

Why American Older Workers Have Lost Bargaining Power

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Suggested Citation: Farmand, A. and Ghilarducci, T. (2019) "Why American Older Workers Have Lost Bargaining Power." Schwartz Center for Economic Policy Analysis and Department of Economics, The New School for Social Research, Working Paper Series 2019-2.

Why Have American Older Workers Lost Bargaining Power?

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May 2019
Updated February 2022

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Introduction

Researchers (see for example: Bronshtein, Scott, Shoven, Slavov, & Engines, 2018; Munnell, Orlova, & Webb, 2014) argue working longer significantly improves retirement readiness, increases retirement standard of living and has a substantially large impact on retirement consumption, particularly in mid and late-career circumstances. Moreover, The OECD “live longer, work longer” consensus presents working at older ages as the most effective way to combat the challenges of population ageing (Martin, 2018).

But the hope that working longer can improve retirement readiness relies on optimistic assumption that older workers’ jobs are comparable to their career job, are physically and mentally easier, and longevity gains and pension wealth, are more or less distributed equally across populations. But in reality, adding more elders to the labor market disproportionately benefits employers as these older workers enter the workforce with few choices and therefore weakened bargaining power (Ghilarducci 2019).

Bargaining power cannot be measured directly but it is inferred from labor market outcomes. The persistent wage stagnation of older workers is a clear indicator of their declining power to bargain for better compensation. We argue that the dynamic model of monopsony developed by Manning (2003) provides a good framework in determining the main factors leading to older workers’ erosion of bargaining power. According to this framework, wage determination hinges on four main factors. Namely, the rate that workers leave for non-employment (δ), the rate at which they receive other job offer (λ), their reservation wages (b) and market wages (p). The following sections describes how changes in each of these market factors, plus institutional factors have undermined older workers’ bargaining position in the process of wage determination.

High rates of separation are caused by: Rise of alternative work arrangements and erosion of internal labor markets, decline in union membership and older workers’ propensity to work for smaller firms. Older workers face lower rates of job offer arrival because of persistent age discrimination and

relative geographical mobility. Moreover, shifts in supply and demand and changes in nonwage attributes of jobs older workers hold could account for lower market wages, while eroding retirement security (a form of non-labor income) leads to a decrease in older workers' reservation wages. One often overlooked institutional factor contributing to older workers' wage stagnation and weakened bargaining power is their ineligibility for the Earned Income Tax Credit.

The decline in internal labor markets and the rise of alternative work increases separation rates since they reduce gains to experience, job-specific skills and a firm's incentive to train workers. Union-representation loss affect the employment stability of both union and non-union workers. Moreover, their decline reduces the ability of older workers to combat monopsony power and also to share rents in the presence of product market imperfections that produce rents.

Older workers are more likely to work in small and medium sized firms, which research shows have higher overall separation rates.(Oslund, 2019)

Since the indirect cost of moving grows significantly when workers have family and community roots older workers face higher barriers in mobility, which leads to lower job offer arrival rates. Additionally, if employers perceive older applicants as less productive or less loyal to the establishment, they will receive job offers at a reduced rate.

We find little evidence that older workers' market wages have declined due to consumer tastes moving away from products older workers make since older workers are not disproportionately employed in high - unemployment rate occupations. But it is evident from secondary sources that the size of the Boomer generation has had a "crowding out" effect on market wages of older works. Worsening non-pecuniary job characteristics and health and retirement coverage did not compensate older workers for wage stagnation. Finally, eroding retirement security has lowered workers' reservation wages.

The Earned Income Tax Credit (EITC) may decrease the relative demand for older workers who are not EITC-eligible if older and younger workers are substitutes and puts downward pressure on older workers' wages in occupations with large EITC worker shares.

The following sections presents evidence for each of the factors mentioned above.

Older Workers Relative Compensation is Falling

Since 1990, wage repression has been more severe for college-educated older men than for college educated prime-age men. Between 1990 and 2020, real median hourly wages for full-time male workers older than age 55 who had a high school degree decreased by 8.8 percent, while wages for the same age group, but for those with a bachelor's degree essentially stayed flat and did not increase. Meanwhile, prime-age men (35-54) with a college degree experienced a 9% increase in hourly wages. Prime-age men (35-54) with a high school degree experienced a 15% decrease in hourly wages.

Insert Table 1 here

From 1990 to 2020 female wages did not fall. Wage trends for women differed partially because demand for female labor increased significantly. Older women with high school degrees experienced 10% increase in hourly wages while wages of prime age women with high school degrees did not rise. Wages for older women with bachelor's degrees have persistently lagged behind their prime-age counterparts. The figures for different age groups and educational levels are available on request.

In addition, health insurance and retirement plan coverage has fallen for all workers. Specifically, from 1990 to 2019. For full-time non-self-employed workers over 55, health insurance coverage fell from 90.4 percent to 87.4 percent and retirement plan coverage fell from 55.5 percent to 35 percent (calculated by authors from the IPUMS-CPS ASEC (1991-2020)) Older workers' wages and working conditions could weaken conditions for all workers because aging boomers continue to exert an outsized impact on labor markets. Estimates from the U.S. Bureau of Statistics show out of 6 million jobs expected to be added to the economy by 2029, 4.4 million will be filled by workers over 55. In 2021, 37.5 million older (over 55) workers constituted 24 percent of the labor force, up from 12 percent in 1990. By 2026, 40 million older workers will make up 25 percent of the labor force (Lacey, Toossi, Dubina, & Gensler, 2017). Between 2000 and 2019, over 21 million jobs were added to the U.S. economy. Of these, more than 18 million were jobs filled by workers over the age of 55

Dynamic Model of Monopsony

In imperfectly competitive markets, the value of the marginal product of workers deviates from the real wage. In a competitive model labor and capital are both wage and price takers so neither has more market power than the other (Kaufman & Hotchkiss, 2006). But labor and product market imperfections create an area of “indeterminacy” in compensation. Demand and supply set upper and lower limits on the compensation range, thus opening the door to wage determination through bargaining.

