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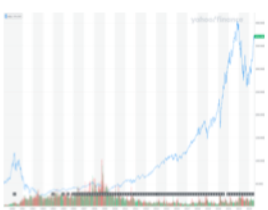
THE "BIG TECH" ECONOMY

By Steven Blank

Introduction



Graph of QQQ ETF that demonstrates 21st century growth in technology sector.
Yahoo Finance.

Technology today is more involved in people's lives than ever before and people in the US are consumed by tech-powered consumption. A February 2021 survey found most Americans spent 5 or more hours on their cell phones daily (Ceci, 2021). That massive portion of people's waking hours is made even more considerable when considering the time people spend on computers and other electronic devices. Everybody is using technology all the time and the pleasant distractions these advancements provide are almost enough to distract from the winners of the technological boom: "Big Tech."

The small group of large companies that produce the technology people spend so much time with enjoy extreme power of all kinds. Their massive influence on the economy is plain to see with multi-billionaire CEOs leading companies worth trillions of dollars that manage to expand their reach with each new start-up acquisition or product release into a new sector. Tech companies also harvest data that can improve their own systems and be sold to third parties. New technology like artificial intelligence has the potential to further disrupt people's lives with impossible-to-ignore effects like threatening to replace people on the job market or literally rewrite reality through extended reality glasses. Today, foregoing Big Tech is the same as foregoing modern life and the power to influence, profit from, and shape the lives of just about everyone means there's a concerning amount of highly concentrated power.

With technology advancements being inherently new and government being inherently slow, the race to keep up with new advancements and the consolidation of power among technology giants has been shaky. In this briefing, we will discuss several topics related to the economic effects of the rise of Big Tech companies and their products. The unsettled and current issue of properly understanding and regulating tech giants will be investigated by considering varying perspectives and competing solutions. With no clear right response to these companies and a quickly ticking clock, the issues discussed in this packet are highly arguable and significant.

EXPLANATION OF THE ISSUE

Historical Development

The existence of large technology companies as economic titans is a relatively recent phenomenon, and their rise is a consequence of late 20th-century technological and economic changes. As computers were gaining processing power and early applications, companies like Hewlett-Packard (HP) and IBM saw economic success and continued growth in the middle of the 20th century. In the coming decades, industry leaders that we are familiar with today (e.g., Apple, Intel, Microsoft) found success with the rise of personal computers, a technological application that remains prominent to this day. By the 1990s, the internet began to grow and usher in the next generation of prominent technology companies. While the tech fueling this movement was significant, there was a key economic problem with the overvaluation of internet startups that led to the "dot-com" bubble (Paluteder, 2022). Investor money ballooned companies with limited potential opportunities for future profit and the budding tech landscape struggled for years to come (Paluteder, 2022).

In the modern era, Big Tech has seen massive economic growth, evident in the progression of the tech companies in the NASDAQ (see QQQ graph). Moving out of the 'dot com' bubble, modern inventions like the iPhone and increases in computing power have caused people's lives to further rely on technology (and thus the companies that produce it). Social media giants capture hours of time and precious user data from largely unaware consumers who have few good options that don't involve giving up a significant amount of privacy. While the big players in technology have changed over the years, the past decade has seen the unprecedented economic strength of "Big Tech" through five titans all near or above trillion-dollar market caps: Alphabet, Amazon, Apple, Meta, and Microsoft. With unparalleled social influence, near infinite economic resources, and the rapid development of newer and shinier promising technologies, the large potentially profitable technology companies of the 21st century have developed into juggernauts with outsize impact on society.

Scope of the Problem

Monopolization – *"A business in complete control of something that prevents other people or companies having any share or influence."* *Cambridge Dictionary.*

Big Tech presents numerous challenges to a range of victims which include consumers, smaller technology companies, and governments that are ill-equipped to deal with the novel challenges presented by these powerful corporations. This section will detail the (somewhat intertwined) issues presented by Big Tech: **Monopolization**, Privacy and Data Protection, and the Labor Market.

