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Monopolies, Monopsonies, and Everything In-Between: The Gradual Unwinding of Nearly a Century of Antitrust Activity

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The Gradual Unwinding of Nearly a Century of Antitrust Activity

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THESIS SUMMARY

The focus of this thesis is the enforcement of antitrust law, or more specifically, the lack thereof. In short, changes in the interpretation of antitrust law since the Reagan administration have created a simultaneous increase in mergers/acquisitions and a decrease in antitrust action. This trend started with Ronald Reagan in an effort to bolster a stagnant United States economy, yet in spite of the revolution the global economy has undergone in the last few decades, this trend is still perpetuated today.

While this has helped the United States economy abroad, it has come at a cost domestically. A number of industries have become dominated by a single firm (or a group) through a variety of anticompetitive practices, and their continued dominance threatens consumer welfare. Industries singled out as “ripe for antitrust action” include agricultural seed (Monsanto / Bayer AG), insulin production (Eli Lilly, Novo Nordisk, and Sanofi), eyewear (EssilorLuxottica), and social media (Meta).

In order to do so, however, the United States may have to pass new antitrust legislation. The country’s first antitrust law, The Sherman Act, was passed in 1890. The country’s most recent comprehensive antitrust law, The Hart-Scott-Rodino Antitrust Improvements Act, was passed in 1974. Both of these laws, while once effective in addressing antitrust concerns, were created before the age of Big Data and multinational conglomerates. Therefore, they are outdated and would likely be ineffective in confronting anticompetitive activity by a company like Meta today.

INTRODUCTION

Monopolies and oligopolies have long been a point of political and economic contention. Some decry all monopolies as a sign of market failure and call for increased regulation to “protect consumers”. Others laud them as a sign of corporate success and view any sort of attempts to regulate them as a gross abuse of government power. Most people fall between these two extremes, recognizing that regulation of monopolies and the like is just and necessary in cases where the companies abuse their power to exploit consumers.

Following the Industrial Revolution, dozens of companies had cornered their respective markets, having either bought out their competitors or priced them out of the market. Prior to the Sherman Act of 1890, these companies wielded largely unchecked power, free to broker mergers and anticompetitive agreements without the need for government approval (Sawyer, 2019). This period, spanning the decades between the Civil War and the turn of the century, is known as The Gilded Age and is remembered as a time of rapid economic growth at the cost of consumer wellbeing.

Today, the American government has allowed competition to slowly dwindle in many respects, leaving a series of trusts and cartels with near-monopolistic pricing power over their respective industries. This process has been ongoing since 1982, starting with the Reagan administration, and has been perpetuated by every presidential administration since. By failing to regulate the government has effectively raised barriers to entry across industries and allowed corporate America to regress to the Gilded Age. This paper will highlight how the rapid relaxation of antitrust laws, coupled with a simultaneous uptick in mergers and acquisitions, has led to a consolidation of a variety of industries into the hands of just a few companies.

Monopolies, Pools, Syndicates, and Cartels

Consumers like to use the term "monopoly" as a catch-all term to refer to any company that controls a dominant share of their industry. However, the truth is much more complicated. A true monopoly refers specifically to a company who has absolutely zero competition within their industry, allowing that company to exert complete pricing control over their product/industry. Even within this, though, there are finer distinctions including natural monopolies, legal monopolies, public monopolies, geographic monopolies, technical monopolies, and discriminating monopolies, just to name a few.

The reality is that it is nearly impossible for true monopolies to form in the United States today. International markets are often too efficient to allow companies to exert complete pricing control. More often than not, when people refer to monopolies, they are likely referring to one of many similar groups of companies. Some of them may or may not be legal. Take for example a pool, in which multiple investors/companies pool assets to effectively create monopolistic control. Alternatively, consider a syndicate, in which individuals work together to accomplish a common goal, such as cornering a market.

While pools and syndicates may be legal depending upon their purpose for existing, cartels are definitely not. Cartels are best viewed as a consortium of companies who, under normal circumstances, would be rivals. In a cartel, these rivals come to an agreement to control levels of production and pricing. This allows member companies to fix prices far above what levels would be in a competitive market and may even allow them to drive prices down if need be to destroy competition outside of the cartel. An example of this is the Organization of Petroleum Exporting Countries (OPEC), who have largely set international oil prices since the 1960s (Fattouh, 2013).

A Brief History of Antitrust Law in the US

Much like how consumers refer to many anticompetitive groups as “monopolies”, the United States government likes to use the word “trust” as an umbrella term for any group of businesses that work together to establish effective monopolistic control. These groups were abundant at the turn of the 20th century, and wielded a dangerous amount of power both politically and economically. These groups controlled many vital industries like steel production, railroad transportation, crude oil, and even meat processing. In recognition of this, the United States government passed a series of laws aimed at limiting the power of these trusts.

The first of these laws was the Sherman Antitrust Act of 1890. The law states that “Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal” (Millon, 1987). Effectively, this gave district courts the basis upon which to challenge the formation of trusts, monopolies, and cartels. Originally it allowed the courts to award treble damages to those affected, though the upper limit for damages has been increased since (Cooper Jr, 1955). While this may appear a very powerful law, it represented just the first step toward greater regulation of businesses and protection of consumers.

By 1914, it was clear that the Sherman Antitrust Act was not robust enough to accomplish the goals lawmakers had set in 1890. The Clayton Antitrust Act of 1914 aimed to address the glaring issues with existing antitrust legislation. According to "Clayton Antitrust Act and Sherman Antitrust Act-Antitrust Trade" (Standing, 1991), the Clayton Antitrust Act of 1914 accomplished three major goals:

1) Provided protections for employees, including the right to form labor unions, strike, protect, boycott, collectively negotiate, etc.
2) Prohibited mergers that would significantly reduce competition
3) Set price floors for certain industrial products in order to protect smaller companies who could not compete with larger competitors whose cost of manufacturing were lower due to economies of scale

As one can imagine, this gave courts and the federal government much greater power over regulation of anticompetitive entities. Together, the Sherman Antitrust Act and the Clayton Antitrust Act continue to form the foundation of modern antitrust law in the United States.

The Federal Trade Commission Act was also passed in 1914. Having seen courts struggle to properly apply the Sherman Antitrust Act of 1890, Congress wanted to establish a commission charged specifically with enforcing the Sherman Antitrust Act and the newly passed Clayton Antitrust Act (Winerman, 2003). While its main functions were initially to maintain competition and protect consumers, later Supreme Court rulings and legislation further expanded the FTC's powers. Eventually their powers grew to encompass regulation of telemarketing, credit reporting, data privacy, and identity theft.

Most notable among these changes was the 1972 ruling in Federal Trade Commission v. Sperry & Hutchinson Trading Stamp Co., which established that the FTC could regulate unfair/fraudulent business practices despite not violating antitrust laws (Gellhorn, 1983).

The Robinson-Patman Act was passed in 1936 and is likely the least relevant antitrust law still in effect. The law aimed to protect small retailers against competition from larger department stores by banning price discrimination against small retailers by producers (Luchs, 2010). It established a minimum price at which retail products may be sold to retailers, as well as preventing department stores from restricting who producers could do business with as a term of their contract (Luchs, 2010). Over the years however, it has gradually fallen out of favor and is now rarely enforced.

The Hart-Scott-Rodino Antitrust Improvements Act, passed in 1976, is actually a revision of the Clayton Antitrust Act. The law requires companies to file a notice with the FTC that they intend to merge if they meet a series of requirements regarding the nature of the businesses, size of the companies, and size of the merger/acquisition (Kintner, 1977). This allows the FTC to prevent anticompetitive mergers/acquisitions from being completed rather than having the federal government break up trusts and monopolies after they have formed. This act, passed nearly fifty years ago, was the most recent overhaul of United States antitrust legislation.

Evolving Interpretations

As mentioned earlier, these laws have been repeatedly amended or expanded upon by later legislation. However, doing so takes an act of Congress and therefore it can be difficult to overhaul antitrust legislation. Instead, smaller changes can be continually made through evolving interpretations of the same basic laws. Because of this, Supreme Court precedent is heavily relied upon in successive antitrust cases. With each application of antitrust laws in the supreme court, they provide a greater level of clarity and reshape future application to more closely reflect the time in which we live. Similarly, the President can reshape application of the law while they are in office by changing the guidance they give the FTC and the Department of Justice.

CHANGING ATTITUDES IN THE BULLY PULPIT

It would be impossible to discuss antitrust law and the presidency without mentioning Theodore Roosevelt. He served from 1901 to 1909 and became the youngest president in United States history at the time he took office following the assasination of President William McKinley. While in office, Theodore Roosevelt greatly strengthened the presidency by taking for himself many powers previous presidents had not. In doing so, he established the presidency as a position from which to advocate one's agenda directly to the people. In light of this, he affectionately dubbed the presidency the "Bully Pulpit".

