5

The 100-Year Life Meets the Future of Work

Cynthia Estlund

The 100-year life, if it becomes a reality, will bring daunting challenges as well as highly skewed gains. First, longer lives will be a blessing only if they come with gains in mental and physical health that last well into the last decade of those lives, and the extra years of life and health are likely to be distributed very unequally both across and within societies. Indeed, recent declines in life expectancy in the US point to the disturbing possibility that poorer and less-educated Americans might be looking at both shorter and less healthy lives for the foreseeable future.[1] Growing inequality thus casts a shadow over this chapter's exploration of the implications of longer lifespans for the future of work and work law in the US – the world's richest and, on some accounts, most unequal country.[2]

Among the more profound challenges of the 100-year life will be to our already-frayed patchwork system of retirement security.[3] It is hard to imagine how either most individuals or the society as a whole will be able to fund more than three decades of reasonably comfortable retirement on the basis of four decades or so of workforce participation.[4] Without a very large (and arguably unjustified[5]) shift of societal resources toward supporting nonworking seniors, most of those who can extend their working lives beyond what is now normal retirement age will have to do so. That might upset expectations, depending on how fast it happens, and it will put an especially heavy burden on those whose work is physically demanding. It might

[1] *See* Ctrs. for Disease Control, *Life Expectancy in the U.S. Dropped for the Second Year in a Row in 2021* (Aug. 31, 2022), https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2022/20220831.htm; *see generally* Anne Case & Angus Deaton, Deaths of Despair and the Future of Capitalism (2021).

[2] *See* Jack Ewing, *United States Is the Richest Country in the World, and It Has the Biggest Wealth Gap*, N.Y. Times (Sep. 23, 2020), https://www.nytimes.com/2020/09/23/business/united-states-is-the-richest-country-in-the-world-and-it-has-the-biggest-wealth-gap.html. Inequality concerns are at the forefront of Kate Andrias's chapter in this volume (Chapter 9).

[3] On the dire state of existing retirement systems, *see* Katherine Newman, Downhill from Here: Retirement Insecurity in the Age of Inequality (2019).

[4] That problem is explored at length in Lynda Gratton & Andrew Scott, The 100-Year Life: Living and Working in an Age of Longevity (2016).

[5] *See infra* Part IV.

https://doi.org/10.1017/9781009466004.007 Published online by Cambridge University Press

even generate political turmoil of the sort recently seen in France over proposals to increase the retirement age to sixty-four.[6]

Longer working lives might in turn exacerbate competition for jobs that do not require scarce or advanced skills. For their part, older workers will be hindered in that labor market competition – more than they already are – by doubts about their capabilities. Longer working lives will require us to reassess the law of age discrimination in employment (discussed at greater length in Kenji Yoshino's chapter) and to devise new ways to ensure intergenerational equity in employment. Longer working lives will also recast the debate over job security protections and will highlight the need to make work and work schedules less demanding, especially as workers age. This chapter will explore these challenges and how they will intersect with changing technology and its impact on the nature and number of jobs.

5.1 FROM LONGER LIVES TO LONGER *WORKING* LIVES

All existing public and private pension systems, including personal retirement savings plans, depend ultimately on working adults generating the revenues that support nonworking retirees. Some of those revenues come from workers' employers, but let us treat that as deferred compensation and part of what workers generate through their work. Let us also put aside the *deus ex machina* device of injecting massive additional funds from general tax revenues; that might prove necessary, but seeing why will require first working through the problems faced under existing models. On those models, workers support their own future nonworking selves through private retirement savings, and current workers collectively support the retirement incomes of current retirees through Social Security and other public and private pension plans. All of these elements of retirement security – public and private, voluntary and mandatory – depend on maintaining a sustainable ratio between the number of active workers and of retirees, and between years of active labor market participation and years of retirement.[7] The 100-year life will test the limits of what is sustainable.

To take a crucial example, consider Social Security, whose rather modest benefits – on average, just $1,614 a month, or $19,370 a year in 2022[8] – are the only source

[6] *See* Elaine Ganley, *French Protests Push for Withdrawal of Macron's Pension Plan*, AP News (Mar. 11, 2023), https://apnews.com/article/france-retirement-pension-protests-macron-c3dc4ea0efb60fc0f5fdd4b8f3d72d51; *see also* Catherine Porter & Aurelien Breeden, *Record Protests in France as Anger over Macron's Pension Plan Persists*, N.Y. Times (Mar. 7, 2023), https://www.nytimes.com/2023/03/07/world/europe/macron-france-retirement-protests.html.

[7] *See generally* Nicholas Barr & Peter Diamond, Pension Reform: A Short Guide (2009); Nicholas Barr, *Pensions: Overview of the Issues*, 22 Oxford Rev. Econ. Pol'y 1 (2006).

