



Monopoly Myth Series 

Monopoly Myths: Is Concentration Leading to Higher Markups?

JOE KENNEDY | JUNE 2020

No, markups have increased only slightly in some industries—and have stayed the same overall—which refutes claims that market concentration is giving firms more pricing power.

KEY TAKEAWAYS

- A number of advocates claim that businesses have been increasing their price markups in the last two decades because they have gained market power.
- The evidence for markups having increased dramatically is extremely weak. Many of the studies making this claim suffer from serious methodological errors.
- Price markups are notoriously difficult to measure, especially at the firm level. Studies that find increases usually miscalculate by failing to consider changes in marginal costs, especially related to the growing share of intangible capital.
- In some industries, markups have increased for both small and large firms and have gone up in a range of countries, all with different antitrust regimes. Both suggest that something other than a decline in competition is at work.
- In many industries with a rise in aggregate markups, the cause appears to be an increase in competition, not market power. Market share is shifting toward more productive, more innovative firms, and this is a trend we should welcome.

INTRODUCTION

In the last few years, a number of academic papers have alleged that price markups (commonly defined as the price of outputs divided by the marginal cost of producing an additional unit) have increased in a large number of industries in the United States. They attribute this to increased market concentration giving firms more pricing power.

In reality, the evidence for markups having increased dramatically is extremely weak. The lead study showing large markups also shows markups have increased as much in small firms as in large ones, suggesting market power has nothing to do with the increase. Overall, the evidence suggests that, while markups have increased slightly in some industries, in others they have remained roughly the same. Moreover, if markups have increased as much as the studies claim, then why have domestic, nonfinancial profit rates over the same period increased only minimally?

Markups are notoriously difficult to measure, especially at the firm level. And in many cases, increases appear to be the result of a failure to take into account changes in marginal costs, especially related to the growing share of intangible capital (e.g., research and development (R&D) and software) in companies, not increases in relative prices. In other cases, increases in markups are the result of intensified competition, as more productive and successful firms gain market share against laggards. In these cases, markups can increase either because firms are more efficient or they offer slightly better products or services that consumers are willing to pay more for—not because of monopoly power.

As always, any implications for antitrust policy need to be based on a careful economic review of the specific markets in question. Policy decisions should be driven by the goal of increasing overall economic welfare.

THE CLAIMS THAT MARKUPS ARE UP

The claims of higher markups have often been sweeping. Economist Joseph Stiglitz wrote, “There has been an increase in the market power and concentration of a few firms in industry after industry, leading to an increase in prices relative to costs (in mark-ups). This lowers the standard of living every bit as much as it lowers workers’ wages.”¹ According to Bonnie Kavoussi of the Washington Center for Equitable Growth, “Markups and corporate profits have been on the rise since the 1980s.”² These and other similar claims are based on several recent academic studies that have been widely touted as the truth, and covered in such major media outlets as *The Economist*, *The New York Times*, and *The Wall Street Journal*.

Perhaps the most widely cited study is from Jan De Loecker, Jan Eeckhout, and Gabriel Unger, who asserted aggregate markups rose from 21 percent of marginal cost in 1980 to an astounding 61 percent in 2016.³ Rather than trying to calculate markups directly from marginal costs—which are extremely difficult to measure—they took advantage of the fact that the markup equals the elasticity of output to an increase in the use of marginal inputs divided by the ratio of marginal costs to total revenue, which they estimated with firm-level data. In particular, they measured the elasticity of output multiplied by total revenue over total marginal costs. They attributed this increase to a rise in market power, which they have also blamed for a variety of social ills: “In addition to lowering consumer well-being, market power decreases the demand for labor and dampens investment in capital, it distorts the distribution of economic rents, and it

discourages business dynamics and innovation. This has ramifications for policy, from antitrust to monetary policy and income redistribution.”⁴

Another team, led by Gauti Eggertsson, used aggregate macro data and also found an increase in markups over the last 40 years—although much smaller than those found by De Loecker. In particular, they equated markups with the inverse of the share of total revenues not accounted for by pure profits (those in excess of the cost of capital). In their baseline case, markups increased from roughly 1.1 to 1.2 between 1987 and 2015, one-sixth the increase found by De Loecker et al. Despite this modest increase the authors attribute to it an increase in market concentration and profits and a fall in the share of income going to labor.⁵

Economic theory tends to downplay the role of fixed costs in an industry. It assumes competition forces companies to set their prices at the marginal cost of producing one more unit. But few companies set prices at marginal costs.

