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HOW ARE EMPLOYERS RESPONDING TO AN AGING WORKFORCE?

Robert L. Clark
Beth M. Ritter

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ABSTRACT

The American population is aging and changes in the population's age structure are leading to an aging of the nation's workforce. In addition, changes to age specific participation rates are exacerbating the aging of the national labor force. An important challenge for firms and organizations is how does workforce aging affect labor costs, productivity and the sustainability of the organization. This paper examines employer responses to workforce aging including changes retirement policies, modification in working conditions, the adoption of phased retirement plans, and reforming other employee benefits.

Robert L. Clark
Poole College of Management
Box 7229
North Carolina State University
Raleigh, NC 27695
and NBER
robert_clark@ncsu.edu

Beth M. Ritter
North Carolina State University
bmritte2@ncsu.edu

The American population is aging and changes in the population's age structure are leading to an aging of the nation's workforce. In addition, changes to age specific participation rates are exacerbating the aging of the national labor force. An important challenge for firms and organizations is how does workforce aging affect labor costs, productivity and the sustainability of the organization. Specifically, what changes do employers need to make in employment and compensation policies in order to minimize adverse effects of an aging workforce and enhance the advantages associated with senior employees?

It is clear that both the population and labor force is aging; however, the aging of the workforce of individual firms and organizations varies considerably across industries and occupations and by firm size. The age structure of an individual organization is a function of past hiring patterns, turnover rates, compensation practices, and employment policies.[1] Thus, concern over an aging workforce and employer responses to aging will differ substantially across industries and occupations. Some firms will be concerned about the possibility of a large number of retirements in a short period resulting in the loss of knowledge and experience and the challenges of replacing retiring workers when the labor force is growing very slowly. In contrast, other organizations may be worried about the growing proportion of their workforce at older ages and that workers are now retiring at older ages. It is important to recognize the diversity across companies and the different challenges they will face in the next decade.

For the past three years, we have been discussing these issues with senior human resource leaders in both the private and public sectors of the economy as well as labor economists in an effort to provide new information on employer concerns about an aging labor force and how companies are modifying employment and compensation practices in response to workforce

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[1] Cantrell and Clark (1982) and Clark and Ghent (2010) illustrate how the age structure of a workforce evolves in response to firm growth and employment policies.

aging. Clark, et al. (2019), Clark and Ritter (2019) and Ritter (2019) describe the findings from three surveys conducted in 2018 and an employer workshop held in 2018. This paper builds on the results from those projects and the new findings from an October 2019 employer workshop.[2] This paper presents trends on the aging of the workforce and discusses how some large employers are responding to preferences of older workers as employees delay retirement along with a comparison of whether economic theories are consistent with employer policies.

I. Aging of the American Workforce

The aging of the population and the labor force in the 21st century is largely due to the post-World War II Baby Boom followed by decades of relatively low birth rates. The age structure of the American population over the past 75 years has reflected the aging of Baby Boomers (born from 1946 to 1964). In 2016, about one of every six Americans was 65 years old or older or 15.4% of the total population. Projections by the U.S. Census Bureau (2017) indicated that the proportion of the population in this age group is expected to reach 20.6% in 2030, thus about one in every five Americans will be 65 and older.

The aging of the U.S. population has altered the age structure of the national labor force. The percentage of the labor force aged 55 or older almost doubled in the last two decades from 12.4% in 1998 to 23.1% in 2018. The U.S. Bureau of Labor Statistics (BLS) projects that this trend will continue so that in 2028, 25.2% of the national workforce will be aged 55 or older (BLS 2019a, Table 3.1) or one in four American workers will be aged 55 or older. The BLS also projects that in 2028, 9.4% of the U.S. labor force will be composed of individuals aged 65 and

[2] The research team held workshops at NBER in November 2018 and October 2019. Participants included senior human resource managers from large firms, governmental HR leaders, and labor economists. The project also included a national survey of HR employees conducted by Willis Towers Watson and a national survey of risk managers conducted by the Enterprise Risk Management Initiative at North Carolina State University.

older. Chart 1 illustrates how the recent growth of the labor force has been dominated by the increase in workers aged 55 and over. Dubina, et al. (2019) discusses the changing of the labor force and the occupations where the incidence of older workers is the highest.

[Chart 1]

During the next 10 years, the growth rate in the number of individuals in the labor force aged 55 or older is projected to be more than 3 times as fast as the growth rate for individuals 25 to 54 (1.4% per year compared to 0.4%). The projected growth rate in individuals 65 to 74 is 4.2% per year and the rate of increase for individuals 75 and older is still higher at 7.4% per year (BLS 2019a, Table 3.1). This aging of the workforce means that organizations must develop policies consistent with an older labor force, including modifying working conditions to accommodate individuals who are working well past the traditional retirement age.

The increasing share of the labor force aged 55 and older is driven, in part, by the aging of the population, which results in a higher percentage of the population at older ages. However, another important component of the aging of the labor force is a substantial increase in the labor force participation rate among older cohorts. The participation rate of individuals aged 55 and older rose from 31.3% in 1998 to 40.0% in 2018 (BLS 2019b, Table 3.3).

Perhaps more interesting is the large and continuing increase in the participation rate of individuals aged 65 and older. For individuals aged 65 to 74, the participation rate rose from 17.7% in 1998 to 27.0% in 2018 and is expected to reach 32.5% in 2028, while the rate for persons 75 and older increased from 4.7% in 1998 to 8.7% in 2018 and is projected to continue to increase to 12.1% by 2028 (BLS 2019b, Table 3.3). Chart 2 shows the increase in participation rates by age over time. The lines illustrate that the participation rate for all ages has declined while the rates for persons 55 and older continue to increase. As a result of these changes in the level of participation by older persons, the median age of the labor force has increased from 38.8 in 1998 to 41.9 in 2018 and further to 42.5 in 2028 (BLS 2019c, Table 3.4).

[Chart 2]

Thus, older workers have become more important to the productive capacity of the nation due to the aging of the population and increasing proportion of older workers who are delaying their departure from the labor force. Throughout the labor force, individuals are seeking to remain working until older ages. This trend reflects delaying retirement from career jobs but also an increase in second careers and bridge jobs in both the public and private sectors of the economy (Quinn, Cahill, and Giandrea 2019). Aging implies that a greater proportion of workers will be age 55 and older, and perhaps more significantly, a greater percentage will be 65 and older. Is the increasing proportion of older workers and the delaying of retirement a concern of industry leaders?

Many companies recognize that their workforce is aging and are developing policies to accommodate older workers and their preferences. Companies appear to follow a continuum of responses to the aging workforce. Company reactions include financial education programs and programs that are designed to support a multi-generational workforce, like flexible work or Health Saving Accounts (HSA's). Manufacturing firms are less likely to offer flexible work policies, but are also offering financial education and retirement counseling for their aging workers. Interventions of companies with larger populations of aging employees include piloting potential new policies and more comprehensive efforts to modify employment and compensation policies to fit the needs and preferences of older workers.

