



# ADAPTING TO AN AGING WORKFORCE

January 30-31, 2014  
Conference Proceedings

Stanford Center on Longevity  
Financial Security Division



STANFORD  
CENTER ON  
LONGEVITY



# ATTENDEES

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**Joanne Baker** – Senior Vice President, Global Workforce Programs, MasterCard Worldwide

**Michaela Beals** – Research Assistant, Stanford Center on Longevity

**Elizabeth Borges** – Research Assistant, Stanford Center on Longevity

**M. Michele Burns** – Center Fellow and Strategic Advisor, Stanford Center on Longevity

**Lincoln Caplan** – Vice President, Encore.org

**Laura Carstensen** – Professor of Psychology & Fairleigh S. Dickinson Jr. Professor in Public Policy, Stanford University; Founding Director, Stanford Center on Longevity

**Christopher Ceder** – Vice President of Retirement Benefits, Goldman Sachs

**Robert Clark** – Zelnak Professor, Poole College of Management, North Carolina State University

**Andrea Davies** – Associate Director, Clayman Institute for Gender Research, Stanford University

**Martha Deevy** – Senior Research Scholar and Director, Financial Security Division, Stanford Center on Longevity

**Margaret Dyer-Chamberlain** – Senior Research Scholar and Managing Director, Stanford Center on Longevity

**Steven First** – Vice President, Global Benefits, Pfizer

**Laura Garza** – Director, Organizational Development and Training, Praxair, Inc.

**Jacques Goulet** – President, Retirement, Mercer

**Rick Guzzo** – Co-Founder of Workforce Sciences Institute, Mercer

**Carleen Haas** – Vice President and Chief Talent Officer, Humana

**Adele Hayutin** – Senior Research Scholar and Director, Demographic Analysis, Stanford Center on Longevity

**Meghan A. Henson** – Executive Vice President and Chief Global Human Resources Officer, Chubb & Son

**Jacquelyn James** – Director of Research, Sloan Center on Aging & Work, Boston College

**Richard Johnson** – Director, Program on Retirement Policy, Urban Institute

**Laurie Ledford** – Senior Vice President and Chief Human Resources Officer, Marsh & McLennan Companies

**Richard Leone** – Senior Business Leader, Compensation, MasterCard Worldwide

**Cynthia Lewin** – Executive Vice President and General Counsel, AARP

**Fergal McGuinness** – Global DC Leader, Mercer

**Megen Metzger** – Global Client Manager, Mercer

**Pat Milligan** – Regional President, North America, Mercer

**Jeff Munn** – Vice President, Benefit Policy Development, Fidelity Investments

**Haig Nalbantian** – Co-Founder of Workforce Sciences Institute, Mercer

**Katie Nedl** – Director, Head of Global Benefits, BlackRock, Inc.

**Michael Patrick** – Director, Talent Acquisition, DuPont

**Julio Portalatin** – President and Chief Executive Officer, Mercer

**Andrea Romisher** – Vice President, Benefits and Compensation, Kindred Healthcare

**David Rosenblum** – Retirement Market Business Leader, US Northeast, Mercer

**Vicki Rossetti** – Human Resources Manager, Chubb Personal Insurance, Chubb & Son

**Clemens Sialm** – Associate Professor, University of Texas at Austin; Visiting Professor, Stanford Institute for Economic Policy Research (SIEPR), Stanford University

**Erik Sossa** – Vice President, Global Benefits and Wellness, PepsiCo, Inc.

**Ursula M. Staudinger** – Director, Columbia Aging Center, Mailman School of Public Health, Columbia University

**Gregory Stopka** – Staff Vice President, IT, General Dynamics

**Mary Tinebra** – Market Leader, US Northeast, Mercer

**Steve Vernon** – Consulting Research Scholar, Stanford Center on Longevity

# AGENDA

## Day 1: Thursday, January 30, 2014

11:00 – 11:15	Welcome & Logistics
11:15 – 12:00	Introductions
12:00 – 12:15	Remarks by Julio Portalatin, CEO of Mercer
12:15 – 1:00	Lunch
1:00 – 1:45	<p><b>Topic #1: Aging Workforces</b></p> <p><i>Worldwide the number of people over age 60 is expected to increase from 810 million in 2012 to more than 2 billion in 2050. As a result, employers and countries alike must collaborate to determine the best way to re-skill and re-engage older individuals to remain productive members of the workforce. In particular, we must change the way we structure education and move from a traditional linear lifecycle of learning — where employers are solely responsible for skilling individuals after higher education — to a more fluid lifecycle of learning.</i></p> <p>Presentations:</p> <ul style="list-style-type: none"> <li>• A Psychological Perspective on Older Workers (Laura Carstensen)</li> <li>• Tapping the Full Potential of the Mature Workforce (Pat Milligan)</li> </ul>
1:45 – 2:45	The Employer Point of View: Case Studies
2:45 – 3:15	Discussion
3:15 – 3:30	Break
3:30 – 4:15	<p><b>Topic #2: Worker and Workforce Productivity</b></p> <p><i>It is often assumed that older workers cost more and are not as productive as younger workers. Myth vs. reality? Should worker value be defined differently? Measured differently? To what extent are policies and practices affecting measures of worker value?</i></p> <p>Presentation:</p> <ul style="list-style-type: none"> <li>• Indicators and Measurements (Haig Nalbantian)</li> </ul>
4:15 – 5:15	Discussion
5:15 – 5:30	Wrap-up
5:30	Adjourn

**Day 2: Friday, January 31, 2014**

8:00 – 8:30	Breakfast
8:30 – 8:45	Welcome & Logistics
8:45 – 9:30	<p>Topic #3: Getting Them Ready in a DC Wealth and Health World: The Employer’s Role</p> <p><i>For many employers the adverse workforce management implications of the transition from DB to DC retirement provision are becoming apparent. Unintended talent and promotional blockages are emerging; some older cohorts who are expected to transition out cannot afford to retire. DB to DC retirement is maturing but DC for health care is just beginning. What are the implications for employees and employers of a DC world for both health and wealth? How can findings from behavioral and political science be applied to address the employer’s strategic workforce management need as well as the employee’s need for financial and physical well-being?</i></p> <p>Presentation:</p> <ul style="list-style-type: none"> <li>• Fergal McGuinness and Steve Vernon</li> </ul>
9:30 – 10:30	Discussion
10:30 – 10:45	Break
10:45 – 11:30	<p>Discussion: Globalization of Work and the Workforce</p> <p>Presentation</p> <ul style="list-style-type: none"> <li>• World Economic Forum Human Capital Index (Rick Guzzo)</li> </ul>
11:30 – 12:00	Wrap-up

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# INTRODUCTION

## **In recent years, the American labor force has aged dramatically.**

According to the Bureau of Labor Statistics, the share of the labor force age 55+ grew from 13.1% in 2000 to 19.5% in 2010 and is expected to increase to 25.2% by 2020.<sup>1</sup> This growth is due in part to overall demographic changes; the first baby boomers turned 65 in 2011, and the number of older people will continue to rise sharply as the baby boomers age. But it is also due to increased labor force participation rates among older people. In 2000, 32.4% of people age 55+ were in the labor force; by 2010, this number had climbed to 40.2%. For various reasons, including financial necessity, many older people are delaying retirement and staying in the labor force.



## **How will employers adapt to this change?**

Initial research suggests that the aging workforce presents both challenges and opportunities for employers. A multigenerational workforce can foster unique collaboration across age groups, leading to greater creativity and innovation, but it can also lead to intergenerational tension and miscommunication. In addition, although older workers can be valuable sources of knowledge and experience, they are also perceived to be expensive. As Alicia Munnell and Steven Sass noted in their 2008 book, “Working Longer,” older workers generally have higher wages than their younger counterparts and their health insurance can cost more. Given challenges in measuring worker productivity, it can be difficult to calculate the precise value that older workers bring to an organization. Finally, older workers who are not financially prepared for retirement may need to work longer than is ideal for their employer. With the widespread change from defined benefit (DB) to defined contribution (DC) plans, employers are losing the levers that they once had to encourage and manage employee retirement. The emergence of DC-style delivery of health care through exchanges means employers need to better understand how health and wealth objectives interact for the first time.

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<sup>1</sup> Bureau of Labor Statistics, *Labor Force Projections to 2020: A More Slowly Growing Workforce*, January 2012, Table 3.

## Past Conference

Sponsored by Marsh & McLennan Companies, the Stanford Center on Longevity convened a conference on the Stanford campus in April 2013 to provide a forum for employers to discuss strategies for adapting to the aging workforce. The conference, entitled “Adapting to an Aging Workforce,” brought together large employers from a range of industries, from retail to technology. The discussion sessions centered on three broad topics: compensation and benefits, workforce management, and job and workplace design. Attendees identified the issues they have encountered with the aging workforce and began to discuss strategies for responding. Much of the conversation centered on the need to transition older workers out of the workforce, but some companies noted that they may need to accommodate older talent in the near future.

A number of key themes emerged from the conference, such as the importance of supporting the multigenerational workforce, the need to create “graceful exits” for older workers, and the opportunity to reimagine the social constructs of work and retirement. Overall, attendees expressed a desire to address the issue of the aging workforce sooner rather than later.

## The Current Conference

The Center’s first conference, in April 2013, demonstrated the range of employer viewpoints on the aging workforce and made clear that there was a lot more to learn about the employer perspective. To continue the conversation, the Center partnered with Mercer to host a second “Adapting to an Aging Workforce” conference in New York. Attendees included numerous employers from large and mid-size companies, as well as academics who study work and aging, and non-profit representatives who think about public policy responses to these issues. The goal of the conference was to address the issues of human capital management and retirement and health planning that employers are facing as they adapt to an aging workforce.

The first session focused on elucidating the reality of aging workforces, including the cognitive abilities of older workers and how companies might respond by reimagining the traditional linear lifecycle of learning and work. The second session centered on ways to measure worker productivity and also addressed many of the myths about older workers, including whether they are really less productive than younger workers. The third session addressed how employers can help their employees manage both their health and wealth needs as they navigate towards a secure retirement in a DC world. The final session featured a presentation of the World Economic Forum’s Human Capital Index, a measure of the human capital potential of different countries, which companies and governments can use to engage in workforce planning.

Throughout the discussion, many of the themes from the first conference re-emerged, including the need to create “graceful exits” for older workers and the desire to reimagine the traditional lifecycle of work to support alternative career arcs. New themes included the difficulty in measuring the value and productivity of older workers and the potential role of behavioral finance approaches in creating more effective plan designs for retirement and health care. This document summarizes the presentations and highlights major discussion points from the conference. It concludes with key themes for employers to consider, as well as open questions for future research.

While our initial goal was to develop a list of best practices and actionable outcomes for addressing the aging workforce, it is clear from these two conferences that we are still in the beginning stages of understanding this issue. More thought, research, and discussion is necessary in order to truly understand the aging workforce and its implications for employers. We hope that our conferences will help stimulate a conversation to be continued between employers, academics, and policymakers.

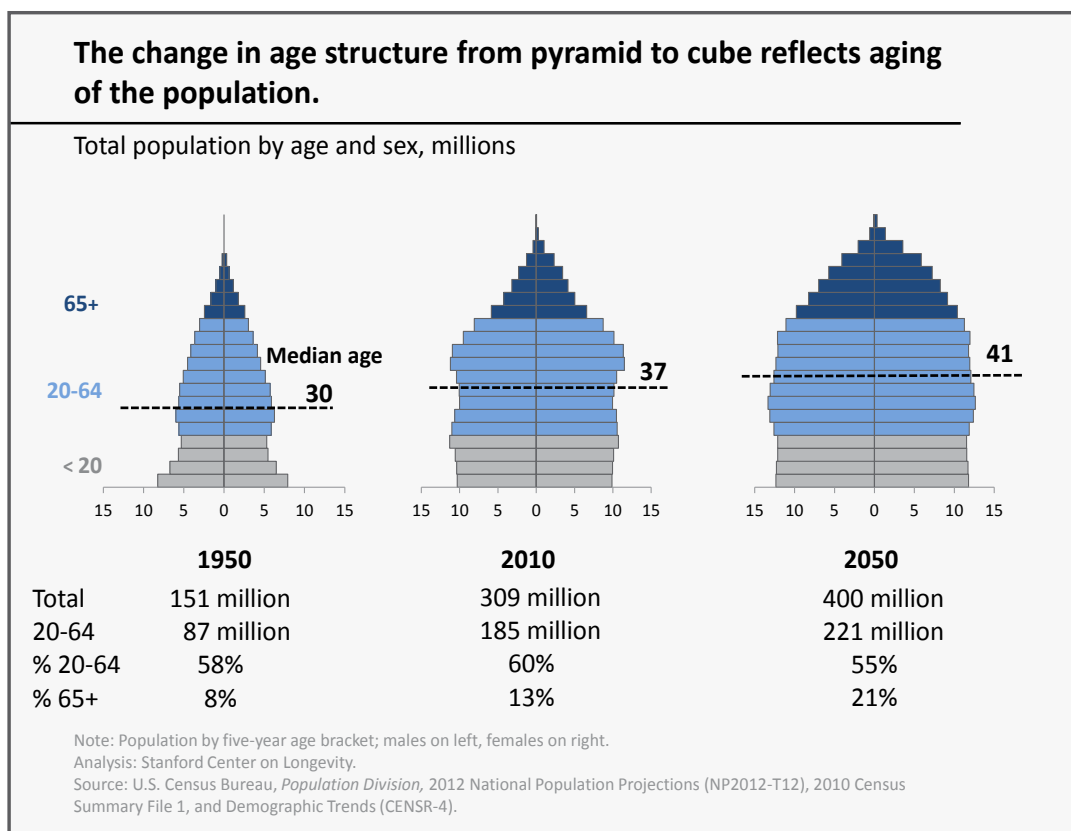


# SETTING THE STAGE: DEMOGRAPHIC CONTEXT

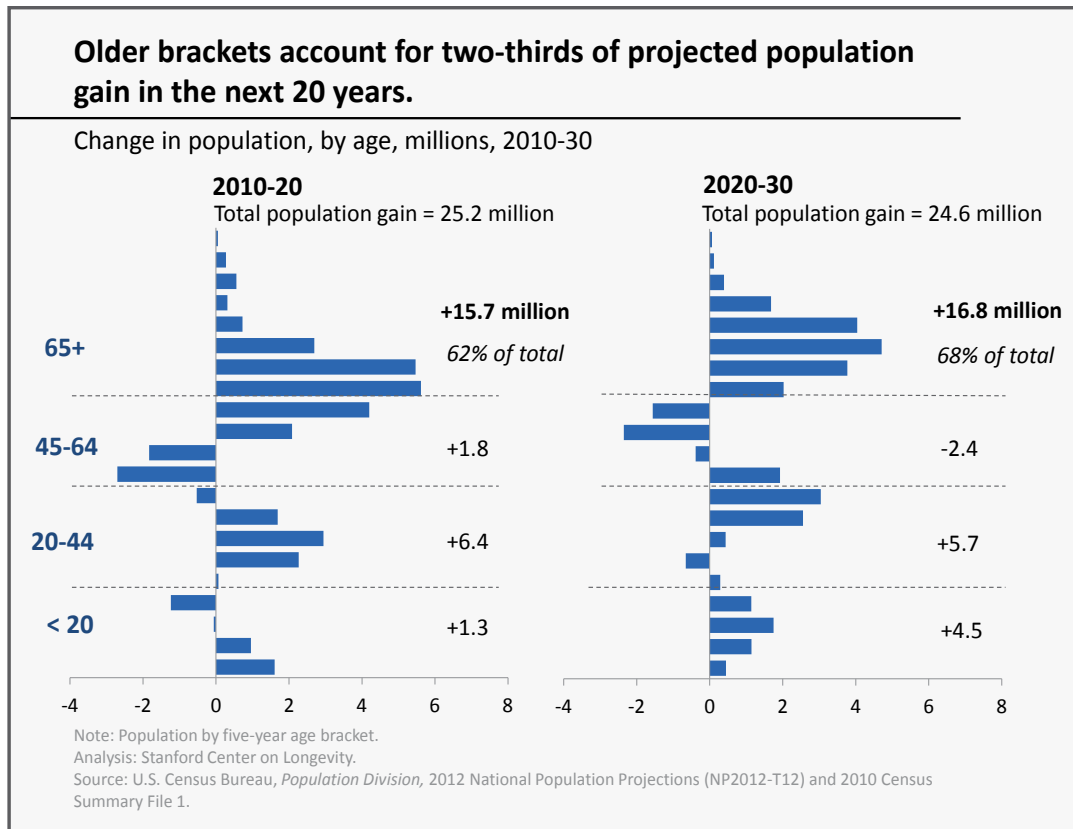
The need to address the issues of an aging workforce is driven by dramatic demographic shifts occurring in the U.S. population and within the labor force. The first “Adapting to an Aging Workforce” conference held at Stanford University in April 2013 began with a presentation by Adele Hayutin, Senior Research Scholar and Director of Demographic Analysis at the Stanford Center on Longevity, that outlined those shifts and highlighted the trends associated with the graying of the U.S. population. A summary of Dr. Hayutin’s presentation is provided below for demographic context.

## Population Shifts

Three key dimensions characterize the coming population shifts in the United States: continued growth, aging of the population, and increased diversity.



**Growth:** The U.S. population is projected to grow by 91 million over the next 40 years, from 309 million in 2010 to 400 million in 2050.<sup>1</sup> Growth will occur in all age brackets, but most of the growth will be concentrated in the higher ages.



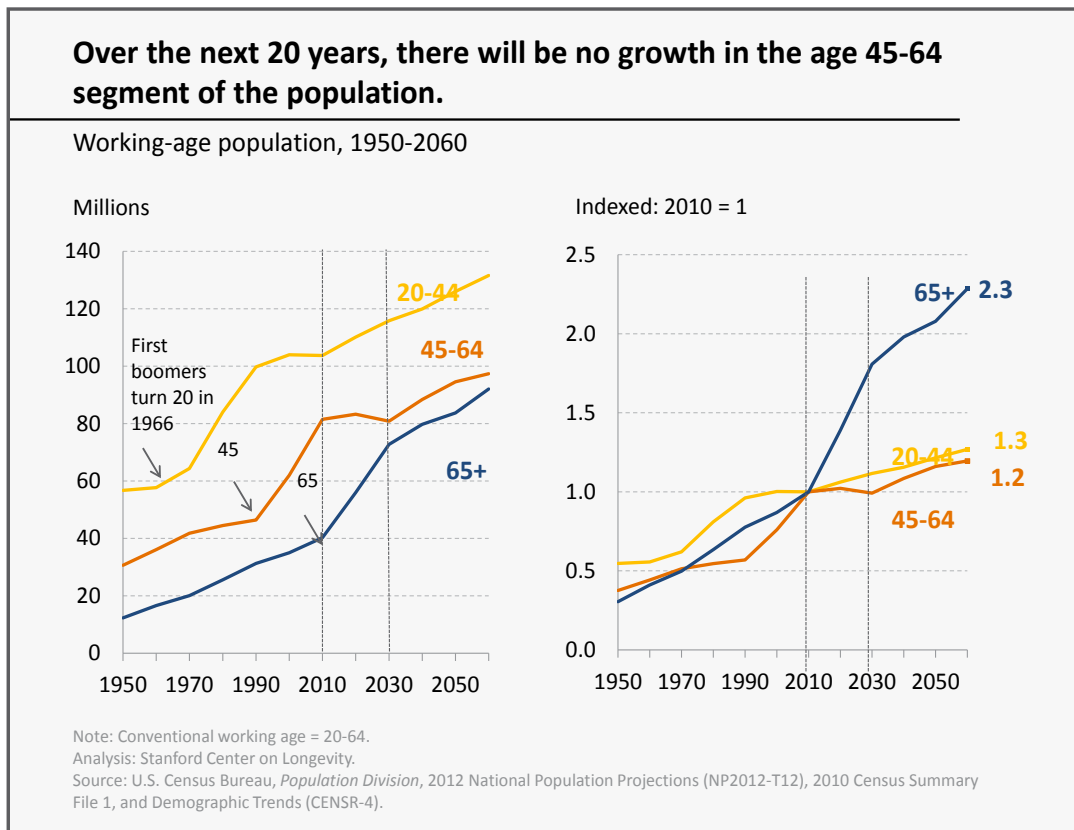
- The number of people age 65+ will more than double, increasing from 13% of the total population in 2010 to 21% of the total by 2050.
- While the working-age population, age 20-64, will continue to increase, growth in this segment will be much slower than in the past when it was fueled by the baby boomer bulge. This population segment will shrink as a share of the total population, from 55% in 2010 to 50% in 2060.
- The population under age 18 will continue to increase, driven by an increase in the total number of births, even while the number of births per woman declines. The total number of U.S. births is projected to average 4.6 million per year from 2015 to 2060, well above the baby boom peak of 4.3 million births in 1957.

