LABOR

# Is There Monopsony Power in U.S. Labor Markets?

*The "new monopsony research" does not make a convincing case for government intervention.*

BY PEDRO BRAGA SOARES, RYAN BOURNE, AND JEFFREY MIRON

The 2022 Economic Report of the President devotes a whole chapter to the role of monopsony, monopoly, and discrimination as barriers to economic equality. That monopsony power — market power held by buyers — is given equal billing to the threat of anticompetitive conduct in product markets or prejudice in hiring is striking. Yet, monopsony is alleged to be rampant in the labor market as employers hold wages below competitive levels.

Once regarded as a mere intellectual curiosity, interest in monopsony as it applies to labor has exploded among economists, policymakers, and politicians in recent years. For a sense of this, consider that just two published economics journal articles used the term in the 1980s; in the 2010s, 64 did.

Partly spurred by this recent literature, the Biden administration contends that monopsony power is "ubiquitous" in U.S. labor markets and requires corrective policy responses. The 2022 report advocates countering employer power with stronger support of labor unions, higher minimum wages, the application of antitrust laws to labor markets, and bans on noncompete agreements.

Is monopsony power really an appropriate model of the American job market? On inspection, many of the studies that are cited as evidence of this power are not convincing, and newer research finds relatively small markdowns on wages. The policies advocated to correct for monopsony power often produce outcomes inconsistent with the idea that these labor markets are monopsonies. And there are real risks that proposed interventions will eliminate job or remuneration agreements that workers value.

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## THEORETICAL OVERVIEW

Monopsonies are the flipside of monopolies. In monopolies, there is only one seller and many buyers; in monopsonies, one buyer and many sellers. A situation with one or few buyers and many sellers may be a good approximation of some historic labor markets, the textbook case being a factory town where the factory employs most of the resident workers.

Most labor markets have more than one firm hiring workers, but many economists worry about labor markets being highly concentrated. Concentration can theoretically be a source of market power in labor markets, especially when coupled with barriers to employer entry. But concentration and market power are not synonymous. Market power in labor markets means that employers can maximize profit while paying wages below the marginal revenue product generated by workers — a *wage markdown*. Concentration merely means that one or a few firms are responsible for a substantial fraction of employment. Other factors, such as potential competition, can curb employers' market power even in a concentrated market.

Another possible indicator of monopsony power is the elasticity of labor supply that an individual firm faces. This elasticity measures the sensitivity of labor to wage changes. An elastic supply means any decrease in wages will decrease the quantity of labor supplied substantially. At the firm level, employers without labor

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market power face a highly elastic labor supply: if they decrease wages by a small bit, employees tend to go elsewhere. In contrast, a monopsonist faces relatively inelastic labor supply: if it marks down wages, workers respond less to the decrease.

What are the implications of monopsony market power for wages and employment? In a competitive labor market, employers and workers represent a small fraction of labor market transactions. Therefore, it is reasonable to model the competing businesses as "wage takers," meaning that market forces, and not employers, dictate the wage rate.

In a monopsony model, employers have the power to set overall hourly compensation rates below competitive market rates. This results in their employing fewer people than in a competitive labor market because some prospective employees decline the offered wage, reducing total output. The lower wages paid to actual employees increase average profit per unit of output and overall firm profits. Raising the wage to attract the prospective employees is assumed to require the employer to raise wages for all workers, reducing total firm profits. Thus, monopsony is a source of inefficiency because, by reducing labor that would have been hired at the competitive rate, this form of market power reduces output and prevents transactions that otherwise would have occurred.

Many people think government can reduce this inefficiency. If a policymaker could set a minimum wage, for example, between the monopsonistic and the competitive wage rates, this would deliver a "double dividend" of more jobs and higher pay. Similar logic dictates that labor unions could offset monopsony power or that antitrust enforcement that reduces monopsony power could reap the double dividend.

***Monopsonistic competition*** / How realistic is this as a model of the labor market? There are important caveats.

First, pure monopsony does not exist; all job markets lie between fully competitive and monopsonistic, with a firm's degree of power determined by both within-market forms of conduct and by government policies that affect entry and thus competition. Businesses in highly concentrated sectors could theoretically collude to suppress wages, but they could also engage in competition. Under some conditions, only two firms might yield a competitive equilibrium. Governments can also be the problem; occupational licensing policies or zoning and housing laws make it difficult for workers to change jobs or move, leaving workers more captive to current employers.

