#### The Business Case for Older Workers

Employers are always in need of experienced, well-trained, and productive workers. And this need is particularly acute today, when the economy is booming and many jobs are going unfilled due to labor shortages. One solution for firms is to increase their reliance on the large and growing pool of workers ages 55 and over (see Figure 1), many of whom are seeking to lengthen their careers both because they enjoy working and they need to shore up their retirement security. Of course, the abundance of older workers is not an argument for retaining and hiring them. If they were sickly, uneducated, disengaged, and wary of computers, they would not make good employees in many settings. Fortunately, the business case for older workers is compelling.

Older workers today are healthier, better educated, and more computer savvy than in the past and, in terms of these basic characteristics, look very much like younger workers. In addition, they bring more to the job in terms of skills, experience, and professional contacts. Finally, they are more likely to remain with their employer longer, and longer tenure enhances productivity and increases profitability for the employer. All of these benefits more than offset any remaining cost differentials between older and younger workers. The following discussion takes a closer look at each of these features of older workers.



Figure 1. U.S. Working-age Population Is Getting Older, Population Pyramid 2010 and 2030

Source: U.S. Census Bureau, Population Division, Main Projections Series for the United States (2017).

### **Older Workers Increasingly Look Like their Younger Counterparts**

The percentages of workers in good health, with a college degree or more, and who use computers at home are very similar for workers ages 30-35 and those 55-60 (see Figure 2).





Notes: College degree includes 2-year associate's degree. Computer use data are from 2010. *Source*: U.S. Census Bureau, *Current Population Survey* (CPS) (2010 and 2017).

### Health

The improvements in longevity and health have been dramatic. As shown in Figure 3, at 55 both men and women can expect to live for many years -27 years for men and 30 years for women. Men have gained 4.7 years in life expectancy over the last four decades, while women have gained 3.4 years. These gains in life expectancy have been accompanied by gains in overall health. By 2017, 91 percent of workers ages 55-60 reported that their health was "good," "very good" or "excellent," only slightly below the 96 percent for workers ages 30-35 (as shown in Figure 2).<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> For other studies that have found similar results see, Irving et al. (2018).



Figure 3. Life Expectancy Increases Reflect the Improved Health of Older Workers

### Education

Over the twentieth century, each generation of workers received more education than the previous one. As a result, younger workers have maintained a consistent educational advantage over older workers. However, increases in schooling among younger cohorts of males slowed dramatically after the mid-1970s. As a result, when male Baby Boomers entered the ranks of the aged, the educational advantage of the young nearly vanished. In 2017, the percentage of male workers with a college degree was 48 percent for those ages 30-35 and 45 percent for those ages 55-60. Some gap still exists for women (60 percent versus 49 percent), because each generation of women continues to get more education. This gap, however, is narrowing and will also eventually disappear.<sup>2</sup> Overall, 53 percent of those ages 30-35 have a degree compared to 47 percent of those ages 55-60 (as shown in Figure 2).<sup>3</sup>

# Comfort with Computers

The time has long passed when older workers were cowed by computers. The share of workers using computers at home is now identical for older and younger workers at 84 percent (see

Source: U.S. Social Security Administration (2017a, b).

<sup>&</sup>lt;sup>2</sup> For more details on trends in education patterns for workers of different ages, see Burtless (2013).

<sup>&</sup>lt;sup>3</sup> The same overall pattern is evident no matter how college achievement is measured. The numbers cited above refer to having completed either a two-year associate's degree at a community college or a four-year bachelor's degree. Limiting the definition to a bachelor's degree, the relevant numbers are 42 percent for those ages 30-35 and 35 percent for those ages 55-60. Expanding the definition to at least some college (which includes those who do not complete any degree) yields 69 percent for young workers and 63 percent for older workers. As above, the remaining gap reflects the increasing percentages of young women going to college.

Figure 2). And older workers are rapidly catching up to younger workers on several other key measures of technology usage, including ownership of smartphones and tablets and use of social media. For example, between 2011 and 2018, the percentage of Baby Boomers with a smartphone surged from 25 percent to 67 percent.<sup>4</sup> Another indication of the technology skills of older workers comes from a study of computer programmer ratings in an online discussion forum, with ratings based on factors such as subject matter and expertise and peer respect. The results showed a positive relationship between age and reputation extending well into a programmer's 50s.<sup>5</sup>

# Older Workers Bring a Lifetime of Experience to the Job

While older workers are roughly equal to their younger counterparts in terms of the human capital that they bring to a job, their performance matches and often exceeds younger workers due to their accumulated job-specific skills and experience.

