April 6, 2022

The Honorable Jim Himes
Chair
House Committee on Economic Disparity and Fairness in Growth

The Honorable Brian Steil
Ranking Member
House Committee on Economic Disparity and Fairness in Growth

In Re: (Im)Balance of Power: How Market Concentration Affects Worker Compensation and Consumer Prices

I want to thank the Committee for inviting me to testify on the important topic of how market concentration adversely affects workers and consumers.[1] Because other witnesses are covering worker harms, the bulk of my comments today will focus on the consumer harms from concentrated power, which largely manifests as price hikes, and how to amend antitrust law to better protect consumers from price-fixing conspiracies.[2] I present new empirical results indicating that the largest price hikes in 2021 tended to occur in the most concentrated industries. These results lend credence to the hypothesis that the current bout of inflation reflects, at least in part, the exercise of market power. The results are inconsistent with an alternative hypothesis, peddled by certain economists, that workers' demands for higher wages are driving inflation; under that theory, the price hikes would be uniformly distributed across U.S. industries as opposed to being clustered in concentrated industries.

---

1. The views I express in this testimony are entirely my own, and do not represent those of any client, or from Georgetown University or Econ One, my employers. My testimony is not intended to impact any ongoing litigation or regulatory matter on which I am working. There are two bills in Congress on which I have testified before other committees within the recent past—the American Innovation and Choice Online Act (February 2021) and the Journalism Competition and Preservation Act (February 2022). I do not discuss those bills in my written or oral testimony, but if asked a question during the hearing, I will answer truthfully. I am not representing any company that would benefit from policies that I am proposing here.

2. With respect to amending antitrust law to better protect workers, in a new paper co-authored with Ted Tatos, we propose a "no offset" rule, which calls for a prohibition on judicial balancing of claimed benefits to any group other than the group that suffered antitrust injury, which would effectively reverse *American Express*. *See* Ted Tatos & Hal Singer, *The Abuse of Offsets as Procompetitive Justifications: Restoring The Proper Role of Efficiencies After Ohio v. American Express* and *NCAA v. Alston*, GEORGIA STATE LAW REVIEW (forthcoming 2022) (available upon request from the authors). Consistent with the broader policy of protecting labor from anticompetitive conduct, including the exercise of monopsony power, legislative intervention should prohibit such balancing. In wage-fixing cases involving multiple defendants, the no-offset rule would immediately condemn the restraint and bar courts from considering any claimed efficiencies, regardless of whom they benefit. In single-firm monopsony cases, the no-offset rule would bar courts from considering any offsetting benefits to parties other than the injured group of workers or input providers.

In addition to teaching advanced pricing at Georgetown's McDonough School of Business, I serve as an economic expert in several antitrust litigation matters, through the economic consulting firm Econ One, on behalf of both workers[3] and consumers.[4] I cannot comment on ongoing litigation matters, but I can advise Congress on how defendants in former price-fixing cases flouted the antitrust laws, and how such laws can be amended to better police would-be conspirators. In particular, I am calling for a change in the presumption—and associated burden of proof—in price-fixing cases once plaintiffs have established certain evidentiary criteria, and for sanctions that would bar executives in firms found guilty of violating Sherman Act Section 1 cases from working in the industry.[5]

Some of the proposals I put forward today echo those in a forthcoming report to be released by American Economic Liberties Project, with contributions from Professor Robert Lande, Eric Cramer, Alex Harman, and me.

* * *

Market power is defined as the ability to raise prices over competitive levels or exclude rivals.[6] Competitive price levels are understood as reflecting a firm's incremental costs of making the last unit of production. When we observe episodes of massive price hikes that cannot be explained by rising costs, as we did in 2021, particularly in concentrated industries such as shipping and meatpacking, we should understand those price hikes through the prism of market power.[7]

Yet too many in my profession are quick to blame workers for the pricing decisions made by their employers. Lawrence Summers, an oft-quoted economist and purveyor of this

---

3. For example, I am the fighters' expert in Cung Le et al. v. Zuffa, LLC, d/b/a Ultimate Fighting Championship and UFC, Case No.: 2:15-cv-01045-RFB-(PAL) (D. Nev.). I am also the workers' expert in a series of ongoing "no-poach" cases.