Individual jobs are also highly differentiated, with similar jobs having different amenities, distance from home, ability to work remotely, workload, schedule flexibility, and more. This means individual workers might consider identical job titles to be imperfect substitutes. A waiter might be willing to earn less at one restaurant over another if it means working near home. In these settings, employers hold power over the local labor market because they can mark down wages to some extent. Nevertheless, the worker considers himself better off given this amenity. Contrary to the usual monopsony story, the local market power does not translate to extraordinary profits because competitors can enter the market freely. Economists call this "monopsonistic competition."

The implication is that neither labor market concentration nor elasticities of labor supply are reliable indicators of whether monopsony power exists, is problematic, or occurs because of anticompetitive conduct as opposed to government policies.

In fact, even if monopsony power is suppressing wages, that presents an entrepreneurial opportunity for new firms (perhaps even in different sectors) to enter profitably, bidding away the monopsony power, so long as government barriers to entry are absent.

***Wage discrimination*** / A second problem with the monopsony model is that it presumes firms have market power to suppress wages but no ability to pay workers different wages for the same job. If, for example, a firm can pay new hires more than it pays previous ones, the inefficiency of monopsony declines. That's because wage discrimination breaks the link between increased hiring and higher wages, which decrease profits. Under perfect wage discrimination, average wages would still be lower than under perfect competition in the labor market, but firms would hire the same quantity of workers as in a competitive market.

This has important implications for monopsony-correcting policies. Suppose a government sets a minimum wage at the rate one would see in a perfectly competitive labor market. Workers as a group would be paid more, but the minimum wage would have no effect on the level of employment, which is already at its efficient level.

What would happen is the firm's cost of production would increase. Given it has no pricing power for its product in global markets, its profits would be squeezed, making it more likely to go out of business or cut back on its output. Employment of its workers would fall. Therefore, even in theory, a corrective minimum wage might cause less employment in a monopsonistic local labor market if the firm can wage-discriminate.

***Measurement issues*** / All those wrinkles relate to the difficulties associated with assessing monopsony power empirically.

A researcher might be tempted to define specific local occupational labor markets — say, the Toledo, Ohio restaurant sector — and then look at how the employment concentration of the industry and wages there compare with the same occupational markets elsewhere as a proxy for observing the effect of more monopsony power.

As we have seen, though, concentration (even locally) is not synonymous with market power over workers. Just because some workers are employed by a restaurant does not mean they would be unable to work for an automobile repair firm, or a florist, or a supermarket. This is especially true over time. Examining local occupational concentration measures of employment can therefore give misleading impressions about a firm's power in the labor market.

Likewise, if we look at weak labor supply elasticities as a proxy for monopsony power, we might confuse good job matching — of workers valuing their current jobs and colleagues, making them less responsive to small wage cuts — with nefarious market power. That makes empirical studies seeking to measure monopsony power using concentration or labor supply estimates risky. It may be better to examine the effects of policies implemented to correct monopsony power and determine whether they bear out the monopsony model's predictions.

## A REVIEW OF THE EVIDENCE

The monopsony model's key prediction is that labor market power should lower wages relative to a competitive benchmark, even when wage discrimination is possible. Yet, theory says nothing about whether labor market power is pervasive or whether its downward pressures on wages and employment are large.

***Market concentration and lower wages?*** / Recent papers try to assess these questions by looking at the effects of labor market concentration on local wages. However, this is unlikely to yield reliable estimates of the causal effect of market power on wages.

One reason for this is that confounding variables might bias estimates in both directions. Concentrated labor markets might reflect lower local productivity that itself lowers pay, thus making wage markdowns look larger than they are. Or, concentration might result from productive firms expanding, implying higher productivity and higher wages, which, if uncontrolled for, could suggest that concentration causes higher wages.

In a recent *Journal of Human Resources* article, José Azar et al. use local labor market concentration measures in particular sectors to gauge market power's effect on wages in commuting zones. To get around productivity driving both concentration and wages, they use comparisons to the average number of firms in other markets for the same occupation as a proxy for labor market power. They find that going from the 25th to the 75th percentile in concentration is associated with a 17% decrease in wages.