Theodore Roosevelt used the Bully Pulpit as effectively as any other president to date. A central focus of his presidency was the "Square Deal", which aimed to protect consumer interests, limit the power of corporations, and conserve nature. This was made clear from his very first speech to Congress on December 3, 1901 in which he called for increased scrutiny to be placed upon trusts in the name of consumer welfare, citing the unyielding power that conglomerates like Standard Oil Company, American Tobacco Company, and Northern Securities Company wielded over their respective industries (Roosevelt, 1901). In total, Theodore Roosevelt initiated prosecution against many trusts under the Sherman Antitrust Act and oversaw the dissolution of forty four trusts during his two terms as president (McCollum, 1997). These actions endeared him to consumers of the time and earned him the nickname "The Trust Buster".

Often "busting" these trusts involved either forced divestment of different lines of business or the division of a single corporation into a series of direct competitors. This created a more efficient market and prevented the exploitation of consumers by trusts via price fixing. However, as international relations changed and the United States economy evolved, so did attitudes within the Bully Pulpit.

Ronald Reagan

The most notable change in attitude came during the Reagan administration. President Ronald Reagan, a Republican from California, served from 1981 to 1989. When Reagan took office, he inherited a litany of crises, both domestically and abroad. Chief among voter concerns was likely the ongoing instability in the Middle East. 1979 saw the end of the Iranian revolution following the overthrow of the Western-backed Shah, the onset of the Iranian Hostage Crisis, and the Soviet invasion of Afghanistan. The following year, Iran invaded neighboring Iraq, further adding to the instability. These events not only destabilized the region but also caused the price of crude oil to skyrocket, doubling over a twelve month period to a high of $40 a barrel in 1980 (Viksnins, 1984). This equates to approximately $137 in 2022, adjusting for inflation. This event is known as the 1979 Oil Shock or the Second Oil Crisis.

While such an oil shock had occurred before, and has occurred since, the timing of the shock compounded the United State's existing inflation issue. Inflation in the United States averaged 9.73% during the four years Jimmy Carter was in office, hitting an all-time high of 13.55% in 1980 (SEE APPENDIX A) (Smyth, 1989). These alarming figures, coming in an election year, chipped away at any remaining support Jimmy Carter had heading into the 1980 election.

Upon taking control of the country, the Reagan administration sought to immediately reign in the rampant inflation and astronomical gas prices. The Chairman of the Federal Reserve, Paul Vocker, leaned on Reagan for support as he raised interest rates ever-higher and slowed growth of the nation’s money supply (Feldstein, 2013). The Reagan administration slashed taxes and slowed the growth of government spending in an attempt to soften the blow to the economy, but it was not enough. The economy fell into a severe 16 month recession and the unemployment rate rose to 10.8%, but by 1983, inflation had fallen back below 6% for the first time since before Jimmy Carter had taken office (Feldstein, 1997) (Smyth, 1989). Still, this left Reagan and the United States economy in a vulnerable position.

In response, Reagan began to deregulate the bureaucratic process of approving mergers and acquisitions. In theory, allowing companies to grow rapidly by expediting the approval process would allow them to compete more effectively on an international scale. First, he oversaw the complete restructuring of the Federal Trade Commission’s Horizontal Merger Guidelines for the first time since they were created in 1968 (Department of Justice, 1984). He was heavily criticized for this move, and many members of the government cited the lack of deliberation prior to the restructuring and quickly called for him to unwind these changes. In response, Reagan plainly stated that “any regulatory change that would increase the cost of mounting takeovers is likely to deter takeovers and thereby cause losses for the economy” (Joint Economic Committee, 1985). He doubled down on these sentiments in his 1985 *Economic Report of the President*, suggesting that Congress amend tax laws to create tax incentives for merging companies, as their mergers bolstered the economy and should therefore be encouraged (Joint Economic Committee, 1985).

As a result, mergers experienced a significant uptick, and the power of the FTC fell. In the first five years of Reagan's presidency, only twenty six of over ten thousand proposed mergers were challenged by the government, with 13 of them being allowed to continue under the signing of merger consent decrees (Sullivan, 1986). This lack of merger regulation, coupled with a decrease in trust prosecution, left little work to be done at the FTC and DOJ. As a result, in the eight years Reagan was president, total staff fell roughly 50% at the FTC and 40% at the DOJ (Nelson, 1991). This furthered his efforts to deregulate mergers and acquisitions, as those agencies now lacked the staff needed to carry out investigations of anticompetitive behavior.

These new merger guidelines were so loose and ineffective that they were disparagingly referred to as "shadow guidelines" both within the FTC and within Congress. In an attempt to provide some form of pacification for his critics, the Reagan administration established two new tests to gauge pre- and post-merger competition within each company's respective industry. The first, the Hypothetical Monopolist Test (HMT), is a pre-merger test used to define whether monopolistic control would lead to significantly higher prices for the products in question (Department of Justice, 1984). The other test, the Herfindhal-Hirschman Index (HHI), measures post-merger consolidation of the industry, with higher HHI scores representing lower levels of competition (Department of Justice, 1982). While both tests are still used today, their effectiveness has been repeatedly questioned, and the cutoff values for each test have fluctuated between presidential administrations.

George H.W. Bush

George H.W. Bush held office for merely four years from 1989 to 1993. Despite this, his short term was eventful and full of international change. One thing that did not change much, however, was the president's stance on mergers and acquisitions.

George H.W. Bush was Reagan's vice president for two terms, and as such, his presidency continued to endorse many of the same policies and views as his predecessor. Initially, however, officials outside of the administration were hopeful they would be able to tighten their hold on both antitrust regulation and merger/acquisition activity. In his first year, the administration amended the FTC guidelines, this time consulting directly with the Department of Justice to establish ratio cutoffs for merger approval rather than depending solely on the opinions of his economic advisors (Nelson, 1991) (Department of Justice, 1992).

However, when the FTC and DOJ asked that their departmental budgets be restored to the levels they enjoyed prior to the Reagan administration, they were met with significant resistance. Rather than restoring their budgets, George H.W. Bush increased each of their budgets by a measly $5,000,000 (Nelson, 1991). It was suggested that the FTC could instead simply spend their budget more effectively, to which FTC Chairman Janet Steiger stated that "improved efficiency and case selection can't entirely make up for a 50% reduction in resources" and that "the staff will continue to be stretched thin" (Nelson, 1991).

All in all, little changed in respect to mergers, acquisitions, and antitrust under George H.W. Bush. Rather than drastically change existing antitrust laws and the guidelines established under the Reagan administration, he chose instead to provide clarity and push for continuity of existing best practices.

Bill Clinton

William "Bill" Clinton served as president from 1993 to 2001. Notably, he was the first Democrat to occupy the Oval Office since Reagan was elected twelve years prior. With this change in political party came renewed calls for antitrust action, particularly given the total collapse of the Soviet economy the prior year, making the United States the unrivaled world superpower.

Surprisingly, the FTC Horizontal Merger Guidelines went unchanged from the previous administration. Instead, Bill Clinton sought to strengthen antitrust activity by increasing the budgets of both the FTC and DOJ. The DOJ alone received an extra 16.3% budget increase per year, allowing them to hire approximately one hundred employees much-needed to carry out the analytical work they were stretched too thin to complete under the two prior administrations (Foer, 1999). Of particular focus was foreign companies operating in the United States which did not have domestic headquarters.

Some of these changes can be attributed to a new head of the Department of Justice's Antitrust Division, Anne Bingaman. After being appointed assistant attorney general in late 1993, the agency saw a huge jump in productivity. In the first six months of 1994 alone, the DOJ opposed fourteen mergers, as compared to the yearly average of just twelve under George H.W. Bush's administration (Kovaleff, 2008). Later during Bill Clinton's presidency this would slow, with the administration opposing a total of seventy mergers between 1996 and 2000, most of them on the grounds that they would harm consumer welfare rather than that they would actually grant a company monopolistic control (Kovaleff, 2008).

Bill Clinton's administration is most notable for its decision to file an antitrust suit against Microsoft in 1998, the last high-profile antitrust suit to be tried in court. While Microsoft was investigated for potential violations of antitrust laws in the early 1990s, it was largely cleared of any allegations. However, in 1998, the Clinton administration brought suit on the grounds that Microsoft had cornered the personal computer software market, given the prevalence of Microsoft Office and Microsoft Windows, as well as the downfall of Netscape, the only competitor for their widely popular Internet Explorer program (Lopatka, 1999). In their eyes, this was a technical monopoly and a clear violation of the Sherman Antitrust Act.

Initially, the courts ruled in favor of the United States government. Despite Bill Gates' insistence that antitrust laws stifled innovation and made them less competitive on a global scale, it was ruled that Microsoft should be split into two companies. This ruling was eventually appealed and overturned in 2001 by the U.S. Court of Appeals, establishing a precedent that presents a challenge to anyone wishing to break up technology companies today.