4. For example, I am the consumers' expert in In re Google Play Consumer Antitrust Litigation, Case No. 3:20-cv-05761-JD (N.D. Cal). The complete list of my active cases is available on my curriculum vitae, which is available for download at https://www.econone.com/staff-member/hal-singer/.

5. I have also called for automatic investigations by antitrust authorities in industries with (1) highly concentrated; (2) rising margins; and (3) year-over-year price hikes in excess of 10 percent. *See* Hal Singer, *Antitrust Should Be Used to Fight Inflation*, AMERICAN PROSPECT, Feb. 2, 2022, *available at* https://prospect.org/economy/antitrust-should-be-used-to-fight-inflation/.

6. 2B PHILLIP E. AREEDA & HEBERT HOVENKAMP, ANTITRUST LAW ¶521 (5th ed. 2021)

7. An alternative explanation for the recent bout of inflation is that government spending to combat the pandemic shifted out aggregate demand, pushing up prices. But this hypothesis is easily ruled out, as aggregate demand did not shift out, but rather the *composition* of demand shifted from services to physical products, which stressed our supply systems. *See, e.g.*, Paul Krugman, *Why Are Progressives Hating on Antitrust?*, NEW YORK TIMES, Jan. 18, 2022, *available at* https://www.nytimes.com/2022/01/18/opinion/biden-inflation-monopoly-antitrust.html. My empirical results are also inconsistent with the hypothesis that government spending caused inflation, as any excess demand would be uniformly distributed across industries. Moreover, if demand were causing inflation, then we would see profits and revenues rise across the board for small and large firms alike; but 38 percent of small business saw revenue *declines* since last year in 2021. *See* Small Business Majority, Small businesses seek a level playing field and chance to compete fairly, Mar. 30, 2022, *available at* https://smallbusinessmajority.org/sites/default/files/research-reports/033022-EC-poll-toplines.pdf.

outdated view, suggests that labor markets are running too tight, workers are making unrealistic wage demands, and firms are defensively raising prices to accommodate these wage demands.[8] This blame-the-worker mentality is contradicted by the *lack* of correlation between wage growth and inflation by industry in 2021.[9] It also fundamentally misunderstands a firm's pricing decision, which according to the classic Lerner Index, is set according to the own-price elasticity of demand it faces and the firm's *marginal* costs or those costs that vary with the last unit produced.[10] Because firms in high fixed-cost industries do not incur incremental labor costs when producing the last unit of output—a pharmaceutical company does not incur incremental labor costs when producing the last pill, a rental car company does not incur incremental labor costs when renting the last car, a shipping company does not incur incremental labor costs when moving the last container—labor costs do not enter the pricing calculus for such firms, and thus labor cannot be blamed for rising prices in many industries in our modern economy.

Moreover, U.S. firms are doing much more than just passing through costs (labor or non-labor) dollar-for-dollar; otherwise their profit margins would be shrinking, not growing. Consider a simple example where price is $10, marginal cost is $5, and the firm's margin is 50 percent (equal to ($10 - $5)/$10). If the firm's marginal costs go up by $1 and all of it is passed on to consumers, then the new margin falls to 45 percent (equal to ($11 - $6)/$11). As reported in the *Wall Street Journal*, however, "Nearly two out of three of the biggest U.S. publicly traded companies reported fatter profit margins than they did before the pandemic."[11] Indeed, in 2021, U.S. corporate profits jumped 25 percent in 2021 to record high.[12] Rising profits are not consistent with the hypothesis that firms are merely

---

8. *See, e.g.*, Lawrence Summers, *The stock market liked the Fed's plan to raise interest rates. It's wrong.,* WASHINGTON POST, Mar. 17, 2022 ("Focusing on the tightness of labor markets as a basis for forecasting inflation is firmly within progressive Keynesian tradition."); Lawrence Summers, *On inflation, we can learn from the mistakes of the past — or repeat them***,** WASHINGTON POST, Feb. 3, 2022 ("But the key to understanding medium-term fluctuations in inflation is labor costs, which represent more than two-thirds of all costs across the economy. Everyone wants a raise, but periods when wages rise rapidly can also be periods when workers' purchasing power falls sharply due to inflation — as the experience of this past year illustrates.").

