Demographic Headwinds

The Economic Consequences of Lower Birth Rates and Longer Lives

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CHAPTER

The Age Divide in the American Workplace

by Nicola Bianchi and Matteo Paradisi

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SUMMARY

Demographic shifts are reshaping the U.S. labor market, as the share of the population within the working age has begun to decline. This paper addresses the implications of this decline with a focus on within-firm dynamics. As longer lifespans and improved health lead more older workers to delay retirement, experienced employees are increasingly concentrated in high-paying managerial and leadership roles. The gap in management representation between workers over 50 and those under 30 has widened substantially over time, reflecting a growing age divide at the top of the wage distribution. While this greater availability of experienced workers can be beneficial for firms in the short-term, it can also generate "congestion effects" that can slow the advancement of younger cohorts. Reduced opportunities to move into high-paying and managerial jobs limit younger workers' earnings growth and ability to make key life investments, and this congestion constrains the development of future managerial talent. The authors argue that this divide is best understood as a shift in fortunes across generations, where gains from experience for older workers come at the cost of decreased opportunities for younger workers. As firms benefit from potential short-term productivity gains, they also neglect long-term investments in the next generation of the labor force. The central task for firms and policymakers is thus to ensure that the benefits of longer and more productive careers for older workers do not come at the expense of the dynamism and opportunities that younger workers need to thrive.

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A. Introduction

In today's US labor market, older workers are increasingly concentrated in the most desirable jobs. They hold a growing share of managerial positions and capture a large fraction of the high wages available in the economy. At the same time, their younger coworkers are starting their careers lower in the pay distribution and are moving up the corporate ladder more slowly than previous cohorts did.

We argue that these shifts largely stem from a fundamental demographic change. Like most other high-income economies, the United States has been aging. Longer life expectancy and improvements in health care have contributed to an increase in the number of older workers who decide to postpone retirement and remain active in the labor market. For firms, this greater availability of older workers has clear short-term benefits: Companies can rely for longer on a larger number of employees with deep firm-specific knowledge and experience, leading to greater internal stability and longer leadership continuity. For many older workers, longer and more rewarding careers translate into greater financial security and better financial preparedness for retirement.

However, the same process that benefits firms and older workers today has created challenges for younger workers. When older employees stay longer in their roles, the number of openings available to younger cohorts shrinks, particularly in organizations that are not expanding rapidly. Younger workers face fewer opportunities to move into high-paying and managerial jobs, and their professional advancement during early career stages becomes flatter and less fulfilling.

Over time, this slowdown in younger workers' early opportunities can erode their lifetime earnings, limit their ability to make key life investments (such as buying a home or starting a family), and reduce the accumulation of managerial and supervisory experience that will be needed when it is their turn to lead.

Therefore, we argue that the current consequences of workforce aging inside firms are best understood as a shift in fortunes across generations. The gains from experience and longevity enjoyed by older workers have come alongside mounting pressures on those just entering the labor market. At its core, this duality reflects a broader slowdown in economic growth across the United States and other high-income economies: Even as firms reap the potential short-term productivity gains from retaining more experienced staff, they have been able to absorb the rising supply of older workers in large part by constraining early opportunities for younger ones. How aging will shape labor markets in the future will depend on how firms and policymakers respond to the differing needs of younger and older workers.

B. The Issue: An Aging Workforce

i. The Aging of the US Workforce

The United States, like most other high-income economies, is getting older. Over the past half-century, the country's average age has climbed steadily, driven by longer lives, fewer births, and the gradual passage of the baby-boom generation into later stages of life. Current Population Survey (CPS) data show that the mean age of the US resident population was 33 years in 1976 and rose to 39 years in 2024 (the last full year of data available at the time of writing). The labor market has mirrored this demographic transformation. Over the same period, the mean age of workers increased from 38 to 42 years (CPS).[1]

Beyond the mean worker age, the whole age structure of full-time private-sector employment has changed dramatically between 1976 and 2024, as displayed in figure 1. In the mid-1970s, this distribution had a familiar pyramid shape: Workers in their twenties and early thirties accounted for almost half the workforce, and relatively few people were still in the labor force past their late fifties. In 2024, the shape was much more top-heavy. Employment was spread much more evenly across ages 30 to 60, and the groups representing workers in their late fifties and early sixties were comparable in size to many mid-career age groups.

