

NOVEMBER 2020

Better jobs, longer working lives: Proposals to improve the low-wage labor market for older workers

Beth C. Truesdale

Research Associate, Center for Population and Development Studies, Harvard University

This report is available online at: <https://www.brookings.edu>

B | Economic Studies
at BROOKINGS

The Brookings Economic Studies program analyzes current and emerging economic issues facing the United States and the world, focusing on ideas to achieve broad-based economic growth, a strong labor market, sound fiscal and monetary policy, and economic opportunity and social mobility. The research aims to increase understanding of how the economy works and what can be done to make it work better.

Contents

About the author.....	3
Statement of independence.....	3
Acknowledgements.....	3
Abstract	4
Introduction.....	5
Many Americans in their 50s are already out of the labor force.....	5
Figure 1. Inequalities by education in employment-to-population rates are large across the life course.....	6
Figure 2. Across cohorts, the fraction currently working is falling in midlife and rising at older ages	7
Involuntary retirement is high and increasing	8
Good jobs for prime-age workers set the stage for working longer.....	9
Inequalities in employment across the life course.....	11
Figure 3. Steady employment in late middle age is strongly	13
related to working beyond traditional retirement ages	13
Policy proposals: Higher minimum wage, fair workweek laws, and universal paid leave .	14
A higher minimum wage	15
Minimum wage policy proposal.....	17
Fair workweek laws and sustainable scheduling	18
Fair workweek policy proposal.....	20
Universal paid family and medical leave.....	21
Paid family and medical leave policy proposal.....	24
Conclusion.....	25
References.....	27

ABOUT THE AUTHOR

Beth Truesdale is a research associate at the Center for Population and Development Studies at Harvard University.

STATEMENT OF INDEPENDENCE

The author did not receive financial support from any firm or person for this article or from any firm or person with a financial or political interest in this article. She is not currently an officer, director, or board member of any organization with an interest in this article.

ACKNOWLEDGEMENTS

I am grateful to Martin Neil Baily and Ben Harris for helpful comments and to J. L. Herrera and Alexandra Mitukiewicz for outstanding research assistance.

ABSTRACT

Working longer – in the sense of choosing to delay retirement beyond traditional retirement ages – is widely proposed as the best way for older Americans to boost their fragile retirement security. But the policy goal of increasing labor force participation among older Americans is fundamentally in tension with a precarious low-wage economy because jobs that feature low wages, high turnover rates, and few benefits do not provide a solid foundation for sustained employment at older ages. Many Americans in their 50s are already out of the labor force, and many retire involuntarily before traditional retirement ages – a situation that has been exacerbated by the COVID-19 pandemic. Better jobs for prime-age workers help to pave the way for longer working lives. I outline three specific policy proposals: improved minimum wage, fair workweek laws, and a universal paid family and medical leave benefit. As others have argued, these policies would improve the well-being of prime-age workers. What has been less appreciated is that these policies would also put older Americans in a better position to extend their working years.

Introduction

In the United States, as in many other nations with aging populations, policymakers have embraced the notion that most individuals can (and should) extend their working years. The large majority of Americans approaching retirement will not have enough income to maintain their preretirement standard of living. During the past 30 years, private workplace pensions have collapsed, and the United States, like other nations, has effectively cut public pension benefits by raising the retirement age. Working longer is widely proposed as the best way for older people to boost their fragile retirement security (e.g., Maestas and Zissimopoulos 2010; Munnell and Sass 2009; Wise 2017).

Conversations about how to promote working longer—in the sense of remaining in paid work beyond traditional retirement ages—often begin with a deceptively simple question: How can older Americans be encouraged to delay retirement? However, there are at least two embedded assumptions when we equate *working longer* with *choosing to delay retirement*: first, that older Americans have jobs from which to retire; and second, that older workers choose the timing of their retirement. Both assumptions were problematic even before the COVID-19 pandemic. They are even more problematic now.

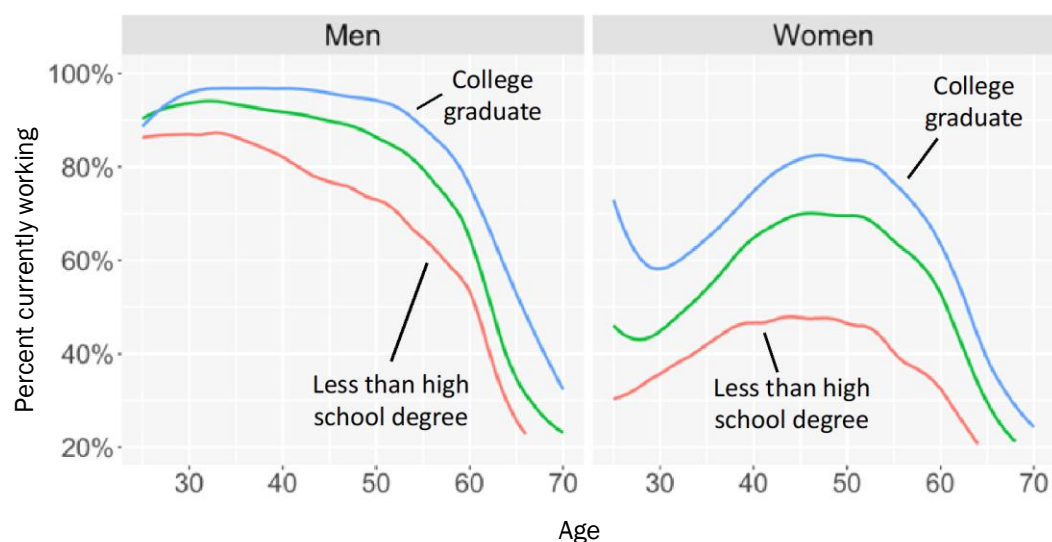
Many Americans in their 50s are already out of the labor force

The first problem is that the idea of delayed retirement makes little sense for the large fraction of Americans in their late 50s and early 60s who do not have jobs from which to retire. In 2018 fewer than 3 percent of adults aged 55 to 59 were unemployed, but more than a quarter (27.7 percent) were out of the labor force (Bureau of Labor Statistics [BLS] 2019). High rates of labor force nonparticipation in late middle age are a concern because only a tiny minority of Americans accumulate enough wealth to retire early in financial comfort (Ghilarducci, Papadopoulos, and Webb 2017). Those who already are out of the labor force in the run-up to traditional retirement ages are largely invisible not only in unemployment statistics, but also in the working-longer discussion.

The challenges are exacerbated for those with lower levels of education, as figure 1 shows. Among 55-year-old men, approximately 90 percent of college graduates were employed, compared to 80 percent of those with a high school diploma and 65 percent of those without a high school diploma. The gaps among women at the same age are similarly large, with employment-to-population ratios of approximately 75 percent, 65 percent, and 40 percent among college graduates, high school graduates, and those without a high school diploma,

respectively. Inequalities in employment are large across the life course and persist as workers age. As a result, those who have jobs to delay retiring from are disproportionately individuals with higher levels of education and greater access to good jobs.

Figure 1. Inequalities by education in employment-to-population rates are large across the life course



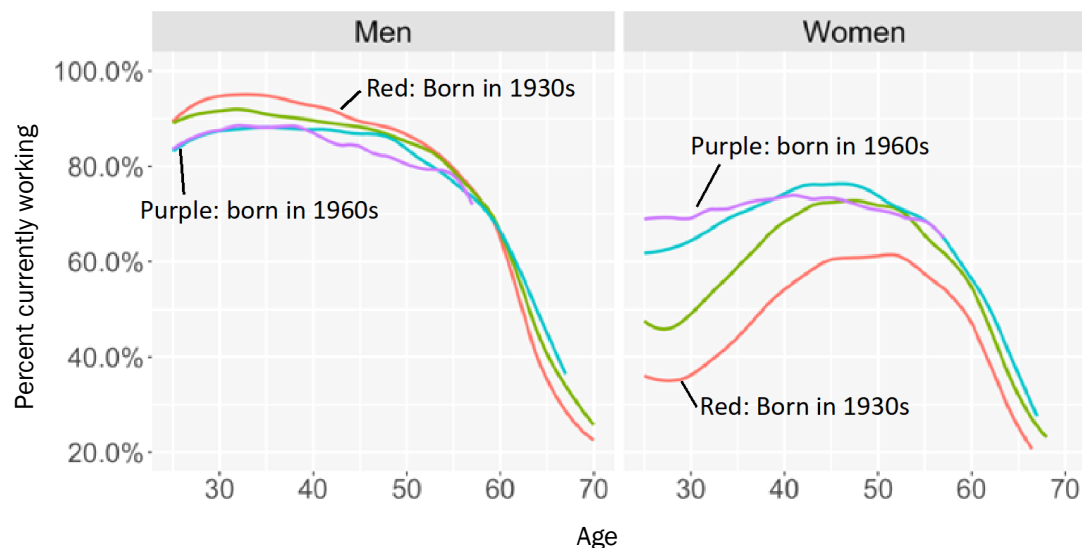
Source: Author's calculations from the Current Population Survey, 1930–59 birth cohorts (Flood et al. 2020).