Monopolization

Big Tech is composed of a small number of large companies that see almost unrivaled dominance in their fields and easily outcompete smaller firms as a result of their monopolistic market control. A 450-page report for the House Judiciary Committee found anticompetitive behavior from large tech companies that prevented innovation, harmed democracy, and limited consumer choice (Fung, 2020). These large companies, prioritizing investor interests and company growth, are incentivized to control as massive of a portion of the market as they can which is easy for them to accomplish with their anticompetitive digital ecosystems and ample funding for expansion.

Monopolization in "Big Tech" isn't just limited to the incredible productivity of large corporations because industry giants with massive checkbooks are able to acquire smaller rival companies and gain greater market share by swallowing innovation. The Department of Justice sued Google for its effort to control the digital advertising market through its 2008 acquisition of advertising firm DoubleClick which was crucial to the development of Google Ad Manager (Klar, 2023). The sphere of influence of tech giants increases with monopolization across fields as one company becomes the only significant outlet to a market and thus has almost unlimited potential to bend users to their will when accessing and using their service.

Privacy and Data Protection

Big Tech companies have access to extremely large quantities of user data and have increasingly come under scrutiny over their data handling practices which range from careless to invasive and malicious. As people use their devices and applications, they provide user data beyond what's consciously and intentionally provided. In addition to explicitly supplied email, password, and contact information, user behavior within applications can be carefully tracked and subconscious decisions can inform power data processing algorithms that erode user privacy. The heavy data collection effort goes even further with applications that quietly gather background data from devices and Big Tech companies that provide entire ecosystems and devices to users which, when synced up online, provide enormous amounts of personal data to companies. These profound issues are almost impossible to avoid as a consumer (or producer) in the 21st century economy and combined with ethically questionable tech companies create serious consequences.

The amalgamation of the invasive data collection effort takes shape in complete user profiles that can be sold to advertisers (Informatica, 2023). With algorithms controlling content a user views, Big Tech can influence its users which has raised concerns in domestic affairs like the 2016 US presidential election (Informatica, 2023). Even without conscious bad efforts from tech companies, data-driven algorithms designed to keep people engaged and susceptible to advertisers incentivize polarized opinions which keep user attention (Shapiro, 2022). Concerns for users are presented even before collected data is used by companies because its very existence makes it worthwhile for hackers to breach companies and steal data with malicious intent. A nebulous process for users to understand and remove collected data cements Big Tech's respect for data and privacy as a significant problem.

Labor Market

A recent report found generative AI could threaten 300 million jobs.

Big Tech, with its outsized economic control, already has a massive effect on the labor market, but the advancement of future technology (such as artificial intelligence) threatens to create new labor challenges. Growth in the technology sector has long provided incentives for new highly skilled workers and the phasing out of old jobs in favor of automation only appears to be increasing. The advent of generative artificial intelligence (AI) technology from Big Tech giants threatens the jobs of millions of people. A recent report from Goldman Sachs Economics Research found generative AI could threaten 300 million jobs (Briggs, 2023). While not all outlooks are bleak, the process of phasing out jobs that can be easily automated and training the workforce for an increasingly technologically developed world requires careful debate.

National Economic Council Action

The National Economic Council (NEC) doesn't create or implement policies as a body, but rather exists to "advise the President on U.S. and global economic policy" (The White House, 2023). It still has acted in relation to Big Tech and the problem stemming from it through recent actions from the Executive and through the selection of its members. Concerns about monopolization among tech giants helped inform a 2021 Executive Order on Promoting Competition in the American Economy which established a White House Competition Council led by the Director of the National Economic Council (The White House, 2021). In the

Antitrust – *"Opposing or intended to regulate business monopolies, such as trusts or cartels, especially in the interest of promoting competition."* *The American Heritage Dictionary.*

same year, President Biden made headlines when he named Tim Wu, a critic of Big Tech and advocate for **antitrust** laws to the National Economic Council (Tracy, 2021). This move was critical as he was described as the "architect" of the previously mentioned executive order on competition policy and he has since departed from the White House (Sisco, 2022). Other Policy Action