Looking more closely at individual age groups, we observe that the share of full-time private-sector jobs held by workers aged 20–24 fell by 7 percentage points between 1976 and 2024, the largest decline among all age groups. Over the same period, the share held by workers over 60 rose by 3 percentage points, the largest gain among all age groups. The overall result of these shifts is that workers over 50 now account for nearly 30 percent of full-time private-sector workers.

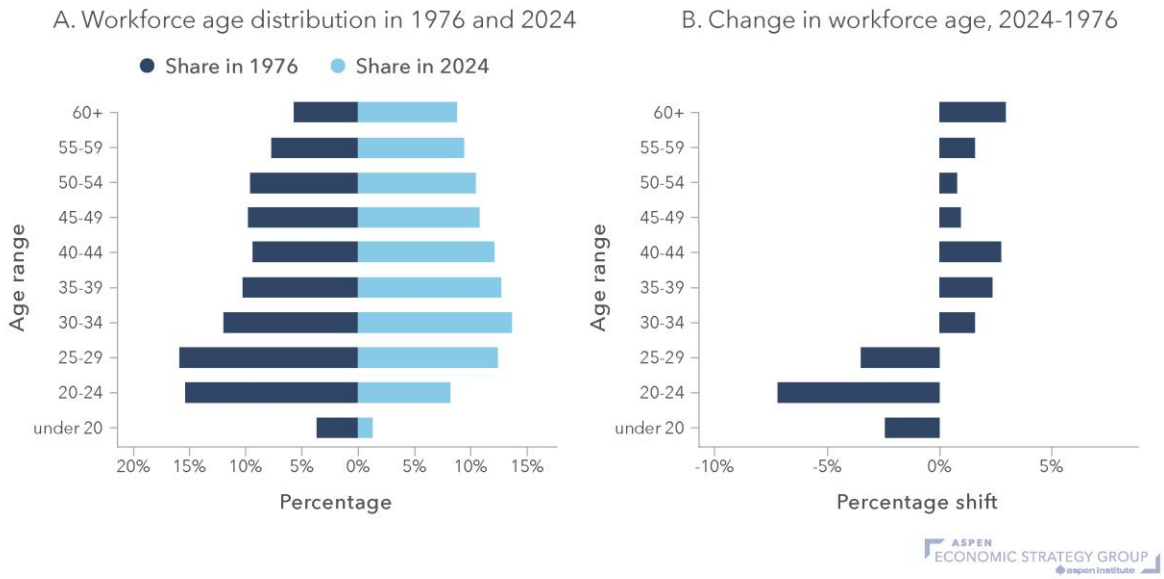
ii. Diverging Fortunes for Older and Younger Workers

Standard economic reasoning provides a useful starting point for thinking about how sustained workforce aging should affect the careers of different generations. If we assume that younger and older workers bring somewhat different but overlapping skills to production, then the relative supply of each group matters for how wages evolve. In this framework, an increase in the supply of older workers should, all else equal, put downward pressure on older workers' wages relative to those of younger workers. Over time, this pressure would be expected to narrow any pay differences between age groups and bring their labor market outcomes closer to balance.

[1] The worker sample we consider in this paper comprises full-time private-sector employees who worked at least 24 weeks during the prior year and earned positive wages.

However, the US experience shows the opposite pattern. CPS data charted in figure 2 indicate that the wage gap between older and younger workers has not narrowed but instead widened sharply since the mid-1970s.[2] The real wages for older workers have trended steadily upward over the whole period: compared with 1976, mean weekly wages for workers over 50 were approximately 20 percent higher in 2024. By contrast, younger workers have seen much weaker gains. Their mean weekly wages fell through the 1980s and early 1990s. By 1995, they were roughly 17 percent below their 1976 level. Afterwards, and especially after 2016, they gradually recovered, exceeding their 1976 level for the first time in 2019. Even after accounting for this recent growth, mean weekly wages for under-30 workers in 2024 were only 5 percent higher than in 1976, falling short of the 20 percent gain experienced by older workers.

