 Equitable Growth

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# How labor markets function under imperfect competition

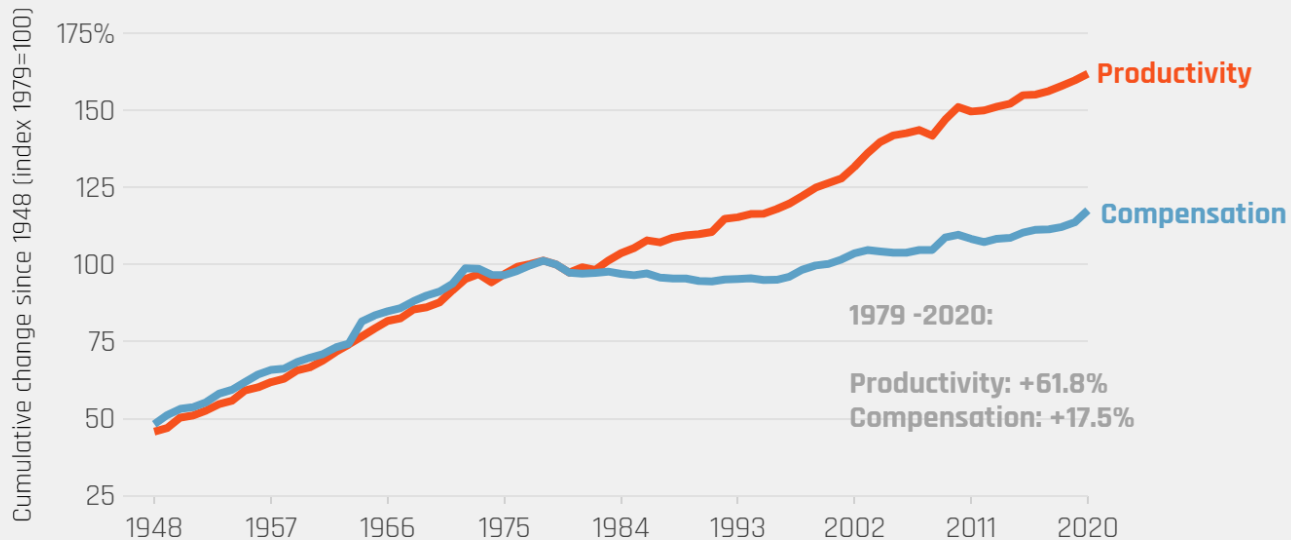
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# An economic puzzle

## The divide between productivity and a typical worker's compensation has widened substantially in the last 4 decades

Productivity growth and hourly compensation growth, 1948-2020



Source: Economic Policy Institute analysis of unpublished Total Economy Productivity data from Bureau of Labor Statistics (BLS) Labor Productivity and Costs program, wage data from the BLS Current Employment Statistics, BLS Employment Cost Trends, BLS Consumer Price Index, and Bureau of Economic Analysis National Income and Product Accounts.

Note: Data are for compensation (wages and benefits) of production/nonsupervisory workers in the private sector and net productivity of the total economy. "Net productivity" is the growth of output of goods and services less depreciation per hour worked.

# What we will cover today

- 1) **What is monopsony?**
- 2) **Contrary to what we learned in intro to economics classes, labor markets are not that competitive and wages aren't explained by market forces.**
- 3) **If labor markets are not perfectly competitive, then how are workers' wages determined?**
- 4) **What does this mean for economic policy?**