One large company that has responded by developing a comprehensive plan for an aging workforce is Bank of America (BOA) which has developed a detailed plan for older employees and their transition into retirement. An internal BOA survey of 250 employees age 50 and up indicated that 85% of this group wanted to work part-time or reduced hours as they move toward retirement and 91% want to stay connected to the work of the firm. BOA began its response to an aging workforce with a series of new programs and pilots, some of which are shown below.[3]

1. Built a portal specifically for retirees that enabled them to stay connected and participate in various programs. Piloted a retiree network and currently evaluating a launch.
2. Launched a phased retirement for Merrill employees.
3. Piloted a phased retirement for bank employees that was not as utilized.
4. Developed a training program and continuous ongoing education for employees about the value of multi-generational teams and the importance of age inclusion.
5. Implemented a program to address unconscious bias.
6. Nine years ago launched IGEN, Inter-Generational Employee Network, which creates networking, development, mentoring and educational awareness of all generations and the strength they each bring to the workplace.

Biogen is another company whose workforce is aging rapidly. The proportion of the company's workforce over the age of 45 increased from 29% to 38% between 2012 and 2018 (see Chart 3). Despite this aging of its labor force, the Biogen workforce remains younger that the US workforce and it's response has been to develop a series of programs to support financial preparation for its employees and to consider future policy changes to optimize the existing workforce (see Chart 4).[4]

[Chart 3]

[Chart 4]

[3] This information is based on a presentation by Aubrey Long at the NBER Workshop, October 4, 2019.
[4] This information is based on a presentation by Susan McGowan at the NBER Workshop, October 4, 2019.

The civilian workforce of the federal government is also aging rapidly due, in part, to delayed retirement. Chart 5 shows that the average age of retirement has risen five years since 1998 from 57.3 to 62.1 years. Federal agencies also face the potential for a large number of retirements in the next decade as the proportion of employees who are currently eligible to retire is projected to increase from 18.2% in 2018 to almost one third of all employees by 2022 (see Chart 6). The Office of Personnel Management's 2018 Federal Workforce Priorities Report includes six government wide priorities (see Chart 7). The agencies are asked to identify two focus areas from the six. Several of the priorities are about providing a better work environment for all employees in the areas of health and well-being or recognition. These efforts would benefit an aging workforce equally as well as the rest of the workforce. The Succession Planning and Knowledge Transfer initiative is a specific effort to address the aging workforce. It includes training, development, mentoring, rotations, re-employment of annuitants and phased retirement.

[Chart 5]

[Chart6]

[Chart 7]

II. Economic Theory and Employer Actions

There is a well-developed theory in labor economics concerning the demand for workers in general and older workers in particular. A key question facing economists is whether this theory can be used to explain employer actions in response to an aging workforce and how employer responses vary across industry and occupations. For example, the BLS reports that the proportion of employees aged 55 to 64 ranges from a low of 27% in primary metals manufacturing, building material and supplies dealers and machinery manufacturing to a high or over 35% in agriculture, and religious organizations (see Chart 8). Similar differences are found across occupations with manual services having the lowest share of workers 55 and over while management and professionals have the highest proportion of older workers (see Chart 9). Conversations with tech companies supported the stereotype that these firms have younger workforces and thus far, have not faced substantial aging of their workforces.

[Chart 8]

[Chart 9]

Allen (2019 forthcoming) reviews the economic literature on the employment of older workers and compares this to observations about how employers are changing policies given the realities of the twenty-first century labor market. He reviews basic economic models of hiring and compensation patterns for older workers, including human capital, incentive structures, complementarity or substitutability with other age groups and technical change. The key challenge facing older workers is as follows. There is clear evidence that total compensation costs, including salaries, health insurance, paid time off and pension contributions rise with age. However the evidence regarding whether there is any productivity increase associated with age is mixed with some studies finding lower productivity, others finding no difference, and still others finding higher productivity for older workers.

In addition to a likely age-productivity gap, older workers face other hurdles in the labor market. Their odds of being hired into a new position have declined significantly over the last 20 years as shown by the decline in the proportion of old workers with 12 months or less of job tenure (see Chart 10). Resume-audit studies find that workers over 55 are much less likely to be called into interviews. Finally there is evidence that many employers are not prepared to make workplace and scheduling accommodations valued by older workers.

[Chart 10]

An important issue concerning the future demand for older workers is how the continued introduction of robots into the work place will affect the demand for older workers; i.e. are robots complimentary to older workers in the production process or substitutes for them? In other words, will greater use of robots make older workers more valuable or will they be used to replace older workers? Acemoglu and Restrepo (2019) look at how the decision to automate is related to demographics. Looking at international evidence, they find that workforce aging is associated with increased use of robots. They also find that this has resulted in lower wages and job displacement for middle-aged workers but not for older workers. It seems clear that additional research is needed by occupation and industry.

An important question concerns how employers are responding to the potential of a large number of retirements due to the aging of the labor force during a period of slow growth in the labor force and low levels of unemployment. One possible response to these conditions would be to develop new policies in order to delay the retirement of older workers. However, the Labor Shortages Solutions Survey by the Conference Board found that in response to labor shortages one policy that was rarely adopted by employers was "Providing new incentives to retain older workers in full or partial capacity."[5] Of notable interest is that the survey also found considerable variation in the likelihood of developing incentives of retaining older workers by whether the firm was facing a significant problem in hiring workers. When companies were divided into

[5] Gad Levanon discussed the results of this survey at the NBER Workshop on October 4, 2019.

those that were “more impacted” versus “less impacted” by labor shortages, 20 percent of the “more impacted” companies adopted policies to retain older workers but none of those “less impacted” did so. Thus, the survey indicates that firms may consider encouraging older workers to remain on the job as a last response to labor shortages and this option is used only by firms that are have the most difficulty in attaining their desired workforce. Thus, most employers reported that they would adopt other means of achieving their desired number of employees rather than adopting policies to retain older workers. The survey also found that labor shortages are much more visible in blue-collar and manual services occupations.[6]

Employers, confronted with the possibility of high demand for new hires and the difficulty of recruiting new workers due to a slowly growing labor force, must consider a variety of employment policies to achieve a productive labor force. Employers are realizing that their workforce strategies need to be elongated. At the NBER Workshop, representatives of several large companies reported on their outreach activities whose objectives are to attract younger workers to their firms. Highmark Health is considering how to attract high school age students into their system while also considering how to retain and motivate the older worker.[7] The Schaeffler Group has utilized an apprenticeship program for over 45 years that seems to be an example of this thinking and BOA is utilizing reciprocal mentoring where junior and senior employees mentor each other.[8]

[6] An earlier Conference Board paper (Levanon and Chang, 2011) reported substantial differences in the ages of retirement by industry and occupation. The analysis also indicates that the likelihood of retiring by full time workers aged 55 and older declined between 1998 and 2011 with the rate of decline increasing in the second half of this time period.
[7] As presented by Larry Kleinman at the NBER Workshop on October 4, 2019.
[8] Greg Tinnell described the apprenticeship program of the Schaeffler Group and Aubrey Long discussed the BOA programs at the NBER Workshop on October 4, 2019.