B | Economic Studies
at BROOKINGS

Note: Loess smoother applied. The middle category includes those with high school diplomas or some college.

The fraction of Americans who approach traditional retirement ages without a job was relatively large and rising even before the pandemic. Proponents of working longer often point to the rise in employment among Americans over age 55 as evidence that working longer is a plausible response to aging societies. But trends among younger cohorts are worrying. Figure 2 shows the trends in employment rates across cohorts. Among older adults, employment rates have risen consistently from cohort to cohort. Among prime-age adults (aged 25 to 54), however, employment rates have fallen. Prime-age men's employment rates have declined steadily across cohorts. Prime-age women's employment rates rose dramatically from the cohort born in the 1930s to the cohort born in the 1950s but stalled or reversed among more-recent cohorts. As today's younger cohorts age, fewer individuals approach retirement with a solid history of employment across the life course.

Figure 2. Across cohorts, the fraction currently working is falling in midlife and rising at older ages



Source: Author's calculations from the Current Population Survey (Flood et al. 2020).

B | Economic Studies
at BROOKINGS

Note: Birth cohorts: 1930s (red), 1940s (green), 1950s (blue), 1960s (purple).

The trends are also worse for those with lower levels of education. Falling prime-age labor force participation has been driven mostly by increasingly precarious and unstable employment in low- and middle-wage sectors (Binder and Bound 2019; Goldin and Mitchell 2017). Americans who are out of the labor force in late middle age—predominately lower earners—are unlikely to be candidates for employment past traditional retirement ages.

When we look at the scale of labor force nonparticipation among Americans in their 50s, especially those with lower levels of education, it becomes clear that we need to rethink substantially what ages we have in mind when we talk about extending working lives. In the American policy conversation about working longer, age 67 (the Social Security full retirement age for those born in 1960 and later) and age 70 (the age at which maximum Social Security benefits become available) stand out as benchmarks. But the issues with working longer begin much younger for many workers—earlier by a decade or more for many.

Involuntary retirement is high and increasing

The second problem is that a large and increasing number of older workers do not choose the timing of their retirement. Many of those who do have a job in their 50s leave the workforce involuntarily. In 2014 more than half of retirees said they were forced or partly forced to retire, up from 33 percent in 1998 (Johnson and Gosselin 2018). Among older workers, job loss often leads to early retirement because many factors, including age discrimination, make it difficult for older Americans to find a new job after they have been out of work for any length of time, and the likelihood of reemployment diminishes with every passing month (Hirsch, Macpherson, and Hardy 2000; Neumark, Burn, and Button 2018). Even those who do get rehired have diminished chances to make up for lost earnings and savings before retirement. Before the pandemic, nine in ten displaced older workers never again had a job that paid as well as the one they lost (Johnson and Gosselin 2018).

The COVID-19 pandemic makes the situation much worse, coupling increased health risks of working with decreased job prospects. Compared to many European nations, the United States did a singularly poor job of protecting employment in the early months of the pandemic, with a rise in unemployment that was greater than that for any other OECD country (Holzer 2020). According to the BLS, among adults aged 55 and older, unemployment rates quadrupled from less than 3 percent in February 2020 to more than 13 percent in April.

There were soon signs that the pandemic recession was pushing many older workers into early retirement. Between March and June 2020, nearly 5 million workers aged 55 to 70 lost their jobs, and 2.4 million (7 percent of all workers aged 55 to 70) left the labor force entirely. It is likely that many of these exits will become permanent. While some older adults may look for a job again, nearly half of those who left the labor force said that they were retired (Papadopoulos et al. 2020). Munnell (2020) likewise finds a spike in retirements in the COVID-19 recession. A few Americans do return to employment after retiring (e.g., Maestas 2010), but they are a small minority.

If previous recessions are any guide, many workers in their 50s who are laid off now will struggle to find new jobs, even if they are still looking when the economy recovers. Older workers tend to be the last to be rehired, since employers choose younger and cheaper workers (Heidkamp, Corre, and Van Horn 2010). Moreover, retirement decisions in an economic crisis play out very differently across socioeconomic groups. As Coile and Levine (2010) describe, the Great Recession of 2008–9 had two opposite effects on retirement decisions: some older workers delayed retirement to make up for falling stock portfolios, while others were forced to retire early because of the weak job market. But these two groups of workers were very different. Those retiring late tended to be more skilled, and

with jobs that were more stable. Those retiring early—a larger group—tended to be less skilled and found themselves facing a labor market where there were fewer jobs to be had.

Overall, recessions raise the risk of retirement insecurity in at least five ways: (1) by decreasing employment income, (2) by reducing the value of retirement accounts, (3) by decreasing housing equity, (4) by locking in lower monthly Social Security benefits if workers must claim early, and, (5) if workers lose their employer-provided health insurance, by increasing the cost of self-insuring and the risk of catastrophic medical bills. For many lower-income workers, though, three of these five risks are irrelevant. More than a third of workers aged 55 to 64 have no retirement savings at all (Ghilarducci, Papadopoulos, and Webb 2017); a quarter of householders aged 55 to 64 do not own a home (Moore 2018); and a quarter of adults aged 45 to 64 do not have employer-provided health insurance or any other private health insurance (Berchick, Barnett, and Upton 2019). For many lower-income older workers, employment is the crucial piece: the key economic risks of a recession are the loss of both employment income and the ability to defer claiming Social Security.

Massive job losses during the pandemic are likely to lead to forced early retirement for many who would prefer to work longer. The effects on their economic well-being are likely to be acute. Low earners affected by weak labor markets around the time of retirement are likely to have substantially reduced incomes for the rest of their lives, mostly because early claiming substantially reduces their Social Security benefits (Coile and Levine 2010). Those who have spent their careers in sectors characterized by off-the-books work, such as the restaurant industry, are likely to be even more severely affected, since their Social Security benefits are often too small to meet even basic expenses. For workers like these, their main retirement strategy—to keep working as long as they can—is seriously undermined by high unemployment rates (Gatta 2018).

These are the paradoxes of working longer. Those who need to work for more years because they lack retirement security are often those least able to do so. And as more Americans need to work longer to meet their financial needs, a recession will sharply reduce the jobs available to them.

Good jobs for prime-age workers set the stage for working longer

The policy goal of increasing labor force participation among older Americans is fundamentally in tension with a precarious low-wage economy. I argue that better jobs for prime-age workers are essential for longer working lives, especially if the vision of working longer is of jobs at older ages that are financially, emotionally, and socially rewarding. Jobs that

are precarious—featuring low wages, high turnover rates, and few benefits—do not provide a solid foundation for working longer.

This insight ties the working-longer conversation directly to the conversation about how to create good jobs in the United States (e.g., Kalleberg 2018; Kelly 2020; Osterman 2019; Ross and Bateman 2020). It puts the working-longer debate into the context of larger political decisions that have shifted many types of economic risk from government and employers to individuals and families (Hacker 2019). It also refocuses attention on the ultimate (though often tacit) goal of working-longer policies, which is not to increase employment at older ages *per se*, but rather to improve individuals' well-being.

Connecting the dots between job quality in middle age and working longer requires a life course perspective. This perspective bridges a common divide in U.S. research on the labor force. A growing body of research examines what is driving older workers' retirement decisions, including the adequacy or inadequacy of Social Security benefits, individual wealth, health and health insurance, spouses' retirement decisions, and labor demand (Coile 2015, 2018), but this research typically excludes those who are already out of the labor force in their late 50s or early 60s. A separate, large literature examines changes in labor force participation among men and women in prime ages, conventionally defined as ages 25 to 54 (Binder and Bound 2019; Goldin and Mitchell 2017). Bringing these two lines of research together calls attention to the relationship between employment during the prime years and an individual's chances of working later in life. As the pandemic throws long-term prospects for workers in their 40s and 50s into jeopardy, a life course perspective on working longer will become even more crucial.

A broader perspective on job quality and employment stability across the life course suggests that a wide range of policy solutions—much wider than the typical set of policies proposed to delay retirement—could be working-longer policies. We should be looking for policies not only that improve the labor market for workers past traditional retirement ages, but also—critically—that improve the labor market for workers in their 50s and even younger. While the conditions attached to many middle- and high-wage jobs have also worsened during recent decades (Kelly 2020), improvements are most needed toward the bottom of the labor market.

I offer three specific policy proposals: (1) a higher minimum wage, (2) fair workweek laws and sustainable scheduling, and (3) universal paid family and medical leave benefit. These are core good-jobs policies that aim to push the quality of low-wage jobs to a more reasonable level in the United States. These proposals enjoy three key advantages. First, respect for the value of hard work is deeply rooted in American culture. Conservatives and liberals

alike agree that working hard and playing by the rules should pay off; this creates opportunities for bipartisan policymaking (Sawhill 2018). Second, each of these three has been implemented in various configurations by U.S. states or cities. Because evaluations of local experiences have been largely positive, these subnational reforms offer researchers and policymakers a useful set of models for federal reforms. Third, although uniform federal policies would be ideal, states and cities can make progress even if federal policymaking lags.

