AMERICAN BENEFITS LEGACY The Unique Value of Employer Sponsorship





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The **American Benefits Council** is a Washington D.C.-based employee benefits public policy organization advocating for employers that are dedicated to the achievement of best-in-class solutions that protect and encourage the health and financial well-being of their workers, retirees and families.

The **American Benefits Institute** is the education and research affiliate of the American Benefits Council. The Institute's mission is to convene meetings and sponsor research that assist public policy makers, the media and other stakeholders in making informed decisions about timely and vital employee benefits policy matters.

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Employer-sponsored programs remain the single largest component of retirement savings and health insurance coverage in the United States.

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INTRODUCTION

The United States is unique among advanced economies in the extent to which employer-sponsored benefits provide a foundation for retirement savings and health insurance. This is a legacy of a system of voluntary employer-provided benefits that preceded the introduction of Social Security and government-financed health care. The central role of employer-sponsored benefits provides many advantages for the American economy, including flexibility in labor markets, lower payroll taxes, high benefit levels by leveraging tax preferences, and growth through capital formation and financial market development. Employer plans are also better able to harness behavioral economics to improve outcomes and increase the security of workers.

One simple way to illustrate the importance of employer-provided benefits is to consider what our world might be like without them. If workers were left to choose to buy health insurance on their own, we could expect coverage to be a fraction of what it is today. Without employer-sponsored retirement plans, the capacity of individuals to meet their financial needs in retirement, already difficult, would become a far greater challenge.

This report considers the value of employer-sponsored benefits and provides an overview of some of the data and analysis that illustrate the important contribution these benefits make to the economy and security of American workers and their families. It is presented in three parts:

Section I provides a brief summary of the characteristics and development of employer sponsorship of benefits, and presents estimates of what the effect might be on the health benefits coverage and retirement security of workers if employers did not provide these benefits. **Section II** presents more in-depth analysis of several selected topics germane to understanding how employer-sponsored benefits provide value to workers and the broader economy. **Section III** highlights innovative programs and behavioral economics strategies implemented by employers in order to help employees achieve health and financial security.



AT THE CENTER, LINKING ALL OF THE ELEMENTS OF THE UNIQUELY AMERICAN SECURITY NET, WHILE DRIVING INNOVATION AND PROVIDING RESILIENCE, ARE EMPLOYER-SPONSORED BENEFITS.

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The Increasing Need to Provide Security to American Workers

Beginning in the middle of the 19th century, the Industrial Revolution created formidable new pressures on American society. Unprecedented gains in life expectancy resulted in individuals living beyond their ability to be self-sufficient, yet the new urban industrial society left many without traditional family support in old age. The explosion of scientific knowledge and medical technology provided access to previously unimaginable, yet often costly, new kinds of health care. This vastly improved quality of life, but imposed an expense beyond the reach of many.

Rapid innovation and accelerated change, which continues today, created new and imposing demands on American society. Individual rights and self-reliance that were the hallmark of the new republic had to be reconciled with a social and political ethos valuing fairness and equity. The need to protect all citizens from the risks of a modern world had to be combined with the need for efficiency in a competitive market economy.

Sustaining the security of American workers poses ever increasing challenges in the 21st century. The share of the population over the age of 65 has gone from 8.0 percent in 1950 to 14.6 percent in 2015 and is projected to increase to 19.8 percent in 2030 and then grow more slowly to 20.8 percent by 2050.¹ As shown in Figure 1, on reaching age 65, the average number of years an American can be expected to live has increased by a third since 1900 and is projected to continue to rise. The majority of today's workforce will soon spend more than twenty years in retirement, nearly as long as some will spend working. Although life expectancy on average for Americans actually showed slight declines in 2015 and 2016, this is largely attributed to increased mortality at younger ages that many attribute to the opioid crisis. Mortality rates at older ages have continued to

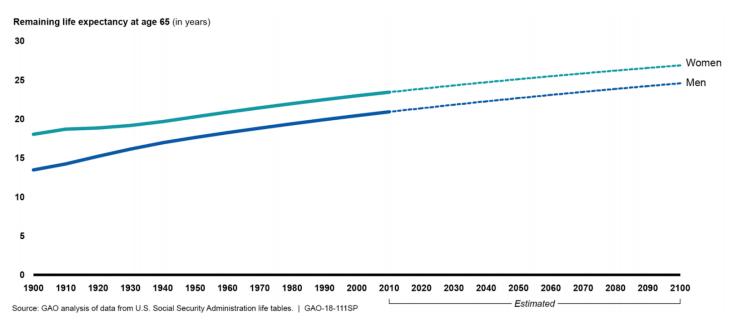
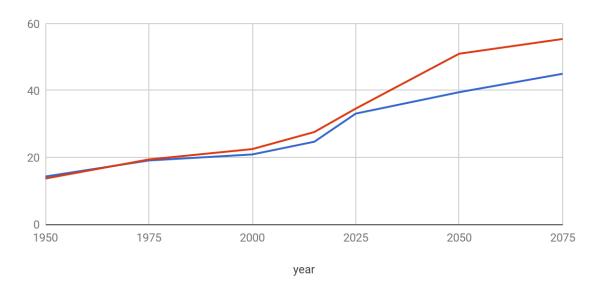


Figure 1. Increasing Life Expectancy in the United States, 1900-2100





Source: OECD (2017), "Old-age dependency ratio", in Pensions at a Glance 2017: OECD and G20 Indicators, OECD Publishing, Paris.

improve, though at a lower rate of increase than the preceding decade. In the last few years, the increased mortality at younger ages has begun to abate and most projections anticipate a continued, though slower increase, in life expectancy in coming decades.

This increased longevity has combined with an equally sharp decline in fertility over the past several generations to dramatically alter the demographics of the United States. Although the United States is expected to experience a less dramatic transition than the other high-income countries that are members of the Organisation for Economic Cooperation and Development (OECD) as shown in Figure 2, we will move from having nearly seven persons of prime working age for each person over the age of 65 to where we can expect to have one elderly person for just over two of working age by 2075.

At the same time, advances in medical technology, consolidation in health care markets and changes in health care practices have led to an explosion in costs. Health-related expenditures now represent nearly one-fifth of the overall economy. An average working family can be expected to require health care that may cost more than \$20,000 per year in health insurance premiums and out-of-pocket costs. Equally important, treating a major illness can involve costs that may be nearly as great as a typical worker's lifetime income.

Changes in the way that American workers earn a living have been equally dramatic. In contrast to a century ago, the majority of women can now be expected to work outside of the home, spending a significant portion of their lives in the workforce. Full-career jobs are now the exception rather than a norm, as are two parent households with a husband working and stay-at-home wife. Traditional employment relationships are now rapidly being replaced by a new "gig economy" in which individuals have multiple jobs at the same time with varying employment relationships. Despite these changes, the amount of time the average worker has spent with their current employer has been rising in recent years. This is in part because the workforce is becoming older as the overall population ages, indicating that most workers have a sustained relationship with an employer throughout much of their career.

While the need to protect workers from high and potentially catastrophic health care expenses increases as health care costs grow more rapidly than wages, gains in longevity

High rates of savings have made the elderly relatively better off in terms of their income levels in the United States than in other countries at similar level of economic development.

and an increase in early retirement (both voluntary and involuntary) impose increasingly complex stress on social insurance systems in all settings. Managing the risks and meeting these challenges require a social insurance system sufficiently diverse to address the complexity of needs and flexible enough to adapt to accelerating change, while remaining robust and sustainable over the long term. This can only be achieved through an interdependent web of institutions and programs able to align its different elements with disparate needs, work in a holistic manner and remain dynamic in response to change.

As in so many other areas, Americans have risen to this challenge in our own distinctive way. *The result is a uniquely American system that weaves together a number of elements — private market-driven sources of insurance and long-term savings supplemented by basic public programs — to form a strong and balanced net of security.* This unique balance, which manages risks through its diversification and dynamic market-driven processes, provides an umbrella of protection in a cost-effective manner while affording flexibility and efficiency that allows a market economy to flourish. At the center, linking all of the elements of the uniquely American security net, while driving innovation and providing resilience, are employer-sponsored benefits.

Balanced and Sustainable Protection with Employer-Sponsored Benefits at the Center

Providing secure and efficient sources of income in old age and health care financing requires institutions and instruments that combine several characteristics:

- The capacity to manage individual variations through pooling. In other words, achieving the basic insurance principle of distributing highly variable individual risks among a larger group so that each member faces only an average of the overall risks.
- The transfer of resources across time or generations by either transferring savings accrued gradually over a working life to the later period of old age or to finance over a long period the unpredictable spikes in expenses (also typically later in life) that characterize health care needs or by requiring successive generations to bear the costs of their predecessors.
- Scale efficiencies in operation that allow small individual savings and expenses to be managed in the most cost-effective manner.

On either ends of the spectrum are universal government programs and benefits provided through individual private market-based products. In between the two, the employer-sponsored benefits system provides a balanced and sustainable approach, resilient in the face of economic and political turbulence.

Limits of Government Programs

The oldest method to become widespread, collectivizing and managing risk through a universal government program, originated in Europe in 1889 when Chancellor Otto von Bismarck introduced the first public social insurance program in Germany, This is accomplished by establishing a mandatory national system financed through taxes. While in principle this may be any kind of tax, universal public social insurance systems are nearly always financed through a payroll tax on wages and a similar levy on the earnings of the self-employed.

While this tax on labor income is often divided into an employee and employer component, there is overwhelming evidence that the costs fall nearly exclusively on workers in the form of lower cash wages. For retirement income systems, benefits are linked to a formula related to earnings history or the crediting of some form of individual account. For publicly financed health care systems, benefits can be provided through either public providers (as in the United Kingdom) or private health care providers (as in Germany). Universal public systems have the advantage of large-scale and effective risk management through national pooling that is achieved by imposing a universal mandate for participation.

There are, however, are a range of disadvantages of taxfinanced public systems:

High payroll taxes can distort labor markets and constrain competitiveness and growth. Advanced economies with universal public programs impose social insurance taxes as high as 30-40 percent of earnings. This imposes a barrier to new jobs and makes it difficult to compete in the global economy. Employer contributions to health insurance benefit plans have been between 8.6 and 8.8 percent of gross domestic product (GDP) in the United States and the total cost of the tax



The father of public social insurance systems Otto von Bismarck, Chancellor of Germany 1862 - 1890

Singular dependence on social insurance programs creates a non-diversified portfolio of benefits vulnerable to political change.

expenditure associated with these remains a bit below 2.5 percent of GDP. Financing the full cost of all health care, which is about 18 percent of GDP, would involve a tax of about 30 percent of the value of wages. A 2016 Urban Institute analysis of the universal public health care system proposed by Senator Bernie Sanders (I-VT) in the 2016 presidential campaign concluded that the proposed payroll tax of 6.2 percent of wages, a 2.2 percent tax on income and a variety of other taxes on estates, capital gains and dividends would only be sufficient to pay for about one-half of a relatively modest package of benefits. This suggests that a primarily public health care system would likely require a tax on labor income in excess of 20 percent to be financially viable. If the U.S. Social Security program were providing an average benefit to retirees today equal to 75 percent of the average covered wage, the pay-as-you-go cost would be 26.7 percent of payroll given the current dependency ratio in the existing system. By 2040, when almost all Baby Boomers will be out of the workforce, the cost rate would rise to 35.2 percent of covered payroll based on the latest projection of the dependency ratio in the current system.

The financing and benefits structure lead to complex, non-transparent and often unintended redistribution and incentives. Administratively feasible and politically viable public systems require simple benefit formulas. Politicians, however, are rarely willing to adjust contribution and benefit levels when faced with demographic realities. Thus, they avoid making difficult changes until the short-term viability of the programs is threatened. This leads to large and usually opaque redistribution between generations and across income levels. Policymakers have known since 1992 that Social Security was underfinanced. The financing imbalance at that time was around 2.3 to 3.0 percent of covered payroll, depending on the projection time horizon. If not adjusted until the system enters a cash flow deficit in 2034, a worker who was young in 1992 will have been exempted from the known financing imbalance over his/her approximately full career — a benefit equivalent to 1 to 1.25 years of his/her lifetime earnings. This cost will be largely passed on to today's younger workers.

Public systems can result in monopolies of service providers that crowd out private markets, stifle innovation and limit access to services. A heavy reliance on intergenerational tax transfers to finance retirement income limits incentives for saving and investment, and stunts innovation in financial markets. Public provision of health care can result in long waiting periods for even basic services.

Large public social insurance programs that seek to provide full health and retirement benefits are the most precarious in their financing. Demographic change creates large political risks that might either result in default on promised benefits for future generations or costs that current generations of workers are not willing to impose on themselves. Singular dependence on social insurance programs creates a non-diversified portfolio of benefits vulnerable to political change.

INDIVIDUAL MARKETS & PRODUCTS

At the other end of the spectrum are individual markets and products. While these afford flexibility, allowing workers to tailor the amount and type of benefits and eliminate most redistribution, they entail a different set of problems:

Individual health and retirement products require individuals with little knowledge or training to make essential decisions about how much they need to save for retirement, how to manage their savings and the appropriate package of health insurance benefits. Most workers are ill-equipped to make these decisions and are subject to well-documented behavioral biases that lead to poor choices.

Individual health and retirement products are very difficult to manage cost effectively. They have higher marketing costs and cannot achieve economies of scale in their administration. The administrative costs associated with smaller savings accounts of primarily younger and lower-income workers are, by definition, comparatively higher than for larger accounts. Consequently, the administrative fees that plan service providers must charge for these less profitable accounts, may diminish the value of accruing assets for savers with small asset holdings.

It is difficult to achieve effective risk pooling in individual products. This is because individuals have greater knowledge of their particular circumstances, most importantly health status and family history, so they can better predict their future costs. This allows them to engage in what is known as "adverse selection" – opting to purchase a package of health insurance that is aligned with their expected costs or to only purchase insurance after they become aware of a costly medical condition. Individuals also typically have better knowledge of their own life expectancy than vendors of retirement income products can predict from observable characteristics. This makes it very difficult for vendors to offer these products at an attractive price for the average person, leading those with longer life expectancies to purchase annuity products at much higher rates.

Employer-Sponsored Benefits

Bridging the Gap

In between these two models, employer-sponsored benefits bridge the gap between public social insurance and individual products, mitigating many shortcomings of the other two:

- Employers bring together large groups for reasons that are unrelated to health status or life expectancy. This creates viable risk management pools and economies of scale that allow employer plans to be very cost effective.
- Employers can utilize key behavioral advantages including payroll deduction, automatic enrollment and default options to enhance outcomes.
- Workplace benefits allow flexibility for employers to tailor benefits to the needs and preferences of a particular group of workers. This avoids the "one size fits all" design shortcomings of public systems, improving cost effectiveness and limiting unintended redistribution.
- Employers utilize their benefit programs to manage their workforce in ways that improve the overall efficiency of labor markets. Flexible design enables employers to adapt to market conditions to attract and retain workers with characteristics aligned with their needs. Benefit programs bind workers to their employer in a mutually beneficial manner that facilitates investment in human capital through training and creates market driven incentives for entry and departure from the labor force.

Employers have incentives to act as effective agents for their workers, providing



expertise to guide options and choices and increasing workers' confidence in the security of their benefits. Employer sponsorship provides meaningful market incentives for innovation in the design and management of retirement and health benefit programs that helps to constrain costs and improve outcomes.

- Unlike public programs, employer-sponsored pensions are subject to strict rules requiring real assets to be set aside to fund future promises. This enhances the security of benefits and contributes to economic growth by adding to the pool of savings available for productive investment and providing stability to financial markets.
- Employers can more effectively integrate their retirement and health benefits with financial capability and wellness programs to improve the security of workers and enhance results.

Unlike nearly every other country at a similar level of income and prosperity, employer-provided retirement and health benefits became prevalent in the United States several generations before the introduction of government programs. The American social insurance system has evolved to become one in which voluntary private benefits provide a foundation that is supplemented by public, tax-financed programs that extend a safety net of protection to groups for whom voluntary workplace benefits may not be practical or sufficient or to those outside of a traditional employment relationship. This is the exact opposite of the situation in most other nations where government programs provide the majority of coverage, and private arrangements provide a limited supplement for only the highest income groups. It is telling that as the limitations of reliance on massive tax financed transfer programs is increasingly revealed by demographic changes, most countries have pursued reforms intended to move them closer to the diversified, balanced and privately managed design of the United States.

EARLY DEVELOPMENT OF PRIVATE Employer-Sponsored Benefits

Private employee benefits in the United States have their origins from well before Bismarck's public social insurance system in Germany. The antecedents of employer-sponsored benefits date back to the earliest days of the republic in programs established by religious organizations. Early traces of a pension system began to emerge at about the time the United States was established. In 1783, the Lutheran Church began to provide support for "sick and old preachers" ... as well as each widow of a regular preacher," six years before George Washington was elected president.² Interestingly, and sadly, in at least one year, the money for these benefits was confiscated by the British during the War for Independence. In 1820, the General Synod was formed as an "umbrella body" for various regional synods. In 1831, they established their retirement plan.

The General Synod established "a fund for the relief of superannuated ministers belonging to the Synods in connexion [sic] with this Body, and their widows and orphans."³

In 1875, the American Express Company set up the first formal pension sponsored by a private company in the United States. Today we think of American Express as a financial services company providing credit to consumers and travelers, but it was then a railroad freight forwarder. The early pension plan formalized an *ad hoc* arrangement that it had been operating for some time to meet the needs of employees "injured or worn out in service."⁴

Through the end of the first decade of the 20th century, private-sector pensions were concentrated in the railroad industry. The B&O Railroad established the second U.S. plan in 1880, after a spasm of violent worker unrest, to eliminate the "pervasive insecurity" that workers faced.⁵ In 1890, the Pennsylvania Railroad implemented a pension, having concluded that, in addition to being inefficient, a worker who

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could no longer perform his job had adverse effects on others.⁶ In this case, the sponsor was "concentrating the interests of their employees within the purview and jurisdiction of corporate oversight and control, by affording, largely through their own revenues, avenues leading to the establishment of a standard of individual efficiency."⁷

Pension plans originated as a management tool to facilitate moving workers out of jobs they were no longer capable of filling. Early literature around the development of pensions often refers to them as paying benefits to workers who were "superannuated." The first edition of Noah Webster's *An American Dictionary*, published in 1828, defines

"superannuate" to mean "to impair or disqualify by old age and infirmity." That same edition of the dictionary defined retirement as "1. The act of withdrawing from company or from public notice or station. 2. The state of being withdrawn. 3. Private abode. 4. Private way of life."⁸ By the 1880 edition, an extended definition to the verb "superannuate" was added: "To give pension to, on account of old age, or other infirmity," and the definition of "retire" was now expanded to mean "to cause to retire; specifically to

designate as no longer qualified for active service; as to *retire* a military or naval officer."⁹ The intervening change in the definitions is not so subtle. "Superannuated" went from being an impairment due to old age and infirmity with no mention of recompense to being given a pension specifically because of old age or some other infirmity. To retire went from a withdrawal from public activity, with no reference to age, to being pensioned for an infirmity that might simply be old age.