Many work-related abilities require years to fully develop and hone. These include specialized skills associated with craftspeople, musicians, or artists who create high-quality goods or experiences. Similarly, accumulated knowledge allows salespeople to amass an encyclopedic command of their products, analysts to recognize patterns within masses of data, and manufacturing workers to anticipate and avoid mistakes in the production process. Older workers have networks and contacts that allow them to quickly reach out to the people needed to get a job done, secure funding for a new venture, or deliver a product to a target market through established distribution channels.<sup>6</sup>

Older workers are also known for having a strong work ethic that includes reliability, concentration, and motivation. A small business owner in New York feels that "older workers take the job more seriously."<sup>7</sup> Older workers often provide superior service to customers, more easily develop a rapport with co-workers of all ages, and engender trust among their supervisors. Of particular value to a company is the ability of older workers – with their storehouse of knowledge and people skills – to train younger employees, transferring their wisdom of how to succeed on the job.

Despite stereotypes that performance generally declines with age as employees slow down or burn out, hard data provide no evidence for such concerns. In fact, some extensive meta-studies of employee productivity by age show a small, but statistically significant, positive correlation between age and performance using objective measures of production output.<sup>8</sup>

Even in areas, like manufacturing, where the natural physical toll of aging might suggest a decline in job performance, older workers can maintain their productivity. For example, a study

<sup>&</sup>lt;sup>4</sup> Jiang (2018). A similar pattern is documented in Aon Hewitt (2015).

<sup>&</sup>lt;sup>5</sup> Morrison and Murphy-Hill (2013).

<sup>&</sup>lt;sup>6</sup> Finkelstein and Block (2015) provide examples of many skills discussed here from interviews with small employers in New York City. Aon Hewitt (2015) offers survey evidence from large firms and broader studies. <sup>7</sup> Finkelstein and Block (2015).

<sup>&</sup>lt;sup>8</sup>See Waldman and Avolio (1986) and Ng and Feldman (2008). Two other meta studies – McEovy and Casio (1989) and Sturman (2003) – also found a positive correlation between age and productivity, but there correlation was not statistically significant.

of a Mercedes Benz assembly facility suggests that workers can continue to perform well by improving on key metrics as they age. Specifically, the study finds that older workers make fewer severe errors on the assembly line (see Figure 4). While this study was conducted at one plant in Germany, the authors note that Mercedes Benz has assembly plants around the world (including the United States), and they believe that the results are generalizable to these plants as well as other similar large-scale manufacturing facilities.<sup>9</sup>



Figure 4. Severity of Errors Made on a Mercedes Assembly Line Declines with Age

Finally, considerable evidence suggests that firm productivity is enhanced by using mixed-age teams. An analysis of German data found that such collaboration effectively melds the disparate talents of older and younger workers.<sup>10</sup> Similarly, with respect to U.S. workers, the *Wall Street Journal* has highlighted how the pairing of older workers and younger workers helps drive innovation by combining fresh ideas with the necessary know-how to bring the idea to fruition. For example, the software industry, long known for lionizing the whiz-kid inventor, relies on more seasoned employees to nurture an innovation into a viable and profitable product.<sup>11</sup>

#### **Older Workers Stay with Their Employer Longer**

Two aspects of turnover are important – avoiding unanticipated turnover and retaining experienced personnel.

Note: Error severity is defined on a scale, with more costly errors assigned a higher score. *Source:* Borsch-Supan and Weiss (2013).

<sup>&</sup>lt;sup>9</sup> Borsch-Supan and Weiss (2013).

<sup>&</sup>lt;sup>10</sup> Zwick and Göbel (2013).

<sup>&</sup>lt;sup>11</sup> Wadhwa (2013).