Other studies have made similar claims. Robert Hall also found a much smaller increase in markups, on average growing from 1.12 to 1.38 between 1988 and 2015.⁶ Gustavo Grullon, Yelena Larkin, and Roni Michaely claimed that a rise in profits between 1972 and 2014 was caused by increased markups, and not by the use of more capital or improved efficiency.⁷

MIT economist Thomas Philippon has reported that, since 2000, U.S. markups have increased by 14 percent relative to Europe, a fact he attributes largely to a decline in competition in the United States.⁸ He stated, “The evidence strongly suggests that increasing concentration in the US is responsible for an excessive increase in prices by at least 8 percent over the past seventeen years.”⁹ He also asserted that the real increase was actually 14 percent, as the lower figure does not account for the fact that productivity rose by 6 percent more in the United States than it did in Europe during that time.¹⁰

THE DIFFICULTY OF MEASURING MARKUPS

One of the first problems with this line of inquiry is the difficulty of measuring profit markups in an economy. Economic theory tends to downplay the role of fixed costs in an industry. It assumes competition forces companies to set their prices at the marginal cost of producing one more unit. But few companies set prices at marginal costs. To see why, consider the case of building an automobile. To get the first car on the assembly line, a company would have to spend tens of millions of dollars on fixed costs such as R&D, design, and tooling. The actual marginal costs—the labor involved in assembling the car plus the cost of purchased components—might only equal half of the total costs if the fixed costs are spread across all cars produced. If the car company priced the car to reflect marginal costs, it would not be able to fund any long-term investments, such as in research. Moreover, it would lose money on every car, and soon go out of business. The end result of an economy in which every firm sets prices on the basis of declining marginal costs is monopoly: Firms go out of business until there is only one left standing (presumably the one that can endure financial losses the longest). In other words, marginal pricing is just another term for predatory pricing—something antitrust regulators can, and should, take action against.¹¹

Moreover, a company raising both its expenditures on R&D and its prices in order to recoup that added investment make it seem to have also increased markups because of the strange way markups are defined. A significant share of any increase in markups appears to be a reflection of increased fixed costs, especially intangible costs such as R&D and design.

But even leaving this fundamental point about markups aside, economists recognize that marginal costs may vary depending on firm size—but they usually assume marginal costs rise as firms become more complex, rather than decline because of efficiencies of scale. With these assumptions, any differences between price and marginal cost must signal market power. And given these restrictions, it is questionable whether markups are meaningful. A more accurate measure of market power would be the long-run return to capital after all other costs—both fixed and variable (including the normal cost of capital)—are subtracted.

Even assuming markups, as defined by these economists, are meaningful does not make them easy to measure. Economist Chad Syverson wrote, “Markups are difficult to measure directly. They require information not just on prices but on hard-to-observe marginal costs.”¹² Eggertsson, Robbins, and Wold characterized obtaining data about the marginal costs of production as a “difficult problem.”¹³ Firms are not required to, and typically do not, report marginal prices largely because it is not certain what costs qualify as marginal versus fixed (for example, some of the electricity cost in a plant is fixed, as it would be used no matter how many cars are produced; but some is marginal, as it relates to how many assembly lines are running and for how long), and because the information would help their competitors. Moreover, marginal price varies by quantity, individual firm, and type of industry. Even De Loecker mentioned marginal costs are fundamentally not observed, and require many assumptions in order to capture them from the data.¹⁴

In the abstract to an earlier version of his paper, economist Susanto Basu elaborated on these restrictions by noting that “different assumptions and methods of implementation lead to quite different conclusions regarding the levels and trends of markups.... Existing methods cannot determine whether markups have been stable or whether they have risen modestly over the past several decades.”¹⁵ Another study led by Steven Berry faulted recent studies on markups for employing an outdated analytical approach in which market structure determines outcomes, rather than newer models from industrial organization theory.¹⁶ The paper went on to discuss four separate industries in which the relationship between changes in market concentration and markups has been radically different.