<sup>1</sup> U.S. Census Bureau, *U.S. Population Projections*, 2012.

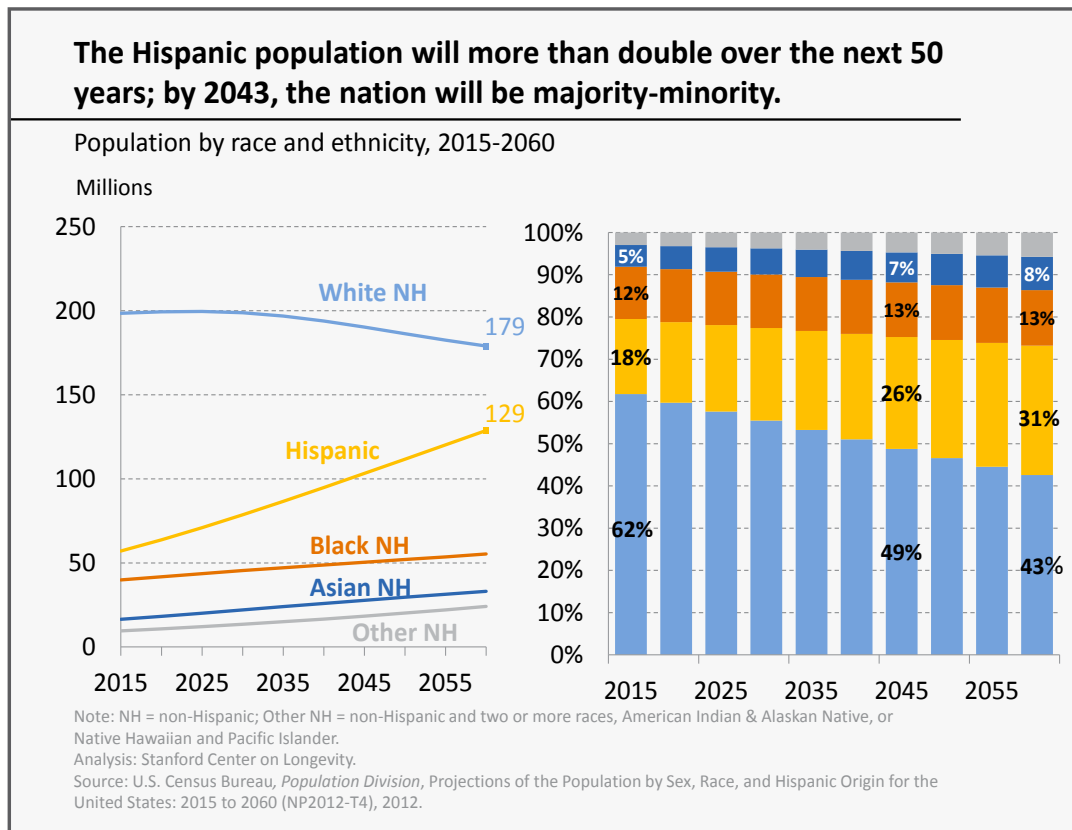
**Aging:** The short-term population age shift is especially significant for employers as the baby boomers age. Segmenting the conventional working-age population into two parts—age 20-44 and age 45-64—shows the impact of aging baby boomers on labor force composition and points to some of the challenges faced by employers:

- The population of mature workers, age 45-64, has grown rapidly over the last 20 years, but will stabilize over the next 10 years and will begin increasing only when the echo boomers—the children of the baby boomers—begin to turn 45 in 2030.
- The young working-age population, age 20-44, is projected to steadily increase, due to the sustained number of projected births.
- In contrast, the senior working-age population, age 65+, will expand rapidly.

As employers seek to fill new positions or replace existing workers, they will face the boom and bust labor cycle and will need to consider how the age mix of the labor pool has changed. They may need to consider hiring either younger workers or senior workers as the pool of mature workers stabilizes or shrinks. Recruiting and training less-experienced young workers may be an option when older workers leave the workforce. Similarly, retention and possibly retraining of mature workers may become increasingly attractive.



**Diversity:** The population will be increasingly diverse. The white population will decline by about 10% while the Hispanic population will more than double. The majority white non-Hispanic population is projected to decline from 62% of the total population in 2015, to less than a majority, 47%, by 2050. In contrast, the Hispanic population will increase from 18% of the total population in 2015 to 28% in 2050.



## Labor Force Shifts

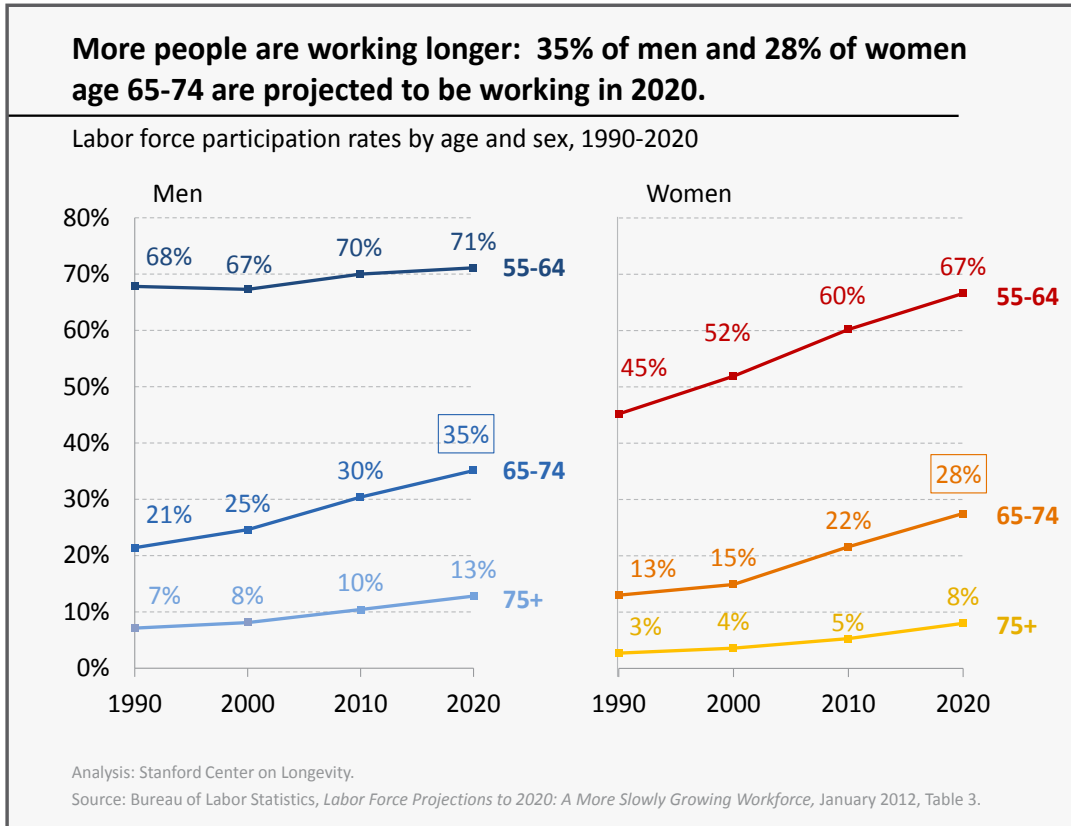
**Composition of the labor force:** The composition of the labor force has shifted dramatically since the late 1990s, and even more dramatic shifts are expected. The participation of women and minorities has increased, there has been an influx of foreign-born workers, and the number and share of older workers has been increasing. The labor force will continue to become more diverse in age, ethnicity, and nativity.

**Labor force participation:** In contrast to declining overall labor force participation, labor force participation among the older population has been steadily increasing since 2000 for both men and women.

- The current 14% participation rate for women age 65+ is the highest it has ever been and is projected to increase to 19% by 2020. The Bureau of Labor Statistics projects that the rate will reach 28% for women age 65-74 and 8% for women age 75+.



- For men age 65+, the current rate of 22% is projected to increase to 27% by 2020, a return to the level registered in 1970. According to Bureau of Labor Statistics projections, 35% of men age 65-74 will be in the labor force along with 13% of men age 75+.



By 2020, workers age 55 and older will account for 25% of the labor force. This share has been steadily increasing since 1990 when workers age 55+ accounted for only 12% of the total. The share of older workers had been as high as 18% in the 1960s and 1970s before baby boomers surged into the labor force.

Although labor force participation has increased among the population age 65+, there may be even further room to expand the labor force participation of this age group. While work disabilities still constrain 20% of people age 65+, an increasing number of older people are not constrained by disability and could enter the labor force.

## Education

**Educational attainment:** Educational attainment is another consideration in recruiting and replacing older workers, especially as younger generations become better educated.

- There are currently more college graduates under age 50 than over age 50, and there are about an equal number of graduate degree holders under 50 as over 50.
- It is also true that today's 65-year-olds are better educated than the 65-year-olds of the past. Moreover, survey results suggest that some employers think older workers are more productive than younger workers.<sup>2</sup>

These education and performance statistics point to the importance of recruiting and retaining well-educated experienced older workers as a complement to recruiting and training well-educated young workers.

**By race and ethnicity:** Educational attainment varies significantly by race and ethnicity, particularly for high school completion.

- Educational attainment is lowest among Hispanics: 35% of Hispanic adults have not completed high school, compared with 15% of blacks, 11% of Asians, and 8% of whites.
- Asians have the highest educational attainment with 51% having Bachelor's degrees or higher, compared with 35% for whites and 14% for Hispanics.

## Global Context

The U.S. population is young relative to the populations of other rich economies, measured both by median age and percentage of the population that is 65 and older. This relative youth gives the U.S. a competitive advantage. Unlike most other advanced economies, the United States has a growing working-age population. In most other advanced economies, including Japan and most of Europe, the working-age population is projected to continue contracting. The United Kingdom and the United States are exceptions. Even among developing economies, working-age population is projected to slow, although remaining positive. Several countries such as China and Brazil are projected to see slow growth over the next 20 years followed by declines in the subsequent 20 years. China's working-age population is projected to steadily decline after peaking around 2015.

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<sup>2</sup> Center for Retirement Research, *Survey of Employer Attitudes towards Older Workers*, 2006, Table 1.

# REMARKS BY JULIO PORTALATIN

In his remarks, Julio Portalatin, President and CEO of Mercer, set the stage for the conference by challenging attendees to create action steps around the issues of retirement and health care. Portalatin began by noting that these topics are starting to get more attention from politicians and the media; indeed, President Obama recently highlighted the importance of saving for retirement in his 2014 State of the Union Address. Portalatin encouraged attendees to use this as an opportunity to bring the aging workforce to the forefront of their companies' agendas. As an example, he stressed the importance of devising thoughtful succession plans that address how to "gracefully exit" older workers and how to re-skill workers early in order to bridge knowledge gaps. He also advised attendees to move from theoretical concepts to research hypotheses to practical solutions when tackling these issues: how can organizations use research to design valuable and cost-effective programs that meet the needs of both older workers and the company? He ended by reminding attendees to focus on turning research into action as they continue to address the aging workforce.





# TOPIC #1: AGING WORKFORCES

**Laura Carstensen, Director, Stanford Center on Longevity**  
**Pat Milligan, Regional President, North America, Mercer**

As the number of older people increases worldwide, aging workforces are becoming a new reality. Employers need to develop strategies to adapt to this change and harness the talent of their older workers. To help employers address this issue, Dr. Laura Carstensen shed light on the capabilities of the older population and explained what companies can reasonably expect from their older workers. Pat Milligan then described what companies are currently doing to manage the aging workforce and outlined other potential ways for employers to respond.



## **A Psychological Perspective on Older Workers**

In order to evaluate the potential contributions of older workers, it is important to understand the evidence-based strengths and limitations of this population. To that end, Dr. Carstensen presented research findings about the cognitive, emotional, and health characteristics of older individuals. She also challenged the group to reconsider the traditional life course model in which education occupies the first portion of life, work consumes the middle life, and later life is exclusively leisure.

## **Tapping the Full Potential of the Mature Workforce**

Following Dr. Carstensen, Pat Milligan discussed the importance of reframing the conversation about older workers and reimagining the traditional lifecycle of learning and work. Milligan recounted that she had just returned from the World Economic Forum in Davos, where there was a lot of interest in discussing youth unemployment but less enthusiasm about addressing aging workforces. She explained that the aging workforce is indeed a pressing issue: the reality is that the world is aging, people are staying in the workforce longer, there are too few younger people, and there's a brain drain in many industries. To address these changes, Milligan stressed the need to have balanced conversations about older workers that highlight both the challenges (such as higher costs) and benefits (such as more experience) that they bring. She also expressed a desire to rethink the traditional lifecycle of learning and work by moving away from the "school, work, retire" model to a more iterative approach that allows for learning and re-skilling throughout the lifecycle.

## Key Discussion Points:

### *Characteristics of Older Workers*

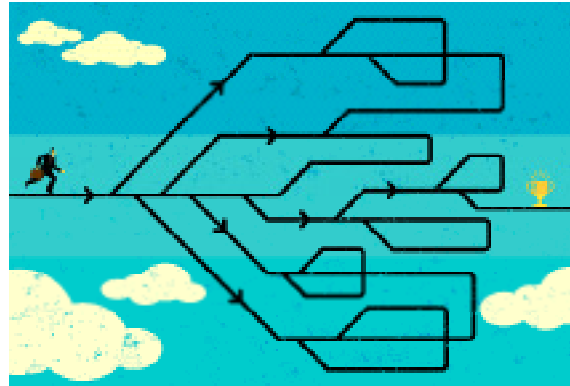
- It is a myth that older workers are less capable than younger workers.
  - For most individuals, increases in knowledge and expertise compensate for age-related declines in cognitive processing speed.
  - Further, we may be overestimating the negative trajectory of cognitive decline with age. If we remove those who will develop Alzheimer's Disease from the sample population, we see less cognitive decline among the population.
  - Older workers bring a key advantage to the workplace: they are more emotionally stable than younger workers. Older people experience fewer negative emotions, are better at handling tense situations, and have fewer conflicts than their younger counterparts.
- Younger and older workers have different strengths and weaknesses in terms of cognition.
  - Younger workers tend to learn new information more quickly, but older workers have more expertise and tend to build stronger relationships.
  - Effective workforce planning and job design should take advantage of older workers' strengths.
- Older workers are "younger" now than they used to be.
  - Measuring age to reflect years prior to mortality (rather than years since birth) supports the claim that 65 is the new 59; a 65-year-old in 2000 had the same mortality risk as a 59-year-old in 1970.
  - This is closely related to the concept of "compression of morbidity," or living healthy longer. Morbidity refers to the presence of illness or medical conditions, so "compressing" morbidity to the very end of life serves to minimize the number of years a person spends living with disease.

### *Rebalancing the Conversation about Older Workers*

- The conversation about older workers should be rebalanced, as it tends to focus mostly on the challenges rather than the benefits of the aging workforce.
  - Conversations about older workers generally start with the presumed challenges: they are more highly compensated, less willing to move, more resistant to change, and more costly to train.
  - But there are also numerous benefits to older workers: they are more loyal, more committed, more emotionally stable, better collaborators, and effective mentors.
  - The conversation may focus on the challenges because these can be easier to measure than the benefits (it's easier to measure compensation, for example, than it is to measure loyalty).
  - A more balanced conversation about older workers may encourage companies to recognize the value of their older workers.

### *Impact of Education & Lifelong Learning*

- Formal educational attainment is the most powerful predictor of several outcomes associated with aging, including functional health.
  - Although the relationship between education and healthy aging is related to several other factors (like income, healthy lifestyle behaviors, and job safety), education is still a better predictor than any of the other variables.
  - Companies should be aware of the impact of educational attainment and assume different outcomes for different segments of their workforce.
- People don't stop learning at a particular age.
  - Employers can take advantage of this by encouraging lifelong learning (beyond traditional formal education) for their employees. This keeps skills up-to-date and provides the stimulation necessary to keep employees engaged in their work.



### *Company Support for Lifelong Learning*

- Companies need to rethink how they allocate training and resources to workers of different ages to better support lifelong learning.
  - The traditional lifecycle of learning and work calls for people to go to school, go to work, and retire — in that order.
  - Many companies allocate resources for training according to this traditional lifecycle; more money is spent on training younger workers than older workers.
  - Investing financial resources in workers throughout their career (not just at the start) would allow workers to remain engaged and develop new skills as they age, adding value to older workers. This approach would also create greater flexibility for younger workers who desire non-traditional career arcs.

### *Redefining and Redesigning the Work Lifecycle*

- The concept of the “ideal” worker as someone fast and tied to his/her desk was based on what was available at a particular time — young workers. Now, we need to redefine what it means to be a good worker, incorporating the reality of the multigenerational workforce. Perhaps the new “ideal” is someone with deep expertise and excellent mentoring skills.

- We also need to redesign the typical career arc to allow for multiple transitions — including both mid-career transitions and different paths to retirement.
  - Lateral moves can be beneficial for both mid- and late-career employees. The resulting development of new skills and expertise in different domains may translate into future career growth for mid-career employees, and may prevent burn-out for those late-career employees who want a change but aren't eligible for promotion.
  - The transition to retirement should be conceptualized as a process rather than a discrete event.
    - This process could include (perhaps several) lateral moves within the organization or changes in job duties and levels that better suit the capabilities and interests of older workers.
    - If opportunities aren't available within the organization, some older workers may “ramp-down” by finding lower-intensity jobs elsewhere.
    - Phased retirement (a reduction in time or intensity of career employment) is also a desirable option for many employees.
  - Discussions of career goals and trajectories can be incorporated into annual reviews for all workers to remove concerns about age discrimination.
- We should move to redesign the life course model in such a way that education, work, and leisure are distributed throughout life.
  - In the current life stage model, education is concentrated in the early years, work dominates mid-life, and the third stage of life is exclusively leisure.
  - This model may no longer be appropriate given increased longevity. Indeed, average life expectancy has doubled in the last century. Why do we add all the extra years of life to the end?
  - Redistributing education, work, and leisure benefits people of all ages.