[8] Ctr. for Budget & Policy Priorities, *Top Ten Facts about Social Security*, https://www.cbpp.org/research/social-security/top-ten-facts-about-social-security (accessed Mar. 13, 2023).

https://doi.org/10.1017/9781009466004.007 Published online by Cambridge University Press

of retirement income for many US workers, including most workers of color.[9] (As of 2020, according to the US Census Bureau, over 40 percent of those aged fifty-six to sixty-four, and larger shares of younger cohorts, had no private retirement savings.[10]) In 1940, shortly after Social Security began to provide basic pensions at age sixty-five, average life expectancy in the US was sixty-two years, and the ratio between covered workers and beneficiaries was 159 to 1.[11] By 2020, average life expectancy had risen to seventy-nine years, and by 2021, the worker-to-beneficiary ratio had fallen to about 2.8 to 1.[12] Thus far, reforms have been modest: a rise in the normal retirement age to sixty-seven (for those born after 1960),[13] and higher payroll taxes to support those longer retirement periods.[14] More of both kinds of reforms will surely be needed.

Employer-sponsored retirement plans, for those lucky enough to have them, face similar demographic pressures. Such plans grew in the mid twentieth century, encouraged by tax subsidies and impelled in some sectors by collective bargaining, but they were never made mandatory[15] and were largely unregulated until the Employee Retirement Income Security Act of 1974 (ERISA).[16] Back in the day, most employer-sponsored and collectively bargained pension plans were, like Social Security, "defined benefit" plans: They promised workers a specific monthly pension depending on age and years of service at the time of retirement; rising life expectancies thus necessitated higher employer contributions. That fact, and perhaps also ERISA's tighter regulation of defined benefit plans, helped to spur employers' sharp shift in recent decades to "defined contribution" plans, in which employers promise no particular benefit levels in the future but contribute some small percentage of each paycheck to individuals' retirement savings.[17] Those plans banish the problem of unfunded employer liabilities, but they put the whole risk of

[9] Newman, *supra* note 3, at 6. Indeed, until 1954 most Black workers in the South were excluded from Social Security, too, because of the New Deal exclusions of agricultural and domestic workers. *See* Wilbur J. Cohen et al., *Social Security Act Amendments of 1954: A Summary and Legislative History*, 17 Soc. Sec. Bull. 3 (1954).

[10] *See* Maria G. Hoffman et al., *New Data Revel Inequality in Retirement Account Ownership*, US Census Bureau (Aug. 31, 2022), https://www.census.gov/library/stories/2022/08/who-has-retirement-accounts.html#:~:text=Demographics%20of%20Ownership&text=About%20half%20(49.5%25)%20of,23%20owned%20a%20retirement%20account.

[11] On worker-to-beneficiary ratio in 1940, *see Social Security History*, Social Security Admin., https://www.ssa.gov/history/ratios.html. On life expectancies, *see Life Expectancy (From Birth) in the US from 1860 to 2020*, Statista (2020), https://www.statista.com/statistics/1040079/life-expectancy-united-states-all-time.

[12] *See* Social Security Admin., *Fast Facts and Figures about Social Security* (2022), https://www.ssa.gov/policy/docs/chartbooks/fast_facts/2022/fast_facts22.pdf.

[13] Social Security Amendments of 1983, Pub. L. No. 98-21, § 201, 97 Stat. 65.

[14] *Id.* § 123(a).

[15] *See* Newman, *supra* note 3, at 4–5.

[16] Pub. L. No. 406, 88 Stat. 829.

[17] *Id.* at 4–5; *67 Percent of Private Industry Workers Had Access to Retirement Plans in 2020*, US Bureau of Lab. Stat. (Mar. 1, 2021), https://www.bls.gov/opub/ted/2021/67-percent-of-private-industry-workers-had-access-to-retirement-plans-in-2020.htm (just 15 percent of private sector workers had defined benefit plans).

financial mismanagement, underfunding, and underperformance on individuals, who are often ill-equipped both to manage assets and to weather economic downturns.[18] In the meantime, many public pension plans – which are unregulated by ERISA and mostly still of the defined benefit type – have begun to teeter or even topple under the weight of nearly $4 trillion in estimated unfunded liabilities.[19]

How will this picture change with the advent of the 100-year life? The basic actuarial challenge of longer lifespans is quite simple: If the normal retirement age held steady, the burden of supporting longer retirement periods would require either higher contributions and savings during working lives (meaning lower disposable incomes for current workers), or lower benefit levels for retirees. A simple example from Gratton and Scott underscores the challenge: Suppose an individual born in 1998 (age twenty-five as of 2023), with a life expectancy of 100, hopes to retire at age sixty-five on an income that is *half* her average income during her working years (plus whatever Social Security provides). To reach that goal, she would have to accumulate savings (and employer contributions if she is lucky) amounting to 25 *percent of her income during her entire remaining working life*.[20] Some high earners – those whose income amply exceeds their living costs – will be able to save enough during their working lives to support a long and comfortable retirement. (Ironically, many of those high earners might choose to postpone retirement, given their high economic and psychic returns from work.) But it is hard to see how working people who are just making ends meet will be able to accumulate those private retirement savings.

