Anna Stansbury and Larry Summers advance the thesis that worker power fell in recent decades, leading to a loss of labor rents. As explanations for the fall in worker power, they stress two factors: first, institutional forces like the shrinking role of private sector unions and, second, increases in shareholder power and shareholder activism that drove firms to cut wages, outsource labor, and rely more heavily on contract workers.

The authors cover a lot of ground, and I will remark on only parts of their study. They make a strong case that labor rent premiums fell for many American workers. They also show that falling worker power and labor rents can potentially explain major developments that other authors have attributed to rising product market power or rising monopsony power – including labor’s falling share of national income, the rise of measured markups, increased market valuations of publicly traded firms, and a fall in the NAIRU. These are important contributions.

Less persuasive are their headline claims about the magnitude of falling labor rents, especially when understood as a redistribution of rents from labor to capital. I make several points in this regard and conclude that we do not yet have a confident quantification of what happened to aggregate labor rents (as a share of value added) in recent decades. I also offer some remarks on the role of technological developments and globalization in driving declines in unionization and the average rent premium.

The magnitude of falling labor rents

Stansbury and Summers estimate that labor rents fell “from 12% of net value added in the nonfinancial corporate business sector in the early 1980s to 6% in the 2010s.” Their Figure 5 plots the estimated labor rent share from 1982 to 2016, and their Table 1 reports the separate contributions of union rents, firm size rents, and industry rents.

These estimates are key inputs into their later analyses. They derive them in two steps. First, they use CPS micro data to estimate average log wage premia associated with union status, employer size, and industry (conditional on various controls). For each category of rents, they designate a reference sector or group with zero rents by assumption, and they interpret one-half of the log wage premium relative to the reference sector/group as a rent premium. Second, they combine these sectoral and group-level rent premium estimates with data on the share of compensation in the non-financial corporate sector, the industry distribution of compensation, the union coverage rate, and the distribution of compensation by firm size as spelled out by the formulas in their Section II. My remarks below pertain to their first step.

At the outset, it’s useful to distinguish between two empirical objects: (a) the average rent premium among workers in a given sector or group, and (b) the natural log of (labor...
rents)/(compensation minus labor rents) in the sector or group. Stansbury and Summers estimate (a) by fitting equal-weighted log wage regressions to CPS micro data by year. When they plug their sectoral and group rent premium estimates into their formulas, they implicitly equate (a) to (b). However, these two objects have the same value only under special circumstances – e.g., when all workers in the sector/group receive the same rent premium. Likewise, changes over time in (a) and (b) are identical only under special circumstances.

Of course, (a) and (b) are roughly the same under a broader range of circumstances. So, the issue is whether (a) and (b) are roughly the same – and changed by roughly the same amount over time – in the circumstances that unfolded in the U.S. economy in recent decades.

There are good reasons to think not. First, Stansbury and Summers show in Figure B4 that the rent premium fell almost twice as much from 1984 to 2016 for workers with a non-college education as for those with a college education. The rent premium was about 15-16 percent for both groups in 1984. Because they earn more, each college-educated worker contributes more to total labor rents than each non-college worker. Likewise, each college-educated worker properly gets a larger weight in quantifying the fall in labor rents over time. In contrast, the approach of Stansbury and Summers weights workers equally in the quantification of labor rents and their changes over time. This aspect of their approach overstates the fall in labor rents (i.e., object (b)) when high-wage workers experience smaller declines in rent premia.

Second, Figure B4 also says that college-educated workers have enjoyed a higher rent premium than non-college workers since the early 1990s. Because the college/non-college wage gap has expanded over time, the appropriate weight on each college-educated worker in the calculation of total labor rents is increasing over time. But, as already noted, Stansbury and Summers maintain equal weights across workers. Equal weighting overstates the fall in object (b) when workers with higher rent premia experience more rapid growth in the non-rent component of their compensation. That pattern has unfolded in recent decades for college-educated workers relative to non-college workers.

Third, other studies point to rising rent premia in recent decades for senior executives, managers, and highly compensated professionals – especially in the financial sector. Stansbury and Summers take note of several such studies in their Section V.C. These other studies, when combined with the Stansbury-Summers evidence that rent premia fell in recent decades for the average worker, strongly suggest that labor rents were redistributed from the bottom and middle of the wage distribution to the top of the wage distribution. In these circumstances, the average rent premium can fall substantially even when labor rents as a share of total compensation are unchanged. That is, object (a) aggregated over sectors and groups can fall substantially, even when object (b) (also aggregated) remains unchanged. More generally, a redistribution of labor rents from the majority of workers to those at the top end yields a fall in (a) relative to (b).