These good-jobs policies have been widely discussed among researchers, policymakers, and advocates who are interested in the well-being of lower-income workers and their families, but they have been largely absent from the working-longer discussion. Conversely, working-longer outcomes have been largely absent from the good-jobs discussion. We know that higher minimum wages, sustainable scheduling, and paid leave have immediate benefits for workers' finances, families, and health, but we know much less about longer-term outcomes. As important as short-term outcomes are, if researchers neglect potential long-term payoffs such as extended working lives, we will underestimate the social and economic value of these policies.

A recession is exactly the right time to improve job quality. Although low pre-pandemic unemployment rates were insufficient to make most low-wage jobs good jobs (Ross and Bateman 2020), catastrophically high unemployment rates during the pandemic, in the absence of effective regulation, will further erode job quality. When workers have fewer job options available to them, regulation to prevent employers from taking advantage of workers' limited bargaining power is, if anything, more important than in boom times.

Moreover, even during bad economic times we should not lose sight of the importance of laying a foundation for the creation of good jobs. Eventually, labor markets will recover. In the long recovery after the 2008 recession, much of the job growth came in the form of low-paid, precarious work (Kalleberg 2018). As jobs are created after the pandemic, we need a higher floor under job quality so that U.S. workers are not only able to support themselves and their families in the short term but are also better placed to extend their working lives in the long term.

Inequalities in employment across the life course

In order to delay retirement, workers need to have a job to delay retiring from. The proposals in this paper aim to improve job quality and decrease turnover in order to increase

rates of stable employment among less-advantaged workers who are in their 50s. Employment *before* traditional retirement ages, in turn, is an essential precursor to employment *after* traditional retirement ages (Goldin and Katz 2018).

In economic terms, labor market outcomes are often framed as rational individual choices based on trade-offs between the benefits of working (such as compensation and job satisfaction) and the benefits of not working (such as time for leisure or caregiving). If the opportunity cost of work rises because, for example, work schedules are complicated and unstable, it becomes increasingly rational for people to choose not to work. Either increasing the benefits of working or decreasing the benefits of not working should increase the number of individuals who choose to stay in the labor market.

For many low earners, however, the problem is not about *making bad choices* but about *having bad options*. As the U.S. safety net has eroded, there are few sources of support for people who are not employed; many older Americans therefore face a choice between trying to stay employed in an unfriendly labor market and retiring into poverty (Ghilarducci, Moore, and Webb 2018). Policymakers' focus should be less on individuals' choices and more on the institutions and structures that constrain individuals' options.

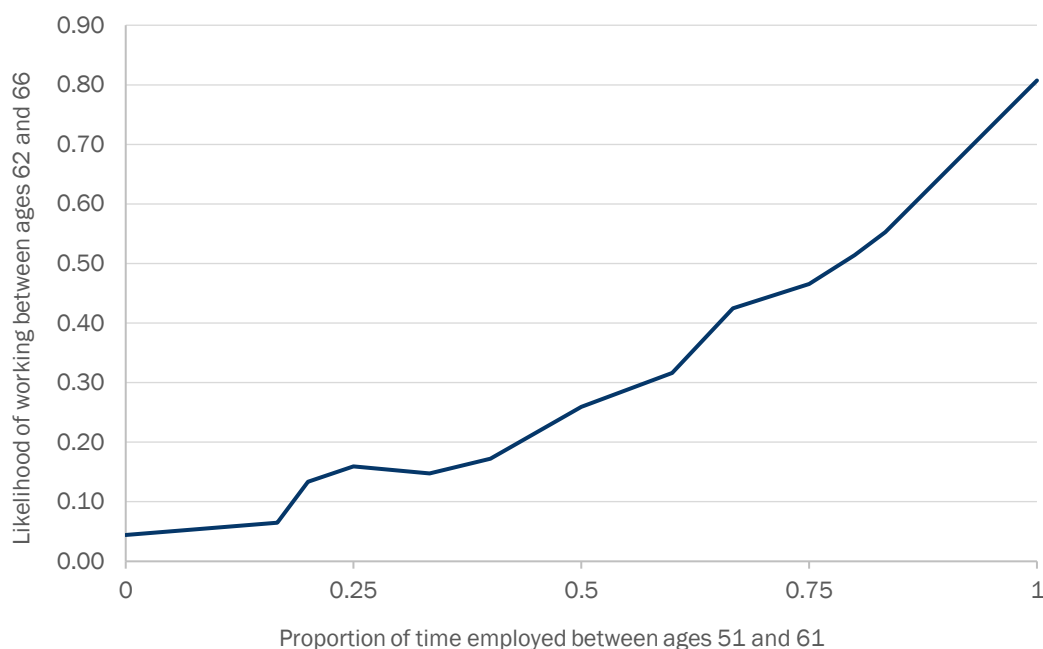
The increasingly precarious low-wage U.S. labor market is a key constraint on individuals' options for working longer. Changes in the relationship between employees and employers—especially the fissuring of the economy as companies shed all but core activities—have allowed large employers to maximize shareholder value by cutting labor costs, producing increasingly precarious and unstable employment (Weil 2014). As a result, people who work in low-wage sectors tend to experience more job separations than those who have better jobs, compounding the risk of long-term unemployment or labor force exit. About 44 percent of U.S. workers left a job (either voluntarily or involuntarily) during 2018 (BLS 2020). In accommodation and food services, the figure was 75 percent.

Job separations and employment stability matter because there is substantial inertia in labor force participation. For example, during 2007–9 nearly 7 million workers were displaced from jobs they had held for at least three years. Many become stuck in unemployment: by January 2010 fewer than half of displaced workers had been reemployed (BLS 2010). Similarly, before the Great Recession, among Americans over age 50 actively looking for a job, half failed to find a job within two years (Maestas and Li 2006). An important risk, especially among older workers, is that temporary job separations can become long term or even permanent.

Working longer is highly concentrated among adults who were steadily employed during their 50s. Using data from the nationally representative Health and Retirement Study (HRS), figure 3 shows the relationship between employment during one's 50s and working

longer. Among those who never worked for pay during their 50s, fewer than 10 percent worked in their 60s. Among those whose employment was intermittent—who worked at some point during their 50s but were not steadily employed—fewer than half worked beyond age 62. Among those who were steadily employed during their 50s, however, more than 80 percent worked beyond age 62.

Figure 3. Steady employment in late middle age is strongly related to working beyond traditional retirement ages



Source: Truesdale, Berkman, and Mitukiewicz forthcoming. Weighted proportions are based on the Health and Retirement Study (HRS), 1992–2016 waves.

B | Economic Studies
at BROOKINGS

Importantly, the relationship between employment stability in one’s 50s and working in one’s 60s is similar across all educational groups and is not explained by a wide range of demographic and health characteristics. Those without a college degree who were steadily employed during their 50s were approximately as likely to work longer as college graduates who were steadily employed. The main difference is that those with less education were much less likely to enjoy steady employment in the first place (Truesdale, Berkman, and Mitukiewicz forthcoming). Those with more education are more likely to be employed at every age, and more likely to have steady jobs that are an important precursor of working longer.

For most Americans, working longer is not about stretching employment to age 70 or beyond. Rather, policymakers should consider what changes would need to take place to

enable more Americans to extend meaningful, remunerative, sustainable employment into their early- and mid-60s. An economy that features a large and increasing proportion of jobs with chaotic schedules, low pay, and little time off for workers to attend to their own needs and those of their families is unlikely to provide the conditions needed for most Americans to be employed through middle age, let alone beyond traditional retirement ages. Policies that improve job quality and reduce job instability in late middle age and earlier are likely to be policies that pave the way for working longer.

Policy proposals: Higher minimum wage, fair workweek laws, and universal paid leave

Each of the three proposals I outline here would help to improve the quality of low-wage work in the United States and put more older adults in a position to work longer. These proposals are not in themselves sufficient to make all low-wage jobs good jobs, though, nor are they the only ways to increase labor force participation among lower socioeconomic groups across the life course (e.g., Munnell and Walters 2019). Other pathways, such as broader efforts to rebalance power between firms and workers, should be seen as complementary.

In addition, working longer is not, on its own, enough to create a financially secure retirement for many Americans. “I hope I die with my boots on” is not a retirement strategy that policymakers should endorse (Gatta 2018). Rather, working-longer policies should be coupled with policies to provide a financially secure retirement for all, regardless of lifetime income (Ghilarducci 2018).

Several principles apply to all three of the proposals below. First, robust federal action would be better than a patchwork of state and local regulations. Uniform federal programs are easier for businesses to implement effectively, less confusing for workers, and more efficient to administer; they also reduce geographic inequalities. But in the face of federal failure to act, state and local action is better than no action at all. Moreover, subnational action often creates momentum for federal laws (Johnson 2016).