All employers experience turnover. Anticipated turnover often comes in the form of retirement. Retiring employees tend to give at least three-to-six-months' notice, which allows the employer time to decide who will take on the role, bring the new person on board, and have the retiring employee transfer knowledge to the new employee. Anticipated turnover is simply part of running a business. Unanticipated turnover, in contrast, can create significant difficulties. If the employee resigns with little notice, the employer is left scrambling to find a replacement and train the new employee. Studies show that for positions earning \$75,000 or less, which covers 9 in 10 U.S. workers, the typical turnover cost is equivalent to about one-fifth of a workers' annual salary.<sup>12</sup>

On the assumption that departures within the worker's first two years at the firm are more likely to fall into the unanticipated category, Figure 5 suggests that older workers are more likely to remain with their employer and therefore less likely to leave abruptly than younger workers.



Figure 5. A Higher Percentage of Older Hires Remain with Employer in the Next Two Years

Source: Authors' calculations from University of Michigan, Panel Study on Income Dynamics (PSID) (2005-2007).

The other aspect of tenure is retaining workers. Greater tenure produces a number of significant benefits to customers and therefore to employers. Workers tend to improve performance over time – a learning-by-doing effect. In addition, the longer a staff stays together, the better they work as a team. As indicated above, employees develop a better understanding of the needs of their customers and have greater knowledge about the resources available to meet these needs. At the same time, customers are more willing to ask questions and seek the assistance of employees they know and trust. Recent data from a large office supply retailer confirm the value

<sup>&</sup>lt;sup>12</sup> For more on the costs associated with turnover, see Boushey and Glyn (2012).

of tenure: stores with more long-tenured employees have more satisfied customers and stores with more satisfied customers have higher rates of profit growth (see Figures 6a and 6b).



Figure 6b. Stores with Higher Customer Satisfaction Have Higher Profit Growth



Source: John Larson and Company, Analysis of Survey Data from a Large Office Supply Retailer (2018).

It is well-known that older workers have higher average tenure than their younger counterparts. Figure 7 shows that the average 30-35 year old has been with his employer for 4.4 years, while the comparable number for the average 55-60 year old is 12.7 years.



Figure 7. Older Workers Have Much Longer Average Tenure than Younger Workers, 2015

In part, this pattern of longer tenure for older workers reflects the outcome of labor market dynamics, whereby workers just out of school move from job to job trying to find the best fit before they settle in. Thus, the average tenure for the 30-35 year old, which incorporates this early career exploration, says little about how long a newly hired 30-35 year old is likely to stay. A survey that follows the same people over time for the period 2005-2015, however, shows that the probability of a worker being on the job after four years is higher for the older than younger worker and the same as younger workers after ten years (see Figure 8).

Source: PSID (2015).



Figure 8. Older Hires at Least as Likely as Younger Workers to Be on the Job over the Next 10 Years, 2005-2015

Source: Authors' calculations from the PSID (2005-2015).

In short, older workers not only bring more to the job than younger workers but also come out strong on the stability front. The final question is the extent to which the strengths of older workers offset any increase in costs.

### The Issue of Costs

Contrary to common perceptions, today's older workers do not cost significantly more than younger workers. This convergence reflects a number of trends, including a move among large employers to performance-based – rather than tenure-based – compensation, the shift from traditional defined benefit pensions to 401(k)s, and a narrowing of the difference in health care costs between older workers and younger workers.

### Wages

For male workers with college degrees, the ratio of wages for those ages 55-60 relative to those ages 30-35 has narrowed substantially over the last 40 years (see Figure 9). Part of the narrowing between older and younger workers is due to an increasing number of large employers shifting to compensation structures based at least in part on performance. In 1992, 61 percent of large employers surveyed offered such performance-based pay; by 2012 the share had jumped to 90 percent.<sup>13</sup> These programs, which are designed to reward employers who meet set goals or measures, level the playing field for workers of all ages.

<sup>&</sup>lt;sup>13</sup> Aon Hewitt (2015).



Figure 9. The Wages of Men Ages 55-60 Relative to Men Ages 30-35 with College Degrees Has Declined, 1980-2017

Note: The ratio above is the median wage for men ages 55-60 to the median wage for men ages 30-35, conditional on having a college degree. *Source*: Authors' calculations from CPS (1980-2017).

The extent to which wages continue to be higher for older workers can be explained by the fact that older workers are doing harder jobs. A study from the St. Louis Federal Reserve shows that, as workers age, they take on jobs that require more intensive social, verbal, and math skills (see Figure 10).<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> Wiczer (2015).