III. Phased Retirement Policies in the Economy

At first consideration, phased retirement seems like a good response to the aging workforce as it allows older workers to remain on the job until later ages while allowing some additional hiring. Problems seem to arise in the management of phased retirement programs, the details of how the program is organized, and concerns over the potential for age discrimination law suits (Fields and Hutchens, 2002; Hutchens and Papps, 2005). Phased retirement has been popular in higher education but relatively few firms and governmental organizations have adopted formal phased retirement programs. A recent survey of employers (Transamerica Center for Retirement Studies, 2019) reported that 75% of employers do not offer a formal phased retirement program with large companies being more likely to report offering phased retirement. The success of phased retirement programs depends on incentives to the individual, management concerns associated with supervising the program, and the fear by employers of legal actions associated with EEOC requirements.

Phased retirement is very popular in colleges and universities. The success of phased retirement in higher education stems, in part, to the ability to more easily organize half time work, e.g. work one semester but not the next. Most programs at colleges and universities provide half time pay for half time work or in some case, the plan is even more generous. The faculty member retires and gives up tenure. In exchange, the individual receives a fixed term contract for part-time work for three or perhaps five years. The phased retiree can begin their pension which is not reduced for the phased retiree. Thus, retiring faculty can gradually separate from the university, work less, retain a connection to the university, and increase their annual income.[9]

The federal government recently adopted a phased retirement program but it has not been widely used as less than 1,000 employees have entered phased retirement out of a workforce of over two million of whom over 100,000 are retiring each year.[10] The federal program provides relatively little incentive for workers to select phased retirement or for agencies to adopt and utilize the program. The program, named the Moving Ahead Program, offers half-time work for half-time pay but the retiree must forfeit half of their federal pension while they are in phased retirement. At least 20% of the person's time must be devoted to mentoring. Thus, there is relatively little increase in annual income for working half time for participants in phased retirement.[11]

From the department management perspective, the retiree working reduced hours still counts as an employee for total department headcount purposes which seems to result in department productivity difficulties. The phased retirement contract is open ended and individuals may return to full-time employment if they choose. Each agency must decide whether its employees will be eligible to participate in phased retirement. If the agency opts into the program, employees wishing to enter phased retirement must be eligible to retire and start their retirement annuity. In sum, the federal phased retirement program provides little incentive

[9] Allen, Clark, and Ghent (2004) examine the impact of phased retirement programs in higher education. Also see Lord (2005).

[10] The number of Federal retirees by year is shown at https://www.opm.gov/retirement-services/retirement-statistics/

[11] The disincentive to enter phased retirement under the federal program is greater for long term employees who are covered by the Civil Service Retirement system and more recent hires who are covered by the Federal Employee Retirement System (FERS). This difference is due to the smaller defined benefit pension for participants in the FERS. Details of the federal phased retirement program are described at https://www.opm.gov/retirement-services/phased-retirement/

for individuals to enter this program and also does not provide much encouragement for agencies to promote the program. Thus, it is not surprising that relatively few employees become phased retirees.

BOA adopted phased retirement programs for both its Merrill employees. Success or failure of the programs was related to management efforts including how the plan was introduced, promoted with the organization, and whether the departmental leadership thought the plan would be effective. BOA also realized they needed to allocate resources to effectively manage the pool of phased retirees who were working part-time. Managing the pool meant matching the available work to the skills of workers with worker desires.

In contrast, IBM's Transition to Retirement program offers a relatively generous phased retirement program that includes 70% of pay for 60% of an employee's regularly schedule workload and also includes full benefits. The program was introduced in 2012 and since it was offered over 3,100 employees have chosen to enter the program. Brickmeier (2017) concludes that "The program has helped the company seamlessly transition roles, responsibility and transfer knowledge".

Overall challenges reported by employers include the compensation and benefit mix for phased retirees and how that may differ by occupation. A specific issue is how to pro-rate vacation days, health premiums, and bonuses or incentives. In the federal program, problems arose due to rules about backfilling a phased retiree's position and how phased retirees fit into headcounts. The rules were not conducive to building management support for the phased retirement. An additional employer challenge is managing increased administration needs for the aging workforce. Activities include retirement counseling, reduced hours workforce planning, and ergonomic and accommodation request management.

IV. Worker Preferences for Working Longer and Government Policies

As discussed above, the participation rate of persons over age 65 are rising as older workers postpone retirement from career jobs and the incidence of moving to bridge jobs increases. Working longer is occurring in response to increases in life expectancy and the need for greater wealth to maintain the desired standard of living in retirement. Insufficient saving, the shift from defined benefit to defined contribution pension plans, and improving health are also important factors leading to delayed retirement.

Labor economists have studied retirement decisions for many years. These studies have typically focused on the economic incentives imbedded in retirement plans and Social Security along with the health of older persons and their spouse. These studies usually calculate the gain in lifetime benefits from continued work. These calculations can be very complex but the implicit assumption is that workers can evaluate the incentives and make work-retirement decisions that are in their best interests. Discussions with HR managers at the NBER Workshops reveal that employers do not believe that their workers understand the benefits that they provide nor do they understand the terms of government programs such as Social Security and Medicare.

Employer and government retirement programs are facing financial challenges associated with population aging and greater life expectancies of beneficiaries. In response, plan sponsors have made significant changes to their retirement plans and there is considerable debate concerning how Social Security and Medicare will be modified. Important policy research requires that additional study be given to how individuals would respond to such policy changes. Clark and Shoven (2019) examined the possible impact of the elimination of the Social Security earnings test and creating a paid up status for both Social Security and Medicare. Their analysis indicate that modifications to these programs could provide large economic incentives for older workers to remain in the labor force.

The results of a recent survey indicated a relatively small response by older workers to rather large changes in the total compensation from working. Survey results were presented by Sita Slavov at the NBER Workshop on October 4, 2019. In response to the presentation, the HR managers in attendance thought this reflected a general lack of knowledge of the respondents and perhaps the difficulty in asking complex questions to workers. Since significant changes to government retirement programs are likely in the next decade, more research is needed to better understand what older workers know about the characteristics of these programs and how they will be affected by these changes.

V. Concluding Observations

The American population continues to age and this demographic trend is leading to an aging of the labor force. The aging of the labor force is also being driven by increases in the proportion of older persons who are remaining in the labor force. The increased supply of older workers is influenced by an increased life expectancy and the need to save more in order to finance more years in retirement. Improvements in health at older ages along with more job opportunities that are less physically demanding enable more workers to remain in the labor force. The shift from defined benefit to defined contribution retirement plans, low interest rates, and the payoff to delaying Social Security benefits has altered economic incentives of working longer.

It seems clear that many older persons want to delay retirement and work longer. The purpose of this study has been to determine how employers are responding to these worker preferences while their workforces are aging. Firms and organizations are aging at different rates and thus, their concerns vary considerably by industry, occupation, and firm size. This report examines the responses of employers to delayed retirement and the increasing proportion of workers at older ages. It is important to know more about how employers are modifying their employment and compensation policies in response to workforce aging. Companies appear to follow a continuum of responses to the aging workforce. Company reactions range from financial education programs and programs that are designed to support a multi-generational workforce to more comprehensive efforts to modify employment and compensation policies to fit the needs and preferences of older workers.