Wage setting power combined with “frictions and asymmetric information leads to monopsony exploitation” (Hicks, 1963). In monopsony, firms are not bound by market forces to pay workers their marginal product of labor, which implies that, even in a world where all firms and individuals are identical, a decrease in the rate at which workers receive job offers will both lower the average wage and increase inequality. Monopsony conditions are expected if workers face discrimination, non-monetary reasons to stay in a region, costs to separating from a job and transferring to another one, lack of information about labor policies, and information about employers’ competitors.

More explicitly in monopsonic markets the firm’s employment represents an equilibrium between the flow of workers who leave and those who join the firm (Ashenfelter, Farber, & Ransom, 2010). These flows also impact the expected wage. As developed in Manning (2003), the expected wage equation is:

$$E(\omega) = \frac{\delta}{\delta + \lambda}(b) + \frac{\lambda}{\delta + \lambda}(p)$$

Where δ is the job offer arrival rate and λ is the job separation rate. b represents the reservation rate and p is the market wage (equal to workers’ marginal product). (For a complete proof please refer to Manning (2003, page 42). In our framework this implies that bargaining power depends on the arrival rate of job offers, the rate of job separation, workers’ reservation wage and the market wage.

Firms are motivated to adopt personnel policies and business strategies to become monopsonists, if they don’t, they miss out on potential profits. Only a monopsonist can offer selected workers who get an attractive competitive job offer a counter offer generous enough to induce the worker to stay. In a competitive labor market, the firm has no choice but to let the worker leave, because they were paying the

maximum wage possible. Monopsony power shifts revenue from wages to profits, which weakens the link between labor productivity and labor compensation. When firms no longer compete aggressively to hire workers, monopsony power opens up the possibility that wages can differ among workers with similar skills (Manning, 2003).

Many studies (Card, Cardoso, Heining, & Kline, 2018; Dube, Jacobs, Naidu, & Suri, 2018; Staiger, Spetz, & Phibbs, 2010) have shown that the U.S. labor market is tainted with high levels of monopsony power. Most recently Méndez and Sepúlveda (2019) suggest that most occupational labor markets between 1979-2000 were characterized by substantial amounts of monopsonistic, wage-setting power. Controlling for individual, time, and industry fixed effects, they find monopsony power is pervasive and decreases wages and benefits.

Factors Increasing Job Separation Rates

Alternative Employment Relations and Loss of Internal Labor Markets

Older workers are the fastest growing group in alternative employment arrangements, which include independent contracting, on-call workers, temporary agency workers, employees of contract firms, and gig workers. In 2017, 15.1 percent of workers ages 55 to 75 reported working in an alternative work arrangement. Katz & Krueger (2019), using a modified version of the BLS Contingent Work Survey, find a larger share for older workers, 23.9 percent of whom faced alternative work arrangements in 2015. Both U.S. Department of Labor, Bureau of Labor Statistics (2017) and Katz and Krueger (2019) find that workers over 55 are the largest and fastest growing age group in alternative work arrangements.

Workers in alternative work (excluding independent contractors) arrive to those jobs with much lower bargaining power. Job separation rates are significantly higher for workers in non-traditional employment. Whereas 6 percent of all older workers report losing their previous job involuntarily, older workers in on-call, temp agency, contract firm or gig work were nearly three times more likely, at 17 percent, to report involuntary job loss. The median older worker reported wealth holdings of 171% their earnings, while older workers in alternative work arrangements reported wealth that was just 77% percent

of their earnings, indicating a much lower ability to retire and therefore a lower reservation wage. In addition, alternative work removes workers from a firm's job ladder, and produces little or no opportunity for promotion within a firm.

Evidence suggests older workers do not prefer alternative work schedules. The plurality of workers in temporary agency and on call jobs in 2017 – 46 and 40 percent, respectively – answered in a survey they would prefer to be in a traditional arrangement, with an additional 12 percent and 10 percent saying, “it depends” (Bureau of Labor Statistics, 2017). According to Katz and Krueger (2019), 60 percent of on-call and temporary help agency workers prefer a job that is permanent and/or has regularly scheduled hours. While some older workers cite flexibility and autonomy as reasons for taking on alternative work, they are outnumbered 2-to-1 by those who cite financial or labor market reasons.

Additionally, workers in alternative work arrangements believed they had just a 21 percent chance of finding an equivalent job if they lost their current one, compared to 35 percent for other workers (Ghilarducci, Webb, & Papadopoulos, 2018). In 2017 the median earnings for full-time workers in a traditional arrangement was \$32,500, while non-independent contractors in alternative work reported earnings of just \$14,000 (Ghilarducci, Webb, & Papadopoulos 2017).

