

Chapter One

Where Buffett and Silicon Valley Billionaires Agree

There's class warfare, all right, but it's my class, the rich class, that's making war, and we're winning.

—Warren Buffett

Warren Buffett is an icon for Americans and capitalists everywhere. For decades, his annual letters have taught and educated Americans about the virtues of investing. In many ways, Buffett has become the embodiment of American capitalism. He's called the annual meetings of his investment firm Berkshire Hathaway a "Celebration of Capitalism" and has referred to his hometown of Omaha as the "cradle of capitalism."¹ Yet Buffett is the antithesis of capitalism.

He has become a folk hero because of his simplicity. Even as he became America's second wealthiest man, he has lived in the same home and avoided a lavish lifestyle. He makes billions not because of dirty greed but because he loves working. Books about him, such as *Tap Dancing to Work*, capture his jaunty ebullience.

As a person he is remarkably consistent. His daily eating includes chocolate chip ice cream at breakfast, five Coca-Colas throughout the day, and lots of potato chips. His investing is as consistent as his eating. For decades, he has recommended buying businesses with strong “moats” and little competition.

The results have shown how right he is. Warren Buffett gained control of Berkshire for around \$32 per share when it was a fading textile company, and turned it into a conglomerate that owns businesses with little competition. The stock is now worth about \$300,000 per share, making the entire company worth more than \$495 billion.

For decades, Americans have learned from Buffett that competition is bad and to avoid companies that require any investment or capital expenditures. American managers have absorbed his principles.

Buffett loves monopolies and hates competition. Buffett has said at his investment meetings that, “The nature of capitalism is that if you’ve got a good business, someone is always wanting to take it away from you and improve on it.” And in his annual reports, he has approvingly quoted Peter Lynch, “Competition may prove hazardous to human wealth.”² And how true that is. What is good for the monopolist is not good for capitalism. Buffett and his business partner Charlie Munger always tried to buy companies that have monopoly-like status. Once, when asked at an annual meeting what his ideal business was, he argued it was one that had “High pricing power, a monopoly.”³ The message is clear: if you’re investing in a business with competition, you’re doing it wrong.

Unsurprisingly, his initial business purchases were newspapers in towns with no competition. According to Sandy Gottesman, a friend of Buffett, “Warren likens owning a monopoly or market-dominant newspaper to owning an unregulated toll bridge. You have relative freedom to increase rates when and as much as you want.”⁴ Back in the days before the Internet, people got their news from their local paper. Buffett understood that even a fool could make money with a monopoly, “If you’ve got a good enough business, if you have a monopoly newspaper. . . you know, your idiot nephew could run it.”⁵ With that line of reasoning, in 1977 Buffett purchased the *Buffalo Evening News*. He bought this newspaper and then launched a Sunday edition to drive his competitor, the *Buffalo Courier-Express*, out of business. By 1986, the renamed *Buffalo News* was a local monopoly.⁶

In many ways, Warren Buffett is like Steph Curry of the Golden State Warriors. Curry is the master of the three-point shot. But if you look more closely at his record, you'll see that he mainly shoots *uncontested* three-point shots. He'll regularly stand several feet behind the three-point line. At first, defenders didn't even defend. Who would shoot from that far away? At one point in 2016, he made 35 out of 52 shots from between 28 and 50 feet. Scoring is a lot easier without competition.⁷

Over the years, Buffett followed his philosophy of buying into industries with little competition. If he can't buy a monopoly, he'll buy a duopoly. And if he can't buy a duopoly, he'll settle for an oligopoly.

His record speaks for itself. Buffett was one of the biggest shareholders in Moody's Corporation, a ratings agency that shares an effective duopoly with Standard & Poor's. (You might remember they rated the toxic subprime junk bonds that blew up the economy as AAA gold). He and his lieutenants bought shares in DaVita, which has a price gouging duopoly in the kidney dialysis business. (They have paid hundreds of millions to resolve allegations of illegal kickbacks.) He's owned shares in Visa and MasterCard, which are a duopoly in credit card payments. He also owns Wells Fargo and Bank of America, which dominate banking in many states. (Wells Fargo recently created millions of fraudulent savings and checking accounts in order to charge more fees to depositors.) In 2010, he fully acquired railroad Burlington Northern Santa Fe, which is a local monopoly at this stage. He has owned Republic Services Group, a company that bought its largest competitor, to have a duopoly in waste management. He has owned UPS, which has a duopoly with FedEx in domestic shipping. He bought *all* four major airline stocks after they merged and turned into an oligopoly. Lately he's been buying utility companies that are local monopolies.

We could go on listing Buffett's investments, but you're probably noticing a pattern here. He really doesn't like competition. By all accounts, he's a fine human being, but he's a monopolist at heart.