Other Policy Action

There has been significant policy action outside of the immediate influence of the National Economic Council that was designed to regulate the growing force of Big Tech. As of late 2022, key bills were in the works on antitrust policies aimed specifically at Big Tech, but, in the face of significant lobbying, never made it into a key spending bill at the end of the year which means these bills were effectively killed for the near future (Kelly, 2022). Senate hearings from mid-2023 saw technology industry leaders testifying to Congress in the wake of recent developments with artificial intelligence that raised serious labor concerns and fear about a privately controlled, challenging to regulate, and disruptive technology (Kang, 2023). Curiously, tech leaders, fearful of the unprecedented growth of AI technology, are urging the government to create regulations (Kang, 2023). Many policies have been enacted at the state level to improve online privacy and the American Data Privacy and Protection Act was a bipartisan bill addressing the privacy of American consumers which was already introduced by the House with strong support. Outside of official government actions, many NGOs are working to address concerns stemming from Big Tech such as antitrust conflicts and egregious handling of user data.

For the purpose of the National Economic Council, we will consider the viewpoints of economic conservatives and economic liberals. Their approaches to Big Tech have some overlap with each other, but they still have different viewpoints.

IDEOLOGICAL VIEWPOINTS

Conservative View

Economic Conservatives tend to value free market economics and lean towards letting the market provide solutions rather than supporting government intervention. The biggest exception most economic conservatives make for letting the free market run loose is the case of monopolies and antitrust policies which are particularly relevant when discussing Big Tech. Economic conservatives may disagree about the implementation of antitrust policies, but would generally take a more limited approach with the understanding that large tech companies are providing their consumers with a valuable service and that market forces should make decisions regarding their fate. In the same spirit, they may approach concerns about user data with support for solutions that involve consumers taking advantage of the free market. Concerns about the labor market would be the most polarized among conservatives and liberals with the former opposing retraining programs sponsored by the government and allowing the private sector to implement solutions to changes in the job market and allowing market forces to determine wages and employment opportunities.

Liberal View

Economic liberals are in favor of government intervention and novel approaches to actively protect consumers and address market failures. At the core of this opinion difference with economic conservatives is varying levels of faith in the effectiveness of the free market versus the effectiveness of government. The sheer degree of control Big Tech companies currently have is the reason why conservatives and liberals somewhat overlap in their viewpoints. Economic liberals favor aggressive antitrust policies which could go as far as the government breaking up large tech companies into smaller ones. The liberal economy philosophy would also see stronger regulations for the handling of user data and active involvement of the government in retraining workers and providing social benefits to people who struggle with finding work as industry priorities shift with new technology changing the job market.

AREAS OF DEBATE

Antitrust Policy

Antitrust policy is the classic solution to handling monopolies. Big Tech is dominated by a small number of firms with incredible control over the market which creates a noncompetitive environment and, thanks to their size, allows each tech megacorporation to dominate many different niches in technology. Antitrust policies prevent mergers between companies that consolidate power, intensely regulate actions by large companies in ways that enable smaller firms to compete, and in some cases see the breaking up of existing companies into smaller ones. Different flavors of this policy would be more to the liking of conservatives or liberals, but both sides largely agree that some degree of antitrust policy will be necessary.

A more extreme approach to antitrust would see the breaking up of large tech companies into smaller companies that were more niche and posed less anticompetitive concerns. The arguments in favor of this solution mean Big Tech won't be so big anymore and with smaller companies, there's less centralized control and more room for competitive practices. The arguments against this intense approach to antitrust are rooted in the government's inability to properly break up companies with such intertwined products and digital ecosystems and concerns about whether it's a harsh overreach of government power to involve itself so deeply in the private sector. Government inefficiency and global dependence on Big Tech companies make this solution very difficult to implement and highly disruptive to the US economy.

A less extreme approach to antitrust would see vigorous challenges to further industry expansion of Big Tech companies and anti-competitive practices that take advantage of the size of Big Tech companies. Some antitrust actions have failed in the past which include Sprint and T-Mobile successfully merging and beating an antitrust effort to block the merger (McLymore, 2020). Arguments in favor of this approach to antitrust are numerous and include stopping the continued acquisitions of rival companies with the big pockets of Big Tech. Anticompetitive practices of Big Tech companies seeing this kind of further regulation will protect the interests of smaller companies, as can be seen in the dispute with Apple's Appstore preventing Epic Games from operating its own payment processing system within the app sold on its store (Owen, 2023). Arguments against this milder antitrust approach mostly come from fierce free market supporters and Big Tech lobbyists who view this kind of government policy as counter to market forces and consumer interests. The same consumer interests and free market that have enabled the success of these companies and their benefits to the American economy could be disrupted with this policy and jeopardize economic and technological progress.