The average duration of employment relationships within the United States has persistently declined in the last thirty years. Older workers have lost the advantage of internal labor markets because their job tenure has fallen by more than one third. Experienced older men lost the most (Farber, 2008; Hollister, 2011). Changes in tenure have manifested as a particularly marked decrease in the proportion of workers who have been with their employer for more than 10 years and a strong increase in the proportion who have moved jobs within the last year (Farber, 2008).

Specifically, older workers seem to have lost the advantage of internal labor markets since their job tenure has fallen by more than one third. In 1987, the median older prime-age man (45-54) had been with his current employer for 12.7 years. By 2018, median older prime-age male job tenure fell 36% to

8.1 years. Older men's (age 55-64) job tenure fell 16% during the same time period (16.8 years to 14.1 years). This tenure drop likely reflects older male workers leaving the labor market. Workers older than 64 are special; they stayed in the market and are likely to have longer tenure. Figure 3: Median numbers of years that older male employees are with the same employers has declined by more than one third. Tenure decline being more concentrated in large organizations can be explained by falling industry unionization rather than foreign competition or technological change (Bidwell, 2013). This body of evidence shows how the erosion of internal labor markets has increased job separation rates.

Older workers face more difficulty in reintegrating into the labor market after losing their jobs compared to the younger unemployed. Studies show as workers get older, the duration of their unemployment lengthens and chances of finding a job decline. (Axelrad, Malul, & Luski, 2018, Böheim, Horvath, & Winter-Ebmer, 2011, Coen, Forrier, & Sels, 2012) and they experience sharp wage declines. Only 14 percent of older (age 55 and older) unemployed in August 2009 were employed in March 2010, compared with 37 percent of those younger than 55 (Van Horn, Corre, & Heidkamp, 2014).

Earlier studies find only 61 percent of displaced men and 55 percent of displaced women in their fifties are employed two years after a job loss (Chan & Huff Stevens, 2002), and that only about half of displaced workers in their early sixties become reemployed (Munnell, Sass, Soto, & Zhivan, 2008).

Displaced workers are more likely to job-hop, to suffer further involuntary job losses, and to experience subsequent unemployment than those who were still working for their age-50 employer at age 56 (Sass & Webb, 2010). Individuals who separate from their age-50 employer for whatever reason are at risk of missing out on their peak savings years and of failing to prepare adequately for retirement, further reducing their bargaining power. Further, older workers are unable to reduce their work effort below full-time without leaving the job they held in their prime working years, forcing them into retirement. Between the years 2010 to 2018, 55.3 percent of workers aged 55 and up in the bottom half of the income distribution were forced to leave the workforce because of layoffs, plant closings, age discrimination, poor health, and family concerns. A lower, but still substantial share 32.4 percent in the next 40% of the

income distribution – the middle class – were forced out of work in old age. Even the most prosperous older worker was forced to retire before they planned 30.4 percent of those in the top 10% of the income distribution were forced to retire (Farmand & Ghilarducci, 2021).

Union Power

Falling union coverage exposes older workers to more monopsony power. John Stuart Mill argued that organizing labor changes a static bargaining process to a dynamic game where the employer deals not with the individual laborer in a single period but with the union in multiple periods (Mill quoted in King & Yanochik, 2011). A union compensation premium exists (Erickson & Mitchell, 2007) because unions transfer monopsony rents from employers to workers without suffering employment losses and compresses wage inequality by bringing up the bottom (Farber, Herbst, Kuziemko, & Naidu, 2018). Moreover, unions play a crucial role in stabilizing the employment status of workers by lowering job separation rates and boosting workers' bargaining power. Strong unions are able to negotiate guaranteed employment in addition to higher wage. (Kahn & Morimune, 1979; Todate, 2010)

If monopsony conditions develop in older workers' labor markets, and the institutions that mitigate monopsony conditions, primarily unions, are weakened, labor compensation would be lower than expected. Older workers' union coverage declined (from 16.7 percent in 2004 to 12.7 percent in 2021) more than prime-age workers (calculated by authors from the IPUMS-CPS ASEC [1991-2018]) partially explaining older workers wages relative worse performance. Unionized workers are more likely covered by retirement plans which help boost older workers' fallback position and an alternative to work at older ages.

Firm Size

Older workers are more likely to work for small (less than 1000 employees) firms. Smaller firms have higher rates of job separation (Oslund, 2019) and fewer economic rents and profits to share with employees. Highly productive and profitable firms – so-called 'superstar' firms (Autor, Dorn, Katz, Patterson, & Van Reenen, 2017) capture greater market share and have the ability to share rents. An

analysis of size of firm and average age of employees shows that 32 percent of workers in large firms are over 50 years old. In contrast, 35 percent of employees in small firms (fewer than 100 employees) are slightly older. There is a 3 percent negative likelihood of being over 50 and working for a large firm. This negative likelihood can contribute to further stagnating wages and lower bargaining power for older workers. Insert Figure 2: Older workers are less likely to work for super-firms.

Factors Decreasing the Rate of Job Offer Arrivals

Age Discrimination

Older workers' monopsony exposure is also increased by persistent age discrimination, defined when employers pay different levels of compensation for the same ability or output. Although discrimination based on age is illegal under federal and most state law, if employers prejudge older workers as being less able to work or learn, or if they are seen as being less loyal, then they will have fewer job offers that pay near their productivity.