Second, policy design should also consider implementation, enforcement, and evaluation. Existing labor laws are often undermined by weak and uneven enforcement in situations where workers do not know their rights or cannot afford to complain (Osterman 2019). Evaluation gives policymakers a chance to see what is working and what needs to be adjusted. What happens after enactment is just as important as what leads up to it.

Third, rules should apply as broadly as possible across sectors, occupations, and firm sizes. It is especially important to counter some of the worst effects of employment fissuring by ensuring that large firms are legally responsible for those who (for example) work in their warehouses, transport their customers, and handle their phone calls (Weil 2014). Many current U.S. labor protections were designed for full-time, full-year jobs with long-term employers. These rules, which always excluded many women and minority workers, are increasingly out of date. New rules must reflect the modern reality (Boushey and Jacobs 2018).

Finally, older Americans' well-being should be at the center of the working-longer discussion. Working longer matters only to the degree that it makes individuals, their families, and their communities better off, in the broadest sense. Likewise, wages and benefits are important not on their own, but as aspects of work that support dignity and a high quality of life. When policymakers ask Americans to work longer, what kind of work do they envision?

A higher minimum wage

Income is not the only mark of job quality, but it is a crucial one. For low-wage workers in the United States, however, neither employers' enlightened self-interest nor labor market pressures have been sufficient to raise wages. Advocates and researchers have long argued that higher wages benefit employers by reducing the cost of hiring and training new workers, but only a few high-road employers in low-wage sectors have actually followed this route (Ton 2014; Wolfers and Zilinsky 2015). The tight pre-pandemic U.S. labor market also failed to boost wages in the bottom half of the income distribution much (Ross and Bateman 2020). In the absence of meaningful union representation, very low wages are deeply baked into the structure of many industries (Osterman 2019). Raising the wage floor is thus an essential part of changing the competitive environment in which employers operate.

For workers toward the bottom of the labor market, a key determinant of pay is the minimum wage. The federal minimum wage is extraordinarily low. Currently set at \$7.25 an hour, the wage floor has eroded in real terms from its peak in 1968 and is now the lowest in the developed world both in terms of buying power and relative to the median wage (Howell, Fiedler, and Luce 2016). Given the low level of the wage floor in the United States, it is perhaps unsurprising that a substantial proportion of American workers face poverty-level wages. In 2014 workers at the 30th percentile had hourly wages of \$12.09. This is almost exactly what the 30th percentile earned in real terms nearly four decades ago and

results in annual earnings even for full-time, full-year employees below the poverty line for many family configurations (Howell, Fiedler, and Luce 2016).

Contrary to media portrayals, the typical low-wage worker is not a teenager earning pocket money. Low wages affect many prime-age and older workers. Recent estimates by Cooper (2019) suggest that an increase in the federal minimum wage to \$15 by 2024 would directly lift the wages of 28.1 million workers and indirectly benefit 11.6 million more, including 14.6 percent of workers aged 55 and over. Over the short term, a reasonable wage floor reduces poverty, reduces the need for means-tested social assistance, increases consumer demand, and makes work more attractive (Howell, Fiedler, and Luce 2016; Reich et al. 2019).

Relatively little research attention has been paid to the effects of a rising minimum wage on employment stability over the life course, but it is increasingly established that higher minimum wages reduce employee turnover. Improvements in the minimum wage have been associated with decreases in employee separations in Canada (Brochu and Green 2013), the United States (Dube, Lester, and Reich 2016; Mishkin 2018), and Portugal (Portugal and Cardoso 2006). If a higher minimum wage results in greater employment stability and labor force attachment for workers in late middle age, it could be an effective working-longer policy.

While minimum wage laws would benefit lower-wage workers of all ages, they could be especially important for workers in late middle age and beyond. Middle-aged individuals are more likely than younger individuals to have health conditions that offset the value of work. They are also more likely to have caregiving commitments for elderly parents. The majority of adults with surviving parents or parents-in-law provide elder care at some point between ages 50 and 62 (Butrica and Karamcheva 2018). Caregivers, who are disproportionately women, subsequently tend to have lower Social Security benefits and higher rates of poverty in old age.

Perhaps as a result of health and family commitments, middle-aged workers tend to require more from their jobs—in terms of wages as well as job status and working conditions—than younger workers. In economic terms, middle-aged workers tend to have a higher reservation wage and reservation utility (De Coen, Forrier, and Sels 2015; Maestas and Li 2006). For middle-aged individuals in low-wage work, the market wage may fail to keep pace with their reservation wage as they age. Increases in the wage floor may help to keep more lower-wage workers employed in the long run-up to retirement.

In addition to making paid work more attractive (increased compensation) and more stable (reduced turnover) for middle-aged and older workers, raising the minimum wage would have positive effects on Social Security's long-term finances as well as on individuals' Social

Security benefits, thus improving retirement income for many lower-income retirees who depend entirely or almost entirely on Social Security (Morrissey 2012). These long-term benefits to society and individuals have been largely neglected in the conversation in the United States about the federal minimum wage.

Efforts to raise minimum wages have gained momentum in the United States during the past decade. By early 2020, 29 states and 46 other localities had minimum wages higher than the federal minimum (Economic Policy Institute 2020). Higher minimum wages are popular with voters along the political spectrum. In 2019 two-thirds of Americans said they favored increasing the federal minimum wage to \$15 an hour, including a majority of those who identified as moderate or liberal Republicans (Davis and Hartig 2019).

Minimum wage policy proposal

I argue in favor of a \$15 federal minimum wage, inflation indexed and covering both tipped and untipped workers, along the lines set out in the federal Raise the Wage Act of 2019. Some scholars have argued that the federal minimum wage should vary across regions, states, or metropolitan areas according to the local median wage and cost of living (e.g., Dube 2014). Tying minimum wages to local average wages effectively locks in lower wages in poor localities, however, thus cementing geographic inequalities rather than compressing them (Cooper and Shierholz 2019; Howell, Fiedler, and Luce 2016). A single national minimum wage also has the distinct advantage of clarity.

A \$15 minimum wage, phased in over several years, is actually modest in the extreme—not enough to ensure a secure standard of living for many family configurations, although much better than the current minimum (Economic Policy Institute 2019). Importantly, as a result of the prominent “Fight for \$15” campaign and other organizing, the \$15 level has achieved substantial popular recognition and political momentum (Luce 2017).

Opponents of increases in the minimum wage often argue that high minimum wages may have negative effects on labor demand. In this view, when the cost of additional labor rises in a competitive market, employers will cut jobs or hours, ultimately harming the low-wage workers the reforms intend to help. However, a large and growing body of work suggests that many, if not most, labor markets are not competitive (Bernstein and Harris forthcoming). In a monopsony, employers are able to hold wages down for a range of reasons, including high concentration (a few firms control a large fraction of jobs) and non-competitive labor market practices (such as noncompete agreements and lack of wage transparency). In the United States the decline of unions and the political erosion of worker

protections during the past 40 years have produced a situation in which there are few checks on employers' wage-setting power (Hacker 2019).

If workers are paid below their marginal product, raising the cost of labor may not reduce employment. Indeed, this is what empirical studies show. In both the United States and internationally, increases in the minimum wages—even relatively ambitious increases—have produced minimal job losses (e.g., Belman and Wolfson 2014; Card and Krueger [1995] 2015; Dube 2019). This research suggests that the employment effects of higher wages are small and may even be positive if they reduce turnover.

Employment effects are only one among many policy considerations, however, and arguably not the most important. As Howell, Fiedler, and Luce (2016, 1) argue, “The proper framing of the debate is not over the statistical risk of the loss of some poverty-wage, high-turnover jobs, but rather over the wage floor that establishes a minimally decent standard of living from full-time work for all workers.” From the perspective of working longer, a more reasonable minimum wage should reduce turnover and increase late-in-life employment, reducing poverty and increasing financial stability among older workers and retirees.

Fair workweek laws and sustainable scheduling

The economic dimension of precarious work has received much attention from researchers and advocates, but until recently the temporal dimension was largely neglected. Time matters. Many low-wage jobs have short, variable, and unpredictable hours. Especially in sectors such as retail, hospitality, and food service, it is common for workers to have schedules that are (a) late notice, posted just a few days ahead of time; (b) on call, requiring the employee to be available for certain hours whether or not they are needed by the employer; (c) nonguaranteed, leaving employees uncertain how many hours they will work; (d) volatile and inconsistent, with shifts and hours varying from week to week; (e) structured around split or “clopening” shifts, involving nonconsecutive hours or a closing shift one day and the opening shift the next, and/or (f) involuntarily part time, with fewer hours than employees want. These are all dimensions of unsustainable and precarious scheduling.

