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How Has COVID-19 Affected Financial Gains of Big-Tech Companies?

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How Has COVID-19 Affected Financial Gains of Big-Tech Companies?

By

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Abstract

This study investigates the impact of the COVID-19 pandemic on the financial returns received by Big-Tech companies in order to predict future financial returns and related business activities.The main objectives of this paper are to delineate business models and financial statements of Big-Tech companies prior to and during the COVID-19 pandemic, present ample, relevant economic information regarding COVID-19, and encompass the effects of COVID-19 on global economies. This study then predicts the future economic effects of COVID-19 on Big-Tech companies. The selected Big-Tech companies included in this study are Facebook, Alphabet (Google), Apple, Microsoft, and Amazon; each company saw an unprecedented rise in their yearly profits due to COVID-19 related market trends, which consequently made them applicable to study their financial gains. Finally, actions and recommendations related to corporate social responsibilities were put forward. In this study, it is worth noting that the financial actions taken by Big-Tech companies prior to and during the COVID-19 pandemic resulted in potential Antitrust infringements and potential U.S. Codes' consumer protection infringements to be addressed.

I. Introduction

The COVID-19 pandemic is vastly different in its scope and severity on the global economy than past crises ever before seen, with a vigorous recovery period to come. Countries, firms, and households alike are profoundly affected by these unprecedented health and economic struggles; the United States is a large recipient of such struggles. Unlike economic crises the United States has faced in the past like the 2008 housing crisis, there were not tell-tale signs of economic collapse to predict the COVID-19 pandemic. The 2008 housing crisis was predicted by economists due to household risks and the imbalance of the U.S. economy. This past crisis was in result of internal factors, while the COVID-19 pandemic was in result of unknown, external factors. In comparison to earlier global pandemics, COVID-19 has had worsening, more severe effects on global supply chain restraints due to increased globalization. The newly added supply shock from COVID-19 has exacerbated the already difficult global demand. COVID-19 completely altered business activities in the way corporations must source and deliver products. In this study, while no company was completely immune to COVID-19's struggles and restrictions, there was a significant trend in Big-Tech companies seeing staggering rise in their financial earnings during this time.

II. Literature Review: Relevant Business Models and Financials of Big-Tech Companies Prior to COVID-19 (2019)

Summary

The following Big-Tech companies chosen are named the "Big Five" due to their status of tremendous usage by global consumers and staggering profits. (Sen, 2017) In order to fully grasp the large market share already held by Big-Tech companies prior to COVID-19, it is important to analyze the selected Big-Tech companies' past business models and financial reports of 2019. COVID-19 had not yet reached the United States in 2019, so analyzing this data will give insight into the selected Big-Tech companies' past successes with lack of COVID-19 related market conditions.

Amazon (2019)

Amazon was chosen in this study due to their status as a Big Five tech company and unmatched successes. Amazon operates in North America, Internationally, and through their Amazon Web Services (AWS) sectors. Amazon's trial-and-error business model is almost incomparable to the business model and business actions taken by competitors. (Tucker, 2018) Amazon's increased diversification allows for its revenue stream to come from a variety of places: its online stores, hardware sales, third party-seller services, and web services. (Tucker, 2018) One of Amazon's major business strategies that aided their success in 2019 was their ability to test-and-learn to improve their market position. Amazon's services include "computing, storage, database, analytics, machine learning, and other services, as well as fulfillment, advertising, publishing, and digital content subscriptions." (Amazon, 1988) Transitioning into a third-party seller and becoming an advertising host has since monopolized Amazon relentlessly even prior to the COVID-19 pandemic. Third-party seller services alone provided Amazon with revenue totaling "$54 billion US dollars." (Amazon, 2019) Amazon also saw significant profits from carrying its household name brands such as Amazon Basic, Amazon Element, Amazon Essentials, and other relating lines. (Amazon, 2021) Additional Amazon products and technologies sold that aid their market share includes the Kindle, Fire tablets, Fire TVs, Rings, and Echo and other devices. (Amazon, 2021) Amazon also trialed brick-and-mortar bookstores, grocery options, and Amazon-Go pop-up stores. (Amazon, 2021) Amazons private brands compete directly with their third-party sellers, profiting from both. Amazon aims to make their customers ultimately and significantly loyal; this issue being Amazon's number one goal utilizing services such as Amazon Prime memberships and innovative supply chains. (Amazon, 2020) Amazon has a significant market share in the United States, but in 2019 was not as successful in the Chinese and Indian markets. (Amazon, 2019)

Amazon constantly reinvests itself through many channels of its business efforts. Additionally, Amazon has acquired businesses such as "IMDB.com." (Amazon, 1991) In 2019, Amazon's yearly net revenue was reported to be "$11,588 (Millions of US $)." (Amazon, 2019) In 2019, previous to COVID-19 conditions, Amazon's average stock price sold for "$1789.19," with an annual change of increase in "23%." (Yahoo Finance, 2021) Fully analyzing Amazon's successes in 2019 is challenging when accounting for its large acquisitions and reinvestments into itself.

Facebook (2019)

Facebook also has a place in the top Big Five tech companies with its many noteworthy successes as a social media platform in the past decade 2019 included. Facebook uses a generic cost leadership, competitive strategy to minimize prices. (Greenspan, 2018) Facebook heavily relies on its users' engagement in order to boost ad sales and keep its market share. While Facebook remains a free app to utilize and download, Facebook profits off its consumer's data and those advertising its users. The largest portion of Facebook's profits come from Facebook's mobile ad sales accordingly. (Facebook, 2019) In 2019, Facebook's business model allowed for Facebook to have a large market share due to the lack of cost of goods sold and selling costs. Despite a lot of controversy in the year 2018 from Facebook facing regulatory media pressures, in the year 2019, Facebook regained its "1.52 billion users daily," where "93% of advertising revenue comes from Facebook mobile." (Tankovska, 2021) Interestingly, Facebook gains more profit off of "growth of revenue per user" and not the assumed user increase. (Tankovska, 2021) In 2019, Facebook's fourth quarter reported its average revenue per user to be "$41.41" for its U.S and Canada users and "$8.52" for its worldwide users. (Horwitz, 2020) Facebook also owns profitable acquisitions such as Instagram, Facebook, Facebook Messenger, and WhatsApp; in 2019, Facebook aimed to increase the use of messaging tools, user commerce, shopping, creating privacy tools, and linking these apps to one another. (Horwitz, 2020) Facebook's net income for 2019 was "$18,485 (Millions of US $)." (Yahoo Finance, 2021) In 2019, Facebook stock soared up "56.6%," with an average stock price during this time of "$181.64." (Yahoo Finance, 2021) Facebook has achieved high scale and profit from this business model and through its profitable acquisitions alike.

Microsoft (2019)

Microsoft, the first debuting Big-Tech company, has had an interesting history of gaining and losing its market share in the Tech sector. The once most prominent PC market share holder was forced to rethink its business model and products once Apple's line extensions included a variety of products past the PC. (Kapko, 2015) In Microsoft's respective industries, there have long been trends of imitation issues and strong competition between goods and services. Microsoft has had significant and frequent acquisitions, such as "LinkedIn, Skype, Hotmail, GitHub, and Mojang." (Microsoft, 2020) In the year 2019, Microsoft remained a top Big-Tech company mainly from its licensing of Windows and Offices, which are constantly being adapted and remolded to be relevant to its users. Microsoft is inherently computer-dominated and has moved into a freemium business model. Microsoft products include "software, hardware, cloud-computing solutions, consulting support services, and training services." (Microsoft, 2020) For the year 2019, Microsoft reported "$39,240 (Millions of US $)." (Microsoft, 2021) In the year 2019, Microsoft's average stock price was "$130.39 dollars," with an annual change of increase in "55.26%." (Yahoo Finance, 2021) In 2019, it was obvious Microsoft was quite profitable and in continual development of innovation.

Alphabet (Google) (2019)

Alphabet, analogous to the search engine Google, has holdings of the most prominent search engine of its kind with its noteworthy brand recognition. Google is included in the Big Five tech companies under Alphabet's name. Alphabet (Google) has a highly diversified business model, creating various revenue streams and opportunities for future innovation. The bulk of Alphabet's (Google's) revenue in 2019 came from advertising services, creating a net income of "$34,343 (Millions of US $)." (Journal, W.S., 2019) In 2019, Google made up "85% of its profits" from advertising. (Trefis, 2019) Google ads are developed from a highly innovative algorithm used to create relevance to its users; Google has profiling data collected of its users to constantly recommend products its algorithm sees fit. (Grind, Schechner, et al., 2019) Other forms of revenue Google creates are related to Google Android, Google Apps, Google Cloud, self-driving cars, Google News, Google Pay, and other acquisition ventures. (Sec. Gov., 2019) Google Pay and Google News have not necessarily monetized themselves at this time, but Google Pay will in the future use its data that will contribute to ad sales and Google News will serve as a booster for ad sales. (Sec. Gov, 2019)

Google's smartphone, Android, competes side by side to iOS, dominating in markets outside the US since its release. (Cohen, 2020) Google profits off Android's "Play Store, Google Maps, and Google Search." (Sec. Gov., 2019) In 2019, Android's operating systems dominated globally as a cheaper smartphone option. (Sec. Gov., 2019) Additionally, Google has "15 million subscribers" as of 2019 for its music services. (Bloomberg, 2019) Alphabet, parent company to Google, owns a plethora of "other bets" along with Google to increase diversification efforts. (Sec. Gov., 2019) Google alone acquired YouTube for "$1.65 billion US dollars," which is now worth hundreds of billions of dollars. (Sorkin, 2006) In 2019, Alphabet's stock price was on average of "$1188.40," with an annual change rise of "29.10%." (Sec. Gov., 2019) Google has proven itself in the year 2019 to be highly diversified with significant market share in various sectors.

Apple (2019)

In 2019, Apple was highly diversified with a large market share in the tech industry, finding itself part of the Big Five tech companies. Apple is the best example of a first mover when it comes to releasing new, innovative products and services with yearly design seminars. Apple holds key strategic partnerships with manufacturers and phone providers to stay ahead of its competition accordingly. (Apple, 2021) Apple has "the highest brand value for the year 2019." (Badenhausen, 2019) Apple's net income for 2019 was "$55,256 (millions of US $)." (Sec. Gov., 2019) In 2019, Apple's average stock price totaled "$95.35," with an annual change of increase in "80.75%." (Yahoo Finance, 2021) Apple's main business strategies include its market driven innovation and design, which customers have become exclusively loyal to. Apple effectively collects consumer information from their target audiences and competitors; consequently, Apple designs and delivers the product to meet consumer's specific needs. (Moorman, 2018) Consumers constantly await the newest Apple products and iOS software yearly. In the year 2019, sales came from a majority of iPhones, followed by macs, iPads, wearables, and services. (Apple, 2019) In 2019 and beyond, Apple users are incredibly loyal to Apple products and consumers desperately wait for Apple's new product releases.

III. Data and Background: COVID-19 Case Data and Related Trends to Global Economic Changes

Relevant COVID-19 Timeline as Related to The United States

In January of 2020, COVID-19 struck Europe and China; COVID-19 had not yet reached the U.S. at this time. (Taylor, 2021) In March 2020, the cases soon after multiplied exponentially due to instances like the "Grand Princess Cruise ship" incident. (Katella, 2021) Hospitals soon after high volume public interactions were overwhelmed with patients, events were cancelled, borders were sealed, schools closed, and mandates began as a result. (Katella, 2021) The original idea of flattening the curve significantly failed due to the fact that states opened in different phases with little treatment found. (Katella, 2021) On May 28th, the COVID-19 deaths in the United States surpassed "100,000." (Katella, 2021) In July 2020, death rates soared, "3 million infections" were found, and millions of Americans quarantined with at-home work conditions and rising mental health issues. (Katella, 2021) In August, it was found that one could be re-infected with COVID-19 a second time. (Katella, 2021) On September 14th, United States' airports stopped screening international travelers with a vaccine distribution plan occurring shortly after. (Katella, 2021) In November, The US reported "100,000 cases in only one day." (Katella, 2021) Finally, vaccinations were made available in December of 2020, but COVID-19's new variants pose unseen threat. (Katella, 2021) Future effects of COVID-19 on the world are yet unknown.

Global Economic Data in Result of the COVID-19 Pandemic

The following data helps visually aids the effects of COVID-19 on the world as it pertains to a country's GDP per capita, a country's confirmed death rates, global consumer trends, a country's travel controls, and global supply chain restrictions. It is important to visually interpret the COVID-19 global death rates alongside a country's economic data to understand the relationship of the two. In relation to the Big Five tech companies' financial gains during this time period, one must note that Amazon, Facebook, Microsoft, Alphabet (Google), and Apple are American firms with global operations.

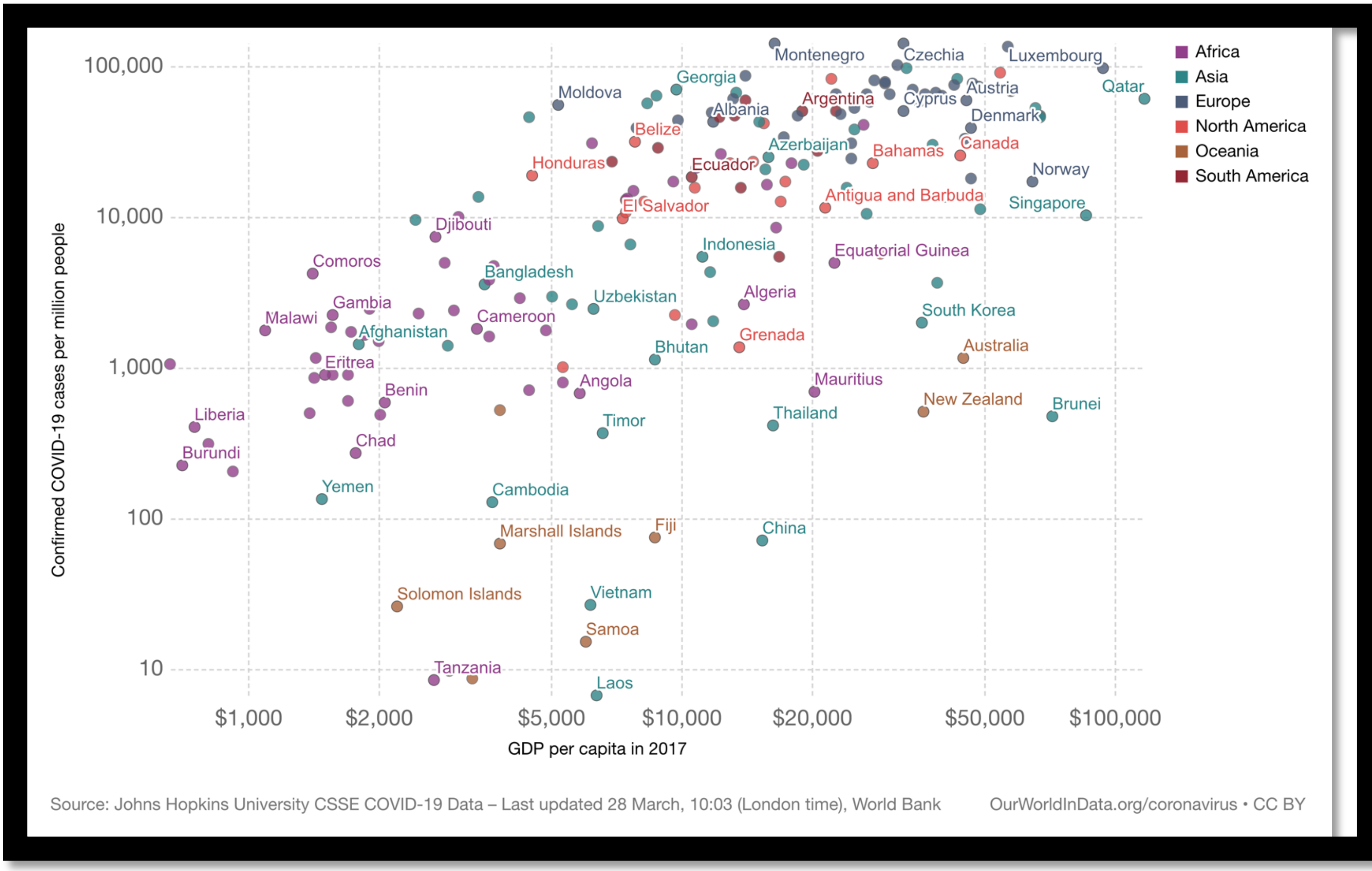

***Figure 1*: Cumulative Confirmed COVID-19 Cases per Million Versus GDP per Capita, March 27, 2021**
Roser, M., Ritchie, H., Ortiz-Ospina, E., & Hasell, J. (2020, March). Coronavirus Pandemic (COVID-19) - Statistics and Research. Retrieved from https://ourworldindata.org/coronavirus

In ***Figure 1***, globally confirmed COVID-19 cases per country were contrasted with the country's GDP per capita that was recorded in the year 2017. (Johns Hopkins University, 2021) The United States recorded that "91,294.38 per million people" had a confirmed COVID-19 case. (John Hopkins University, 2021) Such record high number of cases recorded by the United States is then contrasted with the United States' GDP per capita of "$54,225." (Johns Hopkins University, 2021) ***Figure 1*** serves the purpose of showing that GDP per capita has had varying correlation to the vast spread of COVID-19 across continents. ***Figure 1*** exhibits China having a lower GDP per capita and a lower number of cases in comparison to the United States. It should be noted that China, with a GDP per capita of less than "$20,000" had cases lower than "100 per million people" recorded. (Johns Hopkins University, 2021) After the SARS outbreak in 2002, China chose to improve their healthcare sectors by "$850 million" for future pandemic outbreaks. (Huang, 2003) Asian markets were significantly affected due to COVID-19 market conditions, creating downward trends in the Shanghai Stock Exchange Composite Index; likewise, Asia lost out on hosting the Tokyo 2020 Olympic games which would have a positive effect on Asian markets. (Hungerford, 2020)

COVID-19 served the purpose of exposing countries with a lower GDP per capita having better control of a global pandemic than those countries with higher GDP per capita. However, this figure does not display the spread of vaccines distributed versus a country's GDP per capita.