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U.S. Bureau of Labor Statistics (BLS). 2019b. Table 3.3 Civilian labor force participation rates by age, sex, race, and ethnicity, 1998, 2008, 2018, and projected 2028 (in percent). Viewed: October 20, 2019. https://www.bls.gov/emp/tables/civilian-labor-force-participation-rate.htm

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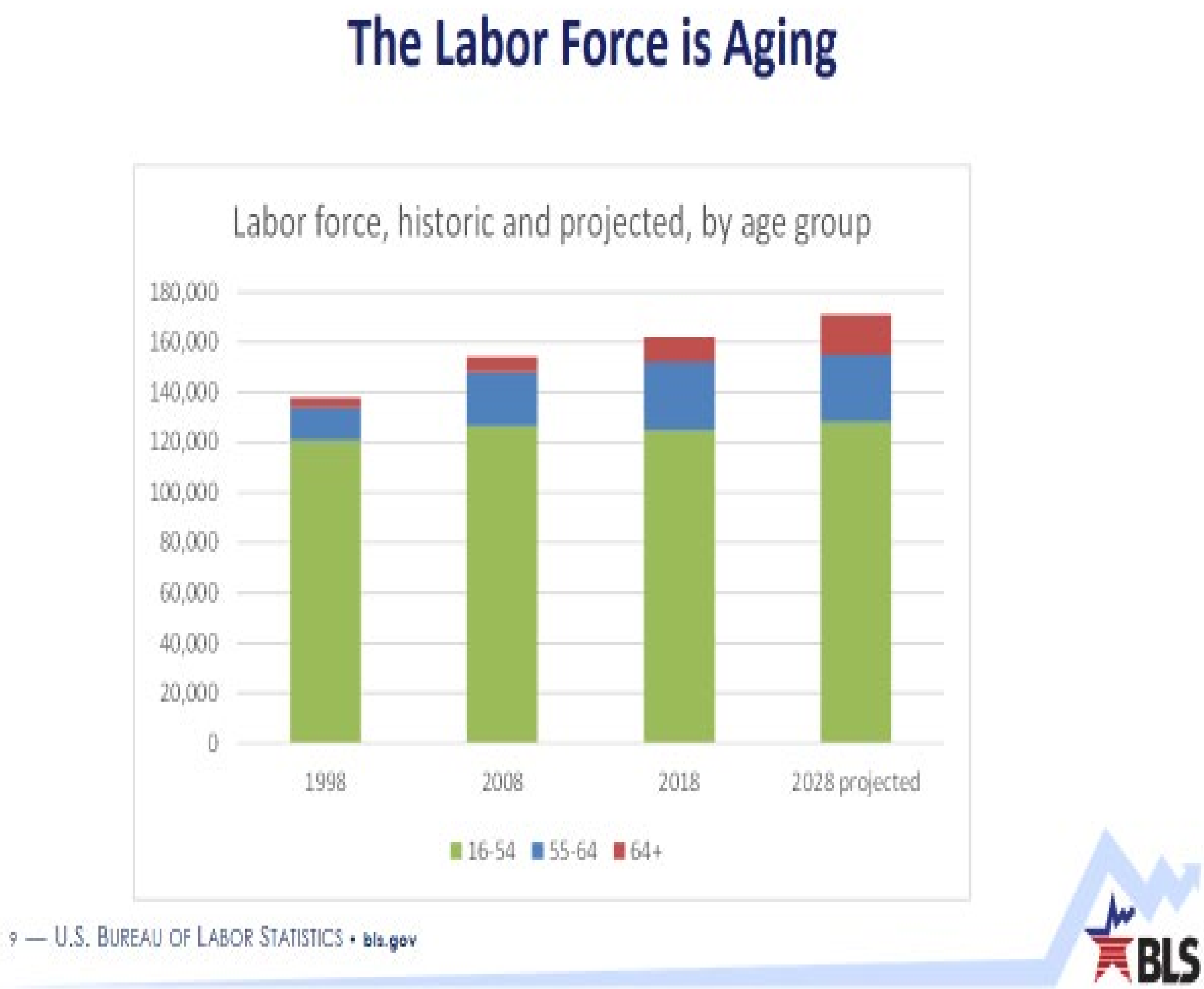
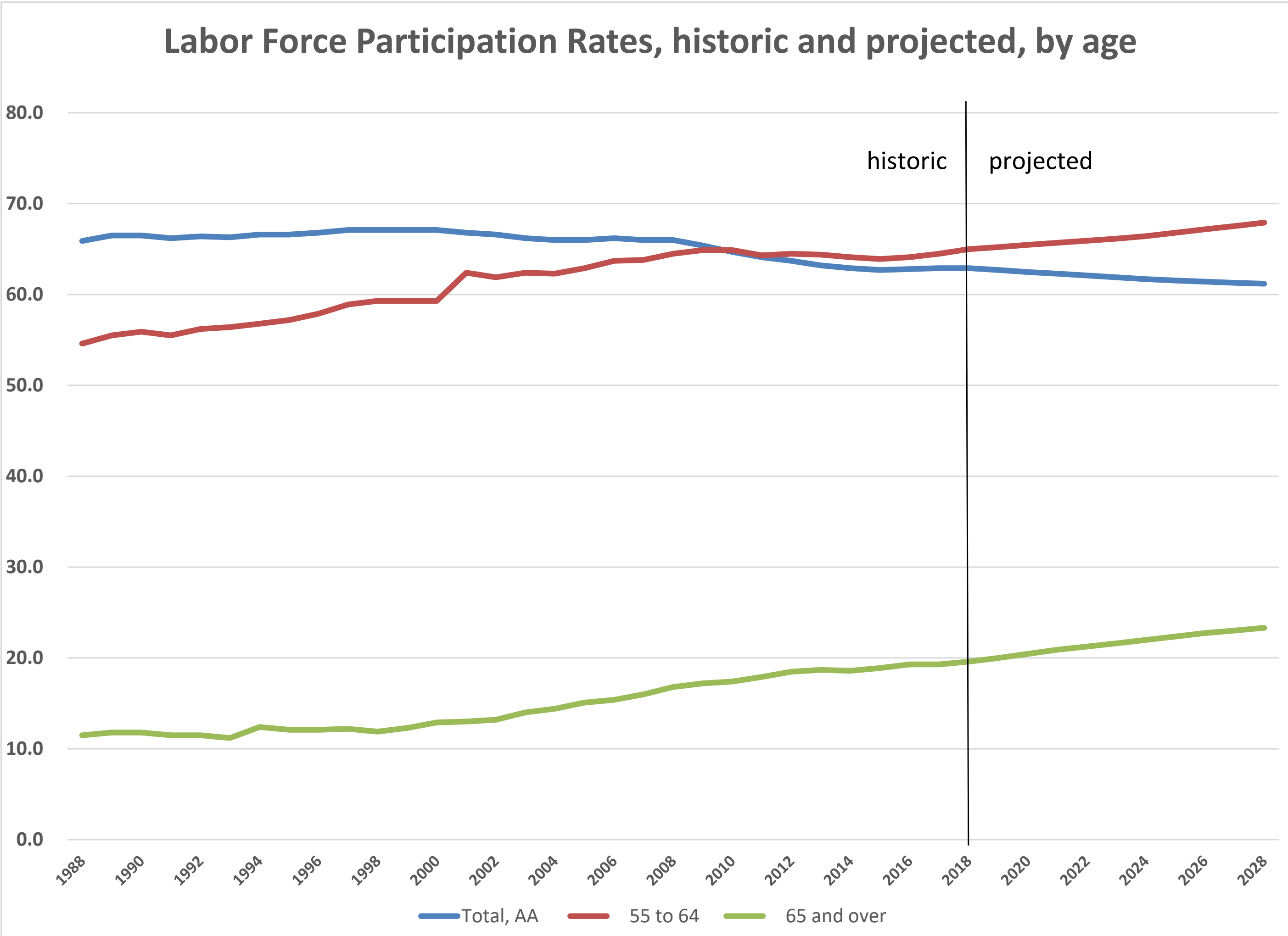
Chart 1. Age Structure of US Labor Force



