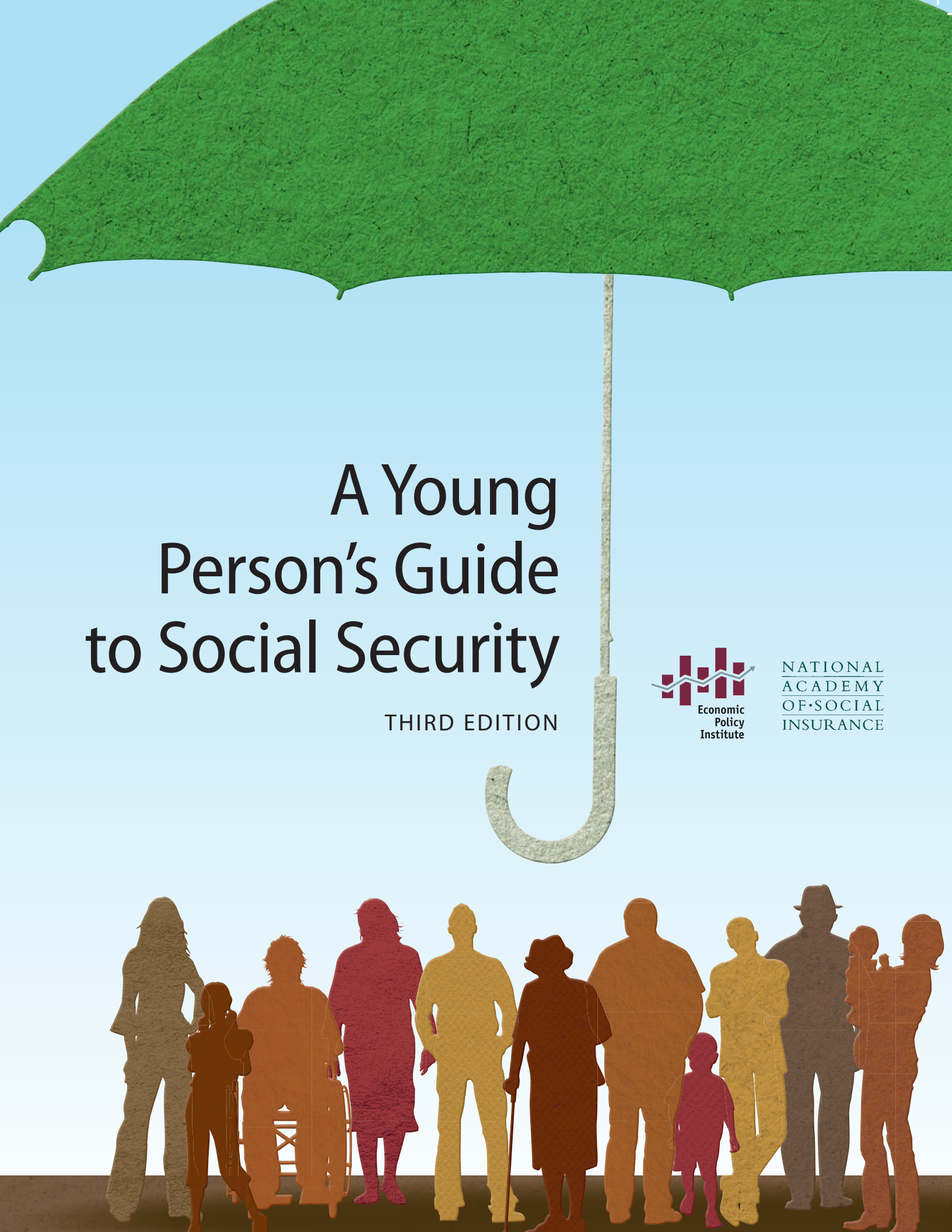
A Young Person's Guide to Social Security

THIRD EDITION

Economic Policy Institute

NATIONAL ACADEMY OF SOCIAL INSURANCE



A Young Person's Guide to Social Security

Kathryn Anne Edwards
Anna Turner
Alexander Hertel-Fernandez

NATIONAL ACADEMY OF SOCIAL INSURANCE

THIRD EDITION • JANUARY 2016

ISBN: 1-932066-31-5

About the work

This curriculum is the result of a collaboration between many people. Kathryn Anne Edwards was the lead author and editor. She wrote the introduction, the majority of the text, organized the chapters, and saw the project completely through from initial brainstorming to the final production. Anna Turner was the genius behind most of the figures, and worked most on the budget chapter and options for reform. The idea of a textbook explaining Social Security to young people belongs to Alexander Hertel-Fernandez. He started the project, made contributions to the first two chapters, and worked most on the social insurance chapter. Josh Bivens lent his expertise and advice to every page of the curriculum as our primary reader. Monique Morrissey and Virginia Reno provided valuable assistance. The National Academy of Social Insurance updated the data and portions of the text for the 2015 re-release of this textbook.

Acknowledgments

This project was made possible with generous funding from the National Academy of Social Insurance (NASI). We thank NASI sincerely for enabling us to work on something we care so much about.

Many people helped. Ethan Pollack was our budget guru; his contribution to the text included CBO numbers over the 10-year window compared to the current policy baseline. Andrew Green, Andre Nakazawa, and Daniel Kopf's careful reading ensured that the text was understandable, and possibly interesting, to humans. Elise Gould and Heidi Shierholz were champions of benign neglect, happy to let us work on our project instead of theirs. But our friends and family are the real heroes, for putting up with us and the need to bring up Social Security at every holiday, birthday party, or social gathering over the past year.

This textbook could not have happened without the help of Josh Bivens. Thank you for your guidance, insight, and encouragement, and being awesome about everything all of the time.

Elliot Schreur and Ben Veghte of the National Academy of Social Insurance updated the text and data for the 2015 version. Jill Braunstein lent her time and energy to ensure the timely re-release of this important publication.

Economic Policy Institute
1333 H Street, NW
Suite 300
Washington, DC 20005

National Academy of Social Insurance
1200 New Hampshire Ave, NW
Suite 830
Washington, DC 20036

Visit our websites at www.epi.org and www.nasi.org

Table of contents

Introduction – You're insured 5

Chapter 1 – 'Protection against the hazards and vicissitudes of life' 7

History and structure 7

The contributions 7

The beneficiaries 9

The benefits 11

How important are Social Security benefits? 15

Contributions to income 15

Poverty reduction 16

Disability and survivor insurance 16

Social Security and children 18

Conclusion 18

Chapter 2 – Social insurance: the philosophy behind Social Security 19

Social insurance 19

How to manage risk: savings, private insurance, and social insurance 20

Risks best addressed through insurance rather than savings 20

Risks best addressed through social rather than private insurance 22

The practical benefits of social insurance 23

Why do we need social insurance? The example of Social Security 24

External economic shocks 24

Insufficient savings to match longevity 24

Inflation 24

Disability and Family Life Insurance 24

Chapter 3 – Social Security's finances: if it ain't broke, don't break it 25

A self-financed program 25

Here's how it works: 26

The trust fund 28

Causes of the shortfall 29

Fertility 31

Life expectancy 32

Inequality 33

Options for reform 35

Ways to increase revenue 35

Ways to cut benefits 40

Conclusion 43

Chapter 4 – Social Security in context: the third rail of politics 44

Social Security and public opinion 44

Social Security and retirement security 47

Five arguments against Social Security 51

Five ways to improve Social Security 56

Endnotes 58

INTRODUCTION

You're insured

When asked, "What is Social Security?" most people answer with some variation of, "It's money that old people get from the government." But that is like saying that the Pentagon is the world's largest office building—it's not that it's incorrect, it's that it tells you nothing informative. Why is the Pentagon so large? Who works there? What do they do? The answer that Social Security is money for old people doesn't tell us much either. How much money? Why old people? Why does it have its own tax? Why do some children receive it, and the disabled? Will I get it?

The answer is simple. Social Security is insurance. Workers pay premiums (the payroll tax) to secure coverage for themselves and their families. And like any insurance, their coverage protects them on the occurrence of a specific event. With Social Security, that event is being no longer able to work. This happens in three instances—old age, disability, and death. As early as age 62, you can claim reduced old-age benefits for yourself, your spouse, and your young children. If you become disabled, you can claim benefits for yourself, your spouse, and young children. And if you die, your spouse and children can claim benefits based on your earnings record.

Insurance exists to protect individuals from risk. What are the risks associated with not being able to work? Poverty. It is the risk that you can end up with nothing, nothing because you made low wages and could never save, nothing because you never had pension or 401(k) benefits through your job, nothing because you were laid off during a recession and had to burn though your savings to make it to the next job, nothing because you became ill and had to stop working, nothing because your child became ill and you had to stop working, or nothing because the company you work for went belly up or the stock market crashed and wiped out half of your 401(k).

When you buy a car, you also buy car insurance. When you buy a house, you also buy homeowner's insurance. Social Security is insurance for the risks we all face—the loss of earnings due to retirement, disability, or death. So when you become a worker, you buy into Social Security.

Social Security then is a misnomer of sorts. It's more than social security, it's also *individual* security. It's the insurance you have against the external factors that can derail the best-laid plans. Social Security is insurance for yourself—you earn it, you pay for it, and you benefit from it. And as far as insurance goes, it is the most comprehensive and most efficient plan you have. One in six Americans receives Social Security benefits, almost every worker contributes to it, and yet the program costs less than one cent of every dollar of benefits to administer.

It's impossible to say how this compares to similar private plans because not all components of Social Security exist in the private market. In 2014, it was estimated that the disability and survivors insurance components were worth about $631,000 in net present value for a young worker with a family.[1] The retirement insurance value is hard to measure because almost no one on the private market offers an inflation-protected lifetime annuity. But rough estimates suggest that to buy an annuity at age 65 that would match the average Social Security retirement benefit ($1,331 a month), plus keep up with inflation and continue to pay your widowed spouse, you would need to pay about $440,000 up front in a lump sum.[2]

This begs the question: do you need the protection? Social Security is a pillar of the American economy. It is the most effective anti-poverty program in the United States. For more than half of the over-65 population it is more than half of their income. But does this apply to you?

If you are 22 years old and starting your first job in the Spring of 2016, you have 45 years before you can claim full Social Security benefits. On the day you begin your first job, someone who began work 45 years earlier, in 1971, will retire. In his or her 45 years, this worker witnessed six recessions—in 1973, 1980, 1981, 1990, 2001, and 2007; lived through inflation, stagflation, oil shocks, oil rationing, the stock market crash of 1987, the savings and loan collapse, the bursting of the dotcom bubble, the bursting of the housing bubble, the stock market crash of 2008, and the bailout of AIG, the financial industry, and the auto industry; saw unemployment climb above 10% twice—in 1982 and 2009; and all this over a time period with slowing wage growth for the bottom 50% and the decline of traditional pensions.

