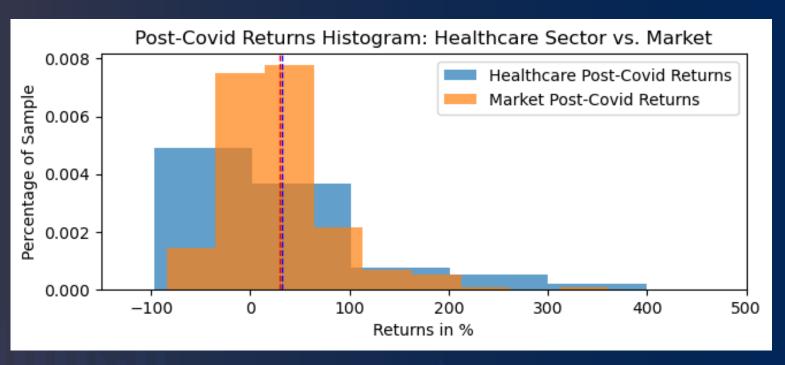
Did healthcare stocks outperform the market during COVID?

Are the results significant?

During Covid, the market had an average return of 29.45%, in contrast, the healthcare sector had an average return of 32.97%.

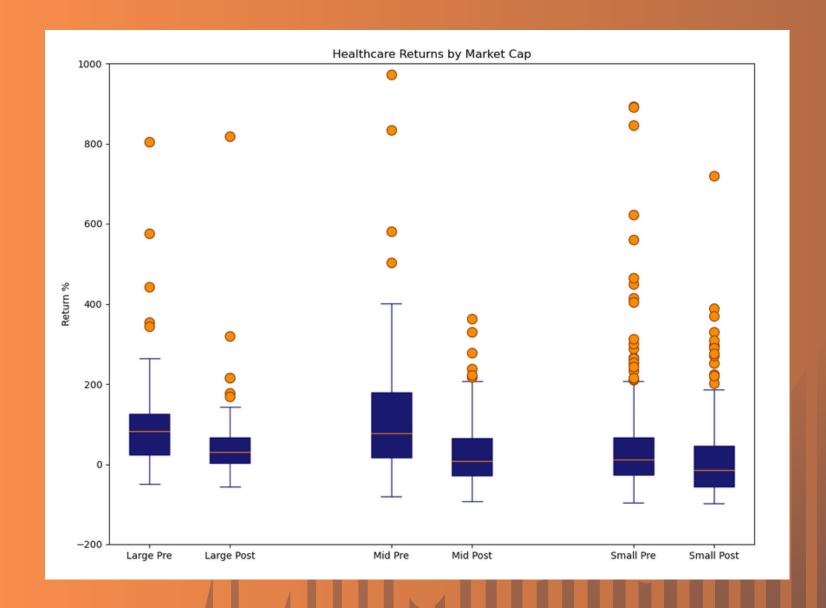
Two sample t-test: p-value ~ 0.73

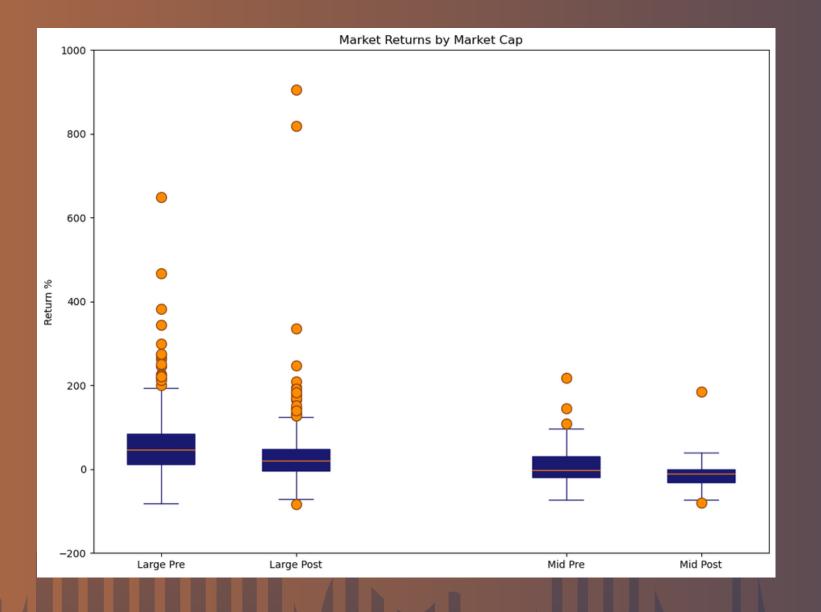




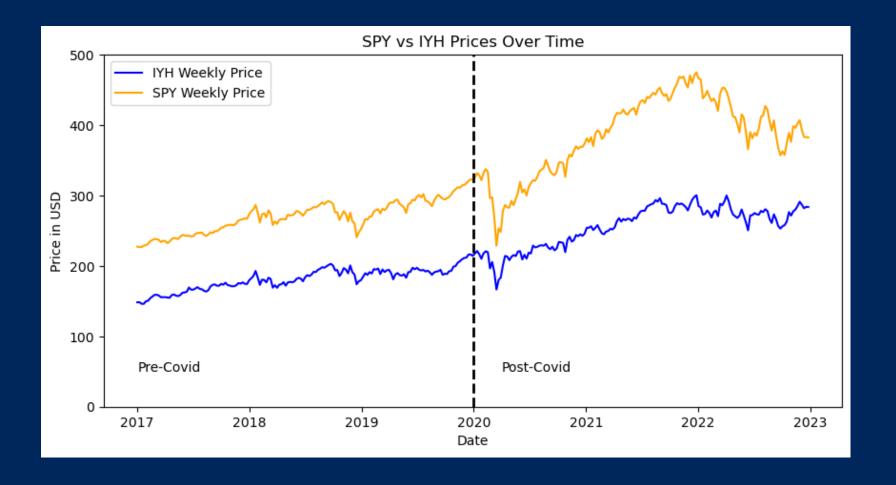
How did market cap impact returns?

