In this project, we have considered a case study that compares how COVID 19 affects Netflix and AMC differently. Then, we have completed an analysis of entertainment stocks. We later draw a closer analysis of stock prices of video game industries to understand COVID-19’s impacts on the entertainment industry. Finally, in order to gain an intuitive understanding of COVID-19 impacts, we develop a quantitative method to estimate the financial loss suffered by AMC during COVID-19.

As we consider the first case study, we use three diagrams to estimate how COVID 19 has affected traditional and streaming industries differently. We compare the quarterly incomes0 of Netflix and AMC from 2018 to 2020. Although the average quarterly income of Netflix was about two times more than that of the AMC, during the first quarter of 2020, Netflix earns nearly five times more than AMC does. We then plot the quarterly change in content liabilities of Netflix from 2018 to 2020, which show that Netflix’s speed of publishing new contents experiences a surge in spring of 2020. Finally, we create a table that lists out 20 “blockbuster” movies which are postponed due to COVID-19 to quantify the loss caused from theater closures.

Next, in the analysis of the entertainment stock market, We resort to stock prices1 for insights on how entertainment companies are performing. Based on the analysis on stock prices, we conclude that large online streaming stock prices saw turbulent movements followed by a strong rebound during the month of March and April, as observed in this plot of daily percentage change in price. In a similar fashion, international entertainment stocks also saw significant movement, but this turbulent period on average starts earlier and stabilizes earlier compared to similar stocks in the US.

We then focused on International Entertainment Stocks in Europe and Asia to illustrate the performance of local companies in the U.S. With Tencent, ProSieben and Sony as indicators in each region, we observe that all three agree on the general trend that they experienced stress in the beginning of February where COVID-19 has spread across Asia to Europe. Then, beginning in mid-March, these entertainment companies all begin to experience recuperation and even further growth when most countries have settled in lockdown for a while. Domestically, the impact of COVID-19 and specific events have marked turning points of stock prices changes. The four circuit breakers have set the stock prices in plummets and greater fluctuations due to instability of the U.S. stock market. National events like declarations of health/national emergencies and stay home orders. Meanwhile, companies that require more on-site work have been “stuck in the mud” with their stock prices remaining low even after stay-home orders are in place; whereas OTT companies (Netflix) skyrocketed to greater stock prices.

Internationally, gaming companies have all experienced a boost from COVID-19, especially after stay-home orders and state mandated closures/ remote works were put into place. They experienced a rate of growth of between 15-30% after declaration of pandemic on COVID-19 by WHO.

Finally, we attempt to quantitatively estimate the impact of theater closures due to cancellation of mass gatherings. In the case study of AMC, we collect 20 blockbuster movies2 that are postponed due to COVID-19 and estimate the box office3 using previous sequels or movies with similar style and genre. We conclude that due to COVID-19, AMC has suffered a 1.4 billion loss during Mar to Jul of 2020.

In conclusion, COVID-19 has brought down varied negative impacts on the entertainment industry. It is clear that the streaming industry is able to recover faster and even benefit from COVID-19, while traditional industries that depend on cinema take huge financial hits.

0: <https://www.netflixinvestor.com/financials/quarterly-earnings/default.aspx>; <http://investor.amctheatres.com/quarterly-results>

1: <https://finance.yahoo.com/>

2: <https://www.latimes.com/entertainment-arts/movies/story/2020-03-12/coronavirus-movies-cancelled-postponed>

3: <https://www.boxofficemojo.com/>