This worker faced risks beyond his or her control and so will you. And the answer to risk is not to work harder at accurately predicting the future, but to insure against it. Even the best drivers get in car accidents. The safest homes can be destroyed by fires. The healthiest people get sick. It's not a matter of intelligence, it's that certain things are beyond your control. Some of us will need Social Security before reaching retirement age—either due to disability or death. Some of us will not need Social Security until retirement. We cannot know which category we will fall into until we get there. But like all insurance, it's better to have it and not need it than need it and not have it.

CHAPTER 1

'Protection against the hazards and vicissitudes of life'

OUTLINE

I. History and structure
   A. The contributions
   B. The beneficiaries
   C. The benefits
II. How important are Social Security benefits?
   A. Contributions to income
   B. Poverty reduction
   C. Disability and survivor insurance
   D. Social Security and children

History and structure

Social Security is a social insurance program that provides retirement, disability, and survivor benefits to workers and their families. Signed into law in 1935,[3] Social Security has operated longer than the Department of Defense, the Central Intelligence Agency, and the Department of Education; it predates by nearly two decades the first U.S. interstate highway; and it was adopted before six of the 27 amendments to the Constitution. Indeed, when Social Security became law, Walt Disney had yet to produce a full-length feature film, the book *Gone With the Wind* had not been published, and sliced bread was an exciting new innovation.

> In the midst of the Great Depression, President Roosevelt intended for the Social Security Act to provide a "comprehensive package of protection against the hazards and vicissitudes of life."[4]

Today, 80 years after its creation, Social Security is embedded in the nation's social and economic structure. In 2015, 59 million Americans,[5] or about one in six, received a Social Security benefit of one form or another.

Where does this money come from? How do people get it? How does a program that was designed before 97% of living Americans were even born operate in a modern economy?

The contributions

Social Security's funding comes directly from its beneficiaries—workers—through a regular payroll tax called FICA, short for the Federal Insurance Contributions Act. Because Social Security taxes wages, it's important in this context to understand the distinction between wages and income. Wages are what you receive in your paycheck. Income is broader; it includes wages plus whatever other money you receive. Selling stock at a profit or renting out a home are sources of income, but not of wages. Social Security, a program for workers, taxes only wages, not other forms of income. (See *"Who Isn't Covered by Social Security"* on page 8.)

Contributions to Social Security are 12.4% of a worker's wages. Half (6.2%) is deducted from the worker's paycheck and half is paid by the employer.[6] Self-employed workers pay both the employer and the employee side (but they can deduct half from their income taxes). However, not all of a worker's wages are subject to the payroll tax. Wages are subject to the tax only up to a certain earnings level, which is called the taxable maximum, or the tax cap. The cap rises each year based on changes in the average wages of all American workers. In 2015 the limit was $118,500, meaning that only the first $118,500 of earnings was taxed for Social Security and the rest, no matter how much, was not.[7]

For example, the police chief of Oklahoma City (salary of about $173,000 in 2015) will make the same payroll contribution to Social Security, or $7,347, as Oklahoma City Thunder forward Kevin Durant (salary of $20,158,622 in 2015). The tax cap is an important

concept to understand because changing the amount of wages subject to Social Security contributions (that is, raising the cap) is frequently discussed as a possible reform to Social Security.

Who isn't covered by Social Security?

In 2015, about 165 million individuals worked in Social Security-covered employment.[8] The small number of workers who are not covered by Social Security include civilian federal employees who were hired before 1984; railroad workers (covered under a separate railroad retirement program); certain state and local government employees (covered under state-based retirement plans instead of Social Security); domestic and farm workers who do not meet minimum work requirements; students working for a university or other academic institution; and self-employed persons with very low earnings—generally under $400 per year.

Payroll taxes are collected continually and automatically throughout the year. No forms, administration, or verification are required from the worker (unless the worker is self-employed). That is different from how we pay income taxes. Every April 15 or thereabouts we fill out forms for itemized deductions, claim credits for education or children, document our various sources of income, and then balance what we owe against what was deducted throughout the last calendar year. Some of us will owe money to the government and some will be owed money by the government, but in either case, the income tax requires additional steps for compliance by the taxpayer.

High earners who pay the payroll tax only on a portion of their wages will find that the tax stops automatically sometime during the year. When they reach the tax cap, they begin getting larger paychecks for the rest of the year. While for the police chief this will happen sometime in September, for Kevin Durant it will happen during his first game of the year.

Payroll tax contributions account for about 85% of Social Security's revenue.[9] The rest comes from two other sources—interest from the trust fund and a tax on higher-income beneficiaries.

For the 25 years prior to 2010, Social Security consistently collected more in taxes than it needed to pay out in benefits.[10] Including interest payments on its reserves, Social Security still runs a surplus today. Although much attention is currently paid to the retirement of the baby boomers—some go so far as to refer to it as Social Security's looming crisis—for the Social Security Administration the boomers are not news. Indeed, the administrators of Social Security have a team of economists, accountants, and actuaries who every year project Social Security's outlook for the next 75 years. They've known for about 40 years that a large part of the workforce will retire between 2011 and 2029 and that the worker-per-beneficiary ratio—the ratio of the number of workers who are paying taxes to the number of workers who are collecting benefits—would fall as a result. Between 1975 and 2008, that ratio stood between 3.2 and 3.4; by 2014, it had decreased to 2.8.[11] With the retirement of the baby boomers, that number will decrease to 2.1 by 2035. After the amendments of 1983, Social Security began running large surpluses, allowing it to have funds on hand when the ratio declined. (See *"The 1983 amendments"* on page 9)

These annual surpluses accumulate over time and are held as bonds in a U.S. Treasury account, called the Social Security Trust Fund. The bonds are assets of Social Security, and interest on the bonds is the second source of revenue for the program. The trust fund held about $2.8 trillion at the end of 2014, and the interest generated on this amount accounts for about 11% of Social Security's revenue.[12]

Upper-income beneficiaries pay income taxes on part of their Social Security benefits, and a portion of those taxes fund Social Security. For the vast majority of recipients, Social Security benefits are not taxed, but if income from other sources besides Social Security, such as earnings, profits from stock, rental income, and so on, is above a specified amount—$25,000 for individuals and $32,000 for couples—a portion of Social Security benefits is subject to income taxes.[13] The share of these taxes that goes to finance Social Security accounts for 3% of the system's revenue.[14]

Social Security's total revenue from the payroll tax, interest from the trust fund, and the tax on higher-income beneficiaries was $884.3 billion in calendar year 2014.[15]

The 1983 amendments

Social Security has been reformed a number of times in its 75-year history. The most recent successful reform effort took place in 1983. President Reagan convened a commission in 1981 (later known as the Greenspan Commission after its chairman, Alan Greenspan) to tackle Social Security's imminent funding shortfall. At the time, the country was suffering from the second of two recessions, which came on the heels of the stagflation of the late 1970s. It was a period of slow growth and high inflation. Social Security was unable to make benefit payments from tax revenue alone and had to dip into the trust fund for five years. By 1981, it was nearly depleted. This was arguably the worst financial shape the program had been in.

Those pushing for changes, including Reagan, were committed to Social Security's fundamental design. Noticeably absent were calls to transform Social Security into a system of private accounts or reduce it to a program for only the poor.

The recommendations of the commission[16] became law in the Social Security Amendments of 1983.[17] These reforms included accelerating the phase-in of the tax increase that was passed in 1977, covering more workers, and making the benefits of higher-income beneficiaries subject to the income tax. In addition, Congress added to the commission's recommendations a gradual increase in the retirement age from 65 to 67.

Even though the reforms altered certain details of Social Security, President Reagan commented at the law's passage that the goal was to strengthen Social Security:

> *"This bill demonstrates for all time our nation's ironclad commitment to Social Security. It assures the elderly that America will always keep the promises made in troubled times a half a century ago. It assures those who are still working that they, too, have a pact with the future. From this day forward, they have our pledge that they will get their fair share of benefits when they retire."*[18]

The beneficiaries

We tend to think of Social Security as a retirement program, but it actually pays benefits in three instances: retirement, death, and disability. In fact, Social Security's full name is Old Age, Survivors, and Disability Insurance (OASDI). Benefits are not limited to workers: their families are eligible as well. **Figure 1.1** summarizes the eligibility for and timing of Social Security benefits. **Figure 1.2** illustrates the shares receiving particular types of benefits.

The Social Security program spends its money on two things: administration of the program and benefits. Administration represents a very small cost because the program can take advantage of large economies of scale. The Old-Age and Survivors Insurance (OASI) components of Social Security direct just 0.4% of total OASI expenditures to administration,[19] while the Disability Insurance (DI) component spends just 2.0% of total DI expenditures on administration.[20] Combined, their administrative costs are 0.7% of total OASDI expenditures.[21] These rates are much lower than administrative costs of most comparable pension and insurance plans.[22]

Who are Social Security's beneficiaries, how do they qualify, how much do they receive, and when do they start getting benefits?

Social Security is a program for workers. Whatever the type of benefits received—retirement, disability, or survivor—individuals must have worked in order to earn insurance protection for themselves or their families. Social Security uses the credit system, in which a certain amount of work within a time period earns a credit, and a certain number of credits earns eligibility for Social Security.[23] Each of Social Security's three components has its own eligibility criteria.

- For retirement benefits, workers typically must have worked for about 10 years in order to be eligible for benefits at age 62.
- For survivors' benefits, the length of employment required is dependent on the worker's age at death, but no one needs more than 10 years of work.
- For disability benefits, the length of employment required is dependent on the worker's age at disability.