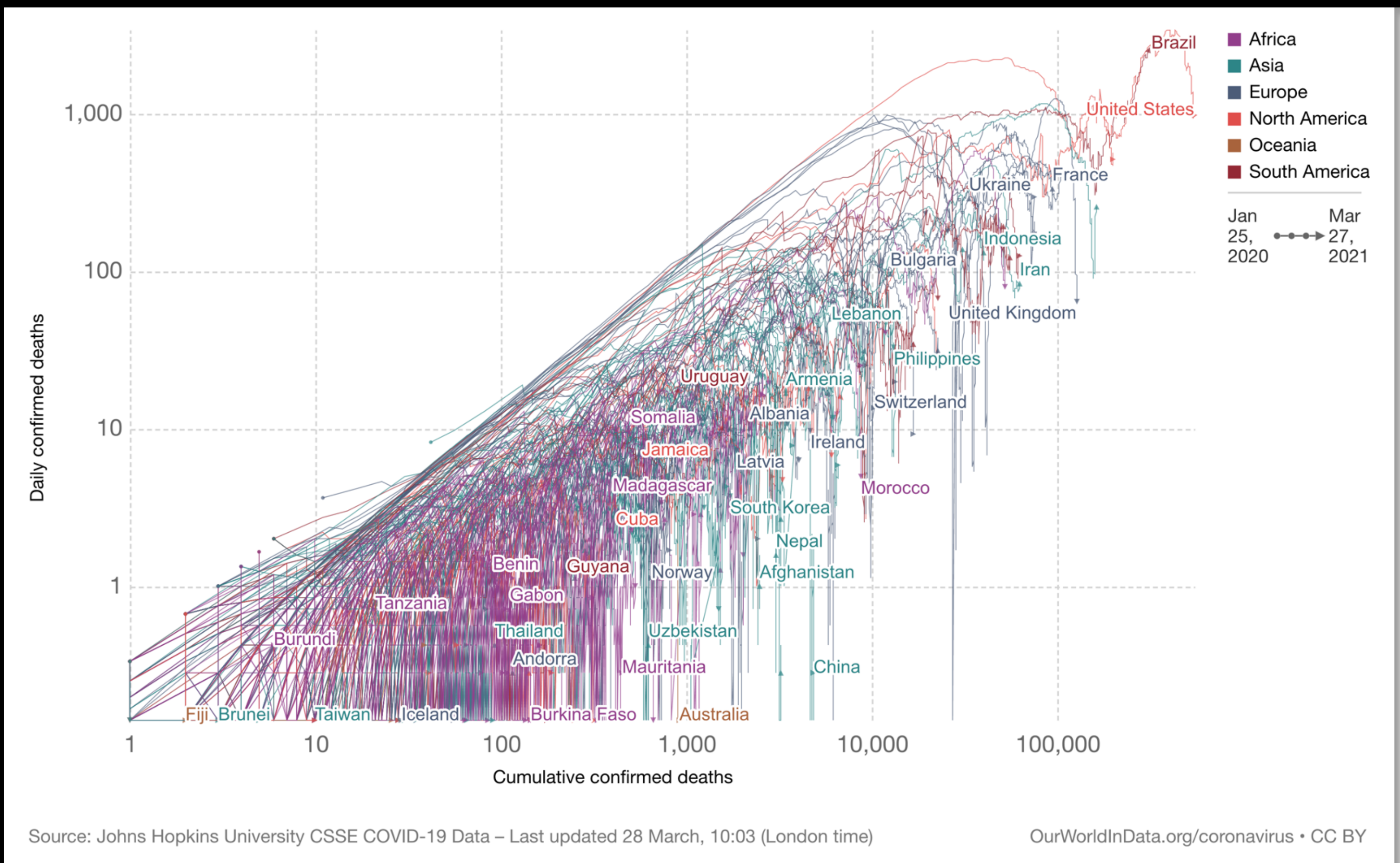

Figure 2: **Daily Versus Cumulative Confirmed Deaths Due to COVID-19, March 27, 2021 Roser, M., Ritchie, H., Ortiz-Ospina, E., & Hasell, J. (2020, March). Coronavirus Pandemic (COVID-19) - Statistics and Research. Retrieved from https://ourworldindata.org/coronavirus**

Figure 2 depicts the relationship between the cumulative confirmed deaths and the daily confirmed deaths over the course of COVID-19 in a specific country. (Johns Hopkins University, 2021) It is important to compare both the daily confirmed deaths of a country with the overall cumulative confirmed deaths to show the severity over time. The time frame depicted in ***Figure 2*** ranges from January 25, 2020 to March 27, 2021 in order to exhibit COVID-19's death toll over a wide range of dates. (Johns Hopkins, 2021) ***Figure 2*** exhibits the United States having exponentially more daily versus cumulative confirmed deaths than most countries listed, of all countries provided the United States has the most confirmed deaths in totality. (Johns Hopkins, 2021) This chart depicts Brazil, a developing country, having very similar confirmed daily versus cumulative confirmed deaths to the United States. ***Figure 2*** is important in understanding over time the effects of COVID-19 on the United States in comparison to similar and even lower GDP countries from Africa, Asia, Europe, North America, Oceania, and South America. While each country had a variety of influences that affected why and how their confirmed deaths rose so high, it is baffling the United States over the course of the presented figure, had the highest death tolls as a highly developed country.

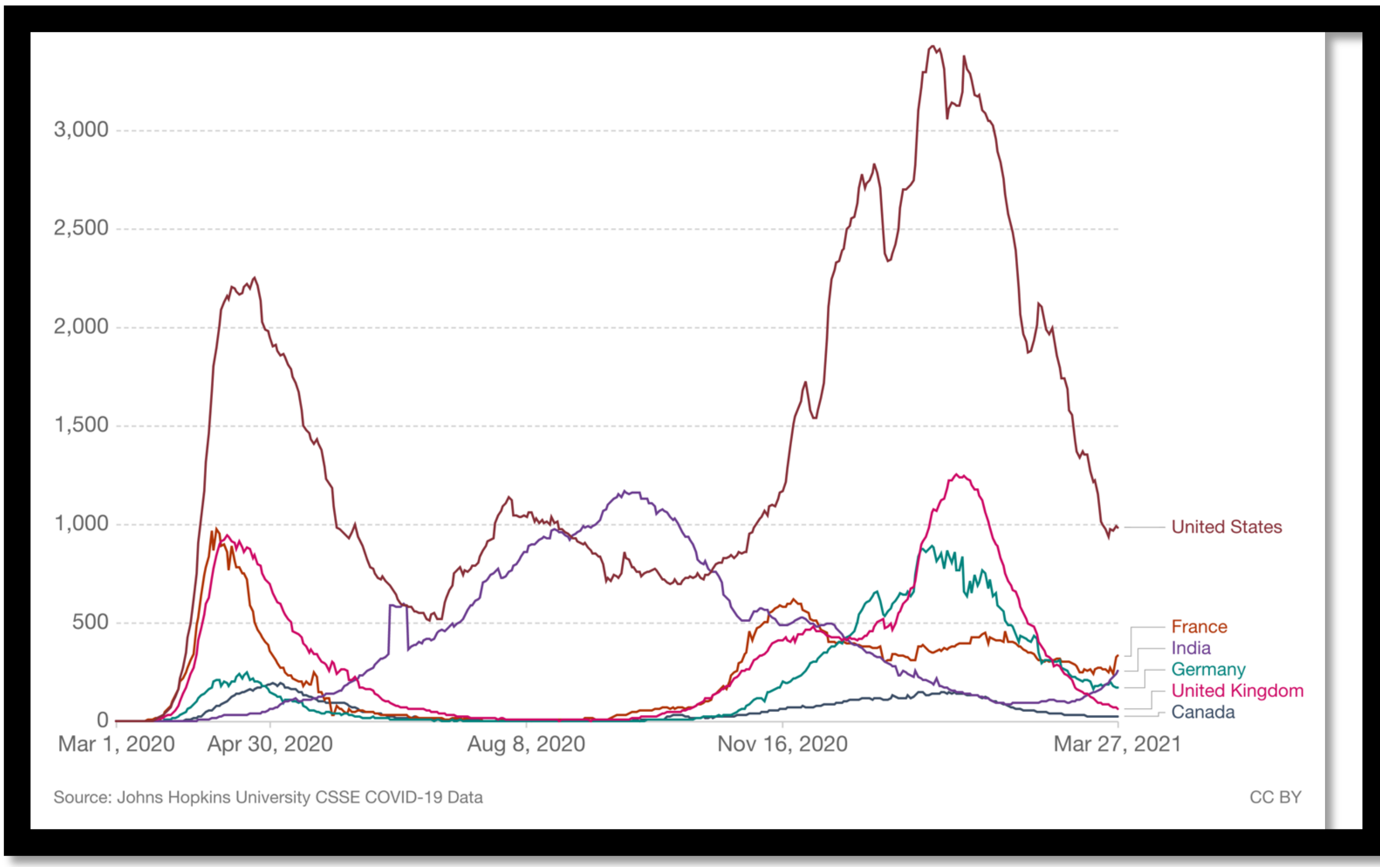

***Figure 3*: Daily New Confirmed COVID-19 Deaths, Johns Hopkins University (2021) Roser, M., Ritchie, H., Ortiz-Ospina, E., & Hasell, J. (2020, March). Coronavirus Pandemic (COVID-19) - Statistics and Research. Retrieved from https://ourworldindata.org/coronavirus**

In ***Figure 3***, in comparison to the previous figure, it is worth noting that the listed countries of France, India, Germany, the United Kingdom, and Canada are those comparable to the United States in relation to GDP per capita and development. ***Figure 3*** reports data from March 1, 2020 to March 27, 2021 to show only a little over a year of confirmed death data per country. (Johns Hopkins, 2021) The figure presents questions of how government, firms, and individual households contributed to such a vast death rate for countries of similar standards of living. During the time period shown, with only a short-term period of India reporting more confirmed deaths than America, the United States held the record for confirmed deaths by a large percentage. Interestingly, “more Americans have died from COVID-19 than American soldiers in both World Wars and Vietnam, combined,” which signifies that “the death toll means 1 out of 670 Americans have died from the virus.” (Tompkins, L., Smith, M., Bosman, J., & Pietsch, B, 2021) The United States saw such a significant devastation of COVID-19 confirmed deaths at an exponentially high rate.

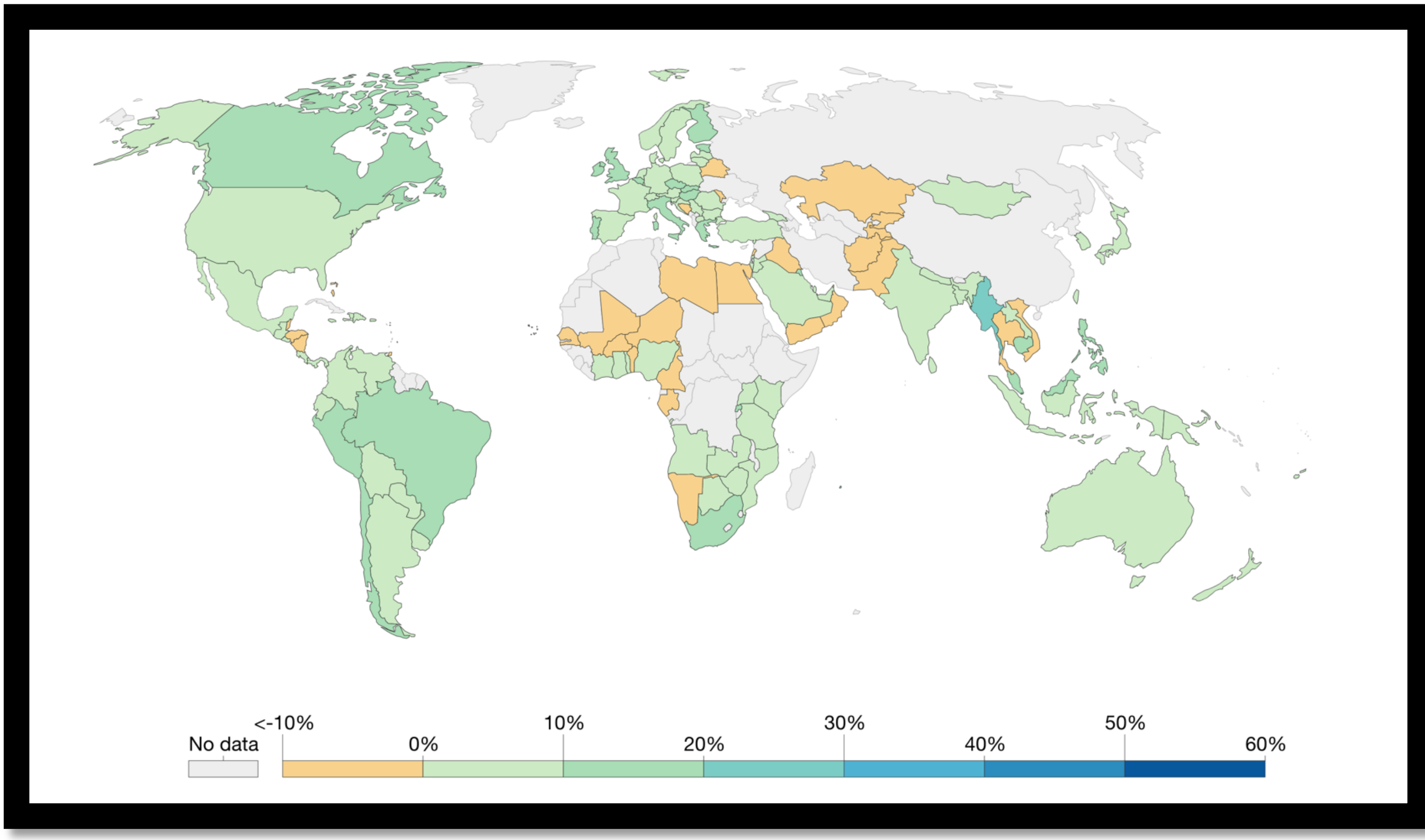

Figure 4: **Map of Time Spent at Home in Comparison to Before the Pandemic, Google LLC (2020) "Google COVID-19 Community Mobility Reports". Feb 17, 2020 – Mar 23, 2021**