Buffett has found his soul mates with 3G Capital Partners, a Brazilian investment firm that controls 50% of the US beer market. The US beer sector has now become a duopoly. Now they're trying to dominate the packaged food sector. In 2013 Buffett partnered with 3G to

buy the H.J. Heinz Company, which two years later he merged with Kraft Foods to become Kraft Heinz. This gave them complete dominance in many areas of the supermarket shelf like ketchup. They tried to buy Unilever in 2017, which would have given them even more ownership of dominant brands, but Unilever turned them down. Alas, Kraft Heinz Unilever was not meant to be.

If Warren Buffett is the embodiment of American capitalism, then billionaire Peter Thiel is Silicon Valley's Godfather.⁸ They could not be more different. Where Buffett is folksy and simple, Thiel is distant and philosophical. Buffett quotes the actress Mae West, while Thiel quotes French intellectuals like Jean-Jacques Servan-Schreiber. Buffett is a dyed-in-the-wool Democrat, and Thiel is a libertarian who has procured a New Zealand passport so he can flee when the peasants with pitchforks come for Silicon Valley monopolies.

Buffett and Thiel have nothing in common, but they can both agree on one thing: competition is for losers.

Thiel founded PayPal and has funded a legendary roster of businesses like LinkedIn and Facebook, which now has a monopoly on the key social networks and has a duopoly with Google on online advertising. He dislikes competition and redefines capitalism by turning it on its head, "Americans mythologize competition and credit it with saving us from socialist bread lines. Actually, capitalism and competition are opposites." In Thiel's view, without fat profits, you can't fund innovation and improve. Thiel supported the Trump campaign, presumably because if you're running a monopoly it is good to know your potential regulator. He wrote an entire book, titled *Zero to One*, praising creating businesses that are monopolies and defiantly declared that competition "is a relic of history."⁹

Competition is a dirty word, whether you're in Omaha or Silicon Valley.

Praising monopolies has a long tradition in the United States. Joseph Schumpeter, an Austrian-born economics professor at Harvard, is generally remembered for coining the phrase "gale of creative destruction," in praise of competition. It is ironic that economists and consultants see him today as the champion of disruptive startups, when

in Schumpeter's view, if you wanted to search for progress, it would lead you to the doors of monopolies. Much like Peter Thiel, Schumpeter thought that perfectly competitive firms were inferior in technological efficiency and were a waste. Monopolies were more robust because, "a perfectly competitive industry is much more apt to be routed—and to scatter the bacilli of depression—under the impact of progress or of external disturbance than is big business."¹⁰

Buffett and Thiel love monopolies, because when you're a monopolist, you become what economists call a "price maker." That means you can set the price of your goods near the highest amount that consumers would be willing to pay for them, unlike in more competitive industries, where competition encourages innovation and drives down prices. Typically, monopolists raise prices and restrict the supply of goods.

The problem of raising prices and restricting supply is not a distant, theoretical issue. For example, cable companies in the United States possess a local monopoly and have been using their market power to overcharge the typical household about \$540 per year, according to the nonprofit Consumer Federation of America.¹¹ Not only are prices high, but cable companies also have long history of throttling sites and content they don't like to restrict use of the internet.¹² Comcast has throttled peer-to-peer services like BitTorrent under the guise of managing bandwidth.¹³

Buffett and Thiel's thinking has not gone unnoticed. Investment banks like Goldman Sachs (also known as the Vampire Squid of Wall Street due to its business attitude) have recommended to clients that they should welcome oligopolies and buy them. Oligopolies may have a bad reputation for pillaging consumers, but they are attractive because in Goldman Sach's view they have "lower competitive intensity, greater stickiness, and pricing power with customers due to reduced choice, scale-cost benefits including stronger leverage over suppliers, and higher barriers to new entrants all at once." Investors could read that loud and clear: oligopolies can squeeze workers and suppliers, hike prices on consumers, and that makes oligopoly stocks attractive buys.

Popular investment books openly recommend monopolies. Before the financial crisis, you could find a book titled *Monopoly Rules: How to Find, Capture, and Control the Most Lucrative Markets in Any Business*. It offered advice to young entrepreneurs, "you probably learned that

monopolies are unnatural, illegal, and rare. Wrong! Wrong! Wrong! In fact, monopolies are often natural, usually legal, and surprisingly common.” Just in case the government held a different view, it advised earmarking part of the very high profits “for top-flight anti-trust attorneys.”¹⁴

Many economists now openly praise monopolies as a more enlightened form of capitalism. Robert Atkinson and Michael Lind wrote a book titled *Big Is Beautiful*. They write, “In the abstract universe of Econ 101, monopolies and oligopolies are always bad because they distort prices. . . . In the real world, things are not so simple.” And to enlighten us, they continue, “Academic economics includes a well-developed literature about imperfect markets. But it is reserved for advanced students,” and these lessons are unavailable to the poor, benighted souls who don’t have PhDs.¹⁵

It is ironic that the champions of monopolies are essentially aligning themselves with neo-Marxist economists who think that in capitalism the big inevitably eat the small. As the eminent Polish economist Michał Kalecki wrote, “Monopoly appears to be deeply rooted in the nature of the capitalist system: free competition, as an assumption, may be useful in the first stage of certain investigations, but as a description of the normal stage of capitalist economy it is merely a myth.”¹⁶ Kalecki would have felt at home in Omaha and Silicon Valley.