Figure 1.1. Social Security benefits: who, when, and how long

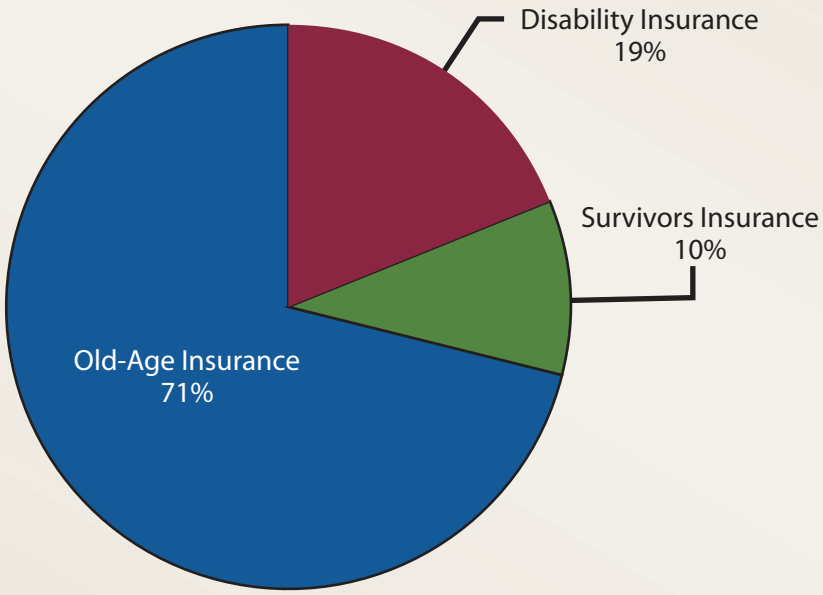
	Old-Age Insurance			Survivors Insurance		Disability Insurance	
Who receives the benefits?	**Retired workers**	**Spouses**	**Children**	**Widow or widower**	**Children**	**Workers**	**Family**
	Retired workers who have worked 10 years or more.	Spouses (or former spouses who were married at least 10 years and never remarried) age 62 or older or spouses younger than 62 if they are taking care of a child who is under 16 or disabled.	Children of a retired worker who are under 18, or under 19 if they are full-time high school students; or children who are disabled, regardless of age.	Widow or widower (or former spouse of marriage of 10 years or more who did not remarry) of a deceased worker; the spouse must be 60 or older, 50 or older if disabled, or any age and caring for the worker's child who is under 16 or disabled.	Children of a deceased worker who are under 18, or under 19 if they are full-time high school students; or children who are disabled, regardless of age.	Workers who are unable to work because of a disability that is expected to last a year or more or result in death.	The family of a disabled worker, including spouses age 62 or older, spouses who are caring for a child who is younger than 16, children who are under 18, or under 19 if they are full-time high school students, or if they are disabled, regardless of age.
When do the benefits start?	When the worker claims retirement benefits. Early retirement begins at age 62, and normal retirement is at age 66-67, depending on year of birth.	Spouses who have not worked are entitled up to half of the worker's benefit amount, depending on when the spouse claims benefits, at the earliest age 62.	When the worker claims retirement benefits, eligible children each get a benefit up to one half of the retiree's benefit.	Widow or widowers (or ex-spouses) can receive partial survivor benefits at 60 (50 if they are disabled), or the deceased worker's full benefits at the widow's retirement age. Widows or widowers caring for children under 16 receive benefits immediately.	Children under 18 and dependent parents can receive benefits immediately after the death of the worker.	Workers can apply when they become disabled.	When the worker is approved for benefits.
How long do benefits last?	Until the worker Dies.	Until the spouse dies or, if not retired, until the child turns 16.	Until children turn 18, or if they are a high school student, two months after they turn 19. Benefits continue if the child is disabled.	Until the widow, widower, or former spouse dies (or until the child turns 16).*	Until the child turns 18, or if a high school student, two months after turning 19. Benefits continue if the child is disabled.	Until the full retirement age, at which time workers receive benefits under old-age insurance.*	Until the child turns 18, or if a student, two months after turning 19. Benefits continue if the child is disabled.

*Persons are not eligible to receive more than one type of insurance at a time. For spousal beneficiaries of Survivor and Disability Insurance, at retirement age, the spouse takes higher of Old-Age or Survivors or Disability Insurance benefits.

Source: SSA. Retirement Benefits. http://www.ssa.gov/pubs/EN-05-10035.pdf • Survivors Benefits. http://www.ssa.gov/planners/survivors/ • Disability Benefits. http://ssa.gov/pubs/EN-05-10029.pdf

FIGURE 1.2

Social Security beneficiaries by type of insurance, 2014



The three components of Social Security—Old-Age, Survivors, and Disability Insurance—paid out benefits to 59 million Americans in any given month in 2014. Including workers and their families, 71% were old-age beneficiaries, 19% were disability beneficiaries, and 10% were survivor beneficiaries.

Source: Social Security Administration. Social Security Beneficiary Statistics. http://www.socialsecurity.gov/OACT/STATS/OASDIbenies.html

The benefits

The benefits that an individual receives from Social Security are related to that individual's earnings (or in the case of benefits for dependents, such as spouses or children, the earnings of the insured worker). Just as the amount you pay in to Social Security depends on how much you earn each paycheck, the amount you get back depends on how much you earn over your lifetime. Workers with higher wages receive higher benefits in absolute dollars because they contributed a higher dollar amount. However, benefits are progressive because lower-income earners will receive a higher *share* of their pre-retirement earnings as benefits. (See *"Progressive or regressive"* on page 12)

Social Security retirement benefits are based on an individual's highest 35 years of earnings, whether they are consecutive or not. The reason for, and the advantage of, looking at only the highest 35 years, even if someone worked 50, is twofold. First, it reduces the penalty workers would face for taking time off of work to pursue more education, raise children, or fight an illness. Second, it protects workers who had spells of unemployment or low wages. (See *"How is the benefit calculated?"* on page 13.)

How much you earn (your average indexed monthly earnings, or AIME) determines your benefit (your primary insurance amount, or PIA). (See **Figure 1.3**.) It is important to note that Social Security makes two adjustments when calculating benefits, one based on an index of average wages and one based on an index of average prices. Although they seem to be mere technicalities, these adjustments are vital to all workers. The wage indexing ensures that benefits represent the living standards a worker has achieved at the *end* of his or her work life, instead of at the *beginning*. Wages rise over time, usually faster than prices. If wages were not adjusted in the benefit calculation using this index, the average of a worker's highest 35 years of earnings would afford a lower standard of living than that of present-day workers simply as a consequence of *when* the worker

Progressive or regressive?

The terms progressive and regressive are used to describe the redistributive properties of taxes and benefits. If a tax is progressive, the effective tax rate rises as the income level increases. If a tax is regressive, the effective tax rate falls as the income level increases. It's important to remember that, when we describe progressivity or regressivity, absolute dollar terms can be misrepresentative.

Let's go back to our example of the police chief and Kevin Durant. They both pay the same $7,347 in payroll tax, but the police chief is paying about 4.2% of his or her income, while Kevin Durant is paying about .04% of his.

Does this mean Social Security is regressive? In different ways, it's both progressive and regressive. The tax system alone is certainly regressive. Workers who earn below the tax cap will pay taxes on 100% of their wages at a 6.2% rate. Workers who earn above the cap, however, pay taxes on only a portion of their wages and their effective tax rate falls as their wages rise, all the way up to the handful who – like Kevin Durant – pay 0.04% or less.

The benefits, however, are progressive. Low-income earners will get a higher share of their pre-retirement earnings back in benefits than will high-income earners. This is referred to as the replacement rate. After you retire, how much is your Social Security benefit compared to your pre-retirement earnings? In other words, how much earnings does Social Security replace? Because earnings replacement is much larger for low-earning workers, the benefits are progressive.

Despite having both progressive and regressive elements, however, it is generally agreed that Social Security is, on net, progressive.[24]

earned them, as opposed to *how much* the worker earned in wage-adjusted terms. Indexing allows the benefit to represent what the worker earned in relation to the current standard of living.

The worker's benefit, once calculated by the Social Security Administration, is not frozen. The PIA is determined at age 62, and is then indexed to changes in prices thereafter.[25] This is called the cost-of-living adjustment, or COLA, and it preserves the purchasing power of benefits when measured against prices. We know that inflation can erode the value of money, but the effect is dramatic over time. Even 3% inflation, a historical average, can reduce the average annual Social Security benefit of roughly $16,000 by nearly half after 20 years (see **Figure 1.4**).

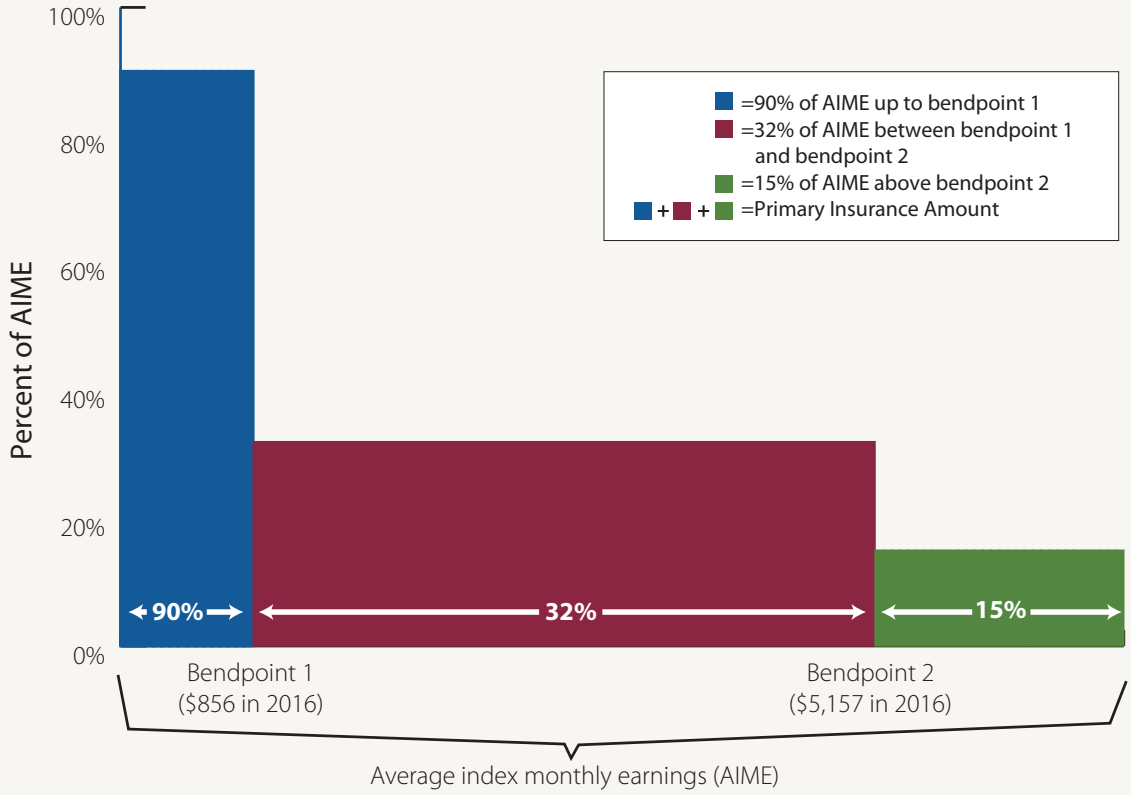
One of the hardest parts of planning for retirement is knowing how much money you will need to live on. Social Security benefits are guaranteed to never erode—neither due to wage inflation over one's working life (a standard-of-living erosion), nor to price inflation during retirement (a purchasing-power erosion). This is a feature that savings accounts, 401(k)s, and private retirement plans rarely, if ever, offer. (See *"Prices, Wages, and Living Standards"* on page 14)

Survivor and disability benefits begin when the worker dies or becomes disabled. Retirement, on the other hand, has a minimum-age requirement. The minimum age for receiving *full* retirement benefits was 65 for many years. As already noted, in 1983, partly as a response to a Social Security shortfall and partly as a response to perceived improvements in health and life expectancy, Congress phased in a gradual increase in the full retirement age from 65 to 67 beginning with workers attaining age 62 in 2000. Individuals born in 1960 and later are subject to the new normal retirement age of 67.