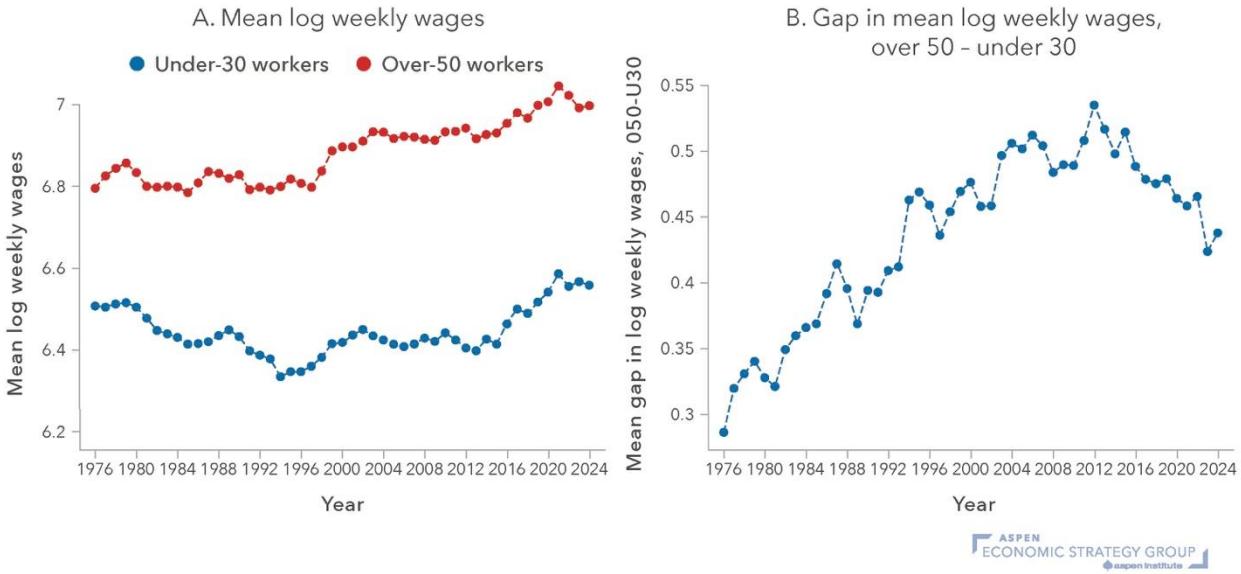
Figure 1. Workforce age, 1976 vs. 2024



Notes: Panel A shows the age distribution of workers in the United States in the first and last sample years: 1976 and 2024. The bars report the share of full-time private-sector employment accounted for by workers in each age group. Panel B plots the change in these shares between 1976 and 2024. The sample includes full-time private-sector employees who worked at least 24 weeks during the prior year and earned positive wages. It includes workers between 16 and 65 years old. Statistics are weighted using CPS weights. Source: IPUMS CPS (Flood et al. 2024), authors' calculations.

[2] All wages used for this analysis are expressed in real terms using the non-seasonally-adjusted consumer price index for all urban consumers (CPI-U). Data on this deflator are available for download on the website of the US Bureau of Labor Statistics: https://data.bls.gov/timeseries/CUUR0000SA0.