# The basics of monopsony

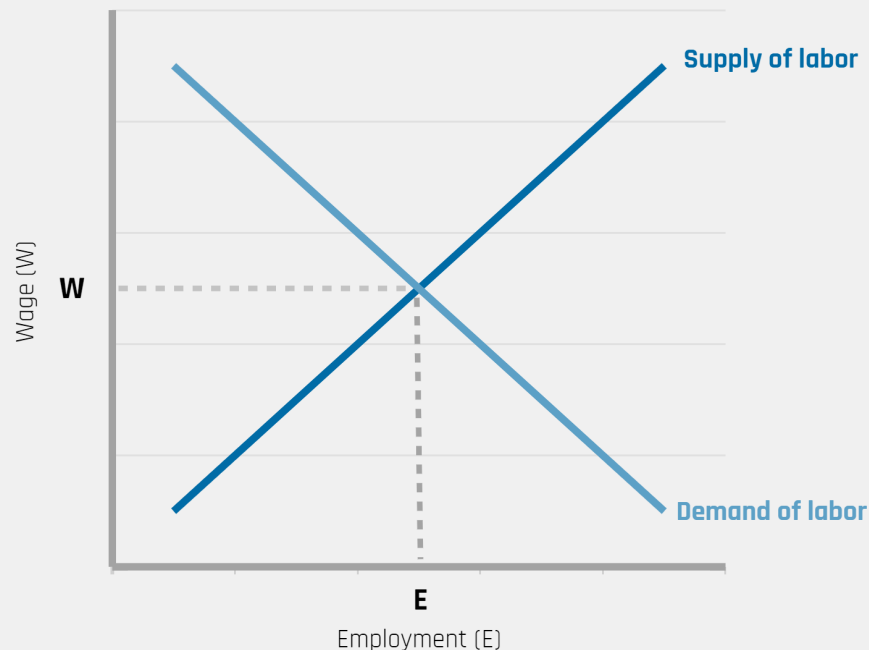
**A labor market in which few employers compete to hire workers, giving employers the ability to set wages below competitive levels.**

- **1) Monopsony deepens wage inequality and holds back productivity.**
- **2) Policies geared towards increasing or maintaining competition for workers among employers, raising wages, improving job quality, expanding employment opportunities, and boosting worker voice all counter employers' monopsony power.**

# The market wage is determined by the supply and demand for workers across the entire labor market

In a perfectly competitive labor market, wages are determined by the demand and supply of labor

Wage and employment determination in a competitive labor market model



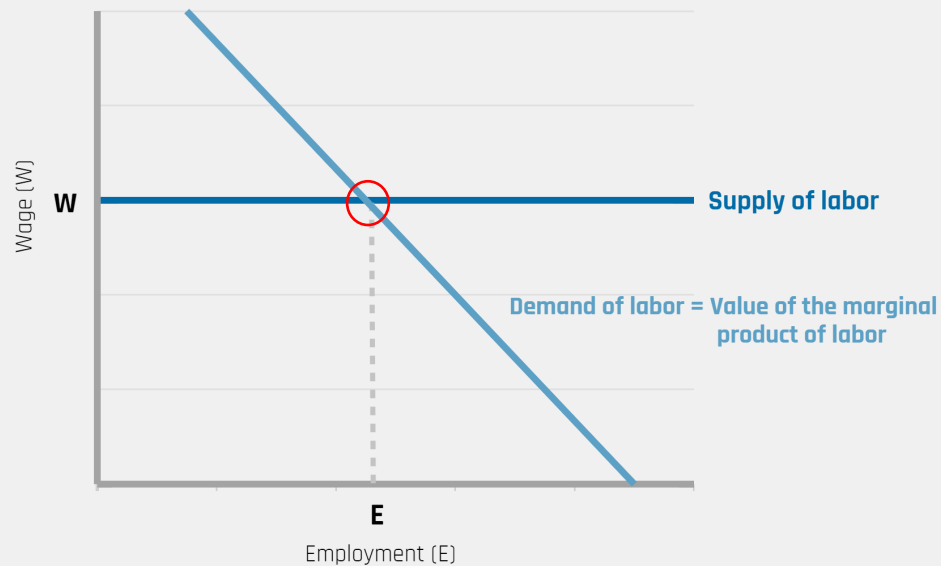
**This model requires a few assumptions:**

- **Workers have no trouble moving between jobs.**
- **Everyone has perfect information.**
- **This market has “clearing wages” and employers are “price-takers.”**
- **Wages reflect workers’ productivity, usually measured through their “human capital.”**

**Employers are “price-takers” so the wages they pay workers are set by market forces**  
**This is the perfectly competitive supply-and-demand model we learn about in intro Econ courses**

In a perfectly competitive labor market, employers can hire any number of workers they want as long as they pay the market wage