Buffett and Thiel’s views on competition capture the contradictions of capitalism. Thiel’s idea that innovation comes only from large monopolies ignores his own personal history at PayPal. He was David creating a startup from nothing and competing against financial Goliaths. Today, little David has joined the Philistines.

Unfortunately, capitalism in the United States and many developed economies is not marked by competition and entrepreneurial drive. Many industries really have very few players that matter. Americans have the illusion of choice, but are not free to choose.

Many large companies have captured their regulators, and regulation exists largely to keep out new entrants. For example, top Comcast employees have gone over to the FCC in droves, and then left government to go back to Comcast and regulated firms. When it came time for Comcast to buy NBCUniversal, Comcast had 78 former government

employees registered as Comcast lobbyists.¹⁷ Unsurprisingly, despite ample antitrust concerns, the deal went through. Even more nauseating was that Meredith Attwell Baker, a key commissioner of the FCC who had approved the deal, was immediately hired by Comcast. There isn't even a thin line separating regulators from the regulated.

Markets are not black and white and are rarely entirely monopolistic or perfectly competitive either. Just as villains in movies are rarely pure evil (great directors know villains are much more frightening when they have just a touch of evil), it is extremely unusual to find a company that is a monopoly and has 100% market share. That would be too obvious and would arouse the wrath of regulators.

In general, we do not have a monopoly problem; we have an oligopoly problem. Americans have been trained to fear national monopolies, but they have given little thought to duopolies or oligopolies. Many industries are duopolies with only two major players controlling the entire market, while others are oligopolies with only three or four main competitors. Few are complete monopolies, so when you read headlines about the monopoly problem in the United States, as Professor Tim Wu has noted, "the press is sounding the wrong alarm. We know how to fight monopolies, but regulators are confused when it comes to duopolies and oligopolies."¹⁸

You won't find the words duopoly or oligopoly in Adam Smith's *The Wealth of Nations* or in any of the antitrust acts, such as the Sherman Act of 1890 or the Clayton Act of 1914. The word oligopoly was not even created until the 1930s by the Harvard economist Edward Chamberlin. The word oligopoly comes from Greek and means "few sellers." It has the same origin as the word oligarchs. Today's oligopolists are our oligarchs.

While the term oligopoly is more correct than monopoly, we hope you will forgive us if we use them interchangeably in this book. As the economist Milton Friedman wrote, a monopoly is any concentration of power by a firm that "has sufficient control over a particular product or service to determine significantly the terms on which other individuals shall have access to it." Today, oligopolies are monopolies under that definition.

Oligopolies often act like monopolies. While collusion and cartels between different players are illegal, tacit collusion is normal and rational. The investment firm Marathon Asset Management noted this in their

wonderful book *Capital Returns*, “A basic industry with few players, rational management, barriers to entry, a lack of exit barriers and noncomplex rules of engagement is the perfect setting for companies to engage in cooperative behavior. . . . and it is for this reason that the really juicy investment returns are to be found in industries which are evolving to this state.”¹⁹

It doesn't matter how you look at it, competition is dying in the United States.

The collapse in competition is happening across most of the economy. Work by *The Economist* found that over the 15-year period from 1997 to 2012 *two-thirds* of American industries were concentrated in the hands of a few firms.²⁰

One of the most comprehensive overviews available of increasing industrial concentration shows that we have seen a collapse in the number of publicly listed companies and a shift in power towards big companies. Gustavo Grullon, Yelena Larkin, and Roni Michaely have documented how despite a much larger economy, we have seen the number of listed firms fall by half, and many industries now have only a few big players. This is translating into higher profits, lower wages, and less competition. They noted, “Firms in industries with the largest increases in product market concentration have realized higher profit margins, positive abnormal stock returns, and more profitable M&A deals, which suggest that market power is becoming an important source of value.”

A couple of charts will be helpful to visualize the stunning concentration we've seen in the United States and the decline in the number of companies in most industries. The boom in mergers and acquisitions over the past 30 years is unprecedented and surpasses the original merger mania at the peak of the Gilded Age when we had robber barons. You can see that mergers tend to move in waves, except that the most recent merger waves have all happened quickly and back to back. We've seen three separate peaks in mergers since 1980. One was at the height of the late 1990s bull market, another at the peak of the market before the financial crisis in 2007–2008, and we're currently living in another great merger wave (Figure 1.1). We have yet to see how crazy things can get this time around.