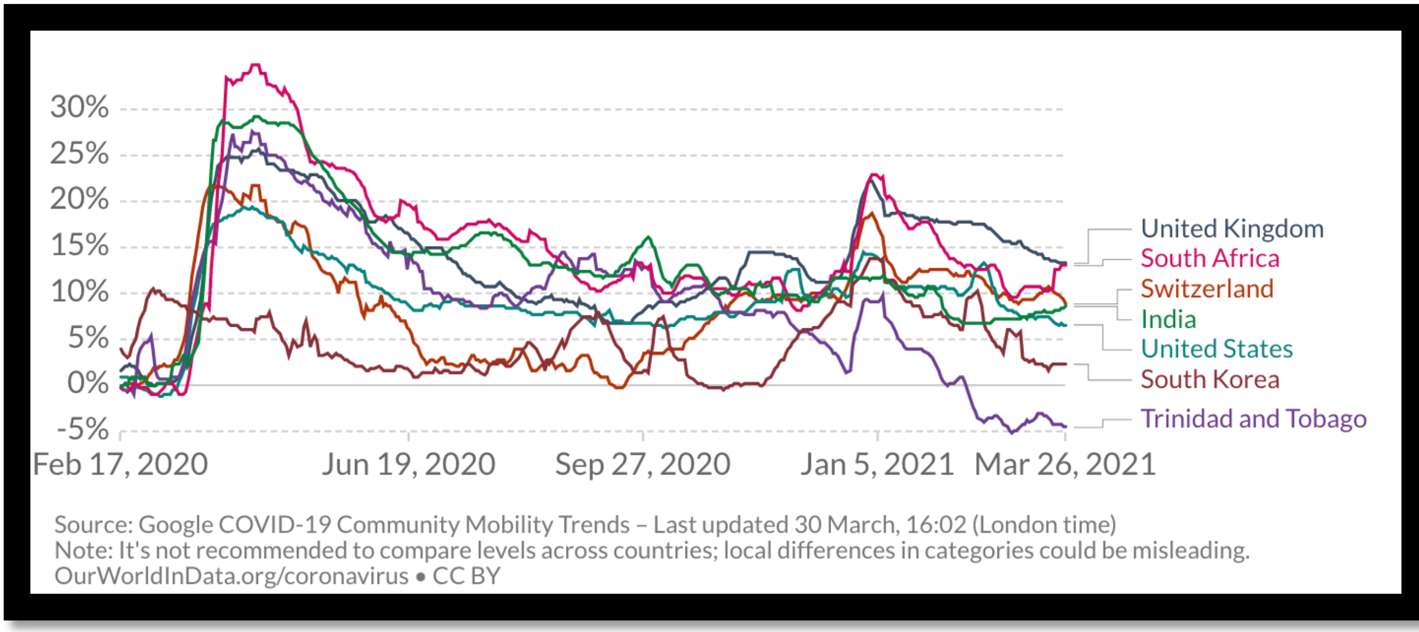

Figure 5: **Chart of Time Spent at Home in Comparison to Before the Pandemic, Google LLC "Google COVID-19 Community Mobility Reports". Feb 17, 2020 – Mar 23, 2021**

Figure 4 and ***Figure 5*** exhibit the percent change of individuals staying at home in comparison to before the COVID-19 pandemic stay-at-home orders and preventative measures rising. It is important to track the mobility of individuals across countries to measure for consumer trends. Stay-at-home orders created a steep rise in remote learning, remote working, and little to no travel and tourism. (Donthu, Gustafsson, 2020) In ***Figure 5,*** February of 2020, we see that less than "5%" of citizens choosing to stay at home for the listed countries. (Google, 2021) Interestingly, the chart depicts the United States having a much lower time at home stay than countries with smaller death tolls. It is worth noting this figure does not give a note of the percent of COVID-19 cases, but only shows the percent change in those choosing to stay home. These figures are important in understanding global market constrictions and restrictions of global economies due to a rise and fall of citizens staying at home.

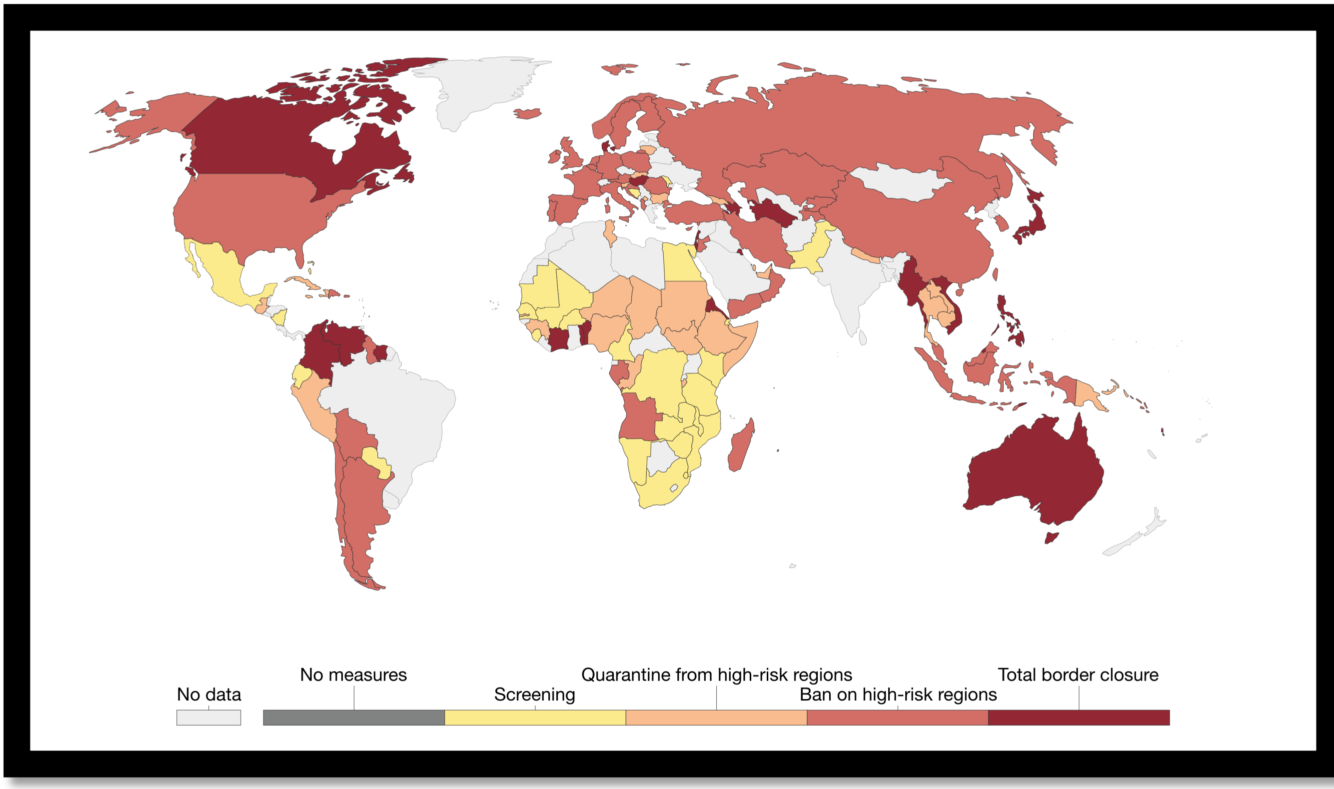

Figure 6: **International Travel Controls, March 28, 2021**
"A Global Panel Database of Pandemic Policies (Oxford COVID-19 Government Response Tracker)." Nature Human Behaviour.
Hale, T., Angrist, N., Goldszmidt, R., Kira, B., Petherick, A., Phillips, T., . . . Tatlow, H. (2021, March 08). A Global Panel Database of Pandemic Policies (Oxford COVID-19 Government Response Tracker). Retrieved April 1, 2021, from https://www.nature.com/articles/s41562-021-01079-8

Figure 6 exhibits each country's measures of international travel controls. This chart exhibits the political decisions made by countries that either allow for free travel and trade during or put harsh measures in place to domestically control the virus. The range of political decisions made varies from no measures made to total border closures. This figure exhibits the correlation between confirmed cases and international travel controls. The United States is depicted to have a ban on high-risk regions at the time shown, but had the highest death toll of all countries surveyed due to other matters. Countries of similar GDP per capita to the United States like Canada enforced a total border closure, which reported a significantly lower death toll than the United States. Finally, this figure depicts the global trading and tourism challenges that are the driving development of the global economy. The strict travel controls enforced restrict the trade of human capital and capital goods needed for a country's economy to thrive.

United States Relevant COVID-19 Stimulus Packages and Federal Reserve Regulatory Actions to Increase Consumer Spending and Decrease Consumer Hardships

The United States aided Americans at this time of economic struggles with a variety of methods. On March 27, 2020, the CARES Act was passed and on July 27, 2020 the HEALS Act was introduced. (U.S. Congress, 2020) The CARES Act and the HEALS act created COVID-19 relief for the economic hardships of the American people. In order to battle a volatile, unprecedented market, the Federal Reserve actively put into order plans of cutting rates to "0" and installing a quantitative easing program. (International Monetary Fund, 2021) The International Monetary Fund reported that the "Federal funds rate were lowered by 150bp in March to 0-0.25 bp... [and the] purchase of treasury and agency securities [were made] … [and they] lowered [the] cost of discount window lending." (International Monetary Fund, 2021) Facilities to support the flow of credit included "the Commercial Paper Funding Facility, the Primary Dealer Debt Facility, the Money Market Mutual Fund Liquidity Facility *(MMLF),* the Primary Market Corporate Credit Facility, the Secondary Market Corporate Credit Facility, the Term Asset-Backed Securities Loan Facility, the Paycheck Protection Program Liquidity Facility (PPPLF)*,* the Main Street Lending Program*,* and the Municipal Liquidity Facility*."* (International Monetary Fund, 2021) Additionally, other federal regulatory actions included "lower[ing] the community bank leverage ratio to 8 percent," and offering "PPP covered loans" to "receive a zero percent risk weight." (International Monetary Fund, 2021) It is important to note the aid of the United States government and the federal policies that were passed at this time give insight into consumer struggles and provided aids to American businesses.

Specific Consumer Trends and Rights Relevant to COVID-19

COVID-19 has created very specific needs for consumers. COVID-19 excelled some industries and disrupted others. Industries that profited from the COVID-19 pandemic-related trends were grocery stores, cleaning supply companies, streaming services, delivery services, and monthly – subscription services. (Ludwig, 2020) Big-Tech companies performed especially well due to stay at home orders and an increased reliance on their services. Industries that have very apparently suffered include hotels, restaurants, and aviation. It is unknown which consumer behaviors and trends have changed for the short-term due to COVID-19 or those that will stay long-term past COVID-19. Consumer trends that occurred during the pandemic and that may remain past the pandemic include online commerce, remote learning, remote working, entertainment, decreased tourism, contactless ordering and pickup, and increased sanitization.

Consumers during this time should be aware that they still hold the "power of safety, to be informed, to choose, and to be heard" by Big-Tech businesses as stated by President Kennedy. (Guest, 2012) There is a large variety of Federal Consumer Protection Agencies that have been put in place by the United States government to protect the American people and ensure their rights. Federal Consumer Protection agencies that ensure such protections and rights include the Federal Trade Commission, the Food & Drug Administration, the Consumer Product Safety Commission, and many others.

Consumer protection is of high priority in these unprecedented times. Big-Tech companies and the American government should provide its primary and secondary stakeholders with "the right to a job, to a living wage, to treatment with respect and dignity as a person, to safe and healthful working conditions, to a non-discriminatory and non-threatening workplace, to freedom of job choice and movement, to reward and advancement for good performance, to appeal and redress for unfair treatment, to recompense for rights violations" for a better society in turn. (Weber, 2018)

With consumer privacy issues rising exponentially perpetuated by Big-Tech companies, there are questions of stripping the U.S. Code 230 that protects Big-Tech companies from their limited liability. Big-Tech companies have been able to act as a publisher under this code by removing or presenting data without being legally liable for their publishing and censoring acts. (47 U.S. Code, § 230) In order to fully grasp the large hold these Big Five tech companies possess on American consumers, it is important to recognize that the American government currently allows for this grasp.

IV. Big-Tech Companies' reported Income Statements in 2019 and 2020

Summary

The Big Five technology companies selected for this study have monopolized their platforms and are becoming drastically stronger every day, especially in COVID-19 related market conditions. In October of 2020, Apple, Microsoft, Amazon, and Alphabet each passed the US "$1 trillion dollar" mark. (Sheetz, 2020). Skeptics compare financial gains of these Big-Tech companies to a "Second Gilded Age." (Reich, 2018) In an era of large-scale online commerce, corporations are monopolizing their platforms, causing antitrust disputes and consumer privacy issues. The reforms that the U.S. government will carry out to solve these issues in the future are still unknown. In order to fully understand the recent astronomical gains of these Big-Tech companies during COVID-19, it is vital to analyze Big-Tech companies' income statements from 2019 and 2020.

Amazon

Amazon's Income Statement	TTM	**12/31/2020**	**12/31/2019**
Total Revenue	386,064,000,000	386,064,000,000	280,522,000,000
Operating Revenue	386,064,000,000	386,064,000,000	280,522,000,000
Cost of Revenue	291,824,000,000	291,824,000,000	205,768,000,000
Gross Profit	94,240,000,000	94,240,000,000	74,754,000,000
Operating Expense	71,341,000,000	71,341,000,000	60,213,000,000
Selling General and Administration	28,676,000,000	28,676,000,000	24,081,000,000
General and Administrative Expense	6,668,000,000	6,668,000,000	5,203,000,000
Other G and A	6,668,000,000	6,668,000,000	5,203,000,000
Selling and Marketing Expense	22,008,000,000	22,008,000,000	18,878,000,000
Research And Development	42,740,000,000	42,740,000,000	35,931,000,000
Other Operating Expenses	-75,000,000	-75,000,000	201,000,000
Operating Income	22,899,000,000	22,899,000,000	14,541,000,000
Net Non-Operating Interest Income Expense	-1,092,000,000	-1,092,000,000	-768,000,000
Interest Income Nonoperating	555,000,000	555,000,000	832,000,000
Interest Expense Nonoperating	1,647,000,000	1,647,000,000	1,600,000,000
Other Income Expense	2,371,000,000	2,371,000,000	203,000,000

Gain On Sale Of Security			203,000,000
Other Non-Operating Income Expenses	2,371,000,000	2,371,000,000	203,000,000
Pretax Income	24,178,000,000	24,178,000,000	13,976,000,000
Tax Provision	2,863,000,000	2,863,000,000	2,374,000,000
Earnings from Equity Interest Net of Tax	16,000,000	16,000,000	-14,000,000
Net Income Common Stockholders	21,331,000,000	21,331,000,000	11,588,000,000
Net Income	21,331,000,000	21,331,000,000	11,588,000,000
Net Income Including Noncontrolling Interests	21,331,000,000	21,331,000,000	11,588,000,000
Net Income Continuous Operations	21,331,000,000	21,331,000,000	11,588,000,000
Diluted NI Available to Common Stockholders	21,331,000,000	21,331,000,000	11,588,000,000
Basic EPS			23.46
Diluted EPS			23.01
Basic Average Shares			494,000,000
Diluted Average Shares			504,000,000
Total Operating Income as Reported	22,899,000,000	22,899,000,000	14,541,000,000
Total Expenses	363,165,000,000	363,165,000,000	265,981,000,000
Net Income from Continuing and Discontinued Operation	21,331,000,000	21,331,000,000	11,588,000,000
Normalized Income	21,331,000,000	21,331,000,000	11,588,000,000
Interest Income	555,000,000	555,000,000	832,000,000
Interest Expense	1,647,000,000	1,647,000,000	1,600,000,000
Net Interest Income	-1,092,000,000	-1,092,000,000	-768,000,000
EBIT	25,825,000,000	25,825,000,000	15,576,000,000
EBITDA	51,076,000,000		
Reconciled Cost of Revenue	291,824,000,000	291,824,000,000	205,768,000,000
Reconciled Depreciation	25,251,000,000	25,251,000,000	21,789,000,000
Net Income from Continuing Operation Net Minority Interest	21,331,000,000	21,331,000,000	11,588,000,000
Total Unusual Items Excluding Goodwill			203,000,000
Total Unusual Items			203,000,000
Normalized EBITDA	51,076,000,000	51,076,000,000	37,365,000,000
Tax Rate for Calcs	0.118	0.118	0.17
Tax Effect of Unusual Items	0	0	0

Figure 7: **Amazon's Yearly Income Statement, Including TTM, and Ending Year Data for Years 2020 and 2019**
Yahoo Finance. (2021, March 30). Amazon.com, Inc. (AMZN) Income Statement. Retrieved from https://finance.yahoo.com/quote/AMZN/financials?p=AMZN

When comparing financial statements from 2019 to 2020, the total revenue growth alone can provide insight into how much Amazon has profited from the COVID-19 consumer demand it serves. For the year 2020, Amazon recorded record high profits. During the COVID-19 period, Amazon has heavily profited from online commerce. Amazon's online commerce has received cult following of monthly subscription services and additional streaming services; these services were up "35%" due to COVID-19 market trends. (Rey, 2020) Prime users pay "$119 US dollars" a year to unlock the benefits Amazon gives its customers: fast shipping services and media streaming services. (Amazon, 2011).