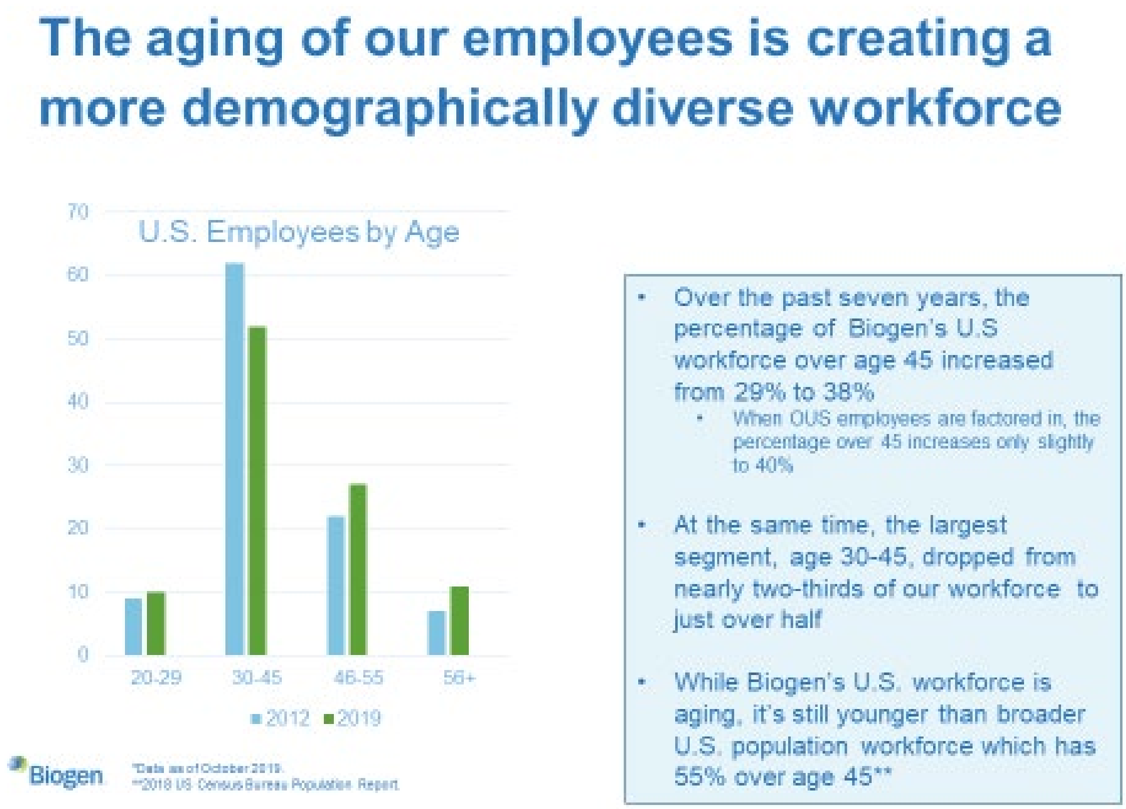
Slide presented by Kevin Dubina at NBER Workshop, October 4, 2019.

Chart 2. Labor Force Participation Rates by Age



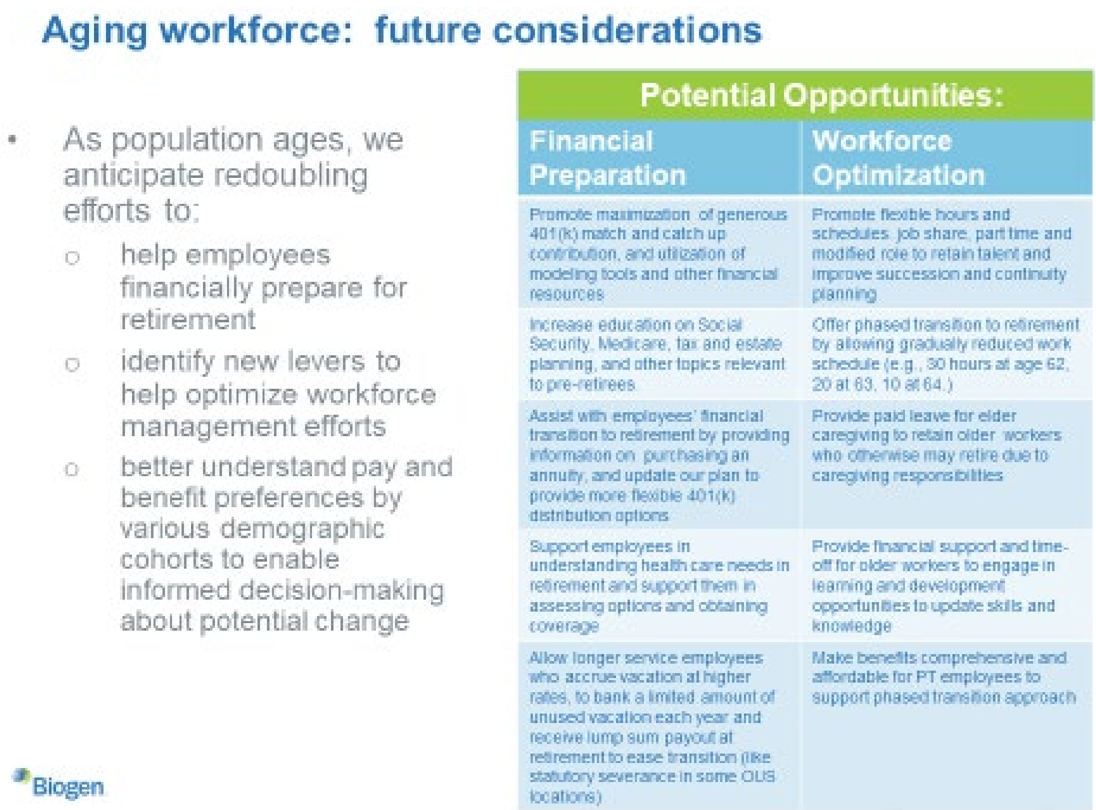
Slide presented by Kevin Dubina at NBER Workshop, October 4, 2019.