### *Company Support for Older Workers*

- There is often a lack of support for older workers from a diversity perspective.
  - Although many companies have diversity groups for women, LGBT people, and racial and ethnic minorities, there are few resource groups for older workers.
  - A resource group focused on older workers could foster a sense of community among these employees.
  - One attendee reported that her company does have a resource group for older workers that began as a grassroots effort.

### *Workforce Management*

- Companies need to look at both country-level data and company-specific data in order to devise best practices for their workforce.
  - Rather than relying solely on aggregate data, each company needs to investigate whether its workforce is aging, why older workers are staying, and whether the company will have enough workers with the right skills.



### *Addressing the “Lump of Labor” Theory*

- The economic research on the “lump of labor” theory is at odds with what many companies experience with their workforce.
  - The “lump of labor” theory posits that the number of jobs in an economy is fixed: if older workers stay on the job longer, there will be fewer jobs available for younger workers. Employers often wonder: for every older worker I keep in the workforce, is there a younger person I’m unable to hire?
  - Considerable economic research disproves the lump of labor theory and shows that older workers do not take away jobs from younger workers; at the macro-level, it’s not a zero-sum game. GDP growth creates new jobs and opportunities for all workers.
  - But at the company-level, the reality is often different. If a company is not growing, then new jobs are not opening up and younger people are more likely to leave.
  - There is a need to reconcile the gap between what the economic research shows at the macro-level and what companies are experiencing at the micro-level.

### *Need for Public Policy Responses*

- The government needs to be involved in the conversation about older workers.
  - There appears to be a lot of collaboration between the private sector, academia, and non-profit organizations, but less collaboration between these groups and the government.
  - We need to learn more about how public policy can address the issues raised by the aging workforce.



# THE EMPLOYER POINT OF VIEW: CASE STUDIES

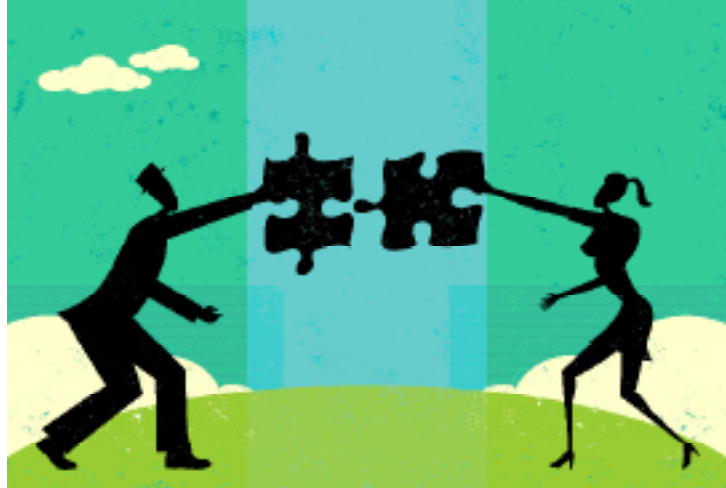
A few companies at the conference presented case studies about how the aging workforce is currently affecting their organization. Some companies are already “feeling” the effects of the aging workforce, while others are trying to stay ahead of the curve. The ensuing discussion reinforced the fact that the aging workforce is a multifaceted issue that affects each organization differently, depending on company size, talent management (“build” vs. “buy”), and industry sector, among other variables. There will not be a “one-size-fits-all” solution.

## Key Discussion Points:

### *Workforce Management/Planning*

- Employers should be aware of several potential problems associated with an aging workforce.
  - Talent drain: As large numbers of employees reach retirement age, companies may face the impending loss of valuable skills and knowledge.
  - Skills mismatch: Even if there is an available supply of younger workers, they may not have the appropriate skills or experience to fill the gaps.
  - Choke points: Some companies have a large number of retirement-age employees who are not leaving the company. This can create choke points that prevent employees at mid-career levels from moving up the ladder. It is important to unblock these choke points to grow talent and prevent younger employees from leaving.
- If employers want their older workers to transition out of the company, they can facilitate “graceful exits” by helping these workers prepare for retirement financially and psychologically.
  - Some employers have even built the concept of “exiting well” into their company’s culture of loyalty. In this framework, employees remove themselves from blocker roles as a commitment to the company’s health.
- If companies want to retain their older workers, lateral moves within the company and phased retirement are other ways to unblock choke points.
  - As people grow older, they care more about doing work they enjoy and find meaningful, even if that means taking a pay cut. Effective job redesign for older workers will consider their preferences and strengths.
  - There may be an opportunity for companies to work with organizations like Encore.org to help their employees transition to other meaningful roles.
  - Phased retirement programs can also help retain talent and facilitate knowledge transfer.
  - Some companies may confront difficulty with these transitions due to the negative connotations associated with taking a demotion or the complications arising from final average pay defined benefit (DB) retirement plans.

- To address skills mismatches, companies can invest in technical and training programs or look to other industries to find workers who have the appropriate core competencies.
  - Some healthcare companies have alliances with nursing schools and physical therapy schools to maintain access to a pool of talent.
  - Some companies might be able to look outside the box to find talent. For example, firemen, who retire early with a pension, could be recruited for positions in risk management.
- Companies can use data analytics to proactively anticipate and plan their workforce structure.
  - These data should be targeted, actionable, and relevant.
- Workforce planning is different for every company, and may be more difficult for companies with many autonomous units.
  - Workforce planning also differs by company culture — some companies grow talent from within their organization (“build”) while other companies hire talent that has been developed elsewhere (“buy”).
- Effective workforce planning must take into account the increasingly multigenerational workforce. What keeps millennials engaged might not be the same as what keeps boomers engaged.



### *Shifting the Corporate Culture*

- Corporate norms need to shift to remove the stigma surrounding retirement. It needs to be ok to talk about retirement.
- Some of the stigma associated with lateral or downward moves late in one’s career may be removed if companies highlight the transition as a move to honored senior status. Some companies have accomplished this with emeriti and fellow programs.

### *Performance Management*

- Many challenges associated with “older workers” are not related to age per se, but rather a talent or performance management issue that hasn’t been addressed for years.
- Companies do not treat all older workers in a one-dimensional way — they want to retain some and “exit” others based on their job performance.

### *Socioeconomic Status (SES) Disparities*

- Some companies are noticing the effects of socioeconomic disparities within their organization. This is especially relevant when employees in the lower income bands don't have enough money to retire.
- We need to have another conversation that addresses the challenges associated with those who have lower-paying and physically demanding jobs. What does "retirement" look like for this group?
  - In general, discussions of the aging workforce tend to focus on white collar employees, and discussion at this conference focused primarily on knowledge workers. But we also need to address the challenges and opportunities that are relevant to blue collar workers.



# TOPIC #2: WORKER AND WORKFORCE PRODUCTIVITY

Haig Nalbantian, Senior Partner and Co-Founder of Workforce Sciences Institute, Mercer

## Indicators and Measurements

Many employers appear to believe that older workers are not desirable because they cost more and are less productive than younger workers. To shed light on the relationship between worker age and productivity, Haig Nalbantian, Senior Partner and Co-Founder of the Workforce Sciences Institute at Mercer, presented results from a systematic review he conducted of the drivers of promotion, performance ratings, turnover, and pay for ten recent workforce analyses he and his team have delivered for large, mostly



global companies. He also addressed the basic question of how to measure worker productivity. A labor/organizational economist, he noted that mainstream economic research has traditionally used pay as a proxy for labor productivity, but there are several pay structures (e.g., tournament model, bonding model, etc.) in which compensation does not accurately reflect contemporaneous productivity, so reliance on pay can be systematically misleading. He also highlighted the difference between measuring individual vs. group productivity. This distinction is extremely important in the context of the aging workforce because individual productivity measures may fail to capture the company-wide benefits or “spillover effects” of older, more tenured employees.

## Key Discussion Points:

### *Challenges with Measuring Productivity*

- Companies want to retain or hire older workers if they create value, but there is uncertainty about how to evaluate the relative cost and productivity of workers generally, including older workers.
- In the ten large organizations examined, both the probabilities of receiving high performance ratings and of being promoted decline substantially for older workers — remarkably, without exception. If these outcomes are considered proxies for individual productivity and performance, the implication is that productivity tends to decline with age, after a certain point. But, the story is far less clear when one considers measures of group-level or organization productivity. Nalbantian showed examples where productivity and other business outcomes actually improve with older or more tenured workers in an organization’s workforce.

- In several case examples examined, the single greatest predictor of growth and/or profitability was having a more seasoned, tenured workforce. For one thing, the decrease in turnover that is associated with an older workforce (age and tenure) has pronounced stabilizing effects on the company that can often enhance performance.
- These data suggest that the real benefits of older workers may actually come from spillover effects on coworkers. As such, traditional economic research that focuses on pay growth and other measures of individual productivity may be misleading.

### *Age Discrimination/Bias*

- Disparities of performance ratings for older workers might suggest significant age bias in many companies. These disparities are similar to examples of gender bias in the workplace.
- Because performance ratings are subjective and susceptible to unconscious (and conscious) age bias by supervisors, they are often flawed measures of assessing the productivity of older workers.

### *Engagement & New Career Pathways*

- Some individual declines in productivity may be associated with burn-out rather than age. Employers can motivate employees to stay engaged by providing mentally stimulating work and/or options for job transitions.
- Volunteering after traditional career employment is a way to stay stimulated and may lead to re-entry into the workforce. Companies can support volunteer opportunities after or throughout an employee's career as part of their corporate social responsibility strategy.

### *Understanding Internal Labor Market Dynamics*

- It is important for employers to understand what influences movement within their organization. What causes people to stay? What causes them to leave?
- This is not just a retirement issue — “graceful” transitions are important throughout an employee's career. We need to restructure internal labor markets to facilitate multiple career paths, not just the typical linear career trajectory.
  - This would have implications for all workers, but is particularly relevant for women and older workers.

### *Influencing Internal Labor Market Dynamics*

- With the move from defined benefit (DB) to defined contribution (DC) retirement plans, employers have lost their primary source of influence over the timing of their employees' retirement.
  - Designing DC retirement plans that are more DB-like could help facilitate “graceful exits.” For example, a DC plan with default annuitization at payout mitigates the longevity risk an employee faces and may influence the timing of his/her retirement.



- Another way to facilitate an exit is to offer a lump-sum payment. This may be very attractive to employees, as we know from behavioral economics that people underestimate the importance of pensions. However, individuals who receive lump-sum payments run the risk of decumulating too quickly.
- Employers should be aware that the presence or absence of retiree healthcare insurance also plays a role in retirement decisions.
- Employers should determine what their organization values and create thoughtful rewards programs that reinforce their specific goals.
  - There is a mismatch between internal and external labor markets. In terms of compensation, external markets may value older workers (and the associated acquired skills and knowledge) more than internal markets do. Backloaded pay structures make it non-economic for employees to retain older workers beyond a certain point even as older workers continue to deliver productive value generally. Increasing mobility of older workers can help address this imbalance.
  - Long-term incentives can be used as retention tools, but their efficacy is variable in different companies and industries depending on the extent and sources of stock volatility.



# TOPIC #3: GETTING THEM READY IN A DC WEALTH AND HEALTH WORLD: THE EMPLOYER'S ROLE

**Steve Vernon, Consulting Research Scholar, Stanford Center on Longevity**  
**Fergal McGuinness, Global DC Leader, Mercer**

Steve Vernon highlighted the potential role of behavioral finance research in designing effective employee retirement and wellness programs. According to Vernon, there is a lot of information about what people should do in order to lead long, healthy, financially secure lives — and yet people often fail to act in their best interest. This suggests that many of the challenges they face are behavioral. To address this issue, Vernon explained that employers can use key findings from behavioral finance research to create benefits programs that facilitate positive outcomes for their employees. He presented SCL's new model of positive behavioral engineering, which outlines a three-step model of behavior change that employers can use as guidance to develop their employee programs.



Fergal McGuinness continued the presentation by sharing some behavioral insights from political science. He described how research on voting behavior provides important lessons for plan designers, such as the efficacy of local, office-level campaigns and the opportunity to use social pressure to shape behavior. He also stressed the importance of collecting company-level data to create targeted employee programs.

## **Key Discussion Points:**

### *Influencing Employee Behavior*

- Many of the challenges in the retirement and health domains appear to be behavioral.
  - There is a lot of science that explains how to live a long, healthy, financially secure life, but many people aren't following this advice.
  - Two challenges stand out: (1) Many employees do not possess the skills to prepare their own retirement program, and (2) Even if they could prepare a realistic retirement plan, many do not possess the willpower or discipline to implement their plan.

- There is an opportunity to use behavioral finance to structure retirement and health programs to lead to positive outcomes.
- Key behavioral finance findings include:
  - The default is never neutral, but instead sends a powerful message of what is expected or ideal.
  - Offering too many choices can be overwhelming.
  - It's important to remove barriers and make it easy to implement the desired behavior.
- Research from political science offers relevant insights for employers and plan designers.
  - Political scientists have done a lot of research on how to get people to vote, which is similar to getting people to save for retirement; they are both behaviors that people know they should do but often don't.
  - Voting campaigns organized at the local level are a lot more effective than national campaigns.
  - Social pressure can induce people to vote: if you tell people that their voting record will be made public, they are more likely to vote.
  - The “mere measurement” phenomenon demonstrates that simply asking people whether they plan to vote increases the likelihood that they will actually do it. As a result, it could be beneficial to ask follow-up questions about retirement planning.

### *Understanding Employee Capabilities and Preferences*

- To design effective plans, plan designers should consider employees' level of interest and capabilities.
  - When it comes to retirement decisions, people fall into one of three groups:
    - Do it for me
    - Help me do it
    - I'll do it myself
  - “I'll do it myself” is a very small part of the population — but the average 401(k) is built for this kind of person.
  - A very large part of the employee population would just like their employer to “do it for them,” and this necessitates a different kind of plan design.
  - Even employees who want to plan for retirement on their own may be overestimating their capabilities; studies show that people are generally overconfident when it comes to financial planning.

### *Implementing Employee Programs*

- Three challenges stand out with DC retirement plans:
  - Not enough money is being contributed; contributions of 10% to 20% of pay need to be contributed consistently over 30 years or more.
  - Leakage due to loans and early withdrawals.
  - Employees are on their own to convert their savings into reliable retirement income.

- Analytics provide a tremendous opportunity for companies to learn about issues specific to their employees and tailor their retirement offerings accordingly.
  - Companies can use analytics to evaluate employee preparedness for retirement. Are employees saving at all? Are they saving enough? Are they saving efficiently?
  - Understanding the problem and why it exists will allow companies to run campaigns that are significantly more effective in terms of cost and outcome.
- Employers sometimes struggle to implement best practices in their retirement plans due to fear of employee pushback.
  - Considerable evidence shows what works in retirement plan design: auto-enrollment, auto-escalation, high default contribution rates. Yet not at all employers have these practices built into their retirement plans.
  - Some employers fail to implement such features due to fear of pushback from employees.
  - Employers wrestle with the tension between what they know they should do and what they think employees will accept.
- Savings milestones could be helpful in guiding employee behavior but are challenging to devise.
  - People often respond well to information that tells them how much to have saved by a certain age (“savings milestones”). But there is no universally accepted rule of thumb for how to devise these milestones.
  - It’s important to create savings milestones for all age groups, including younger people, to get people to begin saving earlier.
  - One idea would be to create profiles of what an effective saver looks like at different ages.



# DISCUSSION: THE GLOBALIZATION OF WORK AND THE WORKFORCE

Rick Guzzo, Co-Founder of Workforce Sciences Institute, Mercer

## World Economic Forum Human Capital Index

To provide a global context regarding human capital, Rick Guzzo, Co-Founder of Mercer's Workforce Sciences Institute, presented an overview of the first annual Human Capital Report, released by the World Economic Forum (WEF) in partnership with Mercer. This report ranks human capital in 122 countries based on four pillars that underpin talent development: education, health and wellness, workforce and employment experiences, and an enabling environment. In doing so, the report evaluates the capabilities of a country's workforce to generate economic prosperity and it serves as a tool for companies and governments to use in workforce planning. Additionally, Guzzo described age and human capital of various countries and highlighted several ways that employment influences the physical, psychological, and fiscal health of workers.



## Key Discussion Points:

### *Impact of Age Composition on Human Capital*

- Age is an important variable to consider when evaluating a country's human capital potential.
  - Although the relationship between age and economic potential at the country level is not entirely clear, some of the most lucrative business markets have older workforces.
  - There is incredible variation in age across countries, which poses challenges for employers with workforces around the world.
  - Increasing the labor force participation of older workers could be a great source of economic value.

### *Measuring the Labor Force Participation of Older People*

- Data from the Human Capital Report indicate decreasing rates of participation in the workforce among older populations globally.
- There is, however, a general assumption made by government and international

agencies that collect employment data that people over 65 are no longer participating in the workforce, thus no measures are made of their actual participation in the labor force.

- Many attendees voiced concern that such data may be underestimating the labor force participation of older people by excluding those who hold non-traditional employment (self-employed, for example).
- Further, information about participation in economic activities by those over age 65 is lacking because of the design of current workforce surveys.
  - Most surveys of labor force participation fail to ask further questions if the respondent indicates he or she is “retired.”
  - More detailed questions about what people are actually doing in retirement (volunteering, working part-time, working for family, opening a new business) may improve the accuracy of this data.

### *Impact of Employment on Physical, Psychological, and Fiscal Health*

- Employment influences the physical, psychological, and fiscal health of workers throughout their careers and into retirement.
  - People with disrupted career paths have less fiscal well-being in retirement.
  - People who take bridge jobs between career employment and retirement are better off financially once they retire.
  - People who experience a lot of job stress or have a strong work role identity have a difficult time psychologically when they transition to retirement.
- Each company needs to define its own role in supporting employee health.
  - Employers are a point of influence on the physical, psychological, and fiscal health of their employees.



# CONCLUSIONS

From the conference, several key topics of interest emerged around the issue of the aging workforce. These themes included: developing workforce management strategies, measuring worker productivity, fostering graceful exits, integrating behavioral finance research, and reimagining the career lifecycle. Conference attendees discussed the need for progress in these areas and identified potential short-term and long-term steps that companies can take to effect change. Attendees also highlighted the need for further conversation and research into various aspects of the aging workforce.



## Conference Themes and Recommendations:

### *Workforce Management Strategy*

As the aging workforce becomes a reality, companies need to develop an explicit strategy for managing their aging workforce. Many companies have accommodated older workers on an ad hoc basis, but have not formalized an official response. A formal strategy ensures consistent and fair treatment of all employees and allows for large-scale workforce planning.

*Things to do today*

- Analyze the demographic composition of your workforce to determine whether it is aging.
- Create an explicit strategy for managing your older workforce as part of your diversity strategy.

*Potential next steps*

- Create a company culture that honors rather than stigmatizes lateral moves, phased retirement, and other transitions to retirement.
- Investigate and address potential barriers to implementing phased retirement programs, such as DB final-average pay plans and concerns about reverse age discrimination.