George W. Bush

George W. Bush's presidency spanned two terms from 2001 to 2009. Much like his father, little changed in regards to mergers, acquisition, and antitrust laws during his presidency. It could be argued that George W. Bush's administration took the lightest stance on antitrust since Reagan. However, in doing so, it is important to consider the events surrounding his presidency. On the economic front, George W. Bush's presidency was bookended by two major recessions, the Dot-Com Bubble in 2001 and the Great Recession in 2007. Additionally, the president's focus was likely more focused on the Middle East moreso than at home, in consideration of the terrorist attacks on September 11, 2001 and the subsequent Second Gulf War.

Because his attention was directed elsewhere, the structure of the FTC guidelines on mergers and acquisitions went untouched from the Clinton administration. Additionally, attitudes towards antitrust regulation were relaxed, as the FTC and DOJ challenged far fewer mergers and acquisitions under George W. Bush than under Clinton. A number of large mergers that would have likely been blocked under previous presidencies were approved under the new administration. One such example is the $87,000,000,000 purchase of BellSouth by AT&T, two companies who were part of the larger Bell Telephone Company that was previously broken apart in 1982 to encourage competition in the telecommunications industry (Kumar, 2012). This merger completed the consolidation of five of the eight "Baby Bells" back into one (Crandall, 2010).

Barack Obama

Barack Obama held office from 2009 to 2017 and inherited a dismal political situation. Still engaged in the Second Gulf War, he had the difficult job of overseeing economic recovery from the largest recession in United States history since the Great Depression. The near-failure of the American economy had shaken consumer confidence in both Wall Street and the federal government. In a bid to restore confidence and protect consumer interests, Barack Obama promised sweeping changes to the antitrust system.

As a senator, Obama had repeatedly criticized George W. Bush for having the “weakest record of antitrust enforcement of any administration in the last half century” (Crane, 2012). On the campaign trail, Senator Obama doubled down on these statements in 2008, stating that:

> “The Bush administration’s abdication of serious antitrust enforcement must be addressed by a new administration. An Obama administration will recommit federal policy to the support of consumer protection measures where there is a demonstrated need.”

These sentiments were echoed repeatedly during Barack Obama’s first few years in office. It seemed as though he felt that blame for the nation’s financial crisis may be on George W. Bush’s reluctance to enforce antitrust legislation

The Obama Administration made an honest attempt to live up to these promises. In 2010, the administration enacted major changes to the Federal Trade Commission’s Horizontal Merger Guidelines for the first time since the Bush administration overhaul in 1992 (Shapiro, 2010). Most of the changes reflect the greater role Technology companies hold in the United States economy as compared to 1992, but the greatest change was an upward adjustment of Herfindahl-Hirschman Index (Shapiro, 2010).

Initially, the Obama Administration found great success. In 2009, DOJ merger investigations doubled over the previous year, as did investigations involving violations of the Sherman Act (Crane, 2012). Despite all of this, it appears that in the end, Barack Obama did little to actually right the ship. Over the course of both their terms, the Obama administration and the Bush administration averaged similar numbers of antitrust case filings, despite the increased number of investigations under Obama (Baker, 2012).

Donald Trump

Donald Trump only served one term, and did little in the way of enacting change within the field of antitrust, yet his position is the most intriguing. As a prominent and polarizing businessman, it should come as no surprise that he was involved in three separate antitrust cases prior to becoming president. In the 1980s, he was a plaintiff in a high-profile suit brought against the National Football League (NFL) by the United States Football League (USFL) in which the NFL was found guilty of maintaining a monopoly (Kogan, 2008). Later, in 1988, he was forced to pay a $750,000 penalty for violating the Hart-Scott-Rodino Antitrust Improvements Act by failing to disclose stock purchases (Podszun, 2016). Finally, Donald Trump was tried and acquitted in the 1990s of allegations that he had attempted to monopolize casino gambling among Atlantic City casinos (Podszun, 2016).

While Donald Trump never took antitrust action as sitting president, he never shied away from sharing his opinions on the matter, even before taking office. He has long been a vocal critic of the great power large technology companies like Amazon and Facebook wield. Most interesting, however, is his direct calls for the United States to attempt to break apart OPEC. In his 2011 book *Time to Get Tough: Making America #1 Again*, he boldly stated:

> "We can start by suing OPEC for violating antitrust laws. Currently, bringing a lawsuit against OPEC is difficult… The way to fix this is to make sure that Congress passes and the president signs the "No Oil Producing and Exporting Cartels Act" (NOPEC) (S.394), which will amend the Sherman Antitrust Act and

> make it illegal for any foreign governments to act collectively to limit production or set prices. If we get it passed, the bill would clear the way for the United States to sue member nations of OPEC for price-fixing and anti-competitive behavior... Imagine how much money the average American would save if we busted the OPEC cartel.”

Surprisingly, his sentiments are somewhat popular in Washington. The “No Oil Producing and Exporting Cartels Act” (NOPEC) is a recurring bipartisan bill, first proposed in 2000, that has been introduced sixteen times in various forms (Reinker, 2005). It has failed repeatedly for a variety of reasons, most often attributed to the power that oil-backed lobbyists and Political Action Committees hold. With Trump likely eyeing a potential 2024 bid, however, it is impossible to rule out the possibility of NOPEC becoming a reality.

Joe Biden

Given that Joseph “Joe” Biden has only been president for a year thus far, it is impossible to fully grasp his administration’s stance on mergers, acquisitions, and antitrust. While the administration has initiated investigations into a number of technology companies including Amazon, Apple, Facebook, and Google, it has yet to take any action. Similarly, while Joe Biden has decried the lack of competition in industries like agriculture and pharmaceuticals in his “Executive Order on Promoting Competition in the American Economy”, he has yet to enact any changes to fix this (Exec. Order No. 14036, 2021).

THE MORE THINGS CHANGE

Many presidents have used, and will continue to use, chaos and economic turmoil as justification for relaxed antitrust regulation, ignoring the fact that these issues will likely never go away. As anyone can see, a lot has changed in the forty years since Ronald Reagan took office and began the rapid relaxation of antitrust laws in the United States. Yet, it seems the more things change, the more they stay the same. The Middle East is still as unstable as it was in 1981. The United States is in the middle of yet another oil crisis, with the price of a gallon of gas reaching all-time highs earlier this year. Inflation has crept back to nearly 8% over the past year, with no guarantee it will return to normal levels anytime soon. And, to cap it all off, the continued dominance of the United States economy is once again being challenged by a far-flung communist regime.

New Threats in the East

With the collapse of the Soviet economy and subsequent dissolution of the USSR, capitalism became the de facto economic system of the world. The Cold War was over and communism had failed. Many communist countries fully embraced free market economics following the fall of the USSR, but that was not necessarily the case in Asia.

Asia had long been in the focus of the United States, as Japan has consistently held a position as one of the three largest global economies by GDP since 1967 (Ito, 2020). The People’s Republic of China was on the United State’s radar, but had always taken a backseat to the USSR, with the Red Dragon being treated as more of a nuisance than anything else. This likely began to change in the early 1990s when China began to rapidly climb among the ten largest countries by GDP.

China broke into the top ten countries by GDP in 1988, with a GDP of merely $312 billion, as compared to the United States' GDP of $5.24 trillion ("Historical GDP by country: Statistics from the World Bank: 1960-2019"). China's economy experienced steady growth through the early 2000s, eventually breaking into the five largest economies in the world. Despite this, China did not become an evident threat until 2008.

Amid the global recession that began in late 2007, China passed a generous economic stimulus package domestically, coupled with a very liberal international lending abroad. By the end of 2008, China had overtaken Japan as the United State's largest foreign creditor, holding nearly $600,000,000,000 in United States treasuries (Dollar, 2016). The Chinese economy continued to grow, even as other countries' economies contracted, and by 2010 China had also overtaken Japan as the second largest global economy ("Historical GDP by country: Statistics from the World Bank: 1960-2019", 2021). Since then, the gap between the United States economy and China's economy has only grown smaller.

China's rise from a largely agrarian society to the modern industrial powerhouse it is today starts in the 1950s. Following the fall of the Republic of China at the hands of the Chinese Communist Party, the Soviets sought to help the Chinese quickly industrialize with the help of Soviet financing. The USSR certainly helped jumpstart industrialization in China, but upon the withdrawal of Soviet planners, the Chinese failed to maintain this upward trajectory. Central planning projects like the Great Leap Forward fell short of expectations, proving to the Chinese that the Soviet model of command economies simply was not sustainable.