9. *See, e.g.*, Josh Bivens, *U.S. workers have already been disempowered in the name of fighting inflation*, Economic Policy Institute, Working Economics Blog, Jan. 21, 2022 (noting in "those sectors where labor scarcity has put upward pressure on wages, like hotels and other accommodations, it has not led to atypically fast price growth"); David Brancaccio & Jarrett Dang, *Another cure for inflation? Making markets more competitive*, MARKETPLACE, Apr. 1, 2022 (interviewing Trevon Logan), *available at* https://www.marketplace.org/2022/04/01/another-cure-for-inflation-making-markets-more-competitive/. *See also* Josh Bivens, *Debunking the Myth of Wage-Led Inflation*, WALL STREET JOURNAL, June 6, 2014, available at https://www.wsj.com/articles/BL-WB-46181 (finding that price growth since the end of the Great Recession is has been largely driven by rising *profits*, not rising labor costs)

10. The equation is $(P - C) / P = 1/E$, where P is the price, C is the marginal cost, and E is the firm's own-price elasticity of demand.

11. *See* Kristin Broughton & Theo Francis, *What Does Inflation Mean for American Businesses? For Some, Bigger Profits*, WALL STREET JOURNAL, Nov. 14, 2021, *available at* https://www.wsj.com/articles/inflation-yellen-biden-price-increase-cost-shipping-supply-chain-labor-shortage-pandemic-11636934826?msclkid=495e1627b1c011ec8ecc43836ee6b6bd

12. *See* Jeffrey Bartash, *U.S. corporate profits jump 25% in 2021 to record high as economy rebounds from pandemic*, MARKETWATCH, Mar. 30, 2022, *available at* https://www.marketwatch.com/story/u-s-corporate-profits-jump-25-in-2021-as-economy-rebounds-from-pandemic-11648644379.

passing along higher costs, including labor costs. While cost increases could explain part of the overall price increase in 2021, certain firms in concentrated industries are abusing the market disruption of inflation to maximize price increases.

A basic tenet of economics is that concentrated industries are more susceptible to coordinated pricing—indeed, antitrust laws exist because concentrated power in the trusts made it easier to fix prices.[13] It is easier to coordinate with three rivals in an oligopoly than with thirty in a competitive industry. This is why antitrust is rightly concerned about coordinated price effects, in addition to unilateral price effects, when reviewing mergers.[14] In his seminal book, *Lectures in Antitrust Economics*, Michael Whinston talks about the two challenges for a cartel: the incentive problem and the coordination problem.[15] The cover of inflation solves both.

Regarding the first problem, a firm is less likely to join a cartel and raise prices to monopoly levels if its customers will react harshly to the price hike. Consumer resistance to price hikes may soften with inflation because there now is a pretext for the price increase. If consumers view price increases as the outcome of widespread economic cost increases and thus inescapable, they are less likely to attempt to evade the price increases by substituting to other products.

Regarding the second problem, coordination is hard because there are typically many possible price points and the firms have to pick one, presumably without communicating. Inflation solves this problem by giving firms a target to hit—for example, if general inflation is seven percent, we should raise our prices by seven percent. Inflation basically provides a "focal point" that allows firms to figure out how to raise prices on consumers without communicating.

To demonstrate that concentration is a significant force behind the recent bout of inflation, I gathered data on concentration by industry from Standard & Poor's Compustat Capital IQ, obtained through Wharton Research Data Services. For each industry code, at both the NAICS 5 and 6 level,[16] I computed the share of domestic revenues accounted for by the three and four largest suppliers in that code, for the year 2020. I then matched that data with 2021 inflation data by industry code from the Bureau

---

13. *See* AMY KLOBUCHAR, ANTITRUST: TAKING ON MONOPOLY POWER FROM THE GILDED AGE TO THE DIGITAL AGE 39-61 (Knopf 2021).

