

Incomplete Picture

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THE TRADITIONAL ECONOMIC MODEL OF HOW WAGES ARE SET FAILS TO REFLECT THE REAL WORLD

In the standard model of the labor market, taught in introductory economics classes around the world, there is nothing special about the relationship between employer and employee. Instead, the model simply relabels the canonical supply-and-demand diagram, magically transforming price floors into minimum wages and unions into monopolists. The labor market is governed by the same forces of supply and demand as are refrigerators or carrots, according to the model. Because labor market institutions and norms impede these forces, the model considers them merely obstacles to efficiency.

This perfectly competitive view of the labor market is not entirely wrong. But it is incomplete—and has pushed economic-policy thinking to focus on demand and supply as the only things that matter for labor market outcomes. It presumes that the law of one price—which postulates that identical commodities have the same price everywhere—includes workers and their wages. As a result, the model considers the supply of human capital and technology-induced demand as the sole levers that move labor markets, with little role for firms, norms, or interventionist institutions, such as labor unions

and governments. The perfect competition model generally portrays efforts to shape the terms of voluntary contracts between workers and firms (like union negotiations or minimum wages) as either of secondary importance at best or counterproductive at worst. As the late Milton Friedman wrote, “The employee is protected from being coerced by his employer by the existence of other employers for whom he can work.”

But the empirical implications of the theory do not much match up with the real world. For example, in the hypothetical case of a company reducing wages by 10 percent, the perfect competition model predicts that *all* workers eventually will quit and go to competitors. Firms have no scope for wage setting, and the market determines a worker’s value at every firm.

A dose of reality

But experimental and quasi-experimental estimates in relatively unregulated scenarios all suggest that is not what happens. The number of workers who leave in response to a wage cut is much smaller, perhaps 20 to 30 percent—and in developing economies, lower still. This suggests

A man carrying a signaling disc with the writing no wage less than 8,50/h in front of the German Bundestag in 2014, in Berlin, Germany.

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that employers have wide latitude to set wages. A higher wage does help recruit and retain workers, but the market does not seriously constrain companies' wage decisions, and different employers can make different choices. That is, employers exercise monopsony power—the labor market analog of demand-side monopoly power that gives sellers a degree of control over pricing.

Dissatisfaction with the traditional depiction of the labor market is not new. The oldest criticisms of this model—for example, that it does not predict involuntary unemployment—remain true. And new ones have emerged—such as the importance of firms, market power, and cultural norms.

Nevertheless, despite a large collection of theories and evidence from the 1980s that poked holes in the model, the traditional framework remains the default model for pedagogy and economic policymaking. Prior to CORE Econ (Curriculum Open-access Resources in Economics)—an open-source economics textbook project I am involved in—the model of the labor market in introductory textbooks was some version of supply and demand. Various other economic forces are acknowledged as possible deviations from the basic model, but the model has not changed. As a result, for example, there is pervasive bias in US employment law that both firms *and workers* can readily terminate an employment relationship at low cost.

Cracks in the edifice

Much of the current criticism of the traditional labor market model stems from increasingly wide empirical cracks in the economic paradigm:

- Although the basic model postulates that firms do not matter much because all workers doing the same kind of job should get the same market wage, it is clear that employer behavior is responsible for a significant share of wages. Early 20th century labor economists had marshaled some evidence on this point, but the advent of high-quality matched employer-employee data, combined with transparent quasi-experiments, has moved the research frontier considerably.
- There is a large body of evidence showing some firm-specific wages that reflect in part the productivity and profitability of their employers, which conflicts with the law of one price.
- It is remarkably difficult to find negative effects of a minimum wage on employment, although the perfectly competitive model predicts that a minimum wage increase would make the least productive workers expendable, with no countervailing effects on turnover or effort.
- There is robust evidence to suggest that labor market concentration is negatively correlated

with wages and that mergers of large employers lower wages. Moreover, there is more recent evidence that unions and minimum wages mitigate the negative effect of concentration on wages.

- Most directly, quasi-experimental changes in wages across workers, all else equal, lead to only moderate changes in quits and recruits.

All this evidence points toward pervasive monopsony as a force in the labor market, where firms set wages for groups of workers, losing those who have better outside options but making profits off those who do not.

While monopsony is but one thread in a web of forces that make the labor market messier than the supply-and-demand model, it is readily seized on to explain aberrations in the labor market because it is both empirically quantifiable from readily available data and conceptually not too far away from the safe space of Economics 101. Simply relaxing the assumption that firms take market wages as given already yields a much more plausible view of the labor market.

Job searches are difficult

Large firms set wages for a whole set of jobs without having to compete with themselves, which creates a bubble of noncompetitive behavior within a workplace. Employees find searching for jobs costly, and many vacancies and possible matches are communicated only informally through social networks. Evidence shows that workers have relatively little credible information on jobs outside their firms (Jäger and others 2022).

A major reason that labor market monopsony exists is that jobs are more than sources of income and employees factor in more than compensation when making job choices. Among other things, jobs also offer social experiences and status and sometimes confer identity. Many aspects of a job matter—including relationships with coworkers and supervisors, commute times, tastes and abilities for particular tasks, scheduling, and hours. People value work they think others think is valuable. Subjective experiences of work—such as meaning and sense of purpose, managerial respect, and the experience of dignity—are important to workers.