Today, we're in a second Gilded Age.

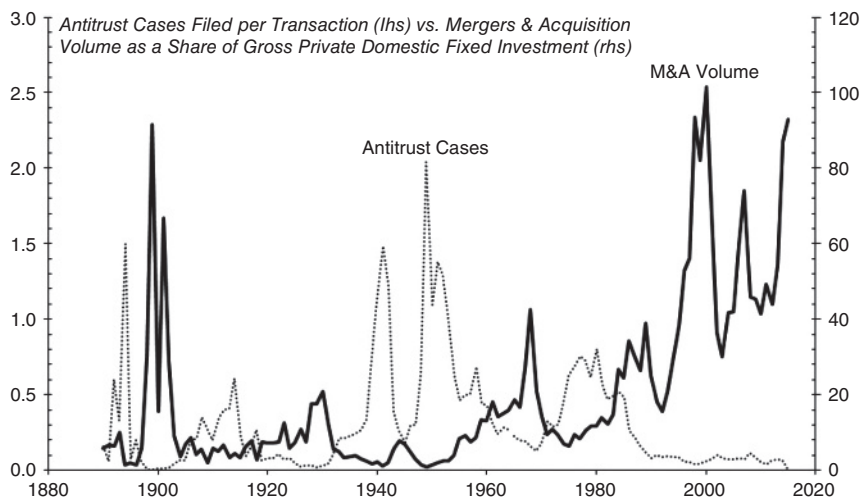


Figure 1.1 Merger Manias: 1890–2015

SOURCE: Taylor Mann, Pine Capital.

The scale of mergers is so extreme that you would almost think American capitalists were trying to prove Karl Marx right. In Marx’s view, capital generally grew via the absorption of capital of one company by another. In this struggle, he wrote, “the larger capitals,” as a rule, “beat the smaller . . . Competition rages in direct proportion to the number, and in inverse proportion to the magnitude of the rival capitals. It always ends in the ruin of many small capitalists, whose capitals partly pass into the hands of their competitors, and partly vanish completely.”²¹ As Marx often said, one capitalist kills many. Marx wanted to replace the monopoly of the fat robber baron with the monopoly of the state. Both of those are wrong. We need real, lively competition.

(For the record, even though Marx was one of the most influential writers on economics ever – to the great misfortune of anyone who ever lived in a communist country – he was a disaster with money and the last person anyone should ever listen to. He was typically penniless and his friend Friedrich Engels stole money from his father’s factory to give to Marx. Furthermore, we don’t know of any communist countries that are not abject failures. But on the point of large capitalists swallowing the small, he was right.)

This extreme corporate cannibalism where the big eats the small has huge implications for the number of firms in the economy. Companies are simply vanishing – to borrow the term from Marx – and being swallowed up by their competitors. It is nothing short of a collapse in public companies. *Over half of all public firms have disappeared over the past 20 years.* Astonishingly, according to a study by Credit Suisse, “between 1996 and 2016, the number of stocks in the U.S. fell by roughly 50%— from more than 7,300 to fewer than 3,600—while rising by about 50% in other developed nations.”²² It is not lower growth or the global financial crisis that caused fewer IPOs. The collapse in listed stocks is happening in countries where industries are becoming more concentrated.

The decline in listed companies has been so spectacular that the number is lower than it was in the early 1970s (see Figure 1.2), when the real GDP in the United States was just one third of what it is today.²³ America’s economy grows every year, but the number of listed companies shrinks. On this trend, by 2070 we will only have one company per industry. Or we may get social revolution.

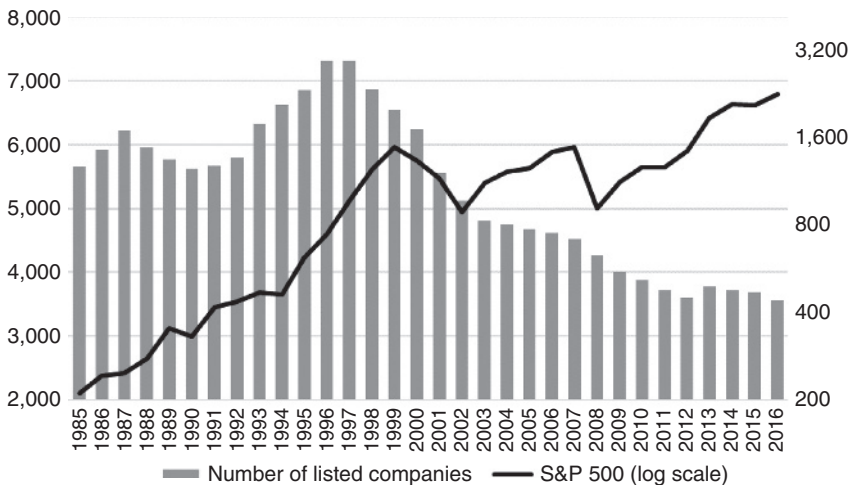


Figure 1.2 Collapse in the Number of US Public Companies Since 1996
SOURCE: Data from Charles Schwab.