This does not mean that you *must* retire at 67. The decision of when to quit working is up to you. "Retirement" in the context of Social Security means when you can claim retirement benefits, and any worker who has met Social Security's work requirements can begin claiming benefits as early as 62. Claiming benefits before reaching the normal retirement age, however, results in a reduced benefit. The earlier you claim benefits, the smaller they are. For workers born in 1960 and later, benefits claimed at 62 will be 30% lower than if claimed at 67.[26]

How is the benefit calculated?

FIGURE 1.3



Step One: Calculate average indexed monthly earnings (AIME)

- The AIME is the average monthly earnings of a worker's highest 35 years of work.
- Earnings are adjusted (or "indexed") to reflect the change in average wages of U.S. workers that occur over a lifetime.

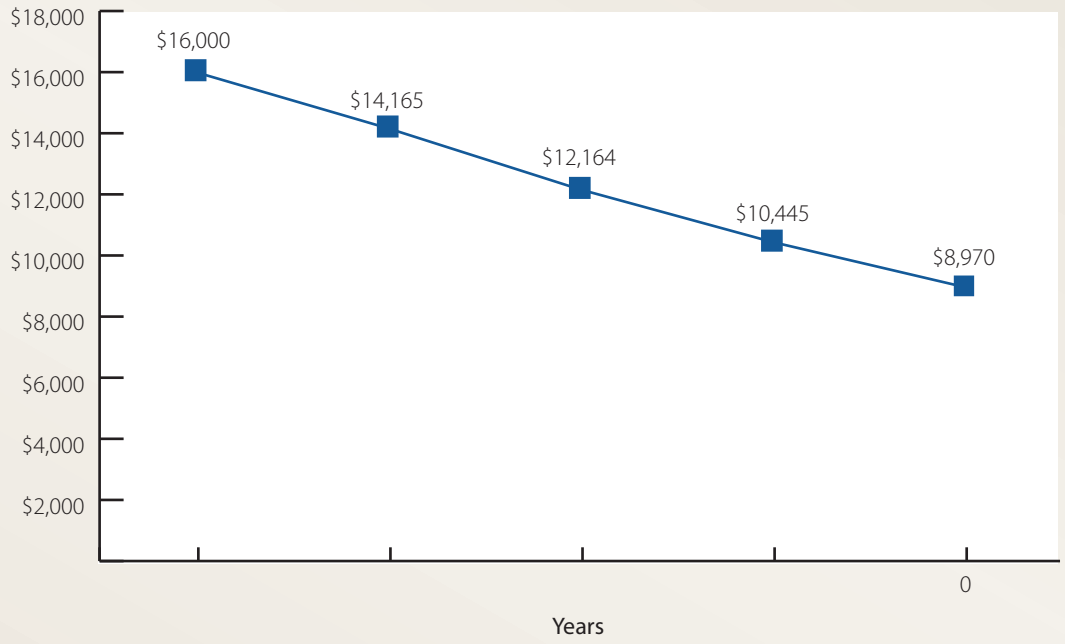
Step Two: Calculate the primary insurance amount (PIA)

- The benefit that an individual receives from Social Security is not equal to the AIME, but is some share of it, called the primary insurance amount (PIA). The size of the share is based on how large the AIME is.
- To calculate the PIA, the AIME is divided into three pieces, and each portion of the AIME is multiplied by some percentage. The three portions are then added together to make the PIA.
- The AIME is divided at the two bend points, which are increased each year based on the change in the average wages of all workers, the same index used to adjust earnings in the AIME.
- Not all workers have high enough earnings to reach the second bend point. For them, the PIA is the sum of only two portions.
- The initial PIA is updated every year based on inflation.
- The average monthly retirement benefit was $1,335.97 in 2015, which is quivalent to $16,031.64 a year.

Source: SSA. 2015. Primary Insurance Amount. http://www.ssa.gov/oact/cola/piaformula.html. Source for average monthly retirement benefit: SSA. 2015. Number of Social Security recipients at the end of Jul 2015. http://www.ssa.gov/cgi-bin/currentpay.cgi.

FIGURE 1.4

The effect of 3% annual inflation on $16,000 over 20 years



The average Social Security benefit is roughly $16,000. At 3% inflation, after 10 years $16,000 will be worth about 24% less, and after 20 years it will be worth only about half as much.

Source: Author's calculations.

Prices, wages, and living standards

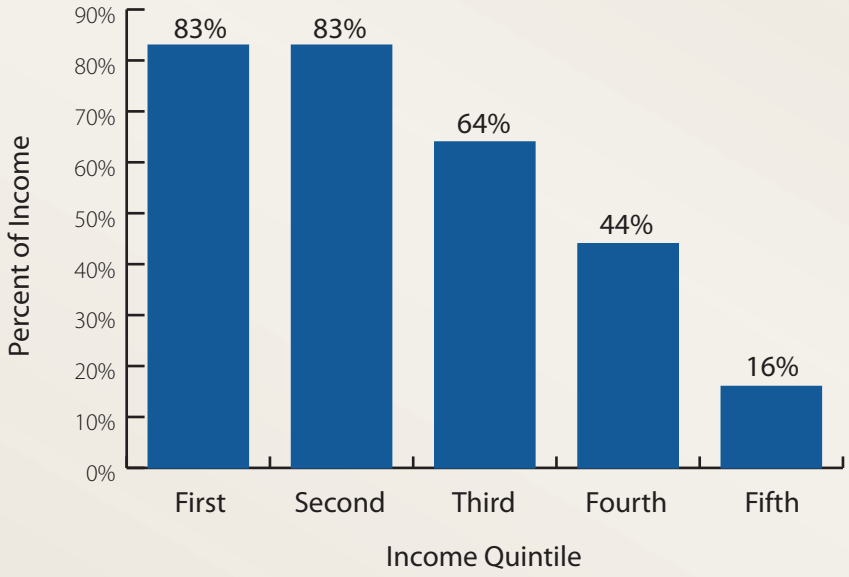
When we talk about saving for retirement and Social Security, we are often talking about a long time span—40, 50, or sometimes even 60 years. Prices and wages, however, do not remain stagnant over time. Most people readily understand this when it comes to prices. For example, in 1935, a gallon of milk cost $0.46, compared to about $4 today. We refer to the growth of prices over time as inflation. So if you are asked if you would rather have a $50 bill today or a $50 bill 25 years from today, you should take the $50 today, because the value of $50 will erode over time.

Wages, though, generally rise faster than prices. This makes sense—if prices rose faster than wages, then everyone would be getting poorer over time because our purchasing power would be decreasing. If wage and price growth were equal, then our living standards would stagnate—the numbers would change at about the same rate on our paychecks and our grocery bills, so we wouldn't be progressing. It's only when wages rise faster than prices, as they have historically done, that workers are able to experience a positive change in their standard of living.

In order for Social Security to be a dynamic program, it has to take changes in both wages and prices into account when calculating the size of the benefit.

FIGURE 1.5

Share of income from Social Security of households 65 or over by income quintile, 2012



To get income quintiles, you line up every household in America that is over 65 from poorest to richest and divide them into five groups of equal sizes.

Social Security is a significant part of income for elderly households.

Source: SSA. 2014. Table 10.5—Percentage of aggregate income of aged units from specified source, by marital status and quintile of total money income, 2012. Income of the Population 55 and Older, 2012. http://www.ssa.gov/policy/docs/statcomps/income_pop55/2012/sect10.html

The advantages of waiting to claim retirement benefits don't end there. If you can wait to claim benefits until age 70, you will receive a benefit that is 24% larger than if you started claiming benefits at 67—and 77% larger than if you started at 62. The general principle behind these adjustments, which are based on actuarial estimates of average life expectancy, is that, on average, the total amount of workers' lifetime benefits will be the same regardless of when they claim them. But your actual life expectancy is impossible to predict. If you think there's a good chance that you will live into your late 80s or even 90s, then there's also a good chance that you will exhaust other retirement resources along the way. Social Security benefits will be more and more important as time goes on, so it pays to wait, if you can.

How important are Social Security benefits?

Contributions to income

Social Security is an essential source of income to its beneficiaries even though the benefits are modest. The program was never intended to be the sole source of income for beneficiaries but rather to serve as a foundation upon which to add savings and other retirement income. The average annual retired worker benefit ($15,943 in 2014[27]) is higher than the official federal poverty line ($11,354 in 2014 for an elderly individual living alone[28]). But the poverty line is a measure of deprivation, not income adequacy. It does not reflect what a retiree needs in order to meet basic expenses, especially since it does not specifically reflect out-of-pocket costs of health care, often the largest expense facing a retired worker.

Despite their modest size, benefits are a substantial share of income for most recipients, as **Figure 1.5** shows. For the lowest two income quintiles, Social Security accounted for 83% of retirees' incomes, making it far and away their most important source of income. For those in the mid-range of retirement incomes—in other words, middle-class retirees—Social Security provided nearly two-thirds (64%) of their income, on average. Even among those in the top quintile, a category that includes many beneficiaries who are still working, Social Security provided about a sixth (16%) of their total income.[29] Obviously, Social Security is more important

to some people than to others, but benefits are important to almost all recipients.