The alternative to reducing incomes either during individuals' working lives or in retirement is to extend working lives. (Indeed, all of the above might be necessary.) Most people will have to keep working longer, if they can, in order to save enough for their own retirements and, at the societal level, to maintain a sustainable ratio of active workers to retirees and of work years to retirement years. Every additional year of paid work does double duty in terms of retirement security, both increasing pension contributions and savings and shrinking the retirement period that those funds will have to cover.

Again, it would be possible to address this problem by injecting much greater public funds into Social Security (or, more ambitiously, into something like universal basic income (UBI) throughout individuals' lifespans). That would stave off destitution for the least well-off retirees, though it would fall short of maintaining living standards for most people. And it would shift part of the burden of funding pensions off the platform of employment, which might make sense for a variety of

[18] Newman, *supra* note 3, at 5.

[19] On pension cuts after Detroit's 2014 bankruptcy, *see* Newman, *supra* note 3, at 77–103. On total unfunded liabilities, *see* Joshua D. Rauh, Hidden Debt, Hidden Deficits: 2017 Edition (2017), https://perma.cc/N8UP-NN55.

[20] Gratton & Scott, *supra* note 4, at 58–59.

reasons (which I explore elsewhere).[21] But the appeal of such solutions will depend partly on what the alternative of longer working lives would look like. So before considering large-scale redistributive public funding of pensions, let us assume here that, one way or another, workers and their employers will continue to fund pensions through a combination of savings, payroll taxes, and employer contributions. With the advent of the 100-year life, that will translate into longer working lives for many.

Some people will be unable to work longer due to age-related infirmities – including cognitive decline[22] – or simply the wear and tear from decades of physically demanding work. Their economic fates will mostly ride (in the US) on the future shape of Social Security's retirement program. The rest of this chapter will focus instead on the implications of a growing cohort of older workers and would-be workers, especially in light of other likely changes in work and labor markets.

5.2 HOW WORKPLACE TECHNOLOGY WILL INTERACT WITH LONGER WORKING LIVES

As lifespans grow over the next few decades, other trends in the landscape of work will not stand still. In particular, some observers expect overall demand for labor to decline gradually but inexorably as innovations in robotics, artificial intelligence, and machine learning encroach on the comparative advantages of human workers.[23] That is hardly conventional wisdom among economists. By 2019, however, leading labor economists at MIT had concluded that, unlike in past waves of technological innovation, automation was already destroying more mid skill jobs than it was creating and was a major cause of labor market polarization.[24] They still projected growing demand for highly skilled labor, and for workers in health care and elder care across the skill spectrum, given the needs of an aging population.[25] But without huge advances in education and training, high demand for skilled labor might translate into job *vacancies* that are out of reach for the vast majority of workers. And the other side of an aging population explored above – that is, a probably

[21] *See* Cynthia Estlund, Automation Anxiety: Why and How to Save Work 119–24 (2021); Cynthia Estlund, *What Should We Do after Work? Automation and Employment Law*, 128 Yale L.J. 254 (2018).

[22] For a thoughtful overview of the likely implications of cognitive decline in the workplace, given both greater longevity and longer working lives, *see* Sharona Hoffman, *Cognitive Decline and the Workplace*, 57 Wake For. L. Rev. 115 (2022).

[23] For one compelling account, *see* Daniel Susskind, A World without Work 115–119 (2020). I delve into the various forecasts in chap. 2 of Estlund, *supra* note 21.

[24] *See* David Autor, David A. Mindell & Elisabeth B. Reynolds, *The Work of the Future: Shaping Technology and Institutions*, MIT Work of the Future Task Force (2019), at 25–26, https://perma.cc/AN4B-PFE5.

[25] *See id.* at 19, 36.

https://doi.org/10.1017/9781009466004.007 Published online by Cambridge University Press

growing *supply* of labor from older workers and job-seekers – does not factor into the MIT forecast. Those two caveats alone might point toward a sizable job gap in a decade or two.

We have not yet factored in other potential countervailing demographic trends that, according to the 2019 MIT report, "point towards rising labor scarcity in the decades ahead."[26] In particular, *lower birth rates* in developed countries mean fewer new entrants to the labor force (putting aside immigration). But longer life expectancies throw a curveball into predictions of labor scarcity.[27] The MIT researchers note that growth in the older population will increase demand for workers in health care and elder care, but they don't consider the prospect of *longer working lives* – that is, older workers seeking or holding onto jobs past "normal" retirement age. In some aging societies of Europe and Asia, a growing cohort of *healthy* older workers (as well as productivity improvements arising from automation) could help offset the shrinking flow of new entrants into the labor market.[28] The US population is younger and is aging more slowly than that of much of the developed world.[29] Still, longer working lives would make job deficits more likely than MIT experts predicted in 2019.