SIGNS THAT MARKUPS HAVE NOT INCREASED

Leaving aside the fundamental problems of measuring the ratio of prices to marginal costs, other observers have cast doubt on whether markups have risen significantly at all. In particular, a number of writers have found problems with the De Loecker study. Robert D. Atkinson and Michael Lind pointed out that, if markups have tripled, surely profits as a share of gross domestic product (GDP) would have gone up significantly as well.¹⁷ Yet as an earlier paper in this series shows, domestic, nonfinancial corporate profits as a share of GDP barely rose between 1990 and 2014, and have been declining ever since.¹⁸

Atkinson and Lind also pointed to two anomalies in De Loecker’s results.¹⁹ In an earlier version of the paper, the authors reported smaller companies have seen a larger increase in markups,

which would seem to refute their contention that market power is causing the rise.²⁰ Second, De Loecker et al. reported markups for a few individual companies. It is noticeable that Apple and Walmart, both of which are often alleged to have significant market power, saw their markups actually decline slightly between 1980 and 2014. At the same time, General Electric's markup increased from 1.19 to 1.71, yet its profits fell. Where did all this markup go if not to profits?²¹

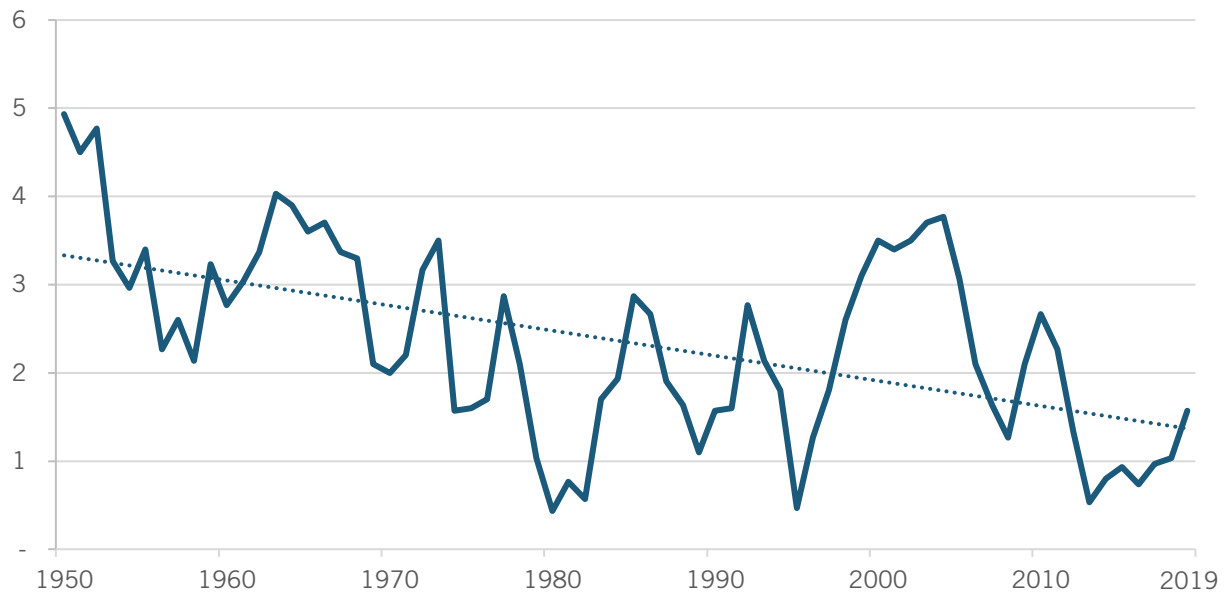
Susanto Basu found that estimates of higher markups are implausible because they lead to unrealistic estimates of other economic variables.

Another problem with De Loecker's model is the assumption that marginal cost, which is used to calculate the markup, is always equal to average cost. But as noted, this is never true for firms with either fixed costs or economies of scale—which is most firms, particularly most large firms. Earlier in his paper, De Loecker recognized that “fixed cost is sizable and has gone up, [but proceeds anyway].”²² The model also assumes all firms are identical with regard to fixed costs, which clearly they are not. These assumptions no doubt make the data easier to model, but severely limit the relevancy of any results.