Poverty reduction

Social Security is the most successful anti-poverty program in the United States. In 2014 it lifted 21.4 million Americans out of poverty, almost 15 million of whom were seniors. Without Social Security income, it is estimated that four out of every ten seniors would be living in poverty. Instead, only one in 10 elderly individuals falls below the poverty line.[30] (See *"The anti-poverty impact of Social Security* below.)

Indeed, a before-and-after look at Social Security shows how instrumental it has been in transforming old age from a near-guarantee of poverty to a period of relative economic independence. As Social Security expenditures per senior rose from $5,143 in 1959 to $15,674 in 2014 (both in 2015 dollars),[31] the elderly poverty rate fell from 35.2% to 9.98% (**Figure 1.6**).[32]

The economic independence of the elderly is an important benefit to society and the economy. For example, consider an elderly couple that has one adult daughter and two grandchildren. The couple has Social Security; they live comfortably but not extravagantly; and, most importantly, they support themselves. But what if instead they were poor? Between the two of them, they would have less than $14,300 a year to live on and they would have to rely on their daughter to help. From paying bills and rent to buying groceries or gas, their daughter would provide financial support for her parents. Money that could've been spent on *her* children, for family vacations, summer camps, or college tuition, would go to her parents instead. When you think of this 20 million times over, it becomes clear why the economic independence of the elderly is important to each generation—your grandparents', your parents', and yours.

Disability and survivor insurance

Social Security is more than just benefits for retirees. The life and disability insurance functions are crucial to providing economic security for many Americans. In spite of advances in medicine and overall quality of life, the risk of disability and death throughout one's life is still significant. A 20-year-old worker has a 1-in-4 chance of becoming disabled before reaching retirement age.[33] But because becoming disabled or dying young is not something we think will happen to us, we don't plan for it.

For this reason, life and disability insurance are very valuable. For example, consider a young (27-year-old) worker with average earnings (between $30,000 and $35,000 a year) who has a husband and two young children. Her protection from Social Security for life and disability insurance has a net present value equivalent to a life insurance policy of $612,000 and a disability policy of $443,000 in 2014.[34]

The anti-poverty impact of Social Security

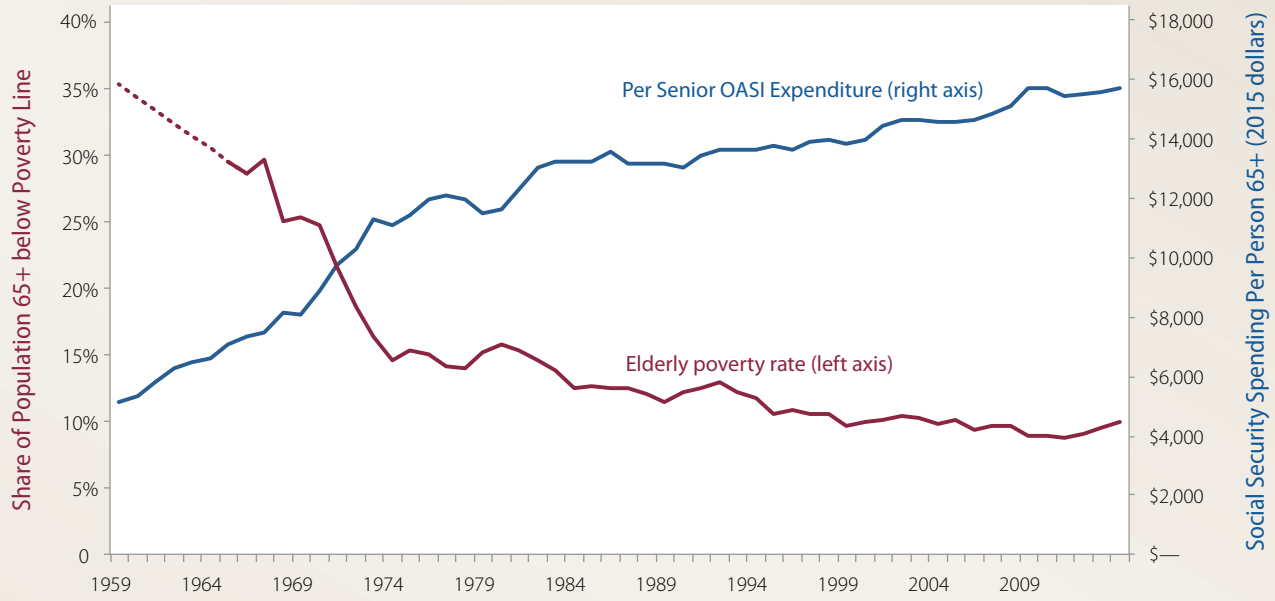
In 2011, the Census Bureau, with the release of the newest poverty numbers, estimated the effect that various public programs had on poverty. What would poverty in America look like without them? In 2014:

Program	Poverty reduction effect
SNAP*	↓3.6 million
Federal Earned Income Tax Credit (EITC)**	↓5.7 million (2013)
Unemployment insurance	↓0.5 million
Social Security	↓21.4 million

*Measure if Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps) were cash income.
**Data for 2013.
Source: U.S. Census Bureau. 2015. Current Population Survey. Annual Social and Economic Supplement. Impact on Poverty of Alternative Resource Measures by Age: 1981 to 2014. http://www.census.gov/hhes/www/poverty/data/incpovhlth/2014/tables.html

FIGURE 1.6

Per-Senior OASI Spending Compared to Elderly Poverty



Note: No formal data on the percentage of elderly persons living in poverty exists for the years 1960 to 1965. The dotted line denotes a linear extrapolation between the earliest data point (1959) and the beginning of the complete series (1966).

Sources: Authors' analysis of U.S. Census Bureau. 2015. Poverty Data. Table 3: Poverty Status of People, by Age, Race, and Hispanic Origin: 1959 to 2014. http://www.census.gov/hhes/www/poverty/data/historical/people.html. • Bureau of Labor Statistics. 2015. CPI Detailed Report Data for August 2015. Table 24. Historical Consumer Price Index for All Urban Consumers (CPI-U): U. S. city average, all items. http://www.bls.gov/cpi/. • SSA. 2015. Old-Age and Survivors Insurance Trust Fund, 1937-2014. http://www.ssa.gov/OACT/STATS/table4a1.html. • U.S. Census Bureau. Various dates. Population Estimates. Historical Data. http://www.census.gov/popest/data/historical/index.html.

As Social Security payments rose from 1959 to 2014, elderly poverty declined dramatically.

Social Security is the insurance policy that you have but don't know you have. Hence, it is one of the most important sources of income for disabled workers and their families.

- Social Security payments represent half or more of total family income for about 48% of disabled-worker beneficiaries.[35]
- In 2010, average annual benefits for disabled workers were $13,757.[36]
- In that same year, about 1.9 million children[37] of disabled workers received annual benefits averaging $4,097.[38]

Life insurance (or survivorship) benefits reached 6.2 million individuals in 2013; 1.9 million of these beneficiaries were children.[39] Average survivorship benefits for a widowed mother or father were $917.69 per month, and average survivorship benefits for children were $813.80 per month.[40] These benefits represent an important source of income to make up for the lost wages of a deceased parent.

Social Security and children

Children are an often overlooked segment of Social Security recipients. Between 11 and 12 percent of all American children live in households that receive some kind of Social Security benefit. About 3.2 million children of deceased, disabled, and retired workers receive direct benefits from Social Security through their late teens, and an additional 5.3 million children live in households that rely on Social Security payments for at least part of their household income.[41]

Supplemental Security Income

The Social Security Administration also administers a program called Supplemental Security Income (SSI), which provides cash benefits to very-low-income elderly, blind, and disabled individuals. This program is financially separate from Social Security, however, and is not funded by Social Security contributions. Funding for SSI comes from the federal government's general tax revenues.

Conclusion

Social Security represents one of the American government's most successful commitments to its citizens. Established in the midst of the Great Depression, it has remained a stable source of income for its beneficiaries in both good and bad economic times ever since. This chapter explained how Social Security has served as a bulwark against poverty, provides valuable survivor and disability insurance, and provides more benefits to children than any other government program. In other words, Social Security is not just about retirement; it is also about family security.

One of the strengths of the program's design is its reliability. The Social Security Administration sends out checks on time every month and is always proud to point out that, in the eight decades since first sending payments to beneficiaries, it has yet to miss a monthly payment. Retirees depend on the monthly benefit for their fixed living expenses; widows and children depend on the monthly payment to supplement household earnings after the death of a family member has left a hole in family finances. These are the typical situations that Social Security was built to respond to. But in the course of its history, Social Security has provided stability to families faced with extraordinary circumstances. Almost one in every five adult Social Security recipients is an American military veteran.[42] More than 2,300 children who lost a parent in the terrorist attacks of September 11th are receiving survivors' benefits through their teenage years.[43] Special Social Security Administration staff were present at the evacuation centers during Hurricane Katrina to ensure that beneficiaries would continue to receive on-time payments despite losing their homes.[44] And the Social Security Administration continued mailing out benefit checks even while the federal government experienced shutdowns in 1995-96 and 2013. When we say that Social Security is a pillar of the American economy, we don't mean for some people, but for all people.

CHAPTER 2

Social insurance: the philosophy behind Social Security

OUTLINE

I. Social insurance
II. How to manage risks: savings, private insurance, and social insurance
    A. Risks best addressed through insurance rather than savings
    B. Risks best addressed through social rather than private insurance
III. The practical benefits of social insurance
IV. Why do we need social insurance? The example of Social Security

Where did the Social Security system come from? How and why was the program designed the way it was? Do we need Social Security?

As much as we can tout the program's importance and the positive impact it has on people's lives and on the economy as a whole, the answer to the "do we need it" question is still a relative one. There are some things that happen to people—layoffs, economic disasters, disability, inflation spikes, stock market crashes—that are unpredictable, arbitrary, and potentially catastrophic. If you think that all of these risks should be borne by the individual alone, it will probably be tough to convince you of the usefulness of social insurance.

But if you think there are risks from which people should be protected, risks that are arbitrary enough in incidence and catastrophic enough in effect, then social insurance is the most effective and efficient way to provide this protection. That is, social insurance is a method—it's a way to enact a social commitment to protect people from the worst effects of these risks.

This brings a common misconception to light. When asked, "What is Social Security?" the shorthand answer is often a variant of "It's money that old people get from the government." But that's like saying that the Pentagon is the world's largest office building or the president of the United States is a highly paid public servant. Those characterizations are technically correct, but they do not reveal the essence of the issue.