Chart 3. Aging of Biogen's Workforce



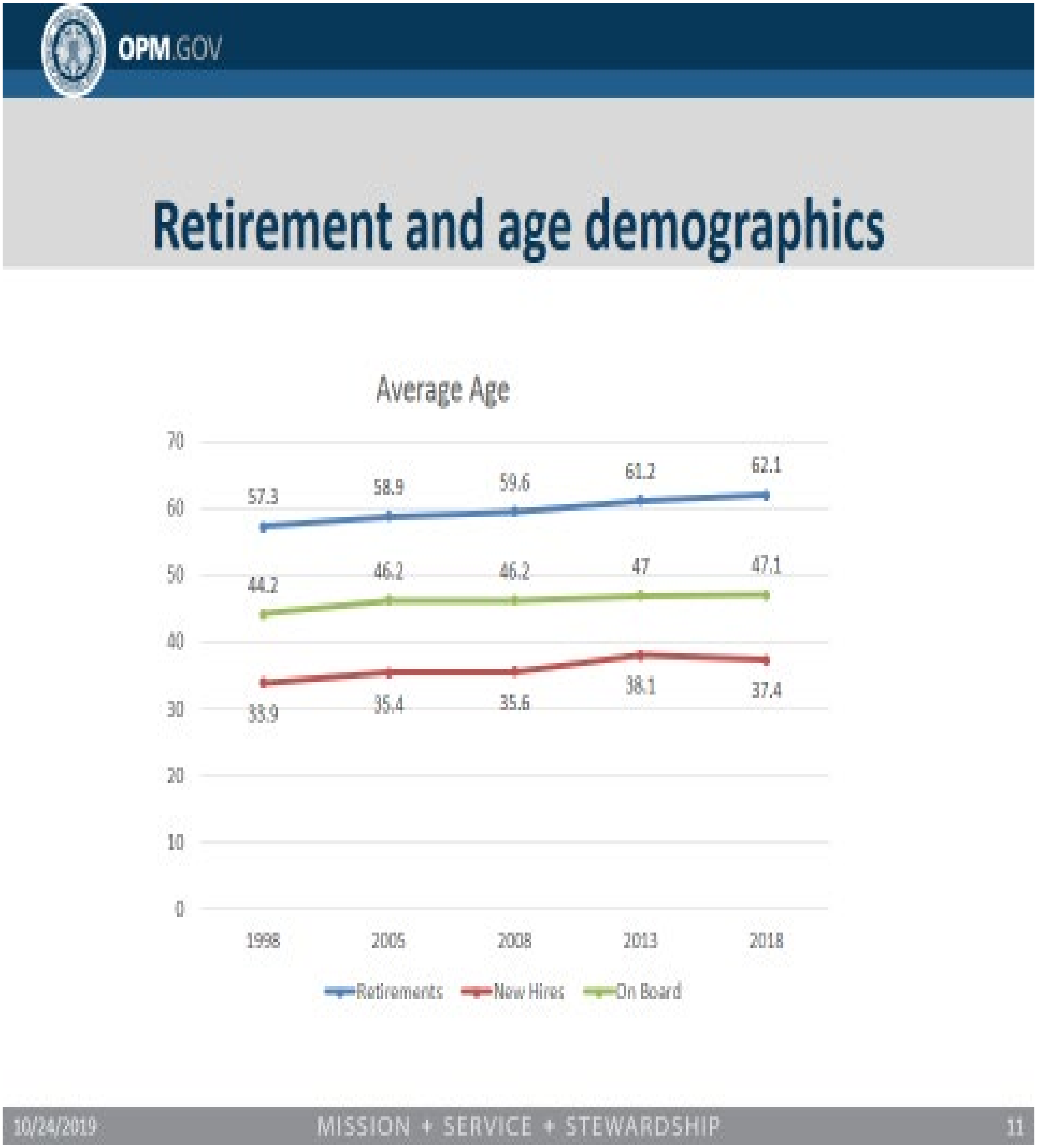
Slide presented by Susan McGowan at NBER Workshop, October 4, 2019.

Chart 4. Biogen Responses to an Aging Workforce



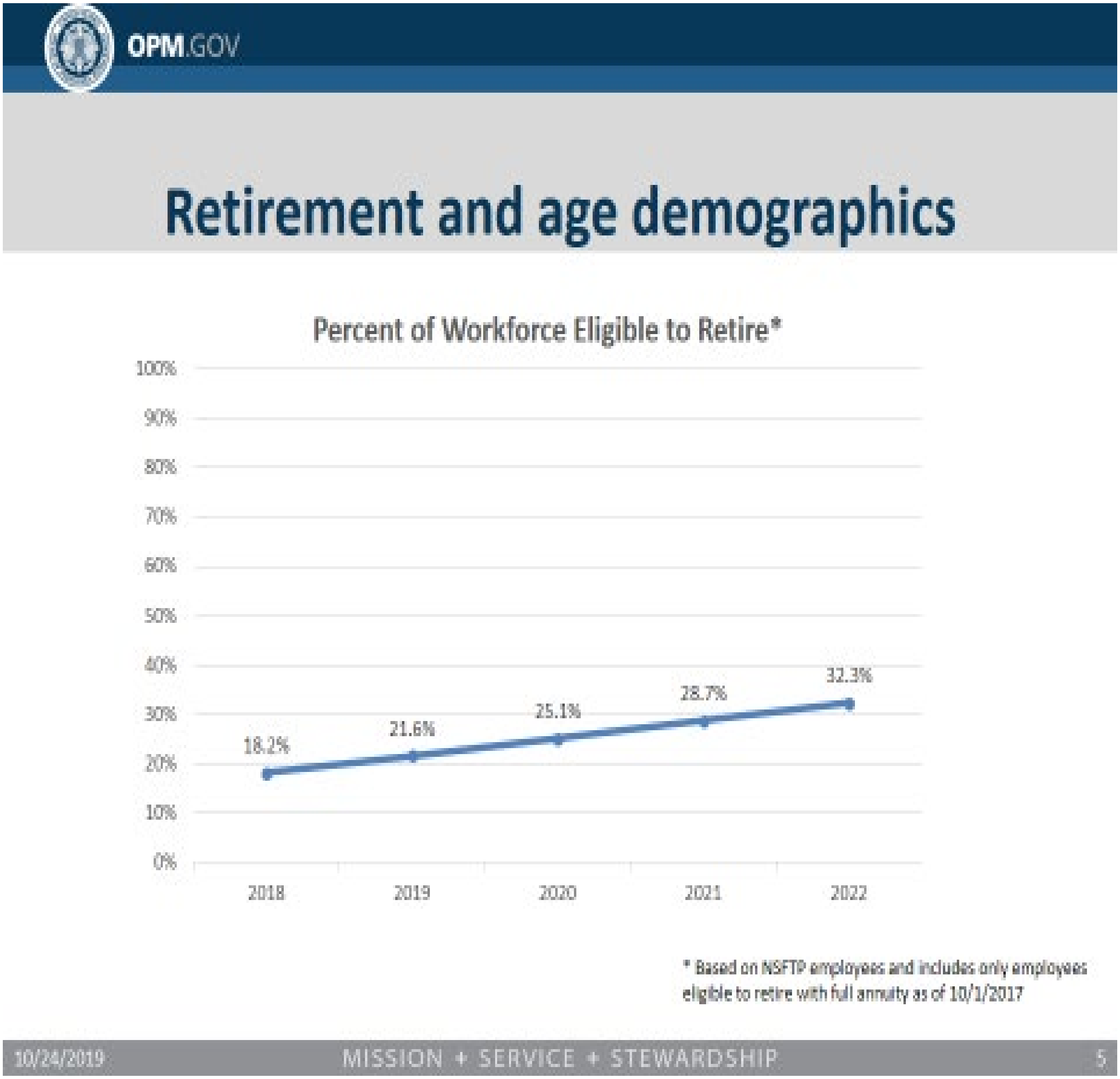
Slide presented by Susan McGowan at NBER Workshop, October 4, 2019.