Susanto Basu found that estimates of higher markups are implausible because they lead to unrealistic estimates of other economic variables. For example, De Loecker's estimates of a threefold increase in markups implies the average economic profit rate must be around 35 percent of firm sales, a figure even De Loecker admitted is “completely unrealistic.”²³ An additional problem is De Loecker's estimates imply adding more capital to a process actually decreases output, which is the opposite of what actually occurs.²⁴ Finally, Basu pointed out that with high fixed costs and increasing returns to scale, a firm can have high markups above marginal cost but still not earn enough to cover its total costs.²⁵ More generally, he noted that the logical consequence of higher markups is reduced demand for workers as firms cut production, higher inflation as they raise prices, or increased productivity. Yet at the time of these studies, the U.S. economy was experiencing record-low unemployment, an inflation rate that persistently stayed below the Federal Reserve's target of 2 percent, and a disappointing decline in the rate of productivity improvement.²⁶

Syverson made a similar observation. When prices are not increasing quickly (low inflation) but markups are, then costs must be falling quickly (e.g., productivity is growing). But it is not clear this is happening.²⁷ Higher productivity would help reduce costs, but as already noted, productivity has been growing slowly for the last two decades. (See figure 1.)

Figure 1: U.S. labor productivity growth rate, three-year moving averages²⁸



It is possible costs have fallen enough to offset the slow productivity growth. According to Syverson, unit labor costs have risen more slowly than inflation, but the timing is bad. Most of the decline he has found in labor's share of income occurred after 2000, whereas the largest markup increases happened between 1980 and 2000. In contrast, unit capital costs for nonfinancial corporations have grown faster than inflation for the past 20 years, raising firms' costs of doing business. So if prices are not rising, productivity increases are low, and costs are not falling, it is difficult to see how markups could increase significantly.

COULD HIGHER MARKUPS BE DUE TO OTHER CAUSES?

De Loecker et al. have acknowledged a number of limitations to their study. In addition to the inherent difficulty of measuring markups, and the erroneous assumption that any prices over marginal costs are a problem, they found that, while markups have risen in many industries, within industries, the story is more complicated. Higher markups have occurred largely within a relatively small group of firms at the top of the markup distribution; firms in the middle of the distribution have not increased their markups. This redistribution within industries accounts for roughly two-thirds of their total increase in markups.²⁹ But an increase in market power likely benefits all companies in an industry to some extent, as the industry becomes more concentrated and firms gain pricing power. The fact that only a few firms benefit, and that markups have risen in other countries and within smaller companies suggests market power is not likely to be the dominant cause.

De Loecker listed several reasons besides an increase in market power that could explain rising markups, including an increase in fixed costs, greater economies of scale, changes in market structure, an increase in customer demand, and the introduction of new product varieties.³⁰ The first two causes would require firms to raise their markups in order to recover the full cost of doing business, as firms with no markup would suffer losses and go out of business. The last two

would mean consumers find products more valuable and therefore would be willing to pay higher prices for them.

The central claim by the proponents of the theory that increased markups are a result of reduced competition would suggest markups should be higher in the United States, which they argue has embraced a laxer antitrust enforcement regime. Yet a companion paper led by De Loecker looking at 70,000 firms in 134 countries finds similar results: The average markup (measured as the ratio of price to marginal cost) increased from 1.1 to 1.6 between 1980 and 2016.³¹ This again casts doubt on the theory that higher markups in the United States are due mainly to lax antitrust enforcement—and strengthens the argument that global economic and technological trends, including the increased importance of intangible capital, are affecting the measurement of markups.

RISING MARKUPS APPEAR DUE TO MISMEASUREMENT

A number of economists have argued that, in one way or another, estimates of significantly rising markups are due to mismeasurement. Tad Lipsky, for example, has argued that much of the higher markups found by De Loecker are from growing international sales by firms located in the United States.³² This would lead to higher markups if firms are able to command a higher price on their exports—which, if true, would be far less worrying. In fact, to the extent international sales result from U.S. firms obtaining higher prices from foreign customers for better products, or from gaining market share by cutting nonlabor costs, the United States would be better off. Even if markups represented the exercise of market power in overseas markets, that would be a problem for other competition authorities, not ours.³³

Other studies have calculated markups using a broader definition of fixed and variable costs, and found little or no increase in markups.

