

ECONOMIC FINDING

Outsourcing, Inequality and Aggregate Output

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The rise in outsourcing in France between 1997 and 2007 increased aggregate output by 1% and reduced the labor share by 3 percentage points.

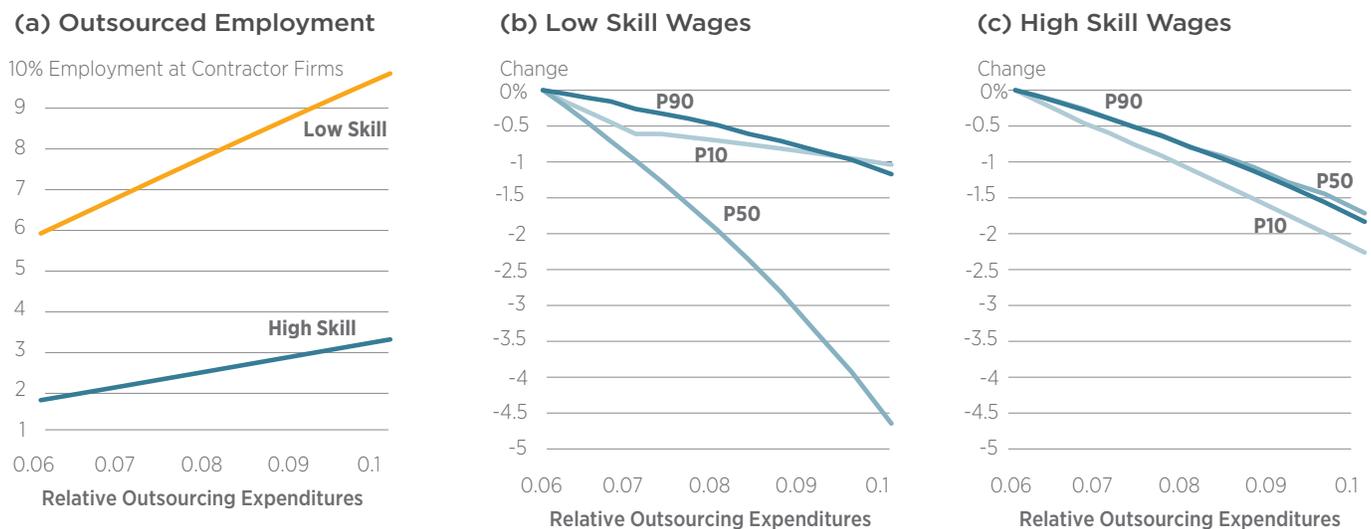
Outsourcing is fundamentally changing the nature of the labor market. During the last two decades, firms have increasingly contracted out a vast array of labor services, such as security guards, food, and janitorial services. While good for business, employees of contracting firms earn less than those working for traditional employers.

However, is that the whole story? To the extent that firms scale up more efficiently by contracting out certain activities, outsourcing generates aggregate output gains that may benefit all workers. Despite the prevalence of outsourcing in the labor market, there is little guidance to trace out its determinants and effects. Why do firms outsource? How can low-paying contractor firms

co-exist with high-paying traditional employers? How does outsourcing change aggregate production and its split between workers and firms?

To answer these questions, the authors employ theory, a general equilibrium model, and four sources of French data between 1996 and 2007 that include tax records reflecting firm and worker outcomes, firm surveys, and cross-border trade transactions to provide direct empirical support of the theory. The authors argue that it is useful to conceptualize firms' outsourcing decisions in the context of frictional labor markets, which give rise to firm wage premia. More productive firms are then more likely to outsource, which raises output at the firm level. Labor

Figure 1 • Discrimination in Algorithmic Bail Decisions



Notes: Panel (a) shows the fraction of workers employed at contractor firms. As the cost of outsourcing falls, the fraction of low-skill workers at contractor firms rises from 6% to almost 10%, while that of high-skill workers increases from 2% to 3%. Given the outsourcing wage penalty, this reallocation of workers towards contractor firms has a negative partial equilibrium impact on workers' average earnings. Panels (b) and (c) reveal that general equilibrium effects further deteriorate workers' prospects. Wages of both low-skill and high-skill workers fall across the distribution, due to two effects. First, the fall in the price of outsourcing implies a direct compression effect on top wages; second, the reallocation of workers away from high-paying firms and toward contractor firms at the bottom of the job ladder weakens labor market competition for workers from both ends of the job ladder.

service providers endogenously locate at the bottom of the job ladder, implying that outsourced workers receive lower wages. Together, these observations characterize the tension that outsourcing creates between productivity enhancements and redistribution away from workers.

This is confirmed by the authors' findings:

- A reduced-form instrumental variable strategy confirms that, as firms grow, they spend relatively more on outsourced labor, and outsourcing further improves growth. However, outsourced workers also experience large wage drops.
- At the aggregate level, output rose by 1%, as the structural model reveals that labor was effectively reallocated to the most productive firms in the economy. However, these productive gains were unevenly distributed. Low-skill workers, who were particularly exposed to outsourcing, were increasingly employed at contractor firms who paid low wages.
- In addition, wages declined even at traditional employers because traditional employers faced weaker labor market competition for workers.
- Together, these results imply that the labor share declined by 3 percentage points, and aggregate labor income dropped by 2%.

What about those theoretical output gains that could benefit all workers? The authors find that outsourcing leads to some, though modest, positive productivity effects, and that these gains benefit firm owners and deteriorate workers' labor market prospects.

Bottom line: outsourcing benefits firm owners and deteriorates workers' prospects in the aggregate.