Two other developments since the MIT report – the splashy debut of "generative AI" such as Chat-GPT, and COVID-19 – might further swell job losses. The impact of generative AI is the quintessential "moving target" whose advances and failures feature daily in newsfeeds. Yet few doubt that it boosts the potential for automating the work of those who analyze data or produce words (or computer code) for a living, among others.[30]

As for COVID-19, leading experts on automation, including the MIT folks, quickly tagged it as an accelerant of job destruction via several pathways.[31] First, economic downturns, whatever their cause, tend to spur adoption of labor-saving

[26] *Id.* at 17.

[27] *See generally* Gratton & Scott, *supra* note 4; Anne Alstott, *Law and the Hundred-Year Life*, 26 Elder L.J. 131 (2016).

[28] *See* Leng Leng Thang, *Populating Aging, Older Workers, and Productivity Issues: The Case of Singapore*, 27 J. Comp. Soc. Welfare 17, 26–30 (2011); Shekhar Aiyar et al., *The Impact of Workforce Aging on European Productivity*, IMF Working Paper 16/238 (2016), at 16–18.

[29] "Fig. 2.1, Working Better with Age," Org. for Econ. Co-operation & Dev. (Aug. 30, 2019), https://www.oecd-ilibrary.org/employment/working-better-with-age_c4d4f66a-en.

[30] For an early survey of competing views, *see* Emma Goldberg, *A.I.'s Threat to Jobs Prompts Question of Who Protects Workers*, N.Y. Times (May 23, 2023).

[31] *See*, e.g., Carl Benedikt Frey, *Covid will Only Increase Automation Anxiety*, Fin. Times (Apr. 21, 2020), https://www.ft.com/content/817228a2-82e1-11ea-b6e9-a94cffd1d9bf; David Autor & Elisabeth Reynolds, *The Nature of Work after the COVID Crisis: Too Few Low-Wage Jobs*, Hamilton Project (2020), https://perma.cc/48XB-Q5NJ; Mark Muro et al., *The Robots Are Ready as the COVID-19 Recession Spreads*, Brookings (Mar. 24, 2020), https://perma.cc/F59P-RRAG; Susan Lund et al., *COVID-19 and Jobs: Monitoring the US Impact on People and Places*, McKinsey (Apr. 29, 2020), https://perma.cc/N9QJ-NVVL.

https://doi.org/10.1017/9781009466004.007 Published online by Cambridge University Press

technologies.[32] Second, COVID highlighted the risks – and not only the health risks – associated with human labor. After all, "robots don't need face masks, health care, or social distancing, and they don't go on strike for better conditions."[33] Third, COVID triggered a dramatic shift in the large retail sector both toward automation of brick-and-mortar retail and toward e-commerce, both of which reduce demand for human labor.[34] It "compress[ed] into a few short months what would otherwise have unfolded over multiple years."[35] Fourth, the spike in remote work and meetings would usher in lasting "reductions in office occupancy, daily commuting trips, and business excursions" and "steep declines in demand for . . . workers who feed, transport, clothe, entertain, and shelter people when they are not in their own homes."[36] By and large, these early predictions have been borne out.[37] Apart from its human death toll, the lasting legacy of COVID-19 might include sizable job losses,[38] notwithstanding the post-COVID rise of labor shortages[39] (which, as noted earlier, carry their own tendency to spur automation).[40]

All in all, a more automated future of less work – especially for those without advanced skills – appears likely enough that we should begin to ponder and plan for that future.[41] In particular, if automation depresses demand for ordinarily skilled human labor over the next few decades, then older workers who cannot afford to retire will be competing with younger workers for a shrinking number of decent

[32] *See* Brad Hershbein & Lisa B. Kahn, *Do Recessions Accelerate Routine-Biased Technological Change? Evidence from Vacancy Postings*, 108 Am. Econ. Rev. 1737, 1762–1767 (2019); Nir Jaimovich & Henry E. Siu, *Job Polarization and Jobless Recoveries*, 102 Rev. of Econ. & Stats. 129 (2020).

[33] *See* Erika Hayasaki, *Covid-19 Could Accelerate the Robot Takeover of Human Jobs*, MIT Tech. Rev. (June 17, 2020), https://perma.cc/Y3FR-8XYM.

[34] *See* Frey, *supra* note 31; Zoe Thomas, *Will Covid-19 Speed Up the Use of Robots to Replace Human Workers?* B.B.C. (Apr. 19, 2020), https://www.bbc.com/news/technology-52340651; Josep M. Argiles-Bosch, Josep Garcia-Blandon & Diego Ravenda, *Cost Behavior in E-Commerce Firms*, Electron. Commer. Res. (2022), https://doi.org/10.1007/s10660-021-09528-2.

[35] Autor & Reynolds, *supra* note 31, at 3. COVID also accelerated automation in brick-and-mortar retail. *See* Ben Casselman, *Pandemic Wave of Automation May Be Bad News for Workers*, N.Y. Times (July 3, 2021), https://www.nytimes.com/2021/07/03/business/economy/automation-workers-robots-pandemic.html.