Figure 2. Wage gap between older and younger workers

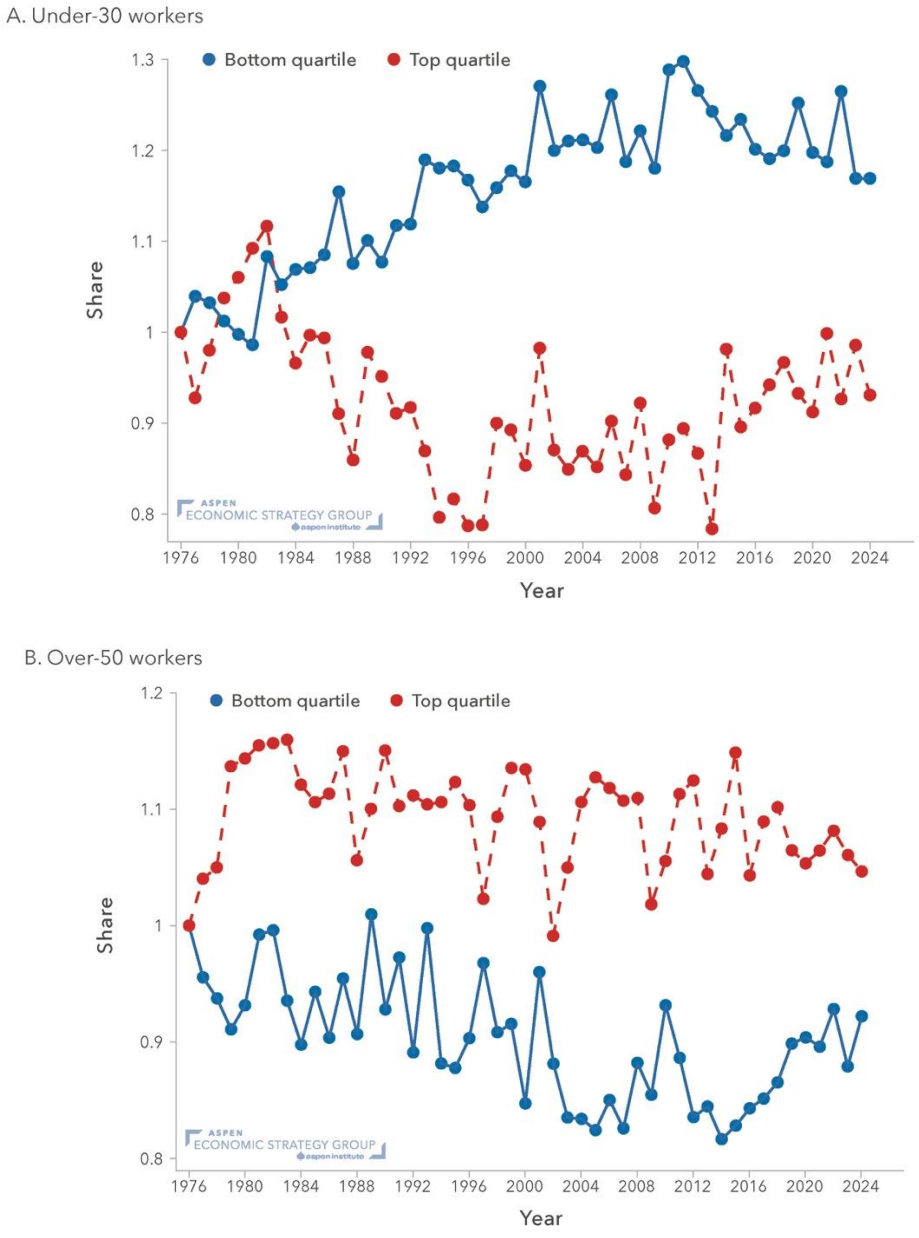


Notes: Panel A shows the mean log weekly wages of workers below 30 years old and above 50 years old. Panel B computes the difference in mean log weekly wages between the two age groups. The sample includes full-time private-sector employees who worked at least 24 weeks during the prior year and earned positive wages. Statistics are weighted using CPS weights. Source: IPUMS CPS (Flood et al. 2024), authors' calculations.

These patterns are easier to see when we look directly at the wage difference between the two groups. In the late 1970s, workers over 50 earned roughly 35 percent more per week than workers under 30. Over the following four decades, this gap widened steadily, reaching a peak in the early 2010s, when older workers earned about 55 percent more. It has narrowed somewhat in the last decade, as the oldest baby boomers have begun to retire and leave the very top of the wage distribution, but even in 2024, older workers still earned 47 percent more per week than younger workers on average. And because working lives are now longer, with many employees remaining in senior roles well into their late sixties, there is little reason to expect this pay gap to return to the more modest levels observed in the 1970s without further intervention from firms or policymakers.

There are two additional pieces of evidence that describe how lopsided the career outcomes of younger and older workers have become over the past five decades. First, figure 3 shows that, over time, younger workers have become considerably more likely than their 1970s counterparts to be in the bottom quarter of the wage distribution and less likely to be in the top quarter. For workers over 50, the pattern is broadly reversed. Relative to 1976, their probability of being in the bottom quartile has gradually fallen, reaching around 15–17 percent below its baseline level during the 2010s, while their probability of being in the top quartile has typically been between 5 and 15 percent higher.