Stansbury and Summers acknowledge in Section V.A that some of what they measure as lost labor rents could instead be a redistribution of rents from the majority of workers to top management, executives, and highly compensated workers in the financial sector. They go on to argue in Section V.A. and Appendix B.2 that the “degree to which the exclusion of top-earning

\footnote{The college/non-college wage gap has increased more than the college/non-college gap in rent premiums. Thus, the non-rent part of wages has risen for college-educated workers relative to non-college workers.}
workers in finance might affect our calculations is relatively limited.” But the calculation they offer to support that claim involves a counterfactual change in the equal-weighted average rent premium – object (a) – whereas the impact on object (b) turns on how the exclusion of top earners affects the pay-weighted average rent premium. Since highly compensated financial professionals earn much more than average workers, the evolution of their rent premium over time has a much bigger impact on object (b) than on object (a). The same point applies to the labor rents of top managers, executives and other highly compensated persons.

In principle, one can recover estimates of object (b) by fitting pay-weighted regressions to the CPS micro data instead of the equal-weighted regressions that underlie Figure 5 and Table 1 in their paper. Stansbury and Summers report selected results using wage-weighted regressions in their Figures A7 and A8. Comparing Figure A7 and Figure 3 shows that the cross-industry variance of labor rents evolves similarly over time whether estimated from a wage-weighted regression or an equal-weighted regression. This comparison suggests that objects (a) and (b) moved similarly over time for industry rent premia. Unfortunately, the comparison is distorted by serious weaknesses in the CPS micro data.

That brings me to the limitations of CPS data as a tool for quantifying total labor rents and their evolution over time. As Stansbury and Summers note, CPS data are top-coded and non-response rates are high for persons in the top tail of the earnings distribution. That may not matter much for estimating object (a), but it potentially matters a great deal for estimating (b) because persons in the upper part of the earnings distribution account for a large and growing share of overall labor compensation in recent decades.

To appreciate the dimensions of the issue, consider some particulars of top coding and non-response in the CPS. Stansbury and Summers report that the share of wage earners with top coded earnings in their sample varies from 1% to 5%, depending on the year. They also report that the share of workers with top-coded earnings in the FIRE sector rose from 2% in 2000 to 9% by 2019. Based on U.S. tax records, Smith, Zidar and Zwick (2020, Figure 3.G) report that the top 1% of wage earners accounted for about 15% of aggregate wages in 2016, roughly double its share in 1980. The top 10% of wage earners accounted for about 42% of aggregate wages in 2016, up by about 10 percentage points since 1980. These statistics underscore the scope for rising labor rents at the upper end of the earnings distribution to go undetected in the CPS.

Philippon and Reshef (2012) combine CPS micro data for the bottom 90 percent of the wage distribution with BEA data on total compensation by sector to back out the average wage for top-decile earners by sector. They find that the average wage in the top decile of finance went from parity with the top-decile average wage in the nonfarm private economy in 1980 to a premium of more than 80 percent in 2010. Other evidence in their paper indicates that much of the rise in relative wages of top-decile finance workers reflects an increase in their rent premium. They also estimate that the finance sector accounts for 6-25 percent of the overall increase in U.S. wage inequality since 1980, with larger percentages for measures that give more weight to inequality in the upper parts of the distribution.

Non-response is another key feature of the CPS (and other household surveys) that hampers estimation of labor rent premia, especially in the upper parts of the earnings distribution. Unit non-response rates in the CPS-ASEC range from 16-20 percent in the period from 1997 to 2011 (Meyer, Kok and Sullivan, 2015, Figure 1). Item non-response rates on earnings questions in the CPS-ASEC rose from about 9 percent in 1987 to about 24 percent in 2015 (Bollinger et al., 2019,
Figure 1). The total earnings non-response rate in CPS-ASEC data—encompassing those who decline to participate in the ASEC and those who participate but fail to answer the earnings questions—rose from about 18 percent in 1987 to 43 percent in 2015. Item non-response rates to earnings questions in the CPS-ORG data exceed 35 percent in recent years (Bollinger et al.).

Working with CPS-ASEC data for 2006-2011 linked to social security earnings records, Bollinger et al. examine item non-response rates across the whole distribution of earnings as measured in the social security records. They find a U-shaped non-response pattern, which they characterize as “trouble in the tails.” Among full-time full-year workers, they find 30 percent non-response rates to CPS earnings questions at the top end of the earnings distribution. Moreover, non-response rates continue to exhibit a U-shaped relationship to earnings after conditioning on a rich set of controls for demographic characteristics and employment status. Put differently, they reject the hypothesis that non-response is random—unconditionally, and conditional on the types of observables available in the CPS.