In 1978, officials at the Third Plenary Session of the 11th Central Committee of the Communist Party sought to reverse the economic course of the country by reopening China to foreign markets, with the ultimate goal being to "make China a modern, powerful socialist country before the end of this century" (Yiu-chung, 1998). This was accomplished through a variety of means, including establishing a One-Child Policy, abolishing collective agriculture, permitting companies to retain profits, and ending federal wage controls.

These changes successfully drove down the cost of manufacturing within the country and boosted foreign investment in the following decades. As manufacturing grew, so did the Chinese economy. GDP increased from a yearly average of 6% between 1953 and 1978 to 9.4% between 1978 and 2012 (Yiu-chung, 1998). Whether the West wanted to admit it or not, China had quietly become a threat to the United States’ unrivaled global economic dominance, and American consumerism was largely to blame.

The Rise of the Service Economy

The outsourcing of American manufacturing to China did not just revolutionize their economy, it revolutionized the United States economy as well. As more and more manufacturing has moved overseas, the United States entered an uncharted area of economics. By 1970, only 22,200,000 workers were employed in agriculture/goods producing jobs, as compared to 48,800,000 workers in service sector jobs (“The American Workplace - The Shift To A Service Economy”). For the entirety of human history, the vast majority of human labor had been devoted to the production of food or consumer goods, but globalization and automation had decreased the need for Americans to work such jobs.

In short, the United States had become the world's first service economy, and it was still under development. By 2005, United States service sector jobs totaled 111,500,000 while agriculture/goods producing jobs totaled only 22,100,000 ("Current Population Survey", 2006). In the years since, this discrepancy has only grown as technology companies have come to dominate the United States economy.

Technology as an industry was still in its infancy as the United States shifted into a service economy. Today, six of the ten largest companies in the United States are in the Information Technology sector: Apple, Microsoft, Alphabet, Amazon, NVIDIA, and Meta ("Companies ranked by Market Cap", 2022). None of these companies existed when the United States made the shift to a service economy in the late 1960s.

Part of what has allowed these Information Technology companies to flourish and dominate their respective sectors of the market has been the aforementioned lack of antitrust action and relaxed attitudes around mergers/acquisitions. Technology is arguably more protected than other industries, as any courts wishing to bring an antitrust case against technology companies would undoubtedly have to convince judges that the U.S. Court of Appeals erred in 2001 by establishing that Microsoft did not in fact have monopolistic power. Overturning such a precedent would be no easy task, and therefore the already understaffed and cash-strapped Department of Justice would be unlikely to take on such an expensive, protracted case unless they were certain the federal government would win.

In spite of this, the sheer size of these Information Technology companies make them common targets for critique. Yet as often as United States presidents and politicians attack American megacorporations, they refuse to take meaningful action against them. Like clockwork, every few years, presidents initiate antitrust investigations and congressional representatives drag CEOs/founders before Congress to be berated for show. The fact of the matter is that as poorly as politicians talk about American megacorporations, few would favor taking action against them, as many find these companies to be a source of American pride.

INDUSTRIES RIPE FOR GOVERNMENT REGULATION

While some politicians may find pride in the dominance and innovation exhibited by these American companies, not every company is worthy of the protections it receives. On the contrary, there are a number of companies whose dominance over their industries are in direct opposition to consumer interests and welfare, yet have evaded antitrust action over the last four decades. Six of these companies, spread across four highly-concentrated industries, are discussed below.

Agricultural Seed (Bayer AG / Monsanto)

The Monsanto Company was an American agricultural company founded in the early 20th century. The company expanded quickly through the acquisition of numerous chemical companies, resulting in a contract with the United States government to purify plutonium for the Manhattan Project (Gillam, 2021). Later the company was contracted to develop/produce Agent Orange and later Dioxin for the United States military to use in the Vietnam War (Gillam, 2021). These high-profile government contracts had the dual effect of establishing Monsanto as a leader within the chemicals industry and strengthening their lobbying power in Washington, D.C.

Throughout their history, the company has produced a number of products that are household brands today, such as All laundry detergent, MiracleGro, and Splenda/NutraSweet (Gillam, 2021). However, what Monsanto is really remembered for is the agricultural side of the company. In the late 1970s, Monsanto entered agribusiness with the introduction of the wildly popular herbicide RoundUp.

With the success of RoundUp, the company threw itself behind agricultural research and development. By 1983, Monsanto had successfully engineered the first genetically modified crops, and by 1987 these genetically modified seeds had begun to enter the United States agricultural supply ("The race towards the first genetically modified plant", 2013). These seeds, branded under the name "RoundUp Ready", were an instant success. The company quickly expanded to target virtually every commercial crop, including corn, rice, soy, cotton, and more. By 2009, RoundUp branded products including seeds and herbicides constituted roughly half of Monsanto's gross margin (Cavallaro, 2009).

Monsanto was not satisfied with controlling just the United States agricultural seed supply. Because many of Monsanto's products promised higher crop yields, drought tolerance, and resistance to herbicides/pesticides, they were widely adopted worldwide. Monsanto even found inroads into third world countries. In many third world countries, farmers had been planting heirloom crops for as long as anyone could remember, collecting seeds from this year's crop to replant the next year. Recognizing that it would not be easy to break into these markets, Monsanto instituted a program in which they would pay farmers for these heirloom seeds and replace them with a commensurate amount of seeds for free (Iyengar, 2002). This was particularly successful in India, where at one point, nearly 95% of all cotton grown in India was grown with Monsanto seeds, up from 0% just a decade earlier (Iyengar, 2002).

The most obvious issue with this is the risk of an evolutionary bottleneck, but the problems don't stop there. Economically, the disappearance of heirloom seeds in agriculture creates a complete dependence of these farmers on Monsanto for all future seed needs. As a condition of selling their seeds, Monsanto made every farmer sign an agreement not to save and replant seeds they gather from Monsanto crops (Nachtigal, 2001). Unfortunately, this proved difficult and tedious to enforce. So in 1998, Monsanto subsidiary Delta and Land Pine Company infamously developed a “terminator” gene within some of their most popular seeds that rendered second-generation seeds collected from Monsanto crops sterile (Ohlgart, 2002). This had a ripple effect across the agricultural world, as cross-pollination with Monsanto crops rendered even the heirloom crops of some farmers who had never used Monsanto seeds sterile.

As a result, Monsanto controlled 91% of genetically modified seeds globally at the turn of the century (“Ag Biotech Countdown: Vital Statistics and GM Crops”, 2002). This is also the case in the United States, where Monsanto crops accounted for 91% of all soybeans, 88% of all cotton, and 85% of all corn (“About Ge Foods”, 2013). This dominance of the agricultural seeds market is likely to go unchallenged for a variety of reasons. First, few farmers have access to non-genetically modified seeds, as it was previously mentioned that Monsanto has taken many heirloom crops out of rotation. Second, few farmers would use non-genetically modified seeds even if they had access to them, as Monsanto’s seeds produce higher yields and are pest-resistant. Finally, Monsanto’s seeds are likely to remain the only genetically modified seeds available commercially, as creating genetically modified crops is a costly and time-consuming process. These all represent significant barriers to entry in the agricultural seed market.

In spite of this, the United States government never took antitrust action against Monsanto to break up their control of the agricultural seed market. Rather, the company found a lot of support in Washington from both the Supreme Court and lawmakers themselves, particularly Sen. Daniel Inouye of Hawaii and Sen. Roy Blunt of Missouri (Grim, 2013). One could argue that the closest Monsanto ever came to a formal antitrust investigation was when it sought approval to merge with Bayer AG.

Bayer AG is a global pharmaceuticals and biotechnology conglomerate headquartered in Germany. In 2016, it sought approval from the United States government and the European Union to purchase Monsanto for $66,000,000 (Varinsky, 2018). Given that Bayer AG is a major pesticide/herbicide producer, the United States had reservations about approving such a merger and forced the company to sell much of Monsanto’s herbicide business to German competitor BASF SE before they would approve the merger (Varinsky, 2018). While this gives the prima facie view that the government was concerned about protecting competition within the agricultural industry, their decision to not force divestment of any of Monsanto’s agricultural seed businesses proved otherwise.

Since the merger, there have been increased calls from consumers for Bayer AG to split into three separate companies. These calls became particularly loud recently following announcements that General Electric, Toshiba, and Johnson & Johnson would all be voluntarily dividing their companies. In August 2021 Bayer AG’s Chairman of the Board Norbert Winkeljohann quickly rejected this idea, stating that

> “We are going to continue the course, which is developing our company along the three pillars that we have - pharmaceuticals, crop science and consumer health… Dividing up the company would not create value but destroy it. That can't be in the interest of shareholders." (Alkousaa, 2021)

Insulin (Eli Lilly, Novo Nordisk, and Sanofi)

The isolation of insulin is arguably one of the greatest achievements of modern medical history. Since antiquity, people diagnosed with diabetes had no recourse for treatment, and life expectancy was incredibly short. When insulin was first extracted from animal pancreases, it was revolutionary. Over the years, production methods improved, and today most insulin is recombinant human insulin produced by genetically modified bacteria.