Neumark and Song (2013) found that older workers worked relatively longer and claimed Social Security benefits relatively later in states that had stronger age discrimination laws and policies. Audit studies – in which employers are confronted with two resumes of candidates with equal qualifications, but one resume indicates the candidate is older, find older workers are less likely to be called for an interview (Neumark, Burn, & Button, 2018). The majority of employers surveyed by Transamerica Center for Retirement Studies answered that 64 was too old to be considered for employment; yet, the median age that workers gave was too old to work was 75 (Collinson, 2018). This gap suggests that older people look for work in markets where employers aren't offering older workers many jobs.

Workforce rationalization can also disproportionately impact older workers. Gosselin (2018) estimated that in the downsizing of 2010, IBM eliminated more than 20,000 American employees ages 40 and over, about 60 percent of its estimated total U.S. job cuts during those years. Reviewing internal company documents, legal filings, and public records, Goesslin concluded that IBM “flouted or

outflanked U.S. laws and regulations intended to protect later-career workers from age discrimination.”

In 2019 researchers surveyed employers, in order to evaluate how firms, assess the risk to their organizations of an aging workforce. While about 40 percent of employers said they thought older workers were a positive asset to their firms, 20 percent thought that their organization views the aging workforce as a liability that may increase costs or reduce productivity more than a talent loss risk (Clark, Nyce, Ritter, & Shoven, 2019).

Geographical Immobility and Weaker Market Dynamism

Older workers are less likely to leave a job, less likely to move to a new job, and less likely to physically move from their place of residence for a job (Kaplan & Schulhofer-Wohl, 2015; Molloy, Smith, Trezzi, & Wozniak, 2016). Long-run declines in job creation, job destruction, and the entry and exit of establishments from the marketplace (Davis & Haltiwanger, 2014) cause workers to have fewer choices indicating a U.S. labor market with considerably lower levels of fluidity and a decline in rate of job arrival for older workers. Declining dynamism directly reduces wages by limiting the frequency of outside offers and wage-enhancing job transitions (Decker, Haltiwanger, Jarmin, & Miranda, 2017). Geographic (interstate) migration, has also fallen dramatically since at least the early 1980s (Molloy, Smith, Trezzi, & Wozniak, 2016). Migration is one major way that many workers find labor market opportunity, receive job offers and achieve higher wages. In 2017, about half of interstate moves were for labor market reasons (Shambaugh, Nunn, & Liu, 2018). Moreover, residential moves that correspond with interstate employer-to-employer transitions have declined by nearly half between 2000 and 2010 (Hyatt, McEntarfer, Ueda, & Zhang, 2016).

Older workers face especially high barriers to mobility since the indirect cost of moving grows significantly when workers have family and community roots. Older workers are also more likely to be stranded in stagnant regions with falling home values and earning low wages. According to our calculations from the Current Population Survey (2006-2019) older workers are 18% as likely to move for a job as younger workers.

Factors Impacting Older Workers' Market and Reservation Wages:

Eroding Retirement Income Security

Diminishing retirement income security lowers a worker's reservation wage. When the unemployment rate is high or pension income is low, the reservation wage dominates the expected wage. The two forces together would explain a precipitous drop in wages. This is particularly true of older middle and lower-income households with falling non-labor assets (Butrica, Smith, & Iams, 2012).

Low rates of retirement plan coverage and low balances mean that a majority of older households (55 percent) will rely on Social Security for almost all of their income in retirement. (Ghilarducci and Knauss 2015). A drop in non-labor income for older workers can be observed in falling pension coverage. In 1980, 46 percent of workers over age 55 reported being covered by a retirement plans from their workplace. By 2013 that rate fell to just 41 percent. Moreover, during this time many firms switched from providing defined benefit plans to defined contribution plans. Workers born during 1946-1950 could expect an average of \$6,375 annually in 2018 dollars from defined pension benefits; for people born between 1961-1965 this number was \$3,750 annually. Although income from defined contribution plans increased for the latter group, expected overall retirement income from sources other than Social Security is still \$1,000 lower for late Boomers (Butrica, Iams, Smith, & Toder, 2009).

Moreover, increases in the Social Security full retirement age (FRA) cut benefits by 13% directly. Workers can claim Social Security benefits at any age after 62, with reduced benefits for those claiming before (ranging from 5.0-6.7 percent per year) and increased benefits for those claiming after the full retirement age (8.0 percent). Thus, an increase in the full retirement age acts as a cut in benefits for all workers. The full retirement age is currently in the process of being raised from 65 to 67, cutting Social Security benefits as much as 13 percent for early retirees and 16 percent for late retirees.

The combined effects of declining pension coverage, inadequate pension savings in the defined contribution system (the average balance of retirement savings for those in the bottom 50 percent of the

income distribution near retirement is less than \$30,000) and Social Security benefit cuts could lead to large-scale downward mobility of middle class near-retirement households. Whereas 21.5 million people in near-retirement households are earning more than 200 percent of the federal poverty level, 8.5 million (40 percent) are projected to fall below this threshold if they retire at age 62. If all workers delayed retirement to 65, the number of downwardly mobile is still 5 million (19 percent) (Ghilarducci, Webb, & Papadopoulos, 2017).