Not only are the big companies gobbling up the small, but we have not seen a new wave of startups coming in to compete with the Goliaths. Notice that as merger waves have happened, we've seen far fewer initial public offerings (IPOs) (see Figure 1.3). The lack of new companies trading on the NYSE or Nasdaq exchanges is historically very unusual given how much markets have risen. Normally, during stock market rallies lots of new companies go public. CEOs take advantage of rising stock markets to sell shares to the public. In the boom years of the 1990s there were an average of 436 IPOs per year in the US. In 2016, we saw only 74 IPOs.²⁴ The great American economic machine is slowly grinding to a halt.

Given the lack of any new entrants into most industries, it should be no surprise that companies are getting larger and older. The average age of public companies in the United States is currently 18 years old, up from 12 years old in 1996. In real terms, the average company in the economy has become three times larger during the past two decades.²⁵ Not only do we have fewer, older companies, but they are also capturing almost all the profits. In 1995 the top 100 companies accounted for 53% of all income from publicly traded firms, but by

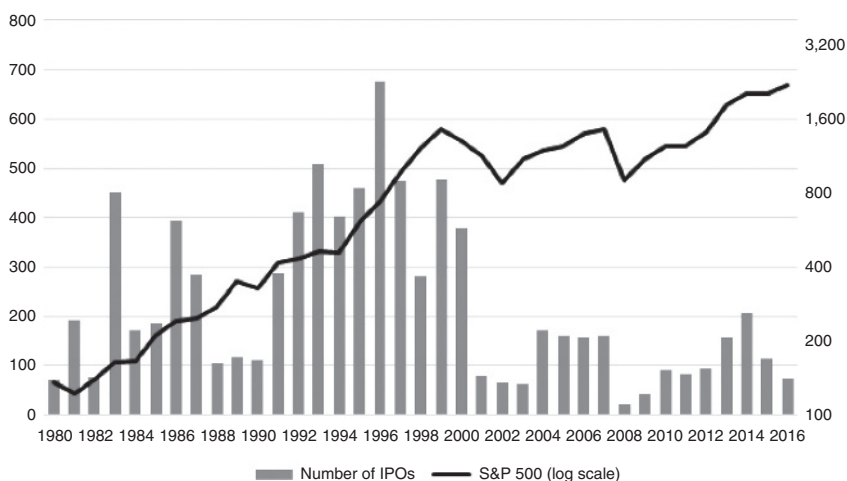


Figure 1.3 Collapse in Initial Public Offerings (IPOs)

SOURCE: BARRONS.

2015, they captured a whopping 84% of all profits.²⁶ Like *Oliver Twist* asking for more, there is little left for smaller companies after the big ones eat their fill.

All the mergers and acquisitions have killed competition. Every year companies write an annual report that shareholders can consult. They have to discuss their business, their competitors, and the risks to their business. *The Economist* looked at how often companies mentioned the word “competition” and the chart (see Figure 1.4) is astounding. We’ve seen a collapse in the use of the word competition in annual reports, and this has coincided with the increasing concentration in the economy. CEOs no longer even need to write about competition because so little remains.

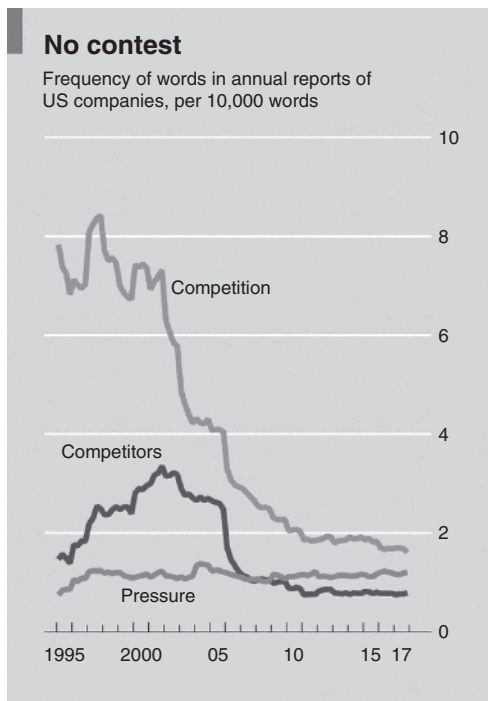


Figure 1.4 Frequency of the Words “Competition,” “Competitors,” and “Pressure” in Annual Reports

SOURCE: *The Economist*.