Until recently, there was little information about the prevalence of precarious schedules in the United States. Historically, labor force surveys, tacitly assuming that most jobs have regular and predictable hours, asked respondents how many hours they “usually” work. In 2011 the National Longitudinal Survey of Youth was the first national U.S. survey to ask respondents about advance schedule notice, hours volatility, and schedule control. Lambert, Fugiel, and Henly (2014) found that, among hourly workers (who account for about 60 percent of the U.S. labor force), more than half received less than two weeks' advance

notice of their work schedule and more than 40 percent received less than one week's notice. Three-quarters of hourly workers reported substantial fluctuations in the number of hours they worked. Schneider and Harknett (2019a), using new survey data on hourly workers in the U.S. service sector, report similarly high rates of variable and unpredictable schedules.

Precarious schedules are bad for workers' finances, families, and health (Schneider and Harknett 2019a, 2019b; Williams et al. 2019). Financially, fluctuating schedules lead to income volatility, make it difficult for low-wage workers to take on a second job to make ends meet, and jeopardize eligibility for means-tested benefits that depend on work hours. For families, variable and unpredictable hours conflict with caregiving responsibilities and community roles. In health terms, they interfere with sleep, which is essential for physical and mental well-being. Night shifts, early morning shifts, and split shifts lead to acute sleep loss, while the stress caused by precarious schedules more generally can precipitate ongoing insomnia (Harknett and Schneider 2020; Williams et al. 2019). Conversely, more-stable schedules substantially reduce workers' psychological distress, improve sleep quality, and raise self-reported levels of happiness (Schneider and Harknett 2019a).

Research on the effects of precarious schedules typically focuses on younger workers and their families, but we would expect such schedules also to be difficult for older adults' finances, families, and health. Financial instability is obviously a hazard for older as well as younger adults. In terms of family, few adults in their 50s and 60s are caring for young children, but (as discussed below) many are caring for elderly parents (Butrica and Karamcheva 2018). And the health stresses of shift work and precarious schedules are likely to become more acute as workers age.

Unsustainable schedules lead to job loss because they make it hard for workers to meet their own needs and those of their families. While economists often make a distinction between voluntary and involuntary job separations, precarious schedules blur the line. In interviews, workers describe quitting jobs when employers create schedules that are logistically unworkable; leaving jobs because employers have cut their hours (a common punishment for minor infractions and a common retaliation against an employee who raises concerns); and being fired for being late, leaving early, or missing a shift, even when absences are the result of health or family emergencies (e.g., Edin and Shaefer 2015; Gatta 2018; Guendelsberger 2019).

We know little about the relationship between sustainable scheduling and working longer, although there is substantial evidence that unsustainable schedules contribute to high turnover. Schneider and Harknett (2019b) found that, in retail and food service, workers

with unsustainable schedules had higher turnover rates than those who did not. For example, 24 percent of workers with at least two weeks' advance notice of their schedules were no longer at their job six months later, compared to 39 percent of those with less than 72 hours' advance notice. Unsustainable schedules lead to higher turnover not only among low performers and new hires but also among highly productive employees and experienced staff (Kesavan and Kuhnen 2017; Williams et al. 2018).

Sustainable scheduling laws are recent but growing. During the past few years, several cities and states have passed “fair workweek” or “secure scheduling” laws (Harknett and Schneider 2020; Wolfe, Jones, and Cooper 2018). An important early effort was San Francisco's Retail Worker Bill of Rights in 2015. Since then several cities (Chicago; Emeryville, CA; New York; Philadelphia; San Jose, CA; and Seattle) and one state (Oregon) have passed scheduling laws that apply to specific sectors such as retail and fast food. Evaluations of these laws show that they do improve covered workers' schedules (e.g., West Coast Poverty Center 2019).

Fair workweek policy proposal

Federal policymakers should pursue legislation to reduce schedule precarity, which should, in turn, reduce turnover and improve labor force attachment. The 2019 reintroduction of the Schedules That Work Act provides a good model: employers must provide (a) two weeks' notice of schedules, (b) additional predictability pay for last-minute schedule changes and on-call work, and (c) the right to rest (i.e., a reasonable break between shifts). Covered sectors should include those where precarious scheduling is especially common, such as retail, food service, cleaning, hospitality, and warehouse work.

Employers often assume just-in-time scheduling improves their financial performance by allowing them to match labor to customer traffic, thus aggressively cutting wages and benefits. But such a view is arguably mistaken. In fact, there is experimental evidence that shows schedule stability for employees can improve business performance. Williams et al. (2018) conducted a randomized controlled trial with 28 Gap retail stores in Chicago and San Francisco. They found that modest improvements in the consistency and predictability of hours sharply increased both median store sales and revenue per hour of labor. Raising the floor under scheduling practices would make work more sustainable for Americans with little cost to employers.

Much attention has been paid to the economic dimension of precarious work, but the temporal dimension has been relatively neglected. Policies that require two weeks of advance

notice for schedules, that reduce or eliminate on-call and split shifts, and that enable involuntarily part-time workers to access more hours would improve the quality and stability of low-wage work for workers of all ages and pave the way for workers to remain employed later in life.

Universal paid family and medical leave

Workers who face their own illness or who are caring for relatives often find that they can either have a job or take care of their personal and family needs, but not both. During the past four decades, changes in work and family arrangements have ratcheted up work–life tensions in the United States (Hacker 2019; Kalleberg 2011; Kelly 2020; Osterman 2019). On the work side, jobs have intensified. Between 1977 and 2002 a rising proportion of U.S. workers said it was difficult to take time off from work to take care of personal or family matters (Kalleberg 2011, 162). On the family side, more women have joined the workforce and the share of single-parent families has increased. Fewer households today have a full-time adult at home to take on caregiving responsibilities as they arise. In general, American households simply have less slack now than they did four decades ago; adding to that situation, the pandemic has shown in stark detail how families struggle to cope when fragile work–life balances are tipped out of alignment. Universal paid family and medical leave (PFML) is one way to restore some balance.

Family issues pose challenges for labor force participation among older workers. As the U.S. population ages, more middle-aged workers will have elderly parents who need care. About half of Americans who reach age 65 will eventually develop a disability serious enough to require long-term care (Favreault and Dey 2015). Long-term institutional care is extremely expensive and is not covered by Medicare. (Medicaid does pay for long-term care, but only for people with very low incomes and very small cash savings.) Even part-time care at home can rapidly run into tens of thousands of dollars a year. Better funding for long-term services and supports would take pressure off family caregivers, but even if long-term supports that are much more robust were available there would no doubt be many shorter-term gaps that family members would still need (and want) to fill. Indeed, for the majority of adults caring for parents or spouses, caregiving is a temporary situation (Butrica and Karamcheva 2018), and policies designed to enable continued labor force participation alongside temporary caregiving would help adult caregivers to remain in the labor force.

As it stands, the responsibility of caring for parents often falls on adult children. Unpaid family caregiving is the most common source of elder care (AEI-Brookings 2017). About

27 percent of women and 22 percent of men aged 55 to 64 are providing some form of elder care at a given time (BLS 2017), while a smaller proportion are providing care for spouses. The risks of becoming a caregiver accumulate over time. Among adults over the age of 50 across the course of 12 years, 57 percent of those with surviving parents or parents-in-law provided care, while 18 percent of those who were married provided care to their spouse (Butrica and Karamcheva 2018). Birthrates fell after the birth of the Baby Boom generation, so there are fewer adult children to share the care of parents. People who have fewer siblings—and especially people who have fewer sisters—are more likely to be providing care. The need to provide caregiving can result in middle-aged workers leaving employment (Fahle and McGarry 2018), with long-term financial consequences. Parental caregivers who provide personal care (such as help with dressing, bathing, and eating) are less likely to be in paid employment and more likely to become poor than are similar non-caregivers (Butrica and Karamcheva 2018).

Health issues also lead workers to leave employment in their 50s. In the late 1990s and early 2000s, about 8 percent of adults aged 50 to 62 experienced a new major health shock such as a diagnosis of heart disease, lung disease, cancer, or stroke over a two-year period; nearly 13 percent of adults aged 50 to 62 experienced a new minor health shock, such as a diagnosis of arthritis, hypertension, or diabetes (Cutler, Meara, and Richards-Shubik 2011). Health shocks substantially increase the risk of labor force exit, disability, and involuntary retirement (Johnson and Gosselin 2018; Mudrazija and Smalligan 2019). Paid medical leave could help more workers remain attached to their employer and to the labor force after a health shock.

By international standards, the United States is an anomaly. Almost all other industrialized nations have national standards on paid parental leave, caregiving leave, medical leave, sick days, and annual leave. The United States has none of these. The federal Family and Medical Leave Act, passed in 1993, provides only unpaid leave. Moreover, the existing law covers only about 60 percent of U.S. workers and disproportionately excludes lower-income workers. Small employers are exempt, and not all employees of covered employers are eligible. To be eligible, employees must have worked with their employers for at least 12 months and to have worked for their employers at least 1,250 hours in the past year—substantial barriers for workers in high-turnover, short-hours jobs and those in small companies. Like the U.S. social insurance system, the program assumes that workers are employed for a single firm for many years and that they work full time. Both assumptions are outdated. Compared to higher earners, lower-income workers are less likely to have access to paid leave, less likely to be eligible for unpaid leave, and less likely to be able to afford to take unpaid leave even when they are eligible for it (AEI-Brookings 2017).