By the middle of the 20th century, pension benefits had become fairly common among private sector workers. By the time Social Security was introduced in the 1930s, the majority of public employees and more than 15 percent of private sector workers were accruing pension benefits through their employer. Even with the subsequent expansion of Social Security to its current form through which retirement benefit are provided to nearly all workers, private pension coverage continued to rapidly grow in the ensuing decades, reaching 9.8 million workers or about 25 percent of the workforce by 1950.

Similarly, private health care benefits date back more than a century in the United States. In 1910, Montgomery Ward established one of the earliest group health plans for its workers and three years later one of the oldest trade unions, the International Ladies' Garment Workers' Union (ILGWU), began providing coverage for its members.¹⁰ Coverage began to expand by the late 1930s and rapidly accelerated during World War II. The Kaiser Company was an early pioneer in recognizing the advantages of ensuring that effective care was received by its workers and that they were not subject to the risk of bankruptcy by a single catastrophic illness. It began providing health services to its workers constructing the Grand Coulee Dam during the New Deal era and provided comprehensive benefits to 190,000 workers during World War II, when able-bodied workers were essential to the war effort.

Employer-sponsored health plans became prevalent during World War II as a market response to the wage and price controls during the war years. These controls were reintroduced during the Korean War in the early 1950s. Providing benefits outside of the controlled wages allowed employers to better compete for scarce and high-value workers. This process was accelerated after the war by the famous Inland Steel decision in 1948 that allowed for the collective bargaining of benefits and the Revenue Acts of 1939 and 1954 which clarified that payments for health insurance and health benefits were permissible business expenses and excludable from income taxes. The provision of voluntary health benefits precedes by several decades the introduction of Medicare and Medicaid during the Great Society era of the 1960s to extend coverage to groups for whom employment-based benefits were impractical.

Limiting the reliance on public programs and therefore the level of taxes required to finance them allows the United States to maintain a more flexible labor market.



Some of the earliest workers with access to employer-sponsored health benefits complete the construction of the Grand Coulee Dam.

CREATION OF THE SOCIAL SECURITY SYSTEM TO SUPPLEMENT EMPLOYEE BENEFITS

Decades after private employer-sponsored benefits became widespread, the United States began to develop a public social insurance system. In 1934, President Franklin D. Roosevelt created the Committee on Economic Security to develop a pension system proposal that he submitted to Congress later that year. Congress took up the proposal in 1935 and, after substantial revisions, adopted the Social Security Act in 1935.

The new law provided for basic welfare benefits for elderly individuals who had limited earnings during their prime working years, or little to no assets or income in old age. The main feature was a pension that was to be earned by paying payroll taxes on covered earnings with retirement benefits based on the level of workers' lifetime earnings on which taxes were paid.

On the third anniversary of the passage of the new pension law, just four months before the first Social Security pensions would be paid, Roosevelt observed:



President Franklin D. Roosevelt signs the Social Security Act on August 14, 1935

"The Social Security Act offers to all our citizens a workable and working method of meeting urgent present needs and of forestalling future need. It utilizes the familiar machinery of our Federal-State government to promote the common welfare and the economic stability of the Nation.

"The Act does not offer anyone, either individually or collectively, an easy life—nor was it ever intended so to do. None of the sums of money paid out to individuals in assistance or in insurance will spell anything approaching abundance. But they will furnish that minimum necessity to keep a foothold; and that is the kind of protection Americans want."¹¹

The implication of Roosevelt's remarks was that the program was meant to be a foundation for providing adequate income to retirees, but was not likely to be adequate to finance a standard of living commensurate with the level achieved by many workers during their careers. While average Social Security benefits have increased somewhat over the years, relative to covered earnings, the policymakers' initial intent that Social Security pensions would not allow most retirees to maintain pre-retirement living standards on the basis of these benefits alone has been maintained. In addition, the pensions provided by Social Security have always been redistributive, providing workers with relatively low lifetime earnings a higher income replacement rate than those with higher career earnings.

Over the decades since the adoption of the original Social Security Act, there have been many additions and modifications to the law. The initial law provided only for a pension for retired workers with a death benefit for survivors of covered workers who died prior to claiming a retirement annuity. Amendments adopted in 1939 added spousal and survivor benefits. In the 1950s, disability insurance was added. In the mid-1960s, the Medicare program provided health insurance to retirees and disability pensioners on a deferred basis. Medicaid was introduced later in the 1960s' Great Society era to extend health care benefits to very low-income groups for whom employer-sponsored coverage was not relevant or unlikely to be financially feasible.

CURRENT COVERAGE RATES OF Employer-Sponsored Benefits

Consistent with the intent of the Social Security program to provide a basic safety net of security, employer-sponsored benefits have rapidly expanded in the ensuing decades. Today, employer-sponsored programs remain the single largest component of retirement savings and health insurance coverage in the United States. A 2016 Employee Benefit Research Institute (EBRI) survey indicated that 87 percent of workers consider employer-sponsored health benefits to be "extremely" important and 77 percent assigned the same high value to employer-sponsored retirement plans.¹²

The latest estimates published by the Census Bureau in September 2018¹³ indicate that 181 million persons, representing 56 percent of the population, received health insurance through an employer-sponsored plan at some point in the year. This is one and a half times the 37.7 percent of the population reporting that it received benefits through a government source and three and a half times the proportion (16 percent) that directly purchased their insurance (see Figure 3).¹⁴

Prevalence of employer-sponsored retirement benefits is somewhat more difficult to measure for a variety of reasons. Retirement savings are accumulated over a lifetime, in contrast to health insurance that provides coverage typically for one year and is paid for in the same period, making point in time measures of coverage misleading because they do not capture accumulations over a full working career. In addition, many workers do not perceive a 401(k) or other defined contribution plan to be a pension plan but rather long-term savings and often do not recall that the substantial assets they hold in an Individual Retirement Account (IRA) have typically originated in an employer-sponsored plan. All of these factors lead to (as is discussed in greater

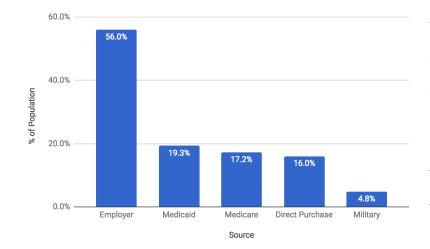


Figure 3. Source of Health Insurance for Americans

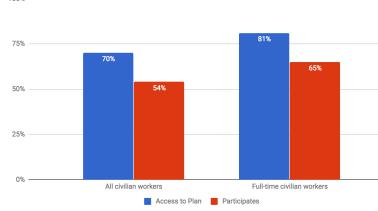
detail in a subsequent section of this report) a substantial undercount of retirement savings when the most commonly used source of data, household surveys, is used. This undercounting has been exacerbated because the main household survey from which measures of pension coverage are usually derived has recently been revised which seems to have lowered the number of positive responses.

Notwithstanding these limitations, the available data indicate that more than two-thirds of workers have access to an employer-sponsored retirement plan through their employer. The most recent (2017) Bureau of Labor Statistics survey of employers¹⁵ indicates that 70 percent of civilian workers¹⁶ have access to a pension

Source: "Health Insurance Coverage in the United States 2017," United States Census Bureau, 2018.

Figure 4. Access and Participation in Employer-Sponsored Retirement Plans — All Civilian vs. Full-Time Civilian Workers

100%

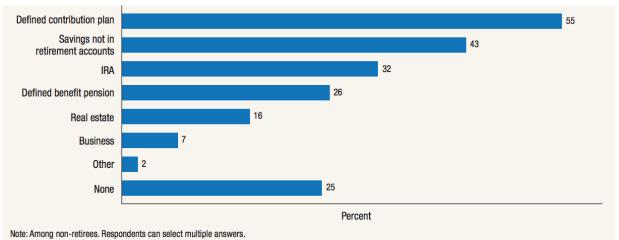


Source: Bureau of Labor Statistics National Compensation Survey 2017.

plan through their employer and 54 percent of these workers participate in the plan (see Figure 4). This is similar to a number of other estimates that have sought to reconcile other survey data with administrative sources of data. Among full-time, full-year workers, access to employer-sponsored retirement programs is much higher at 81 percent with 65 percent participating in the plan during the year.

Although indicating a high level of access and participation in employer-sponsored pension plans, these point-in-time numbers actually understate the importance of employer-provided benefits as a source of retirement income. The most meaningful measure of the role of any retirement income system is the share of households that accrue pension savings over their working lives rather than in any single year. Workers' ability to save is greater at different points in their lives and many are in households where one partner is the primary earner who will be able to accrue savings and benefits sufficient to support the household in retirement. The Federal Reserve Board conducts several surveys to gather information on the extent that American households have accumulated some sort of savings for retirement. The Federal Reserve Board's most recent "Report on the Economic Well-Being of U.S. Households in 2017," published in May 2018, found a large proportion of households reporting accumulation of savings for retirement with more than half of non-retiree households reporting ownership of a 401(k) type account, nearly a third with an IRA (most of the value of which are derived from rollovers of an employer-sponsored plan) and more than a guarter having participated in a defined benefit plan (see Figure 5).¹⁷

Another useful measure is found in the Federal Reserve Board's Triennial Survey of Consumer Finances, conducted most recently in 2016. The latest survey indicates that among households of all ages, ownership of some type of retirement account increased to 52 percent, with the average value of these accounts increasing by 10 percent to \$228,900 since 2013.¹⁸ The 2014 survey had found that about 60 percent of households with a worker between the ages of 45 and 65 reported ownership of a retirement savings account.¹⁹ These high rates of savings have made the elderly relatively better off in terms of their income levels in the United States than in other countries at similar level of economic development. In 2013 the income of persons over the age of 65 in the United States was 92.1 percent of the average for the overall population, compared to the OECD average of 86.8 percent for the same group with individuals between 65 and 75 years old reporting incomes above the overall average.²⁰





Source: "Report on the Economic Well-Being of U.S. Households in 2017." Board of Governors of the Federal Reserve System, May 2018. Figure 34.

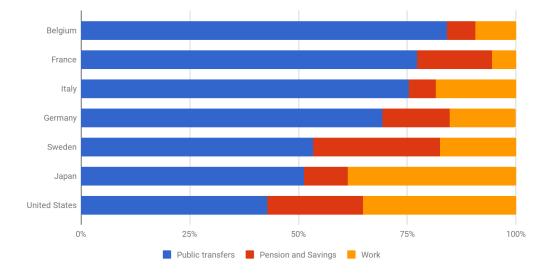


Figure 6. Incomes in Old Age (sources of income of over 65s, percent of total)

Source: OECD Pensions at a Glance, 2017.

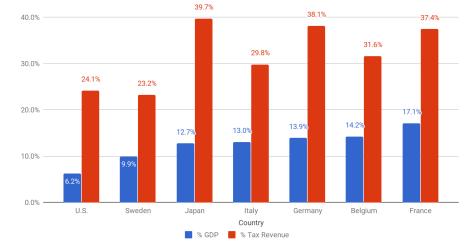
A Balanced System with Lower Taxes

This long tradition and high level of participation in employer-sponsored benefit programs provide the foundation for a uniquely effective social insurance system in the United States. As illustrated in Figure 6, this results in an almost equal balance in the United States among the three primary sources of income: public retirement programs, private retirement savings (capital) and earnings from work. While the high share of earnings from work is in part reflective of the fact that some households have not accrued sufficient pension benefits, it is also indicative of the flexibility that results from employer-sponsored plans that allow workers to vary their retirement dates.

Thus, the tax burden in the United States is significantly lower than other nations. This limits the fixed costs of labor, which in turn facilitates competitiveness, economic growth and job creation. The share of GDP that is taken by social insurance taxes in the United States is far lower than that of most other developed countries. This allows the share of total tax revenues that is taken up by social insurance programs to remain lower in the United States, despite the fact that total taxes collected as a share of GDP remains relatively low compared to these other countries with similar income levels. The lower burden of social insurance taxes thus frees up scarce public resources for other priorities. Figure 7 shows the share of GDP that is collected in taxes for all social insurance programs and the proportion of overall tax revenues that this represents in several countries.

Limiting the reliance on public programs and therefore the level of taxes required to finance them allows the United States to maintain a more flexible labor market. This facilitates job creation by limiting the burden of payroll and other taxes that support more job creation. A simple measure of the cost and impact of taxes on labor is the "Tax Wedge," which estimates the share of income that is taken by the net cost of taxes and benefits for the average individual across countries. These estimates for the same group of higher income OECD countries are shown in Figure 8. *This indicates that the United States has the lowest potential for labor market distortions due to taxes on labor income than any of the other countries.*

Figure 7. Total Social Insurance Taxes as Share of GDP and Total Tax Revenues



Source: Revenue Statistics 2016. OECD. Tables 3.13 and 3.14

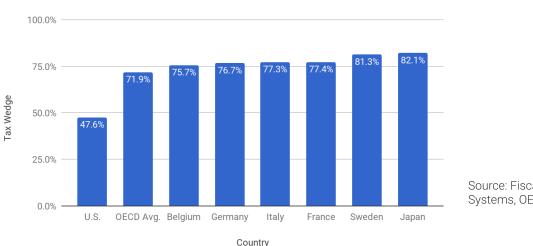


Figure 8. Tax Wedge in Select OECD Countries in 2012

Source: Fiscal Sustainability and Health Systems, OECD 2015.

Employer-sponsored benefits are the foundation and linchpin that hold together this balanced and diversified system that facilitates rather than impedes economic growth and opportunity.

This uniquely American approach accomplishes this by:

- Relying on public programs to provide essential poverty protection to all and a reliable benefit floor to individuals who are unlikely to have the capacity to generate sufficient savings over their working life either because of low income, intermittent work patterns or the misfortune of disability.
- Providing a foundation of publicly financed health care to the elderly through Medicare at a period in their life when expenses are predictably higher and there is no intermediary like an employer that can be expected to help manage this expense, and a safety net to low income individuals who have insufficient earning power to receive health care coverage through a job.
- Filling the gaps between these most vulnerable groups with a market-based system of tax incentivized employer-sponsored benefits supplemented by an individual market to extend coverage and enable additional savings.
- Diversifying sources of coverage and savings that have differing characteristics. This allows for a diversified portfolio of protection that, like any investment portfolio, is less risky than the undiversified alternatives.

It's a Wonderful Life The harsh reality of health and retirement without employer-sponsored benefits

In the classic holiday movie *It's a Wonderful Life*, the lead character, George Bailey (played by Jimmy Stewart), is in the depths of despair over the impending failure of the family business. He contemplates ending his life on Christmas Eve by leaping from a bridge into the frigid waters below. Just as he is about to jump, his guardian angel Clarence jumps into the river first, calling for George's attention. George plunges in to save Clarence, who then convinces George to embark on an imaginary journey that will allow him to understand just how important and meaningful his life has been, by seeing what the world might have been had he never been born.

In the much beloved film, *It's a Wonderful* Life, the protagonist comes to understand just how important his life has been to so many others. In that same spirit, the American Benefits Institute asked the Employee Benefit Research Institute (EBRI) to undertake analysis to shed light on the state of health coverage and financial security if employers did not provide those benefits to their workers.

Findings on Health

EBRI's analysis provides a simple illustration of the contribution employers make to coverage by simulating how many of those currently covered by an employer would be expected to otherwise purchase coverage if, as will be the case beginning in 2019, there is no longer a mandate under federal law to purchase health insurance. The analysis is based on a regression model of the relationship between characteristics of workers including their age, income, family circumstances and self-reported health status and how these are associated with their likelihood of purchasing health insurance in the individual market if they were not offered coverage under an employer plan. Data from 2013 was used because that is the most recent year that there was no individual mandate and no premium subsidies. This simulation is particularly valuable now that the individual mandate has been repealed.

In 2013, 108.7 million workers ages 18-64 received coverage through an employer. Applying the patterns derived from analysis of workers without an employer offering health benefits to their employees, the model estimates that only 31 percent of these workers would purchase coverage on their own. Translating this percentage change to the total employer-sponsored coverage of 164.7 million individuals in 2016 (which includes workers and their family members covered under the employer plan) would indicate that *more than 113 million individuals would not be likely to purchase coverage in an individual market if employers did not offer benefits*. Perhaps even more important than the overall coverage rate is that employer sponsorship extends coverage to groups who might otherwise not be able to afford or choose to purchase health insurance (see Figure 9).

When it comes to health status, employers are particularly important in bringing younger and healthier workers into the risk pools, and extending coverage to those with poor health status who need coverage but often find it unaffordable in an individual market. It is also notable that *younger workers are generally less likely than older workers to purchase health insurance in the absence of employment-based coverage* (see Figure 10).

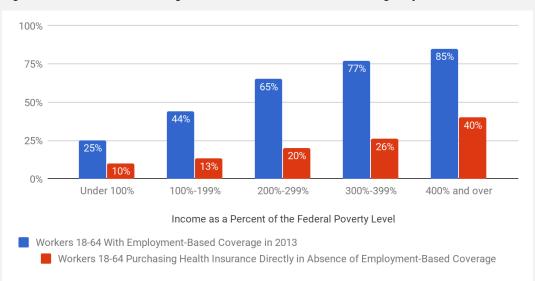
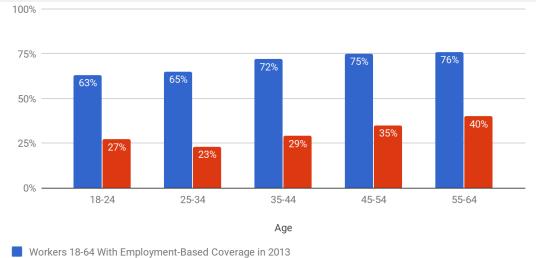


Figure 9. Simulated Change in Health Insurance Coverage by Income

Figure 10. Simulated Change in Coverage by Age Group



Workers 18-64 Purchasing Health Insurance Directly in Absence of Employment-Based Coverage

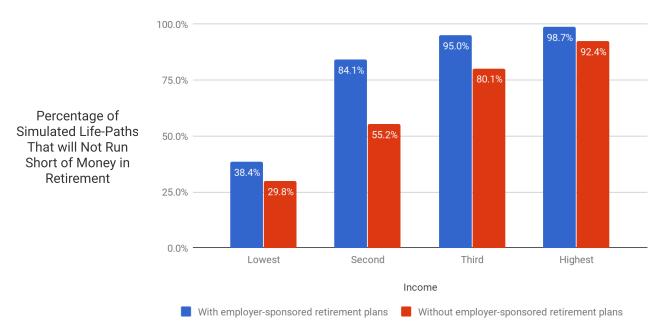
Findings on Retirement

Employer-sponsored benefits can be similarly seen to have a major impact in improving the retirement security of American workers. In the late 1990s, EBRI developed a model to simulate retirement income adequacy. This model can be used to analyze how individuals can be expected to change their behavior and retirement savings in response to the options available to them. The model provides summary Retirement Readiness Ratings (RRR)²¹ that simulate the proportion of households projected to have adequate resources in retirement.²²

The importance of employer-sponsored retirement benefits can be seen by comparing the figures for each income quartile in Figure 11 that shows the Retirement Readiness Ratings for all U.S. households currently with a member aged 35-64.²³ This shows the estimated differences in retirement readiness with and without employer-sponsored retirement plans. Comparing the 29.8 percent of the lowest income households simulated to have adequate retirement resources if no employer-sponsored retirement plans were available with the 38.4 percent of those who would have adequate retirement income under the baseline scenario, indicates that employer-sponsored plans result in a 28.7 percent increase in the number of low-income households achieving retirement security as would be the case in the absence of employer sponsorship of retirement plans.