The lack of competition is not due to a few industries; *almost all* industries are becoming more concentrated. In a landmark study, titled “Are US Industries Becoming More Concentrated?” Gustavo Grullon, Yelena Larkin, and Roni Michaely showed that over the past 20 years over 75% of US industries have experienced an increase in concentration levels. In almost all industries, the top four firms had significantly increased their market share, as smaller rivals disappeared. Much more disturbingly, they noted that the companies in industries that had become the most concentrated had the highest profit margins and the highest stock returns.²⁷ They used information from publicly listed companies, but they also looked at the census data for private companies, and the message was the same. The key conclusion from their study was alarming: “Overall, our findings suggest that the nature of US product markets has undergone a structural shift that has weakened competition.”

When Grullon and his colleagues analyzed industries by size, they found that the more concentrated the industry, the higher the return on assets. They wanted to see if that was simply because larger firms might be more efficient and better run, but instead, what they found was that almost all the return came because “the higher returns on assets are mainly driven by firms’ ability to extract higher profit margins.” The effect was huge and highly correlated with the size of the companies. You really can hike prices and get higher profits when you have little competition.

Buffett was on to something. Grullon’s study found that a strategy of buying the most highly concentrated industries and shorting the least concentrated industries outperforms the market.

No study is perfect, but the overall message is unmistakable: the United States has become a lot less competitive. Recently John Kwoka, one of the great authorities on industrial economics, antitrust, and regulation offered a damning assessment based on all of the available research: the “totality of this body of work provides a compelling portrayal of rising concentration throughout large segments of the U.S. economy over the past 20 years.”²⁸

Dozens of studies are now showing that higher industrial concentration leads to higher profits for firms, higher prices for consumers, fewer startups, lower productivity, lower wages, and greater inequality. Yet CEOs keep gobbling other companies up.

On the surface, our current problems would appear to be a case of greedy CEOs and investors without ethics ruining the economy for their own benefit, but something deeper is happening.

Edward Queen, director of Emory's Turner Program in Ethics and Servant Leadership, found that when business students are presented with an ethics case, 20% to 30% of the students cannot find or identify the ethical issue. In Queen's view, "far too much of the world's corporate leadership is driven by moral midgets who have been educated far beyond their capacities for good judgment." Queen argues that for the past six decades the disciples of Nobel Prize-winning economist Milton Friedman have been emphasizing that the only duty of a corporation is to generate profits and a return on investment.²⁹ These lessons that were drilled into generations of business school graduates are now playing out on a grand scale.

Headlines of high-profile CEOs and managers who have been convicted of crimes reinforce the view that MBAs lack ethics. Jeffrey Skilling was Harvard Business School class of 1979 and he brought an army of McKinsey MBAs to Enron. The head of McKinsey Rajat Gupta was convicted of insider trading, and he also had a Harvard MBA. Headlines from Duke University seem to confirm the problem. MBA candidates at Duke are required to take "Leadership, Ethics, and Organizations" but close to 10% of first-year students in Duke's business program were suspected of cheating on a take-home examination.³⁰

The answer is not so neat and tidy as saying that evil CEOs without ethics are choking the US economy.

Every MBA has learned Michael Porter's Five Forces of management. Porter taught at Harvard, and his book *Competitive Strategy* is now the bible for managers and investors. MBAs are trained to analyze the level of competition within an industry and avoid industries with high competition.

Among Porter's Five Forces are the threat of established rivals and the threat of new entrants. For a Five Forces-trained MBA, the worst industry you can find yourself in is one where your competitors are strong and anyone can enter the industry and compete. If a CEO can find ways to keep out rivals, they are trained to do so. That is why mergers are so typical to eliminate established rivals. It is also why

companies will do all they can to erect regulatory and legal barriers to entry in their industries. This is the MBA gospel.

Over the past few decades, MBAs have also learned to specialize and dominate markets. Jack Welch taught managers at General Electric that they should not be third- or four-place players in industries. Only first or second place would do. Since the cult of Welch and GE has taken over, managers have sold smaller competitors to the biggest rivals, and the top firms have gobbled up any small competitor.

In the investing world, hedge fund managers are trained to invest in companies that have absorbed Porter's Five Forces and have established moats to protect against new entrants. Buffett has said, "In business, I look for economic castles protected by unbreachable moats." Pension fund managers and investors need to find the stocks that produce high long-term returns. They would be failing, in a way, if they did not chase the monopolies, duopolies, and oligopolies. Yet in order to generate returns, in the words of one manager, they have to look for "corporate killer whales that can feast on baby seals."