Debt, which is equivalent to a cut in net non-labor income, is growing among older American households. The share of Americans 66 to 69 years old with debt increased from 29.9 percent in 1998 to 43.4 percent in 2010, with the debt levels increasing on average by 55 percent (Karamcheva, 2013). Our calculations from the Federal Reserve Bank of New York show that the total debt burden for Americans over age 60 increased 515% from 1999 through 2019, to \$1.7 trillion. In comparison total debt burden increased by 163%.

Non-monetary Benefits, Schedules and Ease of Work Are Not Improving

Older workers' working conditions have not improved significantly. Since 1992 the share of workers ages 55 to 62 reporting physical demands at work decreased only slightly. In 1992, 40 percent of older workers reported their jobs required "lots of physical effort." In 2014, this decreased to 34 percent, a statistically significant decrease of 6 percentage points. However, other dimensions of physical work, including "lifting heavy loads" and "stooping/kneeling/crouching," saw no statistically significant changes (Moore, Ghilarducci, & Webb, 2019).

Older Workers Are Not Disproportionately Employed in Occupations with High Unemployment Rates

Another factor leading to compensation repression among older workers could be falling demand for products made by older workers due to shifts in consumers' tastes and an increase in foreign competition. In order to proxy for older workers' demand we correlate the median age of workers by occupation ranked by their respective unemployment rate. Though pure mechanical effects imply that

industries with shrinking employment would have older median ages (shrinking sectors do not hire younger workers). Using the March (2017) supplement of the Current Population Survey we find that older workers are not disproportionately employed in occupations with high relative unemployment rates. There was a non-significant correlation of -0.31 between median age and unemployment rate in each occupation. Additionally, correlations between the percentage change of value added per industry (between 2007 -2017) and median age of that industry produces the same results.

Impact of Cohort Size on Wages

Prior research implies that the size of one's birth cohort affects wages throughout one's working life, with members of relatively large cohorts (at all stages of their careers) earning a significantly lower wage than members of smaller cohorts. Estimated elasticities of wages with respect to the relative size of one's own cohort generally fall between -0.05 and -0.10, and are of similar magnitude for men and for women (Papadopoulos, Patria, & Triest, 2017).

The large boomer cohort slowed wage growth when they were young growing only by 3.9 percent a year before age 55 compared to the 5 percent for the Silent Generation and 6.3 percent for Generation X. Prime aged boomer wages grew only 0.7 percent a year, lower than any generation in the last 70 years. (Ghilarducci, Webb, and Papadopoulos 2017). This factor shows how older workers might face lower market wages (b) and therefore lower expected compensation due to the size of their cohort.

Institutional Factor: The Case of Earned Income Tax Credit

Earned Income Tax Credit Lower Wages for Ineligible Workers

The Earned Income Tax Credit (EITC) is the largest cash assistance program for low-wage workers in the United States. In 2018, 25 million eligible workers and families received approximately \$63 billion in EITC credits. The average federal EITC subsidy received nationwide was about \$2,488 (U.S. Department of Treasury, 2018). Targeted at low-wage workers, the EITC has focused on achieving two major goals: distributing income towards low-wage workers, and increasing labor force participation rate

But, because EITC recipients work alongside workers ineligible for the credit, EITC-induced wage suppression extends to many workers who do not receive off setting EITC payments. Moreover, EITC-induced labor supply increases lead to lower wages, allowing employers to capture a portion of the intended transfer (Rothstein, 2010). These unintended transfers limit the EITC's capacity to redistribute income, weakens the bargaining power of the ineligible workers. EITC expansion could lead to the creation of more low-wage jobs. The dampening effects of the EITC on older workers' wage growth is explored in a forthcoming study by the author (2020)

Table 2 here: Share of workers who receive EITC and older (ineligible) workers in 10 (projected) fastest growing occupations with most employment gain (2015).

Conclusion: Limitations, and Policy Recommendations

Data limitation prevents this study from quantitatively decomposing the decline in wages to rank the importance of these factors. Different factors (such as workers' skills, and job match quality) will matter for different kinds of workers. Older personal care workers, for example, are more affected by the EITC-wage suppression and older male welders by the loss of unions. No silver bullet policy change will restore or strengthen labor bargaining power for the diverse group of older workers. Proposals to increase union density and change employer responsibilities would reduce employers' monopsony power in certain industries. State "right to work laws" weakens union and proposals to ban them may increase union density. Unions are also associated with human resource practices that protect seniority (Verma 2005). Extending labor law protection to excluded workers, including domestic workers and gig workers will help older workers because they are disproportionately represented in these jobs. Additionally, any non-labor income such as Social Security and pensions increases a person's bargaining power because they provide a stronger fall-back position and any activist labor policies that mitigate job losses in recession would help older workers (Couch and Placzek 2010).

The comprehensive review of the evidence lends us to conclude that the decline in unions, the

decline in the enforcement of labor regulations, and the erosion of retirement income security may well be the driving factors suppressing the bargaining power of older workers.