While the importance of employer-sponsored retirement benefits to low-income households will not come as a surprise to anyone who has studied this issue, what is most illuminating is the extent to which *middle and higher income groups rely on*

Figure 11. Impact of Employer-Sponsored Retirement Plans on Retirement Readiness by Pre-Retirement Wage Quartile **2014 EBRI Retirement Readiness Ratings (without long-term care costs)**



Source: EBRI Retirement Security Projection Model, Version 1995 and 3282

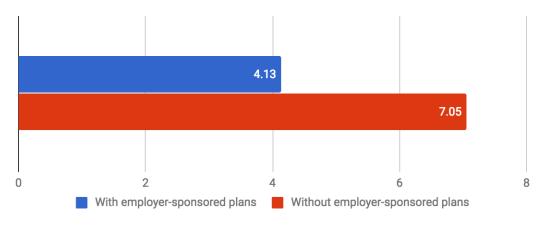


Figure 12. Simulated Change in Retirement Savings Shortfall (trillions)

retirement savings plans through their employer.

Comparing the Retirement Readiness Ratings with and without employer-sponsored retirement benefits shows that the percent increase in the number of households that are saved from retirement income inadequacy is 52.3 percent for the second income guartile and 18.6 percent for the third income guartile. The number of highest income guartile households that are saved from retirement income inadequacy as a result of employer-sponsored retirement plans is only 6.8 percent. But this is due to the fact that 92.4 percent of them would already have adequate resources for retirement (assuming no long-term care expenses) without employer-sponsored retirement plans. If the potential cost of long-term care is incorporated into these projections, the overall level of the readiness ratings becomes lower, as do the differences when simulated without employer-sponsored benefits.

Equally telling is the total dollar value of the benefits that are projected to be provided by employer plans and their role in covering the difference between public benefits and the financial needs of retirees. This is illustrated by EBRI's projections of "Retirement Savings Shortfalls," which calculates the aggregate value of projected financial deficits in retirement for all U.S. households between the ages of 35 and 64 (see Figure 12).²⁴ This measurement is somewhat different than the Readiness Ratings because it also includes the anticipated needs to finance long-term care. The savings shortfall measures the present value of the additional (after-tax) amount each household would need at age 65 to eliminate their expected retirement income deficits. While this shortfall is a relatively small

proportion of the total value of all of the resources households are projected to have available to meet their retirement needs, it provides a useful indication of the overall value of the gap that will need to be addressed and the role of employer-sponsored benefits in filling this gap. The aggregate deficit number with the current employer-sponsored retirement benefits is estimated to be \$4.13 trillion. *When the simulation was done assuming that there were no employer-sponsored retirement benefits and individuals were to behave in the manner observed for those without access to these plans, the aggregate deficit would jump to \$7.05 trillion, an increase of 71 percent.*

Conclusion

These simulations illustrate just how important employer-sponsored benefits remain to the future security of American workers. Without this central element of the uniquely American social insurance, tens of millions of workers who now receive valuable health benefits through their employer would be forced into the individual market. Americans would significantly increase the risk that they will run short of the necessary resources to ensure their security in retirement. In the same way that George Bailey in It's a Wonderful Life comes to understand just how important to so many others his life has been, the value and unique role that employer-sponsored benefits contribute to making the lives of American workers wonderful is perhaps best understood by considering how the world might look without them.

Section II The Unique Advantages of Employer Sponsorship

In this Section

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ADVANTAGES OF AMERICAN BENEFITS

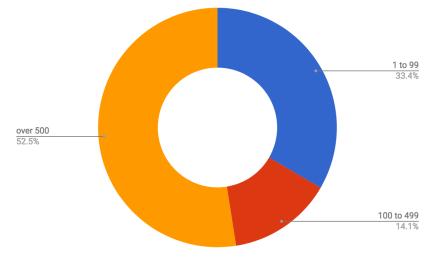
Employer-sponsored benefits have many important advantages that accrue to American workers, their families and the economy of the United States. Included in *Section II* are among the most important of these advantages.

BENEFITS BARGAIN: HEALTH

Employers can pool risks to efficiently provide benefits to a large share of the workforce through privately managed institutions.

Employers are able to pool risk because they bring together large and typically very stable groups assembled on the basis of an employment relationship. Employer plans typically enroll a large proportion of their eligible workers, thus bringing in younger and healthier individuals who might not participate in a pension plan or purchase health insurance. This allows risks to be spread widely and avoid the key problem of "adverse selection," where individuals who have much greater knowledge about their life expectancy and health status may choose certain products or enter and leave the group depending on how long they anticipate receiving retirement benefits or their anticipated health costs.

In general, actuaries have found that if the risk pool is formed on the basis of factors unrelated to health status, and its membership is not contingent on individual decisions to participate, a viable insurance pool can be created with as few as 500 individuals. The "Statistics of U.S. Businesses" published by the Census Bureau, indicates that about one-third of private sector workers are employed in establishments with fewer than 100 workers; 14 percent are employed in a workplace with between 100 and 500; and more than half, 53 percent, work in establishments with more than 500 workers (see Figure 13). The share of workers in large groups is even greater than these numbers indicate because many of these establishments are part of a larger firm that may be operating in many locations and across state lines. In addition, workers in smaller firms may be members of a union that is able to aggregate individuals from a wide range of establishments in a common industry or occupation to assemble a large enough group to be a viable risk pool. This means that about three of every five American workers are employed where it is feasible to create a viable stand-alone insurance pool.





Source: Statistics of US Businesses. Census Bureau, January 2018.

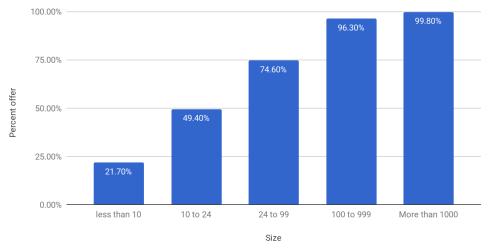


Figure 14. Percent of Private Sector Establishments Offering Health Benefits

Even within the employment-based health benefits system, adverse selection can be an issue, especially for smaller groups. When a few relatively healthy people opt out of a large employer's health plan, it has a modest impact on the average risk remaining in the pool. However, when a few relatively healthy people opt out of a small employer's health plan, it can have a major impact on the average risk of the remaining individuals in the insured pool. As a result, insurers have historically imposed requirements on the small group market that have not been imposed on the large group market. In the small group market, employers often have to meet minimum participation requirements, which means that insurers can drop the coverage of a small group if a certain percentage of employees opted out of coverage. Similarly, smaller employers are often subject to minimum contribution requirements as well, reducing the cost of coverage for workers, which results in more workers enrolling in their health plans.

Group size is also an important factor when it comes to efficiencies in providing insurance. Larger groups are better able to spread the administrative costs and the expense of high cost claims (or bad risks). Thus, larger groups typically pay lower premiums than smaller groups for the same level of insurance. The viable size of an insurance pool is largely dependent on the degree to which adverse selection can be prevented and the average costs for a member can be predicted in advance, or what is known as the "credibility" of the insurance pool. This is strongly dependent on the size of the group and the ability of the members of the pool to enter or leave depending on their circumstance.

As a result, large employers are much more likely to offer health insurance than smaller employers. Nearly all employers with 1,000 or more employees offered health insurance in 2016. Over 96 percent of those with 100-999 employees offered health insurance, compared to 74.6 percent among those with 25-99 employees; 49.4 percent among those with 10-24 employees; and 21.7 percent among those with fewer than 10 employees (see Figure 14).

In a purely voluntary system, such as the individual market in the United States before 2013, the risk of adverse selection is relatively high. In the non-group market, those most likely to seek insurance for health care are also those most likely to need health care. When the Affordable Care Act (ACA) imposed a requirement on insurance companies that they sell insurance to everyone at premiums that are unaffected by health status, it also put in place financial incentives to mitigate against adverse selection in the non-group market. The ACA originally imposed tax penalties on individuals who do not purchase health insurance. It also provides premium subsidies for lower-income individuals to reduce the cost of coverage. However, the tax penalties on individuals who do not purchase insurance were repealed, effective 2019, by the recent tax reform legislation, making it unlikely that the remaining

Source: EBRI Notes. Number 454, August 6, 2018.

incentives will be sufficient to address adverse selection in the individual market. The non-group market continues to experience volatile premium increases, whereas average premium increases for employment-based coverage have recently been between 3 percent and 4 percent.²⁵ Furthermore, many insurers have stopped offering health insurance in various markets, in some cases leaving only one carrier from which to choose.

While the employment-based system can provide the foundation of private health insurance on a cost-effective basis, if the U.S. is to continue to reduce the number of uninsured, it will need to continue to make progress in developing a stable individual market that can supplement employer coverage for individuals in small firms that cannot create or join large enough viable risk pools. In the United States, the combination of employer coverage, Medicaid and Medicare programs (reaching groups that are primarily outside of an employment relationship) and an individual market provides wide access to health care without imposing the costly taxes and inefficiencies characteristic of very large public programs.

Employers provide health benefits at a lower cost to workers than individual markets and have been better able to restrain cost growth.

By assembling large groups that are not subject to the sort of adverse selection problems and higher administrative costs as in the non-group market and by engaging innovative cost containment strategies, employers are able to provide a better bargain for their workers than is likely to otherwise be available. There is no simple or reliable way to compare costs in employer plans to those in other markets. There is, however, some information that illustrates how employer-sponsored plans provide a better bargain to workers than the available alternatives.

The Kaiser Family Foundation (KFF) conducts an annual survey on health insurance plans offered by employers.²⁶ The 2017 survey found that employer-sponsored plans had an average total premium of \$6,690 for single coverage and \$18,764 for family coverage indicating that, on average, employers are providing very generous health coverage to their workers. The average covered worker is required to pay only 18 percent of this premium for a single plan and 31 percent for family coverage works for an employer spaying most of the costs.²⁷ One in seven workers receiving single coverage works for an employer that pays the full premium and 44 percent of workers with family coverage pay one-fourth of the premium costs or less. The employer share of premiums is excludable from income for tax purposes which, as noted earlier, results in a tax expenditure of about \$250 billion or about 2.5

Figure 15. Estimated Actuarial Value and Out-of-Pocket Expenses – Employer vs. Non-group Market (based on 2010 data)

	Actuarial Value	Out-of-Pocket Costs
Non-group Market	60%	\$4,127
Employer Plans	83%	\$1,765

Source: Congressional Budget Office, 2016.

\$691.3 BIL Source: National Income and Products Accounts, Bureau of Economic Analysis and Commerce, 2016. \$155.3 BIL Source: "Estimates of Federal Tax Expenditures for Fiscal Years 2016-2020," Joint * \$155.3 BIL Source: "Estimates of Federal Tax Expenditures for Fiscal Years 2016-2020," Joint

Committee on Taxation, January 30, 2017.

> percent of GDP. More than 80 percent of covered workers also pay an annual deductible with an average cost of \$2,221 for all plans. There are also varying co-payments for services received that will vary considerably depending on the services used. Taking all of these costs into account, a typical worker with family coverage enrolled in an employer-sponsored plan faces a premium and deductible cost of less than \$7,000 per year for their health insurance coverage.

> In a recent review of health insurance premiums, the Congressional Budget Office (CBO) references a 2014 study of 2010 data that found employer plans covered 83 percent of the costs of health care claims (indicating the "actuarial value" of the plan) compared to 60 percent for non-group plans, noting that the difference would amount to an out-of-pocket expense of just \$1,765 for a family enrolled in an employer plan, compared to \$4,127 for a family purchasing health insurance in the non-group market (see Figure 15).²⁸ The CBO reached similar conclusions about the actuarial values of employment-based and non-group plans in its own earlier study.²⁹ In its 2016 review of policy issues related to private health insurance premiums, the CBO projected that employer-sponsored plans will experience premium increases that average 4 percent per year between 2014 and 2018. While it does not project premium changes in the non-group market for a comparable period, the CBO's 2016 report projected premium increases from 2016 to 2018 to be twice this level at 8 percent per year.³⁰ A more recent report in May 2018 projected that non-group premiums would rise by 15 percent from 2018 to 2019, reflecting the considerable increase in the uncertainty about the market's stability that has been introduced over the past year.³¹

The tax expenditure for health insurance provides a high ratio of benefits in relation to the value of the exclusion of employer payments for group health insurance.

The cost of the tax expenditure in relation to the value of the exclusion for employer health plan payments can be estimated by looking at the total value of employer premiums paid for group health insurance reported in the National Income and Product Accounts (NIPA) and comparing it to the value of the tax expenditure calculated by U.S. Congress' Joint Committee on Taxation (JCT). In 2016, the ratio was \$4.45 of benefits for every \$1.00 of tax expenditures.



Employer-provided retirement benefits are now approaching the value of Social Security for a large share of the workforce. The combined value of public and private benefits provide nearly full income replacement for many.

There are two components to income adequacy relevant to our contemporary understanding of retirement income security needs. The first dates back to Adam Smith who, in the 18th century, suggested that everyone in a society should have an income that will allow them to meet basic needs according to established social standards. In our modern society, this is generally deemed to be a poverty-level income that meets basic needs. The second standard dates back to the early days of pension plan sponsorship in the United States and suggests that retirees ought to have an income that allows them to maintain the living standard achieved during their working careers. In contemporary models used to assess the adequacy of workers' retirement income prospects or retirees' income levels, the rate at which pre-retirement earnings are replaced by retirement income are condensed into rules-of-thumb that suggest that retiree incomes be somewhere between 75 and 90 percent of final career earnings levels. While these rules-of-thumb have been applied widely in retirement plan design and assessments of retirement income adequacy, they mask much of the variation in the incomes needed by retirees to meet either basic income needs or to maintain pre-retirement living standards.32

Social Security benefits alone are insufficient to cover either the minimal-needs standard of income adequacy or the relative-needs measure. For individuals with a career of low earnings, annual Social Security benefits provided under current law are less than the federal poverty line.³³ For individuals with higher career earnings, Social Security's replacement of earnings falls considerably below the rules-of-thumb or more carefully derived measures of retirement income needed to maintain pre-retirement living standards. For example, for retirees with at least 35 years of covered earnings that place them in the bottom 10 percent of the lifetime earnings distribution, Social Security on average replaces around 100 percent of their average earnings indexed for inflation. While

Over the years, the tax incentives accorded to retirement plans have been widely criticized... A broader look at the available data, however, indicates that employer plans are providing a much higher level of savings and income than has been appreciated.

the replacement rate of average lifetime earnings might be high, the Social Security benefits for these individuals fall short of meeting the poverty line. For retirees with median career-average covered earnings, Social Security replaces around 45 percent of their lifetime average earnings. Here the Social Security benefits exceed federal poverty standards but fall far short of allowing workers to maintain pre-retirement living standards. For retirees who fall in the top 10 percent of career-average covered earnings, Social Security replaces about one-third of the earnings.³⁴

Since the inception of the federal income tax, employer contributions to retirement plans have received favorable tax treatment. This favorable tax treatment recognizes the desirability of encouraging retirement savings during workers' careers so they will be able to realize adequate incomes when no longer in the workforce. This public policy goal was formalized in the Older Americans Act of 1965 which recognized that the elderly should enjoy "an adequate income in retirement in accordance with the American standard of living."³⁵ The recognition that Social Security benefits alone do not meet generally accepted measures of retirement-income adequacy has contributed to the ongoing tax preferential status of pension and retirement savings plans. The regulations surrounding these plans has recognized the supplementary role that retirement savings play in augmenting Social Security benefits.

Over the years, the tax incentives accorded to retirement plans have been widely criticized and subject to significant curtailments.³⁶ One of the prevailing criticisms has been low coverage and participation rates among workers in the bottom end of the earnings distribution. Alicia Munnell, director of the Center for Retirement Research at Boston College, has expressed this sentiment by asserting that, "Pension benefits are a trivial source of income for retirees in the bottom two-fifths of the income distribution."³⁷ This assessment has been repeated far and wide based on a series of reports published by the Social Security Administration based on data developed from the Annual Social and Economic Supplement 's (ASEC) Current Population Survey (CPS), which gathers data on the sources of income and levels each March from a representative sample of U.S. households. A broader look at the available data, however, indicates that employer plans are providing a much higher level of savings and income than has been appreciated.

Providing accurate and meaningful measures of the value of employer-sponsored benefits has often imposed challenges. Sources of health insurance coverage and retirement income are typically derived from household surveys, most commonly supplements to the Current Population Survey (CPS), one of the largest surveys fielded by the federal government that provides a range of key data for policy makers and analysts. The many years of experience working with this data, however, has shown that **respondents are often unaware of the sources and relative value of employer-sponsored benefits.**

This has especially been an issue with regard to retirement income because individuals often underreport the value of employer-sponsored benefits or attribute these to other sources. This has increasingly become a challenge with the growing prevalence of defined contribution individual account plans (commonly grouped together as 401(k) plans although not all have the particular characteristic of allowing elective pre-tax salary deferrals that define this category of plans). Households have a tendency to attribute retirement income to individual savings rather than employer plans likely because of funds that are often rolled over into an Individual Retirement Account before being distributed during retirement. To address this challenge researchers have recently begun to use sources of data from tax filings and employer reporting to obtain a more complete and accurate view of the relative importance of employer-sponsored plans. This recent research indicates that employer-sponsored plans provide a much greater share of the income of retired persons in relation to Social Security than was previously understood. A detailed discussion of new data and analysis of the value of employer-sponsored benefits is provided in the section below, "A Deeper Dive."

A DEEPER DIVE: The True Value of Employer-Sponsored Retirement Benefits

According to the Social Security reports from 1976 through 2014, the percentage of elderly households reported to be receiving Social Security benefits was relatively constant, varying from 87 to 91 percent. Social Security benefits accounted for 36 to 40 percent of their total income through 2012 and then dropped to 33 percent in 2014. Receipt of income from pensions and retirement accounts was found to have grown modestly over the period. In 1976, only 31 percent of the elderly reported such income and it amounted to only 31 percent of total income. Pension receipts increased to 38 percent of the elderly, accounting for 18 percent of their income by 1988. Receipt of pension income continued to rise to 45 percent of the elderly by 1992, but then dropped slightly and was at 44 percent in 2014. From 1988 through 2014, it accounted for 19 to 21 percent of the elderly's total income.³⁸

The problem with the data in these reports is that they have significantly underestimated the prevalence and level of income that retirees have been receiving from tax-qualified retirement plans. A comparison of reported pension income for households with a person 65 or older in 1990 found that households filing federal income taxes for the year reported 27 percent more income from pension or individual accounts — including IRA or defined contribution plan distributions — than was reported on the Current Population Survey (CPS), even though the latter supposedly covered the whole elderly population while the former included only tax filers.³⁹ By

Table 1. Receipt and Average Amounts of Pension Income Received across the Income Distribution in 2012 by Family Units with at Least One Person Age 65 or Older as Reported on the CPS-ASEC or on Federal Income Tax Forms

		Reported pension or IRA benefit receipt		Mean pension income, all CPS respondents		Mean pension income of those receiving pensions	
CPS income decile	Mean CPS income	CPS respondents	Administrative records	CPS respondents	Administrative records	CPS respondents	Administrative records
1	\$5,032	7%	36%	\$216	\$6,177	\$3,109	\$17,202
2	11,620	12%	41%	467	4,812	3,903	11,810
3	15,381	22%	57%	966	8,685	4,455	15,249
4	19,604	35%	66%	2,058	13,617	5,852	20,610
5	25,075	47%	76%	3,933	16,335	8,340	21,410
6	31,757	59%	81%	7,046	20,027	11,914	24,631
7	40,793	65%	84%	10,601	21,357	16,276	25,569
8	54,286	68%	81%	15,290	24,745	22,376	30,587
9	76,677	66%	80%	21,446	28,998	32,328	36,189
10	172,800	60%	78%	26,858	42,539	45,110	54,528
Total	45,288	44%	68%	8,886	17,727	20,138	27,550

Source: Derived from Adam Bee and Joshua Mitchell, "Do Older Americans Have More Income than We Think," U.S. Census Bureau, SESHD Working Paper #2017-39 (July 2017), p. 57.