Another possibility is these studies do not include all relevant costs when measuring the markup between price and cost. Atkinson and Lind challenged De Loecker's conclusion that higher markups stem from growing market power: "A more logical explanation for this finding of increased markups... is that the ratio of fixed costs to marginal costs has increased in most industries, particularly as investments in intangible capital (e.g., marketing, software, R&D) have increased significantly."³⁴ If the intangible nature of these assets makes them difficult to value, the possibility of mismeasuring markups is even greater.

The Eggertsson paper also points to other "compelling" hypotheses that could explain some of these trends, such as an increase in either the risk premium for capital or in the amount of unmeasured intangible capital.³⁵ "Intangible capital" refers to spending that is intended to yield a return on areas such as software, research, advertising, management, and training. And over the period of time these authors studied, intangible capital increased steadily in as a percent of GDP, from 6.1 percent in 1977 to 12.1 percent in 2011.³⁶ These increases alone are likely more than enough to account for the finding of increased markups, as this capital was not reflected in variable costs.

For example, the paper does not include the cost of marketing in marginal costs on the theory it only shifts demand from one firm to another, rather than creating independent value.³⁷ Whether

this is true—and some economists dispute this notion—it is irrelevant to assessing market power.³⁸ This omission leads to higher estimated markups. Moreover, one could say the same about any cost: The employees and machines of one firm create products that would otherwise be made by other firms.

Other studies have calculated markups using a broader definition of fixed and variable costs, and found little or no increase in markups. The markup is usually defined as the ratio of the selling price and the marginal cost of producing one more unit. Fixed costs are usually ignored because they have already been incurred. In a competitive market, as long as the market price is higher than the cost of producing another unit, the firm should accept it. Of course, with fixed costs, the price may not be enough to cover the firm’s average cost, so it will eventually go out of business. Steven Berry pointed out that rising fixed costs and declining marginal costs (in some cases zero) due to increases in the use of information technology could also be driving measurements of higher markups.³⁹ Indeed, the marginal cost of most software is zero (i.e., whatever it costs to send the bits over an Internet connection), so the markup would be close to infinite (yet, of course, if software firms charged marginal cost they would eventually fail—unless they could make up the revenue another way, such as through advertisements).

Economist James Traina calculated public nonutility, nonfinancial firm markups, including marketing and management expense in marginal cost, which have accounted for a rising share of production costs, and are both fixed and variable in nature. He found that, when these costs are included, markups have increased only modestly since the 1980s, and remain within historical variation.⁴⁰ Although marketing and management are not normally included in the cost of goods sold, they represent another category of spending: selling, general, and administrative expenses (SG&A). He also showed that, because markups tend to vary with firm size, markup estimates that only look at public firms tend to bias aggregate estimates upward because firms with low markups are more likely to exit the industry, leaving only firms with higher and economically sustainable markups.⁴¹

IS COMPETITION DRIVING FIRMS TO BECOME MORE PRODUCTIVE?

Besides mismeasurement, estimates of higher markups might be driven by an increase—rather than a decline—in competition. A number of studies support this thesis. For example, economists David Autor et al. used data from the U.S. Economic Census going back to 1982.⁴² They concluded that globalization and new technologies have increased competition within a number of industries. This in turn has pushed sales toward the most productive firms, allowing their markups to increase as their costs relative to others in the industry have fallen. This trend has not extended to the majority of firms in a given industry, as median markups have been flat or even falling—and larger firms have been more productive. They also noted that these “superstar” firms have tended to become more specialized within their industries, rather than trying to expand into other markets. This same trend has occurred in Europe. What is ironic is if these “superstar” firms cut prices, they would gain market share and likely be accused by anti-monopolist firms of predatory practices.