The taste for the same job and knowledge about outside jobs vary among workers, which gives employers some scope to reduce wages, losing some workers who would rather work elsewhere but keeping those for whom the job is the best they could hope to find.

Antitrust policy is one area that has focused on monopsony in labor markets. Although traditional antitrust analysis is concerned mainly with consumer welfare, recent legal and economic research high-

Signs lie in the street before the start of a rally in support of minimum wage increase in New York in April 2015.



lights the role of employer market power. There are cases under active investigation by antitrust authorities in the United States, and recent horizontal merger guidelines (for combinations of companies in the same industry) suggest that mergers should be screened for harm to workers. Further, antitrust authorities have pursued restrictions on noncompete clauses (which limit an employee's ability to work for a competitor) and no-poaching agreements (in which companies agree not to solicit each other's employees). Both are horizontal (same industry) restraints that putatively dampen labor market competition.

Wage-setting power

But Naidu and Posner (2022) argue that antitrust is only part of the solution to monopsony, because much of a firm's monopsony power is intrinsic to labor as a commodity and not the product of artificial constraints or undue concentration.

By any measure, labor supply does not exhaust the constraints on firms' wage-setting decisions. And monopsony is only part of the wage-setting calculation for firms. For example, just because employers have market power doesn't mean they use it all. There are many countervailing constraints—internal ones, such as the need to motivate

workers to exert effort and care, management interests in empire building rather than simple cost minimization, norms of fairness and reciprocity, and those that are external, such as patterned wage setting (when firms emulate each other's wages), minimum wages, and unions.

Although monopsony alone emphasizes getting bodies into the workplace, older literature on efficiency wages (those set higher than minimum to keep a desirable workforce) stressed the behavior of people once they are at work. A monopsonist that also wants effort must restrain its wage-setting power. Much research in personnel economics has examined the design of jobs, teams, and incentives inside a firm. But little of this literature has considered how these interact with the diversity of outside options for workers who have identical productivity—a scenario that is stressed by monopsony analysis. For example, Dube, Giuliano, and Leonard (2019) find that large quit rates in response to discontinuity in wage policy are driven by aversion to unfair and arbitrary changes in wages.

It is not even clear that firms are perfectly optimizing their profits. The textbook model suggests that firms set wages to maximize profits. But if optimizing is difficult for managers to accomplish,

monopsony gives firms some slack to make mistakes. Dube, Manning, and Naidu (2018) document pervasive round-number bunching in administrative data, in which the most commonly occurring nominal hourly wage is a remarkable \$10.00 over a long period of time. They also show that bunching is not the result of workers being fooled into thinking round numbers are artificially high; it occurs because employers fail to set wages with an eye to precise maximization of profits. This finding is consistent with recent research documenting widespread uniform wage setting—national employers setting countrywide minimum wages, regardless of local labor market conditions, or multinationals propagating home-country minimum wages to their locations around the world. When employers have labor market power, they do not need to engage in a costly search for a perfectly profit-maximizing wage; employers can afford to over- or underpay workers because they do not lose a lot of profit. But when managers—for example those with MBAs—do in fact focus on profit maximization, wages are lower and turnover higher (Acemoglu, He, and le Maire 2022).

One thing employer wage setting makes clear is that power is exercised in the labor market, either through monopsony power over wages or through the threat of unemployment. A *laissez-faire* labor market implicitly allocates wage-setting power to employers. The history of government regulation of the labor market is marked by an understanding that in the interest of workers there should be some countervailing force against this power. But some efforts to regulate labor markets wind up allocating more power to an unaccountable regulator or to a possibly undemocratic union than to workers. And even well-intentioned but mistargeted reforms can create conditions in which unemployed workers line up for jobs and remain vulnerable to being excluded from employment.

Blunt instrument

For example, while the minimum wage is a popular antidote to monopsony power, it is a blunt instrument, able to target only wages at the bottom of the distribution. When minimum wages are imposed or raised, the number of low-productivity jobs may shrink, but labor market monopsony implies that high-productivity jobs will expand, and the overall effect on employment will theoretically be indeterminate. But labor market standards set from afar by a regulator that does not consider the interests of affected workers are more likely to be too high or too low, fail to account for specific nonwage amenities employees value, and be unable to target the monopsony of higher-productivity firms in the same labor market. Recent evidence suggests that

in the United States, on balance, minimum wages have not been set too high.

There is renewed interest in the labor movement. Collective and sectoral wage bargaining between employers and democratic unions has the potential to improve efficiency, fairness, and the balance of power in the labor market. Workplace unions and worker representatives have private information about both the constraints facing their employers and the nonwage amenities valued by their workers. When backed by the bargaining power of a larger union federation or a government mandate, effective worker representation could offset employer power in ways attuned to local labor market and workplace conditions. Recent research suggests that, at least in Europe, increased worker representation has few observable adverse consequences. Perhaps, to the frustration of many managers, worker representation also imposes governance structures on the workplace—such as regulating childcare, parental leave, remote work, scheduling, promotions, and health and safety conditions. But this is a consequence of unionized labor markets that alter the allocation of power between employers and workers. How this plays out in practice will depend on the inclusiveness and accountability of union governance. Increased worker representation does, however, open the way for more democratic and efficient workplaces than the *laissez-faire*, employer-dominated alternative. **F&D**

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