Libraries of books at business schools are devoted to explaining different kinds of moats. Investors search for companies that achieve such scale that they become the "Low-Cost Producer." Investors try to find firms with "High Switching Costs" that lock clients into a relationship. They try to find businesses with "Network Effects" where you win by being the only system people can use to call or pay each other, for example. They also look for industries with "Intangible Assets" such as patents that keep your competitors out by law. In the medical industry, in particular, patents allow companies to charge astronomical prices because, by law, no other companies can compete with them while they hold a patent.

Company CEOs and investors are all behaving in a perfectly rational way when they buy competitors and find ways to monopolize their industries. They are reducing the threat of established rivals as well as the threat of new entrants. They are following Porter and Buffett and widening their moat every day.

Almost all big companies are not bad. The paradox is that what is good, right, and logical for the corporation is not good, right, or logical for the economy as a whole. The growth of monopolies does not lead to growth for the economy.

Every company that is a Goliath starts out as David and tries to increase its dominance and market share. That is what MBAs are taught with Porter's Five Forces and what they learn from Buffett by "increasing the moat" around their businesses. Every manager tries to do this, and investors are trained to reward companies that reduce competition. This system of incentives is a Monopoly Machine.

This drive to monopoly works at the micro level, but not at the macro level. What is good for the CEO to do for his company is not necessarily good for the whole economy. In the economy, it is logical for big companies to try to seek efficiencies, acquire competitors, pay lower wages, and increase their own income, but when all companies try to do this at the same time, everyone is worse off. The paradox is that as every company does this, it leads to lower wages, higher inequality, lower growth, less investment, and we're all worse off. Growth for the monopolist does not mean growth for the economy.

After the financial crisis Walmart's CEO Mike Duke said, "Our customers are running out of money, buying smaller pack sizes and less discretionary items near the end of the month. It shows greater pressure on consumers."³¹ Yet in no way did he connect the low pay of his own employees to the lack of consumer income and demand.

The squeeze on workers brings to mind G.K. Chesterton's observation: "Capitalism is contradictory as soon as it is complete, for the master is always trying to cut down what his servant demands, and hence is cutting down what his customer can spend. He is asking the same person to act in contradictory ways. He wishes to pay him as a pauper, but wants him to spend like a prince."

Record high corporate profit margins are merely the other side of the coin of suppressed wages.

Long gone are the days when Henry Ford could double his workers' wages and do so happily. As Ford explained, "Unless industry can keep wages high and prices low it destroys itself, for otherwise it limits the number of customers." Ford understood that the economy was not a zero sum game between himself and his workers.³²

During the Great Depression, the British economist John Maynard Keynes was trying to figure out why the economic collapse was so severe. He realized that in downturns, it is logical for each household

to demand more cash and save money on a precautionary basis to put itself on a better footing. However, when all households do it at the same time, the economy contracts, the demand for goods falls, workers are fired and all households are worse off than if none of them did it. Your spending is someone else's income; if you don't spend, someone else doesn't get paid. It is illogical for each household not to save and look after itself, yet it is illogical for all households to do that at the same time. The paradox that what is true for the part is not true for the whole is one of the key problems in economics and is at the heart of *The General Theory* by Keynes.

In logic, this is called the fallacy of composition. If you are at a football game and stand to see the game better, you might get a better view. But if everyone stands, no one has a better view and everyone is worse off. Again, what is true for the part is often not true for the whole.

Once you start looking, you'll find the fallacy of composition everywhere in economics.

During the euro crisis, the Germans seemed completely oblivious to the logical fallacy. In German, *Schulden*, the word for debt, comes from *Schuld*, which also means guilt. Debt was almost evil and immoral. German Finance Minister Wolfgang Schäuble blamed the European economic crisis on smaller European countries for abandoning "long-term gains for short-term gratification," by increasing their debt load and abandoning trading competitiveness.³³ Yet just as your consumption is someone else's income, Germany's trading surplus had to be someone else's deficit. Likewise, Germany's assets were someone else's "irresponsible" loans. Not everyone can run trade surpluses at the same time, and not everyone can be a creditor at the same time. Your consumption is my income, and your borrowing is my lending.

In the summer of 2007, long lines of depositors started forming outside the bank Northern Rock in London. It was the first bank run in Britain since 1866. Ironically, the panic started when the Bank of England said Northern Rock was in fine shape and that it would stand by the bank. Problems can only be believed when they are officially denied. Immediately customers were alerted to problems and demanded the return of their deposits.³⁴ Every depositor was behaving

in a perfectly rational way, yet when all of them showed up to get their cash at the same time, they were causing the very bankruptcy they sought to avoid. (A bank run happens when customers try to withdraw more money from the bank than the bank can provide. Banks do not keep all customer deposits available in cash for immediate withdrawal, and instead the money is lent out.)