As previously mentioned, in 2019, Amazon's main business goal was to no longer just sell goods online, but to operate as a third- party platform for other firms to utilize. Amazon's third-party shipping and selling strategies give Amazon an incomparable advantage to competitors for 2020. Also previously mentioned, when analyzing Amazon's financial statements, it is difficult to grasp the totality of its profits due to reinvesting into itself during 2020. Amazon's reported cash flows show that the company reinvests nearly all of its cash back into its own company. (Yahoo Finance, 2021) Additionally, Amazon does not pay dividends or buy back shares, which creates challenges in understanding a portion of its financial statements. (Yahoo Finance, 2021) In *Figure 7*, Amazon's net sales increased a total of "37%" in the year 2020, totaling "$386.1 billion dollars." (Yahoo Finance, 2021) Amazon's net income increased to "$21.3 billion dollars" compared to a net income of "$11.6 billion dollars" in 2019. (Yahoo Finance, 2021) The suprisingly high difference between 2019 and 2020 net income is attributed to COVID-19.

In the fourth quarter of 2020, Amazon reported the largest quarter revenue of "$125.56 billion dollars." (Yahoo Finance, 2021) Amazon had to hire "175,000 employees" in the fourth quarter alone to keep up with its demand, totaling "1.3 million employees" globally. (Weise, 2020) Amazon saw increase in all revenue streams, except for a decreased report of "8% in its physical stores." (Stevens, 2020) In 2020, revenue per share is calculated to be "$772.13" for its (trailing twelve months). (Yahoo Finance, 2021) Amazon's 2020, quarterly earnings growth was a whopping "121%" (year over year) and a quarterly revenue growth of "43.6%" (year over year). (Yahoo Finance, 2021) Amazon's profit margin is calculated to be 5.53% and its operating margin is calculated to be 5.93%.

Amazon sales far surpassed its projections, especially for the 4th quarter earnings. (Yahoo Finance, 2021) Amazon, along with other large Big-Tech companies, were given various tax exemptions from the American government which skyrocketed Amazon's financial performance even more in 2020. Expenses across the board increased substantially, but Amazon improved workplace conditions and thereafter increased its employee retention as well.

Facebook

Facebook's Income Statement	**ttm**	**12/31/2020**	**12/31/2019**
Total Revenue	85,965,000,000	85,965,000,000	70,697,000,000
Operating Revenue	84,169,000,000	84,169,000,000	69,655,000,000
Cost of Revenue	16,692,000,000	16,692,000,000	12,770,000,000
Gross Profit	69,273,000,000	69,273,000,000	57,927,000,000
Operating Expense	36,602,000,000	36,602,000,000	33,941,000,000
Selling General and Administration	18,155,000,000	18,155,000,000	20,341,000,000
General and Administrative Expense	6,564,000,000	6,564,000,000	10,465,000,000
Other General and Administration	6,564,000,000	6,564,000,000	10,465,000,000
Selling and Marketing Expense	11,591,000,000	11,591,000,000	9,876,000,000
Research and Development	18,447,000,000	18,447,000,000	13,600,000,000
Operating Income	32,671,000,000	32,671,000,000	23,986,000,000
Net Non-Operating Interest Income Expense	672,000,000	672,000,000	904,000,000

Interest Income Non-Operating	672,000,000	672,000,000	924,000,000
Interest Expense Non-Operating			20,000,000
Total Other Finance Cost	-509,000,000	-509,000,000	-826,000,000
Other Income Expense	-163,000,000	-163,000,000	-78,000,000
Gain on Sale of Security	-129,000,000	-129,000,000	-105,000,000
Other Non-Operating Income Expenses	-34,000,000	-34,000,000	27,000,000
Pretax Income	33,180,000,000	33,180,000,000	24,812,000,000
Tax Provision	4,034,000,000	4,034,000,000	6,327,000,000
Net Income Common Stockholders	29,146,000,000	29,146,000,000	18,485,000,000
Net Income	29,146,000,000	29,146,000,000	18,485,000,000
Net Income Including Noncontrolling Interests	29,146,000,000	29,146,000,000	18,485,000,000
Net Income Continuous Operations	29,146,000,000	29,146,000,000	18,485,000,000
Other under Preferred Stock Dividend	0	0	0
Average Dilution Earnings			0
Diluted NI Available to Common Stockholders	29,146,000,000	29,146,000,000	18,485,000,000
Basic EPS			6.48
Diluted EPS			6.43
Basic Average Shares			2,854,000,000
Diluted Average Shares			2,876,000,000
Total Operating Income as Reported	32,671,000,000	32,671,000,000	23,986,000,000
Total Expenses	53,294,000,000	53,294,000,000	46,711,000,000
Net Income from Continuing and Discontinued Operation	29,146,000,000	29,146,000,000	18,485,000,000
Normalized Income	29,259,262,000	29,259,262,000	18,563,225,000
Interest Income	672,000,000	672,000,000	924,000,000
Interest Expense			20,000,000
Net Interest Income	672,000,000	672,000,000	904,000,000
EBIT	32,671,000,000	32,671,000,000	24,832,000,000
EBITDA	39,533,000,000		
Reconciled Cost of Revenue	16,692,000,000	16,692,000,000	12,770,000,000
Reconciled Depreciation	6,862,000,000	6,862,000,000	5,741,000,000
Net Income from Continuing Operation Net Minority Interest	29,146,000,000	29,146,000,000	18,485,000,000
Total Unusual Items Excluding Goodwill	-129,000,000	-129,000,000	-105,000,000
Total Unusual Items	-129,000,000	-129,000,000	-105,000,000
Normalized EBITDA	39,662,000,000	39,662,000,000	30,678,000,000
Tax Rate for Calcs	0.122	0.122	0.255
Tax Effect of Unusual Items	-15,738,000	-15,738,000	-26,775,000

Figure 8**: Facebook's Yearly Income Statement, Including TTM, and Ending Year Data for Years 2020 and 2019**
Yahoo Finance. (2021, April 01). Facebook, Inc. (FB) Income Statement. Retrieved from https://finance.yahoo.com/quote/FB/financials?p=FB

In 2020, Facebook had a controversial and difficult year many means, but still saw a significant profit from its platform. In a year of political unrest, decreased small and large business ad purchases due to business closures, increased boycotting of Facebook's platform by individuals and firms, and infringement of user's privacies, Facebook still profited frfom COVID-19 related market conditions. (Yahoo Finance, 2021) The usage of social medias, especially in an election year, boosted Fakebook's sales especially when users were quarantined in their homes.

Facebook, during the year 2020, reported a better than projected revenue, but did not perform as expected in their earnings. (Yahoo Finance, 2021) Facebook has a large consumer loyalty and Facebook still holds the ability to control user content to maximize usage. Small and large companies, even in a pandemic, know Facebook ads have a great return on their investment. Non-business, Facebook users also utilize Facebook's app function marketplace to sell their personal items and services. While television ads fail to give a large return on investment, it is clear digital advertising is a consumer trend that will remain for years. Facebook's acquisitions are a long list of companies, which keep the tech giant diversified and afloat in times of a pandemic. Other media platforms owned by Facebook include "Instagram and WhatsApp" which prevailed in times of social distancing and increased media usage with stay-at-home orders. (Rodriguez, 2019) COVID-19 represents a very large economic contraction, but Facebook remains relatively immune to much of its effects.

In comparison to 2019, it is clear that Facebook, while facing various unprecedented challenges, profited from COVID-19 related trends. In ***Figure 8*,** Facebook's Gross Profit for 2020 was "69,273,000,000." (Yahoo Finance, 2021) Facebook's profit margin is calculated to be 33.9% and its operating margin is calculated to be 38.01%. Facebook's revenue per share for 2020 was "$30.15." (Yahoo Finance, 2021) For 2020, Facebook's quarterly revenue growth (year over year) is calculated to be 33.2% and quarterly earnings growth (year over year) is calculated to be 52.7%. (Yahoo Finance, 2021) Net Income available to common stockholders for 2020 was reported to be "$21.15 billion dollars." (Yahoo Finance, 2021)

Figure 8 serves the purpose of comparing Facebook's 2019 financial report to its 2020 financial report. Similar to Amazon, Facebook reported at the year's end of 2020. Shortly after this 2020 financial report, January 2021 share repurchases aided an additional "$25 billion dollars" in common stock along with the "$34 billion dollar" repurchase of common stock. (Yahoo Finance, 2021) Similar to Amazon, Facebook spent a tremendous amount of money to improve infrastructure and improe itself in the era of COVID-19 consumer demand. Online commerce heavily aided Facebook's reported revenues, even with decreased demands in Facebook ads at the peak of COVID-19 due to business closures.

Microsoft

Microsoft's Income Statement	**ttm**	**06/30/2020**	**06/30/2019**
Total Revenue	153,284,000,000	143,015,000,000	125,843,000,000
Operating Revenue	153,284,000,000	143,015,000,000	125,843,000,000
Cost of Revenue	48,510,000,000	46,078,000,000	42,910,000,000
Gross Profit	104,774,000,000	96,937,000,000	82,933,000,000
Operating Expense	44,619,000,000	43,978,000,000	39,974,000,000
Selling General and Administration	24,693,000,000	24,709,000,000	23,098,000,000
General and Administrative Expense	5,187,000,000	5,111,000,000	4,885,000,000

Other G and A	5,187,000,000	5,111,000,000	4,885,000,000
Selling and Marketing Expense	19,506,000,000	19,598,000,000	18,213,000,000
Research and Development	19,926,000,000	19,269,000,000	16,876,000,000
Operating Income	60,155,000,000	52,959,000,000	42,959,000,000
Net Non-Operating Interest Income Expense	-2,757,000,000	-2,591,000,000	-2,686,000,000
Interest Income Non-Operating		2,680,000,000	
Interest Expense Non-Operating	2,460,000,000	2,591,000,000	2,686,000,000
Other Income Expense	3,328,000,000	2,668,000,000	3,415,000,000
Gain on Sale of Security	3,261,000,000	2,708,000,000	3,472,000,000
Special Income Charges			0
Other Non-Operating Income Expenses	67,000,000	-40,000,000	-57,000,000
Pretax Income	60,726,000,000	53,036,000,000	43,688,000,000
Tax Provision	9,416,000,000	8,755,000,000	4,448,000,000
Net Income Common Stockholders	51,310,000,000	44,281,000,000	39,240,000,000
Net Income	51,310,000,000	44,281,000,000	39,240,000,000
Net Income Including Non-Controlling Interests	51,310,000,000	44,281,000,000	39,240,000,000
Net Income Continuous Operations	51,310,000,000	44,281,000,000	39,240,000,000
Diluted NI Available to Common Stockholders	51,310,000,000	44,281,000,000	39,240,000,000
Basic EPS		5.82	5.11
Diluted EPS		5.76	5.06
Basic Average Shares		7,610,000,000	7,673,000,000
Diluted Average Shares		7,683,000,000	7,753,000,000
Total Operating Income as Reported	60,155,000,000	52,959,000,000	42,959,000,000
Total Expenses	93,129,000,000	90,056,000,000	82,884,000,000
Net Income from Continuing and Discontinued Operation	51,310,000,000	44,281,000,000	39,240,000,000
Normalized Income	48,554,641,339.789	42,019,820,000	36,122,144,000
Interest Income		2,680,000,000	
Interest Expense	2,460,000,000	2,591,000,000	2,686,000,000
Net Interest Income	-2,757,000,000	-2,591,000,000	-2,686,000,000
EBIT	63,186,000,000	55,627,000,000	46,374,000,000
EBITDA	75,214,000,000		
Reconciled Cost of Revenue	48,510,000,000	46,078,000,000	42,910,000,000
Reconciled Depreciation	12,028,000,000	12,796,000,000	11,682,000,000
Net Income from Continuing Operation Net Minority Interest	51,310,000,000	44,281,000,000	39,240,000,000
Total Unusual Items Excluding Goodwill	3,261,000,000	2,708,000,000	3,472,000,000
Total Unusual Items	3,261,000,000	2,708,000,000	3,472,000,000
Normalized EBITDA	71,953,000,000	65,715,000,000	54,584,000,000
Tax Rate for Calcs	0.155	0.165	0.102
Tax Effect of Unusual Items	505,641,339.789	446,820,000	354,144,000

***Figure 9*: Microsoft's Yearly Income Statement, Including TTM, and Mid- Year Data for Years 2020 and 2019**

Yahoo Finance. (2021, April 01). Microsoft Corporation (MSFT) Balance Sheet. Retrieved from https://finance.yahoo.com/quote/MSFT/balance-sheet?p=MSF

Contrasted to 2019, Microsoft has made considerable profits from COVID-19 consumer trends. In 2020, Microsoft's main revenue streams stem from its licensing and unmatched software programs that have been bundled to reach a wide variety of consumers. Microsoft's acquisition of human capital and new technologies is dire to keep Microsoft competitive to other cloud-computing companies. Due to COVID-19, Microsoft Office and Azure are sold in high demands to individuals and big businesses in need of their services. (Choney, Roach, et al., 2020) Microsoft reported significant earnings, especially with the stay-at-home order creating the need for programs like Microsoft Teams and One-Note. First released in 2017, Microsoft Teams offers users a way to collaborate professionally for workplace chats and videoconferencing. (Koenigsbauer, 2020) Due to remote work, Microsoft Teams is heavily used. One-Note can be used as a note-taking service for remote employees or students to participate in remote learning and work. Microsoft's applications are efficiently integrated with one another, which creates at-home workplace ease. In the year 2020, Microsoft cloud computing services rose sharply "50%." (Nasdaq, 2020) Working and learning from home was a top consumer trend that Microsoft profited from. LinkedIn fell shortly during COVID-19, but did recover, which aided Microsoft's profits likewise. (LinkedIn, 2020) LinkedIn saw recoveries through an increase in advertisements. (LinkedIn, 2020) Moreover, due to the emergence of COVID-19, sales of Xbox gaming and similar software sales rose. Despite outsourcing struggles, Microsoft's hardware remained profitable in the year 2020 and subscriptions linked to hardware sales also grew. (Microsoft, 2020)

In *Figure 9*, it is worth noting that Microsoft reports its yearly income statement on June 30th in comparison to the other Big-Tech companies. Microsoft reported a gross profit of "96.94 billion dollars" for 2020 on June 30th. (Yahoo Finance, 2021) Microsoft's profit margin is calculated to be 33.47% with an Operating Margin of 39.24% (trailing twelve months). Microsoft had quarterly revenue growth of "16.7%" (year over year) and quarterly earnings growth of "32.7%" (year over year). (Yahoo Finance, 2021) Microsoft's revenue per share is calculated to be "$20.23." (Yahoo Finance, 2021) Net Income available to common stockholders for 2020 was reported to be "$51.31 billion dollars." (Yahoo Finance, 2021) Microsoft's revenue streams come from its advertising, gaming, devices, services, Windows, cloud services, acquisitions, and office products. (Microsoft, 2020) It has been said Microsoft is actively trying to acquire the app TikTok, which is a prominent social media app used during the pandemic, which holds future potential for revenue. (Microsoft, 2020) In 2020, Microsoft had significant brick-and-mortar closures as it did in previous years, but still saw profit overall. In 2020, compared to 2019, Microsoft had a record revenue of "$143 billion dollars." (Microsoft, 2020) ***Figure 9*** gives perspective of Microsoft's second quarter findings versus its trailing twelve months. (Yahoo Finance, 2021) During COVID-19, in ***Figure 9,*** Microsoft spent a reasonable amount of money in comparison to its financial gains. (Yahoo Finance, 2021) Research and Development had a large part in Microsoft's expenses, but will see later payoff for this decision. (Yahoo Finance, 2021) Similarly, large expenses fall into the sales and marketing and cost of revenue for Microsoft, which increased a great deal in a year's time. (Yahoo Finance, 2021) Compared to 2019, Microsoft saw a more significant net income.

