



# EVIDENCE AND ANALYSIS OF MONOPSONY POWER, INCLUDING BUT NOT LIMITED TO, IN LABOR MARKETS

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Marshall Steinbaum  
Research Director and Fellow, Roosevelt Institute  
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The question of whether the labor market is characterized by monopsony power has recently attracted a great deal of academic and policy interest. Given that competition policy enforcement agencies like the FTC have just as much jurisdiction over the labor market (Ohlhausen 2017), and in theory just as much concern for buyer as for seller power, it's appropriate for the commission to consider whether, in light of evidence of labor market monopsony, greater use of that enforcement authority is appropriate, and what types of antitrust enforcement in labor markets are warranted.

For the purpose of this comment, I define “labor market monopsony” as the discretion or autonomy of employers, acting unilaterally or collusively, to set wages in a labor market, as opposed to taking market wages as given. In economic terms, this amounts to the question of whether employers face a firm-specific upward-sloping labor supply curve, or, as under ‘perfect competition,’ they hire labor from an infinitely elastic supply. We may also pose the question from the workers’ perspective: are workers paid their full marginal product as a wage, or is there a ‘markdown’ that reflects their employer’s ability to extract a monopsony surplus without fear that workers will leave for another job that pays their full marginal product?

The implication of this definition is that the concentration of employers in a properly-defined antitrust market is but one mechanism that might cause the labor market to function monopsonistically. Just as in product markets, concentration is dispositive neither against nor in favor of market power, unless it reaches extreme levels. But unlike in product markets, there is a large body of evidence that even unconcentrated labor markets are monopsonized, for example, that quits don't respond very much to changes in wages (see discussion below), that legislated changes in the minimum wage have a minimal disemployment effect (Allegretto et al. 2017; Cengiz et al. 2018), and that employers can regularly impose adverse conditions on employment (such as non-compete agreements), even when those provisions are legally unenforceable. As the non-compete example suggests, this power is self-reinforcing: employers can use their monopsony power to impose non-price vertical restraints that limit workers’ outside options, thus enhancing that same monopsony power.

For this reason, in labor markets it is not appropriate to commence the analysis with a baseline assumption of perfect competition. That is why the commission’s initiatives targeting “occupational licensing” represent a misuse of agency resources, since the economic evidence is not consistent with their having reduced competition (Konczal and Steinbaum 2016). In fact, on the whole they do not make the economy less efficient, and evidence suggests they reduce race- and gender-based inequality (Blair and Chung 2018).

Given the alternative, factual baseline assumption that labor markets are monopsonized, policy interventions that increase worker power are likely to enhance efficiency by eliminating or mitigating the deadweight loss of monopsony.

## Evidence of Labor Market Monopsony

### 1. Inter-firm earnings inequality

One source of evidence that employers have discretion to set wages is the prevalence of earnings inequality between similar workers who work at different firms in the same labor market. In a competitive labor market, the existence of outside job offers at the market wage makes the labor supply curve infinitely elastic to individual firms. Any worker paid less than they are worth would leave for a better offer, with an equilibrium condition being that those ‘arbitrage’ opportunities are eliminated. Search frictions, on the other hand, can be a source of firm-level wage-setting power even where firms and workers are ex-ante identical (Burdett and Mortensen 1998; Manning 2011).

The evidence reveals high and rising earnings inequality between firms (Song et al. 2016; Barth et al. 2016; Card et al. 2018). Moreover, the once-substantial large firm wage premium has declined substantially for workers below the top of the wage distribution (Bloom et al. 2018; Cosic 2017). The latter implies that workers are increasingly excluded from surplus associated with working at profitable firms. Both the existence of that surplus and its dynamics suggesting it responds to institutional changes in the labor market, support a view that the labor market is not competitive, and the fact that employers can unilaterally choose whom to include in rent-sharing suggests the balance of bargaining power lies with employers.

### 2. Quits do not respond very much to wage changes.

The central prediction of a competitive labor market model is that if a worker is paid less than what the market says they are worth, they will leave for another job. Yet evidence taken from both real-world and experimental contexts suggests elasticities of labor supply to the individual firm are in fact low, and those elasticities correspond to wage differences between firms and also between individual employees at the same firm (Webber 2015; Dube, Giuliano, and Leonard 2015). For example, the fact that women frequently have lower labor supply elasticities thanks to greater de facto restrictions on the types of jobs they may be able to obtain enables their employers to exploit the resulting monopsony power (Webber 2016). In turn, when employers experience windfall earnings, they are much more likely to share those windfalls with workers who have a higher probability of leaving—particularly men (Kline et al. 2017).