The same is true for Social Security. To say that it's money for old people omits so much that it misleads. Social Security is really about protection against risks—the arbitrary setbacks to achieving a secure financial life, whether prosaic or catastrophic, that can befall anyone getting older—under a system of social insurance.[45]

Social insurance

When you talk about insurance, you're essentially talking about risk management. Under a typical insurance arrangement, the purchaser (you) provides a stream of steady payments (called premiums) to an insurer in exchange for a guarantee that the insurer will provide payment after a predefined event (the risk) occurs. If you buy a home, you buy homeowner's insurance to protect against potential hazards, such as fire damage. If you live in a low-lying area near a river, you're at risk of flooding and you buy flood insurance. If you drive a car and are worried about damage or theft, you buy comprehensive car insurance. The underlying principle is the same: as an insured individual, you are trading payments now for the promise that you will receive protection later.

Social insurance is protection offered by a government against risks to broad groups of its citizens. It's still insurance (premium payment in exchange for risk protection), but differs in two key ways. First, most mature social insurance programs cover larger portions of the national population than private Insurance. Second, the risks protected against by social insurance are often

social or economic in nature, like poverty, sickness, disability, or unemployment. In essence, it's protecting everyone from a risk that threatens everyone. To do that, social insurance often mandates enrollment, or heavily incentivizes it. Premiums are then collected through some form of taxation.

Because it straddles the nature of public programs and private markets, social insurance is often confused or conflated with both welfare and private insurance. However, it differs from the former because of structure and design, and it differs from the latter because of goals and intent. Indeed, it is a truly unique way in which people are protected from risk.

Welfare programs are based on economic need. In order to receive welfare benefits, individuals must apply and prove their eligibility through strict income and asset tests. In other words, to qualify for welfare programs, individuals must prove that they are poor. This process is referred to as "means-testing." Examples of these programs include Temporary Aid to Needy Families (TANF, commonly referred to as welfare) and the Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps). In this way, welfare differs hugely from social insurance, where eligibility is established through contributions. You don't have to prove that you are poor to get social insurance, you simply must contribute to the program. Participation in social insurance, then, is not targeted—it covers huge swaths of the population, and the full range of income.

Social insurance differs from private insurance because the latter is a profit-making business. It's an obvious but an important point: firms want to make money. In the case of insurance, companies would therefore want to price insurance plans according to the likelihood of the insured event occurring (such as a fire or accident), and they charge more for high-risk people—a racecar driver pays higher premiums for disability insurance than, say, a teacher.

Social insurance, on the other hand, is run or sponsored by public agencies and therefore does not generally operate for the purpose of profit. Again, while this seems like an obvious distinction, it has several important effects on both the coverage and cost of insurance. Since private firms seek to gain profits, they do not have to prioritize *adequacy* of coverage so much as profitability from individual plans. If there are groups of the population that are priced out of private insurance, that's irrelevant from the perspective of a profitable private insurer. The government, on the other hand, has the power to mandate participation from all citizens; social insurance does not distinguish between high-risk and low-risk, high-cost or low-cost, or high-profit or low-profit individuals. Everyone is covered. This universality (or near universality) has several benefits that you do not see in the private insurance market.

Social insurance equalizes premium costs, as risk is shared across the entire population. If you don't distinguish between high- and low-risk individuals, you don't need to price them differently. Therefore, social insurance is uniquely equipped to protect vulnerable groups who are unfairly treated in the private market because of their high-risk status, something that a private company would not generally aim to do.

It can be easy to confuse social insurance with welfare or private insurance, but they should be thought of as three distinct concepts. That means that they each have their own scope, their own sphere of coverage, and their own function in society. (See *"Precursors to social insurance"* on page 21.)

How to manage risk: savings, private insurance, and social insurance

How do you protect against risk? In this section, we'll start from scratch and build a system for classifying risks—those protected with savings, with private insurance, or with social insurance.

We'll do this in two steps. First, we'll examine insurance (of any kind) versus savings. Second, we'll compare private to social insurance. Put another way, we'll start with all income-related risks and narrow them down to those specific risks that fall under the purview of social insurance.

Risks best addressed through insurance rather than savings

Risks related to events that are out of the control of the individual. Events that are completely out of an individual's control are ill-suited for savings. For example, think of a flood that could potentially destroy your house. If you want to save for it, you'll have to know: when will it flood? How severe will it be? How

Precursors to social insurance

While social insurance may seem like an invention of modern governments, the act of pooling resources to help deal with risk is a longstanding tradition in human societies.[46] Families do it inherently by helping relatives out in times of need. Close-knit communities, especially in early societies, also served a similar role. For example, farmers contributed portions of their harvest into a communal fund that would be available to the unlucky families whose crops failed.

These methods of risk sharing were later formalized in medieval Europe. Merchants and craftsmen sharing common business interests created mutual aid organizations that pooled money to help individual members and their families in the event of sickness, unemployment, or death. Germany was one of the first countries to introduce state-sponsored social insurance protection in the 1880s. These policies included health insurance, workers' compensation, and mandatory old-age pensions. Later, other European and Latin American countries followed suit, modeling their programs after the German system.

Although Social Security—the United States' primary social insurance program—was not created until 1935, the United States did have an important and far earlier precursor in the form of the Civil War pension program. Implemented shortly after the start of the war, the insurance program initially provided benefits for soldiers disabled in combat, as well as benefits to war widows and orphans. The program was later expanded to include all non-war-related disabilities, as well as old-age pension benefits to soldiers and their families. It eventually grew to cover nearly 90% of Civil War veterans and their families. The Civil War pension program provided an important model for the later development of Social Security with the introduction of family income protection. This model provides replacement of wages not just for workers, but also for their spouses and children in the event of worker disability or death.

much damage will it do? How much will that damage cost? It's hard to save for something without knowing anything about the costs or when, if ever, it will happen. Insurance is suitable for this kind of risk.

Risks of losses that are too great for individuals to bear on their own. Some losses are too great for an individual and his or her family to deal with solely through savings. For example, if that flood you were saving against destroys your house, have you saved enough? It's unlikely that an individual paying $200,000 over 30 years for a house would have $200,000 in savings, should his or her house be destroyed.

Risks associated with economic uncertainty or shortcomings in planning. You cannot know with certainty in your twenties what your expenses and income will be 40 years later when you retire, much less how long you'll live after you retire or the extent to which inflation might eat away at your nest egg. For each variable you can make an extremely intelligent, sophisticated projection, and be completely wrong. For these kinds of risks, insurance can provide a hedge against many of your potential errors.

Risks that, when covered by insurance, introduce positive effects for society (or alternatively, without insurance coverage, introduce negative effects for society). Some risks may not present a substantial threat to all individuals, but taken as a whole present negative consequences, or spillover effects, to society. For example, if you are a student in a class of 20 students, you do not want to be the only person who has health insurance. If you get sick, your doctor's visit and prescription are covered. Your uninsured classmates, however, will hold off going to the doctor as long as possible, trying to "sleep off" an illness or just stick it out, putting you, everyone they go to class with, and everyone they live with in their dorm at risk. The consequence is diminished public health—we are all less healthy because a part of our population is less healthy and putting us at risk. Most universities offer free health insurance precisely to avoid this negative externality.

Risks best addressed through social rather than private insurance

When we've determined that we need insurance, which should we use: social or private insurance? The answer to that question is something that insurers, policy makers, and scholars continually debate, and the discussion often becomes conflated with political philosophy (e.g., the market is always better than the government) and politics (e.g., the market is better than the government in this instance). Under that standard, deciding which is better between social or private insurance, varies with each individual's personal belief. However, when it comes to risk, and how risks are best addressed, social insurance has a clear and defined role. Because it offers universal, or near universal, coverage with a government guarantee, social insurance solves many of the problems faced by the private market in insuring against risk. Indeed, there are three risks in particular that social insurance will always better guard against. These risks are:

Risks that require very long contracts. The government has a certainty of existence that is impossible to match on the private market and so it is in a unique position to guarantee contracts for extraordinarily long periods with little fear of insolvency. How many companies have been around since 1791? 1891? 1991? How many can reasonably forecast their operations 75 years into the future? Or even five? How many companies are free of the risk of being bought, sold, or put out of business? When a risk involves a very long contract, say 45 to 70 years, the government is in the best position to guarantee against it.

Risks that are highly concentrated. The type of risks that private insurers can typically cover well are ones that are not concentrated together. This means that the risk of one individual experiencing a negative event is not connected to the risk of another individual experiencing that same event. A car insurance company is betting that if it has a million customers, not all of them will get in an accident on the same day.

But not all risks are like this. Some can affect a large portion of "customers" at the same time. Take unemployment, for example. It's a highly concentrated risk because people tend to become unemployed at the same time—during recessions. The idea that a hundred thousand people become unemployed at the same time is not a matter of chance, but a consequence of a shrinking economy. This is a concentrated risk. For a private insurer, concentrated risks can quickly turn into overwhelming losses, hindering the firm's ability to pay and perhaps even pushing it into bankruptcy. The government, however, does not go out of business. That's why in most countries the government provides unemployment insurance. (See *"Concentrated risks: The example of AIG"* on page 23)

Risks that threaten particularly vulnerable groups. A fundamental problem of insurance markets is adverse selection—the fact that individuals who are most likely to need insurance (those who are likely high risk) are those who are most likely to purchase insurance. But if the only people who are buying the insurance are the ones who are most at risk, the price goes up. It becomes a cycle of exclusion as the lower one's risk is, the more likely he or she is to be priced out of insurance because the premiums become too expensive to be worth the coverage. To make their prices attractive to the broader market of low- to moderate-risk people (who are cheaper to insure), private insurers have an incentive to exclude high-risk people (who are more expensive to insure).

In a private insurance market, this makes perfect sense. Charge high-risk people more money for their coverage, but if the costs of covering them becomes too high, don't offer them coverage anymore. Remember that private insurance firms are profit driven—they are trying to thread the needle between raising their profits (charging more) and cutting costs (dropping coverage). And for some types of insurance, this is fine. If a notoriously dangerous driver is refused car insurance, there is a small negative consequence, but it makes sense from a profit perspective and even from a public policy point of view.

But this logic does not apply to areas of insurance coverage like health care or retirement security. Dangerous drivers are not a vulnerable group in the same way that people with chronic illnesses or other health disorders are. If people are priced out of the health insurance market, it is likely because they are most in need of it and, more importantly, they are left with no other option. This exclusion is bad from a public policy view.