Alphabet (Google)

Alphabet's (Google's) Income Statement	ttm	12/31/2020	12/31/2019
Total Revenue	182,527,000,000	182,527,000,000	161,857,000,000
Operating Revenue	181,694,000,000	181,694,000,000	160,743,000,000
Cost of Revenue	84,732,000,000	84,732,000,000	71,896,000,000
Gross Profit	97,795,000,000	97,795,000,000	89,961,000,000
Operating Expense	56,571,000,000	56,571,000,000	54,033,000,000
Selling General and Administration	28,998,000,000	28,998,000,000	28,015,000,000
General and Administrative Expense	11,052,000,000	11,052,000,000	9,551,000,000
Other General and Administration	11,052,000,000	11,052,000,000	9,551,000,000
Selling and Marketing Expense	17,946,000,000	17,946,000,000	18,464,000,000
Research and Development	27,573,000,000	27,573,000,000	26,018,000,000
Operating Income	41,224,000,000	41,224,000,000	35,928,000,000
Net Non-Operating Interest Income Expense	1,730,000,000	1,730,000,000	2,327,000,000
Interest Income Non-Operating	1,865,000,000	1,865,000,000	2,427,000,000
Interest Expense Non-operating	135,000,000	135,000,000	100,000,000
Total Other Finance Cost			-5,394,000,000
Other Income Expense	5,128,000,000	5,128,000,000	1,370,000,000
Gain on Sale of Security	5,973,000,000	5,973,000,000	2,901,000,000
Earnings from Equity Interest	401,000,000	401,000,000	390,000,000
Special Income Charges	0	0	-1,697,000,000
Other Special Charges			1,697,000,000
Other Non-Operating Income Expenses	-1,246,000,000	-1,246,000,000	-224,000,000
Pretax Income	48,082,000,000	48,082,000,000	39,625,000,000
Tax Provision	7,813,000,000	7,813,000,000	5,282,000,000
Net Income Common Stockholders	40,269,000,000	40,269,000,000	34,343,000,000
Net Income	40,269,000,000	40,269,000,000	34,343,000,000
Net Income Including Noncontrolling Interests	40,269,000,000	40,269,000,000	34,343,000,000
Net Income Continuous Operations	40,269,000,000	40,269,000,000	34,343,000,000
Diluted NI Available to Common Stockholders	40,269,000,000	40,269,000,000	34,343,000,000
Basic EPS			49.59
Diluted EPS			49.16
Basic Average Shares			692,596,000
Diluted Average Shares			698,556,000
Total Operating Income as Reported	41,224,000,000	41,224,000,000	34,231,000,000
Total Expenses	141,303,000,000	141,303,000,000	125,929,000,000
Net Income from Continuing and Discontinued Operation	40,269,000,000	40,269,000,000	34,343,000,000
Normalized Income	35,263,626,000	35,263,626,000	33,299,132,000
Interest Income	1,865,000,000	1,865,000,000	2,427,000,000
Interest Expense	135,000,000	135,000,000	100,000,000
Net Interest Income	1,730,000,000	1,730,000,000	2,327,000,000
EBIT	48,217,000,000	48,217,000,000	39,725,000,000

EBITDA	61,914,000,000		
Reconciled Cost of Revenue	84,732,000,000	84,732,000,000	71,896,000,000
Reconciled Depreciation	13,697,000,000	13,697,000,000	11,781,000,000
Net Income from Continuing Operation Net Minority Interest	40,269,000,000	40,269,000,000	34,343,000,000
Total Unusual Items Excluding Goodwill	5,973,000,000	5,973,000,000	1,204,000,000
Total Unusual Items	5,973,000,000	5,973,000,000	1,204,000,000
Normalized EBITDA	55,941,000,000	55,941,000,000	50,302,000,000
Tax Rate for Calcs	0.162	0.162	0.133
Tax Effect of Unusual Items	967,626,000	967,626,000	160,132,000

***Figure 10*: Google's Yearly Income Statement, Including TTM, and Ending Year Data for Years 2020 and 2019**
Alphabet Inc. (GOOG) Income Statement. (2021, April 01). Retrieved April 1, 2021, from https://finance.yahoo.com/quote/GOOG/financials?p=GOOG

Alphabet, with holdings of Google, has had a significant rise in profits during COVID-19. Google in itself profited largely from the stay-at-home order and online commerce. Google LLC alone controls around 200 companies, popular acquisitions include "Waze Mobile Ltd." (Hartmans, 2020) Alphabet Inc. owns "Google, Waymo Holding Inc., YouTube LLC, OB Technology Holdings, Calico LLC, and Alphabet Holdings LLC." (Hartmans, 2020)

In ***Figure 10***, Alphabet had a lot of spending in 2019 that decreased its net income significantly. (Yahoo Finance, 2021) In 2019, Alphabet reported its total revenue of "$161.86 billion dollars" in comparison to its total revenues of "$182.53 billion dollars" in the year 2020. (Yahoo Finance, 2021) In 2020, Alphabet's earnings per share and revenue was much larger than predicted. When analyzing ***Figure 10,*** it seems Alphabet remained unphased through COVID-19 business downfalls. COVID-19 would seemingly decrease ad purchases made by business from Google, but loss of sales is not reflected in their income statement. Google ads bought by individuals and other companies transfer to every platform Google owns and does not own, so Google ads will always be highly sought after.

Alphabet's reported its income statement on December 31, 2020. Gross profit was reported to be "$97.8 billion dollars" for the year 2020. (Yahoo Finance, 2021) Alphabet reported a profit margin of "22.06%" and an operating margin of "22.58%: for the year. (Yahoo Finance, 2021) Revenue per share was calculated to be "$268.10." (Yahoo Finance, 2021) Additionally, Google had a quarterly revenue growth of "23.5%" (year over year) and a quarterly earnings growth of "42.7% (year over year)." (Yahoo Finance, 2021) Net income available to common stockholders for 2020 was reported to be "$40.27 billion dollars." (Yahoo Finance, 2021) Google's revenues in 2020 streamed from advertising sales, app purchases, Google News, Android technologies, Google Maps, Google Pay, Google Play, Google Cloud, and hardware sold. Google Cloud and YouTube revenue contributed significantly to Alphabet's (Google's) success. Revenue from Google's cloud-computing services is predicted to remain far past COVID-19 market conditions and consumer trends. Google must remain reinvesting itself in human capital and furthering its technologies to stay competitive in the cloud-computing competition across Big-Tech companies.

Apple

Apple's Income Statement	ttm	09/30/2020	09/30/2019
Total Revenue	294,135,000,000	274,515,000,000	260,174,000,000
Operating Revenue	294,135,000,000	274,515,000,000	260,174,000,000
Cost of Revenue	180,068,000,000	169,559,000,000	161,782,000,000
Gross Profit	114,067,000,000	104,956,000,000	98,392,000,000
Operating Expense	39,814,000,000	38,668,000,000	34,462,000,000
Selling General and Administration	20,350,000,000	19,916,000,000	18,245,000,000
Research and Development	19,464,000,000	18,752,000,000	16,217,000,000
Operating Income	74,253,000,000	66,288,000,000	63,930,000,000
Net Non-Operating Interest Income Expense	739,000,000	890,000,000	1,385,000,000
Interest Income Non-Operating	3,465,000,000	3,763,000,000	4,961,000,000
Interest Expense Non-Operating	2,726,000,000	2,873,000,000	3,576,000,000
Other Income Expense	-240,000,000	-87,000,000	422,000,000
Other Non-Operating Income Expenses	-240,000,000	-87,000,000	422,000,000
Pretax Income	74,752,000,000	67,091,000,000	65,737,000,000
Tax Provision	10,822,000,000	9,680,000,000	10,481,000,000
Net Income Common Stockholders	63,930,000,000	57,411,000,000	55,256,000,000
Net Income	63,930,000,000	57,411,000,000	55,256,000,000
Net Income Including Noncontrolling Interests	63,930,000,000	57,411,000,000	55,256,000,000
Net Income Continuous Operations	63,930,000,000	57,411,000,000	55,256,000,000
Diluted NI Available to Common Stockholders	63,930,000,000	57,411,000,000	55,256,000,000
Basic EPS		3.31	2.993
Diluted EPS		3.28	2.973
Basic Average Shares		17,352,119,000	18,471,336,000
Diluted Average Shares		17,528,214,000	18,595,652,000
Total Operating Income as Reported	74,253,000,000	66,288,000,000	63,930,000,000
Total Expenses	219,882,000,000	208,227,000,000	196,244,000,000
Net Income from Continuing and Discontinued Operation	63,930,000,000	57,411,000,000	55,256,000,000
Normalized Income	63,930,000,000	57,411,000,000	55,256,000,000
Interest Income	3,465,000,000	3,763,000,000	4,961,000,000
Interest Expense	2,726,000,000	2,873,000,000	3,576,000,000
Net Interest Income	739,000,000	890,000,000	1,385,000,000
EBIT	77,478,000,000	69,964,000,000	69,313,000,000
EBITDA	88,384,000,000		
Reconciled Cost of Revenue	180,068,000,000	169,559,000,000	161,782,000,000
Reconciled Depreciation	10,906,000,000	11,056,000,000	12,547,000,000
Net Income from Continuing Operation Net Minority Interest	63,930,000,000	57,411,000,000	55,256,000,000
Normalized EBITDA	88,384,000,000	81,020,000,000	81,860,000,000
Tax Rate for Calcs	0.145	0.144	0.159
Tax Effect of Unusual Items	0	0	0

***Figure 11*: Apple's Yearly Income Statement, Including TTM, and Third Quarter Data for Years 2020 and 2019**
Yahoo Finance. (2021, April 01). Apple Inc. (AAPL) Income Statement. Retrieved from https://finance.yahoo.com/quote/AAPL/financials?p=AAPL

Apple's first mover approach and unmatched business strategy has served their brand and reputation well for decades now. In 2019, Apple reported "$260.17 billion dollars" in revenue in, in comparison Apple reported its total revenue of "$274.52 billion dollars" in 2020. (Yahoo Finance, 2021) The majority of Apple's revenue streams from its hardware and sales of iPhones. (Trefis, 2021) The Apple hardware line includes iPads, Macs, iPhones, Air pods, and Apple watches. (Apple, 2021) Apple also sells its streaming services and additional services related to its hardware. (Apple, 2021) In years previous, iPhones were so sought after by the public that some would say they were an inelastic good, not a luxury item; Apple is able to sell their profits for a high price knowing their target market will want their newest technologies. In 2020, Apple benefited from stay-at-home orders significantly driving their hardware and service sales. COVID-19 caused businesses and students to purchase technological items to stay connected while remote learning and working; however, Apple was restricted on supplying its products for a time and was forced to change its release dates and limit the number of their products sold. (Whitney, 2020) Apple reported a gross profit of "$104.96 billion dollars" for the year 2020. (Yahoo Finance, 2021) Apple reported a profit margin of "21.74%" and an operating margin of "25.25%." (Yahoo Finance, 2021) Revenue per share Apple reported was "$17.13" for 2020. (Yahoo Finance, 2021) In 2020, quarterly revenue growth is calculated to be "21.40%" and a quarterly earnings growth was reported to be "29.3%." (Yahoo Finance, 2021) Net income available to common stockholders for 2020 was reported to be "$63.93 billion dollars." (Yahoo Finance, 2021) When looking at ***Figure 11*** and comparing Apple's third quarter findings versus its trailing twelve months, there's a staggering jump in total revenue due to pushed back released dates of Apple products. The iPhone 12 offered 5G services which boosted revenues; however, through the pandemic, Apple was restrained on its supplies and more than likely would have been able to reach its high demand if it weren't for a supply shock. (Haselton, 2020)

V. Big-Tech Companies' Reported Balance Sheets and Investment Decisions in 2019 and 2020

Summary

In order to see the full scope of each Big-Tech company's financial gains through COVID-19, it is dire to analyze each company's balance sheet to understand their assets, liabilities, and equities. Simply analyzing each company's income statement is insufficient to fully understand a company's financial positioning. When analyzing a company's balance sheet, understanding what is owned and owed by the company is important. In 2020, the following balance sheets of Apple, Amazon, Microsoft, Facebook, and Alphabet will show significant equity, small debt owed, and large liquidity. These Big Five companies had very strong insights and protected themselves from COVID-19 global market conditions in 2020.

Amazon

Amazon's Balance Sheet	12/31/2020	12/31/2019
Total Assets	321,195,000,000	225,248,000,000
Current Assets	132,733,000,000	96,334,000,000
Cash Equivalents and Short-Term Investments	84,396,000,000	55,021,000,000
Cash and Cash Equivalents	42,122,000,000	36,092,000,000
Other Short-Term Investments	42,274,000,000	18,929,000,000
Receivables	24,542,000,000	20,816,000,000
Accounts Receivable	24,542,000,000	20,816,000,000
Gross Accounts Receivable	25,542,000,000	21,534,000,000
Allowance for Doubtful Accounts Receivable	-1,000,000,000	-718,000,000
Inventory	23,795,000,000	20,497,000,000
Finished Goods	23,795,000,000	20,497,000,000
Total Non-Current Assets	188,462,000,000	128,914,000,000
Net PPE	150,667,000,000	97,846,000,000
Gross PPE	211,101,000,000	144,821,000,000
Properties	0	0
Land and Improvements	57,324,000,000	39,223,000,000
Machinery Furniture Equipment	97,224,000,000	71,310,000,000
Other Properties	41,325,000,000	28,252,000,000
Construction in Progress	15,228,000,000	6,036,000,000
Accumulated Depreciation	-60,434,000,000	-46,975,000,000
Goodwill and Other Intangible Assets	19,998,000,000	18,803,000,000
Goodwill	15,017,000,000	14,754,000,000
Other Intangible Assets	4,981,000,000	4,049,000,000
Other Non-Current Assets	17,797,000,000	12,265,000,000
Total Liabilities Net Minority Interest	227,791,000,000	163,188,000,000
Current Liabilities	126,385,000,000	87,812,000,000
Payables and Accrued Expenses	116,677,000,000	79,622,000,000
Payables	72,539,000,000	47,183,000,000
Accounts Payable	72,539,000,000	47,183,000,000
Current Accrued Expenses	44,138,000,000	32,439,000,000
Current Deferred Liabilities	9,708,000,000	8,190,000,000
Current Deferred Revenue	9,708,000,000	8,190,000,000
Total Non-Current Liabilities Net Minority Interest	101,406,000,000	75,376,000,000
Long Term Debt and Capital Lease Obligation	84,389,000,000	63,205,000,000
Long Term Debt	31,816,000,000	23,414,000,000
Long Term Capital Lease Obligation	52,573,000,000	39,791,000,000
Other Non-Current Liabilities	17,017,000,000	12,171,000,000
Total Equity Gross Minority Interest	93,404,000,000	62,060,000,000
Stockholders' Equity	93,404,000,000	62,060,000,000
Capital Stock	5,000,000	5,000,000