Figure 10. Older Workers Take on Jobs with Higher Skill Requirements



Note: The skill measures are based on a ranking system by occupation in which an occupation requiring the median skill level is assigned a score of 0.5. For more details on this procedure, see Guvenen et al. (2018). *Source:* Wiczer (2015).

### Costs of Retirement Plans

The shift from defined benefit plans to 401(k)s – as shown in Figure 12 – has reduced an element of compensation in which costs rose sharply with age and service to one where the employer's cost remains a fixed percentage of wages across the age spectrum. The reason is that, in defined benefit plans, the average accrual rate – i.e., the increase in the present discounted value of pension benefits as a percentage of earnings – rises sharply with age. The increase is due to the multiplier effect inherent in the traditional defined benefit formula.

For example, assume that the formula provides 1.5 percent of final salary for each year of service and a 54-year-old with 20 years of service works for another year. That worker's replacement rate will increase from 30 to 31.5 percent, increasing the value of all the previously earned pension credits. For this reason, defined benefit pension accruals rise much faster than salary, making the retention of older workers very expensive. Defined benefit plans also make *hiring* older workers costly. While both the older and younger new hires will be entitled to the same benefits when they retire, the older worker can retire in five years at age 60 while the younger worker has to wait 35 years. The fewer years of discounting means a much larger required contribution to the pension plan for the older worker, making the hiring of older workers in firms with traditional defined benefit plans very expensive. In contrast, with 401(k) plans, employer costs remain constant as a share of wages at the level of the employer matching contribution, regardless of age.



Figure 11. Retirement Plan Coverage Has Shifted from Defined Benefit to Defined Contribution

*Source:* Authors' calculations based on U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (1983, 1998, and 2016).

# Health Care Costs

Health care costs are rising and, therefore, employer-provided health insurance is becoming an even more expensive component of total compensation. While older workers do cost more than younger ones, a 2015 study of large employers found this cost gap to be shrinking. Between 2003 and 2011, the average rate of growth in health care costs – including dependents – was 5.7 percent for older employees compared to 8.0 percent for younger employees (see Table 1).

Table 1. Average Cost of Health Care Claims Paid by Large Employers, Per Household by Age of Covered Employee, 2003-2011

	2003	2011	Average annual increase
Ages 30-34	\$3,202	\$5,926	8.0%
Ages 55-59	6,593	10,273	5.7

Source: Aon Hewitt (2015).

The slowdown in health cost growth for older workers reflects the sharp decline in deaths due to heart disease as well to some improvement on the cancer and stroke fronts (See Figure 13). The control of heart disease through statins and other preventative measures significantly lower the health risks – and thereby the insurance costs – of older workers.



Figure 12. Death Rates for Heart Disease, Cancer, and Stroke Have Declined, 1980-2015

Source: Tejada et al. (2017).

### Conclusion

In summary, hiring older workers makes strong economic sense. This view came through clearly in a decade old survey on "Employer Attitudes Towards Older Workers" by the Center for Retirement Research at Boston College.<sup>15</sup> In the survey, 56 percent of respondents characterized older white-collar workers as more productive, while only 6 percent characterized them as less productive than younger workers. While the research found perceived added costs of older workers in the workplace, the vast majority of respondents stated that older workers are "as attractive" or "more attractive" than younger workers, acknowledging that employers generally perceive older workers as matching or exceeding younger workers in productivity.

Since that survey was conducted, the case for older workers has only grown stronger. They increasingly look like younger workers in terms of health status, education level, and fluency with technology. Their job performance matches and often exceeds that of younger workers. They tend to stay on the job a bit longer than younger workers, making them a reliable option for employers. This greater stability and accumulated experience translates into better service delivery to customers and, ultimately, higher customer satisfaction. This results in higher levels of sales and profit growth. And older workers do not cost significantly more than younger workers due to changes in employer pay practices, the shift to 401(k) plans, and a shrinking gap in health costs between older and younger workers. As the U.S. population continues to age, employers are fortunately finding that an older workforce is a vital ingredient to the success and growth of their own firms and the economy as a whole.

<sup>&</sup>lt;sup>15</sup> Munnell, Sass, and Soto (2006).