Equilibrium employment for firms in a competitive labor market model



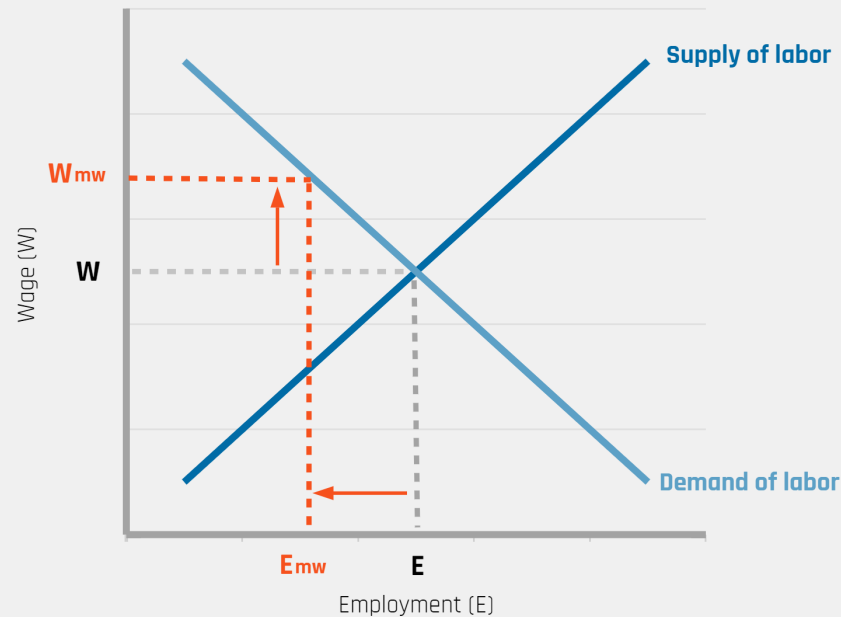
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**Here, employers can hire whatever number of workers they need at the given “market wage”**

**They hire workers up to  $E$ , which is where the market wage  $W$  meets the value of the marginal product of labor**

**According to this model of the labor market, policies like the minimum wage are inefficient: When wages are pushed up, employers will demand fewer workers.**

**According to the model of the perfectly competitive labor market, minimum wages lower equilibrium employment**  
Effect of a minimum wage in a competitive labor market model



**Yet empirical evidence shows labor  
markets are not perfectly  
competitive**



**Often, [workers do not move seamlessly between jobs](#), and unemployment is not only something that happens while workers transition from one job to another. For example:**

- **Employers hold prejudices against workers who lost their jobs, making reemployment more difficult ([Norlander et al 2020](#))**
- **Employers are less likely to hire Black candidates than White candidates, even if their qualifications are exactly the same ([Quillian et al 2017](#))**
- **Employer-provided healthcare “locks” workers into jobs. When public insurance options are expanded, like Medicaid expansions, workers are more likely to move into higher paying jobs ([Farooq and Kugler 2022](#)).**

**Workers [do not have access to or do not know a lot of information](#) relevant to their job prospects. For instance:**

- **Laws that ban pay secrecy practices – where co-workers are discouraged from sharing pay information with one another by their employers – narrow pay divides between men and women ([Kim 2015](#))**
- **Increasing access to high-speed internet in low-income communities increases earnings and employment rates, suggesting that better online resources allow candidates to land more and better jobs ([Zuo 2021](#))**
- **There is also asymmetrical information in the labor market. For example, potential employers asking for a candidates' salary histories have been shown to exacerbate gender and racial pay gaps ([Bessen, Meng, and Deck 2020](#))**

**Often, wages are an imperfect reflection of a worker's productivity. Institutions, discrimination, and public policy are all examples of factors that can affect someone's compensation. For example:**