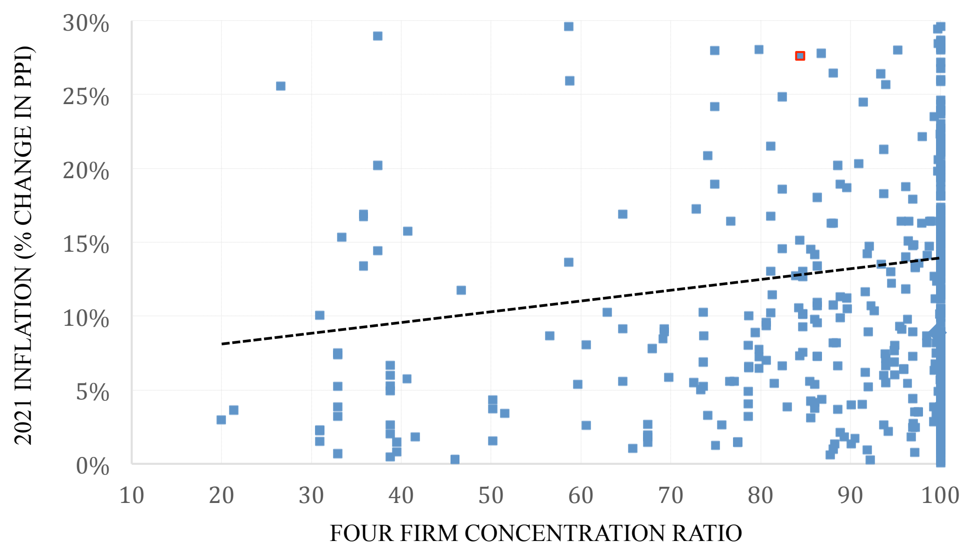
14. Department of Justice & Federal Trade Commission, Horizontal Merger Guidelines, Aug. 18, 2010, Section 7 ("Coordinated Effects").

15. MICHAEL WHINSTON, LECTURES IN ANTITRUST ECONOMICS 21 (MIT Press 2008).

16. *See* Introduction to NAICS, U.S. Census Bureau, *available at* https://www.census.gov/naics/ ("The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy."). NAICS codes run from 2 to 6 digits, with higher digit codes offering more granular industry detail. For instance, the broader NAICS code 311 is comprised of "Food Manufacturing, while the more specific NAICS code 311611 within it is classified as "Animal, except poultry, slaughtering." *Producer Price Index by Industry: Animal, Except Poultry, Slaughtering: Beef, Fresh/Frozen, Primal and Subprimal Cuts, Made in Slaughtering Plants*, FRED, *available at* https://fred.stlouisfed.org/series/PCU31161131161117.

of Labor Statistics.[17] The inflation data captures the "average change over time in the *selling* prices received by *domestic producers* for their output," and reflect the "*first commercial transaction* for many products and some services" in the industry.[18] The figure below shows a scatter plot of the data.

SCATTER PLOT OF 2021 INFLATION AND 2020 FOUR-FIRM CONCENTRATION RATIO



Notes: The four-firm concentration ratio is computed at NAICS level 5. BLS's PPI measures the "average change over time in the *selling* prices received by domestic producers for their output. The prices included in the PPI are from the *first commercial transaction* for many products and some services." U.S. Bureau of Labor Statistics, Producer Price Indexes, *available at* https://www.bls.gov/ppi/ (emphasis added).

Industries with high concentration in 2020 appear on the right side of the graph. Industries with large price hikes in 2021 appear on the top of the graph. Concentrated industries with large price hikes appear in the top-right quadrant. There you can find the Animal Slaughterhouse and Processing Industry (NAICS code 31161, marked in red), with a four-firm concentration of 84 percent and a 2021 price increase of a staggering 28 percent. The dotted line captures the correlation between these two variables. As the figure shows, these data series are positively correlated, with a one percentage point increase in four-firm ratio associated with a 0.073 percentage point increase in inflation. This means the largest bouts of inflation in 2021 tended to occur in the most concentrated industries.

To determine whether these observed relationships are statistically significant, I regressed the inflation measure for various intervals beginning in January 2021 for a given industry code on the industry's concentration. The results are presented in the table below.

---

17. U.S. Bureau of Labor Statistics, Producer Price Indexes, *available at* https://www.bls.gov/ppi/. For each NAICS code where I can calculate industry concentration, I apply the most specific measure of inflation possible. If the BLS does not report the PPI for a given NAICS industry sublevel, I use the broader industry level encompassing it.

18. *Id.* (emphasis added).

REGRESSION OF INFLATION ON CONCENTRATION, BY INDUSTRY
DEPENDENT VARIABLE = INFLATION BY INDUSTRY

NAICS Level	Concentration Measure	3 Month Inflation	6 Month Inflation	9 Month Inflation	12 Month Inflation
5	Three-Firm Ratio	0.007	0.021*	0.038*	0.062**
	P-Value	*0.507*	*0.083*	*0.052*	*0.035*
	Four Firm Ratio	0.015	0.033*	0.047**	0.073**
	P-Value	*0.205*	*0.019*	*0.034*	*0.029*
6	Three-Firm Ratio	0.018	0.024	0.017	0.014
	P-Value	*0.185*	*0.128*	*0.504*	*0.711*
	Four Firm Ratio	0.031*	0.034*	0.012	0.005
	P-Value	*0.062*	*0.07*	*0.691*	*0.907*

Note: * and ** indicate statistical significance at the 10% and 5% levels, respectively.