Though private insurers are indeed acting in accordance with the market by charging higher rates or excluding high-risk people, private insurer profitability

Concentrated risks: The example of AIG

The American International Group (AIG), an insurance corporation, is the largest underwriter of commercial and industrial insurance in the United States and has operations in 130 countries. In September 2008, it faced an acute liquidity crisis and had to be bailed out by the federal government.

What happened? AIG is an insurer, and while we often think of the individual risks that are insured against, firms face risks as well. As such, AIG insures a wide variety of private firms, from small companies to the largest investment banks in the United States. When these large banks, like Lehman Brothers and Bear Sterns, made investments, they would get insurance from the financial services arm of AIG in case these investments failed. The process was complicated and involved numerous financial instruments, but essentially the banks invested in securities (like a bundle of home mortgages) and bought credit default swaps (insurance against the risk that the mortgages would default) from AIG. AIG made money from the swap (essentially an insurance premium), and would only have to pay if the mortgagees defaulted.

AIG did not realize how highly concentrated the risk of default was. It had reason—home prices nationwide had never fallen before, so AIG assumed that bundling many individual mortgages would keep the risks of default for particular mortgages in the bundle relatively independent of each other. That is, if someone defaulted on a mortgage in Montana, it wouldn't affect the likelihood of someone defaulting in Alabama. Hence, each mortgage bundle insured by AIG was presumably low risk: while some components may go bad, the independence of risks meant that it was unlikely (in AIG's view) that a large number of mortgages in each bundle would default together.

But that's what happened.[47] As the housing bubble burst and prices plunged across the country, the defaults turned out not to be independent of each other. Mortgagees defaulted en masse and AIG did not have the money (or liquidity) to cover what it had insured. Because AIG was liable to so many financial firms, its collapse threatened the other institutions as well. The result was the largest government bailout of a private company in U.S. history—an initial $85 billion, followed by another $85 billion in the months after.

There is a lot to be learned from AIG's miscalculation, including the need for stricter oversight of financial firms. Private companies, no matter how large and seemingly secure, always have the potential to fail.

and economic efficiency *are not the same thing.* The farther away insurer profitability is from economic efficiency, the more social insurance is necessary.

Social insurance can ensure fairness for vulnerable groups—such as low-income or high-risk individuals—that are neglected by privately offered insurance. It covers all individuals and charges premiums that are unrelated to whether the individual is high-risk or low-risk. Hence, social insurance saves on many costs: social insurance systems do not need to spend money to measure the risk of each individual consumer; social insurance doesn't need to expend resources on maximizing the number of low-risk individuals the insurer enrolls; and social insurance doesn't need to advertise.

The practical benefits of social insurance

We now have a way of classifying risks and knowing which are more suitable for coverage by social insurance. But if something "should" be covered by social insurance, does that mean it has to be? Is it necessarily bad if it is covered by private insurance or is it just a matter of suitability? In other words, how important is it that the appropriate risks are covered by social instead of private insurance, or the opposite?

Finding a definitive answer to this question is difficult, and often we look not only at the normative question (should we do it) but also the practical question (what happens if we do). Looking at the three main practical benefits of social insurance helps us understand when risks should be covered by it.

1. Social insurance protects vulnerable populations by designing coverage that is priced independent of risk—that is, all individuals generally pay the same amount or the same rate. Social Security, for example, does not charge higher rates to individuals with a longer life expectancy or higher probability of disability.

2. Social insurance emphasizes adequacy of coverage, providing a guaranteed minimum level of benefits to everyone. Low-income people who save the same percentage of their income as high-income earners could still end up in poverty in old age without Social Security because the replacement rate of that income falls below the poverty line during a long retirement. In contrast, Social Security provides a minimum benefit to all fully insured individuals in retirement.
3. While it may seem that social insurance programs would be *more* expensive than private insurance to operate, this is frequently not the case. Because social insurance programs are generally broad-based—including all or nearly all citizens—they can take advantage of economies of scale that lead to low administrative costs. An example of this sort of efficiency can be found with Social Security, which has extraordinarily low administrative costs relative to private insurers or pension providers that provide a similar service. For every dollar in benefits, Social Security spends less than one cent on administration.

Why do we need social insurance? The example of Social Security

When we asked at the beginning of this chapter, "What is Social Security?" we said that it was insurance. More explicitly, it is a social insurance program administered by the U.S. government. It provides insurance to workers and their families against the risks related to retirement, disability, and death.

In essence, it's insurance for the risks that go hand-in-hand with getting older but are out of one's control, risks that affect all of us, risks that can never be perfectly planned for. Risks such as:

External economic shocks:

- From October 9, 2007 (the last peak of the stock market before the Great Recession) to March 9, 2009 (in the depths of the recession), prices for equities fell 57%. This drop translated into a total loss of $2.8 trillion in equity assets in 401(k) plans and individual retirement accounts.[48]

Insufficient savings to match longevity:

- Most people cannot easily estimate how long they will live and often do not consider this factor when saving for retirement. One analysis by the Center for Retirement Research at Boston College estimated that about half of households entering retirement age in 2013 were at risk of outliving their savings and could be forced to significantly reduce their standard of living.[49]

Inflation:

- Retirees that rely on fixed income are especially vulnerable to inflation. This means that a worker's retirement savings needs to grow each year by at least the rate of inflation to keep up with the cost of living.

Disability and Family Life Insurance:

- A 20-year-old worker has a 1-in-4 chance of becoming disabled before reaching full retirement age.
- Private market disability insurance plans are expensive—the vast majority of workers do not have them and are (except for their Social Security eligibility) completely unprepared for a disability that would prevent them from working again.
- Social Security is the main source of life insurance for families with children when tragedy strikes. Almost all workers—including men and women in the Armed Services—are covered by Social Security. If a worker passes away, Social Security provides survivor benefits to his or her spouse and children.[50]

In the end, we all face risks to our economic security—including the risk of poverty—even if we have done everything right.

Social Security, by having all the elements of social insurance—broad, mandated coverage to almost all citizens, minimum benefits and coverage, efficient administration, protection of vulnerable groups, and the guarantee of the U.S. government—addresses these risks to economic security.

CHAPTER 3

Social Security's finances: if it ain't broke, don't break it

OUTLINE

I. A self-financed program
II. The trust fund
III. Causes of the shortfall
   A. Fertility
   B. Life expectancy
   C. Inequality
IV. Options for reform
   A. Ways to increase revenue
   B. Ways to cut benefits

The aspect of Social Security that garners the most attention from politicians and the media is its finances. Is it broke? Is there a looming crisis? When do benefits end? Will the baby boomers bankrupt the program? Isn't it a giant Ponzi scheme? In this chapter, we will discuss in detail Social Security's finances, how it works, and its outlook.

However, the program's financial status can be summed up in one sentence:

> ***Social Security's projected shortfall is 2.68% of taxable earnings over the next 75 years.***[51]

A self-financed program

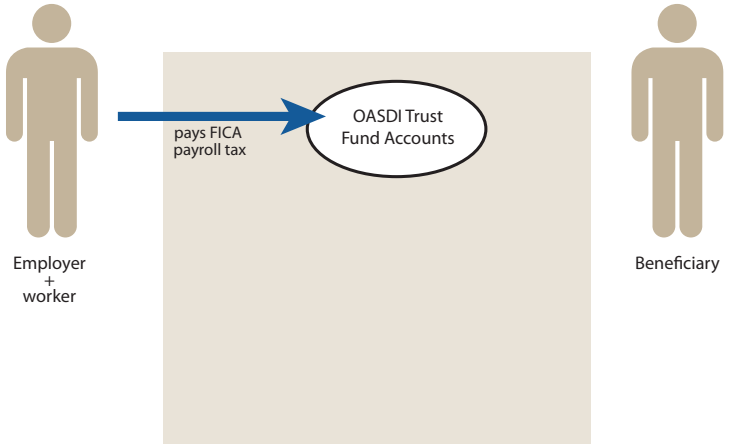
We tend to think of the government as a single huge mass; taxes go into it and spending comes out of it. That is actually not the case. The U.S. Department of the Treasury has separate accounts for different revenue streams such as payroll taxes, income taxes, and tariffs. Some of them are added together to make up general revenue, and some are devoted to something specific. Social Security has its own U.S. Treasury accounts, one for Old-Age and Survivors Insurance, created in 1940, and one for Disability Insurance, created in 1956. While technically separate accounts, they are both shepherded by the same trustees and are added together for 75-year projections. They are collectively referred to as the Old-Age, Survivors, and Disability Insurance (OASDI) Trust Fund.

Social Security is the only major program in the federal budget that is funded entirely by dedicated revenue sources. All of Social Security's revenue—which comes from the payroll tax, interest on the trust fund, and the tax on high-income beneficiaries—goes into the trust fund. All of Social Security's outlays—which are the payments of its benefits (plus administrative costs, which are less than 1% of outlays)—come from the trust fund. When outlays are less than revenue in a single year, the trust fund has an annual surplus, and the fund is legally required to convert its surpluses into U.S. Treasury securities. Those securities, like all federal government securities, are backed by the full faith and credit of the United States government. One can think of the trust fund as Social Security's bank account.

Here's how it works:

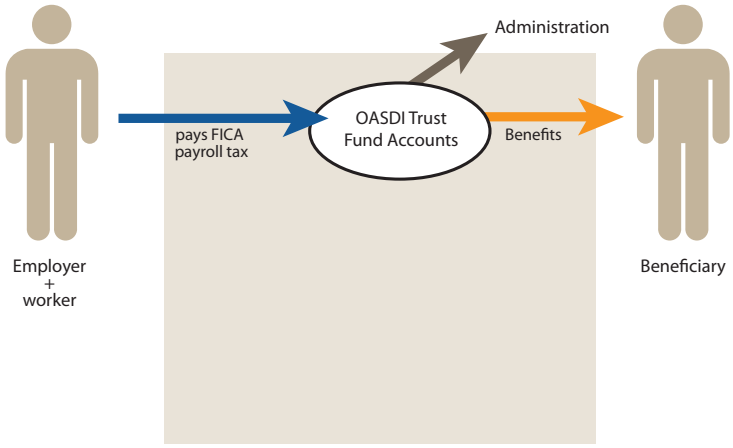
1 Workers and employers pay Federal Insurance Contribution Act (FICA) taxes.

- Both employers and employees pay 6.2% on earnings up to a cap, which was $118,500 in 2015. The cap is indexed to a measure of average wages and increases automatically each year.
- Payroll contributions account for 85% of Social Security's revenue.
- 94% of workers earn below the cap.
- Payroll tax contributions totaled $756 billion in 2014.