References

- Ashenfelter, O. C., Farber, H., & Ransom, M. R. (2010). *Modern Models of Monopsony in Labor Markets: A Brief Survey*.
- Autor, D., Dorn, D., Katz, L., Patterson, C., & Van Reenen, J. (2017). *The Fall of the Labor Share and the Rise of Superstar Firms* (No. 23396). <https://doi.org/10.3386/w23396>
- Bronshtein, G., Scott, J., Shoven, J. B., Slavov, S. N., & Engines, F. (2018). *The Power of Working Longer*. Retrieved from <http://www.nber.org/papers/w24226>
- Card, D., Cardoso, A. R., Heining, J., & Kline, P. (2018). Firms and labor market inequality: Evidence and some theory. *Journal of Labor Economics*, 36(S1), S13–S70. <https://doi.org/10.1086/694153>
- Chan, S., & Huff Stevens, A. (2002). Job Loss and Employment Patterns of Older Workers. *Journal of Labor Economics*. <https://doi.org/10.1086/319568>
- Clark, R. L., Nyce, S., Ritter, B., & Shoven, J. B. (2019). Employer Concerns and Responses to an Aging Workforce. National Bureau of Economic Research, Working Paper Series, 25572
- Coen, A. De, Forrier, A., & Sels, L. (2012). The Impact of Age on the Reservation Wage: The Role of Employability. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1620368>
- Collinson, C. (2018). *Striking Similarities and Disconcerting Disconnects: Employers, Workers and Retirement Security 18th Annual Transamerica Retirement Survey*.
- Couch, K. A., & Placzek, D. W. (2010). Earnings Losses of Displaced Workers Revisited. *American Economic Review*, 100(1), 572–589
- Davis, S., & Haltiwanger, J. (2014). *Labor Market Fluidity and Economic Performance*.
- Decker, R., Haltiwanger, J., Jarmin, R. S., & Miranda, J. (2017). Declining Dynamism, Allocative Efficiency, and the Productivity Slowdown. In *SSRN*.
- Dube, A., Jacobs, J., Naidu, S., & Suri, S. (2018). *Monopsony in Online Labor Markets*. <https://doi.org/10.3386/w24416>
- Erickson, C. L., & Mitchell, D. J. B. (2007). Monopsony as a metaphor for the emerging post-union labour market. *International Labour Review*, 146(3–4), 163–187.
- Farber, H.S., D. Herbst, I. Kuziemko, S. Naidu. 2018. "Unions and Inequality Over the Twentieth Century: New Evidence from Survey Data", National Bureau of Economic Research, Working Paper Series, 24587
- Farber, H. S. (2008). *Employment Insecurity: The Decline in Worker-Firm Attachment in the United States*. CEPS Working Paper No. 171
- Flood S., King M., Rodgers R., Ruggles S., and Warren J.R. Integrated Public Use Microdata Series,

- Current Population Survey: Version 6.0 [dataset]. Minneapolis, MN: IPUMS, 2018.
<https://doi.org/10.18128/D030.V6.0>
- Ghilarducci, T., & Knauss, Z. (2015). *More Middle Class Workers Will Be Poor Retirees*. Retrieved from Schwartz Center for Economic Policy Analysis (SCEPA), The New School website:
<https://econpapers.repec.org/paper/epacepapn/2015-04.htm>
- Ghilarducci, T., Webb, A., & Papadopoulos, M. (2017). *Inadequate Retirement Savings for Workers Nearing Retirement*. Retrieved from Schwartz Center for Economic Policy Analysis (SCEPA), The New School.
https://www.economicpolicyresearch.org/images/docs/research/retirement_security/Account_Balances_adjusted_appendix_tables.pdf
- Ghilarducci, T., Webb, A., & Papadopoulos, M. (2018). *The growth of unstable and low-wage work among older workers*. Retrieved from Schwartz Center for Economic Policy Analysis (SCEPA), The New School. Retrieved :<https://www.economicpolicyresearch.org/jobs-report/the-growth-of-unstable-and-low-wage-work-among-older-workers>
- Gosselin, P., & Tobin, A. (2018, March 22). Cutting 'Old Heads' at IBM. Retrieved from
<https://features.propublica.org/ibm/ibm-age-discrimination-american-workers/>.
- Hicks, J. R. (1963). *The Theory of Wages*. <https://doi.org/10.1007/978-1-349-00189-7>
- Hollister, M. (2011). Employment Stability in the U.S. Labor Market: Rhetoric versus Reality. *Annual Review of Sociology*, 37(1), 305–324.
- Hyatt, H., McEntarfer, E., Ueda, K., & Zhang, A. (2018). Interstate Migration and Employer-to-Employer Transitions in the United States: New Evidence From Administrative Records Data. *Demography*, 55(6), 2161–2180.
- Interim Results of the 2018 Filing Season*. (2018). Retrieved from
<https://www.treasury.gov/tigta/auditreports/2018reports/201840028fr.pdf>
- Kahn, L. M., & Morimune, K. (1979). Unions and Employment Stability: A Sequential Logit Approach. *International Economic Review*, 20(1), 217–235.
- Kaufman, B. E., & Hotchkiss, J. L. (2006). *The Economics of Labor Market*. Thomson/South-Western
- Katz, L. F., & Krueger, A. B. (2019). The Rise and Nature of Alternative Work Arrangements in the United States, 1995–2015. *ILR Review*, 72(2), 382–416
- Krueger, A., & Ashenfelter, O. (2018). *Theory and Evidence on Employer Collusion in the Franchise Sector* (No. 24831). <https://doi.org/10.3386/w24831>
- Kaufman, B. E., & Hotchkiss, J. L. (2003). *The economics of labor markets*. Mason, OH: Thomson/South-Western.
- Kaufman, B. E. (2007). The impossibility of a perfectly competitive labour market. *Cambridge Journal of Economics*, 31(5), 775–787. <https://doi.org/10.1093/cje/bem001>
- King, J. T., & Yanochik, M. A. (2011). John Stuart Mill and The Economic Rationale for Organized

