The background of the image consists of several overlapping financial charts. There are line graphs with multiple data series in various colors (white, light blue, dark blue) and a bar chart. The charts are set against a dark blue grid. Some labels like 'Jun', 'Jul', 'Aug', 'Sep', and 'Oct' are visible along the x-axis, indicating a timeline. Numerical values such as '300.0', '316.2', and '17' are also present on the y-axis and within the chart areas. The overall aesthetic is professional and data-driven.

COVID-19 Economic Impacts

Main Inquiries:

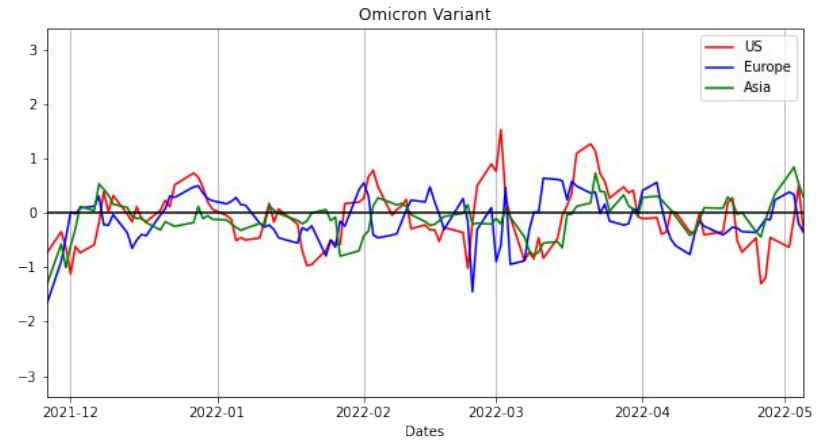
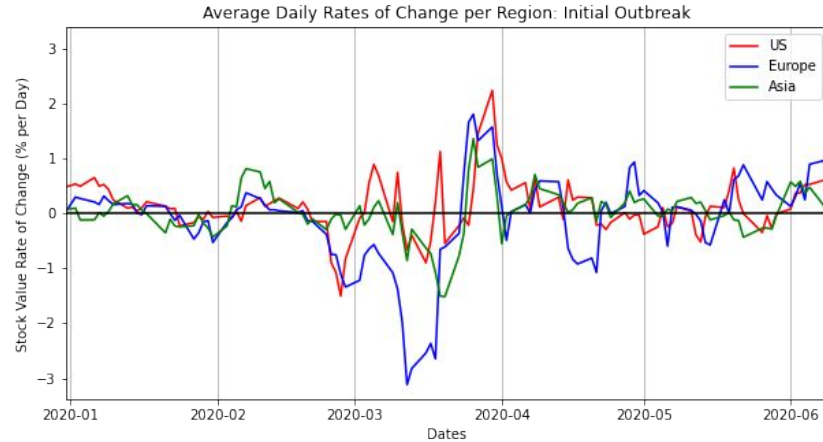
1. Has the global market become less sensitive to new variants and does it depend on region?
2. How has the emergence of COVID-19, associated variants and vaccine rollouts impacted virtual and in-person fitness stocks?
3. How has COVID-19 and vaccine rollouts affected Airlines stocks?
4. What was the impact on Bitcoin's annual and intra-year performance?

Global Impact on Stock Indices

- Data collected from market indices in the US, Europe and Asia.
 - Indices grouped into their respective regions.
- These include the S&P 500 and the NASDAQ in the US, the DAX Performance Index in Europe and the Nikkei 225 in Asia.
- Focused on the effects of the initial outbreak and Variants of Concern (VOCs).