Figure 3. Representation in pay quartiles

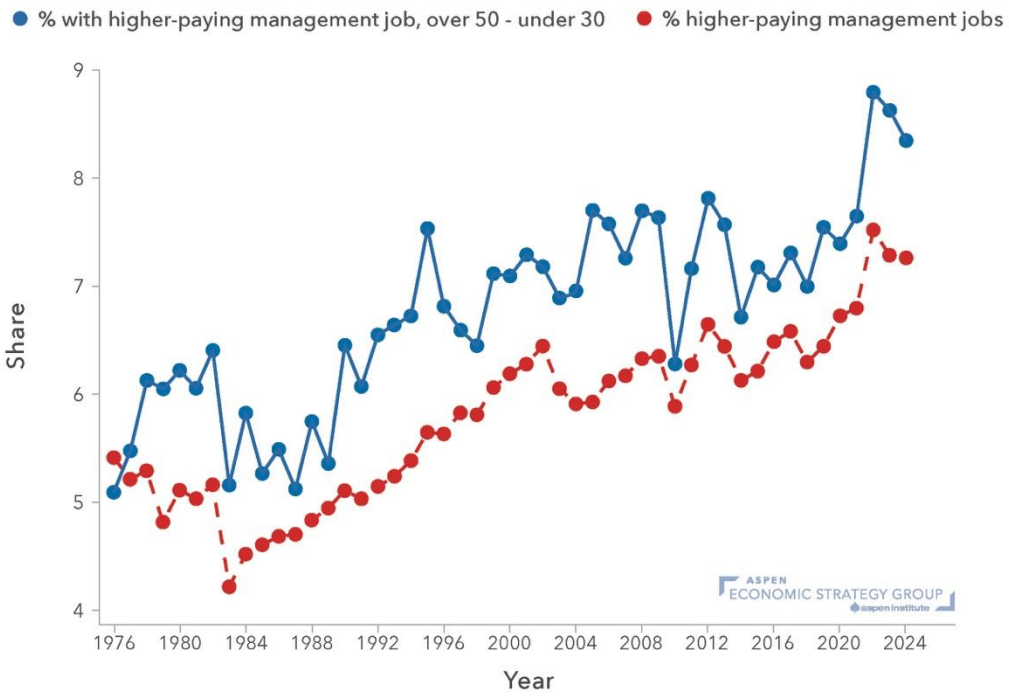


Notes: Panel A shows the probability of workers under 30 years old being in the top and bottom quartiles of the pay distribution in each year between 1976 and 2024. Probability = 1 in 1976. Panel B shows the same probability for workers over 50 years old. The sample includes full-time private-sector employees who worked at least 24 weeks during the prior year and earned positive wages. Statistics are weighted using CPS weights. Source: IPUMS CPS (Flood et al. 2024), authors' calculations.

Second, older workers have pulled further ahead of younger workers in access to desirable, higher-paying managerial jobs, as displayed in figure 4. In the mid-1970s, workers over 50 were about 5 percentage points more likely than workers under 30 to be employed in management occupations in the top quarter of the wage distribution. By 2024, this gap had widened to almost 8.3 percentage points. Over the same period, these higher-paying managerial roles grew from just over 5 percent to a little more than 7 percent of full-time private-sector jobs. Therefore, the inability of younger workers to capture a larger share of these positions was not simply due to a shrinking number of these career opportunities.

In conclusion, at a time when their numbers in the labor force were rising dramatically, older workers increasingly occupied higher-paying jobs and leadership positions. Younger workers, by contrast, faced declining representation at the top and limited access to managerial pathways. Bianchi and Paradisi (2024) show that these patterns are common to most high-income economies, rather than being unique to the United States.

Figure 4. Share of managerial positions



Notes: This figure shows two variables. First: the difference between over-50 and under-30 workers in their probability of holding higher-paying managerial jobs. These jobs are defined as occupations with SOC (Standard Occupational Classification) code 11 and in the top quartile of the pay distribution. Second: the share of higher-paying managerial jobs in the economy. The sample includes full-time private-sector employees who worked at least 24 weeks during the prior year and earned positive wages. Statistics are weighted using CPS weights. Source: IPUMS CPS (Flood et al. 2024), authors' calculations.

iii. Generational Congestion

The evidence reviewed so far points to a striking conclusion: Workforce aging is not necessarily negative for firms. In the US labor market, where employment is largely at will, companies could readily adjust if older workers were unproductive. They could reduce their ranks, replace them with younger hires, or limit their wage growth. But that is not what we see. Instead, firms appear to find value in retaining and rewarding older workers. Over recent decades, older employees have not only stayed in the labor force longer, but they have also continued to enjoy rising wages and better access to key jobs within firms.

From the perspective of firms, the increased availability of experienced employees can therefore be a clear net positive. It expands the pool of workers who can take on decision-making roles, manage teams, and provide leadership continuity. For older workers themselves, the benefits are obvious: longer and more rewarding careers, greater financial security, and more opportunities to leverage accumulated expertise. This state of affairs raises an important question: Why do these gains for older workers seem to come at the expense of younger ones?

The main answer that emerges from our own research is the existence of congestion effects. In firms where job creation has not kept pace with longer careers and the rising supply of older workers—a situation that describes many mature firms in high-income economies—workforce aging, especially at the upper rungs of the hierarchy, can slow the advancement of younger cohorts. The pace at which young workers move into higher-paid roles and experience wage growth slows when internal promotion channels become more congested because firms cannot create new managerial or leadership slots at the rate needed to absorb both older employees staying longer and younger employees seeking promotion. The result is that younger workers face delayed progression, slower wage growth, and fewer chances to reach the top.