[36] Autor & Reynolds, *supra* note 31, at 2–4.

[37] Kristen Broady, Darlene Booth Bell, Anthony Barr & Ryan Perry, *The Covid-19 Pandemic Spurred Growth in Automation*, Fed. Reserve Bank of Chicago Working Paper 2023-06 (Feb. 27, 2023), https://www.chicagofed.org/publications/working-papers/2023/2023-06.

[38] Lei Ding & Julieth Saenz Molina, *"Forced Automation" by COVID-19? Early Trends from Current Population Survey Data*, Federal Reserve Bank of Philadelphia Discussion Paper (Sep. 2020), https://perma.cc/KQ2N-53UR.

[39] *See* Orsetta Causa, Michaell Abendschein, Nhung Luu, Emilia Soldani & Chiara Soriolo, *The Post-COVID-19 Rise in Labour Shortages*, OECD Economics Dep't Working Paper No. 1721 (July 7, 2022), https://www.oecd-ilibrary.org/docserver/e60c2d1c-en.pdf?expires=1688664326&id=id&accname=guest&checksum=2BFFC99B176200E1CFDB19C9751E95C5.

[40] *See* Hershbein & Kahn, *supra* note 32.

[41] As I do at length in a recent book, Estlund, *supra* note 21.

jobs. That is, the convergence of demographic and technological trends could produce a double whammy: fewer work opportunities for a larger number of job-seekers.

Technology will affect the nature as well as the number of jobs. To begin with, more jobs will require working with technology, and the pace of technological change is more likely to speed up than slow down. That will tend to reduce the relative value of cumulative work experience versus newly minted skills. Back in the heyday of "lifetime employment," labor economists sought to explain long job tenures and rising wages in core sectors of the economy.[42] They argued that the experience and tacit knowledge that workers accumulated on the job increased their productivity for many years (though not quite until retirement); long-term job security (until the then-standard and even mandatory retirement age) served to encourage workers to stay and share their tacit knowledge with younger workers. But those patterns were undercut in part by technological change: The value of accumulated experience declined as the skill demands of jobs began to change in ever-shorter cycles.[43] As that pattern continues, older workers will be burdened by both the reality of aging brains and skill sets and stereotypes about their facility with new technologies.[44]

All of these technologically driven trends underscore the need for much better institutions of basic education and new and better pathways for adults to learn new skills on and off the job and to change occupations over the course of their careers. That is an article of faith among those who study technology's evolving impact on work;[45] and it is one obvious implication of the 100-year life.[46] More and better training will ameliorate but not eliminate the challenges of changing workplace technologies for older workers, as well as the job gap that might open up with growing machine capabilities.[47]

[42] *See* Edward P. Lazear, *Why Is There Mandatory Retirement?* 87 J. OF POL. ECON. 1261 (1979); Edward P. Lazear, *Agency, Earnings Profiles, Productivity and Hours Restrictions*, 71 AM. ECON. REV. 606 (1981). On some implications for employment law, *see* Stewart J. Schwab, *Life-Cycle Justice: Accommodating Just Cause and Employment at Will*, 92 MICH. L. REV. 8, 13–15 (1993).

[43] *See* PETER CAPELLI, THE NEW DEAL AT WORK (1999); KATHERINE V. W. STONE, FROM WIDGETS TO DIGITS: EMPLOYMENT REGULATION FOR THE CHANGING WORKPLACE 67–86 (2004).

[44] *See* Hoffman, *supra* note 22; Jessica K. Sink & Richard Bales, *Born in the Bandwidth: "Digital Native" as Pretext for Age Discrimination in Hiring*, 31 ABA JOURNAL LAB. & EMP. LAW 521 (2016).

[45] Autor et al., *supra* note 24, at 36–40; *A Future That Works: Automation, Employment, and Productivity*, MCKINSEY GLOBAL INST. (Jan. 2017), 113–116, https://perma.cc/X9BX-9RWQ; Mark Muro et al., *Automation & Artificial Intelligence: How Machines are Affecting People and Places*, BROOKINGS (Jan. 2019), https://perma.cc/QC7T-F4BU.

[46] *See generally* GRATTON & SCOTT, *supra* note 4; Alstott, *supra* note 27.