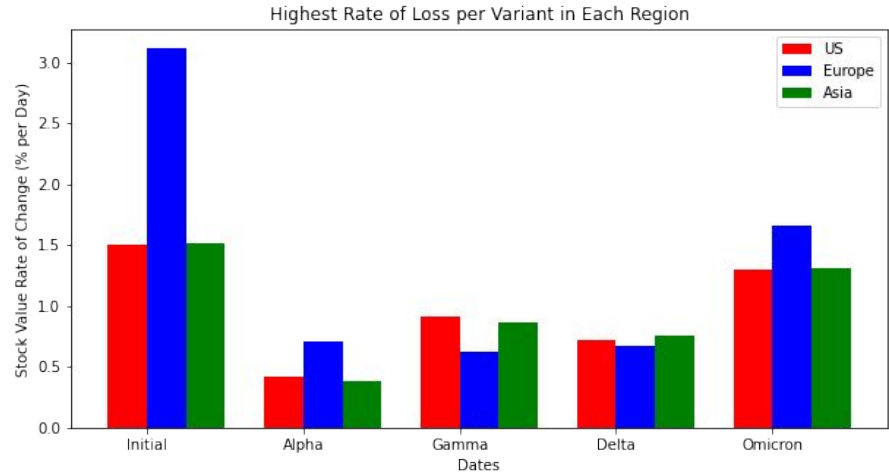
Impacts of the Initial Outbreak vs. Omicron Variant



- Examined the average daily rate of change in terms of percentage per region.
- Compared the initial outbreak to the most recent variant, the Omicron variant.

Rate of Loss Comparison

- The highest rate of daily loss per region was significantly lower after the initial outbreak.
 - With the exception of Omicron.
- The values for the US and Asia are comparable to after the initial outbreak.