- Labor. *The American Economist*, 56(2), 28–34.
- Lacey, T. A., Toossi, M., Dubina, K., & Gensler, A. (2017). Projections overview and highlights, 2016–26. *Monthly Labor Review*.
- Manning, A. (2003). *Monopsony in Motion : Imperfect Competition in Labor Markets*.
- Méndez, F., & Sepúlveda, F. (2019). Monopsony Power in Occupational Labor Markets. *Journal of Labor Research*. <https://doi.org/10.1007/s12122-019-09289-w>
- Molloy, R., Smith, C. L., Trezzi, R., & Wozniak, A. (2016). Understanding Declining Fluidity in the U.S. Labor Market. In *SSRN*. <https://doi.org/10.17016/FEDS.2016.015>
- Moore, K., Ghilarducci, T., & Webb, A. (2019). The Inequitable Effects of Raising the Retirement Age on Blacks and Low-Wage Workers. *Review of Black Political Economy*. 46(1), 22–37..
- Martin, J. P. (2018). *Live Longer , Work Longer : The Changing Nature of the Labour Market for Older Workers in OECD Countries Live Longer , Work Longer : The Changing Nature of the Labour Market for Older Workers in OECD Countries*. (11510), 31.
- Munnell, A. H., Orlova, N., & Webb, A. (2014). How Important is Asset Allocation to Americans' Financial Retirement Security? In *The Market for Retirement Financial Advice*. <https://doi.org/10.1093/acprof:oso/9780199683772.003.0005>
- Munnell, A. H., Sass, S. A., Soto, M., & Zhivan, N. (2008). Has the Displacement of Older Workers Increased? In *SSRN*. <https://doi.org/10.2139/ssrn.1304736>
- Nakajima, M., & Telyukova, I. (2014). Reverse Mortgage Loans: A Quantitative Analysis. In *FRB of Philadelphia Working Paper No. 14-27*.
- Neumark, D., & Song, J. (2013). Do stronger age discrimination laws make Social Security reforms more effective? *Journal of Public Economics*, 108, 1–16
- Neumark, D., Burn, I., & Button, P. (2018). Is It Harder for Older Workers to Find Jobs? New and Improved Evidence from a Field Experiment. *Journal of Political Economy*. 127(2), 922-970.
- Oslund, C. (2019). An analysis of the new job openings and labor turnover data by size of firm. *Monthly Labor Review*. <https://doi.org/10.21916/mlr.2019.8>
- Papadopoulos, M., Patria, M., & Triest, R. K. (2017). Population Aging, Labor Demand, and the Structure of Wages. *Geneva Papers on Risk and Insurance: Issues and Practice*. 42 (3), 453–474
- Rothstein, J. (2010). Is the EITC as Good as an NIT? Conditional Cash Transfers and Tax Incidence. *American Economic Journal: Economic Policy*, 2(1), 177–208
- Sass, S. A., & Webb, A. (2010). Is the Reduction in Older Workers' Job Tenure a Cause for Concern? *SSRN Electronic Journal*.
- Schwartz Center for Economic Policy Analysis. (2018). 52% of Older Workers Forced into Involuntary Retirement - The New School SCEPA.
- Shambaugh, J., Nunn, R., & Liu, P. (2018). *How Declining Dynamism Affects Wages*.

- Starr, E., Prescott, J. J., & Bishara, N. (2015). Noncompetes in the U.S. Labor Force. In *SSRN*.
- Staiger, D. O., Spetz, J., & Phibbs, C. S. (2010). Is there monopsony in the labor market? Evidence from a natural experiment. *Journal of Labor Economics*, 28(2), 211–236. <https://doi.org/10.1086/652734>
- Todate, M. (2010). Economic Effect of Labor Unions. *Japanese Economy*, 37(1), 111–129. <https://doi.org/10.2753/JES1097-203X370104>
- Van Horn, C. E., Corre, N., & Heidkamp, M. (2014). Older Workers, The Great Recession, and The Impact of Long-Term Unemployment. *Public Policy & Aging Report*.
- Verma, A. (2005). What do unions do to the workplace? Union effects on management and HRM policies. *Journal of Labor Research*, 26(3), 415–449.
- U.S. Department of Labor, Bureau of Labor Statistics (2017) *Contingent and Alternative Employment Arrangements*.
- U.S. Department of Treasury (2018) *Interim Results of the 2018 Filing Season*.