Experiments are particularly helpful in addressing questions about individual- and firm-level variation in labor supply elasticities, since this granular heterogeneity is important in the proliferation of monopsony power but potentially difficult to identify separately from other firm- or worker-level characteristics. A recent paper used Amazon’s “Mechanical Turk” labor task platform to address this problem, by randomly assigning wages for the same task to different workers and by varying the wages offered for the same (repeated) task to particular workers. In both settings, labor supply elasticity was low—exactly the context in which one would think tasks and workers would be homogeneous and therefore directly comparable—as in the competitive case (Dube et al. 2018).

### 3. Labor markets are concentrated, and concentration reduces market wages.

Recent evidence shows that employers are highly concentrated in labor markets. The most recent estimate is that the average labor market has an HHI for job postings of 4,378, well in excess of the threshold for “highly-concentrated” according to the 2010 Horizontal Merger Guidelines (José Azar et al. 2018). Moreover, this measured concentration has a robust negative effect on either posted wages (José Azar, Marinescu, and Steinbaum 2017) or on earnings from administrative data (Benmelech, Bergman, and Kim 2018).



Each of these papers defines labor markets in both geography and ‘line of commerce’ dimensions, in line with the Clayton Act and its enforcement. Not surprisingly, estimates of concentration are sensitive to market definition. What this nascent literature has to say about labor market definition for antitrust purposes is addressed in the following section.

#### 4. Employers are able to impose disadvantageous terms on workers without compensation.

The use of non-compete clauses to limit workers’ outside options both enhances employer power to set wages and is itself evidence of that power (Starr, Prescott, and Bishara 2017). Employers also re-classify workers as independent contractors, resulting in loss of job stability and denial of statutory, contractual, and customary benefits of employment (Weil 2014). They also increasingly impose mandatory arbitration and class action waivers as part of their employment terms—which both limit private antitrust enforcement and serve as further evidence of monopsony power. A competitive labor market would imply that if employers sought to restrict workers in any of these ways, they would have to pay a compensating differential to retain workers—and yet the evidence is rather that such contract terms *reduce* wages when imposed, consistent with a model of bargaining power rather than of multi-dimensional labor market competition (Dube and Kaplan 2010).

### Defining Labor Markets

The aforementioned research on finite firm-level labor supply elasticities and on market concentration in labor markets has begun to yield insights of interest to antitrust enforcers. As the agencies have made clear, proper market definition is crucial to understanding concentration and market power for antitrust purposes, and properly-defined antitrust markets tend to be more narrowly drawn than some academic literatures and popular discussions might suggest, because often the full measure of choices available “in the market” is actually not available to particular consumers (FTC/DOJ 2018). The same basic insight holds true in labor markets—even if employment exists near at hand, that doesn’t mean those jobs are functionally available to a searching worker. In fact, job-to-job mobility has declined substantially in the United States over recent decades, because outside job offers are far more infrequent (Molloy et al. 2016). The flipside of this is that a given job is vacated less and less frequently (Hyatt and Spletzer 2016).

One tool for defining markets for antitrust is the hypothetical monopolist test: for a given market definition, would it be profitable for a hypothetical monopolist in that market to impose a “small, significant, non-transitory increase in price?” The typical number is a 5% price increase. The question can be rephrased as “would the increase in price for remaining customers outweigh the reduction in sales?” And the crucial observable parameter to be able to answer that question is the price elasticity of demand facing the hypothetical monopolist. If demand is very elastic, then it would not be profitable to implement a SSNIP, and the proposed market is drawn too narrowly and should be widened. On the other hand, if demand elasticity is low in the proposed market, then it would be profitable to impose such a price increase, and the market is drawn too widely and should be narrowed. The so-called critical elasticity is the one for which it is just profitable for a hypothetical monopolist to impose a SSNIP.

The analogous reasoning holds for labor markets, where we are interested in a hypothetical monopsonist’s ability to impose a “small significant non-transitory reduction in wages,” or SSNRW, and the crucial observable parameter is the elasticity of labor *supply* to the hypothetical market. Aforementioned studies of market- and firm-specific labor supply elasticities (which are likely to be larger than market-level ones) are uniformly small: Dube et al (2018) find the average among firms in their experimental setting was 0.1, with little heterogeneity. What that means is that even individual firms could be antitrust labor markets, and indeed, the dynamics of workplace fissuring and reduced rent-sharing with non-executive workers suggests that is the case.

The implications for antitrust policy are considerable: it would be incorrect to interpret *any* observed vertical restraint in labor markets as existing in a competitive market. Moreover, horizontal mergers between employers (which may or may not be horizontal in product markets) would be likely to substantially increase labor market



power, regardless of product market definition or product market concentration. In fact, the prevalence of monopsony power in labor markets is a good reason why antitrust policy alone is insufficient to ensure they remain competitive: as with regulated markets like telecoms or transportation, there are barriers to entry, lock-in, network effects, and other structural reasons why competition (or, alternatively, lack of concentration) alone is unlikely to ensure the market functions efficiently. In such markets, antitrust provides a baseline, but other regulatory tools are appropriate. That is what we see in labor markets: a minimum wage, for example.