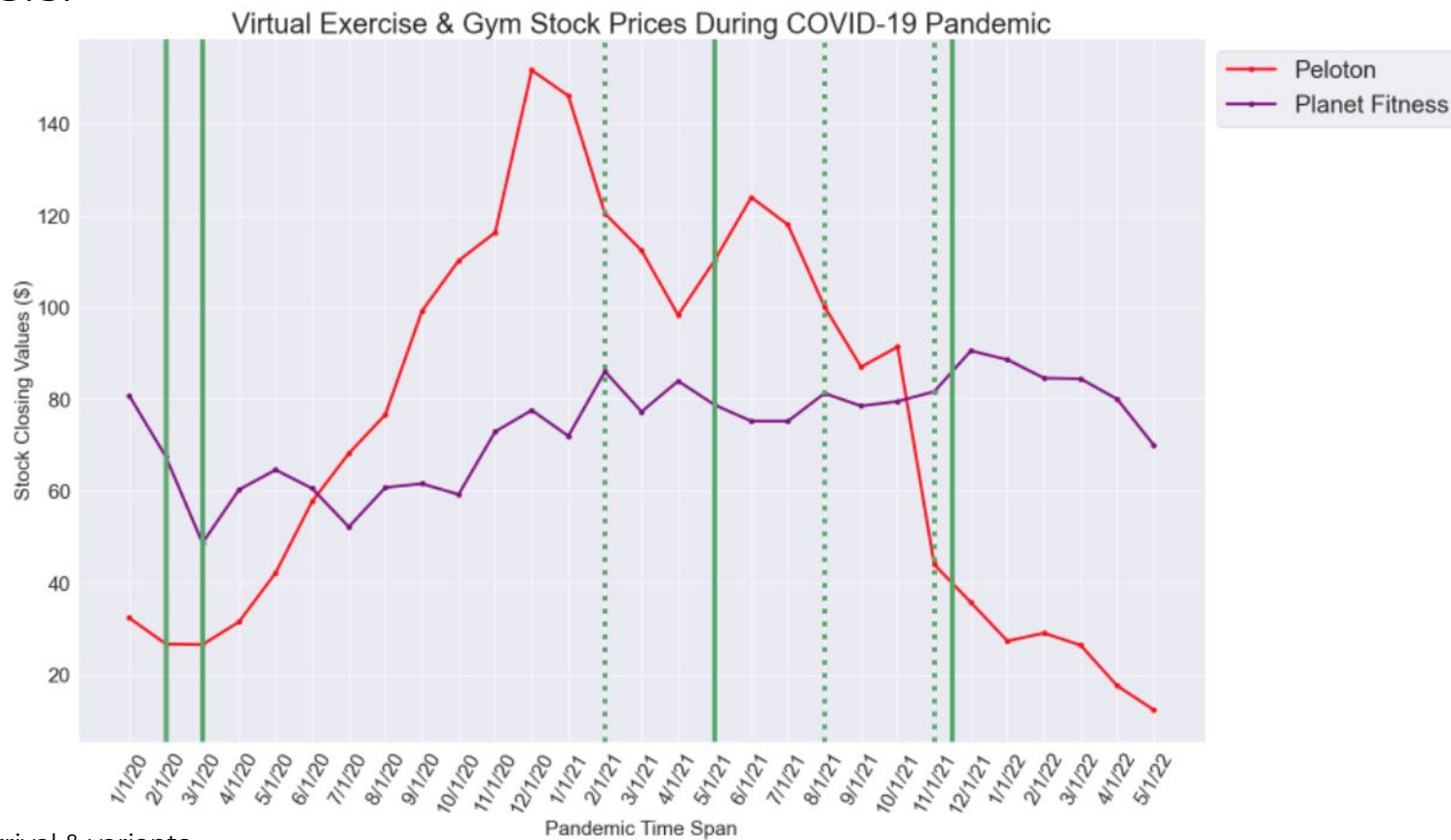


Impacts on Virtual vs. In Person Fitness Stocks

- Data sets pulled: Peloton and Planet Fitness stock closing prices per month from 12/31/19-5/6/22.
- COVID-19 disease designation and vaccine dates compared against monthly stock closing prices for each company.



Analysis:



Vertical lines:

Solid- COVID arrival & variants

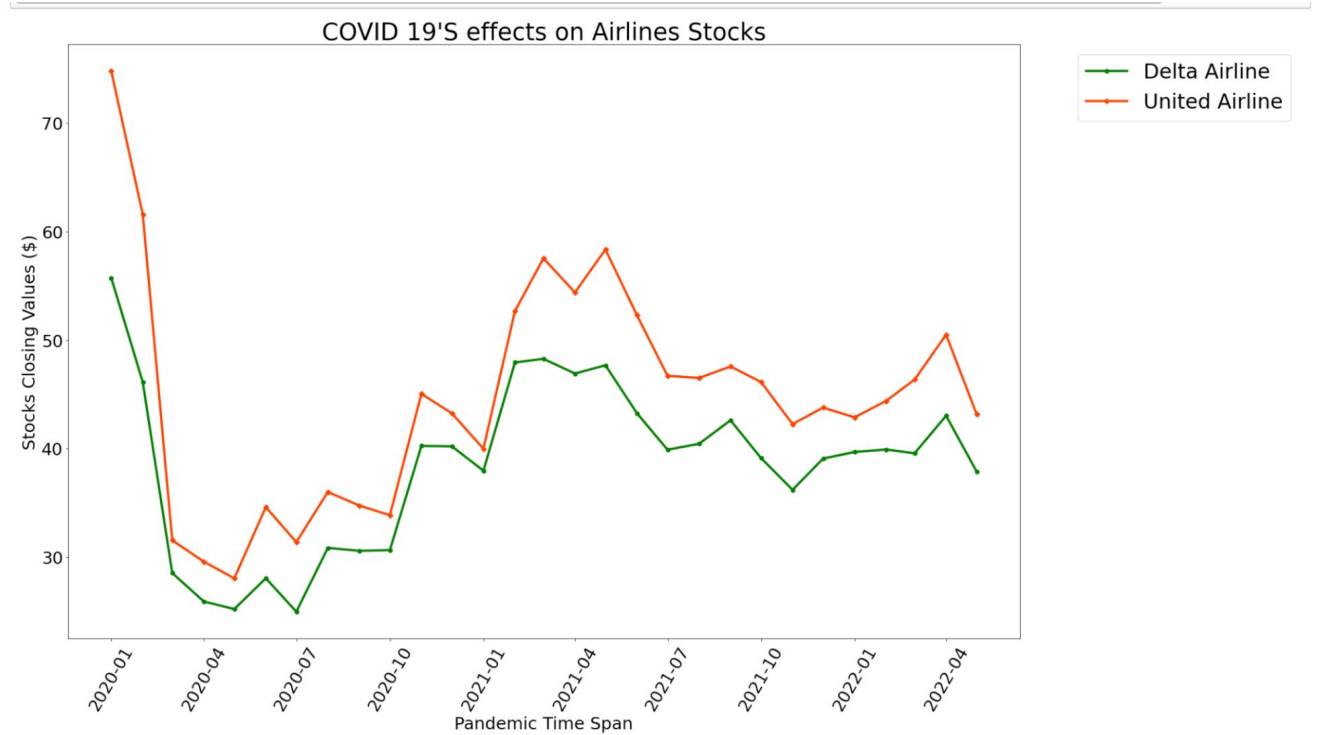
Dotted- Vaccine phases

COVID 19'S Effects on US Airlines Stocks

- Datasets: Delta and United Airlines stocks monthly closing prices from 12/31/19 - 5/6/22.
- Vaccines rollout dates compared against stocks closing prices for Delta and United Airline



Analysis:



	Mean	Median	Variance	Standard Deviation	Standard Error
Airline					
Delta	38.502414	39.689999	60.294121	7.764929	1.441911
United	44.827931	44.400002	110.674280	10.520184	1.953549