[47] *See* ESTLUND, *supra* note 21, at 21–39.

https://doi.org/10.1017/9781009466004.007 Published online by Cambridge University Press

Technology will affect the nature as well as the number of jobs and can be deployed in ways that either help or hurt older workers. On the one hand, machines can take over physically demanding tasks in some jobs (as they have been doing for centuries). For example, robots can do the literal heavy-lifting of human bodies in elder care and of mattresses in hotel room cleaning.[48] Reducing cumulative physical wear and tear might enable some workers to extend their working lives. On the other hand, many employers use technology to intensify the pace of work by monitoring every working moment and movement and squeezing out seconds and minutes of downtime.[49] The resulting "burnout" could undercut older workers' ability to keep at it. The use of such technologies at Amazon's Bessemer warehouse was both a major impetus and a major impediment to union organizing, which takes place largely through conversations among coworkers.[50] These dimensions of workplace technology underscore both the importance and the difficulty of ensuring that workers have a meaningful voice at work, as explored by Kate Andrias in this volume and by Brishen Rogers elsewhere.[51]

There are obvious upsides of technological change. Automation is likely to significantly boost productivity and yield enormous economic dividends. Those dividends *could* be redistributed to ordinary workers in the form of higher incomes, more leisure, or both and could further mitigate the daunting challenge of longer working lives. Or they might continue to flow overwhelmingly to the top of the income scale, as they have in recent decades. Let's now shift to the policy plane.

5.3 TWO STRATEGIES FOR EXTENDING WORKING LIVES: SECURING JOBS AND SPREADING WORK

Let us assume that, a few decades hence, most people will be in the active labor market, either working or seeking work, into their seventies or beyond. Some will seek "self-employment" – nominally or actually independent work outside the relatively protective umbrella of employment, including work in the expanding "gig economy." That might be a decent option for some older workers with specialized skills or capital to invest in a business, but it will be at best a fallback

[48] Stuart Dredge, *Robear: The Bear-Shaped Nursing Robot Who'll Look After You When You Get Old*, Guardian (Feb. 27, 2015), https://www.theguardian.com/technology/2015/feb/27/robear-bear-shaped-nursing-care-robot.

[49] *See* Brishen Rogers, Data and Democracy at Work (2023); Darrell M. West, *How Employers Use Technology to Surveil Employees*, Brookings Inst. (Jan. 5, 2021), https://www.brookings.edu/articles/how-employers-use-technology-to-surveil-employees/.

[50] Steven Greenhouse, *"We Deserve More": An Amazon Warehouse's High-Stakes Union Drive*, Guardian (Feb. 23, 2021), https://www.theguardian.com/technology/2021/feb/23/amazon-bessemer-alabama-union; Michael Sainato, *Amazon Intensifies "Severe" Effort to Discourage First-Ever US Warehouse Union*, Guardian (Feb. 3, 2021), https://www.theguardian.com/technology/2021/feb/03/amazon-intensifies-severe-effort-discourage-first-warehouse-union.

[51] *See* Andrias, Chapter 9, in this volume; Rogers, *supra* note 49; Brishen Rogers, *The Law and Political Economy of Workplace Technological Change*, 55 Harv. C. R.-C.L. L. Rev. 531 (2020).

option for workers without those advantages, whatever their age. I'll focus here on what longer working lives are likely to mean within the sphere of employment.

In order to continue working later in life, workers will have to hold onto jobs longer or find new jobs late in life. Both job-keeping and job-seeking are affected by age discrimination and stereotypes, and sometimes by real deterioration in skills or capabilities. Discrimination against older job *applicants* is especially likely, as stereotypes tend to carry more weight when employers have less information about, and no actual experience with, an individual.[52] And hiring discrimination is especially difficult to uncover, challenge, and deter through antidiscrimination law: Nonhiring decisions are relatively opaque to rejected applicants and are difficult and unlikely to be challenged.[53] Older job applicants already meet hiring resistance, partly due to age discrimination; their even older counterparts in the future are likely to encounter at least as much resistance. But the magnitude of that problem will depend partly on older workers' ability to hold onto their jobs and avoid dismissals or layoffs, and that depends not only on the efficacy of discrimination laws but also on protections against arbitrary or unjustified dismissal.

Nearly all economically developed nations require employers to justify most dismissals based on legitimate reasons such as poor performance, misconduct, or economic necessity.[54] In the US, by contrast, the vast majority of workers can be fired at will – at any time and without justification.[55] Employment at will is the rule, and job security the exception, in both private and public sector employment, and exceptions are largely confined to the shrinking union sector and the civil service. In theory, individuals can bargain for job security, but that rarely happens for reasons explored by legions of US employment law scholars.[56] Employment at will no

[52] David Neumark et al., *Age Discrimination and Hiring of Older Workers*, Federal Reserve Bank of San Francisco (Feb. 27, 2017), https://perma.cc/P529-G55U; Patricia Cohen, *New Evidence of Age Bias in Hiring, and a Push to Fight It*, N.Y. Times (June 7, 2019), https://www.nytimes.com/2019/06/07/business/economy/age-discrimination-jobs-hiring.html.

[53] *See* John J. Donohue III & Peter Siegelman, *The Changing Nature of Employment Discrimination Litigation*, 43 Stan. L. Rev. 983 (1991).

[54] *See* Mariya Aleksynska & Friederike Eberlein, *Coverage of Employment Protection Legislation*, ILO (2016), at 5, https://perma.cc/KBP3-WLJD.