Preferred Stock	0	0
Common Stock	5,000,000	5,000,000
Additional Paid in Capital	42,865,000,000	33,658,000,000
Retained Earnings	52,551,000,000	31,220,000,000
Treasury Stock	1,837,000,000	1,837,000,000
Gains Losses Not Affecting Retained Earnings	-180,000,000	-986,000,000
Total Capitalization	125,220,000,000	85,474,000,000
Common Stock Equity	93,404,000,000	62,060,000,000
Capital Lease Obligations	52,573,000,000	39,791,000,000
Net Tangible Assets	73,406,000,000	43,257,000,000
Working Capital	6,348,000,000	8,522,000,000
Invested Capital	125,220,000,000	85,474,000,000
Tangible Book Value	73,406,000,000	43,257,000,000
Total Debt	84,389,000,000	63,205,000,000
Shares Issued	527,000,000	521,000,000
Ordinary Shares Number	503,000,000	498,000,000
Treasury Shares Number	24,000,000	23,000,000

***Figure 12*: Amazon's balance sheet for years 2020 and 2019**
Yahoo Finance. (2021, April 01). Amazon.com, Inc. (AMZN) Balance Sheet. Retrieved April 1, 2021, from https://finance.yahoo.com/quote/AMZN/balance-sheet?p=AMZN

In 2019, Amazon's assets increased to "$225 billion dollars" from GAAP regulations dealing with operating leases. (Sec. Gov., 2019) Amazon's balance sheet reflects significant achievements. Amazon made significant investments in properties, data centers, and various equipment in 2019. (Amazon, 2019) In times of COVID-19, Amazon's supply chain investments surely paid off when comparing its balance sheet and financial statements. A significant missing factor when viewing Big-Tech company's balance sheet deals with their human capital and intellectual properties not present. (Sec Gov, 2019) Amazon's yearly profit and stock sales of 2019 additionally drove equity in 2019. Between 2019 and 2020, there was a significant cash increase, which aids in understanding Amazon's income statement. (Yahoo Finance, 2021) Current assets also had a staggering increase between 2019 and 2020 and were almost doubled between 2018 and 2020. (Yahoo Finance, 2021) Total shareholder equity and book value per share more than doubled between 2018 and 2020. (Yahoo Finance, 2021) Shares outstanding by Amazon amount to over "500 million" and shareholders, which do not receive dividends. (Yahoo Finance, 2021) In 2020, total debt owed is a whopping "101.23 billion dollars" and Amazon's total debt to equity is calculated to be 108.38%. (Yahoo Finance, 2021)

Total cash per share is calculated to be "$167.6" in comparison to its revenue per share calculating to be "$772.13." (Yahoo Finance, 2021) Amazon's average assets seem stable. Amazon has a high current liabilities rate for the Internet Retail industry. Amazon's current ratio is calculated to be 1.05%. Amazon's long-term liabilities include construction liabilities, long term deferred tax liabilities, and other lease obligations. (Yahoo Finance, 2021) Book value per share is calculated to be "$185.69." (Yahoo Finance, 2021) Return on assets for Amazon is reported to be 5.24% and a return on equity of 27.44% (trailing twelve months). (Yahoo Finance, 2021) Return on invested capital is reported to be "13%." (Yahoo Finance, 2021) In all, Amazon’s balance sheet backs the understanding of seeing significant financial gain during COVID-19.

Facebook

Facebook’s Balance Sheet	12/31/2020	12/31/2019
Total Assets	159,316,000,000	133,376,000,000
Current Assets	75,670,000,000	66,225,000,000
Cash Equivalents and Short-Term Investments	61,954,000,000	54,855,000,000
Cash and Cash Equivalents	17,576,000,000	19,079,000,000
Cash Financial	6,488,000,000	4,735,000,000
Cash Equivalents	11,088,000,000	14,344,000,000
Other Short-Term Investments	44,378,000,000	35,776,000,000
Receivables	11,335,000,000	9,518,000,000
Accounts Receivable	11,335,000,000	9,518,000,000
Gross Accounts Receivable	11,449,000,000	9,724,000,000
Allowance for Doubtful Accounts Receivable	-114,000,000	-206,000,000
Prepaid Assets	2,381,000,000	1,852,000,000
Total Non-Current Assets	83,646,000,000	67,151,000,000
Net PPE	54,981,000,000	44,783,000,000
Gross PPE	70,399,000,000	55,446,000,000
Properties	0	0
Land and Improvements	1,326,000,000	1,097,000,000
Buildings and Improvements	17,360,000,000	11,226,000,000
Machinery Furniture Equipment	2,458,000,000	18,817,000,000
Other Properties	33,646,000,000	11,095,000,000
Construction in Progress	11,288,000,000	10,099,000,000
Leases	4,321,000,000	3,112,000,000
Accumulated Depreciation	-15,418,000,000	-10,663,000,000
Goodwill and Other Intangible Assets	19,673,000,000	19,609,000,000
Goodwill	19,050,000,000	18,715,000,000
Other Intangible Assets	623,000,000	894,000,000
Investments and Advances	6,234,000,000	
Long Term Equity Investment	6,234,000,000	
Other Non-Current Assets	2,758,000,000	2,759,000,000
Total Liabilities Net Minority Interest	31,026,000,000	32,322,000,000
Current Liabilities	14,981,000,000	15,053,000,000
Payables and Accrued Expenses	7,498,000,000	9,505,000,000
Payables	4,462,000,000	2,873,000,000
Accounts Payable	1,331,000,000	1,363,000,000
Total Tax Payable	2,038,000,000	624,000,000
Other Payable	1,093,000,000	886,000,000
Current Accrued Expenses	3,036,000,000	6,632,000,000
Pension and Other Post Retirement Benefit Plans Current	2,609,000,000	1,704,000,000

Current Debt and Capital Lease Obligation	1,023,000,000	1,077,000,000
Current Debt		277,000,000
Current Notes Payable		624,000,000
Line of Credit		277,000,000
Current Capital Lease Obligation	1,023,000,000	800,000,000
Current Deferred Liabilities	382,000,000	269,000,000
Current Deferred Revenue	382,000,000	269,000,000
Other Current Liabilities	3,469,000,000	2,498,000,000
Total Non-Current Liabilities Net Minority Interest	16,045,000,000	17,269,000,000
Long Term Debt and Capital Lease Obligation	9,631,000,000	9,524,000,000
Long Term Capital Lease Obligation	9,631,000,000	9,524,000,000
Non-Current Deferred Liabilities		1,039,000,000
Non-Current Deferred Taxes Liabilities		1,039,000,000
Trade and Other Payables Non-Current	5,025,000,000	5,651,000,000
Other Non-Current Liabilities	1,389,000,000	1,055,000,000
Total Equity Gross Minority Interest	128,290,000,000	101,054,000,000
Stockholders' Equity	128,290,000,000	101,054,000,000
Capital Stock	0	0
Common Stock	0	0
Additional Paid In Capital	50,018,000,000	45,851,000,000
Retained Earnings	77,345,000,000	55,692,000,000
Gains Losses Not Affecting Retained Earnings	927,000,000	-489,000,000
Total Capitalization	128,290,000,000	101,054,000,000
Common Stock Equity	128,290,000,000	101,054,000,000
Capital Lease Obligations	10,654,000,000	10,324,000,000
Net Tangible Assets	108,617,000,000	81,445,000,000
Working Capital	60,689,000,000	51,172,000,000
Invested Capital	128,290,000,000	101,331,000,000
Tangible Book Value	108,617,000,000	81,445,000,000
Total Debt	10,654,000,000	10,601,000,000
Share Issued	2,849,000,000	2,852,000,000
Ordinary Shares Number	2,849,000,000	2,852,000,000

***Figure 13*: Facebook's balance sheet for years 2020 and 2019**
Yahoo Finance. (2021, April 01). Facebook, Inc. (FB) Balance Sheet. Retrieved from https://finance.yahoo.com/quote/FB/balance-sheet?p=FB

In 2019, Facebook reported total liabilities of "$32.3 billion dollars" and total assets of "$133.4 billion dollars." (Yahoo Finance, 2021) In 2020, Facebook reported total assets of "159.3 billion dollars" and total liabilities decreased to "$31 billion dollars." (Yahoo Finance, 2021) Facebook's receivables seem to be increasing exponentially. The significant increase in assets and the decrease in liabilities indicate that Facebook has achieved success in 2020. Facebook does not report long term note receivables, inventory, notes payable, long term debt, deferred income tax, or preferred shares outstanding. (Yahoo Finance, 2021)

Facebook reported total cash of “$61.95 billion dollars.” (Yahoo Finance, 2021) Facebook’s cash significantly outweighs its liabilities, proving good standing in its performance. Corporations understood they must hold high liquidity in uncertain times. Total cash per share was calculated to be “$21.76” in comparison to revenue per share calculating as “$30.15.” (Yahoo Finance, 2021) Facebook’s book value per share is calculated to be “$45.03.” (Yahoo Finance, 2021) Facebook had total debts totaling to “$11.18 billion dollars.” (Yahoo Finance, 2021) In comparison, Facebook’s debt to equity is calculated to be 8.71%. (Yahoo Finance, 2021) For 2020, return on assets is calculated to be 13.95% and return on equity is calculated to be 25.42%. (Yahoo Finance, 2021) The current ratio for Facebook is calculated to be 5.05% in its ability to pay off the current liabilities reported. (Yahoo Finance, 2021) In all, Facebook seems to be profitable and has made smart business decisions when analyzing its balance sheet.

Microsoft

Microsoft’s Balance Sheet	06/30/2020	06/30/2019
Total Assets	301,311,000,000	286,556,000,000
Current Assets	181,915,000,000	175,552,000,000
Cash Equivalents and Short-Term Investments	136,527,000,000	133,819,000,000
Cash and Cash Equivalents	13,576,000,000	11,356,000,000
Other Short-Term Investments	122,951,000,000	122,463,000,000
Receivables	32,011,000,000	29,524,000,000
Accounts Receivable	32,011,000,000	29,524,000,000
Gross Accounts Receivable	32,799,000,000	29,935,000,000
Allowance for Doubtful Accounts Receivable	-788,000,000	-411,000,000
Inventory	1,895,000,000	2,063,000,000
Raw Materials	700,000,000	399,000,000
Work In Process	83,000,000	53,000,000
Finished Goods	1,112,000,000	1,611,000,000
Other Current Assets	11,482,000,000	10,146,000,000
Total Non-Current Assets	119,396,000,000	111,004,000,000
Net PPE	52,904,000,000	43,856,000,000
Gross PPE	96,101,000,000	79,186,000,000
Properties	0	0
Land and Improvements	1,823,000,000	1,540,000,000
Buildings and Improvements	33,995,000,000	26,288,000,000
Machinery Furniture Equipment	46,043,000,000	38,663,000,000
Other Properties	8,753,000,000	7,379,000,000
Leases	5,487,000,000	5,316,000,000
Accumulated Depreciation	-43,197,000,000	-35,330,000,000
Goodwill and Other Intangible Assets	50,389,000,000	49,776,000,000
Goodwill	43,351,000,000	42,026,000,000
Other Intangible Assets	7,038,000,000	7,750,000,000
Investments and Advances	2,965,000,000	2,649,000,000

Long Term Equity Investment		2,649,000,000
Other Non-Current Assets	13,138,000,000	14,723,000,000
Total Liabilities Net Minority Interest	183,007,000,000	184,226,000,000
Current Liabilities	72,310,000,000	69,420,000,000
Payables and Accrued Expenses	14,660,000,000	15,047,000,000
Payables	14,660,000,000	15,047,000,000
Accounts Payable	12,530,000,000	9,382,000,000
Total Tax Payable	2,130,000,000	5,665,000,000
Income Tax Payable	2,130,000,000	5,665,000,000
Pension and Other Post Retirement Benefit Plans Current	7,874,000,000	6,830,000,000
Current Debt and Capital Lease Obligation	3,749,000,000	5,516,000,000
Current Debt	3,749,000,000	5,516,000,000
Current Deferred Liabilities	36,000,000,000	32,676,000,000
Current Deferred Revenue	36,000,000,000	32,676,000,000
Other Current Liabilities	10,027,000,000	9,351,000,000
Total Non-Current Liabilities Net Minority Interest	110,697,000,000	114,806,000,000
Long Term Debt and Capital Lease Obligation	67,249,000,000	72,850,000,000
Long Term Debt	59,578,000,000	66,662,000,000
Long Term Capital Lease Obligation	7,671,000,000	6,188,000,000
Non-Current Deferred Liabilities	3,384,000,000	4,763,000,000
Non-Current Deferred Taxes Liabilities	204,000,000	233,000,000
Non-Current Deferred Revenue	3,180,000,000	4,530,000,000
Trade and Other Payables Non-Current	29,432,000,000	29,612,000,000
Other Non-Current Liabilities	10,632,000,000	7,581,000,000
Total Equity Gross Minority Interest	118,304,000,000	102,330,000,000
Stockholders’ Equity	118,304,000,000	102,330,000,000
Capital Stock	80,552,000,000	78,520,000,000
Common Stock	80,552,000,000	78,520,000,000
Retained Earnings	34,566,000,000	24,150,000,000
Gains Losses Not Affecting Retained Earnings	3,186,000,000	-340,000,000
Total Capitalization	177,882,000,000	168,992,000,000
Common Stock Equity	118,304,000,000	102,330,000,000
Capital Lease Obligations	7,671,000,000	6,188,000,000
Net Tangible Assets	67,915,000,000	52,554,000,000
Working Capital	109,605,000,000	106,132,000,000
Invested Capital	181,631,000,000	174,508,000,000
Tangible Book Value	67,915,000,000	52,554,000,000
Total Debt	70,998,000,000	78,366,000,000
Net Debt	49,751,000,000	60,822,000,000
Share Issued	7,571,000,000	7,643,000,000
Ordinary Shares Number	7,571,000,000	7,643,000,000

***Figure 14*: Microsoft's Balance Sheet for Years 2020 and 2019**
Yahoo Finance. (2021, April 01). Microsoft Corporation (MSFT) Balance Sheet. Retrieved from https://finance.yahoo.com/quote/MSFT/balance-sheet?p=MSFT

When analyzing Microsoft's balance sheet, Microsoft has significant financial strength and economic efficiency. Microsoft for the years 2019 and 2020 had large lump sums of cash that outweighed their debts. In 2020, Microsoft reported total cash of "$84.4 billion dollars." (Yahoo Finance, 2021) Stated previously, Microsoft reports its financial statements in June, so it is difficult to compare Microsoft's balance sheet to the other Big-Tech companies in terms of COVID-19's effects. Microsoft had total assets that increased to "$301 billion dollars" largely in part of investments of assets. (Yahoo Finance, 2021) Similar to Amazon, Microsoft's intellectual properties are not prevalent on the company's balance sheet, only physical investments are present. Microsoft also does not have significant inventory present on its balance sheet due to it mainly selling software as means of revenue. For 2020, short-term investments were recorded to be "$123 billion dollars," accounts receivable were recorded to be "$32 billion dollars," property and equipment were recorded to be "$44.2 billion dollars," and Goodwill was recorded to be "$43.4 billion dollars." (Yahoo Finance, 2021) Microsoft has "$60 billion dollars" in its long-term debt reported due to costly acquisitions and additional reasons. (Yahoo Finance, 2021) Total lease liabilities were "$17 billion dollars" as of 2020. (Yahoo Finance) Total Equity was found to be "$118.3 billion dollars." (Yahoo Finance, 2021)

As compared to its revenue per share totaling "$772.13," Microsoft's total cash per share in 2020 was "$167.60." (Yahoo Finance, 2021) Book value reported per share was reported to be "$185.69." (Yahoo Finance, 2021) Total debt to equity for Microsoft in 2020 was reported to be "108.38%." (Yahoo Finance, 2021) Return on assets for 2020 is calculated to be "5.24%" and return on equity is calculated to be "27.44%." (Yahoo Finance, 2021) Microsoft has a current ratio of "1.05%" to pay off its current liabilities. (Yahoo Finance, 2021) A current ratio between 1% and 3% is desired when analyzing a company's balance sheet, unless the company is hoarding cash for future acquisitions, paying shareholder dividends, or other reasons.