A recent study by the International Monetary Fund (IMF) provides further support. Looking at a large number of industries in different countries, it also finds a consistent record of rising markups in developed countries: about 8 percent since 2000.⁴³ However, within an industry, firms differ in their experience. For most country/industry pairs, higher markups are associated

with more innovation within the industry. The top 10 percent of firms ranked by markup are 30 percent more productive and 30 percent more intensive in their use of intangible assets.⁴⁴ All of these correlations are consistent with causes other than market power—especially with the theory that international competition has increased—pushing firms to become more productive, partly by increasing their investment in intangible assets. These costs are usually omitted from markups. Again, the fact that similar increases are occurring within other countries indicates this is due to changes in global economic markets rather than in national antitrust enforcement.

The IMF found that trends in the United States are driven mainly by a reallocation of market share within industries, reflecting in part “a growth-enhancing reallocation of resources away from low-markup, low-productivity firms toward high-markup, high-productivity counterparts.”⁴⁵ In most industries, only a fraction of firms raise their markups. And these tend to be the most productive and innovative companies whose relative costs are falling. The study finds little evidence that pro-competition policies have weakened. This is especially true because the study weighs firms’ markups by their revenue when calculating aggregate markups. If higher competition causes consumers to move away from firms with low-markups and toward innovative firms with higher markups because the latter provide more valuable products, then the industry markup will rise even if no company changes its individual markup.

In many industries, the rise in aggregate markups likely reflects an increase in competition rather than an increase in market power. Market share is shifting toward more productive, more innovative firms, as it always has, and this is a trend we should welcome.

We have seen that markups need to be interpreted with caution. It may be the case that in some industries market power is allowing firms to raise their markups, but the studies asserting high markups are not able to ascertain which they are because of methodological limitations. Where market power stems from mergers or anticompetitive practices, antitrust laws already give regulators the power they need to deal with those problems. In other cases, the IMF report lists several procompetitive policies that deserve general support. These include reducing domestic barriers to entry, liberalizing trade, and making it easier for low-productivity firms to catch up to high-productivity firms.⁴⁶

However, it would be a mistake to interpret recent studies as calling for a radically different approach to antitrust policy in order to stem rising concentration and market power. To begin with, a lack of good data makes markups extremely difficult to estimate. The increase in fixed costs—including a rise in intangible assets—and economies of scale also casts serious doubt on markups as a useful statistic, since virtually all firms, especially ones in innovation-based industries, need high markups in order to recover their total costs and stay in business.

Second, the fact that De Loecker found markups to be higher in smaller firms, that other studies have found higher markups in other countries as well, and that higher markups are not always associated with increased concentration or higher profits all points to alternative explanations.

Finally, in many industries, the rise in aggregate markups likely reflects an increase in competition rather than an increase in market power. Market share is shifting toward more productive, more innovative firms, as it always has, and this is a trend we should welcome. In fact, one could argue that in an economy wherein fixed costs are rising relative to marginal

costs—and economies of scale, in part through the greater use of information technology, are increasing—rising markups are natural. For 40 years, antitrust policy has demanded careful economic analysis of the relevant markets to drive policy responses. We should not abandon it now.

ABOUT THIS SERIES

In a series of short reports, the Information Technology and Innovation Foundation (ITIF) is examining many of the key claims behind the argument that a significant change in U.S. antitrust policy is warranted. In most cases, we find that the empirical evidence is weaker than claimed; in others, the causal relationships are speculative. Although some of the broader trends—such as a decline in innovation—raise serious social issues, they usually have several causes. Finally, in most cases, it is not clear antitrust policy is either the cause or an effective cure. Broader social policies need to be enacted for such issues as income inequality and privacy.

Acknowledgments

The author wishes to thank Robert D. Atkinson for helpful comments and suggestions. All errors remain the author's responsibility.

About the Author

Joe Kennedy is a senior fellow at ITIF. He has worked as an attorney and economist on a wide variety of public policy issues. His previous positions include chief economist with the U.S. Department of Commerce and general counsel for the U.S. Senate Permanent Subcommittee on Investigations. He is president of Kennedy Research, LLC, and the author of *Ending Poverty: Changing Behavior, Guaranteeing Income, and Transforming Government* (Rowman & Littlefield, 2008). Kennedy has a law degree and a master's degree in agricultural and applied economics from the University of Minnesota and a Ph.D. in economics from George Washington University.

About ITIF

The Information Technology and Innovation Foundation (ITIF) is a nonprofit, nonpartisan research and educational institute focusing on the intersection of technological innovation and public policy. Recognized as the world's leading science and technology think tank, ITIF's mission is to formulate and promote policy solutions that accelerate innovation and boost productivity to spur growth, opportunity, and progress.