Chart 5. Aging of Federal Workforce



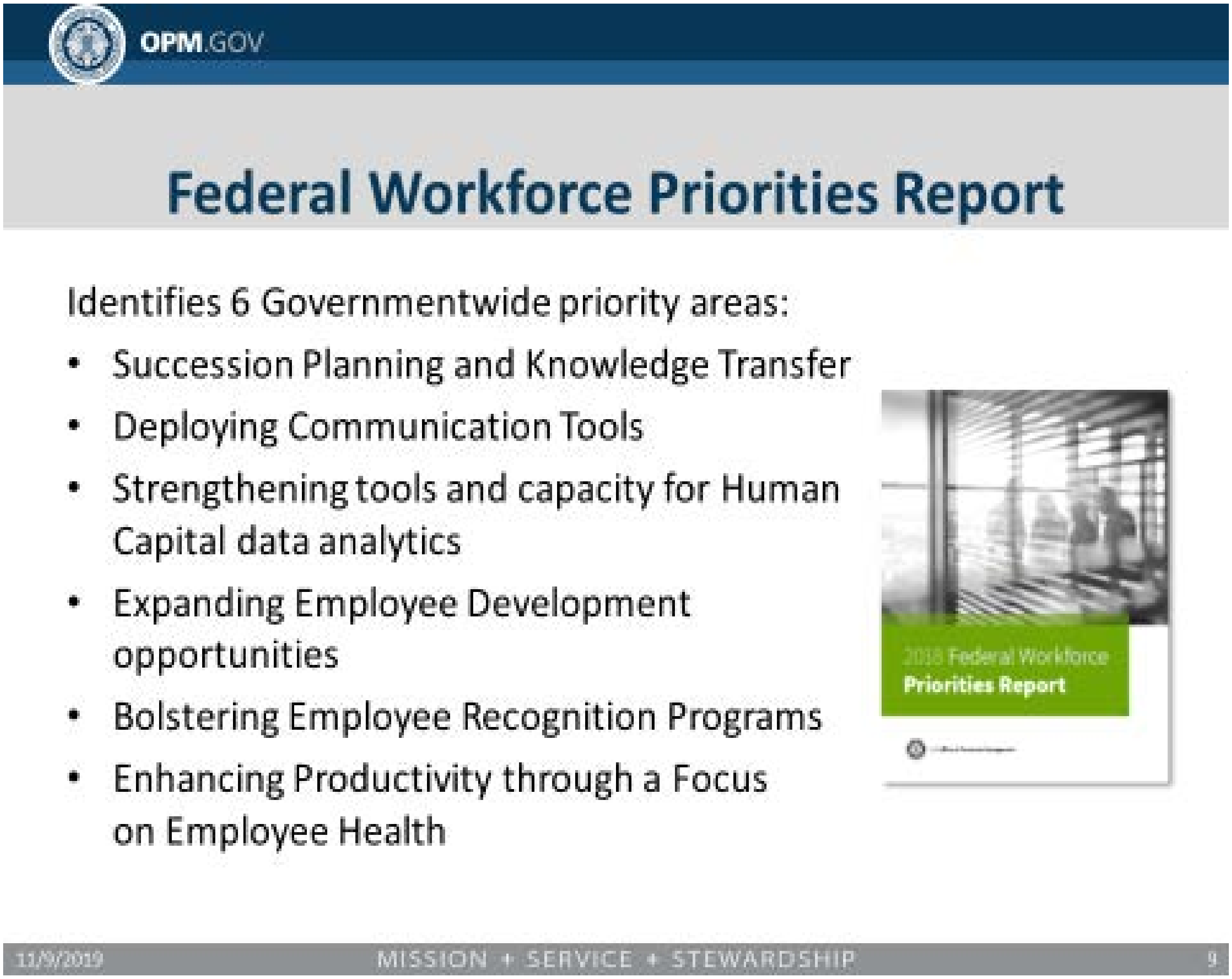
Slide presented by Kenneth Zawodny and Mark Reinhold at NBER Workshop, October 4, 2019.

Chart 6. Federal Workforce



Slide presented by Kenneth Zawodny and Mark Reinhold at NBER Workshop, October 4, 2019.