Alphabet (Google)

Alphabet's (Google's) Balance Sheet	12/31/2020	12/31/2019
Total Assets	319,616,000,000	275,909,000,000
Current Assets	174,296,000,000	152,578,000,000
Cash Equivalents and Short Term Investments	136,694,000,000	119,675,000,000
Cash and Cash Equivalents	26,465,000,000	18,498,000,000
Cash Financial		
Cash Equivalents		
Other Short-Term Investments	110,229,000,000	101,177,000,000
Receivables	31,384,000,000	27,492,000,000
Accounts Receivable	30,930,000,000	25,326,000,000
Gross Accounts Receivable	31,683,000,000	26,079,000,000
Allowance for Doubtful Accounts Receivable	-753,000,000	-753,000,000
Taxes Receivable	454,000,000	2,166,000,000
Inventory	728,000,000	999,000,000
Other Current Assets	5,490,000,000	4,412,000,000

Total Non-Current Assets	145,320,000,000	123,331,000,000
Net PPE	96,960,000,000	84,587,000,000
Gross PPE	138,673,000,000	115,148,000,000
Properties	0	0
Land And Improvements	49,732,000,000	39,865,000,000
Machinery Furniture Equipment	197,000,000	156,000,000
Other Properties	58,117,000,000	47,781,000,000
Construction In Progress	23,111,000,000	21,036,000,000
Leases	7,516,000,000	6,310,000,000
Accumulated Depreciation	-41,713,000,000	-30,561,000,000
Goodwill and Other Intangible Assets	22,620,000,000	22,603,000,000
Goodwill	21,175,000,000	20,624,000,000
Other Intangible Assets	1,445,000,000	1,979,000,000
Investments and Advances	20,703,000,000	13,078,000,000
Investment in Financial Assets	20,703,000,000	13,078,000,000
Non Current Deferred Assets	1,084,000,000	721,000,000
Non-Current Deferred Taxes Assets	1,084,000,000	721,000,000
Other Non-Current Assets	3,953,000,000	2,342,000,000
Total Liabilities Net Minority Interest	97,072,000,000	74,467,000,000
Current Liabilities	56,834,000,000	45,221,000,000
Payables and Accrued Expenses	31,102,000,000	24,214,000,000
Payables	7,074,000,000	5,835,000,000
Accounts Payable	5,589,000,000	5,561,000,000
Total Tax Payable	1,485,000,000	274,000,000
Income Tax Payable	1,485,000,000	274,000,000
Current Accrued Expenses	24,028,000,000	18,379,000,000
Pension and Other Post Retirement Benefit Plans Current	11,086,000,000	8,495,000,000
Current Debt and Capital Lease Obligation	1,694,000,000	1,199,000,000
Current Capital Lease Obligation	1,694,000,000	1,199,000,000
Current Deferred Liabilities	2,543,000,000	1,908,000,000
Current Deferred Revenue	2,543,000,000	1,908,000,000
Other Current Liabilities	10,409,000,000	9,405,000,000
Total Non-Current Liabilities Net Minority Interest	40,238,000,000	29,246,000,000
Long Term Debt and Capital Lease Obligation	25,078,000,000	14,768,000,000
Long Term Debt	13,932,000,000	3,958,000,000
Long Term Capital Lease Obligation	11,146,000,000	10,810,000,000
Non-Current Deferred Liabilities	4,042,000,000	2,059,000,000
Non-Current Deferred Taxes Liabilities	3,561,000,000	1,701,000,000
Non-Current Deferred Revenue	481,000,000	358,000,000
Trade and Other Payables Non-Current	8,849,000,000	9,885,000,000
Other Non-Current Liabilities	2,269,000,000	2,534,000,000
Total Equity Gross Minority Interest	222,544,000,000	201,442,000,000
Stockholders’ Equity	222,544,000,000	201,442,000,000

Capital Stock	58,510,000,000	50,552,000,000
Common Stock	58,510,000,000	50,552,000,000
Retained Earnings	163,401,000,000	152,122,000,000
Gains Losses Not Affecting Retained Earnings	633,000,000	-1,232,000,000
Total Capitalization	236,476,000,000	205,400,000,000
Common Stock Equity	222,544,000,000	201,442,000,000
Capital Lease Obligations	12,840,000,000	12,009,000,000
Net Tangible Assets	199,924,000,000	178,839,000,000
Working Capital	117,462,000,000	107,357,000,000
Invested Capital	236,476,000,000	205,400,000,000
Tangible Book Value	199,924,000,000	178,839,000,000
Total Debt	26,772,000,000	15,967,000,000
Shares Issued	675,222,000	688,335,000
Ordinary Shares Number	675,222,000	688,335,000

***Figure 15*: Alphabet's (Google's) Balance Sheet for Years 2020 and 2019**
Yahoo Finance. (2021, March 29). Alphabet Inc. (GOOG) Balance Sheet. Retrieved April 1, 2021, from https://finance.yahoo.com/quote/GOOG/balance-sheet?p=GOOG

In the year 2019, Alphabet's current ratio was calculated to be "3.37%," its cash ratio was calculated to be "2.65%," and its quick ratio was reported to be 2.37%. (Yahoo Finance, 2021) A current ratio of "2.37%," reported at the end of 2019, allowed Google to cushion for 2020's arrival of COVID-19. Alphabet's current ratio to pay of its current liabilities is calculated to be "3.07%." (Yahoo Finance, 2021) Alphabet (Google) has a large amount of liquidity to alleviate any downward trends that COVID-19 may show, which is seen in Alphabet's balance sheet. Alphabet (Google) reported their total cash to amount to "$136.69 billion dollars." (Yahoo Finance, 2021) Alphabet's total cash per share amounted to "$202.77 dollars" compared to their revenue per share amounting to "$268.10 dollars;" thus, cash flow per share amounted to "$64.45 dollars." (Yahoo Finance, 2021) Alphabet's book value per share was recorded to be "$329.59 dollars." (Yahoo Finance, 2021) Return on Assets for the year 2020 was calculated to be 8.65% and its return on equity was calculated to be 19%. (Yahoo Finance, 2021) Year on year, Google had strong performance during this time.

Google's current liabilities in years 2019 to 2020 increased. Alphabet's total debts were recorded to be "$27.87 billion dollars." (Yahoo Finance, 2021) Alphabet's total debt to equity is calculated to be "12.52%" for 2020. (Yahoo Finance, 2021) Google's ability to pay short-term and long-term liabilities was sound in 2019 and 2020.

Apple

Apple's Balance Sheet	09/30/2020	09/30/2019
Total Assets	323,888,000,000	338,516,000,000
Current Assets	143,713,000,000	162,819,000,000
Cash Equivalents and Short-Term Investments	90,943,000,000	100,557,000,000
Cash and Cash Equivalents	38,016,000,000	48,844,000,000
Cash Financial	17,773,000,000	12,204,000,000

Cash Equivalents	20,243,000,000	36,640,000,000
Other Short-Term Investments	52,927,000,000	51,713,000,000
Receivables	37,445,000,000	45,804,000,000
Accounts Receivable	16,120,000,000	22,926,000,000
Other Receivables	21,325,000,000	22,878,000,000
Inventory	4,061,000,000	4,106,000,000
Other Current Assets	11,264,000,000	12,352,000,000
Total Non-Current Assets	180,175,000,000	175,697,000,000
Net PPE	36,766,000,000	37,378,000,000
Gross PPE	103,526,000,000	95,957,000,000
Properties	0	0
Land and Improvements	17,952,000,000	17,085,000,000
Machinery Furniture Equipment	75,291,000,000	69,797,000,000
Leases	10,283,000,000	9,075,000,000
Accumulated Depreciation	-66,760,000,000	-58,579,000,000
Investments and Advances	100,887,000,000	105,341,000,000
Investment in Financial Assets	100,887,000,000	105,341,000,000
Available For Sale Securities	100,887,000,000	105,341,000,000
Other Non-Current Assets	42,522,000,000	32,978,000,000
Total Liabilities Net Minority Interest	258,549,000,000	248,028,000,000
Current Liabilities	105,392,000,000	105,718,000,000
Payables and Accrued Expenses	42,296,000,000	46,236,000,000
Payables	42,296,000,000	46,236,000,000
Accounts Payable	42,296,000,000	46,236,000,000
Current Debt And Capital Lease Obligation	13,769,000,000	16,240,000,000
Current Debt	13,769,000,000	16,240,000,000
Commercial Paper	4,996,000,000	5,980,000,000
Other Current Borrowings	8,773,000,000	10,260,000,000
Current Deferred Liabilities	6,643,000,000	5,522,000,000
Current Deferred Revenue	6,643,000,000	5,522,000,000
Other Current Liabilities	42,684,000,000	37,720,000,000
Total Non-Current Liabilities Net Minority Interest	153,157,000,000	142,310,000,000
Long Term Debt and Capital Lease Obligation	98,667,000,000	91,807,000,000
Long Term Debt	98,667,000,000	91,807,000,000
Trade and Other Payables Non-Current	28,170,000,000	29,545,000,000
Other Non-Current Liabilities	26,320,000,000	20,958,000,000
Total Equity Gross Minority Interest	65,339,000,000	90,488,000,000
Stockholders’ Equity	65,339,000,000	90,488,000,000
Capital Stock	50,779,000,000	45,174,000,000
Common Stock	50,779,000,000	45,174,000,000
Retained Earnings	14,966,000,000	45,898,000,000
Gains Losses Not Affecting Retained Earnings	-406,000,000	-584,000,000
Total Capitalization	164,006,000,000	182,295,000,000

Common Stock Equity	65,339,000,000	90,488,000,000
Net Tangible Assets	65,339,000,000	90,488,000,000
Working Capital	38,321,000,000	57,101,000,000
Invested Capital	177,775,000,000	198,535,000,000
Tangible Book Value	65,339,000,000	90,488,000,000
Total Debt	112,436,000,000	108,047,000,000
Net Debt	74,420,000,000	59,203,000,000
Share Issued	16,976,763,000	17,772,944,000
Ordinary Shares Number	16,976,763,000	17,772,944,000

***Figure 16*: Apple's Balance Sheet for Years 2020 and 2019**
Yahoo Finance. (2021, April 01). Apple Inc. (AAPL) Balance Sheet. Retrieved from https://finance.yahoo.com/quote/AAPL/balance-sheet?p=AAPL

For the year 2020, Apple had significant buybacks of shares. Buying back shares reflects Apple decreasing its shares outstanding on its balance sheet and increasing stakeholder ownership of Apple. Apple's cash strongly outweighs its debts, but significant buybacks during 2020 could have caused Apple to stress in terms of liquidity. Apple reported its total cash to be "$76.83 billion dollars." (Yahoo Finance, 2021) Apple's total cash per share only amounted to "$4.58" and its revenue per share was found to be "$17.13." (Yahoo Finance, 2021) Apple's book value per share was recorded to be "$3.94." (Yahoo Finance, 2021) Apple's total debts amount to "$112.04 billion dollars." (Yahoo Finance, 2021) Its debt to equity was found to be "169.19%." (Yahoo Finance, 2021) To pay of its current liabilities, Apple's current ratio was found to be "1.16%." (Yahoo Finance, 2021) Apple's return on assets for 2020 was "13.36%" and its return on equity was found to be "82.09%." (Yahoo Finance, 2021) Apple, while still performing well in the year 2020, would have had a more impressive balance sheet if it reported at the end of 2020 when it released its newest iPhone. (Apple, 2020) Additionally, supply issues of Apple products affected Apple's balance sheet as well in terms of its inventory assets and liabilities to strategic partners. (Apple, 2020) When delving into Apple's balance sheet for years 2019 and 2020, it is still very clear that Apple had successful years.

VI. Projections of Future Financial Gains of Big-Tech Companies in their Longevity with Associating Potential Antitrust Restrictions

Summary

With Big-Tech leading the way of society's use of cloud services, streaming, artificial intelligence, and social media usage, Big-Tech companies will continue to digitally transform the world as we know it. Even through COVID-19, Big-Tech stock sales continued to climb, because it is one of the safest places for investors to see profits in times of uncertainty. Political and legal pressures faced by Big-Tech companies are the only thing stopping Big-Tech from becoming even larger. Potential markets these Tech giants dominate include e-commerce, app-stores, social media, internet search, and many others.

These companies effectively acquire consumer data and market to consumers with little competition. These corporations were allegedly guilty of leaking seller-specific data in order to market their products with vicious corporate self-interest. Big-Tech companies additionally give this data to third party individuals across platforms, establishing clear market dominance. The online advertising sector has been seen to far surpass any fair business practices in such a drastic way that not purchasing from or using services from these Big-Tech companies is almost unheard of by any one individual. It is prevalent how much Big Tech companies exploited consumer information, privacy, and propaganda. Actions of these Big-Tech companies essentially affect the country in its entirety. Antitrust laws of the past fail to recognize the e-commerce, current business trends within their statutes to the extent needed. The Bill in place that would reform Anti-trust laws is called “Competition and Antitrust Law Enforcement Reform Act.” (Klobuchular, 2021) In future years, the FTC may be forced to analyze and create new founding laws in mergers, acquisitions, healthy competition, and even past acquisitions from Big-Tech companies. For Anti-trust allegations to move forward, Congress would be required to show harm to consumers overall, which will be difficult because the issue is not of price. A strong defense from these Big-Tech companies aligns with fulfilling consumer needs, consumers choose to use their platforms, and technological innovations would be halted.

Amazon

In February 2021, Amazon’s CEO, Jeff Bezos, chose to step down; this could be in result of backlash Amazon has faced. (Haselton, 2021) Jeff Bezos will be taking a different position at Amazon. (Haselton, 2021) Various countries brought antitrust cases against Amazon for a multitude of reasons. During the COVID-19 pandemic alone, Amazon was said to have vast amounts of unsafe working conditions and failure to change such. (Herrera, 2021) When projecting expected financial outcomes of Amazon’s future anti-trust hearings, even if Amazon was to rightfully diverge its third-party selling platform or relinquish its acquisitions, Amazon goods would still be massively competitive in a vast number of markets.

Analysts expect earnings growth for Amazon to reach “40%” this year. (Palmer, 2021) For 2020, Amazon’s Beta is calculated to be “1.13,” its yearly high of stock value was recorded to be “$3,522.25,” its lowest stock value was recorded to be “$1,889.15,” (Yahoo Finance, 2021) shares outstanding were recorded to be “503 million,” and no dividends were recorded or given. (Yahoo Finance, 2021) In 2020, Amazon also had an enterprise value of “$1.55 trillion dollars,” a trailing price-to-earnings of “95.23,” and a forward price-to-earnings ratio of “61.35.” (Yahoo Finance, 2021)

Amazon has very high levels of innovation and future consumer trends will continue to reflect brand loyalty to Amazon for years to come; consequently, growth rates will continue to rise for a large number of years. Through its three sectors of North America, International, and Amazon Web Services, Amazon has diversified well to ensure if one sector is to underperform, the others would make up for such an underperformance. Amazon, among some other Big-Tech companies, does not pay dividends; if Amazon is to ever underperform in the future, investors would continue to support its business ventures if dividends would be offered. The prosperity of Amazon is pretty definite in the coming years.