The P-value indicates the probability of obtaining a ratio as large or larger in absolute value assuming no relationship exists between concentration and inflation. As the table shows, at the NAICS 5 level, the relationship between the three- and four-firm industry concentration ratio and industry inflation was positive (in all cases) and positive and statistically significant (defined as P-values less than 10%) in six of eight cases. At the NAICS 6 level, the relationship between the three- and four-firm industry concentration ratio and industry inflation was positive (in all cases) and positive and statistically significant in two of eight cases. These relationships, at least for the NAICS 5 level, bolster the view that concentration at least partly explains the recent bout of inflation, and undermines the view that worker demands are to blame.

It bears noting that concentration is not a sufficient condition for coordinated pricing at near-monopoly levels; rather, concentration makes coordination easier at the margin, especially when triggered by a supply shock or a bout of inflation. This would explain why prices were not elevated at monopoly levels in concentrated industries before the inflation bout.

If worker demands were to blame for the recent bout of inflation, then concentration and inflation at the industry level should not exhibit any correlation.[19] While these relationships are insufficient to demonstrate that industry concentration *causes* inflation,[20] they are consistent with the oligopoly theory and not what one would expect to see if workers' wages were the source of inflation.

---

19. Summers might argue that concentration in the output market is really picking up an industry's exposure to rising labor costs, but that conjecture is dubious, particularly to the extent that a firm's selling power in the output market is correlated to its buying power in the labor market.

20. The econometric analysis required to rule out alternative hypotheses, including controlling for cost increases, is beyond the scope of this testimony. One would have to separate out legitimate supply problems versus those caused by oligopolistic market power. For example, if oil companies reduce refining capacity as a means to extract higher prices, then supply problems are caused by the concentration, so controlling for any supply reductions would cause endogenous selection bias.

Some industrial organization (IO) economists have designed "just so" stories to deflect blame of rising prices back to workers, even in the face of profit-concentration linkages. Writing in *Brookings Papers on Economic Activity* in 1990, Michael Salinger noted that high levels of industry concentration in the early 1970s were associated with cost and price increases from 1972 to 1982—similar to the results presented in the figure above—yet inferred that "this finding is consistent with other evidence concerning rent-seeking by workers."[21] The implication is that workers demand payments in excess of their contributions or marginal revenue product (MRP), and that these demands just happen to be most acute in concentrated industries, where high margins presumably allow large wage payments. Yet workers rarely if ever command wages in excess of their MRP,[22] and given the decay of unionization in the last 40 years, the notion of rent-seeking among large swaths of workers seems particularly implausible. On the contrary, economic research indicates that worker wages have stagnated relative to executive pay.[23] Moreover, to the extent some large employers in concentrated industries command both selling power in the output market and buying power in the labor market, the notion the wage demands are behind rising inflation in concentrated industries is even more farfetched.[24]

Through the late 1960s, there was a consensus in economics that concentration increased profitability and facilitated collusion,[25] which came to be known as the "traditionalists" or the structure-conduct-performance paradigm.[26] In the early 1970s, however, certain IO economists, such as Harold Demsetz, who taught at the University of Chicago Business School from 1963 to 1971, began muddling this understanding, insisting that the correlation between profits and concentration did not reflect oligopoly profits, but instead reflected costs advantages to superior firms that came to dominate an industry.[27] According to this "revisionist" camp, often associated with the Chicago School of Economics, more concentrated markets are more competitive, because the most efficient firm gaining market share is evidence of competition, not its absence. Their technical

---

21. Michael Salinger, *The Concentration-Margins Relationship Reconsidered*, BROOKINGS PAPERS: MICROECONOMICS, 1990, at 291, *available at* https://www.brookings.edu/wp-content/uploads/1990/01/1990_bpeamicro_salinger.pdf.