2000, federal income tax filers reporting Social Security income reported 118 percent more income from pension or individual account retirement plans than similar households reported on the Current Population Survey. By 2008, the differential had risen to 149.4 percent.⁴⁰

Recently, two researchers at the U.S. Census Bureau compared reporting of pension and individual account in the CPS data with administrative data collected by the federal government through federal income tax filings, tax-qualified retirement plan income reporting, federal pension payments and Social Security reporting of benefits paid through the Old-Age and Survivors and Disability Insurance programs and the Supplemental Security Income program. In this case, actual data reported on administrative records was matched to CPS survey respondents' records. This analysis found much higher rates of income from private pensions than are being reported on household surveys like the CPS. A summary of some of the findings are presented in Table 1.

Instead of Social Security benefits being paid to those 65 and older being more than twice the pension benefits and individual account distributions paid to them in 2012, the pension and individual account income exceeded Social Security benefits paid to the elderly. Among households with a person 65 and over, 50 percent more reported on tax forms receiving pension income than in response to the CPS questions for 2012. At the bottom of the CPS-income distribution, (the lowest one tenth, or decile, of the distribution) the rate of pension receipt was more than five times higher on tax records than on the survey. In the second CPS-income decile, 3.4 times as many units received pension income. At higher income levels, the underreporting of receipt of pension income was relatively less than at the lowest income levels but still highly significant.

Table 2. Average and Median Incomes of Retired Workers in the Year before Claiming Social Security Benefits and Relative Income in the Year Benefits Are Claimed and Each of the Subsequent Three Years

	1999 per capita total income category						
	Lowest quintile	Second quintile	Middle quintile	Fourth quintile	80-95th percentile	95-99th percentile	Top one percent
Average per capita income and taxes reported in the year before claiming Social Security benefits							
Work-related income	\$17,123	\$28,234	\$39,022	\$50,423	\$76,424	\$101,291	\$281,127
Total income	18,161	30,773	41,862	55,011	87 <i>,</i> 670	187,300	896,128
Income and payroll taxes	1,710	4,013	6,315	9,419	17,170	41,555	200,986
Total income net of taxes	16,452	26,761	35,547	45,592	70,499	145,745	695,142
Average total per capita income net of taxes relative to income net of taxes in year prior to Social Security claiming							
Year SS benefits claimed	117.9%	105.3%	106.1%	102.4%	96.2%	92.0%	92.4%
Year after SS benefits claimed	123.4%	106.2%	104.4%	100.0%	93.3%	95.9%	81.4%
2 years after SS benefits claimed	129.6%	105.6%	101.3%	107.1%	92.1%	80.5%	72.9%
3 years after SS benefits claimed	127.4%	103.0%	102.0%	99.1%	87.3%	79.2%	62.5%
Median per capita income and taxes reported in the year (year t-1) before claiming Social Security benefits							
Work-related income	\$16,400	\$28,000	\$39,100	\$49,500	\$72,100	\$86,600	\$88,100
Total income	17,100	29,100	40,200	52,100	78,200	122,800	297,900
Income and payroll taxes	1,200	3,700	5 <i>,</i> 900	8,400	14,500	25,400	59 <i>,</i> 500
Total income net of taxes	15,800	25,400	34,600	43,500	63,000	95,300	238,700
Total per capita income net of taxes relative to income net of taxes in year prior to Social Security claiming							
Year SS benefits claimed	116.5%	105.5%	102.0%	100.2%	98.9%	95.9%	95.3%
Year after SS benefits claimed	122.2%	105.9%	101.7%	97.5%	88.9%	92.8%	86.8%
2 years after SS benefits claimed	122.2%	104.3%	100.0%	95.2%	86.5%	89.8%	79.1%
3 years after SS benefits claimed 120.3		103.1%	98.6%	94.0%	85.6%	79.9%	74.3%
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Source: Brady, Peter J., Steven Bass, Jessica Holland and Kevin Pierce, "Supplemental Tables," 2017b, found at: <u>https://www.irs.gov/pub/irs-soi/17rpbbhptables.xls</u>, Tables S5a and S6a.

Among all units in the bottom decile, the average amount of pensions reported on tax forms was 29 times the average reported on the CPS; the difference was a multiple of 10 in the second decile and 9 in the third; overall, the average pensions reported on tax forms was twice what was reported on the CPS. Even among units that reported receiving pension income on the CPS, the amounts reported overall on the CPS were only 73 percent of the amount reported on tax filings. Employer-sponsored retirement plans were clearly more effective than the national survey evidence has suggested.

The underreporting of income on the CPS in 2012 was most heavily concentrated in the failure to capture benefits being paid through individual account plans and in the form of annuities. Given the increasing dependence on defined contribution plans, these results suggest the problem of pension underreporting on the national surveys is likely increasing. Trends in underreporting of pension income were traced back to 1990 by linking historical versions of the Survey of Income and Program Participation (SIPP), another nationally representative sample of the population, and the CPS-ASEC to administrative records.⁴¹ On the pension side, the survey results in 1990 indicated 40 percent of individuals 65 and over were receiving pension benefits or income from individual retirement accounts but the administrative data indicated that 45 percent were. By 2012, the respective differences were 36 and 61 percent. By comparison, in 1990, both the survey and administrative records.

indicated that 91 percent of the elderly individuals were receiving Social Security benefits. In 2012, the respective rates were 84 and 86 percent.⁴²

Another research project, carried out using administrative data gathered by the Internal Revenue Service (IRS), focused on individuals who were ages 55 to 61 in 1999 who were not receiving Social Security benefits. They were tracked over the next 10 years to see what happened to individual income levels around the time that Social Security retirement benefits were claimed.⁴³ Only individuals who retired by 2010 and claimed Social Security retirement benefits – that is, those claiming disability benefits – were not included. The sources of income gathered from administrative files included reported employment earnings, unemployment insurance, interest and dividend income, pension benefits and individual account retirement distributions and Social Security and Supplemental Security Income benefits.

A portion of the results from this effort are presented in Table 2. The persons in the sample are arrayed in the columns of the table on the basis of their position in the total income distribution in 1999. The top panel in the table shows average work-related and total income in 2016 dollars, taxes paid and total income net of taxes for individuals at various points in the 1999 per capita income distribution for the year before Social Security retirement benefits were claimed. The second panel in the table shows total income net of taxes in subsequent years as a percentage of total income net of taxes in the year before claiming Social Security. The third and fourth panels in the table are similar to the second and third panels but report the amounts in medians instead of average terms.

There are a number of important observations that can be made on the basis of these results:

Overall, the combined public and private sources of income of the elderly after they decide to claim their Social Security benefits replaces a higher share of the income of lower earning groups than higher earners. This indicates that redistribution inherent in the Social Security benefits structure carries through to post-Social Security claiming income structure. It also indicates that, while resulting in higher benefits to those with greater earnings levels, the private pension system does not disproportionately advantage higher earners by providing greater income replacement rates. This is consistent with the design of the Social Security system, which replaces a larger share of pre-retirement earnings for low earners than for those with higher earnings. The replacement rates in the lowest quintile based on 1999 per capita income are significantly higher than in the second quintile. From the second-to-third quintile, the differences are somewhat smaller, largely because of the broad middle earnings replacement rate in the Social Security benefit formula. But, at each progressively higher 1999 income category, the replacement of income relative to the year prior to claiming Social Security tends to decline.

The maintenance of real income at the bottom of the income distribution is 100 percent or greater and declines gradually the higher up the income distribution considered. The full indexation of Social Security benefits is undoubtedly at the heart of this result. It also indicates that private sources of retirement income are important across the full income distribution. On an average-income basis, it is a remarkable result that, three years after claiming Social Security retirement benefits, even those in the fourth quintile have maintained real income levels equivalent to that reported in the year before claiming. The results are not quite as strong at the median but, up to and including the middle quintile, incomes were relatively protected.

Employer-sponsored retirement programs provide benefits that are many times the cost of the tax deferral that is provided as an incentive for employers to sponsor these programs.

To provide incentives for their establishment and growth, employer-sponsored retirement programs, and to a lesser extent other individual savings for retirement, are afforded a variety of tax advantages. The most important of these is the "exclusion" from current income taxes of an allowable level of contributions to these plans. This is not an exclusion in the same sense that mortgage interest or certain medical expenditures are deductible, but rather a deferral of taxes because the value of the benefits received from these plans is taxed at a future date when they are received. Much of this is received after the age of 65, though there is also a wide range of distributions of retirement savings that are distributed (and taxed) to persons under the age of 65 for a variety of reasons.

Over the years, there has been a great deal of concern about the structure of tax preferences accorded employer-sponsored pension and retirement savings plans, and individual retirement accounts. Some analysts contend that the distribution of the tax expenditures is inefficient and extremely skewed toward higher earners. If the goal of retirement policy is that retirees be able to achieve a reasonable basic standard of living and, above that, to maintain the living standard achieved while working up to some reasonable level, then the relative public costs and benefits of achieving the goal is one way to assess the efficiency of the current system and its components.

Recent research has sought to correct income reporting by the elderly on the Current Population Survey by matching respondents' reported income receipts and levels on the survey questionnaire for 2012 with federal government administrative data for that same year. For the household units with a person 65 and over, the administrative data indicated that such households received \$545 billion in Social Security benefits that year and \$595 billion in pension annuities or disbursements from individual account retirement plans including IRAs.⁴⁴ In gross terms, aggregate benefits paid to the elderly from the two sources are somewhat similar.

Both Social Security and supplemental plans intended to support retirement also pay benefits to persons less than age 65. In the case of Social Security, dependent benefits are paid to juvenile survivors of covered workers and disability benefits are paid to workers younger than normal retirement age who qualify for them based on conditions that limit their ability to earn a living. In the aggregate, Social Security benefits paid to individuals age 18 and over in 2012 equaled \$695 billion and the pension and individual account plan benefits paid to the group equaled \$991 billion.⁴⁵ Some of the \$396 billion paid from the latter accounts to individuals between the ages of 18 and 64 were pre-retirement distributions, which many policy analysts consider to be undesirable (though that is a separate matter from the current point of comparing the relative efficiency of the components of the U.S. retirement income security system).

In terms of aggregate public fiscal costs, the 2017 Social Security Trustees Report indicates that revenues collected from the public in 2012 equaled \$731 billion.⁴⁶ Total benefits paid that year equaled \$775 billion. This amount does not match the \$695 billion reported in the study by Bee and Mitchell because their aggregate was an estimate of benefits paid to persons ages 18 and above who were noninstitutionalized residents in the United States in 2012.47 Simply subtracting out benefits paid to children receiving survivor or dependent benefits and benefits paid to individuals living in U.S. territories or in foreign countries reduces the aggregate benefits to \$731 billion. An additional discrepancy in the two aggregates would arise because the CPS gathers information on noninstitutionalized individuals, so Social Security benefits paid to people in various sorts of institutions would not be captured. Laying all that aside, the federal government raised \$731 billion in tax revenues in 2012 to finance the delivery of \$775 billion in benefits, with the difference being financed out of interest on the trust funds. This means that the benefit-to-revenue cost ratio of Social Security for 2012 was 1.06 - i.e., \$775 billion divided by \$731 billion. The 2017 Trustees Report projects that, under current law, the extent to which system costs exceed revenues will result in the trust funds being completely depleted by 2034, at which point additional revenues will have to be raised or benefits cut by 20 to 25 percent to keep the system solvent.

The aggregate fiscal cost of the tax preferences accorded supplemental retirement plans is estimated in a segment of the White House's annual budget submitted to Congress each year. In that segment of the budget, the Office of Management and Budget (OMB) estimates the cost of various tax preferences in a couple of different ways. The first measure is an estimate of the net cash-flow effects of the tax preferences on the budget for each year; the second is an estimate of the present value of the revenue effects. In the case of retirement plans, the cash-flow Table 3. Estimated Tax Expenditures in Millions of 2012 Dollars for Tax-Qualified Retirement Plans in 2012 on a Cash Flow and Present Value Basis Compared to Benefits Paid by the Plans

	Total 2012 revenue effects	Present value of 2012 tax expenditure
Employer plans	\$45,230	\$73 <i>,</i> 830
401(k) plans	62,850	134,000
Individual Retirement Accounts	13,930	3,800
Exclusion of nondeductible IRA earnings		510
Keogh plans	15,030	5,710
Special ESOP rules	1,600	
Exclusion of Roth earnings & distributions		11,300
Total tax expenditures	\$138,640	\$229,150
Pension and IRA benefits paid to:		
Persons ages 18 to 64	\$396,000	\$396,000
Persons aged 65 or over	595,000	595,000
Total paid	991,000	991,000
Ratio of benefits paid to total estimated tax expenditure for:		
Persons aged 65 and over	4.29	2.60
All persons regardless of age	7.15	4.32

Source: Office of Management and Budget, Budget of the U.S. Government, Fiscal Year 2012, Analytical Perspectives, Chapter 17, found at: <u>https://www.gpo.gov/fdsys/pkg/BUDGET-2012-APP/pdf/BUDGET-2012-APP.pdf</u>; and Adam Bee and Joshua Mitchell, "Do Older Americans Have More Income than We Think," U.S. Census Bureau, SESHD Working Paper #2017-39 (July 2017), p. 40.

measure of tax expenditures recognizes that pre-tax contributions to the plans in a year reduce income subject to the collection of taxes that would otherwise be collected if not for the tax preference and subtracts the payment of taxes on the benefits paid from plans that are distributed as income and subject to the income tax in that year. Because asset income in tax-qualified retirement trusts and accounts are not subject to the income tax until benefits are paid, the present value of a contribution made to a plan in a given year includes an estimate of the value of future foregone taxes due to the preferential tax treatment of asset income relative to what would be accorded a regular savings account.

Table 3 shows the OMB estimates of tax expenditures attributed to tax-qualified retirement plans in 2012 from the 2013 budget. The cash flow estimates are shown in the first column of estimates and the present value estimates in the right-hand column. The estimates of the pension and IRA benefits paid in 2012 shown in the table are taken from Bee and Mitchell's paper. The ratios of benefits paid relative to total cost of these plans to the federal fiscal costs are shown at the bottom of the table. The bottom line in Table 3 reflects the ratio of the benefits paid out of tax-qualified plans to all individuals in 2012 regardless of age. On a cash flow basis, the benefits were nearly 7.2 times the cost of the tax expenditures and, on a present value basis, benefits were 4.3 times the cost.

Many retirement policy analysts are concerned about leakage from tax-qualified plans where workers take pre-retirement distributions. In those cases the distribution of benefits often means that the tax preferences intended to encourage workers to meet their retirement security needs are not fulfilling their intended goals. In the case of benefits paid out of tax-qualified plans reflected in Table 3, much of the distribution paid to individuals under age 65 was paid to retirees who withdrew from the workforce prior to that age. In 2012, 2.7 million individuals claimed "retired worker" benefits from Social Security, but 1.5 million of them, 53.4 percent, were under the age of 65.⁴⁸ Many

individuals coordinate their claiming of Social Security and other retirement benefits. But even if the total cost of the tax expenditures are compared solely to the benefits paid to individuals 65 years of age and older, the ratio of benefits-to-the-cash-flow cost of the foregone taxes is four times the ratio of benefits-to-costs of Social Security and is roughly 2.5 times the Social Security ratio if the present value of the annual tax expenditures for tax gualified plans is considered.

Employer-sponsored pension funds, which now hold assets of nearly \$20 trillion (more than the current GDP of the United States), are the largest single source of investment capital in the world. This long-term savings provides stability in periods of crisis and market volatility.

One of the most important advantages of employer-sponsored retirement programs is that they are required to be backed by real financial assets. While determining the appropriate level of this funding continues to present challenges for the defined benefit system, and most plans for government workers remain outside of the federal funding rules that are applicable to private employer-sponsored plans, the emergence of defined contribution and individual account plans over the past several decades ensures that a very large portion of employer-sponsored benefits are fully funded as they are accrued.

In early 2018, the Federal Reserve Board Flow of Funds reports showed total public and private pension funds to be valued at nearly \$20 trillion, of which about half, \$9.5 trillion, was held by pension funds sponsored by private sector employers.⁴⁹ Using a broader definition of retirement assets that includes Individual Retirement Accounts and estimation of the reserves held by insurance companies backing retirement annuity products (both of which have a large share originating from employer-sponsored retirement plans) the Investment Company Institute (ICI) estimates total U.S. retirement assets have reached \$28 trillion by the first quarter of 2018.⁵⁰ The ICI data (derived from a variety of sources including the Federal Reserve reports) indicates that these assets grew from \$369 billion in 1974 when ERISA was enacted (see Figure 16). These funds continue to be about a third of the financial assets of U.S. households.

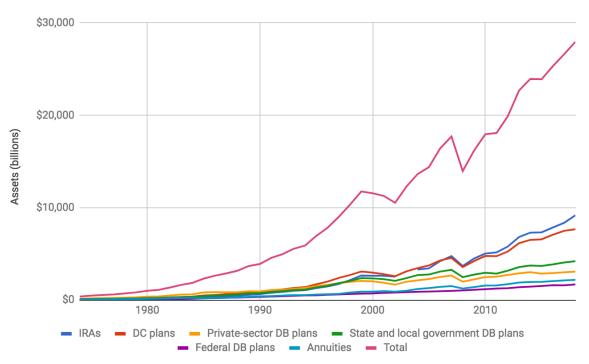


Figure 16. Growth of Retirement Assets in the United States, 1974-2018

Source: "The US Retirement Market, First Quarter 2018." Investment Company Institute, 2018.

Assets of employer-sponsored pension funds in the United States is the largest single source of financial capital in the world today. They represent a value that is larger than the entire output of the U.S. economy and about a third of the financial assets in the U.S. In fact, the assets of U.S. pensions were estimated in a recent study by Willis Towers Watson to constitute nearly two-thirds of the value of pension fund assets in the top 22 economies of the world today,⁵¹ representing nearly one-tenth of global financial assets.