### *Measuring Worker Value and Productivity*

We need better ways of assessing whether older workers bring value to a company. Traditional measures of workplace productivity may not capture their contributions, either because of systematic age bias in performance reviews or because the real value of older workers shows up in spillover effects (how they affect those around them).

#### *Things to do today*

- Assess your current method of performance evaluation to see if it is being implemented consistently.
- When evaluating the performance of older workers, use measures of group-level productivity that capture their spillover value onto other employees.

#### *Potential next steps*

- Investigate methods of performance review that reduce or eliminate age bias.
- Sponsor or participate in research on more effective measures of worker productivity.

### *Fostering Graceful Exits*

There is a strong desire on the part of both employers and employees to create graceful exits for older workers. To facilitate this process, we need to understand the real and perceived legal and corporate boundaries and develop consistent ways to talk to all workers about retirement.

#### *Things to do today*

- Initiate conversations about career goals and transitions into annual performance reviews for employees of all ages.

#### *Potential next steps*

- Build a company culture that supports early discussion of retirement, as is legally appropriate. Employers may have more latitude than they realize to discuss retirement with employees without incurring legal ramifications.
- Investigate potential partnerships with companies like Encore.org to create alternate exit paths that are appealing and rewarding for employees.

### *Integrating Behavioral Finance Research*

As defined contribution plans become increasingly common and individuals assume more responsibility for their physical and financial well-being, employers have an opportunity to use behavioral finance research to create plans that help employees engage in positive behavior. Behavioral finance allows employers to move beyond traditional awareness and education campaigns to design plans that actually induce healthy behavior.

#### *Things to do today*

- Implement the following features in employer-sponsored retirement plans: auto-enrollment, auto-escalation, and a high (> 4%) default contribution rate.

#### *Potential next steps*

- Explore further ways of using behavioral finance research to promote employee fiscal and physical well-being.
- As changes are implemented, collect data on employee behavior to evaluate which changes are most effective.

### *Reimagining the Career Lifecycle*

In the traditional lifecycle model, education is concentrated in the early years, work dominates mid-life, and the third stage of life is exclusively leisure. Increases in longevity have made it critical to redefine this model, as it no longer fits with people's lifespans and lifestyles. Employers and society need to rethink how to support alternative career arcs, lifelong learning, and the distribution of leisure throughout the life course.

#### *Things to do today*

- Distribute your training budget more evenly among workers of all ages to support lifelong learning.

#### *Potential next steps*

- To reduce burn-out, consider offering employees periodic company-supported volunteer opportunities and the potential for lateral moves.
- Investigate and develop strategies for supporting non-linear career trajectories, including flexible work options, telecommuting, and job sharing.

## Research Questions:

*Conference attendees identified several questions that need to be addressed through additional data collection and research studies.*

- On a broad scale, how aware are employers of the demographic changes in the American and global workforces? If they are aware, how prepared are they to deal with these changes in their organizations? How many companies have developed explicit strategies for managing their aging workforce?
- What are more effective, unbiased ways to measure worker productivity? Are there ways to reduce or eliminate unconscious age bias in performance reviews? How can the benefits of older workers be quantified?
- How can behavioral finance research be applied to restructure employee retirement plans? How effective are these changes in promoting better decision-making and behavior modification among employees?



## Discussion Questions:

*The conference made clear that we are still in the initial stages of understanding the challenges of the aging workforce. The questions below require further consideration by employers, practitioners, and policymakers.*

- The discussion at the conference largely focused on knowledge workers. How might the conversation be different when considering the challenges faced by low-income workers and those in physically demanding jobs?
- How can we reframe the conversation about older workers to be more balanced and include the benefits in addition to the challenges?
- How do we have a conversation about the aging workforce that acknowledges both the macro-economic reality of the lump of labor theory and the micro-level experience of individual companies?
- Where does primary responsibility for individual financial security lie? What is the fiduciary responsibility of the employer?

- How can the private sector, academia, and non-profits effectively collaborate with the government to address issues of the aging workforce? What public policy outcomes or initiatives would create a better environment for older workers?
- What does an “effective saver” look like at various points throughout the career lifecycle? How can companies communicate these milestones to employees?
- What does an effective multigenerational workforce look like? How can companies promote the strengths of older and younger workers while minimizing the potential for intergenerational tension? How can companies use multigenerational teams to achieve specific goals?



# APPENDIX: CONFERENCE PRESENTATIONS

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A Psychological Perspective on Older Workers  
Laura Carstensen, PhD  
Director, Stanford Center on Longevity

### What is cognition?

Cognition refers to the high level functions carried out by the human brain. It includes the ability to think, reason, and remember. Cognitive processing is required to comprehend and generate speech, visually perceive the world, perform arithmetic calculations, remember and to attend to environmental stimuli. Cognition also refers to the coordination and deployment of “executive functions” such as planning, problem-solving, and self-monitoring.

## Examples of Memory & Analytical Tests

### Memory

Study the following words and then write as many as you can remember

Lake	Goat
Book	Door
Frog	Fish
Soup	Desk
Mule	Rope

### Spatial Visualization

Select the object on the right that corresponds to the pattern on the left



Source: Salthouse (2012). Reprinted with permission.

February 19, 2014

### Reasoning

Select the best completion of the missing cell in the matrix

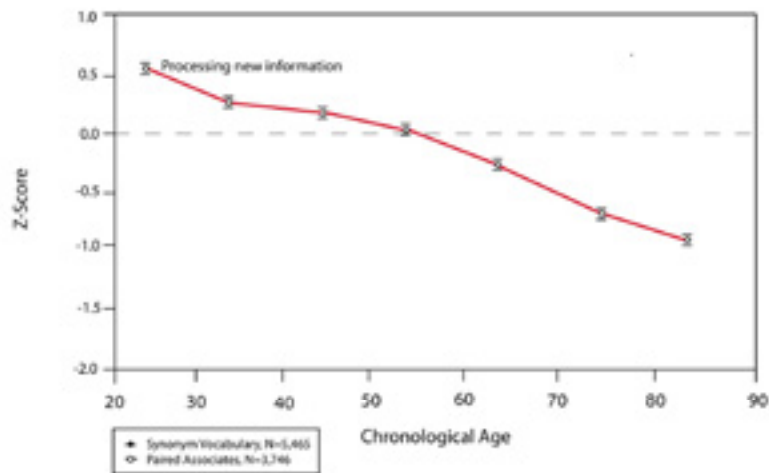


### Perceptual Speed

Classify the pairs as same (S) or different (D) as quickly as possible



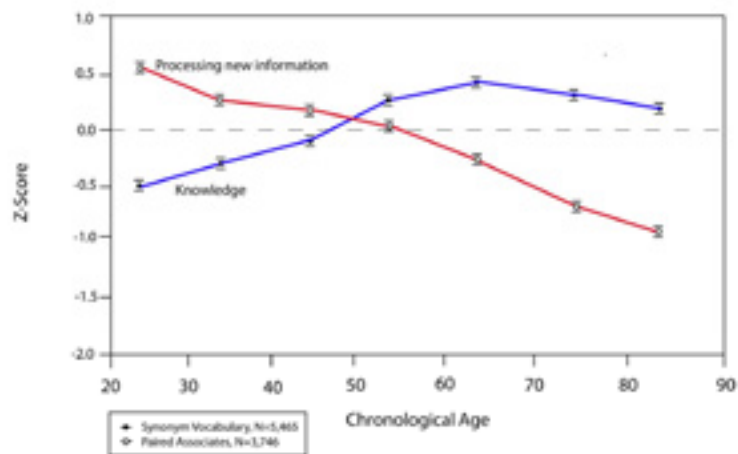
## Cognitive decline with age



Salthouse, T. (2012) Major Issues in Cognitive Aging



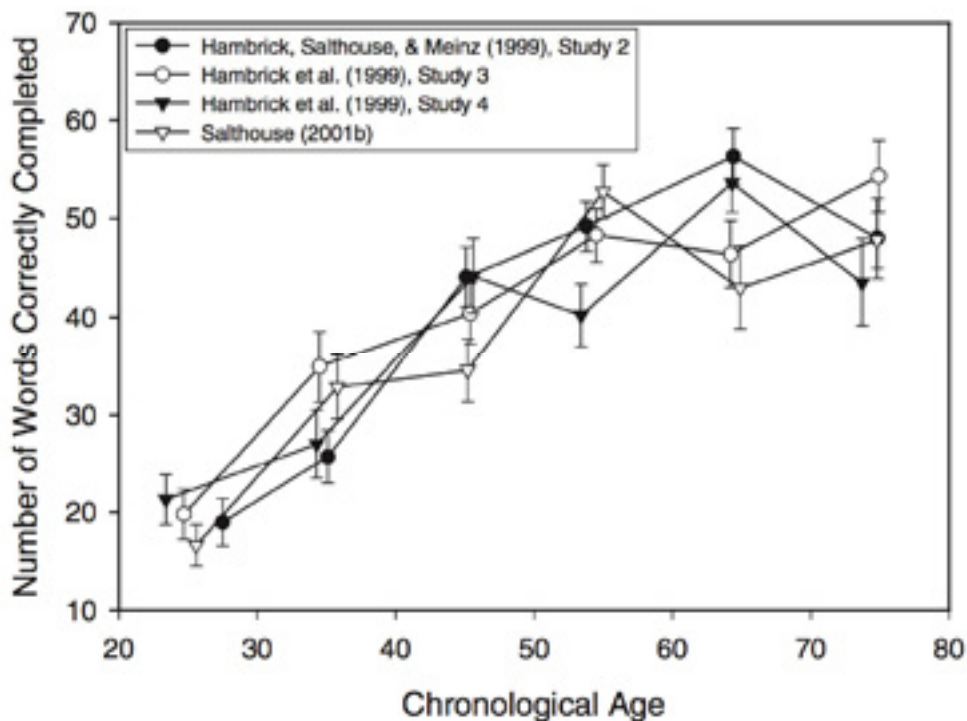
## Cognitive gains compensate for declines



Salthouse, T. (2010) *Major Issues in Cognitive Aging*

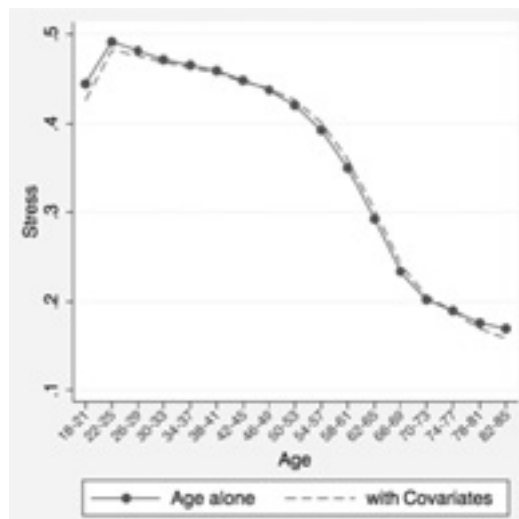


## Experienced New York Times crossword puzzle performance by age





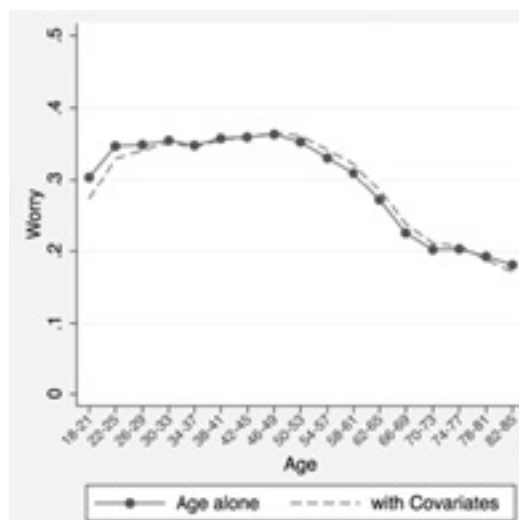
## Emotional life improves with age



Arthur A. Stone, Joseph E. Schwartz, Joan E. Broderick, and Angus Deaton  
Proceedings of the National Academy of Sciences (2011)



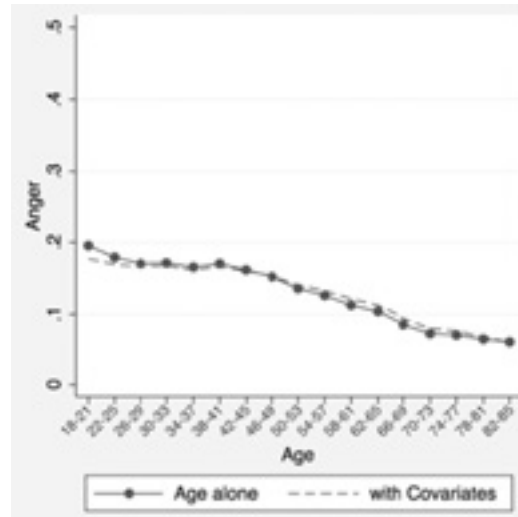
## Worry



Arthur A. Stone, Joseph E. Schwartz, Joan E. Broderick, and Angus Deaton  
Proceedings of the National Academy of Sciences (2011)



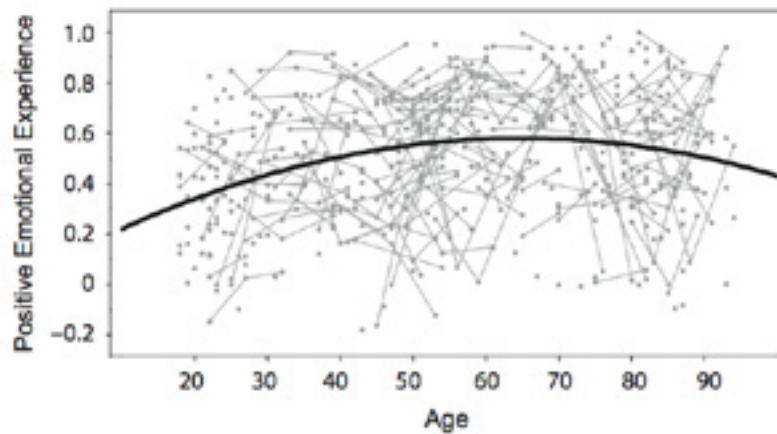
## Anger



Arthur A. Stone, Joseph E. Schwartz, Joan E. Broderick, and Angus Deaton  
Proceedings of the National Academy of Sciences (2011)



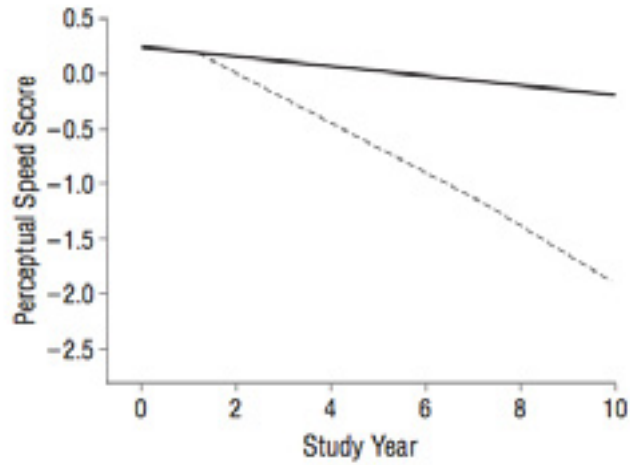
## Not just the Greatest Generation



Carstensen, Turan, Scheibe, Ram, Ersner-Hershfield, Samanez-Larkin, Brooks,  
& Nesselroade Psychology and Aging (2011)



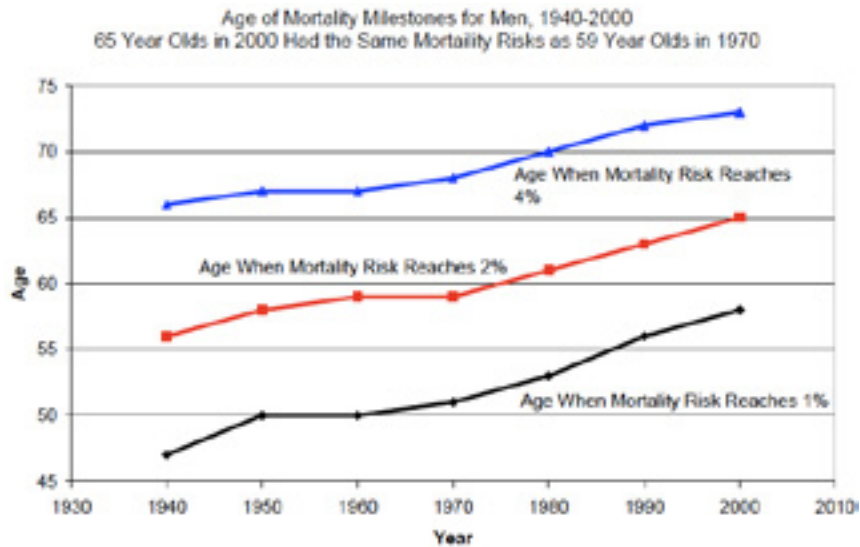
Age-related decline in cognitive processing parsing healthy from those who develop Alzheimer's disease or related disorders



Wilson, R.S., Leurgans, S.E., Boyle, P.A., Bennet, D.A. (2011) Cognitive Decline in Prodromal Alzheimer Disease and Mild Cognitive Impairment. *Arch Neurol*.



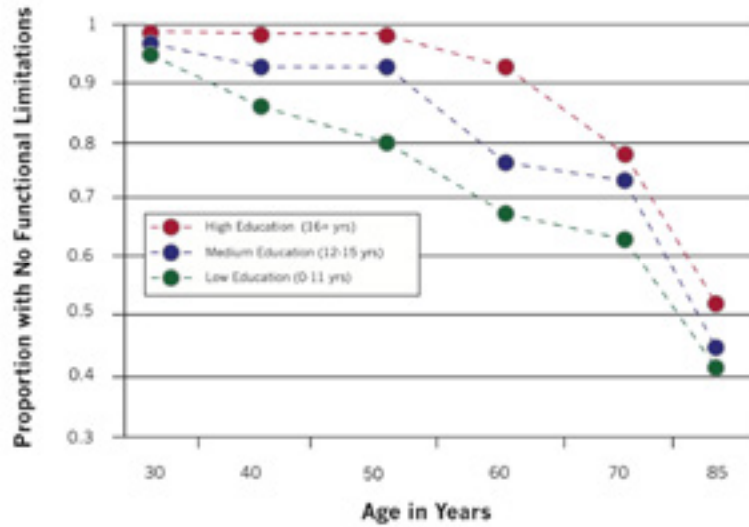
Health is improving



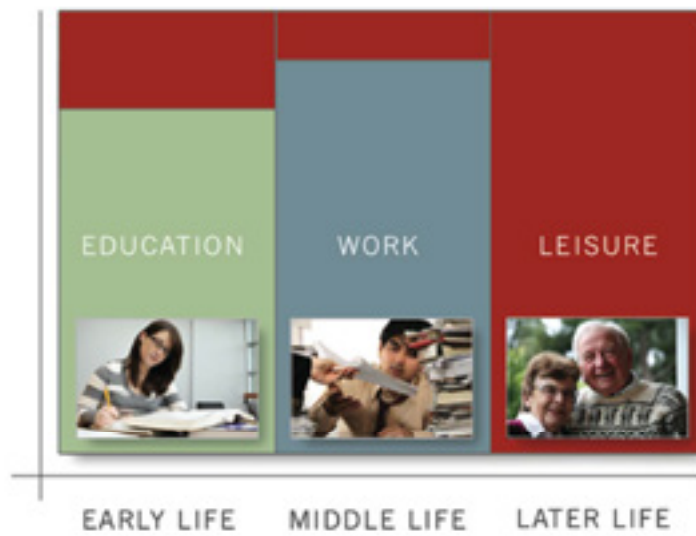
John Shoven, *New Age Thinking: Alternative Ways of Measuring Age, Their Relationship to Labor Force Participation, Government Policies and GDP*



## Education matters



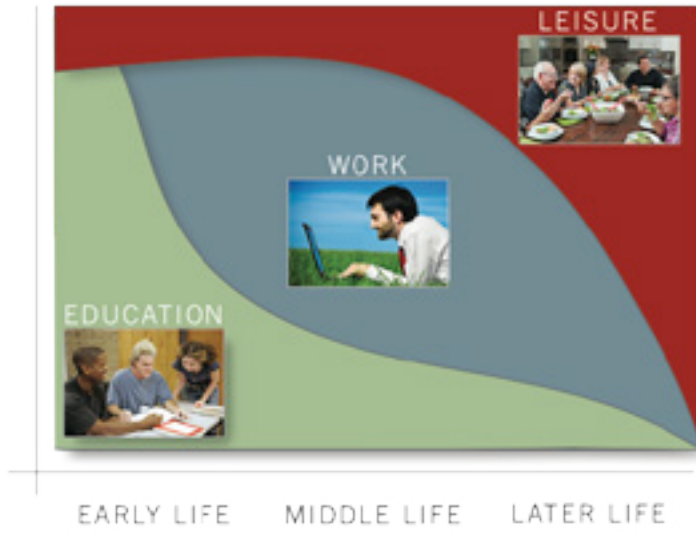
House, J. (2005)



Carstensen, L. (2011). A Long Bright Future: Happiness, Health and Financial Security in an Age of Increased Longevity. New York: Public Affairs.