[55] For recent calls for protections against unjustified dismissal, *see* Benjamin Sachs & Sharon Block, *Clean Slate for Worker Power: Building a Just Economy and Democracy*, Harv. L. Sch. Lab. & Worklife Program (Jan. 23, 2020), 46–50, https://perma.cc/G3JG-SCDE; Alexander Hertel-Fernandez, *American Workers' Experiences with Power, Information, and Rights on the Job: A Roadmap for Reform*, Roosevelt Inst. (2020), at 10, 34, https://perma.cc/L5NU-ZDAW. *See also* Ugo Okere et al., *Secure Jobs, Safe Workplaces, and Stable Communities: Ending At-Will Employment in Illinois*, Nat'l Emp. L. Project (Apr. 2021), https://perma.cc/2HSC-AL5P. For an illuminating philosophical take on employment at will, *see* Elizabeth Anderson, Private Government (2017).

[56] *See*, e.g., Richard Freeman & Joel Rogers, What Workers Want 118–122 (1999); Paul Weiler, Governing the Workplace (1990); Cynthia Estlund, *How Wrong Are Employees about Their Rights, and Why Does It Matter?* 77 N.Y.U. L. Rev. 6 (2002); Pauline T. Kim, *Bargaining with Imperfect Information: A Study of Worker Perceptions of Legal Protection in an*

longer means – as it did a century ago – that employees can be fired for any reason at all. Many reasons for dismissal, including age discrimination, are now illegal, and that probably discourages many unjustified dismissals.[57] But prohibiting discrimination is a far cry from requiring just cause for dismissal, for the former puts the burden of proof of unlawful motive on the employee, and such proof can be very hard to come by. Moreover, some workers pose little risk of litigation, such as low-wage workers in high-turnover jobs (or the growing number of workers bound by mandatory arbitration agreements).[58]

Overturning employment at will and mandating job security would bolster all of workers' rights on the job and would better enable workers to demand overtime pay, complain of discrimination or harassment, or support unionization.[59] It would also promote both economic security and stability within workplace communities, with a range of individual and social benefits. And it would enable older workers to keep their jobs longer. The likely necessity of longer working lives is one more argument in favor of joining the rest of the developed world and protecting job security.

Importantly, employment protections might facilitate longer working lives not just by inhibiting dismissals but also by boosting workers' productivity. How so? By encouraging employers to invest in incumbent workers' skills rather than replacing them with newly credentialed new hires (or machines).[60] That might help to explain recent findings on the economic impact of employment protection laws (EPLs) – those regulating dismissals and layoffs and use of temporary workers.

The conventional economic wisdom, long touted by the World Bank, held that EPL discouraged hiring by taxing dismissals, to the detriment of economic dynamism and workers' overall welfare.[61] But that conventional wisdom has met mounting contrary evidence. A major Cambridge University-based study of 117 countries over several decades found that EPL stringency has modest but mostly positive long-term effects on national economic performance, including slightly lower unemployment and a higher labor share of national income.[62] (Even the World Bank has now acknowledged that "employment regulations are unquestionably necessary" and "benefit both workers and firms."[63]) One explanation for these

At-Will World, 83 Cornell L. Rev. 105 (1997); Cass R. Sunstein, *Switching the Default Rule*, 77 N.Y.U. L. Rev. 106 (2002).

[57] *See* Cynthia Estlund, *Wrongful Discharge Protections in an At-Will World*, 74 Tex. L. Rev. 1655 (1996).

[58] *See* Cynthia Estlund, *The Black Hole of Mandatory Arbitration*, 96 N.C. L. Rev. 679 (2018).

[59] *See* Estlund, *supra* note 57.

[60] *See* Simon Deakin et al., *How Do Labour Laws Affect Unemployment and the Labour Share of National Income? The Experience of Six OECD Countries, 1970–2010*, 154 Int'l Lab. Rev. 1, 5–6 (2014).

[61] These views on employment protections are summarized in Zoe Adams et al., *The Economic Significance of Laws Relating to Employment Protection and Different Forms of Employment: Analysis of a Panel of 117 Countries, 1990–2013*, 158 Int'l Lab. Rev. 1, 3–4 (2019).

[62] *Id.*

[63] *Id.*

somewhat-surprising results is that investments in worker training – which make sense in a world of job security – appear to complement employment protections. That includes public spending on "active labor market policies," including vocational training as well as employer investments in on-the-job training, all of which are much greater in most OECD countries than in the US.[64] Those investments should modestly slow the technological displacement of incumbent workers and better enable older workers to hang onto their jobs, extend their working lives, and build up their retirement assets.

One might worry, of course, that job security protects older incumbent workers to the detriment of younger entrants to the labor market. While some studies have linked more stringent EPL with higher youth unemployment,[65] the latest word, based on the aforementioned Cambridge studies, finds no long-term adverse impact on youth employment.[66] Concerns about youth employment should find their solution not in weaker employment protections but in dedicated investments in young people's education and employment prospects and in strengthening the foundations for longer and more varied work lives.