Problem is, this estimation strategy relies on two assumptions that together seem implausible. First, it assumes that some changes to the local market number of firms cause concentration to vary in other markets. For example, if a new supermarket with an innovative supply-chain technique opens at a given locale, the supermarket is likely to expand into other locations, affecting concentration elsewhere. Second, the strategy also assumes that factors that both change concentration in a local market and affect concentration in other markets do *not* affect wages elsewhere directly, but only through local concentration. In our example, the innovative supermarket chain is likely to spread into other markets, causing its market share to increase elsewhere; but this also influences wages directly through changes in productivity.

The authors try to address this problem by considering the effects of national changes in concentration on local wages directly. In this case, their estimate is very close to zero, with an upper bound showing that going from the 25th to the 75th percentile in concentration is associated with an *increase* of approximately 4% in wages.

Other papers use similar strategies and find smaller effects of

concentration on wages. Using the Azar et al. dataset as a benchmark to facilitate comparisons, estimates of the effect of concentration on wages range from a 3.9% decrease to a 13% decrease when going from the 25th to the 75th percentile in concentration. Yet, all analyses face the challenge that concentration might be a symptom of market power, but it might also be a symptom of other things such as changes in productivity or lack of dynamism.

Another problem is wage comparability. Even though wages can be adjusted for inflation to allow for comparisons over time, adjusting for the cost of living is more difficult. The literature surveyed does not attempt to control for the purchasing power of posted wages. This could show higher nominal wages for dense urban areas, when in fact wages adjusted for purchase power are smaller.

In a 2021 working paper, Gregor Schubert et al. try to address some of the concerns with other studies by using a larger dataset of vacancies both online and offline. They also tackle the problem that labor market concentration might be correlated with having bad options in other occupations. The paper finds estimates that are substantially smaller than previous papers: moving from the median to the 95th percentile of employer concentration reduces wages by an average of just 2.6%. Using the Azar et al. data as a benchmark, the estimates imply a wage decrease of only around 2%, as opposed to 17%, when moving from the 25th to the 75th percentile in local market concentration.

***Measuring elasticities*** / Some studies attempt to proxy for labor market power at the firm level by estimating labor supply elasticities directly. Estimates vary wildly, with a mean estimate reported in the literature of 3.75 (and a standard deviation of 36.9), which means that a 10% decrease in wages would lead to a 37.5% reduction in the labor supply. There is no consensus as to what magnitudes would constitute competitive or monopsonistic labor markets. Many of the findings are inconsistent with a textbook monopsony model and instead suggest "monopsonistic competition," where firms can freely enter but hold local market power because of workers' heterogeneous preferences and job search frictions.

In a 2021 *American Economic Review* article, Elena Prager and Matt Schmitt investigate hospital mergers and find no evidence of lower wages for low-skill workers post-merger. In cases where concentration induced by the merger is large, the authors do find that wage growth is 1% slower for skilled workers. In either case, there are no observable employment effects. In line with these findings, a 2010 *Journal of Labor Economics* article by Douglas Staiger et al. uses variation in Veterans Affairs hospitals' national wage policies to estimate labor supply elasticities for nurses. They find that this supply is relatively inelastic but mostly explained by geographic differentiation and nurses' preferences. In addition, they find that VA wage changes have similar effects whether the hospital market location is concentrated or not. The authors suggest low labor supply elasticities might result from workplace differentiation.

Analyzing labor supply elasticities for teachers at public school districts in Missouri, a 2010 *Journal of Labor Economics* article by Michael Ransom and David Sims finds more elastic estimates of 3.7. The authors note that these estimates are smaller than expected and imply that districts wield power to mark down wages. But they are in line with other research that shows strong locational preferences of teachers to stay close to their hometown. The lower-than-expected elasticity might also reflect a rigid pay structure based on work seniority. When looking at tenure duration, the authors find much higher labor supply elasticities (4.7) for teachers with less than 10 years in the same position.

Other studies find much higher elasticities, especially in the long run. But even results that show relatively inelastic firm-specific labor supply mostly fail to find depressive effects of concentration on wages or employment. The findings paint a more nuanced picture of local labor market power stemming from workers' preferences and workplace differentiation, and not from markets where barriers to entry allow for extraordinary profits. It's worth noting that industries that appear to be the least elastic are those where entry regulations exist for employers in specialized jobs (e.g., certificate of need laws for hospitals, which employ doctors and nurses).

***What about employment?*** / Measuring the net employment effects of monopsony power is complex because restricting employment in one occupation will increase the supply of workers in other occupations, leading to lower wages and higher employment elsewhere.