22. An exception might be administrators in college athletes, siphoning off value that is created by student athletes. *See* Ted Tatos & Hal Singer, *Antitrust Anachronism: The Interracial Wealth Transfer in Collegiate Athletics Under the Consumer Welfare Standard*, 66(3) ANTITRUST BULLETIN (2021).

23. Lawrence Mishel & Julia Wolfe, *CEO compensation has grown 940% since 1978. Typical worker compensation has risen only 12% during that time*, ECONOMIC POLICY INSTITUTE, Aug. 14, 2019, *available at* https://www.epi.org/publication/ceo-compensation-2018/.

24. *See* Josh Bivens, *Inflation and the policy response in 2022*, Economic Policy Institute, Working Economics Blog, Feb. 9, 2022, *available at* https://www.epi.org/blog/inflation-and-the-policy-response-in-2022/ ("Given the past generation has seen relentless policy attacks on workers' leverage, it seems highly likely that the labor market will dampen, not amplify, inflationary pressures regardless of *what workers expect*.") (emphasis in original).

25. Salinger, *supra*, at 288.

26. Whinston reviews an early literature from showing that most successful criminal price-fixing cases brought by the DOJ from 1963 to 1972 occurred in highly concentrated markets, consistent with the structure-conduct-performance paradigm. Whinston, *supra*, at 43 (citing George Hay & D. Kelley, *An empirical survey of price-fixing conspiracies*, 17 JOURNAL OF LAW AND ECONOMICS 13-38 (1974)).

27. Harold Demsetz, *Industry Structure, Market Rivalry, and Public Policy*, 16(1) JOURNAL OF LAW AND ECONOMICS 1-10 (1973).

"correction" to the regression of margins on concentration was to add a market share variable—itself highly correlated with concentration—and to claim that concentration was no longer positively related to margins once market share was controlled for.[28] If the concentration-profits relationship is caused by short-term rents earned by superior firms with a cost advantage, the revisionists reasoned, then even concentrated markets can be viewed as competitive, and mergers do not facilitate collusion and higher prices.

This rewriting of the very meaning of concentration, and alleged technical defects (called "endogeneity") in any regression of margins on concentration,[29] allowed the Chicago School view to remake antitrust. Without a unifying model that revealed concentration's pernicious effects across industries, merger review would entail a series of bespoke models that were unique to each industry, controlled by economic insiders. For the decades of the 1980s, 1990s, and aughts, graduate students seeking placement in economics departments and publication in peer-reviewed journals steered clear of pursuing the structure-conduct relationship, and IO gatekeepers made sure concentration metrics became less relevant in antitrust. And for that reason, we have now reached this monopoly moment.

What originated in the Chicago School grew quickly into the mainstream of IO economics, with concentration potentially reflecting an efficiency in driving down *costs*. Indeed, IO economists continue to push back against structural explanations to this day.[30] As noted above, these revisionist arguments are not compelling, and are even more tenuous when applied the labor markets, because the ability to drive *wages* below competitive levels is not a plausible expression of a firm's efficiency. To the contrary,

28. Salinger, *supra*, at 290. Salinger refers to this questionable alteration as "extremely influential" in upsetting the structural presumption, with "F. M. Scherer and others consider[ing] the finding that market share rather than concentration determines firm profitability the most important result that has emerged from those data." *Id*. at 290.

29. Detractors claimed that concentration was a flawed explanatory variable in a regression model because output decisions, which inform concentration, are a choice variable of the firm and thus are endogenous to the system: "If a large firm chooses a higher output than is predicted by the underlying (implicit) model, concentration will be higher and profits will be lower than expected. Thus output errors by large firms reduce the correlation between concentration and profitability. By the same line of reasoning, output errors by small firms increase the correlation between concentration and profitability." *Salinger* at 299-300. As Salinger notes, however, because the magnitude of errors of large firms with more discretion in output decisions likely exceed those of small firms, this alleged bias would tend to *reduce* the correlation between concentration and profit margins on net, making it harder to observe. Even critics of the structure-conduct-performance model acknowledge that econometric techniques could disentangle different causal stories. *See* Timothy Bresnahan, *Empirical Studies of Industries with Market Power*, Chap. 17 in HANDBOOK OF INDUSTRIAL ORGANIZATION, vol. 2, edited by Richard Schmalensee and Robert Willig, 1011–57. Amsterdam: Elsevier. at 1031 ("The next section treats the question of what constitutes an adequately rich specification of cost and demand so as to permit a reasonably convincing case that a strategic interaction hypothesis is in fact being tested. The section will show that the hypothesis of market power is in fact identified on reasonable data. … *Only econometric problems*, not fundamental problems of interpretation, cloud this inference about what has been determined empirically.") (emphasis added).