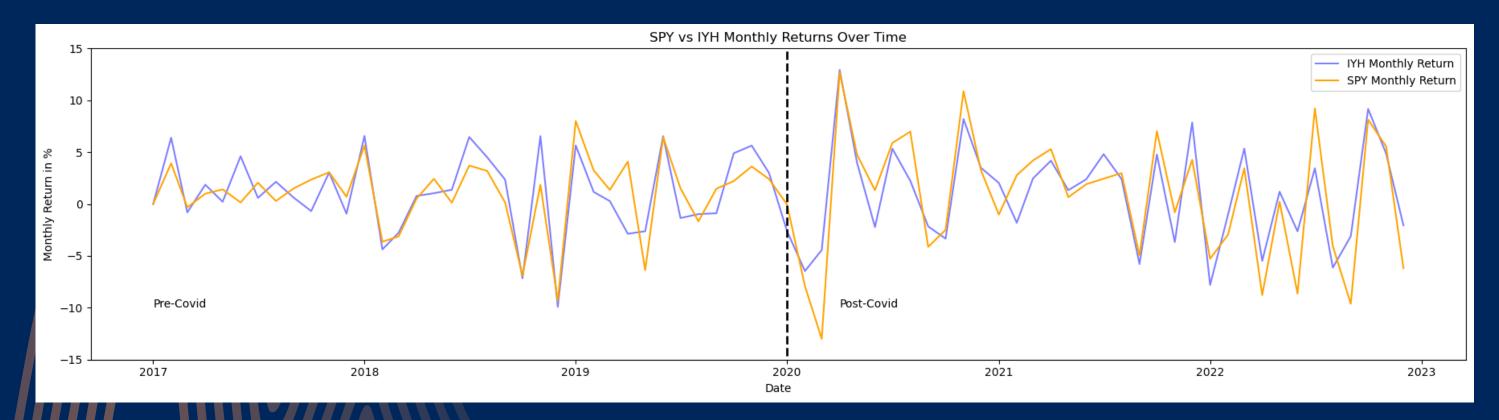
Market Capitalization is a measurement of a company's size. It is the total value of a company's oustanding shares.





SPY vs. IYH - how do price and return trends differ?





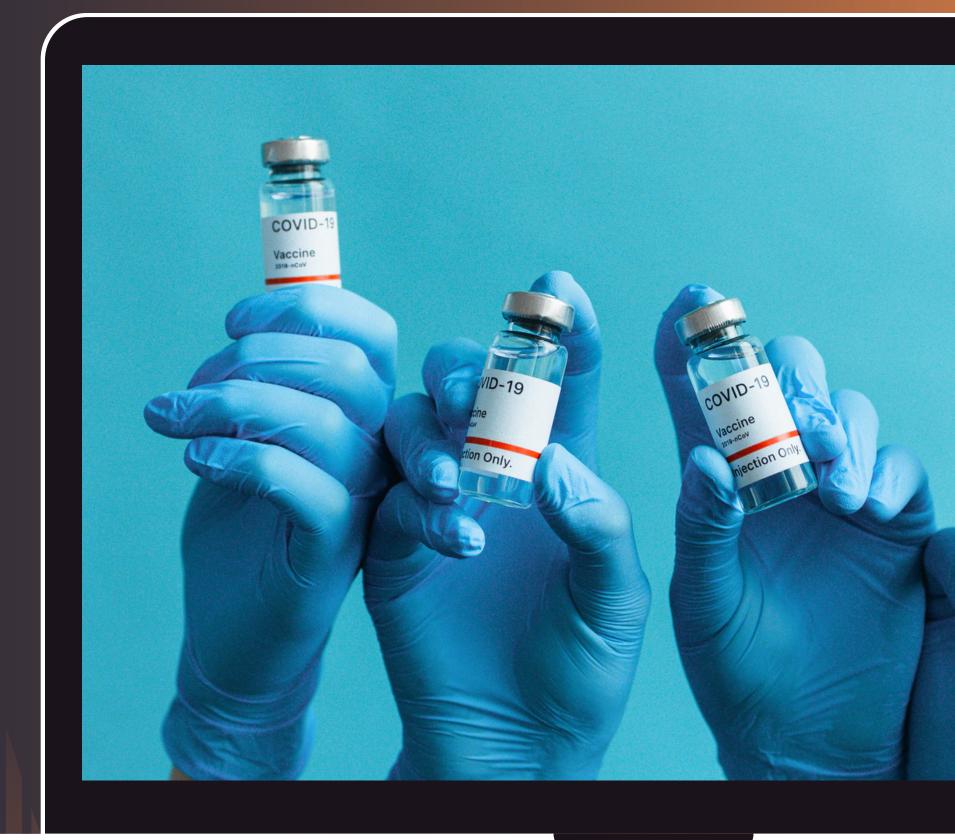
Conclusion

We found that COVID-19 had a negative impact on the market as a whole and on the healthcare sector as well.

We also found that there was no difference in the impact of COVID-19 on the healthcare sector compared to the rest of the market.

Our findings showed that healthcare sector did not outperform the market after COVID-19, contrary to what many people believed.

So what do we recommend?



Thank you!

Any questions?