These facts about high, rising, and non-random non-response rates in the CPS micro data raise concerns even about the Stansbury and Summers estimates of empirical object (a). These facts about non-response rates and my earlier remarks about top coding lead me to the conclusion that CPS data do not provide a sound basis for estimating empirical object (b) and its evolution in recent decades.

To summarize, I see the evidence provided by Stansbury and Summers as showing that the equal-weighted average rent premium fell for private sector American workers in recent decades. I see the question of what happened to aggregate labor rents as largely open. Moreover, I do not think that CPS micro data are adequate for developing a persuasive analysis of this second question—that is, for how object (b) has moved in recent decades.

To be sure, questions about the evolution of rent premiums for the average worker (or the majority of workers) are interesting and important. But answering questions about changes in rent premiums for the average worker is not sufficient to determine what happened to total labor rents or labor rents as a share of value added. Nor is it sufficient to discern whether, and how much, the loss of rents for the average worker reflects a redistribution of rents to capital owners.

On the role of technological developments and globalization

What drove the decline in rent premia for the majority of American workers in recent decades? Here, I see a greater role for globalization and technological changes than Stansbury and Summers. I will briefly sketch some reasons why, but my remarks only scratch the surface of a complex set of issues that warrants more research.

Consider developments in the U.S. manufacturing sector. Historically, manufacturing workers had high unionization rates and earned high wages compared to observationally similar workers in other sectors. As of 1977, the union membership rate was 35.5 percent in

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2 To be clear, I am not criticizing Stansbury and Summers for using imputed earnings data in their CPS-based analyses. Quite sensibly, they do not use imputed earnings data.

3 In contrast to the fall in the average rent premium among private sector workers, the average rent premium among public sector employees has increased substantially since the early 1980s. See Gittleman and Pierce (2011).
manufacturing and 17.6 percent in the non-manufacturing part of the nonfarm private sector. The corresponding coverage rates were 37.6 percent and 19.2 percent. Unionization rates were higher yet among manufacturing production workers. Tabulations in Freeman (1980, Table 1) using CPS data from 1973-75 imply that 55 percent of blue-collar male workers in the manufacturing sector were union members. Alternatively, under the assumption that non-production workers in manufacturing had the same unionization rate as the non-manufacturing part of the private sector, the implied membership rate for manufacturing production workers is 43.2 percent.

These high-wage, heavily unionized jobs became a steadily shrinking share of aggregate employment over time, largely because of automation, foreign outsourcing, and greater competition from foreign producers. Production workers in the manufacturing sector fell from 16.3 percent of all nonfarm employees in 1977 to 6 percent in 2016. Now consider a counterfactual in which 10.3 percent of nonfarm employees shift from production jobs in manufacturing to non-manufacturing jobs while the unionization rate stays unchanged for each category of jobs. This counterfactual yields a drop in the private sector unionization rate of 2.6 to 3.8 percentage points, which amounts to 17-25 percent of the overall 1977-2016 drop in the union membership rate among nonfarm private sector employees. This counterfactual suggests that globalization and automation played significant roles in shrinking the private sector unionization rate in recent decades. By design, the counterfactual speaks only to the potential effects of globalization and automation working through the share of overall employment accounted for by manufacturing production workers. These same forces may also affect unionization and rent premia through other channels.

Stansbury and Summers remark that stronger foreign competition may have eroded the market power of U.S. manufacturers in recent decades. If correct, this characterization points to another channel through which globalization potentially drove a shrinking unionization rate: When there are fewer monopoly profits to share, workers have less to gain by opting for unions that exist partly to extract monopoly profits. In these circumstances, it becomes more challenging for unions to win the certification elections that grant collective bargaining rights, and it becomes less attractive for national union organizations to invest in certification elections. In this connection, note that unionization fell at a faster rate from 1984 to 2019 in the manufacturing sector than in any other industry sector except for mining. See Figure C2 in Stansbury and Summers. The relatively rapid fall of unionization within manufacturing – from a high initial level – reinforces the view that globalization was a significant factor behind falling unionization.

Stansbury and Summers also remark that unions can lead to rents for workers at non-union employers through threat effects. If union threat effects outweigh the countervailing effects of

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4 Membership and coverage rates are from Hirsch and MacPherson (2003), as updated at unionstats.com. I back out the rates in the non-manufacturing part of the nonfarm private sector using the fact that manufacturing accounted for 25.1 percent of nonfarm private sector employees in 1977.