Longer working lives will also be more feasible if the demands of work are less intensive. Technology could contribute on that score not only by taking over physically demanding work tasks, as noted above, but also by allowing for shorter working hours. A more automated economy might augur a future of too little or no work for many workers, but it could be steered in the direction of less work for nearly all – that is, fewer hours per week or fewer weeks per year or both, with guaranteed rights to take extra time off or work shorter schedules as needed. As Anne Alstott has recognized, older workers in particular would value the ability to scale back working hours as they age.[67] Elsewhere I propose a range of strategies for reducing overall hours of work for those with too much of it and for spreading work to those with too little.[68] Those include guaranteed paid vacations and family and sick leaves, guaranteed access to part-time schedules, wider eligibility for overtime pay and other deterrents to excessive and intrusive work demands, and eventually a shorter standard work week. Together, those strategies would help to meet the challenge of a future of less work, promote a better work–life balance for individuals, and facilitate longer working lives by reducing the cumulative toll of decades of work and by accommodating the distinctive toll aging can exact on physical and mental stamina.

[64] *See* Org. for Econ. Co-operation & Dev., *Public Expenditure and Participant Stocks on LMP: Public Expenditure of LMP by Main Categories 2018*, https://perma.cc/R76D-CACQ.

[65] Michael Gebel & Johannes Giesecke, *Does Deregulation Help? The Impact of Employment Protection Reforms on Youths' Unemployment and Temporary Employment Risks in Europe*, 32 Euro. Sociological Rev. 486 (2016), https://doi.org/10.1093/esr/jcw022 (citing numerous studies).

[66] Prabirjit Sarkar, *Does Labor Regulation Reduce Total and Youth Employment?* 52 Structural Change & Econ. Dynamics 374 (2020).

[67] Alstott, *supra* note 27, at 136–137.

[68] *See* Estlund, *supra* note 21, at 125–140.

5.4 CONCLUSION

When we ponder the many and daunting challenges that longer working lives will pose for both individuals and the society, we might ask: Wouldn't it be more sensible – both more humane and more efficient – to maintain the current normal retirement age and find ways to publicly fund longer periods of retirement, at least for those who can't afford to do so themselves, through taxes and transfers? In particular, why compound the challenge posed by automation and a future of less work by extending working lives and increasing the supply of older workers? These are more than fair questions (even if their empirical premises are still debated). But they suggest other questions.

First, if we can muster the political will for that much taxing and spending, how much of it should we direct to the support of retirees? There is no shortage of compelling demands on those societal resources – the needs of the poor and especially poor children, including severe housing insecurity; underfunded educational institutions at every level; unmet healthcare needs, which will rise in an aging society; climate change and its associated costs; and a societal debt from centuries of racial injustice. With all those needs in mind, could it possibly make sense to direct a large share of social resources to supporting seniors, many of whom might be capable of supporting themselves through remunerative work for many years to come?

Second, what are the implications of most people spending the last three to four decades of their lives outside of the nexus of paid work? If the question were simply about individual preferences – when would most people choose to retire if they expected to live to 100? – the answer would obviously vary widely. Many tenured academics, for example, are already choosing to delay retirement, so that "between 2000 and 2010 the proportion of all professors 65 and older nearly doubled, and the median age of the professorate now surpasses all other occupational groups."[69] Most jobs are much less rewarding and more draining, physically and psychically, than ours. Even so, many people have mixed feelings about leaving the workforce when they still have energy and skills to contribute.[70]

Consider also the social and political implications of longer retirements versus longer working lives. If most people continued to retire from work in their mid to late sixties even as life expectancies climb toward a century, retirees would soon make up a quarter or more of the population and a larger share of the electorate. The workplace is not only a source of economic sustenance, status, and identity; it is also our society's single greatest cauldron of cooperation and integration, especially

[69] TIAA-CREF, *Financial Services: An Age of Opportunity* (2012), at 2, https://perma.cc/ZUQ2-JV9P.

[70] *See* Jeffrey M. Jones, *More in U.S. Retiring, or Planning to Retire, Later*, GALLUP (July 22, 2022), https://news.gallup.com/poll/394943/retiring-planning-retire-later.aspx.

across lines of social division.[71] Most people's social circles grow much smaller and less diverse once they retire. As that group swells, the political and social distance between seniors and others will become wider and more consequential, and the potential for intergenerational political conflict will grow.

Ours will be a more vibrant, fair, and cohesive polity and society if we instead find ways to make work less draining and more fulfilling, to spread work from those with too much of it to those with too little, and to enable people to work for more years but fewer hours per year and per week, especially as they grow older.

[71] *See* Cynthia Estlund, Working Together: How Workplace Bonds Strengthen a Diverse Democracy (2003).

https://doi.org/10.1017/9781009466004.007 Published online by Cambridge University Press