30. *See e.g.*, Steven Berry, Martin Gaynor, and Fiona Scott Morton, *Do Increasing Markups Matter? Lessons from Empirical Industrial Organizations*, 33(3) JOURNAL OF ECONOMIC PERSPECTIVES, 44–68 (2019), at 46 ("Within the field of industrial organization, the structure-conduct-performance approach has been discredited for a long time (Bresnahan 1989; Schmalensee 1989). But outside of industrial organization, the paradigm seems to have been readopted in recent years.").

one would expect larger and more efficient firms to pay higher wages than others, as their workers are more productive. In any event, evidence that higher concentration and monopsony power depress wages is convincing and has been established by multiple methodologies, including concentration-wage relationships.[31]

One of the reasons that firms in concentrated industries are exploiting the pandemic and turning small bouts of inflation into large bouts of inflation is because they can. And they are even willing to explore the boundaries of collusive behavior because there are little consequences: When it comes to price fixing, courts give great deference to defendants in the absence of smoking-gun evidence of an agreement to fix prices. Recognizing this lenient standard, executives are exploiting the pandemic and are potentially seeking to coordinate their pricing through the public airwaves on earnings calls. The Department of Justice and Federal Trade Commission *Collaboration Guidelines* warn that a firm's sharing its current or future pricing plans with a horizontal rival could be anticompetitive.[32]

To an economist, a public announcement of wielding "pricing power that we would have *going forward*" (Disney), or noting that it will "*continue to take* further price increases"[33] (Unilever) on an earnings call can be understood as an encouragement to one's rivals to raise prices, as the speaker is planning to raise his.[34] Even defenders of the beleaguered consumer-welfare standard acknowledge that when it comes to price fixing, antitrust is plagued by a problem of "under-deterrence."[35] Because collusion is rarely detected and would be masked by shortages, bottlenecks, and general chaos in the marketplace, firms would be silly not to try it. And so long as antitrust law regarding cartels is permissive, firms would be silly not to try to coordinate their pricing via the airwaves.

A short digression of a price-fixing case in which I served as the consumers' expert is in order. Delta was one of the last remaining legacy airlines to impose a bag fee. The

---

31. *See e.g.*, *See* José Azar, Ioana E. Marinescu & Marshall Steinbaum, *Labor Market Concentration,* JOURNAL OF HUMAN RESOURCES (2020) (showing that variation in wages could be explained by measures of labor market concentration using vacancy shares from CareerBuilder.com); Elena Prager & Matt Schmitt, *Employer Consolidation and Wages: Evidence from Hospitals*, AMERICAN ECONOMIC REVIEW 397-427 (2021).

32. Department of Justice and Federal Trade Commission, Antitrust Guidelines for Collaboration Among Competitors, April 2000, at 15 ("Other things being equal, the sharing of information relating to price, output, costs, or strategic planning is more likely to raise competitive concern than the sharing of information relating to less competitively sensitive variables. Similarly, other things being equal, the sharing of information on current operating and future business plans is more likely to raise concerns than the sharing of historical information.").

33. Matt Stoller, *Unilever CEO: "We will, of course, continue to take further price increases...."*, BIG, Feb. 11, 2022, *available at* https://mattstoller.substack.com/p/unilever-ceo-we-will-of-course-continue?s=r.

34. As observed by Stoller, "one way to understand what Unilever is doing with this public signaling is the firm is price-fixing, or exploiting the collective power of the small number of firms competing in its various lines of business." Matt Stoller, *Why Are Judges Encouraging Inflation?*, BIG, Mar. 16, 2022, *available at* https://mattstoller.substack.com/p/why-are-judges-encouraging-inflation?s=r.