5 I computed these statistics by combining (a) data on manufacturing and nonfarm employment from the Current Employment Statistics with (b) data on the production worker share of manufacturing employment from the Annual Survey of Manufactures. The corresponding figures for all manufacturing workers (inclusive of non-production workers) are 22 percent of nonfarm employees in 1977 and 8.6 percent in 2016.
unionism on pay in non-union jobs, then any external force that causes a decline in unionization leads to falling rent premia for non-union workers. Those external forces may be policy-oriented or institutional in nature, or they may reflect other forces such as greater foreign competition. In other words, threat effects amplify the impact of declining unionization on labor rents regardless of what drives the decline.

Finally, it’s worth remarking that – for any given unionization rate – stronger foreign competition is likely to erode the rent premium among union and non-union employees of affected firms. The reason is simple: When employers have lower profits, there is less to share with workers in the form of labor rents. This is yet another channel through which stronger foreign competition lowers the average labor rent premium.

In short, my remarks above suggest that automation and foreign competition reduced the average rent premium among American workers in the private sector by (i) lowering the share of employment accounted for by manufacturing production workers, a heavily unionized group that had enjoyed high rent premiums, (ii) making unionization less attractive within the manufacturing sector, (iii) lowering rent premiums among non-union workers through diminished union threat effects, and (iv) reducing the profitability of firms facing more intense foreign competition.

I turn now to another development that may contribute to the fall in the average labor rent premium: advances in employee monitoring technologies and their deployment in the workplace. An important class of efficiency-wage models attributes labor rents to the difficulties that employers face in monitoring worker performance. In these models, improvements in the ability of employers to detect sub-par worker effort (shirking) leads to a fall in the equilibrium rent premium. See, for example, the one-sector model of Shapiro and Stiglitz (1984) and the multi-sector model of Bulow and Summers (1986).

Technologies for tracking vehicles and workers has become common in trucking, delivery services, and field service operations in recent decades (Dutta, 2012). Tracking covers vehicle location, speed, idle time, fuel consumption, customer contact, delivery items, and more. The web and social media apps have also made it easier for customers to provide instantaneous feedback about the performance of remote employees, and for firms to track that performance. Cheap surveillance cameras have made it easier to detect theft, sabotage, and other forms of bad conduct in the workplace. The spread of electronic payment mechanisms probably reduces opportunities to embezzle cash. These developments make it easier for employers to detect and deter shirking and other worker conduct that harms productivity and profitability. As a result, the labor rent premium falls according to efficiency-wage models founded on concerns about shirking and other hard-to-detect forms of worker misconduct.

Much anecdotal evidence points to the increased use of monitoring technologies to detect and deter shirking. A Google search of “employee monitoring technologies” returns 139 million items. In the summary to its “Market Guide for Employee-Monitoring Products and Services,” Gartner Research (2015) states that employee-monitoring tools “can protect sensitive information and generate positive ROI by increasing the productivity and efficiency of systems and employees. Security officers seek products and services in this market focusing on insider threat mitigation, regulatory compliance and employee productivity.”

In the opening paragraph to his review of “The Best Employee Monitoring Software for 2020,” Uzialko (2020) writes:
Employee monitoring software offers a comprehensive window into employee activities on company devices. This type of software can monitor web browsing, track applications and generally keep tabs on what employees are doing on the clock. The best employee monitoring software includes features like remote viewing of employee sessions, screenshots and keystroke logging. Administrators are often given a great deal of latitude when setting rules and policies; when these are violated, the software will typically generate a notification and record the monitored violation for review.

While ubiquitous now, these technologies did not exist twenty years ago, or they existed only in more primitive and less capable forms. To my knowledge, however, economists have not studied their impact on rent premiums and wage structures. As I remarked above, the shirking-class of efficiency-wage models predicts that the spread of such technologies lowers rent premia.

It is also plausible that advances in monitoring technologies facilitate “fissuring” by making it easier for firms to outsource non-core labor activities to other firms that specialize in those activities. This type of outsourcing relaxes internal pay equity constraints, leading to a loss of rents for low-pay workers. Fissuring also makes it easier for firms with market power and monopoly profits to de-link the compensation of non-core workers from firm-level profitability. The likely effect is to reduce the rent premia of non-core workers and perhaps to raise them for core workers. The impact of advances in monitoring technologies on fissuring and labor rent premia is another topic that is ripe for research.

In closing, let me note that my remarks are not intended to deny a role for policy shifts and institutional forces in the decline of average labor rent premia. They may well play major roles, but the fall in unionization, for example, is not sufficient to make that case. As my foregoing remarks suggest, it seems likely that globalization and technological developments played important roles in driving the fall in unionization and average rent premia in recent decades. I also note that policies and institutions can affect how product market developments, globalization, automation, and advances in monitoring technologies impact labor rent premia. So, similar exogenous developments may play out quite differently across countries with different policies and institutions.

References