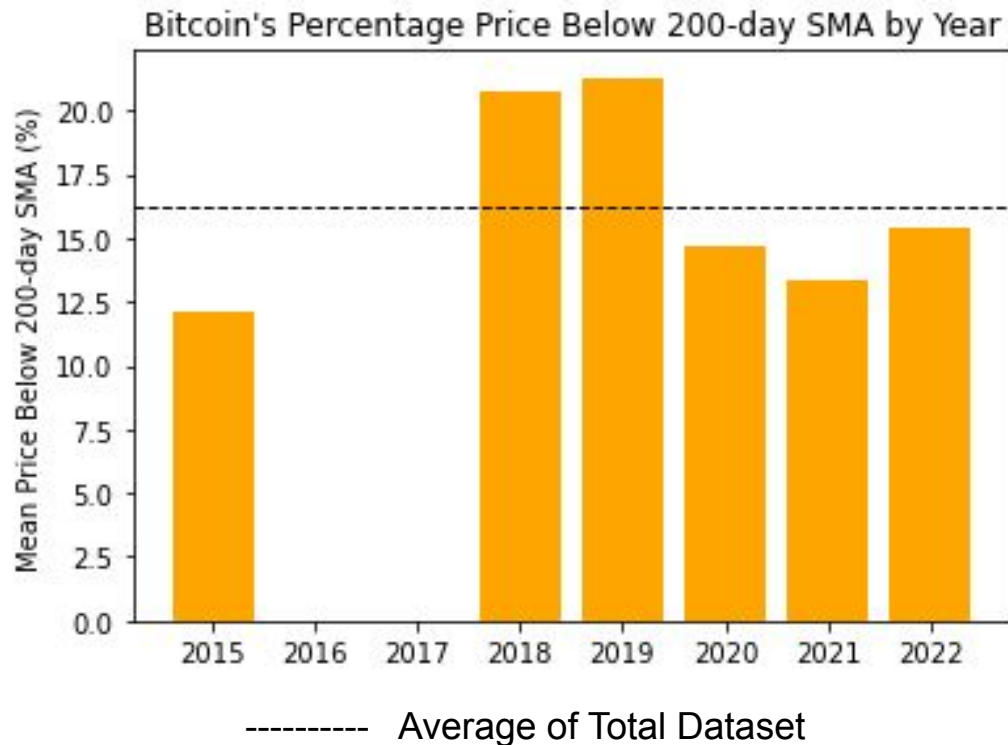
Global Impact on Bitcoin Price

- Why Bitcoin?
 - Global Reach
 - 24/7 Trading



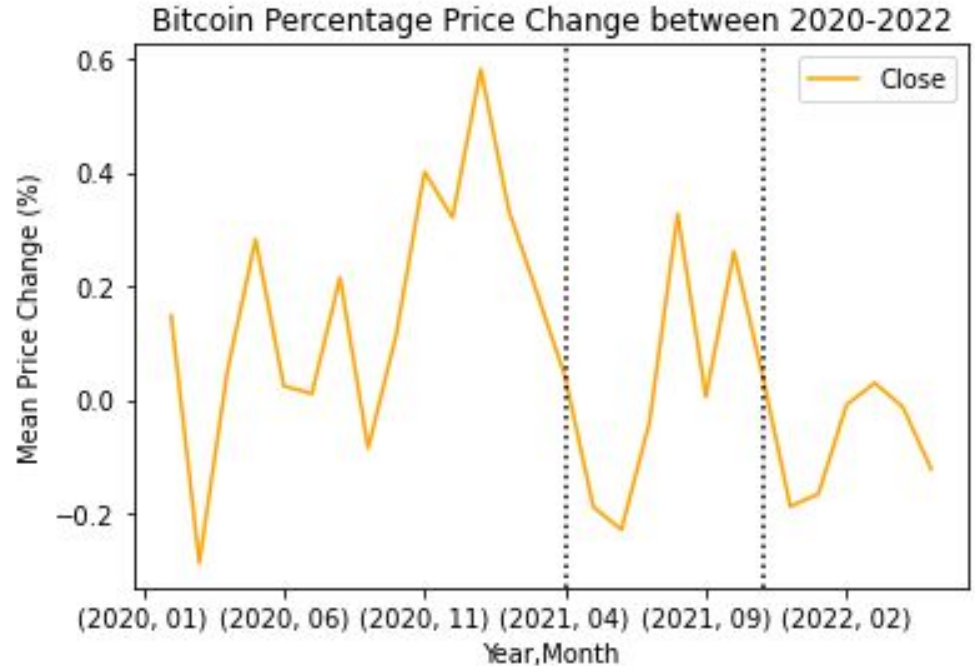
Analysis of Annual Performance

- Bitcoin's worst 2 years were 2018 and 2019.
- 2020 - 2022 were below the average
- Limitations:
 - More price data may have proved 2018 and 2019 to be outliers.



Deeper Dive: 2020 - 2022

- Left and right vertical dotted lines indicate Delta and Omicron public awareness, respectively.
- Delta impact
 - Average percentage price change in approx. 3 mo. downtrend prior to public awareness
- Omicron impact
 - Average percentage price change in approx. 1 mo. downtrend prior to public awareness



Conclusions

- **Has the global market become less sensitive to the discovery of COVID-19 variants? Is there a regional difference?**
 - For the majority of the variants of concern, yes.
 - Omicron is an exception for the US and Asian markets but not the the European markets.
- **How has the emergence of COVID-19, associated variants and vaccine rollouts impacted virtual and in-person fitness stocks?**
 - Based on the data people prefer in person fitness over virtual.

Conclusions (pt. 2)

- **Impact of COVID 19 on Airline industry?**
 - From the analysis, it appears that due to COVID, the stocks went down and each time the vaccine came out the stocks tend to go up.
- **What was the impact on Bitcoin's annual and intra-year performance?**
 - The analyses conducted do not reflect a clear impact from COVID-19 and its variants on Bitcoin's price action.