Of equal importance to the size of these funds is the role that they play in bringing depth and stability to financial markets. Pension funds are long-term investors that are less likely to trade as frequently as many others and seek products with maturities consistent with their long-term nature. They also provide stability in periods of crisis and volatility. This can be seen by looking at the constancy of the investments in employer-sponsored plans across the years of the 2007-8 financial crisis. The Employee Benefit Research Institute (EBRI) and ICI have developed an extensive database of information on the investment behavior of 401(k)-type plans covering 26.1 million participants holding \$1.9 trillion in assets.

The data indicate that the share of these funds invested in the major asset classes have had relatively small variations between 2007 and 2016 (the latest year for which data is currently available). The largest asset class continues to remain in equities which has moved from 48 percent to 37 percent between 2007 and 2008 and rebounded to between 39 percent and 44 percent in the ensuing years.⁵² This initial drop is roughly proportional to the 25 percent decline in equity values in the early years of the crisis, indicating that on average members in these plans did not react to market fluctuation but rather remained stable in their investment patterns. The share of these funds in equities has now returned to its pre-crisis level as the values have recovered (although some of this has now shifted to balanced funds as these become more popular). Essentially, the same pattern is seen when the EBRI/ICI data is limited to a subset of participants who can be tracked across the entire time period.⁵³ The degree to which the investment of employer-sponsored pension funds have remained relatively constant across this period of turmoil in financial markets indicate how these funds in these financial markets.



The "Fearless Girl" is steadfast in facing the iconic symbol of Wall Street.

BENEFIT'S BARGAIN: Sustaining the Social Compact

Tax-favored employer retirement plans provide an efficient way to complement the redistribution in Social Security benefits and sustain the political consensus supporting the poverty protection outcomes of Social Security.

It has been widely documented that workers with higher career earnings participate at higher rates in tax qualified plans, as well as contribute more than those with lower earnings levels. The progressive rate structure of the federal income tax system also means that a dollar a high earner contributes to a retirement savings plan will be measured as a larger "tax expenditure" than a dollar contributed by a lower earner simply because of the difference in the marginal tax rates that each face. This means that the distribution of tax expenditures attributed to tax-qualified plans, when disaggregated by earnings levels, are skewed toward higher earners.

Critics of the tax provisions favoring tax-qualified retirement plans often point to the skewing of the benefits of retirement tax preferences toward those with higher earnings to argue that current tax provisions favoring retirement saving should either be eliminated or greatly curtailed. These same critics also point to the relatively low participation of low earners in retirement savings plans to further support the contention for eliminating the favorable tax treatment of retirement saving in current law. There are two problems with this reasoning. First, it ignores the integrated nature of Social Security and retirement savings plans in the overall structure of the U.S. retirement system. Second, it also suggests that low earners should be encouraged to adopt savings patterns during their working careers that are totally inconsistent with the life-cycle theory of savings and consumption embraced by most economists.

The Social Security actuaries annually calculate "money's worth" estimates for a set of hypothetical workers that provide a picture of the relative lifetime benefits that workers at various earnings levels and life situations can expect to receive from participating in the Social Security segment of the U.S. retirement system.⁵⁴ Table 4 shows the actuaries' latest estimates of the "money's worth" for a set of these hypothetical workers born in 1955 and retiring at age 65 in 2020. The career-average indexed earnings for the "very low" earner in the table are about 25 percent of the Social Security average wage index (AWI) in the year these workers turn 60. That year would be 2015 when the AWI was \$48,098.63. For the "low" earner the career-average indexed earnings would be roughly 45 percent of the AWI. For the "medium" earner, the equivalent of the AWI. For the "high" earner, it is 160 percent of the AWI. For the "maximum" earner, it is 242 percent of the AWI.

Table 4. Social Security Money's Worth Ratios for Various Earning Level Scaled Workers Born in 1955 and Retiring in 2020 under Current Law at Their Retirement⁵⁷

	Career average earnings level				
Gender and marital status	Very low	Low	Medium	High	Maximum
Single male	1.58	1.15	0.85	0.71	0.54
Single female	1.82	1.32	0.98	0.81	0.61
One-earner couple	2.92	2.14	1.60	1.33	1.01
Two-earner couple	1.77	1.30	0.98	0.81	0.61

Source: Michael Clingman, Kyle Burkhalter and Chris Chaplain, "Money's Worth Ratios under the OASDI Program for Hypothetical Workers," Actuarial Note, Number 2016.7 (December 2016), found at: <u>https://www.ssa.gov/oact/NOTES/ran7/an2016-7.pdf.</u>

Looking across the top row of Table 4, the result for the single male with very low career average earnings is 1.58, meaning that his lifetime benefit from Social Security under current law would be 1.58 times what he could expect to receive if he had alternatively participated in an actuarially fair pension plan where the contributions on his earnings had been invested in the equivalent of Social Security trust fund bonds. Looking across the row, the declining results reflect the redistributive characteristic of the Social Security benefit structure. Workers with low earnings do better by participating in Social Security than if they alternatively participated in an actuarially fair system. Meanwhile, those at high earnings would do better in the actuarially fair system rather than Social Security.

Comparing the results for single females to those of single males, women at each earnings level do somewhat better than the men because they have a longer average life expectancy and so receive more benefits despite paying equivalent contributions. In the third row, "one-earner" couples are shown to do better than any of the others at each career earnings level listed because of the highly subsidized spousal benefits that are provided by Social Security. A number of empirical studies suggest the main beneficiaries of these relatively high returns from participating in Social Security tend to be in situations where the single-earner has career earnings toward the upper end of the lifetime earnings distribution.⁵⁵ "Two-earner" couples fare almost identically to single females under Social Security compared to how they would fare in the actuarially fair alternative model.

The results in Table 4 indicate that "one-earner" and "two-earner" couples at the medium earnings level

and above incur considerable net lifetime opportunity costs for participating in Social Security versus participating in an actuarially fair retirement plan.⁵⁶ Those workers with higher career earnings incur greater net costs from Social Security participation than those with lower earnings. So, the net costs of Social Security participation are inversely correlated with the tax benefits that accrue to workers who participate in tax-qualified retirement plans.

Virtually all of the economic literature that evaluates the overall operation of the U.S. retirement system in the context of providing retirement income security – even cross-country analyses such as those developed by the OECD – considers the benefits delivered by both Social Security and tax-gualified plans. Both elements of the system operate under a complex legal framework of federal laws and create costs that are part of fiscal operations presented in every federal budget. Evaluating one element of the system with regard to the benefits delivered or the federal fiscal costs without considering the other will result in an incomplete understanding of the effectiveness or efficiency of the retirement income security system. At least two published analyses evaluate the combined federal fiscal costs of Social Security and tax-qualified savings.

In the first of these analyses, found in *The Predictable Surprise: The Unraveling of the U.S. Retirement System*, the Social Security actuaries' estimates of the "money's worth ratios" for their hypothetical workers born in 1949 and retiring at age 65 are converted to dollar figures. The historical earnings of these same hypothetical workers were used to estimate the present value of the accumulated retirement saving net of taxes at retirement from The net costs of Social Security participation are inversely correlated with the tax benefits that accrue to workers who participate in tax-qualified retirement plans.

participating in a tax gualified retirement plan under two scenarios. In the first scenario, the current tax law favoring tax-qualified retirement saving was simulated and the present value of taxes that would be payable on the accumulated savings over the distribution period were estimated at retirement. In the second, the saving was considered to be done through a generic savings account. In this latter scenario, all contributions were assumed to be made with post-tax income and annual asset income was taxed at the workers' marginal tax rates. In both scenarios, the gross contribution rate as a percentage of earnings was equal. So, the only difference in accumulation over time was due to the difference in the tax treatment of the tax-gualified plan versus the regular savings account. The net tax benefits from saving in the tax-gualified plan were then added to the net lifetime gains or losses from participating in Social Security to get the lifetime federal fiscal benefit from participating in the combined system. The results indicated that the net losses from participating in Social Security for the single males at "medium" earnings and above were greater than the net tax benefits from participating in the tax-gualified plans. The same was true for single women and the "two-earner" couples at the "high" and "maximum" earnings levels.58

In the second study, found in *How America Supports Retirement: Challenging the Conventional Wisdom on Who Benefits*, the tax expenditure framework was used to measure the value of both Social Security and tax-qualified retirement plans. It compared the lifetime tax obligations of a set of hypothetical workers under current law and then under an alternative scenario where contributions and accruals were subject to regular taxation. In this way, the study expanded upon the first analysis by including the effect of the Social Security system on the income tax liability. Based on this analysis, the overall U.S. retirement system was found to be progressive. The benefits of the tax-qualified leg of the system were greater for higher earners than those with lower earnings levels, but the Social Security benefit structure more than offset the advantages of tax deferral for high earners.⁵⁹

Despite the progressivity of the overall U.S. retirement system, the tax-qualified element of the system is often criticized because of the relatively low participation rates by low earners. It is important to recognize that many low earners are young workers still pursuing their education or part-time workers supplementing the earnings of a main breadwinner during periods when special expenses related to educating children, paying off debts, and so forth demand extra work activity by household members. Still, some workers spend a full career working relatively full-time at low wages and the evidence suggests that many of these workers also do not participate in available retirement savings plans even when they are offered by their employer. While the ultimate outcome of this behavior might be undesirable from a retirement income security policy perspective, it does not necessarily reflect irrational behavior on the part of the individuals with relatively low earnings, nor does it suggest that the tax incentives accorded to gualified plans are not warranted.

Analysis of a sample of Social Security beneficiaries helps to explain the issues that are often overlooked when critics decry the ineffectiveness of tax-qualified plans in attracting low earners to participate in them. The Social Security beneficiaries' records that were To expect career low earners to save or even to force them to do so would be totally inconsistent with the life-cycle model most economists believe provides a rational framework for retirement savings.

used in this analysis were matched to lifetime covered earnings records used to determine Social Security benefits. For each retiree, there was an annual record of their earnings. For the analysis, only workers with at least 35 years of covered earnings were considered so these were all long-career workers. The analysis used these annual earnings and assumed that each worker made an annual contribution of 6 percent of pay into a tax-qualified retirement plan and that the assets were allocated 60 percent to an index equity fund and 40 percent to an index bond fund generating returns equivalent to market returns on U.S. equities and bonds. The accruing fund was assumed to incur administrative and investment costs totaling 25 basis points per year. At retirement, the accumulated assets were annuitized using a unisex life table, a 10-year T-bond interest rate and a 7.5 percent administrative load on the accumulated assets. What the results showed was that for workers at the bottom quintile of the earnings distribution, the supplemental annuities combined with Social Security benefits still failed to provide a poverty level retirement income. These workers ended up with low retirement incomes because the earnings that they received were also less than poverty level over much of their careers.⁶⁰

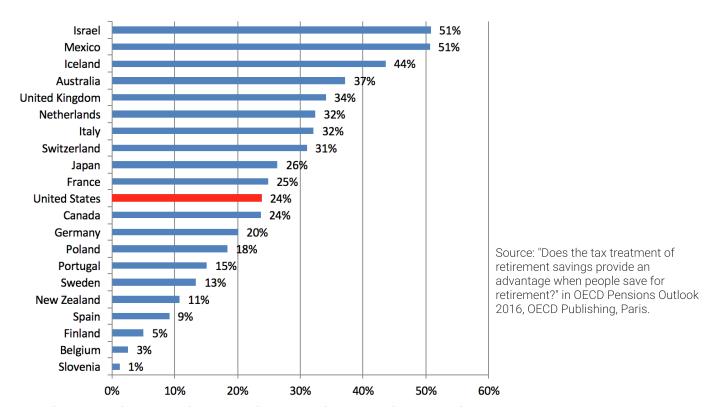
The fact that some career low earners end up in retirement with less than poverty level incomes does not reflect the failure of a component of the retirement system where benefits are proportional to lifetime contributions. The problem is that proportional savings against low earnings generate hardly any retirement income, at least not enough to get some retirees over the poverty income thresholds. But beyond the ineffectiveness of these individuals' potential savings, the results of the existing retirement income security system, when it is considered in its totality, indicate that it is economically irrational for career low-income workers to be saving in the first place. Referring back to Table 2 (see page 36), workers in the bottom guintile of the earnings distribution are already ending up with retirement incomes that replace more than 100 percent of their preretirement earnings. It makes no sense that workers with sub-poverty earnings while working should save so they have a more abundant retirement period when they will already be better off in retirement than when working. To expect career low earners to save or even to force them to do so would be totally inconsistent with the life-cycle model most economists believe provides a rational framework for retirement savings. Even if we could get career low earners to save more, their low earnings while working mean that any unexpected illness, job loss or other major expense would likely result in frequent tapping of their retirement savings to the point of depleting them long before the retirement date arrives. If we want to give these sorts of workers more money in retirement, the only effective way to do so is to either enhance the Supplemental Security Income program or old age, survivors, and disability insurance (OASDI) itself. This is why a host of Social Security reform proposals in recent years, from conservatives and liberals alike, have called for enhancing Social Security benefits to at least poverty income levels for long-career earners.

BENEFIT'S BARGAIN: An International Context

The tax incentives that are provided to employer-sponsored retirement plans in the United States are modest in comparison to other countries, yet are associated with high levels of contributions to these plans.

Current tax law that defers income taxes on allowable levels of contributions to employer-sponsored plans are often identified as one of the largest forms of tax expenditures, suggesting to some that these financial incentives are very high relative to the tax treatment of private retirement savings in other countries. As part of an ongoing multi-year project to evaluate the form, level and outcomes of financial incentives for private pensions, the Organisation for Economic Cooperation and Development (OECD) has developed several metrics to measure and compare the tax incentives provided in its member countries. These take on a wide range of forms among different countries. The most common is the exemption of a certain level of contributions and all investment earnings of tax gualified retirement savings followed by the imposition of ordinary income tax on the value of benefits as they are distributed to the individual participant. This is the primary tax treatment in the United States that is also used by about half of OECD countries. Other countries use variations in which contributions are subject to income tax. However, investment earnings and distributions are allowed to be tax exempt, as is done for Roth plans in the United States. Some countries tax investment earnings when they accrue, while others that provide no tax exemptions give various types of tax credits or matching contributions from public funds to incentivize retirement savings.

Figure 17. Generosity of the Tax Treatment of Retirement Savings in OECD Private Pension Plans



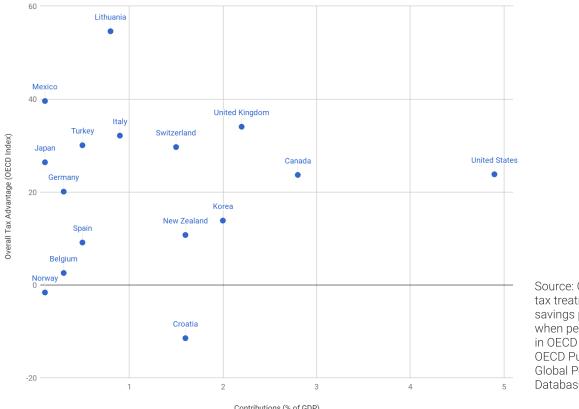


Figure 18. Overall Tax Advantage and Contribution Level in Voluntary Pension Systems

Source: OECD (2016), "Does the tax treatment of retirement savings provide an advantage when people save for retirement?", in OECD Pensions Outlook 2016, OECD Publishing, Paris and OECD **Global Pension Statistics** Database (2016).

Contributions (% of GDP)

To compare the value of these disparate approaches using a common measure, the OECD provides comparable estimates of the value of the tax preference for retirement savings for a typical worker in a wide range of high-income, developed countries. This is done by comparing (1) the present value of taxes paid by a typical worker saving 10 percent of earnings in an investment account that is subject to regular income taxes to (2) the value of taxes that would be paid on the same level of savings in a tax gualified retirement savings account. The value of the tax incentive is expressed as the value of the differences in taxes as a percentage of the present value of contributions. This measure incorporates the wide variations in income tax rates across countries in addition to the variations in the tax treatment of private pensions and also incorporates the deferral of tax.⁶¹

The results, as shown in Figure 17, indicate that the value of the tax incentives varies widely from a low of 1 percent of the present value of contributions in Slovenia to a high of 51 percent of contributions in Israel and Mexico. The United States falls exactly in the middle of the distribution with an estimated value for a median income worker of 24 percent.

It is noteworthy that despite the fact that the United States provides tax incentives that are in the middle of the range of those afforded by other comparable countries, it has achieved one of the highest levels of private pension savings in proportion to the overall size of the economy, with private pension funds now holding assets with a value greater than the annual gross domestic product (GDP). This can be seen by comparing the OECD's data of the value of annual contributions as a share of GDP⁶² among countries that have voluntary private pension systems to the estimated value of the tax incentive measure developed by the OECD. As Figure 18 shows, the United States achieves contribution levels of about 5 percent of GDP. This is more than twice the level of any of the other countries with voluntary systems despite the fact that many have far more generous tax treatment.

This outcome is the result of the high levels of coverage that have been achieved over a long history of employer sponsorship of retirement plans. The U.S. now has the most

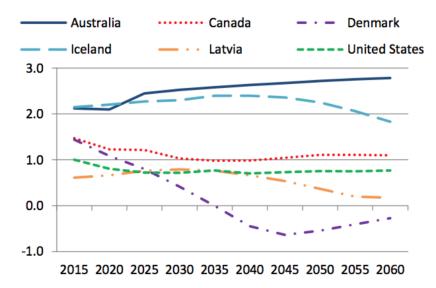
mature and developed employment-based pension system among its peers and benefits enormously from the breadth of participation that this has engendered. The remarkable efficiency of the private pension system is also a reflection of the way in which the tax incentives are predicated on minimum coverage and vesting requirements, and the imposition of requirements that the value of contributions and benefits be fairly distributed across the participants in the plan. The way in which the tax incentives have been structured effectively leverages the tax expenditure, motivating employers to design their plans to maximize participation and provide other kinds of incentives for workers to save for their retirement. Most notable in this regard are the use of matching contribution and automatic enrollment designs that were pioneered by private employer-sponsored plans in the United States and have now been widely emulated in both public and private pension systems around the world.

The long-term fiscal cost of tax incentives for retirement savings in the United States are estimated by the OECD to be relatively modest and lower than many comparable countries.

As discussed above, there is often a focus on the annual value of the tax expenditure for retirement savings and concerns that these represent a major fiscal cost. Tax incentives for private pensions, however, are a deferral of taxes rather than an exclusion that is never recaptured. While current-year measures net some collections of taxes on benefits received, this does not provide a complete picture of the long-term value because it masks the effect of the maturing of coverage patterns and the effects of demographic transitions. It also does not consider some secondary effects that may offset tax preferences for retirement savings, including increases in corporate taxes associated with increases in economic activity resulting from increased savings.⁶³

The OECD's recent study of long-term fiscal costs of private pensions provides some estimates of the net fiscal costs over an extended period for several countries. As shown in Figure 19, these are estimated to decline in the coming decades for the United States and to remain below 1 percent of GDP over the long term.⁶⁴

Figure 19. Projected Net Tax Expenditure Related to the Tax Treatment of Private Pension Plans in Selected OECD Countries, 2015-2060



Note: Calculations using the revenue forgone method and the cash flow approach.