Political Perspectives on this Solution

Liberals would be in favor of the most extreme approach to antitrust policy which includes the actions outlined in the more and less extreme approaches to antitrust. This government intervention is viewed as justified by economic liberals and the extension into breaking up large tech companies could create a more favorable economic landscape for other tech companies to compete and less opportunity for malicious practices from Big Tech.

Conservatives would mostly be in favor of the less extreme approach and mostly oppose the more extreme approach to antitrust. The power and anticompetitive issues brought by Big Tech are large enough for conservatives to justify government intervention, but the economic drawbacks and overbearing intervention of the more extreme approach would go against conservative economic values.

Regulating Data Collection and Use

Concerns about Big Tech invading the privacy of consumers by collecting large amounts of user data and mishandling it can be addressed by regulating the collection and use of data by technology companies. This regulation can take the form of creating an agency devoted to data protection, outlining cybersecurity requirements for the handling of user data, providing users with explicit options to consent to sharing certain pieces of user data and creating an economic and regulatory framework that enables users to sell their own data. A lot of this regulation could fall under the umbrella of a data protection agency so the question is whether this agency is truly necessary, or a better combination of policies should be implemented that are rooted more in empowering users to control their own data rather than going after companies collect it.

Arguments in favor of a data protection agency include the ability to continuously adapt to new outlets for data protection and providing a central unit to handle the ever-increasing issue of privacy in the digital age. The arguments against the creation of this agency include the cost of creating this agency and the lack of emphasis on a free-market approach that sees users taking control of their data and being able to freely sell it.

An alternative approach that avoids the costs of the data protection agency could involve the creation of cybersecurity standards and a set of policies that impose strict requirements on tech companies to be transparent about the handling of data and provide users with the opportunity to sell their own to advertisers. Arguments in favor include empowering users and opposition would say that without the establishment of a government agency, users are more likely to be victims of future data thieving efforts and loopholes.

Political Perspectives on this Solution

Economic liberals would be in favor of the creation of a government agency and an approach on the side of greater government intervention where companies are regulated in the amount of data they collect. Protecting people and involving the government are viewed as greater priorities than maintaining a free market.

Economic conservatives would still support some regulation over data collection but would oppose increasing government spending through the establishment of a new agency, instead preferring to directly protect users from egregious data collection and empowering users by creating regulations that enable them to sell their own data. Also, more specific solutions like cybersecurity measures would be better left to the private sector rather than supporting government-led practices that may likely be poorly informed.

State-Sponsored Job Retraining Programs

State-sponsored job retraining programs would aim to help workers who have lost or are likely to lose their jobs as Big Tech shakes up the labor market through AI-based automation. These programs would allow workers in professions that are not as necessary in a more technologically advanced world to learn skills that can make them productive with different industry priorities.

One argument in favor of the solution is that people whose skills are rendered useless and are unemployed could instead be an asset to the economy as opposed to a strain. Keeping a skilled labor force is in the economy's interest and the state sponsoring a retraining program would help with sustaining economic growth.

A state-sponsored job retraining program would be expensive and can be viewed as an overly interventionist approach by the government. Without jobs actually being phased out, the government risks training workers to become proficient in skills that may not have much longevity with rapidly changing labor market demands. There are also logistical difficulties of implementing this program and a convincing argument for the private sector to be able to better retrain workers. Modern technology makes learning new skills cheaper and easier than ever and workers may simply be able to retrain themselves by using free resources on the internet. That would then mean the barrier to being able to reenter the workforce with useful skills would be based on personal motivation which a state-sponsored program would not affect.

Political Perspectives on this Solution

Economic liberals would support state-sponsored job retraining programs because it allows the government to help maintain economic growth and grapple with the labor market challenges brought by Big Tech.

Economic conservatives would oppose state-sponsored job retraining programs in favor of private sector solutions instead that are driven by market forces and wouldn't be spending tax dollars or further government economic intervention.