One of the clearest pieces of evidence on these dynamics in the United States comes from Mohnen (2025). This study on the retirement slowdown that took place between 1980 and 2017 shows that the lengthening of the working careers of older Americans changed the quality of the jobs that younger workers obtained. In commuting zones where fewer older workers retired, younger workers were less likely to secure high-skill and especially managerial positions, and more likely to begin their careers in low-skill jobs. They also earned lower wages and experienced less job mobility.

The evidence on these congestion effects is not limited to the United States. In fact, the availability of rich employer–employee data in many European countries has allowed for even more detailed analyses. Our own research (Bianchi et al. 2023) provides direct evidence of how workforce aging reshapes careers inside firms. Drawing on Italian administrative records and an unexpected pension reform, the study shows that when older workers extend their tenure, they can alter the internal dynamics of promotion. By occupying senior slots for longer, they reduce

the chances that younger colleagues can advance, leading to slower wage growth and weaker career trajectories for the cohorts behind them. The effects are only present in firms with limited opportunities for expansion, where the pace of promotions cannot keep up with the increased retention of older staff. The patterns observed in Italy are compatible with those documented in other high-income economies, underscoring that career congestion from workforce aging is a structural feature of advanced labor markets rather than a country-specific anomaly (Bianchi and Paradisi 2024).

More recent work by Ferrari et al. (2025) extends this line of inquiry to the Netherlands, exploiting a reform that gradually raised the statutory retirement age. Their analysis, based on monthly firm-level data, shows that retirement delays caused firms to postpone hiring and significantly curtailed the career progressions of coworkers, particularly younger workers and women. They further demonstrate that the additional hours worked by older employees were almost entirely offset by reductions in hours and earnings for other workers, highlighting that the costs of longer careers at the top are often borne by those lower down the ladder.

One could argue that slower career progression would be less concerning if lifetime earnings remained stable or even increased. In that view, workers would simply need to wait longer to realize the full returns from their careers. Yet this state of affairs is not what the evidence shows. Research demonstrates that lifetime earnings have declined for more recent US male cohorts (Guvenen et al. 2022).[3] The authors attribute this pattern primarily to more recent male cohorts entering the labor market with lower earnings and never fully catching up in later career stages.

Even if lifetime income had increased, the deferral of career rewards to much later in life can carry serious implications. Workers cannot easily borrow against the promise of future wages to finance present needs. Delayed earnings make it harder to purchase homes, invest in further education, or start families during prime years, when these decisions are most consequential. In this sense, the congestion effects created by workforce aging can extend well beyond careers inside firms, shaping key life choices and amplifying intergenerational inequalities.

While congestion effects provide one important explanation, economic research has also presented other accounts of why older workers have advanced even as their numbers have increased. These focus on how the content of work and the structure of jobs have evolved in ways that tend to favor experience.

Research shows that jobs requiring open-ended judgment and decision-making have expanded dramatically, rising from just 6 percent of employment in 1960 to more than one-third by 2018

[3] In this paper, the baseline sample is restricted to men with persistent and significant attachment to the labor market, defined as being observed every year between ages 25 and 55 and meeting two earnings-based criteria: annual earnings above a year-specific minimum threshold in at least 15 of the 31 years from 25 to 55 years old, and total lifetime earnings above a cohort-specific minimum threshold.

(Deming 2021). These kinds of tasks draw heavily on accumulated knowledge and the ability to navigate uncertainty, which are skills that typically improve with age. As a result, the age of peak earnings has shifted upward, from the late thirties in the 1960s to the mid-fifties today. As work has become more centered on problem-solving and leadership rather than routine execution, the relative advantage of older, more experienced workers has grown.

A complementary line of research looks more directly at the age-friendliness of occupations. Acemoglu et al. (2022) develop an age-friendliness index capturing whether jobs involve lower physical strain, more autonomy and flexibility, a healthier and safer work environment, better working conditions, and more on-the-job recognition. They show that between 1990 and 2020, nearly three-quarters of US occupations became more age-friendly, with employment in such jobs rising by close to 50 million.

This evolution aligns with broader structural shifts in the economy. As Kerwin Charles et al. (2018) show, the US has experienced a massive decline in manufacturing employment since 2000—5.5 million jobs lost between 2000 and 2017—even as manufacturing output remained stable or grew. Deindustrialization eliminated many physically demanding roles that had long employed younger, less educated workers, while the expanding sectors of the economy (finance, healthcare, business services) offered jobs that were less physically taxing and more compatible with the skills and preferences of older employees.