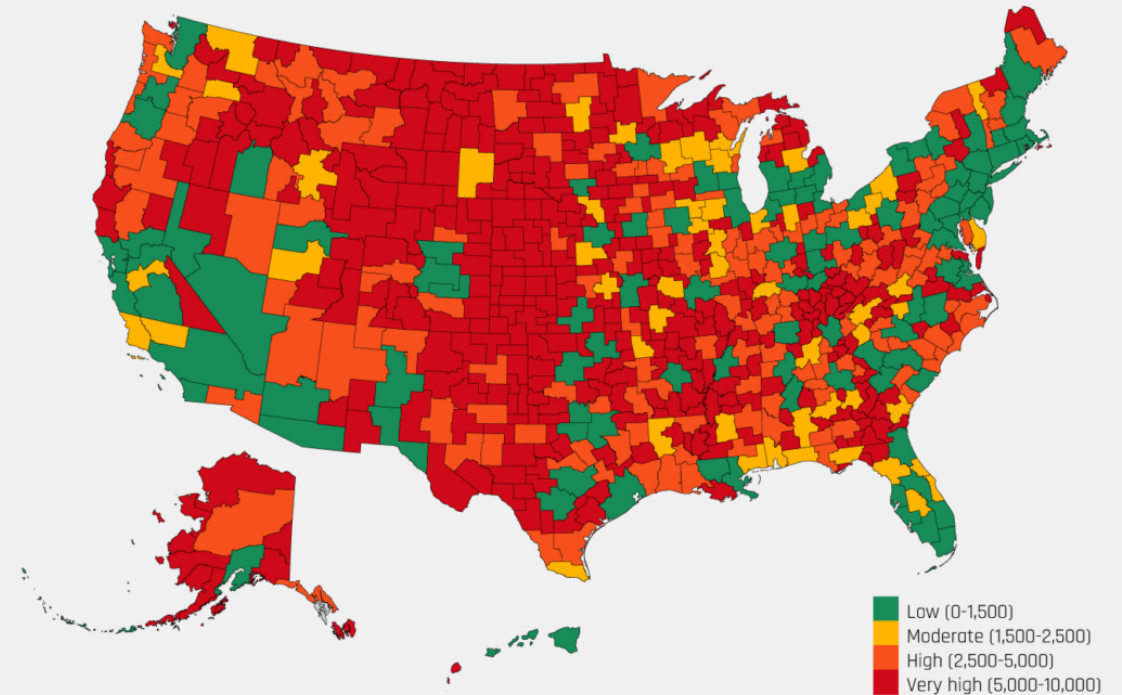
- **Predicted productivity does not fully explain wage disparities between workers, particularly when looking at wage gaps by race and ethnicity ([e.g. Holder 2020](#))**
  - **Racial wage gaps are higher at higher levels of education.**
  - **As the same occupations become more or less segregated by gender, wages are correlated with the proportion of women in that occupation.**
- **There's a growing mismatch between labor productivity and compensation ([Economic Policy Institute](#))**

In addition, there is evidence that **employers are not always price-takers**. For instance:

- There are highly concentrated labor markets where there are not many employers, and these markets have lower wages. ([Azar et al. 2020](#))
- When big employers voluntarily increase their minimum wages, other nearby employers increase their wages too. When Amazon increased their wages by 10%, nearby employers followed suit by increasing their wages an average of 2.6%. ([Derenoncourt, Noelke and Weil, 2021](#))

The vast majority of local U.S. labor markets have few employers competing for workers

Labor market concentration based on the share of each employer among job vacancies, calculated using the Herfindahl-Hirschman Index, by commuting zone



Source: José Azar, Ioana Marinescu, Marshall Steinbaum, and Bledi Taska, "Concentration in U.S. Labor Markets: Evidence from Online Vacancy Data," *Labour Economics* 66 (2020), available at <https://doi.org/10.1016/j.labeco.2020.101886>.

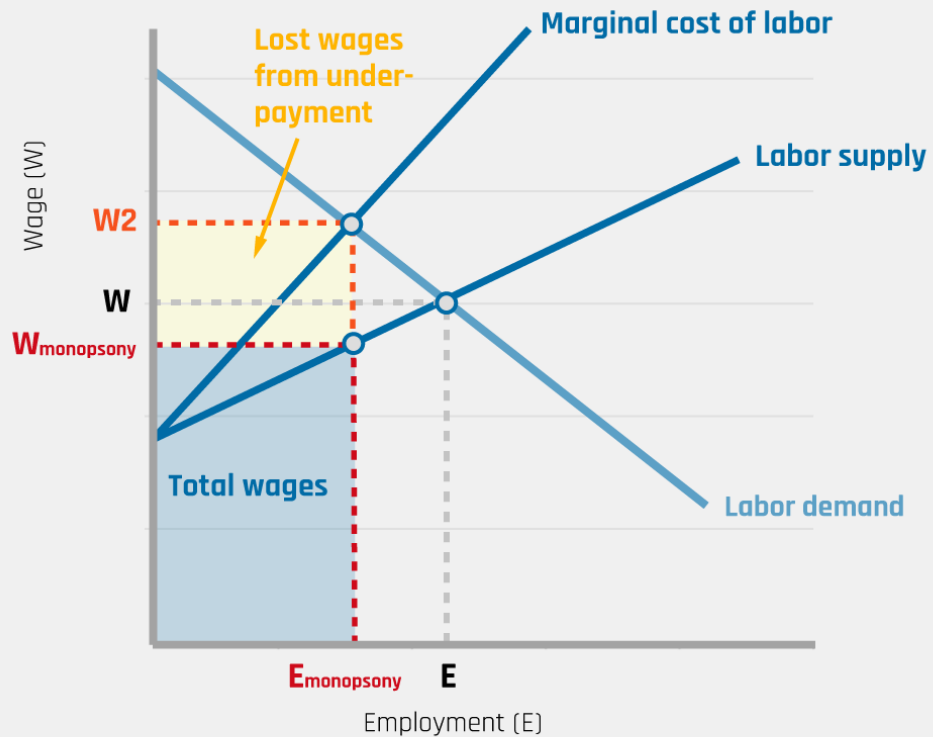
Note: The figure shows average labor market concentration calculated using the Herfindahl-Hirschman Index, an antitrust tool that measures market concentration. The concentration is calculated using job vacancy postings collected by Burning Glass Technologies. A higher concentration means that there are fewer employers posting job vacancies and/or that some employers post a large share of the vacancies in the market.