Carstensen, L. (2011). *A Long Bright Future: Happiness, Health and Financial Security in an Age of Increased Longevity*. New York: Public Affairs.





## Tapping the Full Potential of the Mature Workforce

Pat Milligan  
January 30, 2014

### Older Worker Perceptions



Are more highly compensated



Less productive than younger workers



Are less mobile



Require a higher cost of training in technology



Produce lower quality work



Are resistant to change

- ✓ **Rapidly Aging Workforce**
  - ✓ Number of people over age 60 expected to increase from 810M in 2012 to more than 2B in 2050
- ✓ **Workers are Staying in the Workforce Longer**
  - ✓ Economic uncertainty is leading individuals to delay retirement
- ✓ **Too Few Young People Available to Enter the Workforce**
  - ✓ Due to declining global fertility rates
- ✓ **Industry Brain Drain**
  - ✓ Changing demographics result in talent deficits in industries requiring highly specialized skills



**We must proactively accommodate mature workers, build on their talents and engage them to pass on their skills and knowledge to the next generation**

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## JAPAN

Human Capital Index Rank: 15 (n=122)

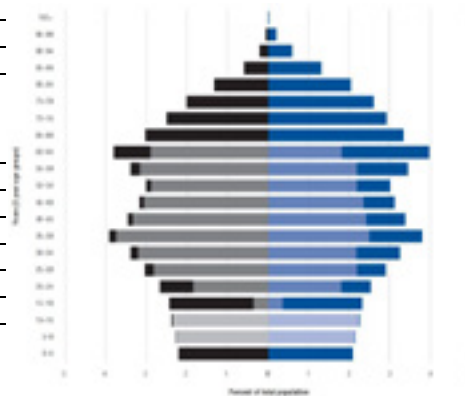
Pillar 1: Education	28
Pillar 2: Health and wellness	10
Pillar 3: Workforce and employment	11
Pillar 4: Enabling environment	13

### Additional Indicators

Total population (1,000s)	127,352.8
Median age of population	45
GDP per capita PPP (constant 2005, international \$)	31,425
GDP growth (annual %)	1.9
Aged dependency:	36.0%
Youth dependency:	20.9%
Male labour force participation, age 65+:	2.9%
Female labour force participation, age 65+:	1.8%

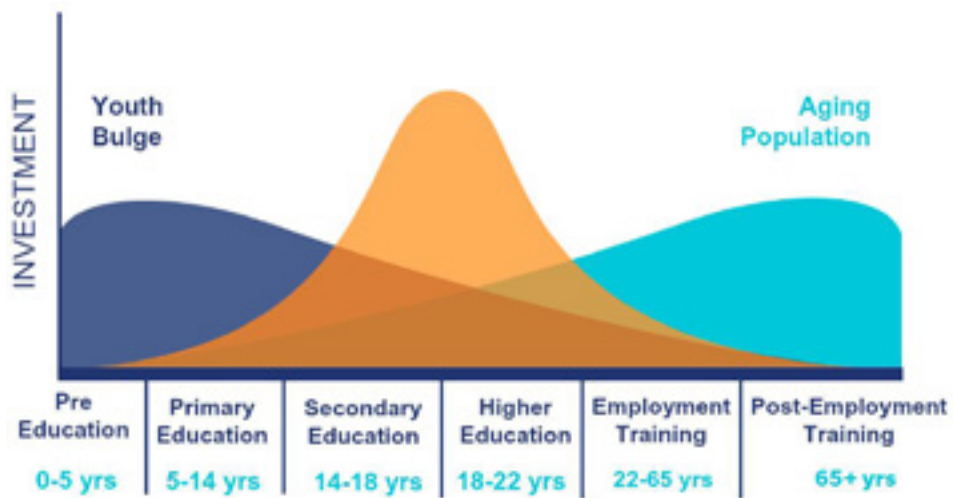
### Education and Workforce Distribution Key:

<b>Male</b>	<b>Female</b>
■ Total population	■ Total population
■ Labour force participation	■ Labour force participation
■ Primary and secondary enrolment	■ Primary and secondary enrolment



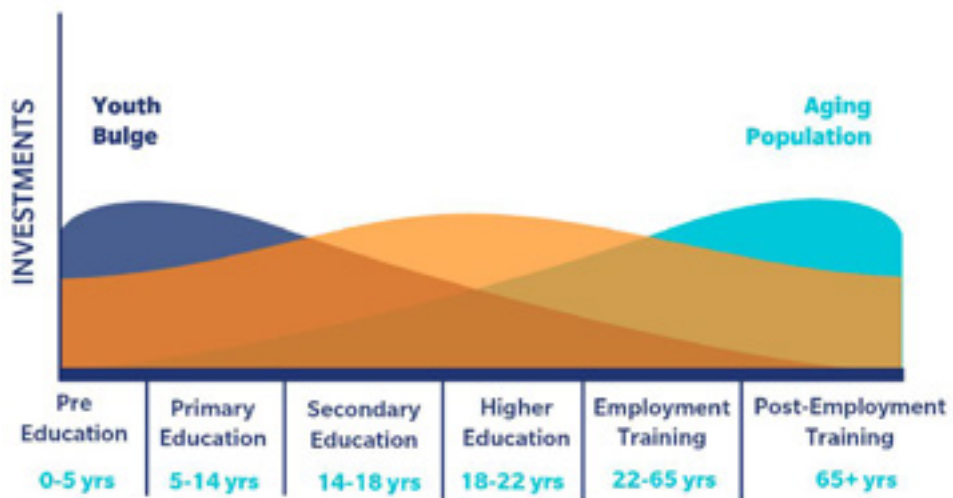
MERCER

### Traditional Life Cycle of Learning



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### Non-Traditional Life Cycle of Learning



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## Innovative Approaches to An Aging Workforce Recruiting and Re-skilling Mature Workers and Retirees for New Roles

- ❑ Australian bank, **Westpac**, hired and trained 900 recruits over the age of 45 to help improve overall customer service.
- ❑ **L'Incontro Cooperative**, an Italian nongovernmental social services organization recruits retired nurses as social workers, art teachers, art therapists to improve quality of client services.
- ❑ Canadian government's **Targeted Initiative for Older Workers (TIOW)** program helps workers between ages 55 and 64 remain productive participants in the workforce through training and employment programs



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## Innovative Approaches to An Aging Workforce Leveraging Mature Worker Knowledge/Experience to Prepare Next Generation of Workers

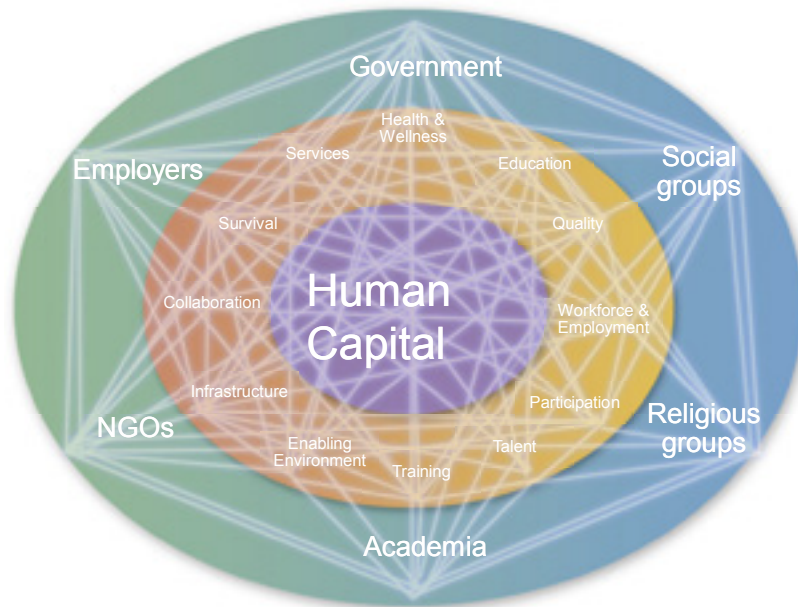
- ❑ **Chevron Australia** incentivizes near-retirees to spend time mentoring successors and next generations.
- ❑ **GE** implemented programs to nurture and enhance professional growth for women, particularly in technical and engineering fields, through mentorship.



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## NETWORK OF STAKEHOLDERS



## Discussion Questions

- What challenges related to the aging workforce are you seeing in your organization today?
- What are some of the new and innovative solutions or interventions you find effective to address these challenges?
- What can you do to foster multi-stakeholder collaboration?
- How can we fully leverage the mature workforce to ensure organizations stay ahead of the curve?





**Not Peer Reviewed**

# GAUGING THE PRODUCTIVITY OF OLDER WORKERS: MEASUREMENT ISSUES AND CHALLENGES

30 JANUARY 2014

**Haig R. Nalbantian**  
Senior Partner

New York

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## Key issues for discussion

- Do “seasoned” (older and/or more tenured) employees create business value in your organization?
  - How do you know?
- What are the channels through which older workers do and can affect productivity and business performance in your organization?
  - Their own productivity/performance?
  - Spillover effects on the productivity/performance of others?
- Through what reward mechanisms do you value experience?
  - Pay? Career Value? Work assignments? Other “intangibles?”
- How is the changing economy, driven by the primacy of knowledge/information, by forces of rapid technological change and by rapid globalization, affecting the productivity of older workers?
  - Is the increased value of information and knowledge offsetting or delaying the otherwise inexorable diminishing returns to experience?
  - Is the speed of technological change pulling in the other direction?
- What are the workforce management implications of an ageing workforce?

## Today's presentation agenda

- Traditional economic views of age and productivity
  - Human Capital theory
  - Offshoots of Human Capital theory
  - Alternative models
    - Personnel Economics
- The view from the field
  - Mercer evidence from “internal labor market analysis<sup>®</sup>” of firm-level employee data
- What's wrong with this picture?
  - Levels of analysis problems
  - Spillover effects of older/more tenured workers on organization productivity and performance
- A more “macro” view of firm-level data
  - Mercer evidence from modeling the business impact of human capital management
- Implications

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## Background: A Quick Overview of Traditional Economic Views of Age and Productivity



## Traditional economic views on age and productivity

### **Human Capital Theory**

- Focus on individual productivity and performance
- Focus on pay as a proxy for productivity – the impact of competitive markets
- Explain trajectory of age-earnings profiles in terms of the productivity of human capital investments in education and training
- Draw out implications of presumed “diminishing returns” to learning and experience

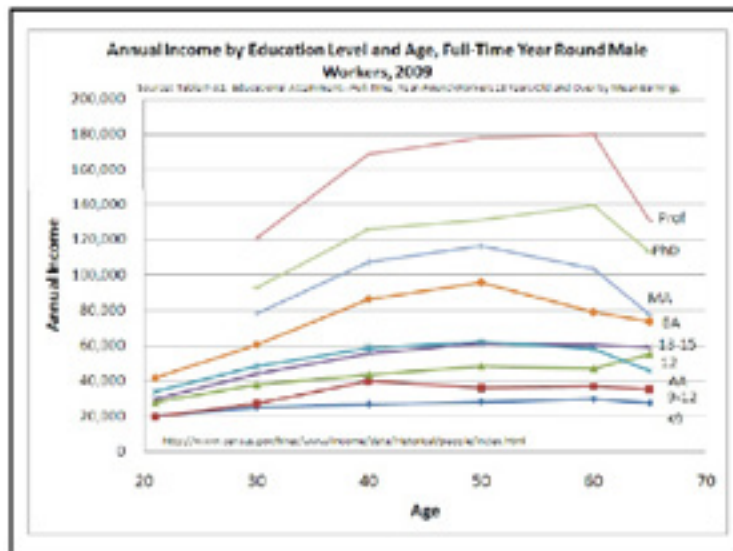
### **Offshoots of Human Capital Theory and Alternative Models**

- Essentially examines disruptions to pay – productivity link to solve incentive and selection problems associated with incomplete or asymmetrical information and implications for observed age/tenure-earnings relationships
  - Distinctions between “general” and “firm-specific” human capital
  - “Bonding” to solve incentive problems
  - Tournaments to motivate performance and better allocate risk

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In traditional Human Capital theory, diminishing returns to experience are reflected in the decreasing slope of the age-earnings profile, as in the illustration below:



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Source: [www2.econ.iastate.edu/~HUMANCAP2.pdf](http://www2.econ.iastate.edu/~HUMANCAP2.pdf) Iowa State University

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This interpretation may be confounded by a set of factors that disrupt the link between pay and productivity and render pay a flawed proxy for individual productivity

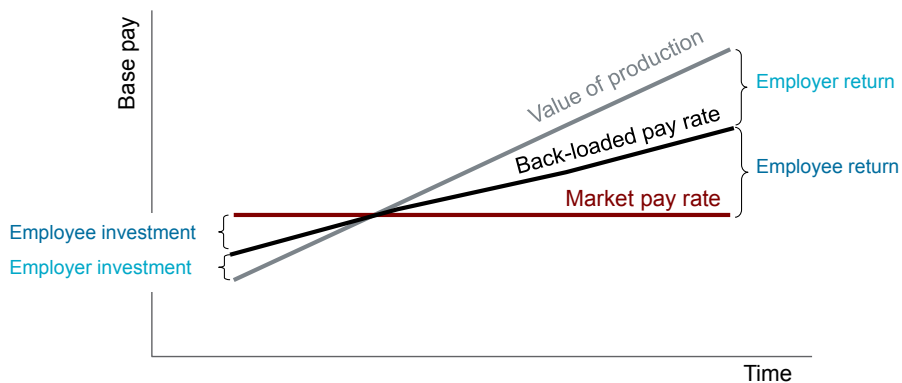
- Back-loading of pay/benefits to account for employer investments in training and learning
  - differential patterns of investment and return to general versus firm-specific human capital
- Back-loading of pay/benefits to address incentive problems in agency relationships
  - i.e., the performance bond
- Hierarchical structures of pay/benefits to motivate performance and more effectively allocate risk
- Asymmetries of information between employers and employees regarding job and employee attributes and resulting challenges of insuring match quality
- Imbalances in external versus internal labor market valuation of experience that can make older workers more or less valued than the true social utility of their employment

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ILLUSTRATIVE EXAMPLE

### The so-called “Bonding” Model



**Organizations that pay older workers more than their current productivity can only do so for so long before the economics of inter-temporal transfer begin to fail**

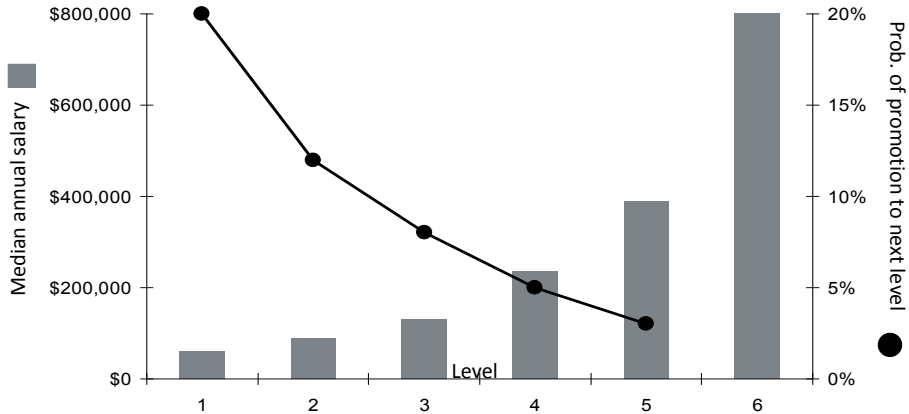
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DISGUISED CASE EXAMPLE

### A "Tournament" in Practice

Careful calibration of pay differentials across career levels with associated promotion probabilities helps ensure increasing "returns to promotion"

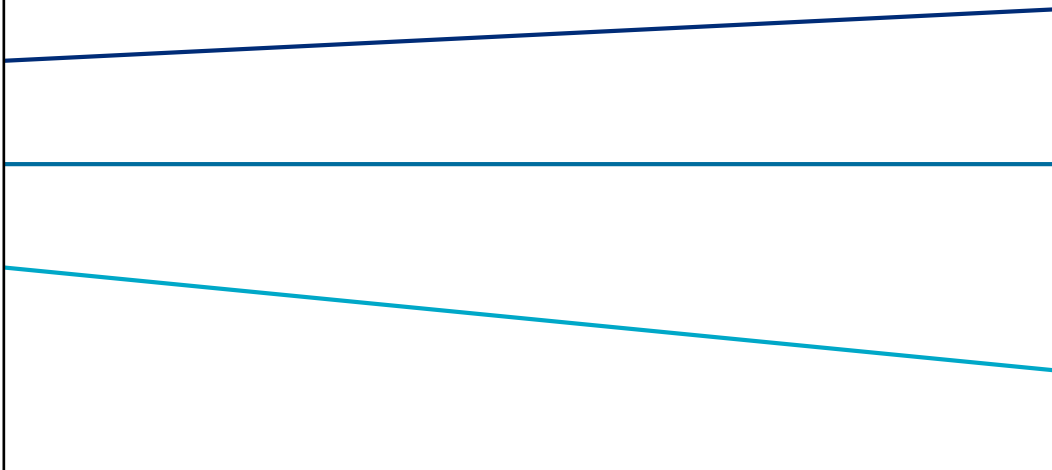


Increasing "returns to promotion" motivate the effort/diligence to meet increasingly challenging goals. . . but again the "winners" of the tournament cannot stay on indefinitely or else the tournament comes to a halt