Taken together, this research suggests that changes in both the task content of work and the sectoral composition of the economy have systematically increased employer demand for older workers.

C. Implications for Firms and the Economy

Addressing these dynamics is inherently complex. At its core, the decline in opportunities for younger workers is closely connected to a long-run fall in US business dynamism. When fewer new firms are created and existing firms age, there are fewer expanding businesses, and hence fewer newly created positions, to relieve the congestion in firms' hierarchies created by an older workforce. Using census microdata, Decker et al. (2014) shows that the startup rate in the United States has fallen markedly since the late 1980s. Consequently, the share of employment and job creation accounted for by firms aged five years or less has substantially dropped over the past forty years. Recent research argues that a substantial share of this trend has demographic roots (Karahan et al. 2024): The sharp slowdown in labor supply growth generated by lower fertility rates can explain between roughly one-third and one-half of the decline in the startup rate.

Then, the most straightforward solution would be to reignite business dynamism and firm growth, since faster expansion would create more opportunities for promotion while still making full use of the experience of older employees. This growth could come from faster gains in labor

productivity, but US labor productivity is already high by international standards. Therefore, it is probably unrealistic to expect large, rapid increases on this margin. The alternative path is to spur firm growth through increases in the productivity of intangible capital, with the most likely candidate being the adoption of artificial intelligence and related technologies. However, the impact of AI remains uncertain: It may complement labor and expand opportunities, but it may also replace tasks in ways that further reduce career progression for younger workers. In that case, technological change could increase firm productivity while reinforcing or even deepening the duality of fortunes described in this paper.

Moving beyond broad growth policies, the alternative is to consider measures targeted more directly at the challenges of an aging workforce. One group of policies aims to reduce the number of older workers within firms. After all, the gradual retirement of the baby boom generation has been associated with some modest improvements in younger workers' prospects, so it is intuitive to think that encouraging earlier exits could help.

For example, voluntary retirement programs could ease congestion by creating room for younger workers. Such initiatives can indeed open slots in firms' hierarchies, but they do not come without drawbacks. At their core, these programs are designed to be attractive to the most productive older employees: those whose high earnings make the buyouts or subsidies worthwhile, and who are often well placed to find employment elsewhere. In practice, this approach means firms risk losing exactly the workers they value most: their most experienced and capable employees.

Mandatory retirement policies represent an even more heavy-handed alternative. While they would certainly create openings for younger employees, they do so by imposing a one-size-fits-all rule that ignores differences in health, productivity, and financial readiness among older workers. Such policies risk forcing out highly effective employees solely on the basis of age, while penalizing those who may need or wish to remain in the labor force longer. For these reasons, most high-income economies have largely moved away from mandatory retirement, and it is difficult to view such measures as a viable response to the challenges of workforce aging.[4]

A third set of proposals moves in the opposite direction: Rather than reducing the number of older workers, governments can try to increase the number of younger workers inside firms, for example, by subsidizing youth hiring and promotion. Evidence from Sweden shows that such subsidies can be effective in raising youth employment (Saez et al. 2019; 2021). However, they can have important drawbacks. In firms that are not expanding or are growing slowly, these incentives may operate through displacement rather than net job creation, effectively pushing

[4] In the United States, the Age Discrimination in Employment Act (ADEA) of 1967 originally allowed mandatory retirement at age 65, but a 1986 amendment abolished compulsory retirement for most workers. Today, mandatory retirement is largely prohibited, with exceptions only in a few occupations (such as airline pilots, certain public-safety jobs, and some high-level executives with specific pension arrangements).

experienced older workers out of the labor force earlier than they would prefer. Moreover, such policies may alter the quality of job matches for younger workers. If less productive firms become more reliant on subsidies, they will have stronger incentives to hire and retain younger employees, potentially steering them toward starting their careers in firms that are weaker than those they might otherwise have joined. Because early career conditions can have long-lasting effects on wages and skill development (Arellano-Bover 2022), these distortions could inadvertently undermine the very cohorts they are designed to help.