Taxation and Subsidies

The establishment of taxes and subsidies could regulate Big Tech and help the government capitalize on the industry's success and address monopolization issues. Tech companies are clever with avoiding all kinds of corporate taxes and taxation and subsidies allow for the federal government to shift economic interests in its favor and gain control over large tech companies. These policies can be crafted either to raise more tax money, help address a changing labor market, or oppose anticompetitive practices from Big Tech.

Taxes could be developed to curb anticompetitive practices from large tech corporations. This could take form as a tax or fees for mergers and acquisitions or for certain industries that lack sufficient economic competition. Bolstering competition and ensuring a free market could also be aided with the use of government subsidies to incentivize innovation and create a climate where rivals to Big Tech can survive anticompetitive tactics. Even more specific problems brought on by Big Tech can be addressed with taxes and subsidies which can take form in providing subsidies or tax cuts to Big Tech companies that retrain its employees that threaten to be replaced by automation or subsidies for companies that have data policies that guarantee user privacy.

This implementation of taxation and subsidies provides a favorable and adaptable set of solutions to issues presented by Big Tech.

Taxes can often have negative economic consequences whether it's harming growth in the private sector by taxing current businesses or discouraging companies from conducting business in the US. Subsidies are also expensive and cost tax dollars. Both policies can be viewed as negative government intervention, depending on how overreaching a policy is.

Political Perspectives on this Solution

Economic liberals would support generally support taxes and subsidies as solutions to problems presented by Big Tech. These solutions actively involve the government in the economy and can further influence market forces in ways that match their political values.

Economic conservatives would support some taxes and subsidies in specific circumstances, but generally be less enthusiastic than economic liberals. Both policies extend the control of government into the economy and higher taxes and a less free market don't usually match conservative values, but certain use cases such as preventing anticompetitive behavior can prove to be sufficient justification for taxes or subsidies.

BUDGETARY CONSIDERATIONS

The budgetary limits of the NEC don't apply in the same way as they do for Congress because they're a body that provides advice rather than producing legislature and executing actions. Across the areas of debate with proposed solutions, the Legislative and Executive branches are provided with multiple sources of funding for policy proposals to address the problem brought on by Big Tech. The option to tax large technology companies or the services they produce has significant potential for raising funds for relevant initiatives. Tariffs, more specific taxes, and already federally available funds are also potential sources of funds. Still, the NEC must tread extremely carefully when considering budgets and economic actions because their purpose is to advise on economic policy. Crafting successful recommendations will require careful economic thinking despite the loose budgetary constraints for this body.

CONCLUSION

The National Economic Council is faced with issues from Big Tech that include monopolization, data collection and privacy, and a changing labor market all having massive economic influence. Members of the NEC will have to grapple with the extent to which they wish to involve the government in the economy and how hard they wish to press the titans of Big Tech with hopes of creating an economy that better treats consumers and avoids anti-competitive behavior. The risks of overly extreme government intervention can take shape in severe consequences for not only people but also the large tech companies that make up a massive portion of the American economy. Members of the NEC will need to figure out how far the government should go in regulating the private sector and if the benefits of action outweigh the costs. The pace of technological advancement is continuously speeding up and it will take a carefully designed set of policy recommendations to ensure the economy can continue to grow through these new circumstances. In an effort to avoid widespread unemployment, the complete erosion of the privacy of American citizens, and a democracy turning to a technocracy, the NEC must come together to craft the right set of policies craft to handle the challenges in the current "Big Tech" economy.

GUIDE TO FURTHER RESEARCH

Looking at some of the sources mentioned throughout the briefing and in the bibliography are strong places to begin further research. Also, following recent developments with government responses to Big Tech at the federal and state levels could prove useful for the committee. Having a proper understanding of the Big Tech landscape and the legal frameworks at play in regulating tech giants will make discussing policies easier. Research may include looking through court cases, testimonies, bills/laws, news articles, public statements from technology companies, and interviews with key stakeholders.

GLOSSARY

Big Tech – The largest technology companies that dominate technological development, advancement, and sales (e.g., Google, Meta, etc.)

Monopolization – A business in complete control of a particular industry that prevents other people or companies from having any share or influence.

Antitrust – Opposing or intending to regulate business monopolies, such as trusts or cartels, especially in the interest of promoting competition.

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