Mervyn King, governor of the Bank of England, once noted that it may not be rational to start a bank run, but it is rational to participate in one once it has started. It is illogical for you not to pull your money out of a bank when you're worried about the bank's solvency, but it is also illogical for everyone to pull their money at the same time, as that itself brings the bank down.

The idea of the fallacy of composition applies in the field of energy as well.

Coal was the main energy source in Victorian England. Charles Dickens had described the skies of industrial towns as "black vomit, blasting all things living or inanimate, shutting out the face of day, and closing in on all these horrors with a dense dark cloud."³⁵ In 1865, the English economist William Stanley Jevons published *The Coal Question*. He set out to establish the size of England's coal reserves. During his research, he stumbled upon a surprising paradox. As steam engines became more efficient, coal consumption overall went *up*, rather than down. Jevons concluded, in italics, "It is wholly a confusion of ideas to suppose that the economical use of fuel is equivalent to a diminished consumption. The very contrary is the truth."³⁶ What was true for each individual steam engine was not true for the whole of England. This insight is known as Jevon's Paradox: make something more efficient, and people will use more, not less of it.

Jevons Paradox is the reason why expanding freeways in Los Angeles, Houston, and other concrete jungles only leads to more cars, less carpooling, and worse traffic. When people can drive more easily, they can live further away. Suddenly, much larger, more affordable homes are in commuting distance from cities. In an attempt to keep traffic moving by adding more lanes, city planners have made room for more cars and encouraged driving. What is true for the efficiency of the individual lane in a freeway is not true of the efficiency of the whole of Los Angeles. In 1990, British transportation analyst Martin Mogridge

observed it as a more general characteristic of highways, and his insight is known as the Lewis-Mogridge Position: the more roads that are built, the more traffic grows to fill the roads. It holds everywhere from Nairobi to Beijing to Los Angeles.

When CEOs are presented with the choice of maximizing efficiency for the overall economy or behaving like a monopolist, the answer is obvious. It is perfectly logical for them to behave like monopolists. Most CEOs don't sit down and consider the effects their individual decisions have on society at large. That is not the way they are trained or what is logical for them.

The logical choices to reduce competition and dominate industries creates a natural cycle in business where the Davids in business always try to become Goliaths and kill off all threats.

When you look at the history of large monopolies in telecommunications and media, they started out by trying to provide a better product to the mass market. Initially hobbyists built telegraph lines between towns, but there was no way to reliably connect all of the United States until Western Union pieced together regional networks. Western Union went from a small upstart to the dominant monopolist of its day, much like Facebook went from a website at Harvard to a network that connects over two billion people. Likewise, AT&T started out as the little David. The quality of phones was terrible, and you couldn't really call many people, so it was viewed as little more than a toy. However, soon the telegraph and telephone competed head on and were in a patent war. Eventually, Western Union settled. The telegraph company sold its telephone network to Bell in exchange for 20% of Bell's telephone rental revenue. AT&T built a formidable monopoly that completely eclipsed Western Union's previous control over American life.³⁷

This cycle of David turning into Goliath is told in Professor Tim Wu's dazzling book *The Master Switch*. In "The Cycle" businesses go "from somebody's hobby to somebody's industry; from jury-rigged contraption to slick production marvel; from a freely accessible channel to one strictly controlled by a single corporation or cartel – from open to closed system. It is a progression so common as to seem inevitable, though it would hardly have seemed so at the dawn of any of the past century's transformative technologies."³⁸

It is not only telecommunications or media where you see the cycle. We've seen it in supermarkets, farming, insurance, and many other fields. Mom-and-pop stores have been replaced by big-box giants like Walmart, local community banks have been replaced by global banks like JP Morgan or Bank of America and small farmers have been replaced by the likes of Cargill and Tyson. Cable companies initially started out fighting the television networks to be able to transmit broadcasting, and the networks themselves were a hobby of connecting towns for shared programming. Over time, though, it has morphed into giant monopolies with no competition for high-speed internet.

Buffett is extremely smart, but his greatest advantage is the insight that monopolies, duopolies, and oligopolies face little competition and little threat of new entrants. Companies that dominate their industries represent toll roads in your daily life. Every time you do anything in your daily life, you're sending part of your paycheck to monopolists. You're making Buffett richer, and he's tap dancing all the way to the bank.

Key Thoughts from the Chapter

- It doesn't matter how you look at it, competition is dying in the United States.
- In general, we do not have a monopoly problem; we have an oligopoly problem.
- The paradox is that what is good, right, and logical for the corporation often is not good for the economy as a whole.
- Companies that dominate their industries represent toll roads on your daily life.