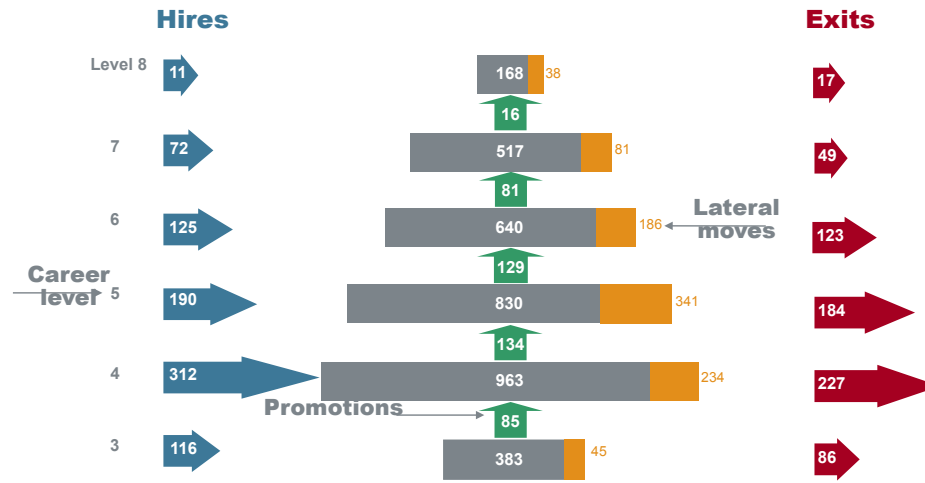
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### Measuring the Productivity of Older Workers Through Individual Workforce Outcomes: The "Micro" View



Internal Labor Market (ILM) analysis® “maps” the talent flows and associated rewards that determine what your workforce is, what it is becoming, and it statistically estimates the drivers of those outcomes

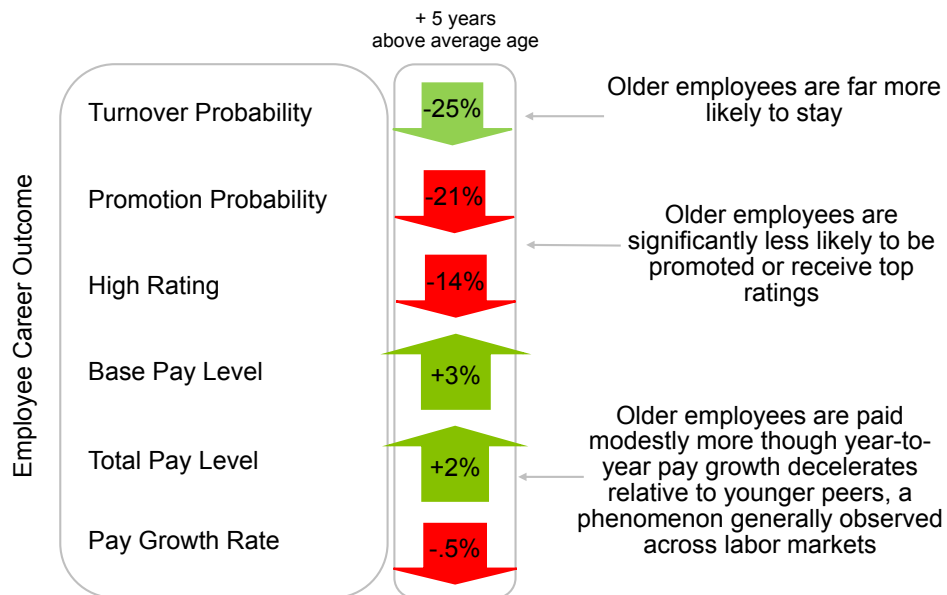


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DISGUISED CASE EXAMPLE

At this large consumer products company, older workers face a significant fall-off in career advancement and ratings, *all else being equal*:



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DISGUISED CASE EXAMPLE

In this professional services company, positive attitudes also waned with tenure, as did engagement overall

Category	% Fav for company	Less than 1 year	1-2 years	3-4 years	5-10 years	11-20 years	More than 20 years
Clients	79	3	-1	0	0	1	2
Management of Team / Department	69	6	2	2	-1	-1	-2
Colleague Engagement	69	14	1	-2	-3	1	3
Your Job and Role	68	7	1	-1	-1	0	3
Integrity, Ethics and Values	68	8	2	0	-2	0	1
Leadership	63	16	5	0	-4	-2	-3
Teamwork and Cooperation	59	8	1	-1	-2	0	2
Fairness and Diversity	56	19	4	-1	-4	-3	-3
Corporate Citizenship	55	9	3	0	-2	-2	-2
Communication	54	13	6	1	-4	-2	-3
Parent Company	52	16	4	1	-4	-2	-4
Development and Career	47	18	2	-2	-4	-1	2
Reward and Recognition	42	15	1	-3	-3	0	1

*This pattern of results is typical in that new employees experience a 'honeymoon' period. Typically, however, long service employees become more positive, which is not seen in these results.*

The scores for the sub-groups show the difference in the favorable response between the sub-group and 'parent group'.

Shaded boxes indicate differences which are statistically significant

COMPILATION OF DISGUISED CASE EXAMPLES

Overall, older employees fare consistently worse in terms of performance ratings and career progression (both promotion and pay **growth**); the picture is a bit more mixed for more tenured workers

		TURNOVER	PROMOTION	RATINGS	TOTAL COMPENSATION		
					BASE PAY	COMPENSATION	PAY GROWTH
Company A	AGE	-17%	-18%	-10%	-1%	1%	-34%
	TENURE	-50%	-7%	0	1%	-1%	17%
Company B	AGE	-20%	-27%	-13%	2%	2%	-0.3
	TENURE	-36%	-9.50%	0	0	0.4%	-0.1
Company C	AGE	-30%	-25%	-15%	3%	3.3%	-0.4
	TENURE	-42%	-5%	7%	-0.8%	-0.5%	0
Company D	AGE	-20%	-33%	-9%	1%	1%	-0.4
	TENURE	-52%	-30%	-5%	3.3%	3.4%	-0.2
Company E	AGE	-17%	-22%	-16%	na	na	-8%
	TENURE	-26%	0	0	na	na	-18%

Estimates are drawn from statistical models of the drivers of each outcome, applied to multi-year workforce panel data for each organization; these models account for numerous individual, organizational and external market factors that also influence the six workforce outcomes of interest. Please note: actual coefficients have been altered modestly to preserve absolute confidentiality of client data, but in all cases maintain relative magnitudes of effects

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COMPILATION OF DISGUISED CASE EXAMPLES

In contrast, increasing age tends to contribute more to pay *levels* than does longer tenure in the organization, reflecting the interplay with external labor market dynamics

		TURNOVER	PROMOTION	RATINGS	BASE PAY	TOTAL COMPENSATION	PAY GROWTH
<b>Company F</b>	AGE	-15%	-20%	-0.15 points	3.4%	3.5%	-0.8
	TENURE	-27%	-15%	0	1.5%	3.3%	-0.2
<b>Company G</b>	AGE	-22%	-20%	-13%	2.6%	2.4%	-0.2
	TENURE	-30%	-14%	0	-3.2%	-3.4%	
<b>Company H</b>	AGE	-53%	-40%	-25%	1.8%	1.3%	-0.3
	TENURE	-50%	-20%	0	1.7%	2%	0
<b>Company I</b>	AGE	-14%	-20%	na	8%	5.8%	-1
	TENURE	-42%	-0%	na	0	5%	0
<b>Company J</b>	AGE	0	-60%	-0.35 points	5%	5%	-0.2
	TENURE	-10%	-30%	0.7	13%	13%	-0.2

Estimates are drawn from statistical models of the drivers of each outcome, applied to multi-year workforce panel data for each organization; these models account for numerous individual, organizational and external market factors that also influence the six workforce outcomes of interest. Please note: actual coefficients have been altered modestly to preserve absolute confidentiality of client data, but in all cases maintain relative magnitudes of effects <sup>14</sup>

## Why Individual Productivity Measures Don't Tell the Whole Story: The Role of Spillover Effects



**Traditional economic approaches to measuring the productivity of older workers focus on measures of individual productivity, but this may miss a big part of the productivity story**

- Individual productivity of older workers, as traditionally measured, may indeed tend to be lower, but spillover effects, or productive “externalities,” may be so large as to offset any fall-off in individual performance
- For instance, older workers may:
  - stabilize a work unit by lowering turnover, which in turn increases unit productivity and performance
    - Both older and more tenured workers are less likely to turn over
    - In supervisory roles, they often reduce the propensity of others around them to turn over
    - Those working in groups of older and/or more tenured workers are sometimes less likely to turn over as well
  - Increase the productivity of those around them through knowledge and information sharing
  - Help grow the human capital within an enterprise by enhancing development and career progress of those they supervise or mentor
  - Enable innovation
  - Strengthen group cohesion, collaboration, conflict avoidance, and resolution, among other things

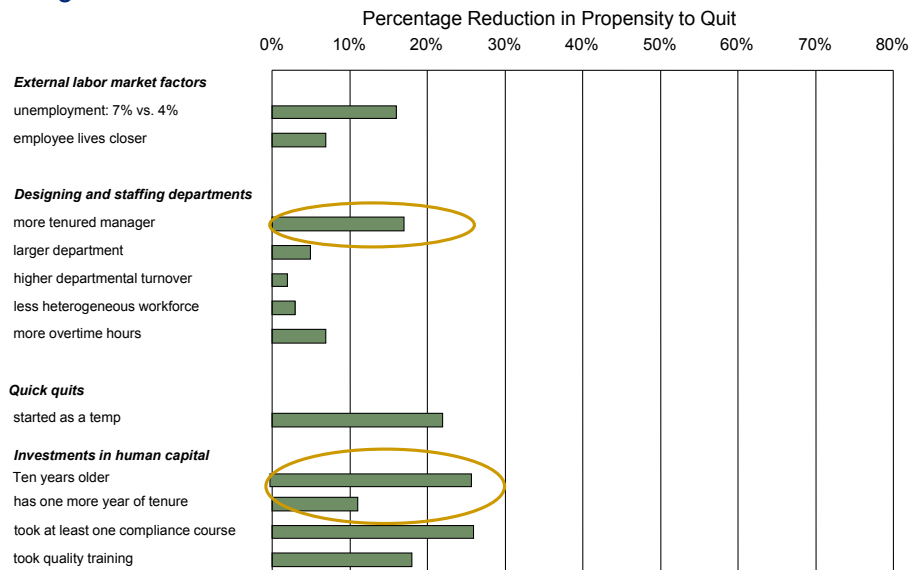
**Measuring and understanding the trade-offs is fundamentally an empirical issue**

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DISGUISED CASE EXAMPLE

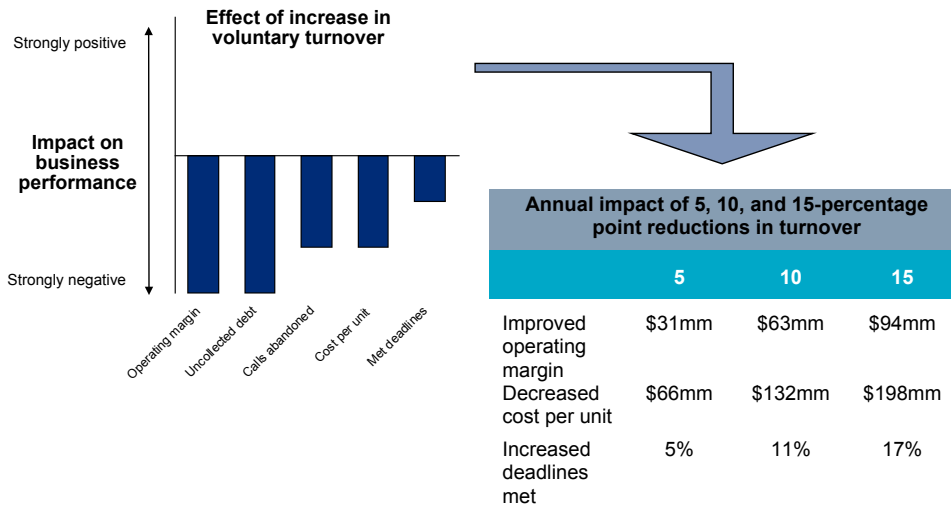
**In this health services organization, older and more tenured employees are far less likely to quit as are those who report to more seasoned managers**



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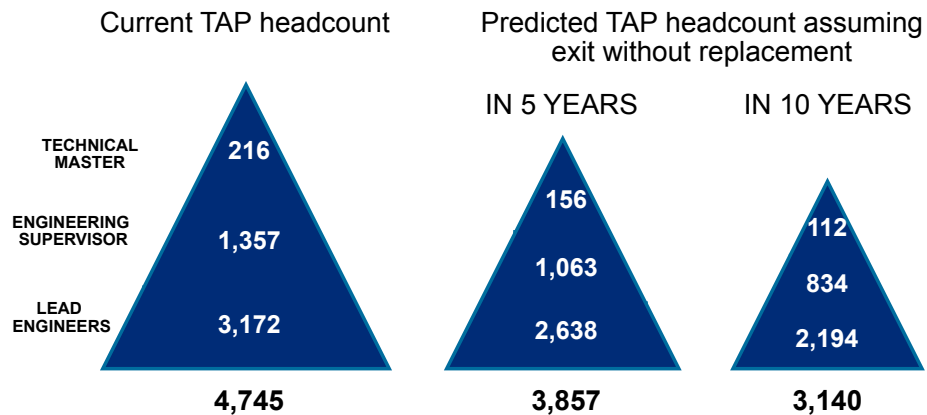
This matters a great deal from an organizational productivity perspective, because the cost of turnover is extremely high, *across all job families*



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DISGUISED CASE EXAMPLE

This engineering organization faced huge vulnerabilities to loss of specialist knowledge



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On the other hand, spillover effects can work the other way too: this global consumer products company has had to confront the adverse impact of older workers staying on too long

**Situation**

- Large, branded company facing slow growth, almost all of which is driven by emerging markets, looks to develop a people strategy that fosters greater customer knowledge, faster, better innovation, and stronger workforce diversity
- The company has traditionally built its talent from within, successfully relying on a premium rewards and employment package, to get talent to come and stay
- The company closed its DB plan in the late 1990s

**Presenting Problems**

- Company experiencing significant back-up in its talent flows as more senior employees delay retirement due to erosion of wealth in retirement plans and high uncertainty about their ability to supplement retirement income from work in a weak economy.
- Absent business growth, this back-up in retirements blocks progression of more junior talent, stalling our careers and generating incentives for higher performers or the more marketable among them to leave prematurely.

**Implications**

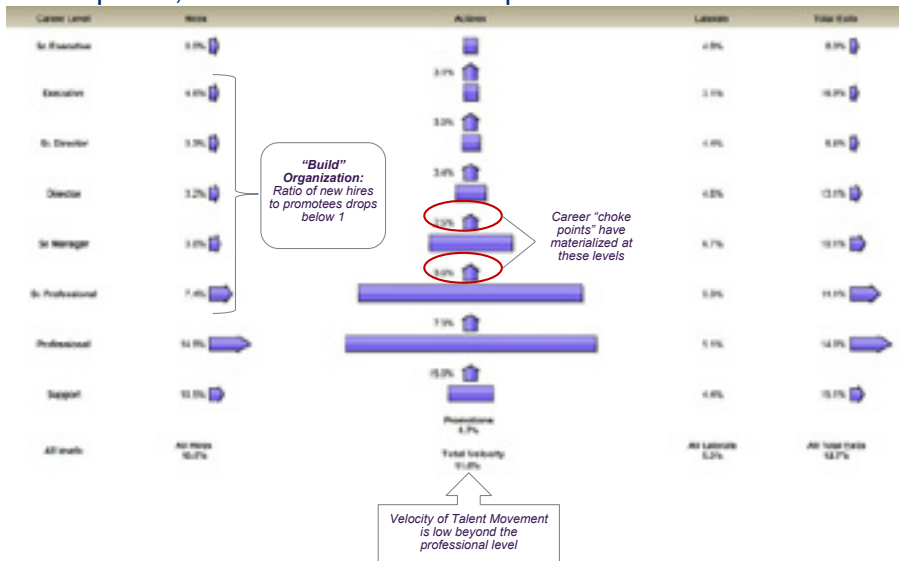
- Low “velocity” of movement within the company’s internal labor market, created, *in part*, by the existing retirement program is antithetical to successful realization of the company’s “Build” strategy with serious negative consequences to their business
- In this instance, a retirement program that delivered incentives for retirement-eligible employees to leave, would outperform one whose incentives are completely disconnected from tenure

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DISGUISED CASE EXAMPLE

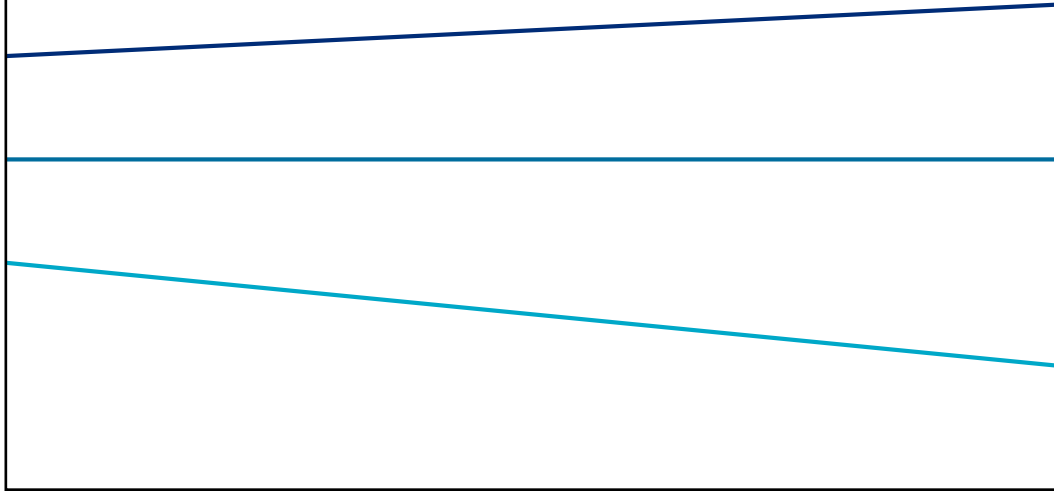
Limited incentives to retire - in the context of low growth and a “build” talent strategy - result in low internal labor market velocity, career choke points, and a serious drain of top talent



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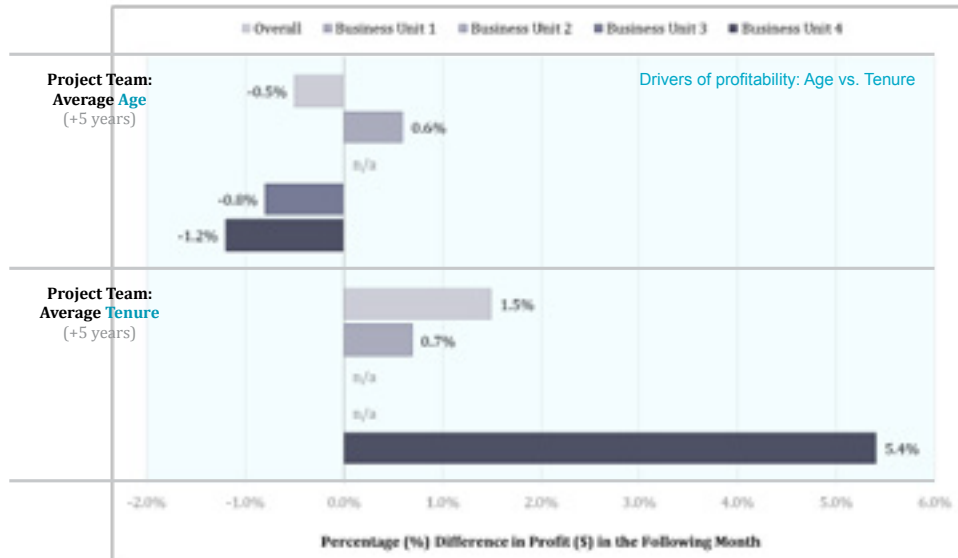
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## Measuring the Productivity of Older Workers Through Individual Workforce Outcomes: The “Macro” View