# So, how are wages determined in labor markets that are not perfectly competitive?

- **Employers do not compete to hire workers by bidding up wages equal to the value workers contribute.**
- **Labor demand intersects with labor supply facing the firm at a lower wage \*and\* employment level.**
- **There is deadweight loss and inefficient economic outcomes.**

Under monopsony, employers are able to pay wages below the value they create

Wage and employment determination in a monopsonic labor market model



# What evidence is there of monopsony affecting wages?

**What economists call “labor supply elasticity” tells us how willing or unwilling workers are to take a job depending on the pay they are offered**

- **In a perfectly competitive market, workers are pay sensitive – if another job offers a wage \$1 more than their current job, they will immediately go for that new job.**
- **Economists measure labor supply elasticity to determine how workers actually respond to wage raises or cuts.**

# Empirical evidence that monopsony exists

- A meta-analysis found that the median labor supply elasticity across studies is 1.41. ([Sokolova and Sorensen 2020](#))
  - This is bad. It means that employers can undercut wages by 58%. In other words, if a firm cuts wages by 5%, they will lose only 10-20% of their workers.
- When accounting for the likelihood a worker can switch occupations, over 10% of U.S. workers are in labor markets so concentrated that pay is at least 2% lower than it would be under competitive conditions. ([Schubert, Stansbury, and Taska 2020](#)).
  - For workers in low-population areas and working in healthcare sectors, this pay suppression is likely to be greater
- Hospital mergers lead to wage stagnation for skilled workers. ([Prager and Schmitt 2019](#))
  - Wages were 4.1 percent lower for professional staff and 6.3 percent lower over 4 years following a merger, compared to wages where hospital mergers did not occur.

# The case of Walmart Supercenters

**Walmart is the largest private-sector employer in the country, and research shows the opening of a Walmart Supercenter affects wages and employment in local labor markets ([Wiltshire 2022](#))**

- **Walmart is a notoriously bad employer and faces high levels of turnover. Yet, it's able to maintain its workforce, suggesting that the company does not face much competition and as such is able to keep wages (and job quality) low.**
- **Researchers analyzed counties where a Supercenter was proposed but blocked to counties where a Supercenter was successfully opened**
  - **In counties where a Supercenter opens, county-level wages decrease by 5.2%, aggregate employment decreases by 2.9%, and labor force participation decreases by 1.4% after 5 years**



# What does all this mean for public policy?

**Both earnings and employment can go up through mitigating monopsony since both are suppressed – a win-win for the U.S. labor market.**

- **When labor markets are operating with lack of competition and deadweight loss, increasing competition and rebalancing power toward workers leads to more efficient outcomes.**
- **Intrinsic frictions in the labor market means that policy can replicate competitive outcomes.**

# Policies are needed to both boost competition and balance worker power

- **Boost competition: antitrust authorities should increase their role in preventing anticompetitive behavior in labor markets**
  - **Develop explicit guidelines for merger scrutiny for labor markets**
  - **Ban non-compete agreements, especially for low-wage workers**
- **Balance worker power: raising wages and giving workers voice**
  - **Raise the federal minimum wage, which has been stuck at \$7.25 since 2008**
  - **Empower organized labor by expanding the right to organize and bargain collectively to workers who currently cannot form part of a union, such as self-employed workers and agricultural and domestic workers**
  - **Ensure that employers comply with labor standards and protect workers against violations like wage theft and discrimination**