For more information, visit us at www.itif.org.

ENDNOTES

1. Joseph E. Stiglitz, “America Has a Monopoly Problem—and It’s Huge,” *The Nation blog*, October 23, 2017, <https://www.thenation.com/article/archive/america-has-a-monopoly-problem-and-its-huge/>.
2. Bonnie Kavoussi, “How Market Power Has Increased U.S. Inequality,” Washington Center for Equitable Growth, May 3, 2019, <https://equitablegrowth.org/how-market-power-has-increased-u-s-inequality/>.
3. Jan De Loecker, Jan Eeckhout, and Gabriel Unger, “The Rise of Market Power and the Macroeconomic Implications.” *Quarterly Journal of Economics*, Vol 135(2) May 2020, <https://doi.org/10.1093/qje/qjz041>.
4. Ibid, 562.
5. Gauti B. Eggertsson, Jacob A. Robbins, and Ella Getz Wold, “Kaldor and Piketty’s Facts: The Rise of Monopoly Power in the United States” (National Bureau of Economic Research Working Paper No. 24287, February 2018), 26, <https://www.nber.org/papers/w24287>.
6. Robert E. Hall, “New Evidence of the Markup of Prices Over Marginal Costs and the Role of Mega-Firms in the US Economy” (NBER Working Paper No. 24575, May 2018), 14, <https://www.nber.org/papers/w24574>.
7. Gustavo Grullon, Yelena Larkin, and Roni Michaely, *Are U.S. Industries Becoming More Concentrated?* 719, https://pdfs.semanticscholar.org/138f/249c43bfec315227a242b305b9764d57a0af.pdf?_ga=2.248600910.891676176.1589152386-363689515.1586812418.
8. Thomas Philippon, *The Great Reversal: How America Gave Up on Free Markets* (Belnap Press, 2019), 120.
9. Ibid, 123.
10. Ibid, 120–21.
11. Predatory or Below Cost Pricing, Federal Trade Commission Website, accessed May 4, 2020, <https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/single-firm-conduct/predatory-or-below-cost>.
12. Chad Syverson, “Macroeconomics and Market Power: Context, Implications, and Open Questions,” *Journal of Economic Perspectives*, Vol 33(3) Summer 2019, 31–32, <https://www.aeaweb.org/articles?id=10.1257/jep.33.3.23>.
13. Gauti B. Eggertsson, Jacob A. Robbins, and Ella Getz Wold, “Kaldor and Piketty’s Facts: The Rise of Monopoly Power in the United States,” 40.
14. Jan De Loecker, Jan Eeckhout, and Gabriel Unger, “The Rise of Market Power and the Macroeconomic Implications,” *QJE*, 563.
15. Susanto Basu, “Are Price-Cost Markups Rising in the United States? A Discussion of the Evidence,” (National Bureau of Economic Research Working Paper No. 26057), <https://www.nber.org/papers/w26057>.
16. Steven Berry, Martin Gaynor, and Fiona Scott Morton, “Do Increasing Markups Matter? Lessons from Empirical Industrial Organization,” *Journal of Economic Perspectives*, Vol 33(3), <https://doi.org/10.1257/jep.33.3.44>.
17. Robert D. Atkinson and Michael Lind, *Big is Beautiful: Debunking the Myth of Small Business*, (MIT 2018), 203.