It is well established that family-friendly policies increase labor force participation, especially among women. The lack in the United States of family-friendly policies such as paid leave is one of the main explanations for the plateau in women's prime-age labor force participation (Blau and Kahn 2013). Most research on the effects of paid leave focuses on parental leave, which helps women remain attached to the labor force (Berger and Waldfogel 2004; Rossin-Slater, Ruhm, and Waldfogel 2013). More research is needed into the effects—especially the long-term effects—of other types of paid leave on labor force participation and on working longer.

Even before the pandemic, the idea of universal PFML insurance had gained both state and federal attention. By the end of 2019, eight states—California, Connecticut, Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Washington—and the District of Columbia had enacted paid leave laws (KFF 2020). All of these allow for paid leave to care for a new child, for a family member with a serious health condition, and for one's own serious health condition or disability. All of them fund it as a social insurance program, and not as an employer mandate (National Partnership for Women and Families 2019).

America's first federal paid leave program—sparked by the coronavirus crisis—was a historic development. But the actual provisions, which excluded the majority of private-sector workers and sharply restricted the reasons workers could take time off, were inadequate to meet the national need. In March 2020 the Families First Coronavirus Response Act was passed; it provided funding for up to two weeks of paid COVID-19–related sick leave and up to 12 weeks of paid family leave to care for children whose school or caregiver was unavailable. Promisingly, part-time, self-employed, and gig workers were covered. Large employers were excluded, though, and small firms could exempt themselves from providing child-care leave. If every employer who could take an exemption did so, only 17 percent of the private-sector workforce would have been covered (Glynn 2020). By contrast, in states that already had PFML programs in place, a broader range of workers were able to access paid leave for a wider variety of reasons, which provided them with essential support (Boyens 2020).

Americans recognize the need for comprehensive, permanent paid leave programs. Among voters, paid leave has broad, bipartisan public support, with large majorities of Americans being favorable toward maternity leave (82 percent), paternity leave (69 percent), family care leave (67 percent), and medical leave (85 percent) (AEI-Brookings 2018). A universal PFML benefit would offer support for workers facing either health problems or challenges balancing caregiving and work.

Paid family and medical leave policy proposal

Universal PFML should have several key characteristics (AEI-Brookings 2017, 2018; Boushey and Jacobs 2018). To meet the needs of low- and middle-wage workers, PFML should offer a high rate of wage replacement coupled with a pay cap. All workers should be covered for wage replacement, including part-time workers, contingent workers, and new employees. And because family and medical needs come in many different forms, PFML should encompass the full range of care needs (parental, family, and medical). As the AEI-Brookings Working Group on Paid Family Leave notes, “Some people do not need parental leave because they are not planning to have children or because they have aged beyond their childbearing years. Others do not need to worry about caring for an elder because they are still young or their elderly relatives have died. Still others may never face a serious illness. But when one looks at all these possible reasons for paid leave together, almost everyone can imagine needing leave at some point during their working lives” (AEI-Brookings 2018, 30). The Family and Medical Insurance Leave (FAMILY) Act, reintroduced in 2019, provides a good model.

In terms of funding, policy designs should avoid employer mandates, which risk encouraging employers to discriminate against workers they think are likely to need paid leave—including women of childbearing age and older workers, who are already subject to substantial labor market discrimination. PFML is best financed through a social insurance model such as a designated payroll tax that then provides support to workers (Boushey and Jacobs 2018). A social insurance model can also include part-time and contract workers, who need benefits that are portable across employers. One concern is that payroll taxes (unlike income taxes) tend to be regressive, but a payroll tax would provide a clear, dedicated funding stream for PFML, and a pay cap should make distribution progressive.

An issue with the design of most proposed PFML plans is that they offer some wage replacement for a block of consecutive weeks, but not for intermittent needs. Caregiving needs vary enormously. A contiguous block of time off may work reasonably well for caring for a new baby or recovering from an acute illness or surgery (one’s own or a family member’s). It works less well for periodic disease treatment or illnesses that flare up from time to time. Development of paid leave policies should enable workers to take leave on the scale of days or part-days (similar to sick leave) as well as on the scale of weeks or months (similar to traditional parental leave and short-term disability leave).

Programs that help newly ill or injured workers return to work help workers of all ages, but they may be especially important for middle-aged and older workers, who face greater health risks than younger adults. Similarly, programs that either give caregivers the flexibility they need to care for relatives while continuing to work or help them return to work

after a stint of intensive caregiving could help more adults stay attached to the labor force during midlife, putting them in a better position to work at older ages.

Conclusion

Policymakers increasingly expect people to work beyond traditional retirement ages to pay for their retirement. If we expect people to work into their mid- to late-60s, we need to pay attention to what is happening in their lives in their 50s—and even earlier. Many Americans in their 50s are already out of the labor force, and many retire involuntarily before traditional retirement ages. As a result, delayed retirement, in the sense of choosing to work past traditional retirement ages, is not relevant for many Americans.

Inequalities in working longer are stark. College graduates are far more likely than those with less education to be employed at older ages. Disparities in working longer also reflect other deep divisions in American life, including gender and race. Individuals who need to work for more years because they lack retirement security are often those least able to do so.

Inequalities in working longer, like many other social inequalities, have been exacerbated by the COVID-19 pandemic. Catastrophic rates of unemployment among lower-wage older workers are leading many to retire earlier than they want to (Munnell 2020; Papadopoulos et al. 2020). Even if jobs are available, returning to work is not straightforward: lower-wage jobs that may expose workers to the coronavirus pose particularly high health risks for older workers, who are more susceptible to serious illness than younger workers. Opportunities for older workers are likely to be cut dramatically, producing higher rates of downward mobility and poverty in old age. Even before the pandemic, the U.S. labor market was poorly designed to support working longer among lower-wage workers; it is worse today.

A life course perspective on inequalities in working longer calls attention to a set of policies to promote good jobs for lower-wage workers. These policies have been discussed extensively among policymakers and researchers who focus on prime-age labor force participation, but very little among those who focus on retirement. A life course perspective also suggests that we need to rethink *what ages* we envision when we discuss working longer. In the United States, the working-longer discussion often focuses on ages 62 to 70, the years from the earliest eligibility age for Social Security to the age of maximum Social Security benefits. We should pay more attention to workers between ages 50 and 62, the years during which labor force participation rates drop roughly 20 percentage points (figure 1). The challenges of working longer, especially for those without a college degree, begin in middle age and earlier.

Policies that boost labor force participation in middle age could promote working longer. I focus on three policy areas: a higher minimum wage, fair workweek (sustainable scheduling) laws, and universal paid family and medical leave. All three tap into bipartisan consensus about the value of work. All three have been implemented successfully in various forms at the state and city levels and are ripe for expansion at the federal level. Even more important is the broader point: a wide range of policy areas that influence prime-age Americans' well-being should rightfully be part of the working-longer discussion.

As influences on working longer, job quality and employment stability are embedded in wider political, economic, and cultural contexts. Internationally, greater employment protections tend to go along with *lower* rates of labor force participation among adults over age 65. Compared to the United States, most European countries have both greater employment protections and lower retirement ages. By contrast, more than half of men aged 65 and older in Guatemala and Zambia were in the labor force (He et al. 2015). Economic progress in democratic countries has usually reduced the amount of the life course during which individuals are expected to work for pay. Weekends, paid vacations, paid family leave, and bans on child labor—along with the concept of retirement—are manifestations of this trend (Ghilarducci 2020). The policy proposals outlined here apply *within* the contemporary U.S. context, in which employment protections are limited and being out of work in the run-up to traditional retirement ages can have severe consequences.

Over the long run, policymakers should aim for a labor market in which workers of all ages, including those without college degrees, have access to decent jobs that offer adequate pay, sustainable schedules, and the flexibility for employees to care for themselves and their families. We would expect such a labor market to produce lower rates of job turnover for lower-wage workers in their 50s. Lower turnover would reduce the number of people who retire early because they have lost a job and cannot find another suitable one. Longer and more-stable employment histories, in turn, produce higher Social Security retirement benefits and retirement savings. Better jobs would increase both the likelihood and the value of working longer.