Insulin has been isolated and used in medicine over a century now, yet prices still remain artificially high. For the most part, three companies are to blame: Eli Lilly, Novo Nordisk, and Sanofi. Between them, these three companies control 92% of the global insulin market, with seven other companies splitting the remaining 8% (Knox, 2020).

First up, Eli Lilly is an American company with a rich history. Dating back to the 19th century, they produce many recognizable brand-name drugs, like Prozac. They also produce a variety of insulin medications including Humulin, Humalog, and Basaglar. They entered the insulin market in 1923 by developing the first commercially produced American insulin, Iletin. Being an early entrant clearly paid off, as Eli Lilly controls 23% of global insulin production (Knox, 2020).

Next, Novo Nordisk is a Danish pharmaceuticals manufacturer. The company was founded in 1923 as a non-profit, the Nordisk Insulinlaboratorium, literally "Nordic Insulin Laboratory". Following a merger with Novo Industri A/S, the company became the largest producer of insulin in the world. Novo Nordisk is most famous for developing the first insulin pen, the NovoPen, making diabetes care both highly portable and discreet by eliminating the need to carry syringes and insulin vials. The new product was a success and now insulin production accounts for a substantial portion of Novo Nordisk’s revenues. This is unsurprising, given that Novo Nordisk controls 52% of global insulin production (Knox, 2020).

Finally, Sanofi is a pharmaceutical company based in France. Sanofi became a major player in the insulin market with the acquisition of Hoechst Marion Roussel, a German pharmaceuticals manufacturer. Hoechst produced the first long-acting insulin, insulin glargine, known primarily by the brand name Lantus. While insulin comprises only a small share of Sanofi’s business, the company still controls 17% of global insulin production (Knox, 2020).

These three companies do not just comprise the vast majority of insulin production, they also comprise the vast majority of insulin-related research and development. As anyone in pharmaceuticals can attest, medical research and development is a massive expense on these companies’ income statements. This presents a major challenge, as after 20 years medical patents expire and companies can begin producing generics/biosimilars of these drugs. In order to circumvent this rule and recoup these costs, Eli Lilly, Novo Nordisk, and Sanofi have held back small incremental improvements to these drugs, releasing them as patents neared expiration in order to keep them evergreen and delay the release of biosimilars by pharmaceutical competitors.

Despite this two biosimilars of insulin do exist and have approval from the FDA, Semglee and Rezvlogar, both of which became available in the last year (Office of the Commissioner, 2021) (“FDA approves Eli Lilly's Rezvlogar”, 2022). However, because insulin is produced from living cells rather than a chemical cocktail, these biosimilars are just that— biologically similar, but not identical. These small changes can lead to severe side effects, making many diabetics hesitant to make the switch from brand-name insulin to biosimilar. Still, this barrier to entry is just one of the reasons more diabetics do not use biosimilars.

The other reason is that insurance often won’t cover biosimilars, but will cover brand-named insulin. Pharmaceutical benefit managers, otherwise known as PBMs, act as intermediaries between manufacturers and insurers to negotiate prices for pharmaceutical drugs. In effect, PBMs choose what products insurers will and will not cover. In return for their services, they are compensated with a percentage of the drug cost, ranging anywhere from 5% to 70% (“Schulman”, 2018). Because of this compensation structure, PBMs prefer to sell higher-cost drugs because they pay out higher commissions. Therefore, if one company raises the price of insulin, the other two must as well or risk being dropped from insurance coverage by the PBMs. This also means that they often refuse to deal in generic/biosimilar products.

As a result, insulin manufacturers often engage in “shadow pricing”. Shadow pricing is a method for pricing goods that are not subject to competitive market pricing, such as highly inelastic goods like insulin. In the insulin market this results in price increases of a product in response to price increases for a competitors’ products, a sort of perverse price competition. This leads to successive lockstep increases in price for substitute products, as can be seen with Sanofi’s Lantus and Novo Nordisk’s Levemir, the only long-acting insulin injections on the market (SEE APPENDIX B) (Rathore, 2019). The impact these increases have on price certainly creates sticker shock for the uninsured. Take for example the most affordable branded insulin, Eli Lilly’s Humalog. Between 1999 and 2019, the cost of Humalog increased from $21 to $332 per vial of insulin

(Rajkumar, 2020). Given that a typical Type 1 diabetic will use between two and three vials of insulin a month these costs quickly add up for the uninsured.

While this is a fact diabetics must live with in the United States, it is not the case in any other developed country. In fact, insulin costs approximately ten times more in the United States than in any other nation (Rajkumar, 2020). This has a lot to do with the way the United States healthcare system is structured, but that is not the focus of this thesis.

The issue in taking antitrust action to rectify this is that, while this shadow pricing system has the same effect as if Eli Lilly, Novo Nordisk, and Sanofi were acting as a cartel, they technically are not. There is no proof these companies are colluding to raise prices, and therefore their shadow pricing is not illegal. Despite this, the FTC could still take regulatory/punitive action against them if they so wished, as the Supreme Court’s 1972 ruling in Federal Trade Commission v. Sperry & Hutchinson Trading Stamp Co established that the FTC could still take action against companies whose practices were unfair/fraudulent despite not violating antitrust law (Gellhorn, 1983). Still, the fact that shadow pricing is legal in this form is just one example of the many shortcomings of the United States antitrust system.

Eyewear (EssilorLuxottica)

EssilorLuxottica is a vertically integrated eyeglasses and sunglasses manufacturer headquartered in Paris, France. The company was formed following the merger of the Italian company Luxottica and its French competitor Essilor in 2018. With a market capitalization of over $85,000,000,000, it is a component of the Euro Stoxx 50, representing one of the fifty largest companies in Europe (Business Insider, 2022).

Essilor was a legendary company within the world of prescription eyeglasses. Founded in 1849, for over a century it operated almost exclusively within France. However, following their development of Varilux (the world’s first ophthalmic progressive lens), they began an aggressive global expansion. They began to purchase manufacturing plants around the world to meet demand for their breakthrough lens, expanding into North America in the 1970s.

Luxottica, on the other hand, is relatively young by comparison. Founded in 1961 by a young metalworking apprentice, the company was focused primarily on designing and manufacturing frames. Luxottica’s high-quality products attracted a lot of attention from designers, and eventually they came under contract with a number of high-profile luxury designers. Seeing an opportunity to cut out the middle man, Luxottica began to aggressively expand into distribution through a series of global acquisitions.

Following their merger, it was remarked that “in seven centuries of spectacles, there has never been anything like it. The new entity will be worth around $50bn (£37bn), sell close to a billion pairs of lenses and frames every year, and have a workforce of more than 140,000 people” (Knight, 2018). While neither of these companies may sound familiar, they manufacture roughly 70% of the prescription eyeglasses market (Knight, 2018). They control every level from design to distribution, operating under a variety of brand names. Some of their wholly-owned eyewear brand subsidiaries include Oakley, Ray-Ban, Transitions, Arnette, Costa Del Mar, Oliver Peoples, and Persol. This list, however, is not truly representative of their control over the eyewear market. In addition to their house brands, EssilorLuxottica is also the exclusive eyewear manufacturer for:

Brooks Brothers; Bulgari; Burberry; Chanel; Coach; Dolce & Gabbana; Emporio Armani; Ferrari; Giorgio Armani; Google; Kodak; Michael Kors; Nikon; Ralph Lauren; Prada; Tiffany & Co.; Tory Burch; Valentino; Versace

The primary reason for these partnerships is that EssilorLuxottica's size means they can produce eyewear for a fraction of the price any of their competitors can through economies of scale. This, however, is just one barrier to entry the company uses to maintain their stranglehold on the eyewear market.

EssilorLuxottica is not just a eyewear manufacturing company. In addition, they own a variety of distributors worldwide, from designer stores to online, direct-to-consumer businesses. In total, they own 9,100 retail locations worldwide under the brands:

Alan Mikl; Clearly; Coastal; EyeBuyDirect; EyeMed; Glasses.com; John Lewis Opticians; LensCrafters; Oakley; Oliver Peoples; Paris DeGaulle; Pearle Vision; Ray-Ban; Sunglasses Hut; Target Optical; Vistazo

These brands give consumers the illusion of options in the not-so-competitive eyewear market. However, the reality is that whether a person is buying a $15 pair of glasses from EyeBuyDirect or a $300 pair from Ray-Ban, they may have been manufactured in the same factory with the same materials, just a few feet apart from each other.