Tables and Figures

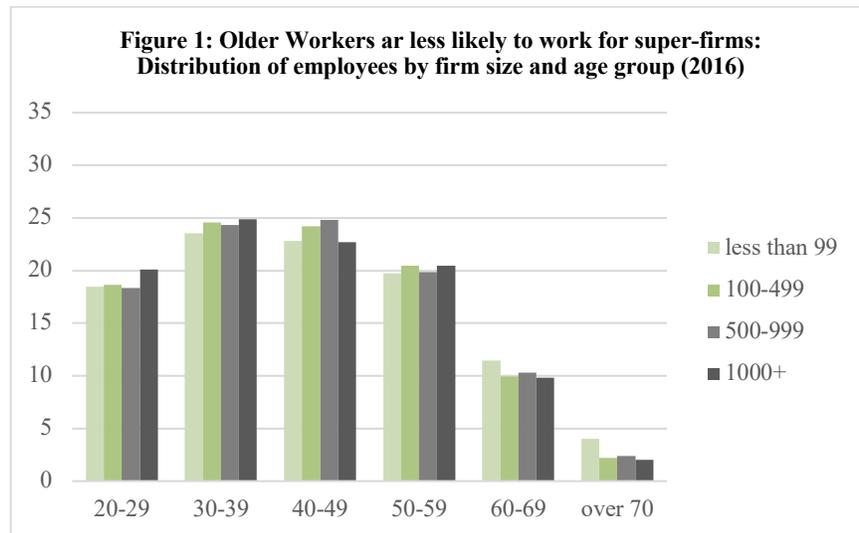
Table 1: Regression Estimation for wage trends (1990-2021)

Variables	Quantile Regression on time trend of log hourly wages (1990-2021)							
	Prime age Men With BA	Older Men With BA	Prime age Women With BA	Older Women With BA	Prime age Men With HS	Older Men With HS	Prime age Women With HS	Older Women With HS
year	0.00289*** (0.000256)	0.000133 (0.000615)	0.00348*** (0.000287)	0.00542*** (0.000609)	-0.00486*** (0.000179)	-0.00283*** (0.000372)	-0.000109 (0.000202)	0.00338*** (0.000349)
Constant	-2.209*** (0.514)	3.314*** (1.235)	-3.685*** (0.577)	-7.603*** (1.225)	12.83*** (0.360)	8.811*** (0.747)	2.976*** (0.404)	-3.992*** (0.700)
Observations	122,211	33,722	108,349	27,193	179,605	54,379	148,325	51,327

Source: Author's calculations using CPS-ASEC (1990-2021)

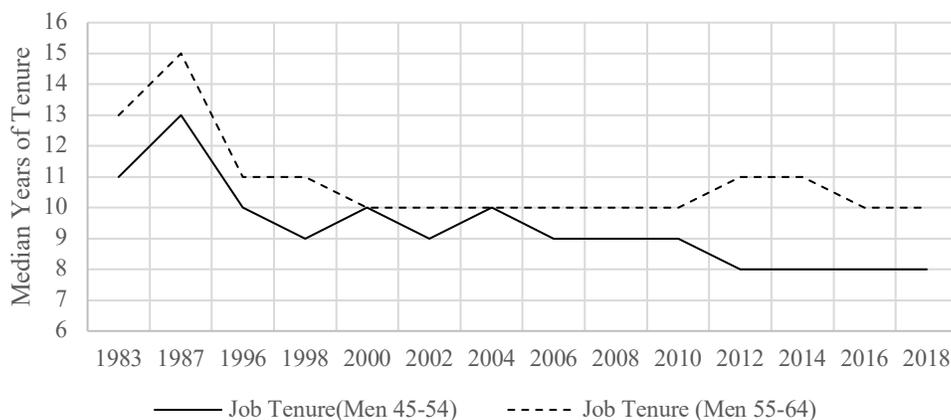
Note: Sample is restricted to full-time wage and salary workers

Note: Robust standard errors in parentheses (***) $p < 0.01$, ** $p < 0.05$, * $p < 0.1$



Source: Authors' Calculations using the IPUMS-CPS ASEC (2017)

**Figure 2: Median numbers of years that older male employees are with the same employers has declined by more than one third
Median years of tenure with current employer for male wage and salary workers by age group (1983-2017)**



Source: Authors' Calculations using the IPUMS-CPS Job Tenure Supplement (1983-2018)

Table 2: Share of workers who receive EITC and older (ineligible) workers in 10 (projected) fastest growing low wage occupations with most employment gain (2015)

Top Occupations with the most job growth and employment gain, 2016 and projected 2026 (Numbers in thousands)						
2016 National Employment Matrix title	(Numbers in thousands) Increase (2016-2016)	(Numbers in thousands) Employment 2026	Median annual wage (2017)	EITC (%)	Percent Female	Percent Old (55+)
Total, all occupations	11,519	167582.3	\$37,690	11.8	48.1	23.8
Nursing, psychiatric, and home health aides	604	3026.4	\$25,365	30.3	88.8	25.3
Personal care aides	778	2793.8	\$23,100	30	83.2	32.7
Medical assistants	818	818.4	\$32,480	23.6	92	14.4
Combined food preparation and serving workers, including fast food	580	4032.1	\$20,180	22.6	62.5	29.8
Janitors and cleaners, except maids and housekeeping cleaners	237	2621.2	\$24,990	20.6	34.4	35
Cooks, restaurant	145	1377.2	\$25,180	20	38.1	18.5
Waiters and waitresses	183	2783	\$20,820	18	67	12.6
Construction laborers	150	1367.1	\$34,530	17.3	2.9	16.6
Laborers and freight, stock, and material movers	200	2828.1	\$27,040	16.5	16	22.6
<p>(1) Data are from the Occupational Employment Statistics program, U.S. Bureau of Labor Statistics. Wage data cover non-farm wage and salary workers and do not cover the self-employed, owners and partners in unincorporated firms, or household workers.</p> <p>Source: Employment Projections program, U.S. Bureau of Labor Statistics</p> <p>(2) Additional data is authors' calculations using the March Supplement of the Current Population Survey</p>						