18. Joe Kennedy, "Market Power: Is Concentration Leading to Higher Profits?" (Information Technology and Innovation Foundation, May 2020), <https://www.itif.org>.
19. Robert D. Atkinson and Michael Lind, *Big is Beautiful: Debunking the Myth of Small Business*, 203.
20. Jan De Loecker, Jan Eeckhout, and Gabriel Unger, "The Rise of Market Power and the Macroeconomic Implications," (NBER Working Paper No. 23687, August 2017), 1, <https://www.nber.org/papers/w23687>.
21. Ibid, 38; Gurufocus, <https://www.gurufocus.com/financials/ge>.
22. Jan De Loecker, Jan Eeckhout, and Gabriel Unger, "The Rise of Market Power and the Macroeconomic Implications," *QJE*, 603.
23. Susanto Basu, "Are Price-Cost Markups Rising in the United States? A Discussion of the Evidence," *Journal of Economic Perspectives*, vol. 33(3), 16, <https://doi.org/10.1257/jep.33.3.3>; Jan De Loecker, Jan Eeckhout, and Gabriel Unger, "The Rise of Market Power and the Macroeconomic Implications," *QJE*, 603.
24. Susanto Basu, "Are Price-Cost Markups Rising in the United States? A Discussion of the Evidence," *JEP*, 16–17.
25. Ibid, 7.
26. Ibid, 19.
27. Chad Syverson, "Macroeconomics and Market Power: Context, Implications, and Open Questions," 31–32.
28. ITIF calculation using U.S. Bureau of Labor Statistics Data.
29. Jan De Loecker, Jan Eeckhout, and Gabriel Unger, "The Rise of Market Power and the Macroeconomic Implications," *QJE*, 583.
30. Ibid, 592.
31. Jan De Loecker and Jan Eeckhout, "Global Market Power" (National Bureau of Economic Research Working Paper No. 24768, June 2018), <https://www.nber.org/papers/w24768>.
32. Tad Lipsky et al., Comment of the Global Antitrust Institute of the Antonin Scalia Law School, George Mason University before the United States Federal Trade Commission Hearings on Competition and Consumer Protection in the 21st Century, Hearing on Concentration and Competitiveness in the U.S. Economy, George Mason University Law & Economics Research Paper Series 18–25, September 13, 2018, 14, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3245866.
33. In fact, foreign profits have grown much faster than domestic profits since 1990. Joe Kennedy, "Market Power: Is Concentration Leading to Higher Profits?"
34. Robert D. Atkinson and Michael Lind, *Big is Beautiful: Debunking the Myth of Small Business*, 203.
35. Gauti B. Eggertsson, Jacob A. Robbins, and Ella Getz Wold, "Kaldor and Piketty's Facts: The Rise of Monopoly Power in the United States," 5.
36. Ben Miller and Robert D. Atkinson, "The Limits of the Knowledge-Based Capital Framework" (Information Technology and Innovation Foundation, January 2015), <https://itif.org/publications/2015/01/20/limits-knowledge-based-capital-framework>.
37. Gauti B. Eggertsson, Jacob A. Robbins, and Ella Getz Wold, "Kaldor and Piketty's Facts: The Rise of Monopoly Power in the United States," 17.

38. Carol Corrado, Charles R Hulten, and Daniel E. Sichel, “Measuring Capital in the New Economy: An Expanded Framework,” in *Measuring Capital in the New Economy*, by Carol Corrado, John C. Haltiwanger, and Daniel E. Sichel, Conference on Research in Income and Wealth (Chicago: University of Chicago Press and National Bureau of Economic Research, 2005), 11–46, <http://public.eblib.com/choice/publicfullrecord.aspx?p=432153>; Carol Corrado, Charles Hulten, and Daniel Sichel, “Intangible Capital and US Economic Growth,” *Review of Income and Wealth* vol. 55(3), (2009), 661–685.
39. Steven Berry, Martin Gaynor, and Fiona Scott Morton, “Do Increasing Markups Matter? Lessons from Empirical Industrial Organizations,” 54.
40. James Traina, “Is Aggregate Market Power Increasing? Production Trends Using Financial Statements,” SSRN, February 8, 2018, 1-2, <https://ssrn.com/abstract=3120849>.
41. Ibid, 2.
42. David Autor et al., “The Fall of the Labor Share and the Rise of Superstar Firms,” *Quarterly Journal of Economics*, Vol 123(1), May 2020, <https://doi.org/10.1093/qje/qjaa004>.
43. International Monetary Fund, “The Rise of Corporate Market Power and its Macroeconomic Effects,” Chapter 2 in IMF, *World Economic Outlook, April 2019: Growth Slowdown, Precarious Recovery*, <https://www.elibrary.imf.org/view/IMF081/25771-9781484397480/25771-9781484397480/ch02.xml?language=en&redirect=true>.
44. Ibid, 61.
45. Ibid, 68, italics removed.
46. Ibid, 58.