Because of this, EssilorLuxottica has effective control over the entire eyewear industry and engages in a number of anticompetitive practices, sometimes flirting with market manipulation. Take for example Oakley, a very popular in-house sunglasses brand the company acquired in 2007, at the height of the brand's popularity. Although the two initially entered into formal negotiations, the deal quickly fell through as Oakley felt that their brand was being undervalued and they themselves lowballed. When Oakley withdrew from negotiations, EssilorLuxottica publicly announced that they would pull all Oakley products from all of their distribution channels. In response, many investors dumped their shares and caused the stock price to plummet, allowing EssilorLuxottica to sweep in and complete a hostile takeover at a final purchase price of just $2,100,000,000 ("Luxottica Group and Oakley complete merger", 2007).

The greatest barrier to entry in the eyewear market, however, is EssilorLuxottica’s insurance business. On top of controlling eyewear manufacturing and retailing, EssilorLuxottica also owns EyeMed. EyeMed, the second largest vision insurance company nationwide, has approximately 36,000,000 people (Spaulding, 2012). Through this vision insurance subsidiary, EssilorLuxottica exclusively covers eyeglasses manufactured by themselves. Given that the insured will have to also go through a EssilorLuxottica owned or approved ophthalmologist (who themselves must use EssilorLuxottica laboratories), there is certain to be plenty of approved designs to choose from, whether it be an in-house brand or a designer partnership.

In recent years, lawmakers have come to recognize EssilorLuxottica as anticompetitive and a near-monopoly. In 2015, Sen. Chuck Schumer called out EssilorLuxottica as such on the Senate floor, citing the average $300 price tag most Americans pay for eyeglasses and imploring President Obama to take action against the company (McCarthy, 2015). President Obama gave no response, partially because while many of the company’s brands and manufacturing plants are located in the United States, EssilorLuxottica is still a foreign company. While this does not outright prevent the

United States from taking antitrust action, it makes doing so difficult and limits the actions that can be taken against them.

Social Media (Meta)

Meta, formerly known as Facebook, is a company that needs no introduction. Meta is the ubiquitous social media company, controlling not just Facebook but also Instagram, Whatsapp, Oculus, and more. Throughout the years, a number of companies have attempted to dethrone Meta, but none have come close. The social media industry's barrier to entry is not the investment required to create a rival platform, it is the fact that Facebook was arguably the first mover in the industry. While Facebook was preceded by MySpace and similar companies, Facebook was the first social media platform to leverage its network effect to create and maintain dominant control of the social media space. Meta has managed to maintain this control by buying out its competitors, as was the case with Instagram, or by cloning the features that set their competitors apart, as they did with Snapchat and TikTok through Instagram stories and Reels, respectively.

While many think that this makes Meta a monopoly, it simply is not. It is a monopsony. A monopoly is a market with one seller and many buyers. A monopsony is the exact opposite, a market with one buyer but many sellers. The difference may seem trivial, but it has an interesting effect. In a monopoly, the monopolist dictates the price they sell products at to consumers. But in a monopsony, the monopsonist dictates the price at which they buy products from suppliers. Given that we are the suppliers, and the product is our social media data, that price is $0.

Monopsonies themselves are not illegal, and many popular companies, such as Walmart or Amazon, could also be considered monopsonies. What makes Meta’s monopsony an issue is the way in which it abuses its power. Meta has roughly 2,910,000,000 active Facebook users, 1,478,000,000 active Instagram users, and 2,000,000,000 active Whatsapp users (“Most used social media 2021”, 2022). Whether or not the allegations of price fixing as it relates to Meta’s social media advertising systems are true, it cannot be denied that their consumer engagement systems are flawed, powerful, and potentially dangerous. These harmful effects have reverberated throughout news media for years, highlighting misinformation campaigns preceding elections and civil unrest, both domestically and abroad (Tangherlini, 2020). Meta’s Facebook and Instagram platforms also became hotbeds of deadly misinformation during the beginnings of the COVID-19 pandemic, a time at which the average American knew very little.

This argument, that Meta is a harmful monopsony, creates an interesting workaround for an issue that has haunted advocates of antitrust for years. The 2001 court ruling in favor of dismissal of the United State government’s antitrust lawsuit against Microsoft has long hung over any calls-to-action regarding antitrust action against the giants in Silicon Valley. By taking Meta to court as a monopsony rather than a monopoly, this precedent would largely be irrelevant to the case at hand. On the contrary, there is precedent for the regulation of harmful monopsonies. Justice Clarence Thomas once stated:

> “kinship between monopoly and monopsony suggests that similar legal standards should apply to claims of monopolization and to claims of monopsonization.”

in a case against Weyerhaeuser, a monopsonist who used their pricing power to buy lumber at a discount, resulting in the bankruptcy of a regional logger (Steinbaum, 2020).

This landmark monopsony case, *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co Inc*, marked a turning point in antitrust law enforcement. Not only did it open the door for monopsonies to be charged for violations of antitrust law, it also redefined what constituted harm against consumer welfare. Whereas "consumer welfare" had previously applied exclusively to the specific consumers of a product/service, this case extended the concept of "consumer welfare" to encompass society as a whole (Rosch, 2007). This is an important distinction in the case against Meta.

IN DEFENSE OF ANTICOMPETITIVE FIRMS

It is worth noting that while a firm's practices may be anticompetitive, they may not necessarily be illegal. Anticompetitive horizontal conduct between competitors is always illegal, but monopolization and anticompetitive single firm conduct is only illegal if it greatly reduces competition within the industry to the point of harming consumer welfare (The Premerger Notification Office, 2022) (Fox, 2002). This is known as the Harm to Competition Principle.

While all six companies named in this thesis have violated the Harm to Competition Principle, no company would admit to such during their initial trial. Every company would deny that they have violated antitrust law and, if found guilty during their initial trial, would change their defense tactic and appeal the case to a higher court. Often this change in defense tactic entails employing an affirmative defense. There are a plethora of affirmative defenses that anticompetitive firms could use in court to stave off antitrust action or mitigate the damages levied against them. The affirmative defenses most likely to be used by each company are outlined below,

Bayer AG / Monsanto

Monsanto has dominated the agricultural seed industry through a variety of anticompetitive practices for years. Most notably, Monsnato has been repeatedly accused of collusion with what few agricultural seed producers they do not own, including DuPont-owned Pioneer Hi-Bred International (Niiler, 2000). Many of these historic practices are defensible simply because they have passed the statute of limitations.

However, Bayer AG and Monsanto would have a difficult time defending their current business practices. Bayer AG and Mosanto are notorious for predatory prosecution of farmers who they believe violated their patents on genetically modified crops. This includes farmers who use second-generation Monsanto seeds, farmers who bought Monsanto seeds through unauthorized distributors, and farmers whose crops were cross-pollination with Monsanto crops. Bayer AG and Monsanto have sued for all of these reasons, regardless of the farmers' intent.

Unfortunately for well-intentioned farmers, Bayer AG and Monsanto's practices are protected under the Noerr-Pennington Doctrine. The Noerr-Pennington Doctrine protects companies from damages arising from their lobbying for the enforcement of laws. This doctrine, rooted in Supreme Court precedent, applies whether the lobbying is motivated by anticompetitive desires or not.

Despite this, Bayer AG and Monsanto would still be at risk for antitrust action. Their predatory prosecution presents two previously mentioned threats to consumer welfare. The first threat is that the disappearance of heirloom crops decreases biodiversity and threatens to create an ecological bottleneck with the potential for famine should a disease evolve targeting any of Monsanto's genetically modified crops. The second threat to consumer welfare is the gradual bankruptcy of numerous farmers who have fallen victim to massive legal settlements they could not afford to pay.

Eli Lilly, Novo Nordisk, and Sanofi

As stated earlier, Eli Lilly, Novo Nordisk, and Sanofi engage in anticompetitive behavior through shadow pricing. This shadow pricing has the same effect as if the companies were acting as a cartel, but is not technically illegal. They must raise their prices in order to avoid being dropped from coverage under most insurance plans, including government insurance plans, by pharmaceutical benefit manufacturers (PBMs).

These companies could defend their pricing strategy through a defense known as in pari delicto. "In pari delicto" is Latin for "equally at fault". Under this defense, the defendant argues that their practices are defensible because the plaintiff is complicit in their illegal behavior and therefore has no right to bring a lawsuit. In this context, Eli Lilly, Novo Nordisk, and Sanofi could argue that, because the United States government was heavy-handed in the formation of the system that relies on PBMs to negotiate prices on behalf of insurance companies, they were in pari delicto and therefore have no right to bring suit. This would not be an effective defense, however, if the same lawsuit were brought by consumers suing in a class action lawsuit.

Whether a suit was brought or not, Eli Lilly, Novo Nordisk, and Sanofi could still be subject to future regulatory action. Given the lack of universal healthcare in the United States and the high sticker price uninsured Americans must pay to access life-saving insulin, it is undeniable that their pricing negatively affects consumer welfare, even if it does not violate antitrust law. Therefore, they could face regulation from the FTC in an effort to protect consumers.