If monopsonies can wage discriminate between employees, resulting employment effects will be small. Legislation that curtails firms' abilities to wage-discriminate — such as pay disclosure laws — might therefore reduce employment when monopsony power exists.

The 2022 Economic Report of the President quotes a staggering estimate that monopsony power reduces U.S. output and employment by 13% and the labor share of national GDP by 22%. Those estimates, however, come from a model that treats the U.S. economy as composed of identical firms that display equal monopsony power. The model is calibrated by labor supply elasticities from previous studies. Some of those elasticities, when plugged into the model, would lead to a more than 50% GDP loss, which is simply not believable.

Assuming all firms have equal monopsony power likely overestimates monopsony effects, especially when the effects of a few monopsonistic labor markets on employment and output are likely to be offset by more competitive labor markets elsewhere. The model's results are hard to square with the decline of the natural rate of unemployment, as noted in a 2020 working paper by Anna Stansbury and Lawrence Summers. They are also inconsistent with studies that look at empirical employment effects.

Furthermore, only 6% of recent empirical studies on state minimum wage hikes conclude that they raised employment, against 80% that find negative effects. A swath of other research shows that unionization tends to reduce job growth within firms. Neither backs the monopsony model's predictions of a well-designed policy raising wages and employment.

## POLICY IMPLICATIONS

Several policymakers and economists have interpreted the literature presented above as vindicating their longstanding diagnosis of the U.S. economy as skewed by corporate power against the best interests of workers. They claim this explains a host of social problems, including inequality and gender or racial pay gaps. This in turn purports to justify policy prescriptions such as stricter antitrust enforcement against mergers and acquisitions, raising the minimum wage, banning noncompete agreements, strengthening union power, and more.

Our assessment, however, is that the current state of evidence is much less persuasive than portrayed, which makes these proposals problematic.

Suppose, for example, there was a small-town supermarket deemed to be a monopsony employer of retail workers in the local market. Would the supermarket be forced to split in two so that the newly created firms would compete? This could have significantly adverse consequences in product markets by introducing new inefficiencies. How antitrust authorities would consider these tradeoffs is unclear.

The large heterogeneity across labor markets means one-size-fits-all solutions, like raising the minimum wage or nationwide permissive labor union laws, will cause significant problems in some areas or in some industries, even if they help alleviate monopsony power where it exists.

An increased federal minimum wage or even a hike across a whole state might successfully raises workers' wage rates at the cost of monopsony rents in some places but significantly reduce employment elsewhere. It seems unlikely the same wage floor could perfectly correct for monopsony power in all low-pay industries across the whole country.

Finally, the nuanced reality where labor markets are monopsonistically competitive, with free entry curbing excessive profits over time, means that heavy-handed policies are likely to reduce job differentiation and flexibility that is valued by workers. Higher minimum wages, mandatory maternity leave, and mandatory vacations would narrow the diversity of possible job packages and reduce the welfare for some workers.

Pay disclosure laws might make it more difficult for firms with monopsony power to wage discriminate, leading to worse employment outcomes. Banning non-compete agreements in contracts can have significant unintended consequences too, even if they do make workers more mobile. Even if wages increase marginally in the short run, the ban might make firms refrain from sharing productivity-enhancing information or providing adequate investment in workers. Indeed, evidence suggests such contracts foster risky research-and-development investments and more training in workers.

Instead of the above interventions, policymakers could help workers by removing government-imposed constraints on mobility or the ability to change occupations. Occupational licensing reduces mobility across professions, increasing wage-setting power on the margin. In a 2020 working paper, Morris Kleiner and Ming Xu suggest licensing accounts for almost 8% of the total decline in occupational mobility over the last two decades. Zoning policies restricting businesses in certain locations or pricing workers out of moving because of higher housing costs are also likely to bolster local market power by reducing options available to workers.

## CONCLUSION

The surge of interest in market power has brought important contributions to our understanding of labor markets. Nevertheless, the leap from existing evidence to calls to transform labor market policies is misguided.

Policymakers should avoid swift policy action based on these studies. Blanket policies, such as large minimum wage increases, further government support for collective bargaining, and applying antitrust laws to labor markets risk doing great harm. To the extent policymakers are worried about monopsony (and even if they are not), they should focus on removing government-erected barriers to workers' geographical or occupational mobility. *R*

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