Source: Policy Brief: Long Term Fiscal Cost of Tax incentives for Private Pensions. OECD. July 2017. https://www.oecd.org/finance/private-pensions/Longterm-fiscal-cost-of-tax-incentives-Policy-Brief-2.pdf

SECTION III EMPLOYERS: A CRITICAL SOURCE OF VALUE & INNOVATION

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Employer Innovations In Health



Employers are a source of innovation that leads the improvement of health care delivery systems and better manages costs.

Employers have been the source of much of the innovation in health care financing and delivery from the very outset of their provision of benefits through the workplace. In addition to being a pioneer in providing health benefits, Kaiser was an originator of the concept of managing care, rather than simply indemnifying costs, when it began providing on-site health care during the 1940s. This early Health Maintenance Organization (HMO), an integrated financing and delivery system, has evolved to become Kaiser Permanente, one of the largest health care providers in the country. Thirty years ago, Bell South (now part of AT&T) created the privately negotiated Preferred Provider Organization (PPO) and Allied Signal (now Honeywell) established the first Point of Service (POS) plan.

Employer innovations in health care purchasing and delivery have had a broad beneficial effect. Employers have been leaders in the development of value-based purchasing arrangements, now a key strategy for managing costs and achieving better patterns of health care delivery. A recent report estimates that 40 percent of US employers are now engaged in some type of value-based purchasing that links quality and costs efficiency outcomes to payments rather than payments based on the volume of services provided.⁶⁵

A new report written by Mercer and the American Benefits Council, "Leading the Way: Employer Innovations in Health Coverage,"⁶⁶ provides a review of some of the most important recent innovations in employer-sponsored health benefits. To quote from the introduction, the report aims to show that:

"...employers are more than mere intermediaries. They play a critical role in the health care system, leveraging purchasing power, market efficiencies and plan design innovations to provide comprehensive health coverage at a fraction of the cost to government compared to federal programs."

This section organizes the examples of employer innovations into four groups: **Pay For Value, Drive to Quality, Personalize the Experience, and Embrace Disruption**.

Pay for Value

These are strategies that move away from traditional fee-for-service reimbursement to establish new contracting arrangements that integrate the provision of services with incentives that reward providers based on health outcomes rather than volume of services provided. These innovative contracting arrangements facilitate collaboration between employers, workers and health care providers to provide high quality health care in the right setting to improve both cost effectiveness and outcomes.

One of the key examples of this approach pioneered by large employers are Accountable Care Organizations (ACOs) in which an affiliation of providers collaborate across the range of settings in which health care is provided with payments linked to achieving cost, guality and patient satisfaction targets. Intel provides a recent example cited in the report of how employers have established partnerships with health care providers to create ACOs based on pay-for-performance principles that are achieving improved outcomes and employee satisfaction while dampening the rate of cost increases. As a company that deals in data, Intel undertook a deep analysis of claims in 2011 and found that although it was spending \$500 million per year on healthcare for 132,000 people, just 800

people accounted for \$100 million. These high-cost individuals were managing chronic conditions (often multiple conditions), engaging with multiple doctors and specialists and managing multiple prescriptions. But the program was lacking coordination of care to help these employees navigate the system, avoid wasted spending and achieve improved health outcomes. To address this issue, Intel went out to the marketplace in locations where they had a critical mass of employees and forged partnerships with health systems, essentially creating their own ACOs.

Introducing specialty pharmacy management is another important example of how employers can facilitate a shift to value. NRECA found that pharmacy spend accounted for 20 percent of annual claims, and specialty drugs made up 35 percent of the total pharmacy spend. By carving out specialty medications from the larger medical benefit plan and developing innovative ways of managing these through its vendor, NRECA estimates it reduced costs by \$1.3 million in 2016 while improving the patient experience. Extending access to on-site or nearby medical clinics outside of working hours, or for a wider range of services that can substitute for expensive emergency room visits is another employer innovation that has been successful in reducing costs.

Drive to Quality

An approach that complements value-based care that employers have been at the forefront of advancing is incorporating quality objectives and measures into health care delivery. An important example of this is a "Centers of Excellence" strategy in which workers are provided with incentives to obtain treatment from designated high-quality providers or given tools to identify providers with better cost and quality records. This has been particularly effective in achieving more cost-effective management of surgical procedures. Mercer survey data shows that two-thirds of large employers (those with 500 or more employees) and about 80 percent of employers with 20,000 or more employees provide members with access to a surgical center of excellence.

ARLP, a large energy company, decided the first step in trying to manage cost trend was to understand the price of the various procedures in the claims data. The company began by moving to a third-party administrator that agreed to provide price-per-procedure codes, instead of averaging out claim costs for similar procedures. This allowed ARLP to drill down and identify major cost drivers. What it found was stunning: 4 percent of its members were driving 50 percent of its claim costs. This explained why primary care interventions had not helped to bring down costs — the top cost drivers were patients with intensive health issues being handled by multiple specialists and hospitals. The patients were often critically, chronically ill with low disease knowledge and limited therapy management and coping skills. ARLP then sought partnerships with facilities that were willing to disclose prices before interventions and work with the plan and its population for better health outcomes.

Providing workers with access to Expert Medical Opinions (EMO) is another innovation that has proven effective in managing costs. After implementing an EMO program with a financial incentive for it workers, Princeton University found that two-thirds of its members received a second opinion with 20-30 percent receiving a new diagnosis, resulting in significant cost savings while preventing what may have been unnecessary procedures.

Embrace Disruption

The common characteristic of employer-led innovations in health care delivery is a willingness to embrace new technology and disruption. By underwriting the costs and financial risk inherent in providing health benefits, employers have the incentive, scope and expertise to embrace disruption by incorporating new technology and practices in health care. Walgreens, one of the largest pharmacy and consumer products retailers, has introduced an innovative new system of "care coordinators" who manage the interaction of workers, carriers and providers. Innovative financial arrangements were established to incentivize these coordinators to seek the most cost-effective source of services, making the insurance carrier, rather than the consumer, responsible for price comparisons. In its first year, the program is expected to save up to 4 percent of total medical claims costs.

Large employers have led the effort to improve consumerism by enhancing health care transparency. Nearly 90 percent of companies with 5,000 or more workers now provide access to price and quality information by telephone or online. AT&T's integrated platform, called "Your Health Matters," provides information and decision-making resources. This platform integrates data on employees' actual claims experience with plan information and individual assessment tools to support workers' consideration of various plan options. Providing improved access to the information has led to significant changes in plan enrollment that has reduced AT&T's cost path below the national trend.

Two-thirds of large employers now use some form of technology-based resource to better engage their workers in caring for their health.

Personalize the Experience

Employers invest in health benefits to attract and retain valuable workers and keep them healthy and productive. They have strong incentives to ensure that workers get the most positive experience and outcomes from their health care. Health assessments, lifestyle coaching and disease management programs can encourage workers to obtain timely and effective treatment. Princeton University has implemented a "My Health Coach" program with financial incentives for participation that has increased usage of personal health care advice by its employees, resulting in improved clinical outcomes in the treatment of diabetes, which had been a significant contributor to increases in health care expenditures.

Health advocacy programs offer a more intensive personalized management of health care. The best programs provide ongoing access to expertise across a full spectrum of issues, from lifestyle coaching, managing interactions with clinical providers and managing medical bills. BorgWarner, a large engineering and technology firm, now provides each employee in the health plan an advocate who is the initial primary point of contact when health or wellness services are needed, incorporating incentives that can reduce workers' health plan premium contributions. More than half of its members utilize this service and the company's evaluation indicates that the program saves \$3.9 million per year in health care expenses.

Employers have taken the lead in using health and well-being technologies to personalize employees' interactions with health care services. Two-thirds of large employers now use some form of technology-based resource to better engage their workers in caring for their health, often through the use of smart phone-based and wearable applications. For example, Boeing's long-term strategy to improve access to treatment for behavioral health and substance abuse issues recognizes that many different doorways to care are needed. Led by one of Boeing's senior ACO partners, a simple, ingenious solution was pioneered for Boeing ACO members, giving all primary care physicians in the network the ability to consult directly - and in real time - with a psychiatrist's office to discuss concerns or questions arising during a patient's office visit. The program is based on clinical evidence indicating that the collaborative care model is twice as effective as standard care for people with depression and anxiety. Over two years, patient symptoms improved (and held steady), and they had a higher level of satisfaction with their care.

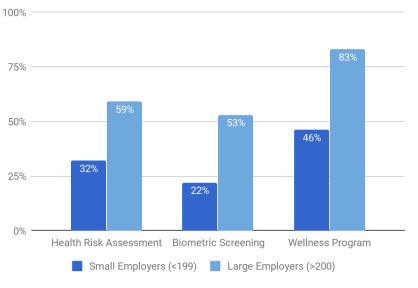


Figure 20. Employer Sponsorship of Health Programs

Source: Kaiser Family Foundation Survey 2016.

Through the workplace nexus, employers are able to integrate the benefits they provide with a wide range of "well-being" programs that are a very cost effective way to enhance both health outcomes and improve financial capabilities of American workers.

Employers have been at the forefront of efforts to engage individuals in taking on an enhanced role in monitoring their health status and encouraging and incentivizing healthy behavior. By sponsoring health benefits, paving a large share of costs and increasingly underwriting the risks by self-insuring, employers have strong incentives to find new ways to help improve the health of their workers. This is enabled by the synergies derived from their daily interaction with workers. Most common among these programs are health risk assessments that assist workers in identifying health care needs, biometric screenings to more precisely evaluate any issues and wellness programs that educate workers about health risks. As shown in Figure 20, a significant portion of smaller employers and the majority of employers with more than 200 workers are now integrating these programs into their health care benefits.

Employers are uniquely positioned to optimize participation in these programs by providing incentives for their employees to participate and convert to healthier behaviors. Among the most common wellness programs are incentives and programs for weight loss and smoking cessation, providing subsidized gym memberships or providing on-site exercise facilities. In 2016, 35 percent of firms with more than 200 workers and almost half of firms with more than 1,000 workers were providing some type of incentives for their employees to participate in a wellness program.

These programs are increasing in their prevalence because they are perceived to provide a cost-effective means to manage costs and improve employee relationships. Early studies on the cost effectiveness and outcomes of employer-sponsored wellness programs based on observational comparisons of individuals who participated in the programs with other employees indicated that employer wellness programs were associated with significant value in terms of diminished health care spending and improvements in absenteeism. A 2010 meta review of 38 studies on the effects of employer-sponsored wellness programs by researchers at Harvard University found that medical costs were reduced by an average of \$358 per workers in the studies they reviewed concluding that the programs reduced costs by an average of \$3.27 for every dollar spent.⁶⁷ They also found that the programs had meaningful impacts in reducing absenteeism and its associated cost to the employer with an average savings of \$294 per employee per year representing a ratio of \$2.73 in savings for each dollar spent. The study notes that these savings are likely to be shared by both workers and employers to the benefit of both. A 2012 report by the Rand Corporation reviewed a wide range of studies evaluating the return on employer wellness programs. It found that the return on investment

ranged from \$1.65 to as high as six dollars for each dollar of employer spending.⁶⁸

The potential benefits and the manner in which wellness programs represent a worthwhile investment for employers, however, has been challenged in a more recent study published in June 2018 that suggests that much of the initial findings of reduced health spending may be primarily the result of the attractiveness of wellness programs to healthier workers and those with a propensity for participation in activities associated with improved health.⁶⁹ Using a sophisticated "Random Control Trial" (RCT) design, similar to what is used in testing the effectiveness of new medications, the recent study randomly assigned employees at a large public university to different levels of incentives and withheld participation from randomly selected workers to serve as a control group. The study found that the significant differences in costs and levels of participation in health-improving activities appeared to be associated with inherent characteristics of the individuals; attributing the differences in outcomes to the sorting of individuals into the program based on pre-existing attributes. The study found some meaningful effects of incentives in inducing workers to obtain health screenings, but little evidence of reduced spending or improvements in health enhancing activities beyond what would otherwise be expected of workers with the characteristics of those who chose to participate.

While utilizing a sophisticated experimental design and providing valuable evidence of the complex dynamics of workplace wellness programs, the study also provides insights into why employers may find these programs to be a good investment. The report notes that wellness programs may be a very effective means for employers to attract and retain healthier workers and improve worker's positive perceptions of their employer, both of which can have a variety of beneficial effects over the long term. In an extraordinarily important observation, the study noted that, because of significant differences in health care costs, if there were as little as 5 percent increase in the proportion of the workforce with the characteristics of those inclined to participate in wellness programs (and a corresponding 5 percent decrease in the proportion of the workforce without that propensity) the full cost of the wellness programs would be offset. Far from casting doubt on the validity of these programs, is the prospect that they can have a very positive return on investment for employees. Like many other employer sponsored benefits, these programs may improve the efficiency of labor markets by allowing employers to attract

workers with desirable characteristics (healthy behaviors and low absenteeism) as well a lower health care costs. The current report on the study only covers the first year of outcomes so it also remains to be seen whether more significant results will emerge over the longer term. Related to this potential for more effective workforce selection, evidence is also now emerging that a superior wellness program is related to the overall financial performance, with the stock of those firms receiving high scores on their wellness programs found to outperform the S&P 500 average in a recent study.⁷⁰

Collectively, these studies underscore what would be missing without the innovation and leadership of employer engagement.

Read more stories on employer innovations in health and get the full *Leading the Way* report at: AmericanBenefitsCouncil.org/innovation



Employer Innovations in Retirement

Employers have also been the leading impetus for innovations in designing programs that achieve demonstrated results in improving the retirement savings and enhancing the financial capability, behavior and long-term economic security of their workers.

There is a considerable body of research that has emerged in recent years indicating a positive relationship between the provision of financial capability enhancement programs by employers and measures of improved financial behavior. Two studies published in 2003 found that workplace financial education improved retirement saving for low savers and moderate savers⁷¹ and that participation in retirement seminars enhanced the level of retirement saving, especially for workers with characteristics indicating they were not likely to be savers.⁷² A later study concluded that participation in employer-sponsored retirement plans.⁷³ These studies are in contrast with efforts to find positive long-term outcomes from broader efforts to improve financial literacy and knowledge that have found few or very modest effects. This suggests that providing these programs in conjunction with employer-sponsored retirement savings plans is one of the most effective ways to improve savings and financial behavior.

Understanding this potential and responding to the business imperative to ensure that employee benefit spending is effectively deployed, employers and service providers to employment-based retirement savings programs have taken the initiative and have been important innovators in the development of workplace financial wellness programs. These important innovations and the measurable results they have been able to achieve include the following examples from some of the largest and most successful corporations' retirement savings programs outlined in this section.

Using Technology to Make Retirement Saving Easier

Microsoft has been innovative in combining a strong retirement savings plan design with a comprehensive communication approach to achieve notable results for its employees. Microsoft offers its regular U.S. employees the opportunity for immediate enrollment and full vesting with a 50 percent match of regular contributions, well above the average match formula for most 401(k) type plans. Partnering with Fidelity, Microsoft is able to offer simplified enrollment, comprehensive communications and coaching to maximize participation and savings levels.

Microsoft's simplified enrollment is comprised of three main components that address the key behavioral elements driving positive outcomes. In keeping with its digital culture, Microsoft has adopted Fidelity's "Easy Enroll" program that offers new hires a simple "three click" enrollment process which places them in a pre-established framework of a high default savings rate, automatic annual increases in salary deferral, and investment in low cost age appropriate target date funds. A standard enrollment process that enables participants to opt for higher rates or tailor specifics to their particular circumstances is offered as an alternative for those seeking greater engagement. More than half of new employees are now using this simplified enrollment process which has resulted in a significant increase in both the speed with which new hires are enrolled and their resulting savings rates.

This underlying framework is supported through a coordinated suite of information and consultation programs. This includes targeted and personalized communications to ensure employees understand the potential value of the plan to their particular circumstances, individualized assessment and tracking of results using customized online tools that enable workers to define their financial goals and track progress, personalized on-site coaching by licensed advisors from Fidelity, onsite and virtual workshops and "Ask Fidelity" tables at weekly "Benefits Open House," and the availability of phone advice and online planning resources to all employees.

This integrated approach has enabled Microsoft to demonstrate how technology and integration of communications can leverage a strong program design. In 2017 Microsoft was able to achieve a 92 percent participation rate in its US 401(k) plan (up from an already very high 87 percent in 2012) with a median deferral rate of 10 percent (up from 7 percent in 2012). A strong indication of the effectiveness of the combined enrollment and communications program is indicated by the 58 percent of participants that were maximizing the matching contribution, nearly twice the level of 31 percent just five years earlier. A quarter of participants had signed up for automatic increases by early 2017, more than four times the share than just four years earlier, and the average account balance reached \$205,584 during the year.

Achieving Synergies in Communications and Behavior Change

The Boeing Company has demonstrated how employer-sponsored retirement plans can serve as effective cornerstones to broader financial well-being education programs. In partnership with Financial Engines Advisors L.L.C., a federally registered investment advisor and wholly owned subsidiary of Financial Engines, Inc., Boeing uses communications, personal conversations, and in-person and online resources to help employees evaluate their personal financial situation and take steps to improve it—both today and in the future.

Boeing has provided employees with access to retirement planning resources through Financial Engines for eight years, with a focus on 401(k) savings and investments. In response to employees' requests for more holistic financial planning support, Boeing enhanced its educational offerings in late 2017. Through the expansion, Boeing had both short-term and long-term goals: First, Boeing wanted to help employees address their day-to-day financial needs—building a budget, saving for college, and getting ready for retirement, for example. Second, Boeing ultimately wanted to improve employees' overall financial picture through reduced financial stress and greater financial confidence.

In addition to the online planning tools already provided by Financial Engines, Boeing rolled out new "Retirement Checkups"—one-on-one discussions with Financial Engines advisors that enable employees to take a more comprehensive look at their overall financial goals and progress.

To drive awareness of the new Retirement Checkup program and to encourage employees to sign up for an appointment, Boeing distributed comprehensive communications across a variety of print, email and online channels. Boeing also offered on-site live events and advisor sessions so employees could further discuss a range of important topics, including debt management, college planning, Social Security payment strategies, estimating health care costs, estate planning, and saving for retirement.

The communications and on-site support drove very strong engagement across Boeing's population. In just the first three days following the Retirement Checkup rollout, 700 employees signed up for an appointment—and by the end of the first quarter of 2018, over 2,700 employees had. Additionally, over 2,000 employees participated in a live event in the first two months they were offered, more than 1,000 employees became new users of Financial Engines' Online Advice service, and 600 employees received personal advice from an advisor for the first time. Both Boeing and Financial Engines are closely monitoring a range of metrics to monitor engagement and measure ongoing success. These metrics include overall program utilization rates as well as changes to employee behavior, such as increased 401(k) contribution rates and/or improved 401(k) investment allocations. To maintain momentum over time, Financial Engine's offerings are also being promoted through Boeing's "Well Being Co-Pilot," a web-based well-being program through which employees and their eligible spouses can earn points for completing healthy behaviors.

Boeing's innovative partnership with Financial Engines illustrates how employer-sponsored financial well-being programs tied to available retirement plans can be instrumental in helping employees navigate complex financial needs. It also demonstrates the importance of taking a holistic approach to communications strategies, planning tools, and ongoing financial discussions. Together, technology and personal conversations can help employees define and reach their financial goals.