On the other hand, the erosion of traditional labor protections means that increasingly workers fall back on antitrust to secure a relative equalization in bargaining power with employers. Unfortunately, even that lesser guarantor has been most absent, save for a few discrete enforcement actions against out-and-out no-poaching agreements. In fact, in numerous instances the antitrust authorities have sided definitively *against* workers (Vaheesan 2018; Steinbaum 2018), which in a monopsonized labor market means that the enforcers have opted to make the relevant market less efficient.

The antitrust authorities cannot point to other policy instruments as better able to uphold workers' interest in equalization of bargaining power when those instruments have already proven themselves ineffective. The FTC has statutory authority and it has the backing of cutting-edge economic research. The avenues to enforcement are open.

## Remedies

- **Merger Review.** As a matter of standard merger review, the FTC should define the relevant labor market or markets—in addition to the traditional approach of defining the relevant product market—and assess whether the proposed merger would harm workers by reducing wages, employment, or both. To make such a review meaningful, the analysis should investigate whether a merger would result in anti-competitive coordinated effects in order to address the degree of competition in the market as a whole, not just on the part of merging parties. Such a review should include theories of harm that involve non-price effects, such as the ability to impose disadvantageous terms of employment on workers post-merger, including re-classification as independent contractors. This review should extend throughout the relevant supply chain.

In order to do this, the FTC should supplement its existing Bureau of Economics staff with labor economists in order to investigate the competitive effect of mergers in labor markets.

- **Merger retrospectives.** There is some evidence that previously-approved transactions had disadvantageous effects on labor markets. For example, following the Amazon-Whole Foods merger, Amazon imposed restrictions on Whole Foods suppliers, preventing access to its the stores. And more generally, powerful buyers tend to impose price reductions on captive suppliers, who in turn demand and receive pay cuts from their workforce (Wilmers 2018). The commission should increase its merger retrospective capacity in general, and in particular, scrutinize whether past transactions had the effect of diminishing labor market competition ex-post.
- **Non-compete clauses** are non-price vertical restraints within the meaning of antitrust law—analagous to an exclusive supply contract. Existing jurisprudence implies that such contracts would be illegal if they had the effect of monopsonizing (or monopolizing) the market and had no offsetting efficiencies. This is why labor market definition is critical: noncompete clauses are prevalent, including in markets in which employers have less than the 70% market share that would probably be necessary to prove monopsonization. And yet given what the literature has to say about the prevalence of monopsony power and the narrow scope of labor markets for antitrust purposes, there's reason to believe that the proper market definition for this purpose is quite a bit narrower—that with or without a noncompete clause, an



individual firm might count as a labor market for antitrust purposes. If that is true, then noncompete clauses would be Sherman Act violations.

There's also a strong case to be made that they are unfair trade practices and hence in violation of Section 5 of the Federal Trade Commission Act. The commission ought to consider passing a rule that would ban them. In doing so, it is important not to give excessive credence to theoretical efficiencies that they might have, such as inducing employers to invest more in training their workforce. The empirical evidence that exists about the impact of noncompetes does not support any such efficiencies (Starr, Prescott, and Bishara 2017).

- **Prohibit no-poaching language** from appearing in franchising contracts as an unfair method of competition. This can be done similarly through a rule-making process.
- **Bring a monopsony wage-fixing case against rideshare companies.** Uber and similar ridesharing companies have availed themselves of the growing regulatory black hole between lax labor law enforcement and lax antitrust enforcement. To date the antitrust enforcers have seen them as pro-competitive, for introducing competition into urban taxi markets. But given that their drivers are classified as independent contractors, the business model rests on violating the Sherman Act by fixing and coordinating fares and driver pay among hundreds of thousands of independent businesses, by means of an app designed for that purpose (Steinbaum 2018).

A similar private antitrust suit was sent to arbitration thanks to the arbitration clause contained in the terms of service signed by the plaintiff. But the FTC is not bound by any such clause. Moreover, the DOJ's suit against the Apple ebooks conspiracy provides a favorable precedent to enforcers: that the coordination is a hub-and-spoke conspiracy and therefore per se illegal, meaning that the spurious defense for two-sided platforms created by *Ohio v. American Express* would not be available to the ridesharing platform.

The ultimate policy aim of such an enforcement action would be to force Uber to choose one regulatory regime or another: either classify drivers as employees, or give up any discretion over setting the fares that riders pay drivers. Ridesharing companies shouldn't be forced out of business, but they should be forced to follow the same laws as everyone else.



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