A more promising lever is to change what happens inside firms when older workers stay longer. A rational response to workforce aging would be to invest more in internal training and knowledge transfer from older to younger employees. Longer careers can give firms a short-term boost because they retain a large stock of experience on the payroll. However, a potential risk in the longer term is that slower promotions stunt the skill accumulation of younger workers, leaving them less prepared to make good decisions when their turn to lead comes. Instead of trying to solve this tension by pushing older workers out or artificially subsidizing youth slots, firms can treat senior employees as a training asset. Well-designed mentoring and internal training programs can allow younger workers to accumulate skills, networks, and tacit knowledge even when internal promotions are temporarily blocked. Importantly, survey and administrative data suggest that many employers are currently moving in the opposite direction, with the incidence of employer-paid training in the United States in decline since at least the early years of the first decade of the 2000s (Waddoups 2016; Fife et al. 2020). In light of population aging, this declining trend in on-the-job training is likely to become increasingly detrimental for both firms and younger workers.

D. Conclusion

The aging of the workforce is already posing difficult challenges to firms. The central task for firms and policymakers is to ensure that the benefits of longer and more productive careers for older workers do not come at the expense of the dynamism and opportunities that younger workers need to thrive. Striking a balance between experience and turnover will determine whether workforce aging becomes a source of shared prosperity or a driver of deeper generational divides.

References

Acemoglu, Daron, Nicolaj Søndergaard Mühlbach, and Andrew J. Scott. 2022. "The Rise of Age-Friendly Jobs." *Journal of the Economics of Ageing* 23: 100416.

Arellano-Bover, Jaime. 2022. "The Effect of Labor Market Conditions at Entry on Workers' Long-Term Skills." *Review of Economics and Statistics* 104, no. 5: 1028–45.

Bianchi, Nicola, Giulia Bovini, Jin Li, Matteo Paradisi, and Michael Powell. 2023. "Career Spillovers in Internal Labor Markets." *Review of Economic Studies* 90, no. 4: 1800–1831.

Bianchi, Nicola, and Matteo Paradisi. 2024, April. "Countries for Old Men: An Analysis of the Age Pay Gap." Working paper no. 32340. National Bureau of Economic Research. https://www.nber.org/papers/w32340.

Charles, Kerwin Kofi, Erik Hurst, and Mariel Schwartz. 2018. "The Transformation of Manufacturing and the Decline in U.S. Employment." Working paper no. 24468. National Bureau of Economic Research. https://www.nber.org/papers/w24468.

Decker, Ryan, John Haltiwanger, Ron Jarmin, and Javier Miranda. 2014. "The Role of Entrepreneurship in US Job Creation and Economic Dynamism." *Journal of Economic Perspectives* 28, no. 3: 3–24.

Deming, David J. 2021. "The Growing Importance of Decision-Making on the Job." Working paper no. 28733. National Bureau of Economic Research. https://www.nber.org/system/files/working_papers/w28733/w28733.pdf.

Ferrari, Irene, Jan Kabátek, and Todd Morris. 2025. "Workplace Spillovers and Welfare Implications of Delaying Retirements." IZA Discussion Paper no. 16745. Institute of Labor Economics.

Fife, Anna, Hillary Greenberg, and Alastair Fitzpayne. 2020. "Supporting Employer-Provided Training in the COVID-19 Recovery." Policy brief. Aspen Institute Future of Work Initiative.

Flood, Sarah, Miriam King, Renae Rodgers, Steven Ruggles, J. Robert Warren, Daniel Backman, et al. 2024. IPUMS CPS: Version 12.0 [dataset]. Minneapolis, MN.

Guvenen, Fatih, Greg Kaplan, Jae Song, and Justin Weidner. 2022. "Lifetime Earnings in the United States over Six Decades." *American Economic Journal: Applied Economics* 14, no. 4: 446–79.

Karahan, Fatih, Benjamin Pugsley, and Ayşegül Şahin. 2024. "Demographic Origins of the Start-Up Deficit." *American Economic Review* 114, no. 7: 1986–2023.

Mohnen, Paul. 2025. "The Impact of the Retirement Slowdown on the U.S. Youth Labor Market." *Journal of Labor Economics* 43, no. 1: 203–46.

Saez, Emmanuel, Benjamin Schoefer, and David Seim. 2019. "Payroll Taxes, Firm Behavior, and Rent Sharing: Evidence from a Young Workers' Tax Cut in Sweden." *American Economic Review* 109, no. 5: 1717–63.

Saez, Emmanuel, Benjamin Schoefer, and David Seim. 2021. "Hysteresis from Employer Subsidies." *Journal of Public Economics* 200: 104459.

Waddoups, C. Jeffrey. 2016, March. "Did Employers in the United States Back Away from Skills Training During the Early 2000s?" *ILR Review* 69, no. 2: 405–34.