Chart 7. 2018 Federal Workforce Priorities Report



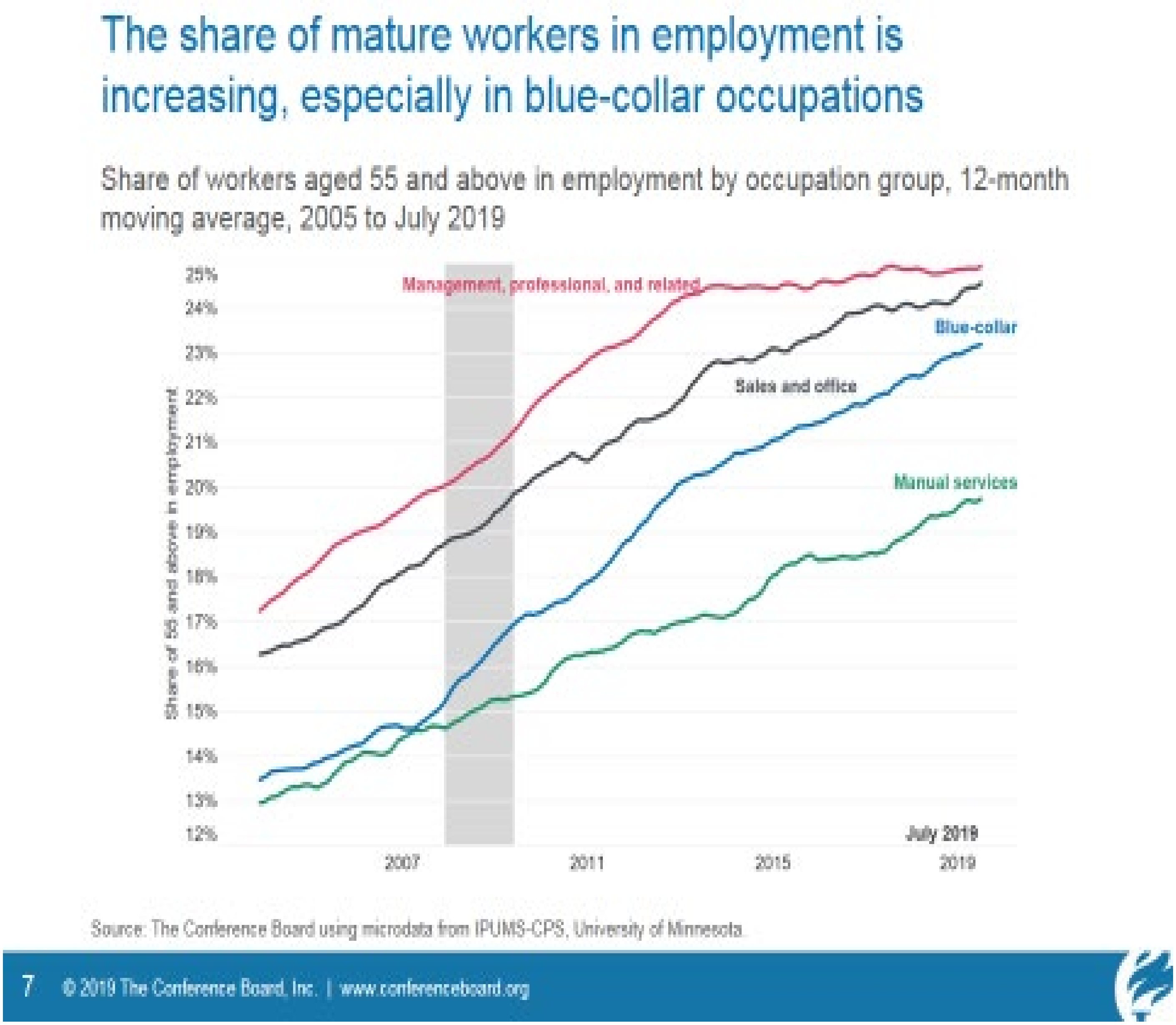
Slide presented by Kenneth Zawodny and Mark Reinhold at NBER Workshop, October 4, 2019.

Chart 8. Employment of 55 to 64 Year Old Workers by Industry

All industries	**23**
Primary metals manufacturing	27
Building material and supplies dealers	27
Utilities	27
Truck transportation	27
Machinery manufacturing	27
Social assistance: individual and family services	27
Home health care services	27
Management, scientific, and technical consulting services	28
Accounting services	30
Legal services	31
Real estate	34
Agriculture	35
Membership associations	37
Religious organizations	45

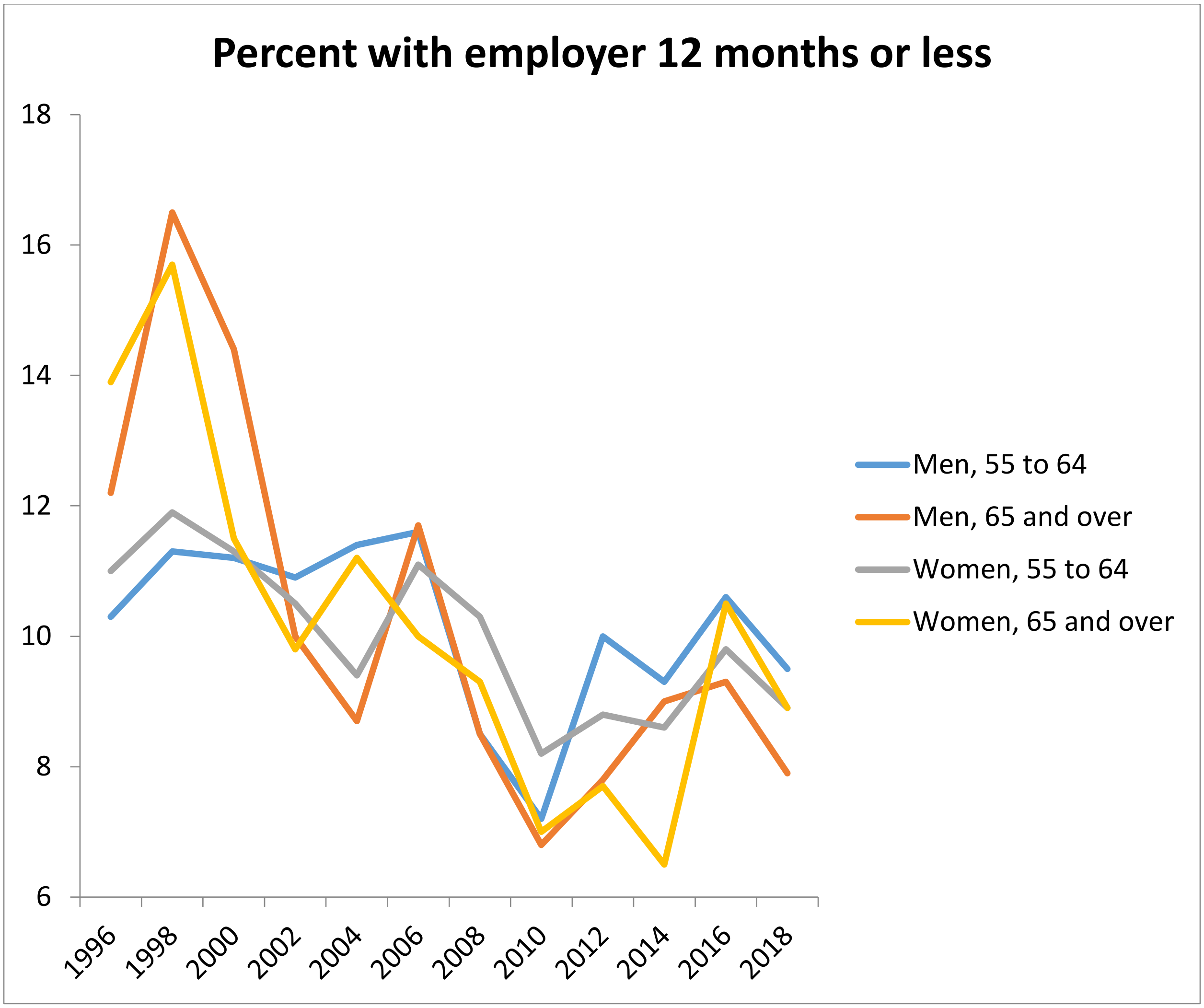
Source: Bureau of Labor Statistics, Slide presented by Steven Allen
at NBER Workshop, October 4, 2019

Chart 9. Employment of Older Workers by Occupation



Slide presented by Gad Levanon at NBER Workshop, October 4, 2019

Chart 10. New Hire Rates for Older Workers, 1996-2018



Side present by Steven Allen at NBER Workshop, October 4, 2019.