EssilorLuxottica

EssilorLuxottica has little recourse if charged in an antitrust case regarding the company's dominance over eyewear manufacturing. The merger between Essilor and Luxottica represented the consolidation of manufacturing of nearly every major eyewear brand under one corporate umbrella. In spite of this, the company has not used economies of scale to lower the cost of prescription eyewear for most consumers. This is indefensible and to argue otherwise would be an unwinnable antitrust case.

If challenged as a vertical monopoly over their control of EyeMed, ophthalmology labs, or their many eyewear distributors, EssilorLuxottica may be able to defend their practices. If forced to stop their current method of operations, EyeMed would likely still use EssilorLuxottica laboratories and sell EssilorLuxottica manufactured eyewear through EssilorLuxottica-owned distributors. These firms would in all likelihood continue to work together in much the same way they always have, regardless of any injunctive relief courts may pass to end EssilorLuxottica's vertical monopoly. Therefore, doing so would fail to increase competition within the industry and may actually drive up the cost of any prescription eyewear bought through EyeMed.

This is known as the Single Entity Defense. It argues that, while a company may be a monopoly in practice, breaking them apart would fail to increase competition within the target industry. This defense was famously used to prevent a breakup of the National Football League in the 1980s, but it is also a common defense used by vertical monopolies. To understand if this defense is being correctly applied to a vertical monopoly like EssilorLuxottica, however, requires intensive financial analysis and would come under serious scrutiny in court. In short, it would be difficult to determine whether or not their vertical monopoly keeps costs down, and changes in any one of the many assumptions used in the financial analysis could have a drastic impact on the price to consumers.

Meta

For just as many negative consequences arise from Meta's monopsonistic dominance of the social media industry, there are positive ones. Friends separated by time and distance can now connect with each other easily via Facebook. Instagram has allowed small businesses to connect with markets they could not otherwise reach. Whatsapp allows families to communicate with each other across continents at no additional fee, circumventing costly international cellular charges. This defense is known in the world of antitrust as the Rule of Reason.

In essence, the Rule of Reason asserts that a company should be spared antitrust enforcement because the benefits of its activity outweigh the negatives. The Rule of Reason is likely the most common defense against antitrust action because it is such a difficult argument to refute. It is a highly subjective rule, but tends to be very effective. While it would be unlikely to prevent the government from taking any antirust action against Meta, it would likely limit the scope of the punishment.

In light of this, the biggest issue in taking antitrust action against Meta is that there is no effective existing solution to the issue. Breaking apart Meta along social platform lines would ultimately decimate the company, as it gets its value from the network effect shared between its platforms, allowing them to provide social media access at no cost to consumers. Meta would use this argument, alongside the Rule of Reason, to avoid divestment or a forced breakup at the hands of the United States government.

This obviously limits the options the government has for recourse against Meta. The most likely action the government would take is a hefty fine, but a simple one-time fine would likely be insufficient in punishing Meta for its harmful anticompetitive activity. Therefore, the government may wish to turn to patent law for inspiration.

Patent law and court precedent have established a concept known as “apportionment”. Apportionment refers to a system for attributing damages in patent suits, calculated as a portion of the value of the patent in question (Bailey, 2011). Under this system, Meta could be assigned damages based on the perceived value of their algorithm and the data it uses, paying the United States government a portion of this perceived value yearly. In theory, this punishment should be more effective in offsetting Meta’s ill-gotten gains.

Alternatively, the government could use injunctive relief or divestment to restrict Meta’s advertising activities. By altering Meta’s advertising business, the government would change the way in which Meta earns revenue. As where before the company kept data in-house to drive user analytics and tailor advertising, forcing them to sell that data to outside advertising firms may be enough to break up their monopsonistic control.

AFTER THE GUILTY VERDICT

After the guilty verdict has been passed and all appeals options have been exhausted, the United States government has many options for recourse. However, judges must keep in mind that the goal in antitrust action is twofold. First, the courts must seek to punish companies and individuals who violated antitrust laws. Second, they must create lasting change to prevent the continuation of anticompetitive practices.

Domestically, there are a slew of punishments which may be imposed upon the guilty. Often, individuals and companies found guilty of wilfully violating antitrust laws face massive fines. Currently, fines paid to the government for violating the Sherman Act are capped at double the gain received from violation, as well as being liable for treble damages in civil court (Waller, 2003). Additionally, the courts can enforce a range of non-financial punishments to encourage future competition within the industry. Sometimes it is a divestment, but oftentimes consent decrees are not so simple. In 1982, Bell Telephone was broken into eight separate companies following conviction, five of which have since re-merged to form AT&T (Crandall). In 1921, Kodak was allowed to maintain its near-monopolistic market share of photography film but restricted by injunctive relief over what labels it may be marketed under in an effort to increase transparency with consumers (Klein). These are just a few of the options to address domestic antitrust issues.

Internationally, the options are more limited. International companies, such as Bayer AG or Luxottica, are subject to United States antitrust law, yet their international status makes forced breakups and divestments difficult if not impossible. Therefore, the most frequent punishment for antitrust violations by multinational corporations is putative damages. Alternatively, they may restrict competitive practices, in a form similar to Kodak’s 1921 punishment. Finally, they may ban non-conforming companies from operating within the country altogether, as President Trump suggested doing with OPEC in 2011.

While all of these punishments are rooted in precedent, they represent only a small sample of the potential actions the federal government could take to regulate/punish those who violate antitrust laws. The reality is that punishments are limited only by the creativity of politicians and judges. At some time or another, none of these punishments existed, and were pulled from thin air to punish companies who violated antitrust laws

In today’s age of Big Data and multinational conglomerates, what may have passed as the most fair and effective punishment thirty years ago may not be the most fair and effective now. Therefore, judges may have to be creative in future antitrust dealings. For an example, look no further than Meta. As described earlier, while a forced divestment of Instagram and Whatsapp would likely have been the logical punishment decades ago given that they are both direct competitors with Facebook, such an action would hardly be fair to the company’s consumers who all benefit from Meta’s network effect..

FINAL THOUGHTS

As anyone can plainly see, the enforcement of both mergers/acquisitions guidelines and antitrust laws is a complicated matter. The specific wording of antitrust law provides a framework upon which to build, but the subject is open to interpretation.

Like most products of government, United States antitrust law is a flawed system. As Eli Lilly, Novo Nordisk, and Sanofi exemplified, it can be difficult to define exactly what is and is not anti-competitive practices. There have been many attempts to push legislation through that would build upon existing antitrust law, much like the European Union did recently in an effort to address many of the issues and companies discussed in this paper. Unfortunately, lobbying and party politics often get in the way of progress.

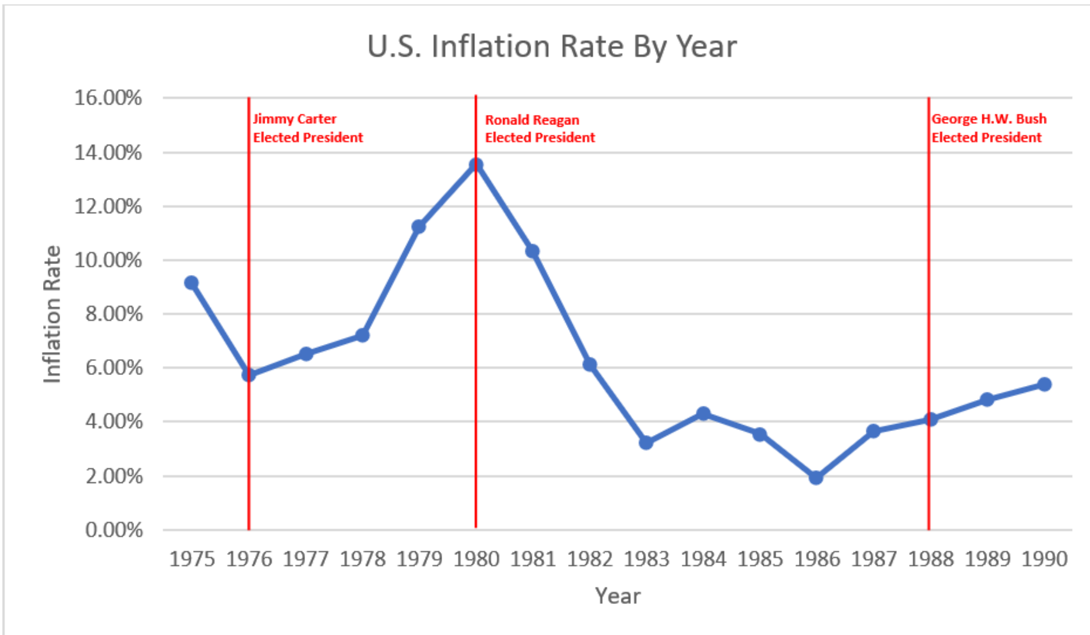
Because of this, antitrust law relies heavily upon judicial precedent. While this has the benefit of allowing antitrust law to evolve without a need for an act of Congress to invoke change, it creates a complex web of differing opinions. As attitudes, technology, and economic situations evolve, so do the opinions of the court, and one judge's ruling may conflict directly with another. Therefore, over time, relying so heavily on judicial precedent without legislative reform only serves to muddy the waters.