References

- AEI-Brookings. 2017. *Paid Family and Medical Leave: An Issue Whose Time Has Come*. AEI-Brookings Working Group on Paid Family Leave. Washington, DC: AEI-Brookings.
2018. *Paid Family and Medical Leave: Charting a Path Forward*. AEI-Brookings Working Group on Paid Family Leave. Washington, DC: AEI-Brookings.
- Belman, Dale, and Paul J. Wolfson. 2014. *What Does the Minimum Wage Do?* Kalamazoo, MI: W.E. Upjohn Institute.
- Berchick, Edward R., Jessica C. Barnett, and Rachel D. Upton. 2019. *Health Insurance Coverage in the United States: 2018*. P60-267(RV), Current Population Reports. Washington, DC: U.S. Census Bureau.
- Berger, Lawrence M., and Jane Waldfogel. 2004. "Maternity Leave and the Employment of New Mothers in the United States." *Journal of Population Economics* 17 (2): 331–49.
- Bernstein, Jared, and Benjamin H. Harris. Forthcoming. "Labor Market Competition: Framing the Issues." In *Inequality and the Labor Market: The Case for Greater Competition*, edited by Sharon Block and Benjamin H. Harris. Washington, DC: Brookings Institution Press.
- Binder, Ariel J., and John Bound. 2019. "The Declining Labor Market Prospects of Less-Educated Men." *Journal of Economic Perspectives* 33 (2): 163–90.
- Blau, Francine D., and Lawrence M. Kahn. 2013. "Female Labor Supply: Why Is the United States Falling Behind?" *American Economic Review* 103 (3): 251–56.
- Boushey, Heather, and Elisabeth Jacobs. 2018. "Addressing 21st-Century Economic Risk in the United States." In *The AEI-Brookings Working Group Report on Paid Family and Medical Leave: Charting a Path Forward*, edited by AEI-Brookings. AEI-Brookings, Washington, DC.
- Boyens, C. 2020. "State Paid Family and Medical Leave Programs Helped a Surge of Workers Affected by the COVID-19 Pandemic." Urban Institute, Washington, DC.
- Brochu, Pierre, and David A. Green. 2013. "The Impact of Minimum Wages on Labour Market Transitions." *Economic Journal* 123 (573): 1203–35.
- Bureau of Labor Statistics (BLS). 2010. "Worker Displacement: 2007–2009." News Release August 26, 2010. Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC.
2017. "Unpaid Eldercare in the United States: 2015–16 Data from the American Time Use Survey." Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC.
2019. "Employment Status of the Civilian Noninstitutional Population by Age, Sex, And Race." Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC.
2020. "Economic News Release, Table 16. Annual Total Separations Rates by Industry and Region, Not Seasonally Adjusted." Last modified March 17, 2020. Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC.
- Butrica, Barbara A., and Nadia S. Karamcheva. 2018. "The Impact of Informal Caregiving on Older Adults' Labor Supply and Economic Resources." U.S. Department of Labor/Employee Benefits Security Administration (DOL/EBSA), Washington, DC.
- Card, David, and Alan B. Krueger. (1995) 2015. *Myth and Measurement: The New Economics of the Minimum Wage* (20th anniversary ed.). Princeton, NJ: Princeton University Press.
- Coile, Courtney C. 2015. "Economic Determinants of Workers' Retirement Decisions." *Journal of Economic Surveys* 29 (4): 830–53.

2018. "Working Longer in the U.S.: Trends and Explanations." In *Social Security Programs and Retirement around the World: Working Longer*, edited by Courtney C. Coile, Kevin Milligan, and David A. Wise. Chicago, IL: University of Chicago Press.
- Coile, Courtney C., and Phillip B. Levine. 2010. *Reconsidering Retirement: How Losses and Layoffs Affect Older Workers*. Washington, DC: Brookings Institution Press.
- Cooper, David. 2019. "Raising the Federal Minimum Wage to \$15 by 2024 Would Lift Pay for Nearly 40 Million Workers." Economic Policy Institute, Washington, DC.
- Cooper, David, and Heidi Shierholz. 2019. "Fact Sheet on Regional Minimum Wage Proposals: Millions of Workers Would Lose Out on Billions of Dollars under a Regionally Adjusted Federal Minimum Wage." Economic Policy Institute, Washington, DC.
- Cutler, David M., Ellen Meara, and Seth Richards-Shubik. 2011. "Health Shocks and Disability Transitions among Near-Elderly Workers." Working Paper 11-08, Boston College Retirement Research Center, Boston, MA. Prepared for the 13th Annual Joint Conference of the Retirement Research Consortium "Innovations in Retirement Security," August 4–5, 2011, Washington, DC.
- Davis, Leslie, and Hannah Hartig. 2019. "Two-Thirds of Americans Favor Raising Federal Minimum Wage to \$15 an Hour." Pew Research Center, Washington, DC.
- De Coen, An, Anneleen Forrier, and Luc Sels. 2015. "The Impact of Age on the Reservation Wage: The Role of Employment Efficacy and Work Intention: A Study in the Belgian Context." *Journal of Applied Gerontology* 34 (3): NP83–NP112.
- Dube, Arandrajit. 2014. "Designing Thoughtful Minimum Wage Policy at the State and Local Levels." In *Policies to Address Poverty in America*, edited by Melissa S. Kearney and Benjamin H. Harris. Washington, DC: The Hamilton Project.
2019. "Impacts of Minimum Wages: Review of the International Evidence." HM Treasury, London, UK.
- Dube, Arandrajit, T. William Lester, and Michael Reich. 2016. "Minimum Wage Shocks, Employment Flows, and Labor Market Frictions." *Journal of Labor Economics* 34 (3): 663–704.
- Economic Policy Institute. 2019. "The Federal Minimum Wage Should Be a Robust National Wage Floor, Not Adjusted Region by Region." Economic Policy Institute, Washington, DC.
2020. "Minimum Wage Tracker." As of July 3, 2020. Economic Policy Institute, Washington, DC.
- Edin, Kathryn J., and H. Luke Shaefer. 2015. *\$2.00 a Day: Living on Almost Nothing in America*. New York, NY: Houghton Mifflin Harcourt.
- Fahle, Sean, and Kathleen McGarry. 2018. "Caregiving and Work: The Relationship Between Labor Market Attachment and Parental Caregiving." *Innovation in Aging* 2 (Suppl 1): 580.
- Families First Coronavirus Response Act, Pub.L. 116-127 (2020).
- Family and Medical Insurance Leave (FAMILY) Act, S.463, introduced 02/12/2019.
- Family and Medical Leave Act (FMLA), Pub.L. 103-3 (1993).
- Favreault, Melissa, and Judith Dey. 2015. *Long-Term Services and Supports for Older Americans: Risks and Financing Research Brief*. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services.
- Flood, Sarah, Miriam King, Renae Rodgers, Steven Ruggles and J. Robert Warren. 2020. "Integrated Public Use Microdata Series, Current Population Survey: Version 7.0 [dataset]." Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D030.V7.0>

- Gatta, Mary. 2018. *Waiting on Retirement: Aging and Economic Insecurity in Low-Wage Work*. Stanford, CA: Stanford University Press.
- Ghilarducci, Teresa. 2018. *Rescuing Retirement: A Plan to Guarantee Retirement Security for All Americans*. New York, NY: Columbia University Press.
2020. "The Gray New Deal: General Theory of Employment, Retirement, and Money." Transcript of a keynote originally presented at the Association of Social Economic's 2020 Allied Social Sciences Association reception. Blog. The New School's Retirement Equity Lab, New York, NY. January 9, 2020.
- Ghilarducci, Teresa, Kyle Moore, and Anthony Webb. 2018. "The Inequitable Effects of Raising the Retirement Age on Blacks and Low-Wage Workers." The New School for Social Research, New York, NY.
- Ghilarducci, Teresa, Michael Papadopoulos, and Anthony Webb. 2017. "Inadequate Retirement Savings for Workers Nearing Retirement." Schwarz Center for Economic Policy Analysis and Department of Economics, The New School for Social Research, New York, NY.
- Glynn, Sarah J. 2020. "Coronavirus Paid Leave Exemptions Exclude Millions of Workers from Coverage." Center for American Progress, Washington, DC.
- Goldin, Claudia, and Lawrence F. Katz, eds. 2018. *Women Working Longer: Increased Employment at Older Ages*. Chicago, IL: University of Chicago Press.
- Goldin, Claudia, and Joshua Mitchell. 2017. "The New Life Cycle of Women's Employment: Disappearing Humps, Sagging Middles, Expanding Tops." *Journal of Economic Perspectives* 31 (1): 161–82.
- Guendelsberger, Emily. 2019. *On the Clock: What Low-Wage Work Did to Me and How It Drives America Insane*. New York, NY: Little, Brown and Company.
- Hacker, Jacob S. 2019. *The Great Risk Shift: The New Economic Insecurity and the Decline of the American Dream* (2nd ed.). New York, NY: Oxford University Press.
- Harknett, Kristen, and Daniel Schneider. 2020. "Precarious Work Schedules and Population Health." *Health Affairs*, Bethesda, MD.
- He, Wan, Daniel Goodkind, and Paul Kowal. 2015. *An Aging World: 2015*. International Population Reports. U.S. Department of Commerce, U.S. Department of Health and Human Services, and U.S. Census Bureau. Washington, DC: U.S. Census Bureau.
- Heidkamp, Maria, Nicole Corre, and Carl E. Van Horn. 2010. "The 'New Unemployables': Older Job Seekers Struggle to Find Work during the Great Recession." Issue Brief 25. Sloan Center on Aging and Work, Boston College, Boston, MA.
- Hirsch, Barry T., David A. Macpherson, and Melissa A. Hardy. 2000. "Occupational Age Structure and Access for Older Workers." *ILR Review* 53 (3): 401–18.
- Holzer, Harry J. 2020. "The COVID-19 Crisis: How Do U.S. Employment and Health Outcomes Compare to Other OECD Countries?" Brookings Institution, Washington, DC.
- Howell, David R., Kea Fiedler, and Stephanie Luce. 2016. "What's the Right Minimum Wage? Reframing the Debate from 'No Job Loss' to a 'Minimum Living Wage.'" Washington Center for Equitable Growth, Washington, DC.
- Johnson, Olatunde C. A. 2016. "The Local Turn; Innovation and Diffusion in Civil Rights Law." 79 *Law and Contemporary Problems*, 115–44.
- Johnson, Robert W., and Peter Gosselin. 2018. *How Secure Is Employment at Older Ages?* Washington, DC: Urban Institute.