DISGUISED CASE EXAMPLE

In this services company, longer tenured teams are associated with higher profit potential; older teams, however, are linked to lower productivity, except in one business unit



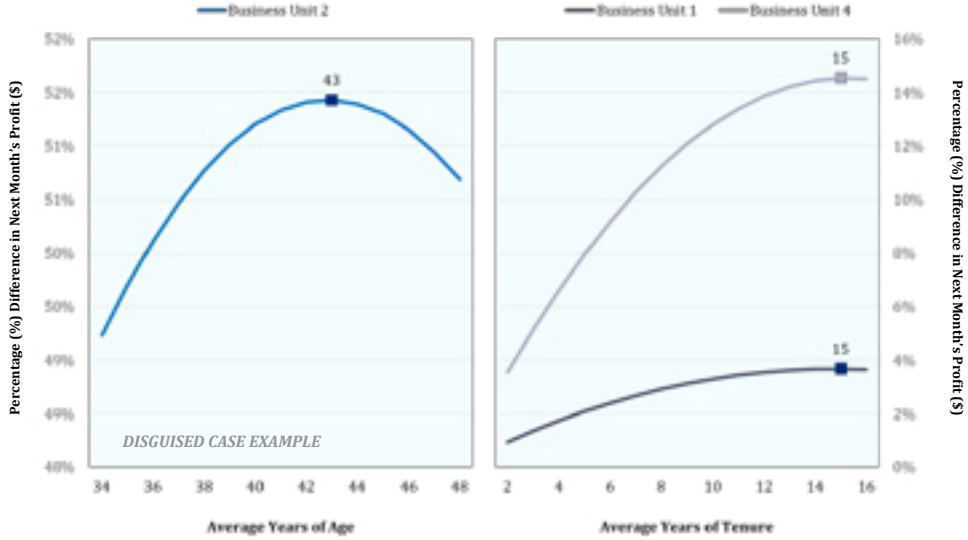
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DISGUISED CASE EXAMPLE

Trajectories show varying levels of impact of age and tenure on next month's profit across different business units

Optimal Levels: Age vs. Tenure



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DISGUISED CASE EXAMPLE

For this professional services firm, having more seasoned employees in customer facing roles was the single largest predictor of revenue growth

1-year growth in revenue

**Breadth of relationship**

Delivering one additional service to customers

**Stability of relationships**

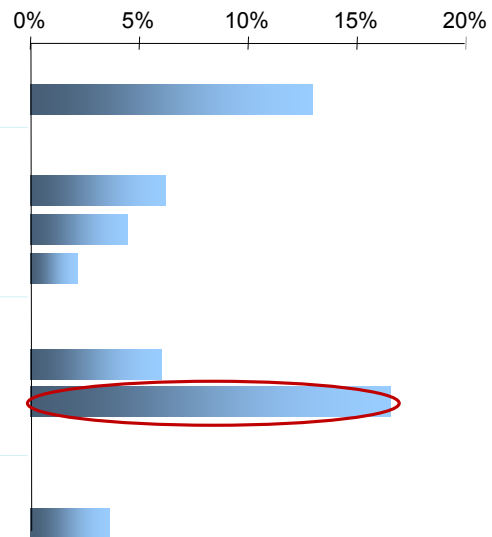
- Increase in dedicated staff serving customers
- Reduction in the turnover of seasoned people
- Reduction in voluntary turnover

**Key personal attributes**

- Increase average performance rating
- Increase in the tenure of customer service employees

**Diversity**

Increase in the percentage of non-whites

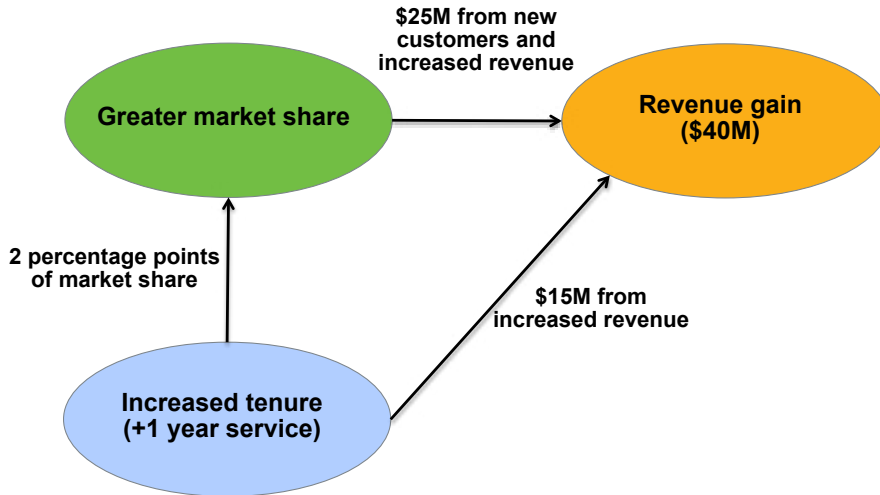


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DISGUISED CASE EXAMPLE

For this regional bank, the single largest driver of branch level performance was average tenure of employees in customer facing roles

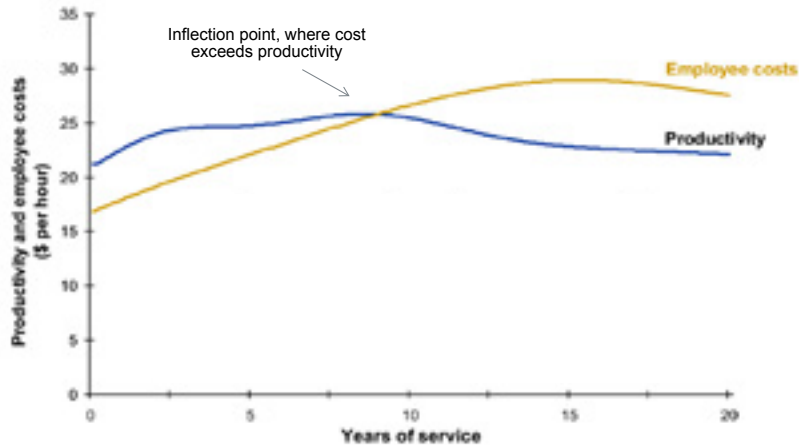


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DISGUISED CASE EXAMPLE

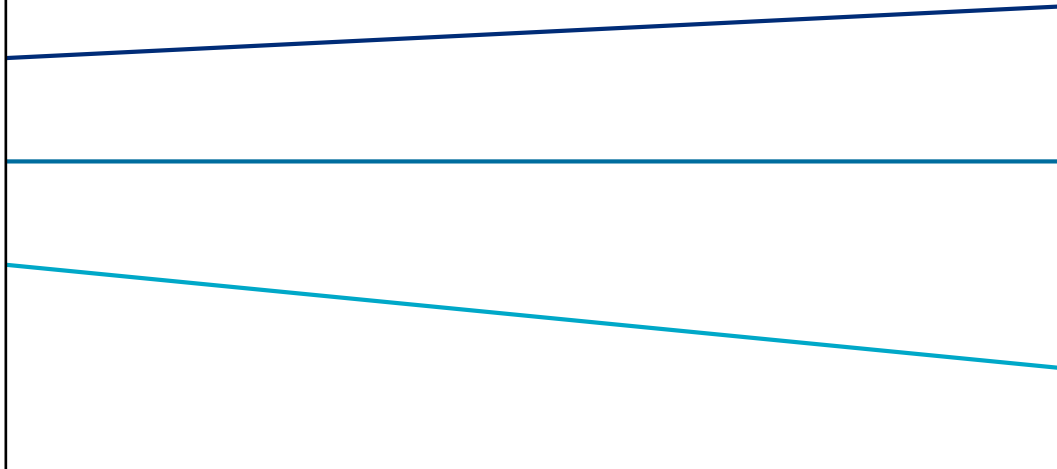
On the other hand, for this Distribution company, the productive value of tenure is exceeded by employee costs after only 8 to 10 years of service, a pattern driven largely by increased health claims for older workers



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## Key Conclusions



### What it all means

- There is quite pervasive evidence that measures of individual productivity and performance wane as workers get older, though the value of firm-specific knowledge appears to offset at least some of these productivity differentials
- Gauging the value of older workers strictly in terms of traditional individual measures of performance may be very misleading
  - Spillover effects are very significant, suggesting the real economic value of older workers manifests itself at the group or organizational level
- A persistent imbalance may exist between external and internal labor market valuations of experience
  - External labor markets may “price” general experience higher in terms of wages/salaries, but internal labor markets may value homegrown experience more and deliver that value through other elements of rewards
  - This can result in situations where older workers get locked into employment with their current employer, impeding career progress for younger employees, even as they might contribute higher value to other employers and to the economy overall
- Strengthening “after markets” for older workers and actually enabling higher levels of mobility among the oldest employees may be a way to better align social and private value
- For individual employers, there is no substitute for careful, disciplined measurement of the drivers of workforce performance
  - In the age of big data, the possibilities to quantify these relationships far outstrip what they were even a few years ago

## About the presenter

**Haig R. Nalbantian** is a *Senior Partner* and at Co-founder/Co-leader of Mercer's Workforce Sciences Institute. A labor/organizational economist, he has been instrumental in developing Mercer's unique capability to measure the economic impact of human capital practices. Those capabilities have been applied in numerous project he has directed globally and across a board range of industries in the U.S., Europe and the Middle East, including: pharmaceuticals, high technology, manufacturing, financial services, media and information services, energy, telecommunications and professional services.

Haig came to Mercer from National Economic Research Associates, Inc.; before that he was on the faculty of economics at New York University and was a research scientist at its *C.V. Starr Center for Applied Economics*. He is an internationally recognized expert in incentives, human capital measurement and management and their links to workforce productivity and organizational performance.

Nalbantian is widely published in major economic, business and human resources journals. He co-authored the prize-winning book on human capital measurement and management "**Play to Your Strengths**" (McGraw Hill, 2004). He is also editor of and chief contributor to the book "*Incentives, Cooperation and Risk Sharing*" and is a frequent speaker before industry groups, professional associations and academic audiences. His article (with Rick Guzzo), "**Making Mobility Matter**," published in the March 2009 issue of the *Harvard Business Review*, won the *Academy of Management's 2010 Award for "Outstanding Practitioner-Oriented Publication"*. Most recently, he co-authored a study sponsored by the World Economic Forum and Mercer, entitled, *Talent Mobility Good Practices: Collaboration at the Heart of Economic Growth (2012)*.

Haig earned his BA in English and Economics at New York University and his graduate degrees in economics from Columbia University. He is a member of the American Economic Association.



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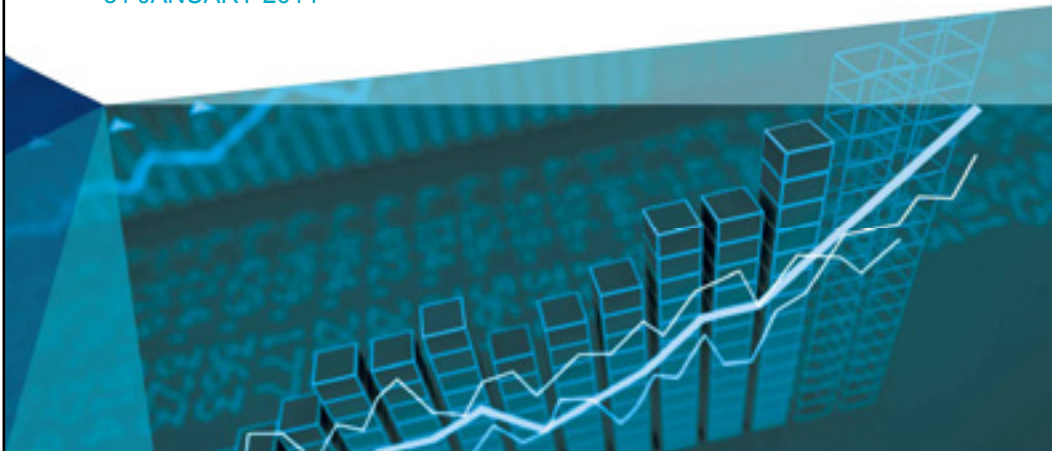
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## Getting Employees Ready in a DC Wealth and Health World - The Employer's Role

31 JANUARY 2014



### Agenda

- Behavioral engineering
  - Foundation & Framework
- Effective campaign design
- Group discussion
  - The Mercer Stanford research agenda

“Life expectancy is ballooning just as science and technology are on the cusp of solving many of the practical problems of aging. What if we could not only have added years but spend them being physically fit, mentally sharp, functionally independent, and financially secure? At that point, we no longer have a story about old age. We have a story about long life.”

Dr. Laura Carstensen, Founding Director, Stanford Center on Longevity (SCL)



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## Great Goals, But There Are Challenges ...

### Retirement Confidence At Record Low, Study Says

The Huffington Post | By Shelley Emling  
Posted: 03/19/2013 8:07 am EDT

#### The National Retirement Risk Index: An Update

by Alida H. Munnell, Anthony Webb and Francesca N. Golub-Sass

IB#12-20

The brief's key findings are:

- The National Retirement Risk Index (NRRRI), based on newly released *Survey of Consumer Finances* data, shows that over half of households may be unable to maintain their standard of living in retirement.



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## More Specifically ...

Three challenges in a DC world

1. Inadequate contributions – need 10% to 20% of pay contributed consistently for 30+ years
2. Leakage due to loans, early withdrawals
3. Employees on their own to convert savings into reliable income



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The image is a screenshot of the Harvard School of Public Health (HSPH) website. At the top, the Harvard logo and "HARVARD SCHOOL OF PUBLIC HEALTH" are visible, along with the tagline "Powerful ideas for a healthier world". A search bar and navigation links like "People", "Calendar", "MyHSPH", "Email", and "Newsletters" are also present. The main content area features "HSPH News" with a sidebar menu containing "News Home", "Press Releases", "Features", "Multimedia", and "HSPH in the News". A featured article titled "Life expectancy declines among least-educated whites" is shown with a breadcrumb trail: "Home > HSPH News > HSPH in the News > Life expectancy declines among least-educated whites". Below this, a "REPORT BRIEF • JANUARY 2013" is highlighted, with the title "U.S. HEALTH IN INTERNATIONAL PERSPECTIVE: SHORTER LIVES, POORER HEALTH".

**HARVARD** SCHOOL OF PUBLIC HEALTH  
Powerful ideas for a healthier world

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**HSPH News**

News Home  
Press Releases  
Features  
Multimedia  
HSPH in the News

Home > HSPH News > HSPH in the News > Life expectancy declines among least-educated whites

**Life expectancy declines among least-educated whites**

REPORT BRIEF • JANUARY 2013

**U.S. HEALTH IN INTERNATIONAL PERSPECTIVE:  
SHORTER LIVES, POORER HEALTH**

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## Here's One of the Problems ...

- Marshmallows.....



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## Here's the Other Problem

"For many people, being asked to solve their own retirement savings problems is like being asked to build their own cars."

- Richard Thaler, University of Chicago



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## Three Population Segments

- Do it for me
- Help me do it
- I'll do it myself.

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## Two Possible Responses to Wealth and Health Challenges

1. Mandatory programs/participation condition of employment
  - DC pensions
  - Only offer managed care
2. Use behavioral finance to move beyond awareness and education
  - Enlightened paternalism
  - Desired behaviors are incented but not required

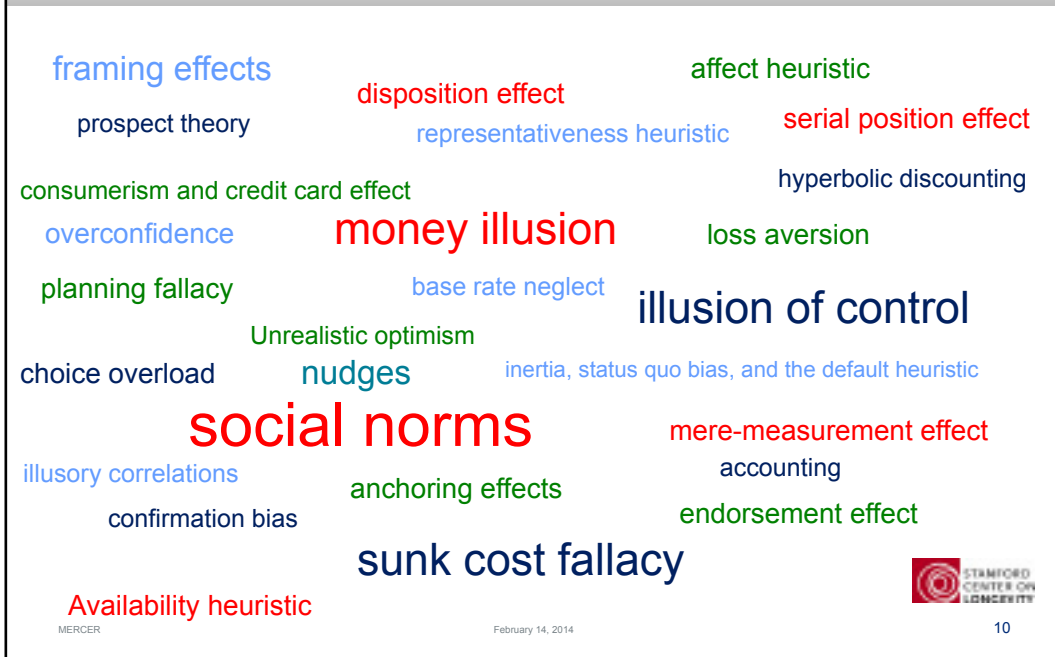
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February 14, 2014



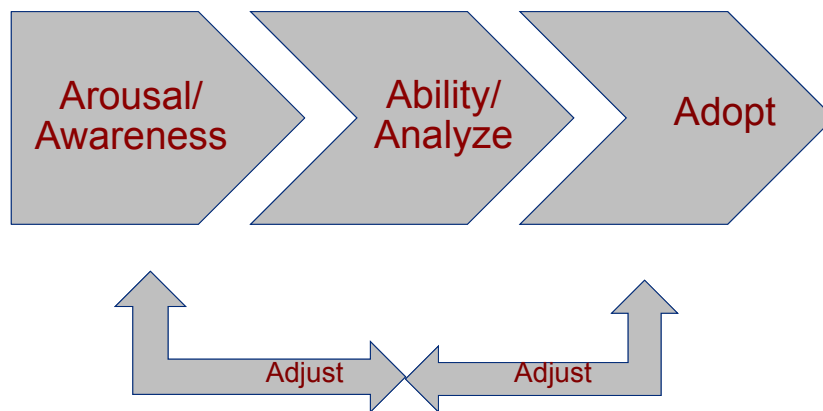
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## Current State of Research On Behavioral Finance



## Moving Beyond Education and Awareness Positive Behavioral Engineering

Refine the "awareness to action" model



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“The essential difference between emotion and reason is that **emotion leads to action** while reason leads to conclusions.”