35. *See* Douglas H. Ginsburg& Joshua D. Wright, *Who Should be The Target of Cartel Sanctions?: Antitrust Sanctions*, 6 COMPETITION POL'Y INT'L 3 (2010) (noting that only about a quarter of cartels are caught).

problem was that Delta shared a hub (Atlanta) with a low-cost carrier (AirTran), which was committed to upholding its value image. Based on internal analyses, Delta calculated that it would lose money if it unilaterally imposed a bag fee. That calculus changed, however, with an October 23, 2008 earnings call in which AirTran's then-CEO, Robert Fornaro, answered a question on bag fees this way:

> Kevin, good question. Let me tell you what we've done on the first bag fee. We have the programming in place to initiate a first bag fee. And at this point, we have elected not to do it, primarily because our largest competitor in Atlanta where we have 60% of our flights hasn't done it. And I think, we don't think we want to be in a position to be out there alone with a competitor who we compete on, has two-thirds of our nonstop flights and probably 80 to 90% of our revenue is not doing the same thing. So I'm not saying we won't do it. *But at this point, I think we prefer to be a follower in a situation rather than a leader right now*.[36]

Within days, Delta revised its bag-fee calculus and imposed a bag fee. AirTran quickly followed with its own bag fee. The public assurance granted by AirTran, which can be understood as a *contingent* offer to raise prices, solved the coordination problem. The district court judge, despite certifying the class based on my model of impact, granted summary judgment for the airline defendants due to the conduct—parallel pricing and the earnings call—being just as consistent with "tacit collusion" as with "explicit collusion."

Courts have determined that parties injured via tacit collusion now must provide exceptional evidence in support of the allegations before having the opportunity to conduct in-depth factual discovery. This standard means such cases rarely survive a motion to dismiss or motion to summary judgment,[37] thus blocking credible price-fixing cases. As in the *Bag Fee Antitrust Litigation*, courts have implicitly adopted the notion that oligopolistic interdependence is just as likely to achieve prices inflated over competitive conditions as agreement, and so "merely" alleging or putting forward evidence of parallel pricing, excess capacity, and artificially inflated prices is insufficient to prove agreement under Section 1. But why should we assume that it is just as easy to maintain artificially inflated prices tacitly than through agreement?

Congress should flip the presumption, effectively reversing *Twombly* and *Valspar*. In particular, Section 1 of the Sherman Act should be amended so that the following evidentiary criteria shall create a presumption of agreement: Evidence of parallel pricing accompanied by evidence of (a) inter-firm communications deemed suspect under DOJ and FTC *Collaboration Guidelines*, or (b) other actions that would be against the unilateral interests of firms not otherwise colluding, or (c) prices exceeding those that would be predicted by fundamentals of supply or demand.

---

36. In Re Delta/Airtran Baggage Fee Antitrust Litigation, Civil Action File No. 1:09–md–2089–TCB, 03-28-2017 (emphasis added), *available at* https://casetext.com/case/in-re-deltaairtran-baggage-fee-antitrust-litig-4#N196689.

37. *See Bell Atl. Corp. v. Twombly,* 550 U.S. 544 (2007); *Valspar Corp. v. Du Pont,* 873 F.3d 185 (2017); *Indirect Purchaser Plaintiffs v. Samsung*, No. 21-15125 (9th Cir. 2022).

If plaintiffs do put forward such evidence, then the burden would shift to the defendants to prove either that prices are not inflated above competitive levels or that oligopolistic interdependence is a more likely explanation for the performance of the market than agreement is. The presumption would require defendants to put forward the exact kinds of evidence that the FTC or DOJ would put forward in opposing a merger. This change would grant state and private enforcers similar powers to those enjoyed by the FTC under Section 5 of the Federal Trade Commission Act, which allows prosecution of cases where there is an *invitation* to collude.[38]

Finally, the Sherman Act should be amended to permit courts to sanction corporate executives who participated in any price-fixing conspiracy upon a guilty verdict, by barring the executives from working in the industries in which they broke the law, either indefinitely or for a period of time. Until corporate executives understand that they personally bear liability for seeking to orchestrate a conspiracy, we will be bombarded with more invitations to collude via the public airwaves—and ever increasing prices.

38. FTC, Analysis of Proposed Consent Order to Aid Public Comment In the Matter of Sigma Corporation, File No. 101-0080, at 4 ("The complaint includes allegations of a stand-alone Section 5 violation, namely that Sigma invited McWane and Star to collude with Sigma to increase DIPF prices in early 2009."), *available at* https://www.ftc.gov/sites/default/files/documents/cases/2012/01/120104sigmaanal.pdf. Every state with a Baby FTC Act may prosecute invitations to collude under Section 5, but my proposal would grant explicit authority for the states to do so.