Facebook

Facebook received repercussion from a very interesting election year in 2020; Facebook utilized its limited liability under section 230 to remove content seen inappropriate. Propaganda was mass spread in the name of politics in the year 2020. Protests were prevalent and long-lasting on both ends of the political spectrum. Certain political groups boycotted the use of Facebook due to its removal of user content. (McNamee, 2020)

In 2020, Facebook had a beta of “1.25,” its yearly stock price high was recorded to be “$304.67,” and its yearly stock price low was recorded to be “$150.83.” (Yahoo Finance, 2021) In 2020, Facebook had an enterprise value of “733.23 billion dollars,” a trailing price-to-earnings of “31.11,” and a forward price-to-earnings ratio of “25.97.” (Yahoo Finance, 2021) Facebook had “2.4 billion shares outstanding” for 2020. (Yahoo Finance, 2021)

Facebook will largely have to answer for itself in future Anti-trust proceedings; Facebook is said to have too much market power, abused its market power, made unfair acquisitions, had privacy issues, leaked consumer info, made improper commercial practices, and had lack of providing news content creators with substantial funds. (McLaughlin& Larson, 2020) A huge question to be answered in the near future will be if Facebook must sell off Instagram, WhatsApp, and its Messenger acquisitions and holdings. Facebook relies heavily on its ads, communicative properties, integration of platforms, and revenue made off of users, so it will be interesting how future laws will impact Facebook’s future financial earnings. (McLaughlin& Larson, 2020) Facebook has a high level of innovation and plans for the future, but no dividends were given to investors in 2020. (Yahoo Finance, 2021) A huge cushion for Big-Tech companies is the potential ability for dividends when and if they are underperforming in the future.

Microsoft

Similar to the Antitrust cases other Big-Tech companies are currently facing, Microsoft has had a significant Antitrust case in the past that was brought against them for integrating its programs and partaking in anti-competitive actions of browsers. (Feiner, 2020) Acting as a precedent, Microsoft’s case will show insight on how future court proceedings will go for other Big-Tech companies. Microsoft may be facing the least scrutiny of the Big-Tech giants of 2021, but Microsoft will have to prove itself by defending their bundling of Microsoft Teams with other software programs. Microsoft Teams had great success in 2020, and other e-meeting platforms may have struggled to compete due to Microsoft bundling this program with its other programs. Microsoft also has significant acquisitions and may be asked to relinquish its acquisitions.

In 2020, Microsoft had a Beta of “.81,” a yearly stock price high of “$246.13,” a yearly stock price low of “$150.36,” “7.56 billion shares outstanding,” and a payout ratio of “31.15%.” (Yahoo Finance, 2021) In 2020, Microsoft had an enterprise value of “1.61 trillion dollars,” a trailing price-to-earnings of “35.87,” and a forward price-to-earnings ratio of “33.00.” (Yahoo Finance, 2021) Microsoft had a great financial year in 2020 and will continue to see a great future of earnings to come. Although Microsoft’s technologies have been heavily imitated, consumers have been loyal to Microsoft products for years on end. Microsoft also struggles to keep its products at minimal cost like its competitors do. In order for Microsoft to actually become obsolescent, other platforms would have to offer substantially better software. Microsoft heavily profits from Windows, cloud services, and hardware. Microsoft had impressive financial statements that correspond to large future financial gains.

Alphabet (Google)

Alphabet, with holdings of Google, has a long road ahead in terms of antitrust proceedings. Alphabet has been said to mislead its consumers, gain personal data for target ads, dominate online advertising, abuse its market power, acquire more companies in an anti-competitive way, integrate its cloud services in an anti-competitive way, misuse its affordable Android technologies with non-competing services installed, favor its own web searches and services, fire protestors who unionized, made lack of diversity efforts, made anti-competitive sales of ads, misuse advertising trackers, made unlawful pacts with other tech giants, and misuse its ads by targeting to children. (Jarsulic, 2020)

In 2020, Alphabet had a Beta of “1.0,” a yearly stock price high of “$2,152.68,” a yearly stock price low of “1,079.81,” “329.87 million shares outstanding,” and no dividends recorded. (Yahoo Finance, 2021) Alphabet had a significantly high increase in stock price from the beginning to the end of 2020. In 2020, Alphabet had an enterprise value of “1.08 trillion dollars,” a trailing price-to-earnings of “33.88,” and a forward price-to-earnings ratio of “30.58.” (Yahoo Finance, 2021)

Alphabet faces similar anti-competitive strategy accusations Microsoft previously faced in years prior. Even if Alphabet is to sell its acquisitions or split its assets, Alphabet’s performance would never cease to slow down in terms of its profits. Google is such a large player in online marketing due to its online ad sales. Alphabet operates as a search engine, email service, a video platform, an internet browser, a map program, Android, and Google Play, advertising network, cloud storage, and other bets. (Google, 2021) In order for Alphabet to become less profitable, almost every operation would need to fail. Alphabet has large abilities to improve its financial standing by improving one or more of its already profitable operations. There are also other tech sectors for Alphabet to find involvement in to stay competitive with the other Big-Tech companies.

Apple

Lastly, Apple will also face future antitrust hearings similar to the other Big-Tech companies mentioned; Apple exclusively offers its own app store, media sources, and other pre-programmed apps when a consumer buys an iPhone. (Apple, 2021) Other companies’ media sales and app stores are unable to compete with the pre-programmed apps on Apple products. Apple also is said to favor its own products and have anti-competitive allegations for app creations. (Albergotti, 2020) Although Apple may or may not face extraneous consequences from these hearings, Apple consumers will more than likely continue to download and utilize the associative offerings Apple has. Other anti-competitive acts include Apple, working with Amazon, proposing the idea that Amazon remove ads that compete with Apple products. (Zakrzewski, 2020) It is extremely anti-competitive for two large Big-Tech companies to collude on making other competing products viewed under a product that already has a high market share. Apple has many lawsuits in place over battery storage globally, which forces consumers to buy its newest products. (Iyengar, 2020) Apple creating a product not meant to last creates a large product quality issue.

A large part of Apple’s success is its first-mover strategy, in years to come, it will be interesting to see how Apple’s competition attempts to override Apple’s unbeatable products and services with far advantage. In 2020, Apple had a beta of “1.25,” a yearly stock price high of

"$145.09," a yearly stock price low of "$59.22," "16.79 billion shares outstanding," and a payout ratio of "21.77." (Yahoo Finance, 2021) In 2020, Apple had an enterprise value of "2.25 trillion dollars," a trailing price-to-earnings of "40.45," and a forward price-to-earnings ratio of "33.44." (Yahoo Finance, 2021) The tech industry will continue to open up more markets for Apple to participate in to profit from. Apple has hinted at interest in the autonomous vehicle industry to expand its already large market share. (Dean, 2021) If Apple fails to see repercussions from future antitrust hearings or lawsuits, Apple will exponentially improve its market share across industries.

VII. Corporate Social Responsibilities taken by Big-Tech Companies during the COVID-19 Pandemic

Summary

A firm's corporate social responsibilities define their conscious and deliberate performance of acts that aid in the enhancement of societal welfare. A firm's corporate social responsibilities have been a vital concept for firms to participate in for centuries. In the 1920s, increased government legislation and Great Depression employee protests aided the movement of monopolistic businesses moving toward obliging to corporate social responsibility measures taken. In an industrialized and advanced economy, merely operating for profit is no longer acceptable or noteworthy. Corporate social responsibility has been pronounced upon big corporations since corporations themselves began, but in recent years it has become a larger reality of Big-Tech companies needing to become socially responsible. It is now a larger requirement for corporations to behave socially responsible in the way that they operate and conduct themselves. It is a large consumer and investor trend in fact that the public would be significantly more loyal to those companies performing its corporate social responsibilities well. (Kramer, 2020) In totality, how Big-Tech companies respond to the COVID-19 pandemic in the way that they operate and conduct themselves will define how consumers identify their corporation for decades to come.

Amazon

Amazon's large scale and mass-market share hold has been very controversial during the COVID-19 pandemic. Amazon has been asked to improve its sustainability efforts, stop de-unionizing its workers, stop selling irresponsible products, stop listening to its consumer's private conversations through Alexa technologies, create ethical supply chains throughout its operations, uphold ethical employee treatment, serve its community, and promote fair business practices. (Weidiger, 2021) Workers were outraged by Amazon's working conditions during the pandemic, some quoting to have "sleep at work" with no other choices. (Weidiger, 2021) Amazon has fired its employees who take not of its bad conditions, while not taking into consideration the safety of workers during a pandemic. (Weise, 2020) Sustainalytics, Inc report Amazon having "a significant controversy level and a medium ESG risk score." (Sustainalytics, 2021) While Amazon increases its market share and increase of primary and secondary stakeholders, it is vital that Amazon take account for societal concerns. As corporations become stronger, more responsibility for their business practices must be taken.

In order to increase sustainability after consumer backlash, Amazon has pledged to achieve a "net-zero carbon emission" in the next "19 years," implement "recyclable packaging," and donate "two billion dollars" of its profits to committing to sustainability challenges. (Au-Yeung, 2020) Amazon also donated "$800 million dollars" to fight climate change through various organizations. (Au-Yeung, 2020) Amazon has put into works adopting "renewable energies" and replacing vehicles with "electric cars" to combat pollution. (Au-Yeung, 2020) Other noteworthy programs that Amazon has donated money towards include "housing relief, support of education, and COVID-19 relief." (Au-Yeung, 2020) In the coming years, Amazon will be closely watched in their efforts to improve their insufficient business practices, sustainability actions, and various responsibilities owed to society.

Facebook

In 2020, Facebook had controversies of a "hate speech crisis," "online violence of women," antitrust allegations, "breach of children's data," "accepting payments from hate groups," charging certain political candidates more for ads, providing ill information during an election year, spreading misinformation in relation to the pandemic, and other large scandals. (Creative Fund, 2021) Such large controversial happenings from WhatsApp, Instagram, Messenger, and Facebook show how large of a role Facebook must answer to societal backlash. Sustainalytics, Inc. gave Facebook a "high controversy level and high ESG risk score." (Sustainalytics, 2020)

With large controversy surrounding Facebook in recent years, Facebook has pledged to reevaluate their core ideals of "connect[ing] people in positive ways that leverage community engagement to foster healthier lives, personal connections, civic engagement, [and] environmental action." (Mui, 2021) Society is demanding the fulfillment of these promises as social media platforms overtake a large part of everyday life. Facebook has taken the responsibility of its consumer's misuse of its platform, and says they are willing to sacrifice Facebook's profits to enhance the correct use of its platform. (Mui, 2021) After taking publisher-based responsibilities, Facebook hopes to establish a better community and societal prosperity with its platform's usage. (Mui, 2021) From a sustainability standpoint, Facebook is on track to reach "zero emissions by 2030" and used "86% renewable energy" in 2019. (Facebook, 2021) Facebook hopefully will make do on their promises to society and be less profit-based as it was when the company initially launched.

Microsoft

Microsoft seems to be the most ethical of the Big Five tech companies with there being limited reporting of any recent antitrust allegations, no exploiting of its consumer's data, and holding high standards in its consumer protections. (Microsoft, 2020) Microsoft sees the value in putting society first, which sets itself apart from other tech companies. Microsoft handles itself well in terms of societal responsibilities and takes action to improve the tech sector. Microsoft has shown efforts to make awareness of stricter guidelines for "facial recognition software" and "privacy protection." (Microsoft, 2020) Microsoft also showed initiative to provide broadband to less fortunate countries. (Microsoft, 2020) Microsoft's company initiatives state the company's desire to "support inclusive economic opportunity, protect fundamental rights, be sustainable, gain consumer trust, provide broadband, empower its employees, and respond well to COVID-

19." (Microsoft, 2020) Microsoft has shown valiant efforts to respond to COVID-19 appropriately through "protecting public health," "supporting the economy and recovery," and "protecting customers from online threats." (Microsoft, 2020) Microsoft has very similar sustainability initiatives to Facebook and Amazon in reducing carbon waste, but Microsoft wants to go above and beyond by becoming carbon negative in removing the carbon emissions their company has previously put off "by 2050." (Microsoft, 2020) Microsoft gave "$221 million dollars" in donations to varying causes and logged "750 thousand volunteer hours" from their employees. (Microsoft, 2020) Microsoft resides in the "top-20 companies" for diversity spending globally. (Microsoft, 2020) Sustainalytics, Inc. reports Microsoft as having a "significant controversy level," but a "low ESG risk score." (Sustainalytics, 2021) Microsoft is a great example of a company who has chosen to take initiative to improve their CSR reports from past controversies.

Alphabet (Google)

Alphabet (Google) had a highly controversial year in 2020 and now faces significant public pressure to improve its CSR measures and activities. During COVID-19, Google had antitrust issues, diversity criticism, database abuse, AI misuse, and other detrimental issues. (Allyn, Bond, et.al., 2020) Sustainalytics graded Alphabet (Google) a "medium ESG risk rating" and a "high controversy level." (Sustainalytics, 2021) Alphabet (Google) has shown limited responsiveness to answering to the public's desire for change. Google gave its services to small businesses for Google ad credits and low- interest loans to boost small and large businesses in times of struggle, but it was met with criticism due to Google profiting off of both charitable donations. (Pichai, 2021) Google donated "800 million dollars" in charitable gifts to COVID-19 efforts. (Langley, 2020) In all, Google is such a large corporation, and it is very evident that they as a corporation could have made much more effort in corporate social responsibility actions.

In terms of sustainability, Google's 2020 sustainability report shows their achievements in "neutralizing its carbon footprint," "issuing $5.75 billion in sustainability bonds," and "achieving a place on the CDP's Climate Change List." (Porat, 2021) By 2030, Google has plans to "operate on 24/7 carbon-free energy and add 5 GW of carbon-free energy through investments across key manufacturing regions." (Porat, 2021) While Google has a lot of consumer and business activity related issues, it seems they are doing their part along with the other Big-Tech companies to reduce waste. Additionally, Google released a supplier responsibility report to show its supply chain transparency, stating that Google "put[s] people first, strengthen[s] communities, and protect[s] the planet." (Porat, 2021) In all, Alphabet (Google) shows that it is transparent, cares for its employees, supports charitable causes, and cares about the planet. Google however can improve upon answering to social demands to improve social welfare.

Apple

In 2020, Apple faced varying social controversies, which have now seemed to be taken account for and addressed in Apple's recent business decisions and strategies. Apple seems to value its employee retention, community reach, and consumer brand loyalty. Apple empowers its workers with education, removed unethical suppliers, launched health clinics, and hires diverse ethnic groups. (Apple, 2021) In response to COVID-19, Apple gave back "$15 million dollars" and has a long-term history of matching employee donations. (Apple, 2021) In terms of sustainability, Apple has made plans to make its products more durable and energy efficient in the coming years to battle consumer's battery backlash. (Apple, 2021) In order to also make its products more sustainable, Apple has pledged to move toward "recycled materials." (Apple, 2021) Apple also has made the initiative to utilize "clean energy by 2030." (Apple, 2021) To battle past allegations of unethical supplier outsourcing, Apple now reports supplier information to increase its transparency in its product supply chains. (Apple, 2021) In all, it seems Microsoft and Apple see trends in their consumer base vying for more ethical Big-Tech business decisions.

Conclusion

This study investigated the COVID-19 pandemic as it relates to the financial gains of Big-Tech companies to predict future financial gains and related business activities. The study concludes that while all Big Five tech companies are seemingly financially prosperous for years to come in their ability to profit and pay off debts, these companies are only allowed to operate for as long as society allows. Future antitrust lawsuits and consumer protection laws in the future will address the financial gains and business decisions by Big Tech companies during the COVID-19 pandemic. Ethical behavior in firm's decision making is a long-term consumer trend that these Big Tech companies may have to abide by to continue profiting at their current rates. The main objectives of this paper are to delineate business models and financial statements of Big-Tech companies prior to and during the COVID-19 pandemic, present ample, relevant economic information regarding COVID-19, and encompass the effects of COVID-19 on global economies. While there are many recommendations to Big-Tech companies in order for these companies to compete fairly and make ethical business decisions, the biggest recommendation would be to listen to the public to avoid future, more serious backlash. Microsoft, while financially gaining off of COVID-19 market trends, is an excellent example of a Big-Tech company choosing to do good with their large platform. Facebook, Alphabet (Google), Apple, Microsoft, and Amazon alike saw an unprecedented rise in their yearly profits due to COVID-19 related market trends, but not every Big-Tech company impressed the public with their responsiveness with corporate social responsibilities. In result, Big-Tech companies will soon have large levels of restrictions on their revenue streams and will be forced to meet the government and public's desire of operations in how they operate.

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