The role of the President in forming guidelines for mergers/acquisitions presents its own roadblock in enforcing antitrust law. On one hand, the President could use the Bully Pulpit to enact meaningful change and encourage more competitive domestic markets, as Theodore Roosevelt did. On the other hand, the President can relax guidelines and allow companies to grow largely unregulated in order to compete more effectively on an international stage, as Ronald Reagan and other presidents have since. Similar to judicial precedent, this dichotomy creates a lot of contradicting opinions.

All of these issues make a person question: should there be increased antitrust regulation? It is the opinion of the author that yes, there should be increased regulation, starting with the six companies singled out in this thesis. While not all monopolies/trusts/cartels/monopsonies are evil, they are anticompetitive and represent massive potential deadweight loss in the economy, often at the expense of consumer welfare. Therefore, such harmful corporations should be dealt with accordingly to encourage competition and protect consumer interests. How the government should respond to this issue, however, is a much more complicated opinion to give. Crafting legislative change like that is the purview of a politician, not an economist.

APPENDICES

Appendix A



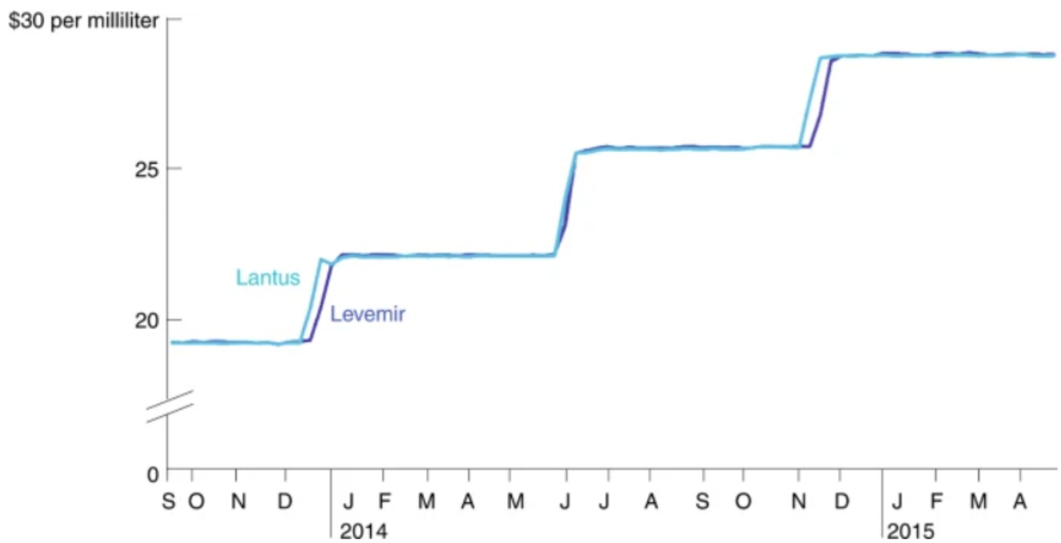
Description: This is a graph of yearly inflation in the United States from 1975 to 1990, with election years for Jimmy Carter, Ronald Reagan, and George H.W. Bush labeled.

Data Source:

U.S. inflation rate 1960-2022: Data from World Bank. MacroTrends. (n.d.). Retrieved March 5, 2022, from https://www.macrotrends.net/countries/USA/united-states/inflation-rate-cpi#:~:text=U.S.%20Inflation%20Rate%20-%20Historical%20Data%20%20,%20%200.87%25%20%2057%20more%20rows%20

Appendix B

‘Shadow pricing’ between Lantus and Levemir from 2015 to 2016.



Description: This graph illustrates the successive lockstep increases in price between Sanofi’s Lantus and Novo Nordisk’s Levemir over a single year. This is a perfect example of how shadow pricing can create the same effects as price collusion.

Graph Source:

Rathore, A. S., & Shereef, F. (2019). Shadow pricing and the art of profiteering from outdated therapies. Nature Biotechnology, 37(3), 217-220.

GLOSSARY

Affirmative Defense: a defense that admits guilt, but provides justification for the defendant’s actions

Baby Bells: the eight regional telephone companies that emerged from the breakup of American Telephone and Telegraph, also known as “Ma Bell”, in the 1980s.

Biosimilars: a class of drugs which are biologically similar to, and serve the same purpose as, more expensive brand-name drugs

Bully Pulpit: an office from which one may wield significant influence, used in reference to the United States Presidency

Cartel: a group of companies/individuals who should be rivals, but instead work together to control pieces, typically through limiting production output

Command Economy: an economy controlled by the government at all levels, including manufacturing, investment, and pricing

Competitive Market Pricing: the “fair market price” that results from the relationship between supply and demand in an industry with many competitors

Conglomerates: a company comprised of many business segments, typically spread across different industries

Consent Decree: a court-ordered settlement that attributes no blame to either party

Divestment: the sale of subsidiaries/investments, whether voluntary or forced

Discriminating Monopolies: a monopoly which charges different consumers different prices based upon a variety of measures, often demographic

Economies of Scale: when manufacturers can produce an item for significantly less as the quantity manufactured increases

Evolutionary Bottleneck: when a large population descends from a smaller, homogenous population, resulting in a lack of biodiversity among the larger population and making them more susceptible to extinction resulting from disease

First Mover Advantage: the advantage gained by a company over its competitors as a result of being the first major company to enter the target market

Geographic Monopoly: a monopoly that exists only within a certain area

Generics: drugs which are chemically identical to more expensive brand-name drugs

Great Leap Forward: the plan implemented by the People’s Republic of China to turn the largely agrarian country into a modern industrialized nation

Harm to Competition Principle: the idea that anticompetitive companies should only be regulated if the decrease in competition threatens to harm consumers

Heirloom Crops: an old cultivator of a plant, often grown outside of commercial agriculture and passed down from gardeners and subsistence farmers

Horizontal Conduct: interactions between direct competitors

Horizontal Monopoly: a monopoly in which one company owns all of their competitors

In Pari Delicto: latin for “equally at fault”

Injunctive Relief: a court order instructing a company to refrain from certain activities

Legal Monopoly: when a company has been granted a monopoly by the government, often reflecting the high costs of investment, as is the case with utilities

Monopsony: a market in which there are are many sellers but only one buyer

Natural Monopoly: when a monopoly arises as a result of free market competition with zero government regulation

Network Effect: when a product or service derives its value from the sheer number of users it has

Noerr-Pennington Doctrine: the concept that companies are not liable for lobbying for the enforcement or creation of laws, even if their goals are anticompetitive

Ophthalmic Progressive Lens: a type of eyeglasses lens of varying thickness, allowing for a transition from no correction at the stop (to view items close to you) to higher correction at the bottom (to view items at a distance)

Political Action Committee: a United States organization that uses donations to support politicians who support similar causes as their organization

Pools: when multiple groups pool resources together to achieve monopolistic control

Prima Facie: latin for "at first appearance"

Public Monopoly: when the government has a monopoly on a good/service

Rule of Reason: the argument that a company's benefits outweigh their negative behavior

Service Economy: an economy in which more people are employed in service jobs than manufacturing/agricultural

Shadow Pricing: a method of pricing goods that do not trade on a competitive market, such as highly inelastic goods, resulting in (in the insulin market) lockstep increases in the price of goods that results when one company raises the price of goods in response to an increase in their competitor's prices, giving the illusion of collusion

Single Entity Defense: the argument that the company would continue to act as a single business unit if broken apart, failing to increase competiton

Single Firm Conduct: individual action taken by a firm

Syndicate: when a group of individuals/companies work together to accomplish a common goal, such as cornering a market

Technical Monopoly: when a monopoly forms as a result of superior technology held by one company over their competitors

Treasuries: government bonds

Treble Damages: punitive damages amounting up to three times the actual/compensatory damages established by the courts

Trusts: a legal entity which acted as a holding corporation of sorts in which companies gave managing control of their stock to the Trust to manage, effectively cornering the market of a good and driving companies who refused to cede control to the Trust out of business; often used as an umbrella term for any anticompetitive company

Vertical Monopoly: a monopoly in which a company owns both their supplier(s) and their distributor(s)

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Now, make sure you get my good side!
Yes sir, Mr. President!
Chase Faulkner