Employees will have saved nearly \$90 million in loan payments and shortened payoff time by 46,800 years.

Creating New Benefits to Improve Workers' Financial Status

In addition to the creative solutions implemented by Fidelity in partnership with its clients, the company has been a leader in introducing important benefit innovations for its own workers. The financial services industry faces challenges attracting and retaining top-notch talent needed to remain successful. Turnover of less tenured staff (those with fewer than three years) has been a challenge in significant part due to the high education requirements that left many workers with large student loan obligations. In addition to the financial burden, staff told Fidelity that they were delaying important life choices like marriage and purchasing a home in addition to delaying saving for retirement. Most notably, they were accepting jobs at other companies for relatively small monetary gains due to the burden of their student loan debt. In response, Fidelity created the "Step Ahead Student Loan Repayment Program" in which the company makes contributions directly to student loan servicers on behalf of eligible associates which supplements regular monthly repayments to help its employees get out of debt sooner.

When it was established in 2016 very few employers offer this type of benefit making this a unique and powerful recruiting and retention tool. Determining the "right" design however was a challenge with no industry benchmark, and the potential for favorable tax treatment limited. After some consideration Fidelity opted to provide a monthly (taxable) benefit of \$166.67 (\$2000/year up to a lifetime maximum of \$10,000). When it was rolled out, the program received an overwhelming amount of positive feedback both from employees who are benefiting from the program, but importantly also from associates who either do not qualify nor have loans because the program positioned the company on the cutting edge of benefits innovation. Initial evaluation indicates that the program increases retention of less tenured employees and helps recruiters build interest with candidates and enhanced the acceptance of offers. Through the end of 2017, Fidelity's employees have saved \$22.5 million in loan repayments which has reduced the overall loan repayment period by 34,625 years for these workers. Current projections are that over the next five years, its employees will have saved nearly \$90 million in loan payments and shortened payoff time by 46,800 years.

Integrating Financial Wellness and Health Programs

Prudential focused on providing an integrated program of wellness support in the workplace when its senior management saw signs of financial stress among large numbers of employees during the Great Recession. One of the first measures the company undertook in 2008 was to expand its employee health risk-assessment evaluation to include risk factors for financial stress. Prudential was surprised to learn that, despite benchmarking that verified a superb total benefits package, employees were experiencing high levels of financial stress as the recession deepened, with a survey indicating that 31 percent had experienced financial problems in the prior year. After implementing several innovative programs for its own workers, the company is now making financial wellness programs available to other companies that use its products for their own employees.

Recognizing the way in which financial wellness and healthy behavior are connected, Prudential substantially increased the number of subsidized dependent-care hours its workers could use, enhanced its 401(k) plan to include automatic enrollment in Roth accounts and automatic escalation of participant contributions. It supplemented this with a targeted messaging campaign to increase use of its 401(k) plan, as well as budget coaching and on-site financial education workshops led by financial advisors. More recently, in early 2018, the company introduced a digital financial wellness platform, the Financial Wellness Experience, that allows employees to customize the financial wellness education they receive. The platform is aimed at helping employees adopt healthy behaviors that improve their ability to manage day-to-day expenses, achieve financial goals, and protect against key financial risks.

A key component of this financial wellness program is the use of analytics to monitor and demonstrate the success of its initiatives. Prudential now tracks numerous metrics measuring how effective its wellness programs are in reducing stress, depression, and absenteeism among employees. One key finding from that analysis is that financial stress correlates with health risk. Twenty-nine percent of employees experiencing financial problems also exhibit moderate or overall health problems compared to just 11 percent of employees not experiencing financial problems. Employees experiencing financial problems also miss significantly more days of work and lose significantly more hours of productivity.

The results from Prudential's efforts to integrate and enhance its wellness program are highly encouraging in indicating the unique ability of employers to coordinate both health and financial wellness initiatives to achieve important new synergies. The percentage of the company's employees reporting they are experiencing financial problems is now half what it was in 2008.

Providing Guidance to and through Retirement

Enabling and empowering plan participants to make the most effective use of the opportunities provided by employer-sponsored retirement plans has always been a central challenge as defined contribution and hybrid plans become the source of new coverage. In 2014, Portico Benefit Services, which provides retirement, health and other benefits to the clergy and lay employees of the Evangelical Lutheran Church in America (ELCA), found that only 17 percent of its plan members were on pace to retire with suitable income replacement. Despite a generous employer contribution, most members were not saving enough toward retirement, with fewer than 20 percent of plan members making their own pre-tax retirement contributions. While employees were offered access to external financial planners and planning tools, very few took advantage of these offerings.

Portico addressed this challenge by requiring its members to more frequently consider and update their retirement savings plan, providing easy access to expert guidance and extending the plan sponsors' support through the equally important years in retirement. Beginning in 2013, plan members were required to annually complete a new benefits enrollment process, including reconsidering and specifying their pre-tax retirement contribution. In late 2016. Portico implemented a customized retirement planning tool designed for active plan members along with an in-house financial planning service. Credentialed planners who understand the investment and distribution options help individuals make best use of the planning tool at no out-of-pocket cost to the member. This enables them to easily generate a comprehensive retirement plan, project any potential income gap or surplus and adjust their future contributions and investments accordingly by recommending a specific pre-tax contribution amount and asset allocation strategy. To maximize participation Portico offers active members a \$200 wellness incentive if they implement a retirement plan.

In early 2018, Portico extended support to ECLA employees by implementing a planning tool that enables retirees to better manage retirement income. This allows them to plan for expenses while they are in retirement, model lifetime income options, plan for a financial legacy, as well as generate and adjust an asset allocation and withdrawal strategy consistent with their evolving needs.

The combination of these enhancements has achieved remarkable results. In 2017, 65 percent of members made pre-tax retirement contributions —representing a 329 percent increase from 2012. Over 7,000 active members have benefited from using the retirement planning tool to create a plan. Of those who have implemented a plan, 51 percent increased their pre-tax contributions and, perhaps even more importantly, 61 percent of those previously not making pre-tax contributions started saving toward retirement. by implementing a retirement plan and increasing their saving. Over 3,500 members have worked with a Portico financial planner with 100 percent of the planners receiving high satisfaction scores from members. As a result, the percentage of active members on pace to retire well has nearly doubled since 2014. Incentivizing participation, making guidance cost free and extending access to planning expertise throughout the entire retirement process is shown by this innovation to be a very effective integration of essential elements that are linked to a long-term employment relationship.

This coordinated set of innovations demonstrates how employers can take advantage of timely individualized information to improve retirement savings outcomes.

Preserving Savings in Retirement Plans

Like many other plan sponsors, Metlife was concerned about the potential for employee loans to result in leakage from their 401(k) plan and diminish the retirement savings of their workers. To address this challenge the company introduced a number of innovations in the design of the plan by adding educational content through pop-up messages in the automated transaction flow through which a loan request is processed. During the application and approval process through the plan website a message now appears telling the participant the estimated dollar reduction in their account balance and expected reduction in monthly income at retirement that is likely to result from taking the loan. A second pop-up message asks if the participant has considered other options and repeats that they will have less money in retirement if they are unable to completely repay the loan. The participant must click through each of these messages to request a loan. In addition to the pop-up messages, there are links to more educational content about plan loans, their costs and the consequences of taking a loan. In conjunction with the timely availability of this information, the interest rate on loans was increased by one percentage point and a flat loan fee was imposed regardless of the amount or duration.

The website's educational content is specific to the participant's requested loan amount and other

parameters, giving them a dollar impact on their retirement that is more meaningful than a generic educational piece could provide. The higher interest rate increases the total loan repayments to the plan, with a goal of also increasing the participant's account balance at retirement. The loan fee is added to the principal amount the participant repays, to avoid reducing the retirement account balance permanently by the fee amount. All three of these features are intended to cause participants to limit plan loans or seek other sources of funds, or if they do take a loan to end up with a higher account balance after repayment than might otherwise be the case.

In the first eleven months after these three features were implemented, the plan saw reductions in average monthly loan amounts for each month compared with the same period in the prior year. These reductions were as high as 20.7% between comparable months. The average loan balance also decreased. The reduction in loan amounts indicates that participants are giving more deliberation to taking plan loans that will reduce their account balance at retirement. This coordinated set of innovations demonstrates how employers can take advantage of timely individualized information to improve retirement savings outcomes in a way that would not be feasible in another environment.

Customizing Education and Information to the Specific Needs of Employees

Another large company with thousands of employees throughout the United States and globally has partnered with Vanguard to provide an example of how employer sponsorship creates powerful synergies to enhance financial wellness. After undertaking an assessment of the behavior and perceptions of engagement with its retirement savings programs in 2015 and 2016, this Fortune 500 company was able to identify specific areas in which retirement savings outcomes were below a national baseline or its workers expressed a need for financial capability support. This diagnostic analysis was then matched to a suite of financial education and behavior enhancement programs developed by Vanguard who was providing the investment management and other services underlying the company's employee savings programs.

This resulted in a targeted deployment of educational modules through webinars and on-site seminars tailored to the identified needs of the workforce that were delivered in May and June of 2017. Nearly 3,000 workers participated in these sessions delivered by the company's in-house education and outreach team and Vanguard staff. These were designed to raise awareness and understanding of the savings plans offered, increase the level of funds directed to these plans, teach effective debt management methods, introduce the concept of emergency funds, and motivate employees to update their beneficiary designations.

About a quarter of the roughly 2,000 participants in the webinars and on-site sessions were tracked over the ensuing 30 day period to assess changes in behavior. A meaningful proportion of these participating in a webinar (16 percent) increased their elective deferrals from an average of 10 percent of earnings to 14.3 percent and a similar proportion of participants in on-site sessions (12 percent) increased their savings rate in the plan from 8.7 percent to 11.4 percent. A somewhat smaller proportion added or enhanced the automatic annual increase in the share of their earnings directed into the plan. Among the nearly 900 employees who participated in sessions presented by the sponsor's team, similar proportions (8.5 percent for on-site sessions and 12.2 percent for webinars) increased their savings allocations. Webinar participants making a change moved to an average of 17.2 percent of earnings directed into the plan. Nearly one in ten participants in these sessions changed their investment fund allocations within 30 days of the program and many increased automatic escalation and updated beneficiary information.

These substantial improvements in savings and financial behavior illustrate some of the unique advantages of employment-based savings programs in improving financial well-being. Large employers are particularly well positioned to undertake the diagnostic work necessary to target interventions in a cost-effective manner. Employers are then able to deploy well-developed programs and complete timely impact assessments with a large enough sample to validate outcomes. The company partnered with Vanguard to provide participants with a personalized retirement journey that is rooted in behavioral finance, adult learning theory and participant analytics. The monitoring and evaluation undertaken in conjunction with the programs has had the additional advantage of informing the strategy going forward. In their assessment of the experience, workers articulated a need for a personalized and holistic approach to enhancing their financial skills that adjusted to the evolving needs across life stages. The company is developing are developing the next phase of the program that is reflective of this learning.

Read more stories on employer innovations in retirement and other benefits showcased by the Council's IDEA Institute: AmericanBenefitsCouncil.org/idea



Behavioral Strategies in Retirement

Employer-sponsored retirement savings plans are able to utilize a number of behavioral tools to enhance participation and savings beyond what would otherwise be expected, especially among younger and lower-income groups.

Employment-based saving arrangements have proven to be particularly well-suited to take advantage of the growing body of insights into the use of behavioral tools to design retirement programs to maximize participation and the level of savings. The linkage of retirement savings programs to the workplace and the integration of coverage and participation requirements with tax incentives have motivated plan sponsors in the United States to develop many of the most consequential innovations in the design of retirement savings programs. Many of the innovations pioneered by American employers are now widely used in both public and private retirement systems throughout the world.

Employment-based retirement plans, in many cases derived from lessons learned from the American system, are increasingly prevalent in a wide range of settings. China introduced a system of "Enterprise Annuities" modeled on 401(k) plans nearly 20 years ago. The pension reforms in Latin America originating in the 1980s are based on individual accounts funded through payroll deductions, emulating features of defined contribution retirement plans in the United States. These individual accounts are now being extended to include employer plans tailored to the needs of a particular employer's workforce, as are the systems introduced in Central and Eastern Europe following the fall of the Soviet Union in the 1990s. A number of African countries are now engaged in efforts to include employer-sponsored plans as a primary component of their pension systems.

In addition to the way in which tax incentives are structured, one of the reasons employer-sponsored plans have been such an important source of behaviorally motivated innovation is because these tools can be adjusted by individual employers to meet the particular needs of their workforce. The design features developed by employers have proven to be very effective in promoting participation in pension plans and increasing savings while preserving an element of individual choice. These strategies have proven especially effective in reaching younger, lower-income and minority employees, who are otherwise the least likely to participate. Some of the most important plan design elements originating in employer plans are payroll deduction, automatic enrollment, matching contributions and default features.

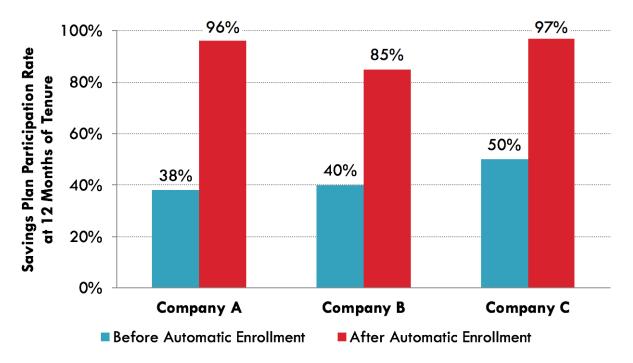


Figure 21. Alternative Approaches to Increase Savings: Automatic Enrollment

Source: "Matching Contributions and Savings Outcomes: A Behavioral Economics Perspective" by Brigitte Madrian in Matching Contributions for Pensions: A Review of International Experience, The World Bank, 2013.

Payroll Deduction

The most basic of these tools is payroll deduction or withholding. Like U.S. tax authorities, who use the payroll withholding system to enforce their demand to "pay me first", employees can use it to ensure that they save for their future by "paying themselves first" (actually, second, after the tax collector). One strong indicator of the effectiveness of payroll deduction saving is the difference in the rates of participation via payroll deduction as compared to individual savings vehicles such as an IRA. While roughly 1 out of 10 individuals who are eligible to make tax-favored IRA contributions actually do so, most of those eligible for tax-favored saving via payroll deduction (most commonly used in 401(k) plans) do participate. In 401(k) plans, participation rates have varied from plan to plan, but have tended to cluster in the range of 7 or 8 out of 10 people.⁷⁴

The power of regular payroll withholding as an engine of saving derives from several key characteristics. Unlike contributing to an IRA, contributing to a 401(k) or otherwise by payroll deduction can be designed to avoid requiring much, if any, individual initiative. The plan and related arrangements are a "do it for me" system — established, administered, and, in a sense, "enforced" by a third party: the employer. Workplace payroll deduction makes it unnecessary for employees to remember or decide when, where or how to contribute, or to come up with substantial amounts to save at any given time. And the regularity of payroll deduction makes it easier to plan and make do with reduced take-home pay.

Automatic Enrollment and Escalation

When 401(k)-type plans were first developed in the early 1980s, employers typically required an affirmative decision by their workers to "opt in" to the plan and begin the elective deferral of some portion of their earnings into the retirement savings program. This required the worker to take some initiative to participate in the plan, or alternatively, if the individual's behavior was characterized by "inertia" or "decision avoidance" due to uncertainty, they would not start saving for retirement. Employers soon found that they were not achieving sufficient participation levels among many lower wage workers to allow others, in accordance with the nondisrimination rules. to utilize the full scope of the tax incentives available for these plans. They then began to experiment with the alternative approach of automatically enrolling workers in the plan and giving them the option to "opt out," flipping the inertia in favor of saving.

Since auto enrollment was first defined, approved, and promoted by the U.S. Treasury Department and Internal Revenue Service (IRS) two decades ago,⁷⁵ it has proven to be probably the most important innovation in retirement saving since the advent of the modern 401(k) in the early 1980s. A seminal study in 2001 found that automatic enrollment design in employer plans raised participation levels to nearly 100 percent as shown in Figure 21.76 Subsequent studies confirmed this finding indicating that automatic enrollment in employer plans increased the rate of participation from 35 to 67 percentage points.⁷⁷ A study published in 2015 found that auto-enrollment even had a significant impact on groups that already had much higher likelihood of participating in their employer plan, demonstrating more than a 10 percentage point increase in the participation of workers over the age of 50.78

About one-third of larger 401(k) plans adopted automatic enrollment before the Pension Protection Act of 2006. Since then, the percentage has risen to well over half. Importantly, with the benefit of auto-enrollment, participation typically rises most dramatically among those often least likely to participate, including lower-wage, Latino, and African-American workers, as well as women.⁷⁹ Auto-enrollment has also encouraged plan sponsors to institute automatic (or at least optional) escalation of contribution levels. This important innovation helps ensure that inertia does not lead some automatically enrolled employees to contribute at a default rate lower than the rate at which they might otherwise have chosen to contribute. A study co-authored by the 2017 Nobel Laureate in economics, Richard Thaler, showed that increasing contributions automatically in proportion to salary increases substantially raised the level of savings in employer plans over a four-year period.⁸⁰

Matching Contributions

Another key innovation that has its origins in employer-sponsored plans is the provision of matching contributions to provide an immediate and easily understandable financial incentive for workers to contribute to retirement savings. Many individuals have a limited understanding of the value of the tax deferral provided in conjunction with employer-sponsored plans, and the progressive income tax structure affords a smaller — or almost zero, in the case of very low-income workers financial incentive for lower-income savers because they tend to have lower marginal tax rates. This imposes challenges for employers seeking to optimize the potential for tax preferred savings across their entire workforce. In response, many employers provide contributions matching some portion of the amount contributed by workers, which has been successful in increasing contributions across the full range of income levels.⁸¹

Matching contributions are one of the most common design features of employer-sponsored plans, with the majority of workers covered under 401(k) plans receiving some kind of employer match. Employers have introduced a variety of matching contribution arrangements, with some matching a fixed percentage of employee contributions up to a specified level of pay and others matching a varying percentage of employee contributions. The interplay between auto-enrollment and matching provisions has proven to be a complex phenomenon with designs that employers use to address their different circumstances, providing a rich set of natural experiments supporting research that has made an important contribution to behavioral economics and the understanding of factors that influence savings behavior. The research has found that while auto-enrollment seems to exert a greater influence on participation rates, matching provisions can provide both an important substitute as well as complement.⁸² One of the most important insights into employer matches that has emerged is that, in addition to providing a meaningful financial incentive that is equivalent regardless of the lower value of the tax preference to lower-income workers, workers' contributions tend to cluster around the match thresholds and maximums and therefore can provide an important behavioral tool to guide workers toward an appropriate savings level.83

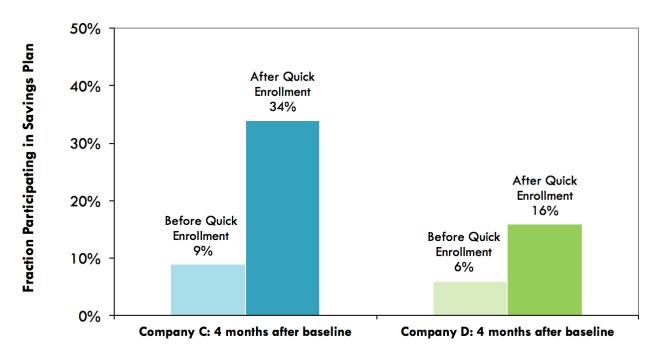


Figure 22. Alternative Approaches to Increase Savings: Simplification

Source: "Matching Contributions and Savings Outcomes: A Behavioral Economics Perspective" by Brigitte Madrian in Matching Contributions for Pensions: A Review of International Experience, The World Bank, 2013.