– DONALD CAINE, NEUROLOGIST



## Positive Behavioral Engineering

Refine the “awareness to action” model

**Arousal/  
Awareness**

**Ability/  
Analyze**

**Adopt**



## Behavioral Finance is the Next Frontier in Plan Design

- The default is powerful and never neutral
- Design to the population segments
- Individual differences matter, but a few distinct choices are best
- Deploy both emotional and rational messaging
- Powerful factors are social norms, loss aversion, framing, endorsement effect
- Remove barriers and make it easy to implement

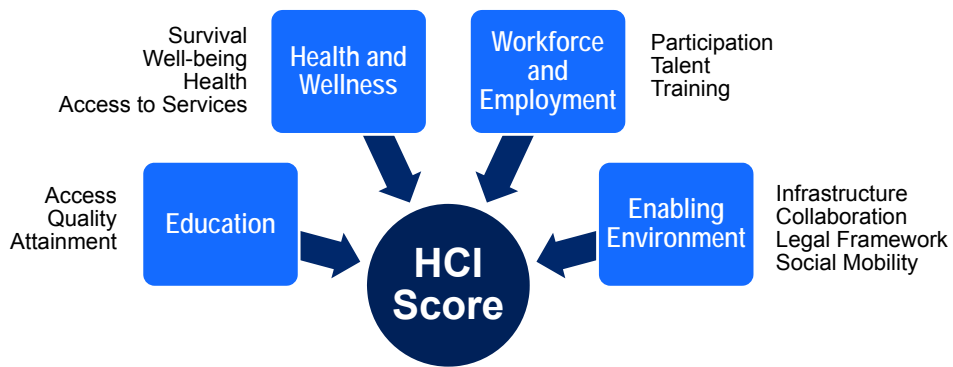


# GLOBALIZATION OF THE WORK AND WORKFORCE

JANUARY 31, 2014

Rick Guzzo  
Washington, DC

## Human Capital Index 51 measures, 4 pillars, 122 countries ranked



## Top 20 Countries

Country	2013 rank
Switzerland	1
Finland	2
Singapore	3
Netherlands	4
Sweden	5
Germany	6
Norway	7
United Kingdom	8
Denmark	9
Canada	10
Belgium	11
New Zealand	12
Austria	13
Iceland	14
Japan	15
United States	16
Luxembourg	17
Qatar	18
Australia	19
Ireland	20

Canada's world class education system was ranked #2 in the world



Less favorable scores on health (ranked #46) pulled down the US overall score

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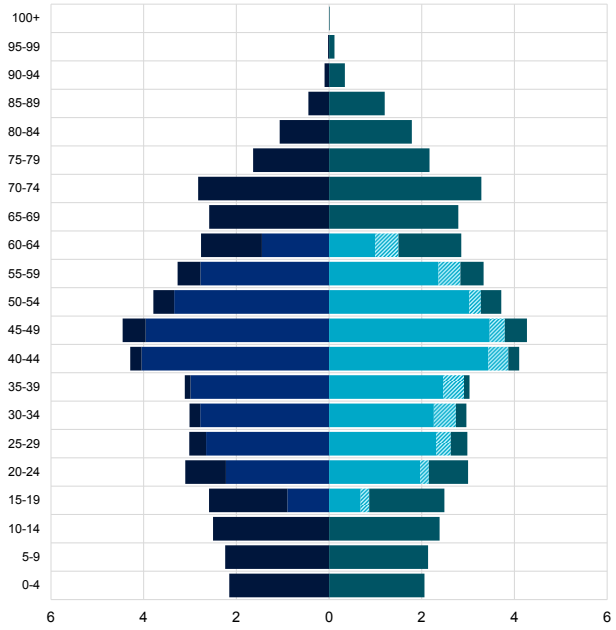
## Age comparisons by country

	Median Age	% Over 60
<b>G-7s</b>		
Japan	45	31%
Germany	44	26%
USA	37	19%
<b>BRIC</b>		
Russia	38	18%
China	35	12%
Brazil	29	10%
India	35	8%
<b>MINT</b>		
Turkey	28	11%
Indonesia	27	9%
Mexico	26	8%
Nigeria	18	5%

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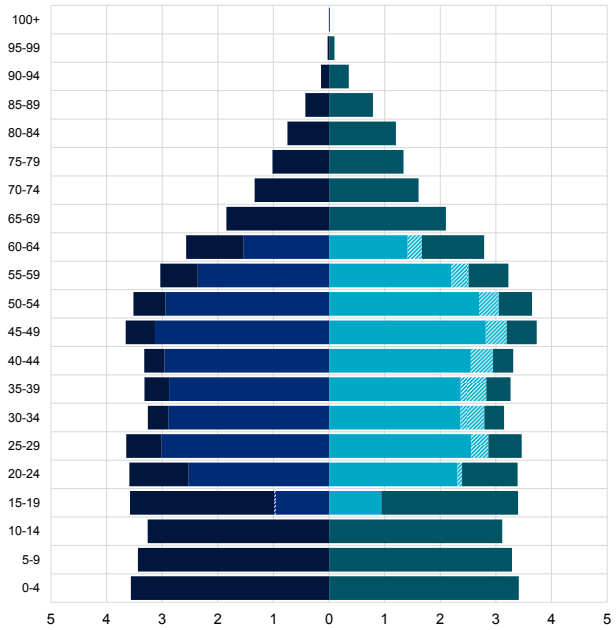
### Germany (6)



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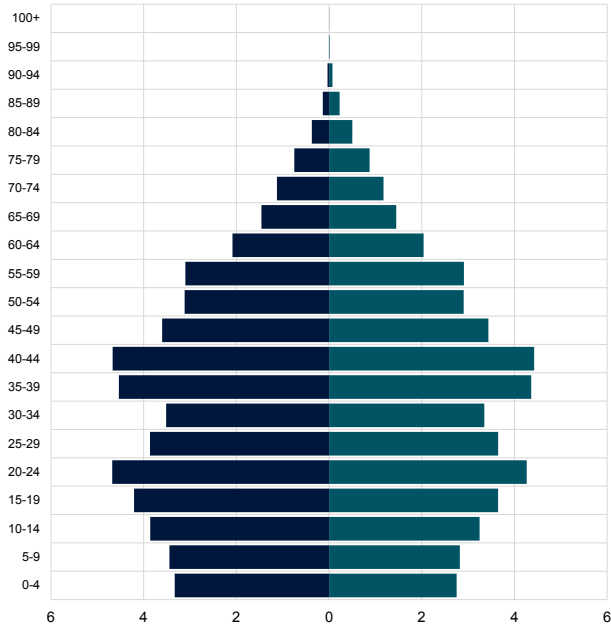
### USA (16)



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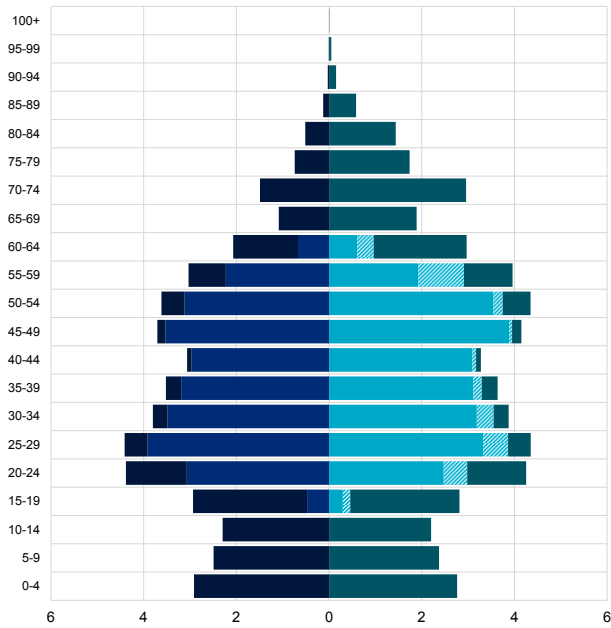
### China (43)



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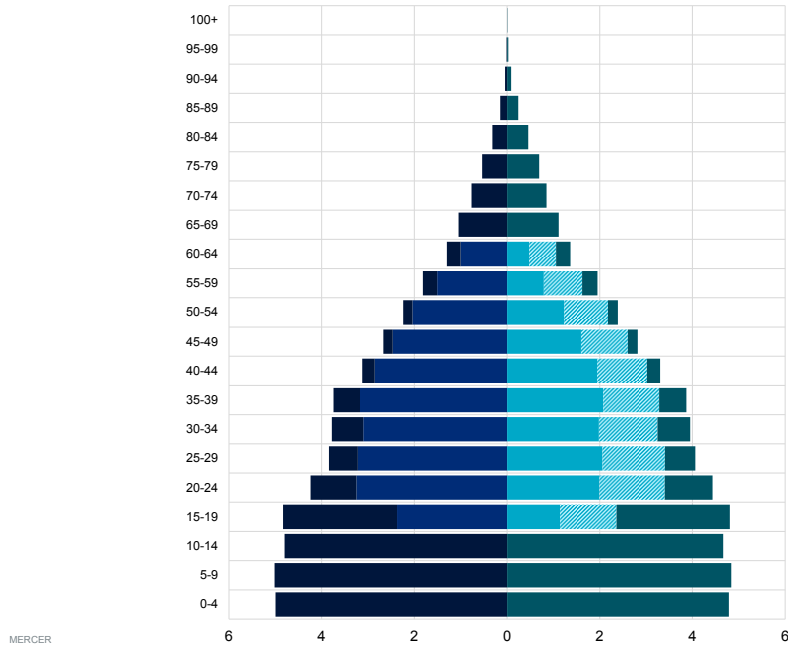
### Russia (51)



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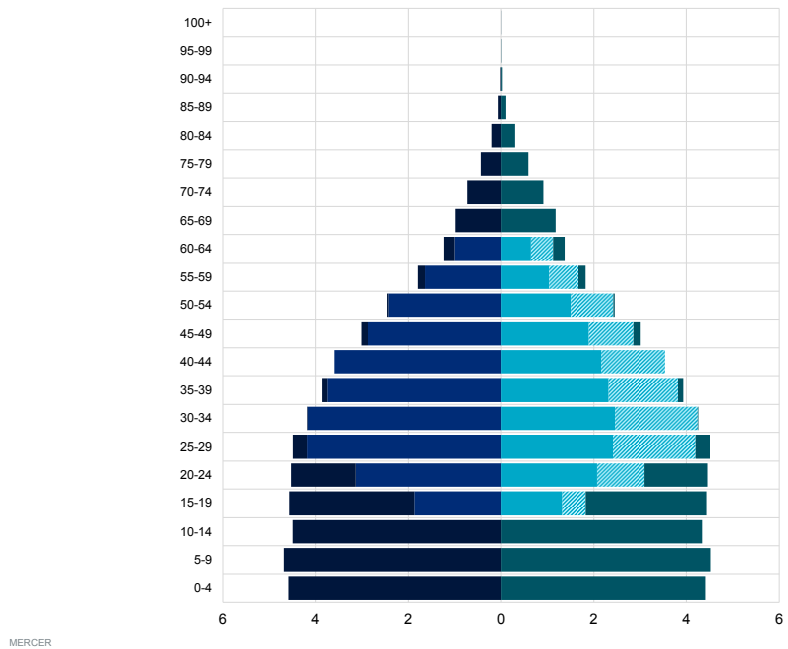
### Mexico (58)



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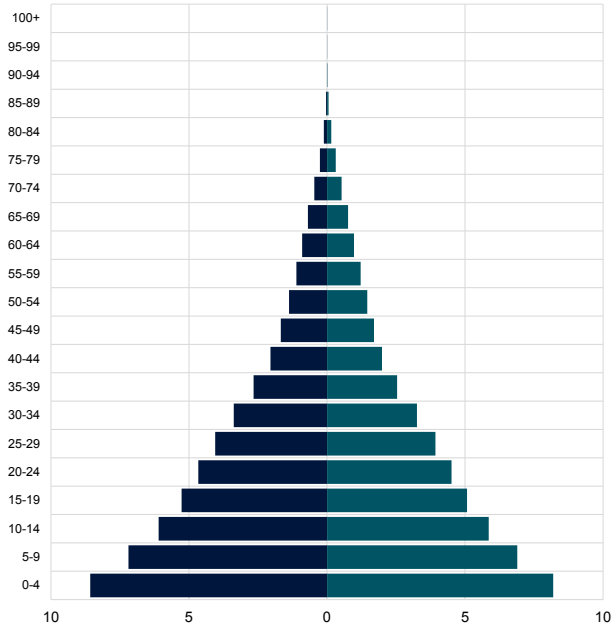
### Indonesia (53)



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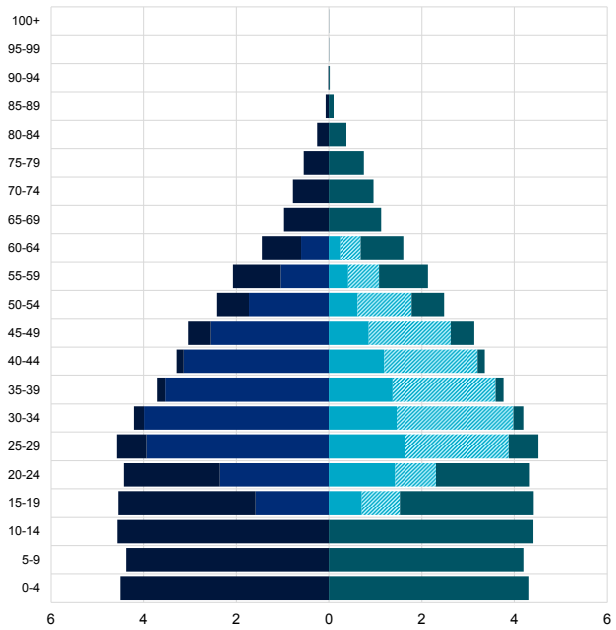
### Nigeria (114)



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### Turkey (60)



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## “Company A” Brazil compared to A’s employees in Brazil

Brazil’s rankings on the  
2013 Human Capital  
Index

OVERALL INDEX RANK  
**57** / 122 countries

EDUCATION  
**88** / 122 countries

HEALTH & WELLNESS  
**49** / 122 countries

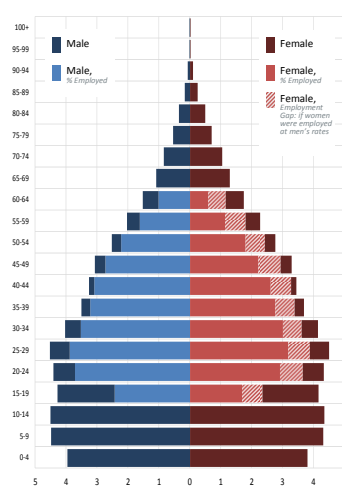
EMPLOYMENT  
**45** / 122 countries

ENABLING ENVIRONMENT  
**52** / 122 countries

**% of Total Population by Age Band, Brazil**

Median age: 29 years old

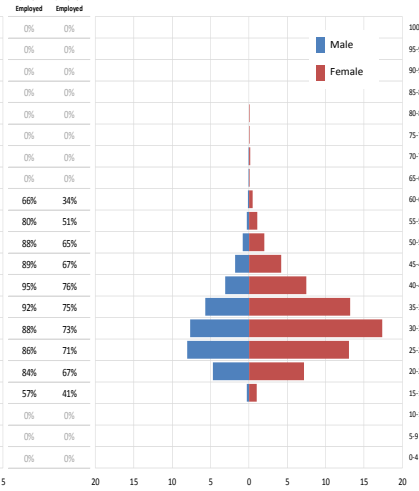
% Female, overall: 51% | % Female employed, ages 15-64: 64%



**% of Co. A’s Salaried Workforce by Age Band, Brazil**

Median age: 33 years old

% Female, overall: 67%



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## Factors that influence fiscal well-being in retirement

### Individual Attributes

Financial literacy  
Financial goal clarity  
Physical health

### Pre-retirement Job-related Factors

Disrupted career path  
Unemployment before retirement

### Family-related Factors

More dependents  
Cost related to dependent care

### Retirement Transition-related Factors

Financial planning  
Retiring to receive financial incentives

### Post-retirement Activities

Bridge employment

Wang, M. & Hesketh, B. (2012). Achieving Well-being in Retirement: Recommendations from 20 Years' Research. Society for Industrial and Organizational Psychology, Inc. (2012).

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## Factors that influence physical well-being in retirement

### Individual Attributes

Pre-retirement health status  
Healthy behaviors and habits  
Financial status

### Pre-retirement Job-related Factors

Job-related physical demands

### Retirement Transition-related Factors

Health insurance coverage in retirement

### Post-retirement

Bridge employment

Wang, M. & Hesketh, B. (2012). Achieving Well-being in Retirement: Recommendations from 20 Years' Research. Society for Industrial and Organizational Psychology, Inc. (2012).

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## Factors that influence psychological well-being in retirement

### Individual Attributes

Financial status  
Physical health  
Physical health decline

### Pre-retirement Job-related Factors

Work stress  
Job demands  
Job challenges  
Job dissatisfaction  
Unemployment before retirement  
Stronger work role identity

### Family-related Factors

Marital status (Married vs. Single/widowed)  
Marital quality  
Spouse working status (Working vs. Not)  
More dependents  
Losing a partner during transition

### Retirement Transition-related Factors

Voluntariness of the retirement  
Retirement planning  
Retiring to do other things  
Retiring to receive financial incentives  
Retiring earlier than expected  
Retiring for health care reasons

### Post-retirement Activities

Bridge employment  
Volunteer work  
Leisure activities  
Anxiety associated with social activities

Wang, M. & Hesketh, B. (2012). Achieving Well-being in Retirement: Recommendations from 20 Years' Research. Society for Industrial and Organizational Psychology, Inc. (2012).

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STANFORD  
CENTER ON  
LONGEVITY

## The Stanford Center on Longevity

The mission of the Stanford Center on Longevity is to redesign long life. The Center studies the nature and development of the human life span, looking for innovative ways to use science and technology to solve the problems of people over 50 in order to improve the well-being of people of all ages.

Working as a catalyst for change, the Center identifies challenges associated with increased life expectancy, supports scientific and technological research concerning those challenges, and coordinates efforts among researchers, policy makers, entrepreneurs, and the media to find effective solutions.

The Center was founded in 2006 by two of the world's leading authorities on longevity and aging. Laura Carstensen PhD, professor of psychology, is the founding director, and Thomas Rando MD, PhD, professor of neurology and neurological sciences, is deputy director. The Center received its initial funding from Richard Rainwater.

The Financial Security Division, directed by senior research scholar Martha Deevy, brings a unique interdisciplinary perspective to financial security issues facing our society by rethinking the perceived problems around an aging population, especially retirement planning and the need to work longer. By understanding the role that research, education, and policy can play in solving these issues and looking at the problems from multiple perspectives, the division drives the dialogue forward in order to facilitate a healthier state of long-term financial security for the individual and society.

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