- Kalleberg, Arne L. 2011. *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s*. New York, NY: Russell Sage Foundation.
2018. *Precarious Lives: Job Insecurity and Well-Being in Rich Democracies*. Cambridge, UK: Polity Press.
- Kelly, Erin L. 2020. *Overload: How Good Jobs Went Bad and What We Can Do About It*. Princeton, NJ: Princeton University Press.
- Kesavan, S., and Kuhnen, C. M. 2017. "Demand Fluctuations, Precarious Incomes, and Employee Turnover." Kenan Institute of Private Enterprise, University of North Carolina, Chapel Hill, NC.
- KFF. 2020. "Paid Family and Sick Leave in the U.S." Kaiser Family Foundation, San Francisco, CA.
- Lambert, Susan J., Peter J. Fugiel, and Julia R. Henly. 2014. *Precarious Work Schedules among Early-Career Employees in the US: A National Snapshot*. Chicago, IL: University of Chicago.
- Luce, Stephanie. 2017. "Living Wages: A US Perspective." *Employee Relations* 39 (6): 863–74.
- Maestas, Nicole. 2010. "Back to Work: Expectations and Realizations of Work after Retirement." *Journal of Human Resources* 45 (3): 718–48.
- Maestas, Nicole, and Xiaoyan Li. 2006. "Discouraged Workers? Job Search Outcomes of Older Workers." Research Paper 2006-133, Michigan Retirement Research Center, Ann Arbor, MI.
- Maestas, Nicole, and Julie Zissimopoulos. 2010. "How Longer Work Lives Ease the Crunch of Population Aging." *Journal of Economic Perspectives* 24 (1): 139–60.
- Mishkin, Elizabeth. 2018. "Essays in Labor Market Inequality." Doctoral dissertation, Harvard University, Cambridge, MA.
- Moore, Derick. 2018. "Homeownership Remains Below 2006 Levels for All Age Groups." U.S. Census Bureau, Washington, DC.
- Morrissey, Monique. 2012. "Wages and Social Security." *Working Economics* (blog), Economic Policy Institute, Washington, DC. July 16, 2012.
- Mudrazija, Stipica, and Jack Smalligan. 2019. *How Work-Limiting Health Shocks Affect Employment and Income*. Washington, DC: Urban Institute.
- Munnell, Alicia H. 2020. "Will COVID-19 Force Older Workers to Retire?" *MarketWatch*, July 8, 2020.
- Munnell, Alicia H., and Steven A. Sass. 2009. *Working Longer: The Solution to the Retirement Income Challenge*. Washington, DC: Brookings Institution Press.
- Munnell, Alicia H., and Abigail N. Walters. 2019. *Proposals to Keep Older People in the Labor Force*. Economic Studies at Brookings and Kellogg School of Management. Washington, DC: Brookings Institution.
- National Partnership for Women and Families. 2019. "State Paid Family and Medical Leave Insurance Laws." National Partnership for Women and Families, Washington, DC.
- Neumark, David, Ian Burn, and Patrick Button. 2018. "Is It Harder for Older Workers to Find Jobs? New and Improved Evidence from a Field Experiment." *Journal of Political Economy* 127 (2): 922–70.
- Osterman, Paul. 2019. *Creating Good Jobs: An Industry-Based Strategy*. Cambridge, MA: MIT Press.
- Papadopoulos, Michael, Bridget Fisher, Teresa Ghilarducci, and Siavash Radpour. 2020. "Over Half of Unemployed Older Workers at Risk of Involuntary Retirement." *Status of Older Workers*

- Report Series. Schwarz Center for Economic Policy Analysis and Department of Economics, The New School for Social Research, New York, NY.
- Portugal, Pedro, and Ana Rute Cardoso. 2006. "Disentangling the Minimum Wage Puzzle: An Analysis of Worker Accessions and Separations." *Journal of the European Economic Association* 4 (5): 988–1013.
- Raise the Wage Act, H.R. 582, introduced 01/16/2019.
- Reich, Michael, Claire Montialoux, Sylvia Allegretto, Ken Jacobs, Annette Bernhardt, and Sarah Thomason. 2019. "The Effects of a \$15 Minimum Wage by 2019 in San Jose and Santa Clara County." Center on Wage and Employment Dynamics, Institute for Research on Labor and Employment, University of California, Berkeley, CA.
- Ross, Martha, and Nicole Bateman. 2020. "Low Unemployment Isn't Worth Much If the Jobs Barely Pay." Brookings Institution, Washington, DC.
- Rossin-Slater, Maya, Christopher J. Ruhm, and Jane Waldfogel. 2013. "The Effects of California's Paid Family Leave Program on Mothers' Leave-Taking and Subsequent Labor Market Outcomes." *Journal of Policy Analysis and Management* 32 (2): 224–45.
- Sawhill, Isabel. 2018. *Forgotten Americans: An Economic Agenda for a Divided Nation*. New Haven, CT: Yale University Press.
- Schedules That Work Act, H.R. 5004, introduced 11/08/2019.
- Schneider, Daniel, and Kristen Harknett. 2019a. "Consequences of Routine Work-Schedule Instability for Worker Health and Well-Being." *American Sociological Review* 84 (1): 82–114.
- 2019b. "It's About Time: How Work Schedule Instability Matters for Workers, Families, and Racial Inequality." The Shift Project, Harvard University, Cambridge, MA.
- Ton, Zeynep. 2014. *The Good Jobs Strategy: How the Smartest Companies Invest in Employees to Lower Costs and Boost Profits*. Boston, MA: Houghton Mifflin Harcourt.
- Truesdale, Beth C., Lisa F. Berkman, and Alexandra Mitukiewicz. Forthcoming. "When I'm 54: A Life Course Perspective on Inequalities in Working Longer." In *Overtime: America's Aging Workforce and the Future of "Working Longer"*, edited by Lisa F. Berkman and Beth C. Truesdale. New York, NY: Oxford University Press.
- Weil, David. 2014. *The Fissured Workplace: Why Work Became So Bad for So Many and What Can Be Done to Improve It*. Cambridge, MA: Harvard University Press.
- West Coast Poverty Center. 2019. *The Evaluation of Seattle's Secure Scheduling Ordinance: Year 1 Findings*. Seattle, WA: University of Washington.
- Williams, Joan C., Susan J. Lambert, Saravanan Kesavan, Peter J. Fugiel, Lori Ann Ospina, Erin Devorah Rapoport, Meghan Jarpe, Dylan Bellisle, Pradeep Pendem, Lisa McCorkell, and Sarah Adler-Milstein. 2018. *Stable Scheduling Increases Productivity and Sales: The Stable Scheduling Study*. Hastings College of the Law, University of California, San Francisco, CA.
- Williams, Joan C., Susan J. Lambert, Saravanan Kesavan, Rachel M. Korn, Peter J. Fugiel, Erin Devorah Carreon, Dylan Bellisle, Meghan Jarpe, and Lisa McCorkell. 2019. *Stable Scheduling Study: Health Outcomes Report*. Hastings College of the Law, University of California, San Francisco, CA.
- Wise, David A., ed. 2017. *Social Security Programs and Retirement Around the World: The Capacity to Work at Older Ages*. Chicago, IL: University of Chicago Press.
- Wolfe, Julia, Janelle Jones, and David Cooper. 2018, July 19. "'Fair Workweek' Laws Help More Than 1.8 Million Workers: Laws Promote Workplace Flexibility and Protect Against Unfair Scheduling Practices." Economic Policy Institute, Washington, DC.

Wolfers, Justin, and Jan Zilinsky. 2015. "Higher Wages for Low-Income Workers Lead to Higher Productivity." Peterson Institute for International Economics (PIIE), Washington, DC.

B | Economic Studies

at BROOKINGS

The Brookings Economic Studies program analyzes current and emerging economic issues facing the United States and the world, focusing on ideas to achieve broad-based economic growth, a strong labor market, sound fiscal and monetary policy, and economic opportunity and social mobility. The research aims to increase understanding of how the economy works and what can be done to make it work better.