#### References

- Aon Hewitt. 2015. "A Business Case for Older Workers Age 50+: A Look at the Value of Experience. Washington, DC: AARP.
- Belbase, Anek and Geoffrey T. Sanzenbacher. 2016. "Cognitive Aging and the Ability to Work." *Issue in Brief* 16-18. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Borsch-Supan, Axel and Matthias Weiss. "Productivity and Age: Evidence from Work Teams at the Assembly Line." Munich, Germany: Munich Center for the Economics of Aging.
- Boushey, Heather and Sarah Jane Glynn. 2012. "There Are Significant Business Costs to Replacing Employees." *Issue in Brief.* Washington, DC: Center for American Progress.
- Burtless, Gary. 2013. "Can Educational Attainment Explain the Rise in Labor Force Participation at Older Ages?" *Issue in Brief* 13-13. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Finkelstein, Ruth and Dorian Block. 2015. "10 Advantages of Retaining and Hiring Older Workers." New York, NY: Columbia University, The Robert N. Butler Aging Center and the Mailman School of Public Health.
- Guvenen, <u>Fatih</u>, <u>Burhanettin Kuruscu</u>, Satoshi Tanaka, and <u>David Wiczer</u>. 2018 (revised). "Multidimensional Skill Mismatch." Working Paper No. 21376. Cambridge, MA: National Bureau of Economic Research.
- Irving, Paul, Rita Beamish, and Arielle Burstein. 2018. "Silver to Gold: The Business of Aging." Santa Montica, CA: Milken Institute Center for the Future of Aging.
- Jiang, JingJing. 2018. "Millennials Stand Out for Their Technology Use, but Older Generations also Embrace Digital Life." Washington, DC: Pew Research Center.
- John Larson and Company. 2018. "Analysis of Survey Data from a Large Office Supply Retailer." Pasadena, CA.
- McEvoy, Glenn M. and Wayne F. Cascio. 1989. "Cumulative Evidence of the Relationship Between Employee Age and Job Performance." *Journal of Applied Psychology* 74(1): 11-17.
- Morrison, Patrick and Emerson Murphy-Hill. 2013. "Is Programming Knowledge Related to Age?" Raleigh, NC: North Carolina State University.
- Munnell, Alicia H., Steven A. Sass, and Mauricio Soto. 2006. *Employer Attitudes Towards Older Workers Survey*. Chestnut Hill, MA: Center for Retirement Research at Boston College.

- Ng, Thomas W. H. and Daniel C. Feldman. 2008. "The Relationship of Age to Ten Dimensions of Job Performance." *Journal of Applied Psychology* 93(2): 392-423.
- Sturman, Michael C. 2003. "Searching for the Inverted U-Shaped Relationship Between Time and Performance: Meta-Analyses of the Experience/Performance, Tenure/Performance, and Age/Performance Relationships." *Journal of Management* 29(5): 609-640.
- Tejada, Vera B., B. Bastian, and E. Arias, et al. 2017. "Mortality Trends in the United States, 1980–2015." Atlanta, GA: CDC, National Center for Health Statistics.
- University of Michigan. *Panel Study of Income Dynamics*, 2005-2015. Public Use Dataset. Ann Arbor, MI.
- U.S. Board of Governors of the Federal Reserve System. *Survey of Consumer Finances*, 1983, 1998, and 2016. Washington, DC.
- U.S. Census Bureau. Current Population Survey, 1980-2017. Washington, DC.
- U.S. Census Bureau, Population Division. *Main Projections Series for the United States*, 2017. Washington, DC.
- U.S. Social Security Administration. 2017a. *The Annual Reports of the Trustees of the Old-Age and Survivors Insurance and Disability Insurance Trust Funds*. Washington, DC.
- U.S. Social Security Administration, Office of the Chief Actuary. 2017b. "Unpublished Data on Historical and Projected Death Rates." Baltimore, MD.
- Wadhwa, Vivek. 2013. "There's No Age Requirement for Innovation." (October 28). New York, NY: *The Wall Street Journal*.
- Waldman, David A. and Bruce J. Avolio. 1986. "A Meta-analysis of Age Differences in Job Performance." *Journal of Applied Psychology* 71(1): 33-38
- Wiczer, David. 2015. "It's the Older Workers Who Have the Job Skills." *On the Economy* series. St. Louis, MO: Federal Reserve Bank of St. Louis.
- Zwick, T. and C. Göbel. 2013. "Are Personnel Measures Effective in Increasing Productivity of Old Workers?" *Labour Economics* 22(C): 80-93.