A typical private sector employer plan might provide a 50 percent match of the first 6 percent of salary deferred into a qualified retirement plan. Some are more generous with some matching part of contributions for as much as 10 percent of earnings. Employer matching and other contributions now account for as much as one-third of the total value of contributions to 401(k) plans,⁸⁴ providing a significant proportion of the resources that current workers will need in retirement.

Default and Life-Cycle Investment Products

Other important innovations that employer-sponsored retirement plans have been instrumental in developing are default and life-cycle investment management instruments. Just as payroll deduction was the predicate for automatic enrollment, auto-enrollment in turn elevated the importance of default investments in employer-sponsored plans, paving the way for widespread use in 401(k) plans of automatic investment in professionally recommended funds such as target date and balanced funds and managed accounts. The emergence of 401(k)-type plans in the early 1980s shifted retirement savings from primarily employer-managed investment to plan designs that allowed workers to decide how to invest from among an employer-provided menu of options. While this afforded considerable flexibility for individuals to tailor investment strategies in accordance with their individual circumstances, it rapidly became apparent that most workers lacked the knowledge and inclination to take on this responsibility. Employers responded by developing default choices consistent with the long-term nature of retirement savings and (in conjunction with the investment management industry servicing their plans) introducing life-cycle (or "target date") investment products that rebalance automatically and vary the asset allocation automatically as a function of the workers' target retirement age.

In its landmark 1998 guidance, the U.S. Department of Treasury illustrated and approved 401(k) automatic enrollment. It used a diversified balanced fund as the default investment, as opposed to either employer stock or a money market or other principal-protected fund, which in that era was the common default investment in plans that had one. In a footnote to its 1998 ruling, the Treasury Department obtained a cautious acknowledgement from the U.S. Department of Labor (DOL), which, some eight years later, was followed by DOL's important Qualified Default Investment Alternative (QDIA) regulations that were motivated by the Pension Protection Act of 2006. More than three quarters of 401(k) plans now offer this sort of "auto-pilot" product.⁸⁵ Most of these plans provide this as a default option in their participant-directed plans, which is likely to significantly enhance the effectiveness and risk management of retirement savings.

Simplification and Choice Architecture

Employer-sponsored retirement plans have motivated a great deal of innovation and understanding of how savings and investment programs can be designed in consideration of inertia, procrastination, risk aversion and other behavioral issues. Another important area of innovation is derived from the recognition of the challenges of "choice overload," the aversion to making decisions when faced with too many alternatives or a requirement to engage in a complex process of enrollment and decision making. An important early study of employer plans found that having more than ten investment options reduced participation in pension plans by 1.5 to 2 percentage points.⁸⁶

In addition to default-oriented designs, employers have also found effective ways to facilitate engagement with savings programs by simplifying the menu of investment choices and the enrollment process. One example of this approach that was developed by Aon is known as "Quick Enrollment." This allows employees to enroll in the retirement savings program in a single simplified decision by opting into a preselected contribution rate and asset allocation specified in the plan. A study of two companies using this program that are shown in Figure 22 illustrates the magnitude of the effects that employers can achieve by simplifying the decision and enrollment process. By providing workers with a simple "Yes/No" choice framework in the pre-set plan design, both of the firms studied experienced a significant increase in the proportion of their workers who signed up for the retirement savings program⁸⁷ preselected by the employer.

The diversity of circumstances that must be addressed in employer-sponsored savings plans and the creativity of plan sponsors and service providers in crafting solutions make the American voluntary benefits system a unique laboratory that has been a main source of knowledge and innovation in incorporating the many emerging insights from behavioral economics into pension system design. Through experimentation with the way in which auto-enrollment and matching contributions interact, researchers have been able to understand that defaults provide the most powerful effect. However, even in the presence of auto-enrollment, a 25 percent increase in matching can increase participation by about five percentage points.⁸⁸ They have also been able to document how the "anchoring" effect of matching and default contribution rates can cause individuals to interpret them as implicit advice and gravitate to these levels despite otherwise varying individual circumstances.

Experience from employer-sponsored plans has also been the catalyst for related advances in policy and regulatory frameworks. Employer innovations in enrollment, default choice architecture and matching contributions has inspired a variety of plan simplification regulatory innovations that establish minimum default and plan sponsor matching contribution tax qualification "safe harbors" that enable plans to ensure that they remain within the distribution and fairness standards underlying the tax preferences. Both the behavioral insights and their integration into design parameters and regulatory systems have been adopted by pension systems throughout the world as they seek to reach hard-to-cover groups and make efficient use of fiscal incentives. Designs informed by this experience can be seen in the United Kingdom's NEST program, in the multi-funds and default age-based portfolios that are an integral part of the Chilean pension system and in a number of the innovative design features of New Zealand's Kiwi-Saver program. These innovations are sure to be one of the most important and lasting legacies of employer-sponsored benefits within and from the United States.

Behavioral Strategies in Health

Employers apply a number of behavioral tools when designing plans and communications for employer-sponsored health coverage and wellness programs. This maximizes participation and engagement, thereby improving overall health and helping to contain costs.

It is well documented that poor health not only is detrimental to affected individuals, but also has a direct and palpable impact on employer costs and overall productivity. In just one representative study, employees who were in poor cardiovascular health were found to incur more than \$10,000 in mean annual health care expenditures -- more than twice that of those with optimal health profiles.⁸⁹ The costs borne from health-related lost productivity are significant. An employer with 10,000 employees could face nearly \$3.8 million in productivity loss each year.⁹⁰

Large employers offer a myriad of programs to help address these challenges. The nature of these programs is an indication that companies are committed to not only investing in their employees' overall well-being and mitigating costs for both employers and workers, but also providing several options in which employees can receive support and engage in achieving health security. The uncertainty in calculating future probability of health occurrences means that employees often rely on their employers for assistance in not only accessing, but also selecting, the appropriate health benefit offerings.

By their nature, electing health coverage and choosing to either forgo or adopt certain activities to achieve future outcomes (such as quitting smoking or eating a balanced diet) are complex decisions. This creates a significant opportunity for employers to help guide employees using behavioral tools to overcome the confusion, inertia, procrastination, indifference or lack of awareness that keep workers from taking full advantage of health benefits. As with the behavioral economics experience with retirement plans, some of the innovative components of employer health plans are behavioral messaging, incentives and disincentives, pre-tax health savings, simplification and choice architecture.

Behavioral Messaging

An important area of innovation is derived from the recognition of the behavioral concept of "loss aversion," where individuals are more strongly motivated by the fear of losing than by the desire of gaining.⁹¹ Accordingly, employers often design benefits communications to frame messages to highlight loss. The optimal emotional reaction to solicit with loss-framed messages is some level of concern, worry or desire to avoid regret, without creating fear or panic.⁹² In a best practices guide provided by the International Foundation of Employee Benefit Plans (IFEBP) and Aon, for example, employers are instructed to substitute inert messages, such as "This year we are offering a high-deductible health plan with a health savings account," with loss-framed messages, such as "Are you really going to pass up the \$500 PremierCo will give you when you enroll in the high-deductible health plan?"93

Crafting benefits communications to encourage employees to simply make a plan to improve their health can also motivate them to change behavior. This is exemplified by a 2011 study that examined workers at a large employer who were randomly assigned to one of three groups to receive information about influenza vaccination. The first aroup was encouraged to be vaccinated and were informed about the locations, dates, and times of vaccination availability; the second group received the same information and an additional suggestion to write down the date they planned to be vaccinated; and the third group received the same information and suggestion as the second group and an additional suggestion to write down the time of the appointment to receive vaccination. Compared to the first group, the third group had a 4.2-percentage-point higher vaccination rate.94

Individuals are also susceptible to remembering stories better than they do statistics, and this can motivate action as well. For example, women are more persuaded to have a mammogram when presented with anecdotal evidence emphasizing the downside of not getting screened.⁹⁵

Incentives and Disincentives

By offering economic incentives and aligning them with psychological incentives, such as aversion to regret and probability weighting, employers are able to achieve powerful results affecting employee wellness behavior, such as as weight loss, smoking cessation and diabetes management. For example, one study showed that General Electric tripled its long-term smoking cessation rates by offering a \$750 incentive.⁹⁶ The study showed that company employees who were given both information about cessation programs and financial incentives to quit smoking had significantly higher cessation rates than employees who were just given program information.⁹⁷

This result — that financial incentives can be useful — is by no means surprising. However, a key insight from the growing body of behavioral economics is that the size of an incentive may not be nearly as effective in motivating change as connecting to employees emotionally and traveling along existing pathways of social networks.⁹⁸

In a 2011 study, one employer conducted an experiment to explore how designing incentives to leverage behavioral theories could achieve greater participation rates for completing health risk assessments.⁹⁹ Initially, the employer was paying a \$25 incentive for health risk assessment completion, and the participation rate was 40 percent. Work-sites were then randomly assigned to two different incentives: 1) employees at certain work-sites would receive a \$50 incentive, or double the original amount, for completing the assessment (which would be an economically rational approach to increase participation), and 2) other work-sites were entered into a "regret" lottery which was designed to have the same actuarial value as the \$50 incentive given the probability of winning. For the lottery, the workforce was divided into groups of 4-8 employees. Every week in a four-week period, a winning group was chosen at random. Anyone who had completed a health risk assessment in the winning group would win \$100, and an additional \$25 if more than 80 percent of the group's members had completed the assessment as well. After four weeks, the first group that received the \$50 incentive had participation

rates at 44 percent, an increase of 4 percent. Meanwhile, the participation rate of the second group assigned to the "regret" lottery rose to 64 percent. The lottery, by leveraging regret aversion and social pressures, underscored more clearly the risk of loss when not participating and led to greater participation and success rates for the same amount of money as providing simple economic incentives.¹⁰⁰

Pre-Tax Health Savings

Just as employees save toward retirement by using salary reduction to contribute to their 401(k) accounts, employees can also save toward health care expenses by electing salary reduction contributions into tax-advantaged vehicles, such as health savings accounts (HSAs) and flexible spending accounts (FSAs). With salary reduction contributions, employees do not need to remember or decide when, where or how to contribute, nor to rely on sporadic sources of substantial income to save toward health expenses. This also makes it easier to plan and make do with reduced take-home pay. Because FSAs have a set open enrollment period during which an employee elects their FSA contribution amounts, the contributions are truly consistent and inflexible, barring any qualifying life events. Meanwhile, technology platforms that are used to manage both HSAs and FSAs enable greater customization and digital engagement, facilitating both greater savings and prevalence of reimbursement reminders.

Simplification and Choice Architecture

The well-established finding that too many options can paralyze decision-making, or "choice overload," is applicable to employer-sponsored health coverage choices as well. While individuals may value health plans more when presented as one of two options, rather than if it is offered as the only option,¹⁰¹ there are cognitive costs to offering too many choices which can then lead to undesired outcomes. Borrowing a lesson from Medicare Advantage, a 2011 study found that offering a choice set of 15 or fewer Medicare plans was associated with higher rates of enrollment. However, providing between 15-30 plan choices did not lead to increased enrollment; and offering more than 30 actually decreased enrollment.¹⁰²

Designing choices to take advantage of the tendency toward loss aversion and the significant framing effect of benefits communications also provides insight into how to present benefits offerings and features. CVS Caremark, for example, wanted to increase participation in its automatic refill program. However, the company did not want to simply default individuals into the program due to the risk of filling unwanted prescriptions. While the success of auto-enrollment has been validated in many circumstances, there are scenarios in which automatically enrolling all participants is either infeasible, unethical, or - as the case with CVS' concerns for its patrons – potentially contrary to the participants' preferences. Thus, the company took an enhanced active choice approach by presenting two simple choices over the phone: "Press 1 if you prefer to refill your prescriptions by yourself each time. Press 2 if you would prefer for us to do it for you automatically." It is considered an enhanced active choice because it requires individuals to make a choice, but the way the choices are presented favors one choice by highlighting the losses incumbent in another choice. This enhanced active choice approach resulted in an over 100 percent increase in the rate at which individuals actively signed-up for the auto-refill program.¹⁰³

More than half of Americans rely on employer-sponsored health plans as their primary source of coverage. There is no doubt that employers play a vital role in helping their employees achieve overall well-being. As part of this commitment, employers apply the latest and most innovative strategies to achieve healthier outcomes for their employees. This propels them to lead the way in behavioral research. The legacy of employer benefits will only grow more valuable with the inevitable development of behavioral tools to further improve employee well-being, increase engagement with employer-sponsored health benefits, and contain costs.



CONCLUSION

Employer sponsorship of health, retirement and a range of other programs was the original source of these benefits for American workers. In contrast to most other countries at a similar level of economic development they remain the foundation of long-term economic security for the majority of the population.

The provision of voluntary, privately managed benefits by American employers affords a wide range of advantages to workers and their families while facilitating economic growth and stability. Employers can provide benefits at a lower cost than is likely to be available through government programs and enable the tax burden on business and workers to remain well below that of other countries. Tailoring benefit programs to the needs of specific groups of workers is more efficient than the "one size fits all" approach typical in public programs and improves the operation of labor markets. Were these benefits to no longer be available, health insurance coverage and retirement security would be significantly diminished.

A key element supporting this system is the favorable tax treatment afforded to employer-sponsored benefits. While entailing a significant fiscal cost the tax expenditures invested in employment-based health and retirement benefits are very effective in expanding coverage and the receipt of benefits received by workers and their families each year is many times the value of the foregone revenues. This is a far more cost-effective way to enhance the security of American workers than could be achieved by expanding government run programs. Moreover, the financial assets held in employer-sponsored plans are the single largest source of investment capital in the world today and serve as an essential driver of growth and stability.

Notwithstanding the importance of employer sponsorship to benefits security and economic growth, perhaps the most important contribution of the system is in fostering innovation. Nearly all of the most important innovations in health care financing and service delivery have their origins with employers. New insights and practices in behavioral economics have significantly arisen through the creativity of employers and service providers in finding ways to enhance the level and efficacy of retirement savings.

Employer-sponsored benefits provide a unique value that has had an important role in achieving the prosperity and security that American workers have long enjoyed. As such, they represent a national legacy that needs to be appreciated and preserved.

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⁴¹ The SIPP linkage is important because they did not have administrative data linked to the CPS-ASEC prior to 1995 but could compare reporting rates of pension and Social Security income on the CPS-ASEC and SIPP from 1995 through 2008 to show nearly identical reporting of these sources of income on the two files. Thus for the 1990 comparison of survey versus administration reporting rates, the SIPP match results were used in lieu of a match with the CPS-ASEC.

⁴² Bee, Adam and Joshua Mitchell, "Do Older Americans Have More Income than We Think," U.S. Census Bureau. SESHD Working Paper #2017-39, July 2017, p. 69.

⁴³ Brady, Peter J., Bass, Steven, Jessica Holland and Kevin Pierce, "Using Panel Tax Data to Examine the Transition to Retirement," 2017, found at: <u>https://www.irs.gov/pub/irs-soi/17rptransitionretirement.pdf.</u>

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45 Ibid.

⁴⁶ "The 2017 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds." Social Security Trustees. June 2017. Table VI.G8 in, "Supplemental Annual Tables," found at: <u>https://www.ssa.gov/oact/TR/2017/lr6g8.html</u>

⁴⁷ Social Security Administration, Annual Statistical Supplement, 2013, Tables 5.J1 and 5.J4 found at: https://www.ssa.gov/policy/docs/statcomps/supplement/2013/5j.html.

⁴⁸ Ibid., Table 6.A4.

⁴⁹ "Financial Accounts of the United States - First Quarter 2018." Board of Governors of the Federal Reserve System, June 2018. <u>https://www.federalreserve.gov/releases/z1/20180607/z1.pdf</u>

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⁵¹ "Global Pension Assets Study 2018." Willis Towers Watson, February 2018. https://www.willistowerswatson.com/-/media/WTW/Images/Press/2018/01/Global-Pension-Asset-Study-2018-Japan.pdf

⁵² "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2015." EBRI Issue Brief No. 436. August 3, 2017. ⁵³ "What Does Consistent Participation in 401(k) Plans Generate? Changes in 401(k) Account Balances, 2007–2013." EBRI Issue Brief 418, September 2015.

⁵⁴ The money's worth calculations compare the lifetime contributions and benefits of participants in Social Security to what they would receive from comparable lifetime contributions in a funded pension where assets were invested in long-term federal securities paying returns equal to those realized by the Social Security trust funds and where the expected value of the hypothetical pension is calculated on the basis of an actuarially fair annuity with none of the redistributive features in the Social Security benefit structure.

⁵⁵ For example, see Jeffry R. Brown, Julia Lynn Coronado and Don Fullerton, "Is Social Security Part of the Social Safety Net?" Working Paper No. 15070, (Cambridge, MA: National Bureau of Economic Research, 2009); and Alan L. Gustman and Thomas I. Steinmeier, "How Effective is Redistribution under the Social Security Benefit Formula," Working Paper No. 7597, (Cambridge, MA: National Bureau of Economic Research, 2000).

⁵⁶ Clingman, Michael, Kyle Burkhalter and Chris Chaplain, "Money's Worth Ratios under the OASDI Program for Hypothetical Workers," *Actuarial Note*, Number 2016.7 (December 2016), Table 1, found at: <u>https://www.ssa.gov/oact/NOTES/ran7/an2016-7.pdf.</u>

⁵⁷ The results in the table are based on current law for both revenues and benefits and the system is inadequately financed to pay the full benefits that are specified in current law. Using benefits that are payable given the contribution rates specified under current law, the money's worth ratios in Table 1 would be reduced by 5 to 6 percent relative to what is shown there.

⁵⁸ Schieber, Sylvester J. *The Predictable Surprise: The Unraveling of the U.S. Retirement System*. Oxford: Oxford University Press, 2012, Chapter 24, particularly Table 24.5.

⁵⁹ Brady, Peter J. *How America Supports Retirement: Challenging the Conventional Wisdom on Who Benefits.* Washington, DC: The Investment Company Institute, 2016, Chapter 2.

⁶⁰ Schieber, Sylvester J. "U.S. Retirement Policy Considerations for the 21st Century." *Journal of Retirement*, Fall 2015, vol. 3, no. 2, pp. 12-33.

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⁶⁴ Policy Brief: Long Term Fiscal Cost of Tax incentives for Private Pensions. OECD. July 2017. <u>https://www.oecd.org/finance/private-pensions/Long-term-fiscal-cost-of-tax-incentives-Policy-Brief-2.pdf</u>.

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