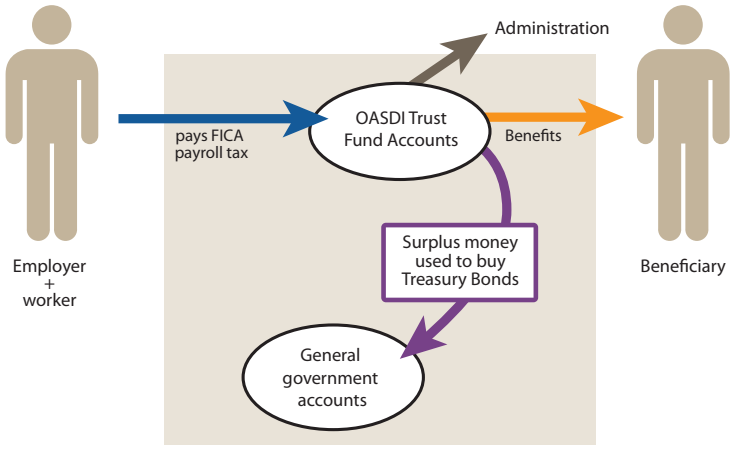
2 The trust fund pays out benefits and administration costs.

- Benefits totaled $848.5 billion in 2014.
- Administrative costs account for 0.7% of total spending.



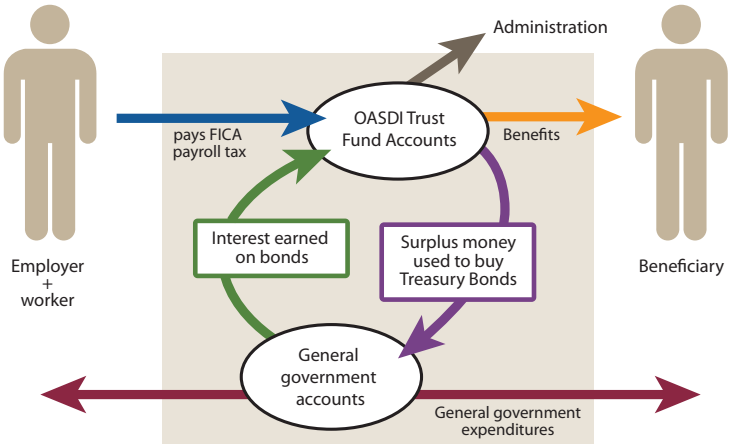
3 Surplus money is used to buy Treasury bonds.

- By law, Social Security's surplus funds must be converted into special issue securities that are backed by the full faith and credit of the government and can be redeemed at any time at face value. In exchange for the sale of the bonds, the government receives the cash and puts it in its general accounts.



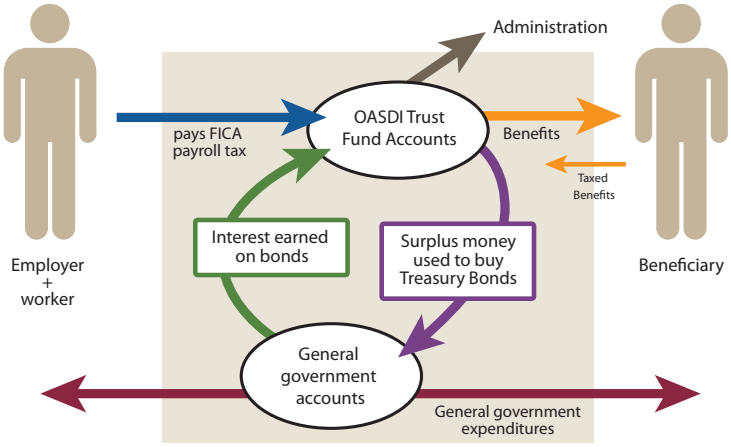
4 The government pays interest into the trust fund.

- The Treasury securities yield interest, which is paid back into the trust fund.
- Interest payments to the trust fund totaled $98.2 billion in 2014.
- Interest payments accounted for 11% of revenue in 2014.



5 Benefits of higher-income beneficiaries are taxed.

- Higher-income beneficiaries may pay income tax on up to 85% of their benefits.
- About two-thirds of this revenue goes to Social Security, and the rest to Medicare.
- For most seniors, Social Security benefits do not count toward taxable income.
- Taxes from higher-income retirees were 3% of Social Security's revenue in 2014.



Social Security is thus a part and at the same time not a part of the federal budget. Legally, it is separate. The letter of the law in the Social Security Act is clear: OASDI has separate Treasury accounts and operates independently of the yearly machinations of the federal budget. It has dedicated revenue streams and automatically adjusted benefits. Most of the government programs that we think of do not work this way—there is no dedicated funding for the Department of Defense, for example. Instead, defense spending comes from general revenue derived from personal income taxes, corporate income taxes, estate taxes, gift taxes, fees, tariffs, etc. Social Security is independent in a way that most programs aren't because it is designed to be self-sustaining.

However, it does interact with the federal budget as a purchaser of U.S. Treasury securities. Indeed, most of the confusion, misconceptions, and misinformation about Social Security—the claims of double counting and the charge that the government is spending money it does not have—derive from its role as a holder of these securities. But the transaction is simple to understand.

Yearly surpluses have been accumulating in the trust fund since 1982.[52] Social Security has collected more in revenue than it has paid out in benefits, creating substantial reserves for the retirement of the baby boomers. This accumulated surplus cannot be kept as cash, however, because cash continually loses value due to inflation. For example, if the surplus of $2.8 trillion was currently held as cash and inflation was 2%, the real loss would be $56 billion each year. To preserve the purchasing power of accumulated surpluses, then, they are invested, and because securities from the United States government are generally considered one of the world's safest investments, the trust fund has been invested exclusively in these securities.

The government spends the cash it receives from the sale of securities to Social Security, but that's what it does with the cash it receives from the sale of any security, whether the buyer is an individual U.S. citizen, a foreign country (China, Japan, Brazil, Switzerland, Ireland, and the United Kingdom are the largest holders[53]), a mutual fund, a public or private pension fund, or a state or local government. The cash the government generates from the sale of securities sums up to its total gross debt.

Because the sale of securities to the Social Security trust fund occurs within the federal government, some analysts contend that the surplus is just an accounting fiction—the money is spent and gone. There are two problems with this argument. First, the accumulated surplus in the trust fund is held in Treasury securities. For the trust fund to be meaningless, those securities, issued by the U.S. Treasury and backed by the full faith and credit of the U.S. government, would have to be valueless. In that case, *all* securities issued by the U.S. government are an accounting fiction, whether they are held by the trust fund, foreign governments, investment banks, pension funds, mutual funds, or any holder of a U.S. bond. To say that the trust fund has no value is tantamount to a declaration that the U.S. is unable to meet any of its obligations.

Second, the fact that presidential administrations and U.S. Congresses have used Social Security's cash to finance deficit spending is a problem that the president and the Congress will have to address, but it is not a problem with Social Security itself. Social Security has loaned the government money fair and square; deficit spending by the general government accounts is neither a reflection nor a result of Social Security.

The trust fund

The OASDI Trust Fund held $2.8 trillion at the end of 2014,[54] and it is expected that annual income from the fund and contributions to Social Security will cover annual costs until 2020.[55] At that point, the system will start drawing on the trust fund principal.

The trust fund is managed by its Board of Trustees, composed of the secretary of the treasury, the secretary of labor, the secretary of health and human services, the commissioner of Social Security, and two members of the public, who are confirmed by the Senate. This Board of Trustees also oversees the Medicare trust funds.

The Board of Trustees is required to give a comprehensive report every year on Social Security, including basic statistics about income, benefits, and finances, and projections about the future. This annual report, called the *Trustees Report* (short for *The Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust*

Funds), is the most important and reliable source of information about the trust fund and the financial health of Social Security. It includes:

- the financial status of the prior year (e.g., 2014)
- the projected status of the current year (e.g., 2015)
- short-term (10-year) estimates (e.g. to 2024)
- long-term (75-year) estimates (e.g. to 2090)
- the assumptions used to make these estimates

Today, Social Security faces a long-term shortfall over the 75-year window. Since 1984, Social Security has collected more in taxes than it paid out in benefits, and the yearly surpluses have accumulated in the trust fund. However, benefit payments are expected to rise in the future. The trustees project that in 2020 Social Security will need to rely on the trust fund reserves to meet its obligations and that the trust fund itself will run out of funds two decades from now. At that point, Social Security will be able to cover 79% of benefits at their promised level.[56]

The difference between all expected outlays summed over the next 75 years and all expected revenues summed over the next 75 years is 2.68% of taxable earnings (Social Security's tax base). This projected shortfall has been around since the trustees' report of 1984, and it has circled around 2.0% of taxable earnings since 1994.[57] To put that in context, if taxes were raised 1.4 percentage points on both the employer and employee side, to 7.6% each, the shortfall would disappear. (See *"What didn't happen"* on page 30.)

Forecasting the future in the Trustees Report

To make projections for Social Security, the trustees must make assumptions in three key areas:[58]

- **Demographics** - Fertility, mortality, immigration, life expectancy
- **Economics** - Productivity, inflation, wage growth, labor force, unemployment, gross domestic product, interest rates
- **Program parameters** - Automatic adjustments, covered employment, payroll tax revenue, taxable payroll earnings, the insured population, Old-Age and Survivors Insurance beneficiaries, Disability Insurance beneficiaries, average benefits, benefit payments, administrative costs, income from the taxation of benefits.

The trustees rely on detailed historical records of past trends to produce the forecasts in the Trustees Report. But like all forecasts, the projections are subject to considerable uncertainty, especially in the long term. In the 2015 report, actuaries estimated that under a "best case" scenario there would be no long-term shortfall and the program would remain solvent for at least the next 75 years. In contrast, under a "worst case" scenario, the actuaries estimated that trust fund reserves would be exhausted by 2028. In the "intermediate case," the one most frequently cited and used for policy purposes, the trust fund is exhausted in 2034. The difference between the best and worst case scenarios illustrates the variation and uncertainty involved in forecasting the future.[59]

Causes of the shortfall

Social Security's long-term shortfall is the result of an increase in projected spending that is not fully funded with current revenues. Between 1982 and 2014, Social Security spending averaged 4.4% of gross domestic product (GDP).[60] Currently, it has increased to 4.9% of GDP. Spending is projected to increase to about 6.05% of GDP by 2037, and then decline slightly, remaining between 5.9 and 6.2% of GDP through 2086 (**Figure**

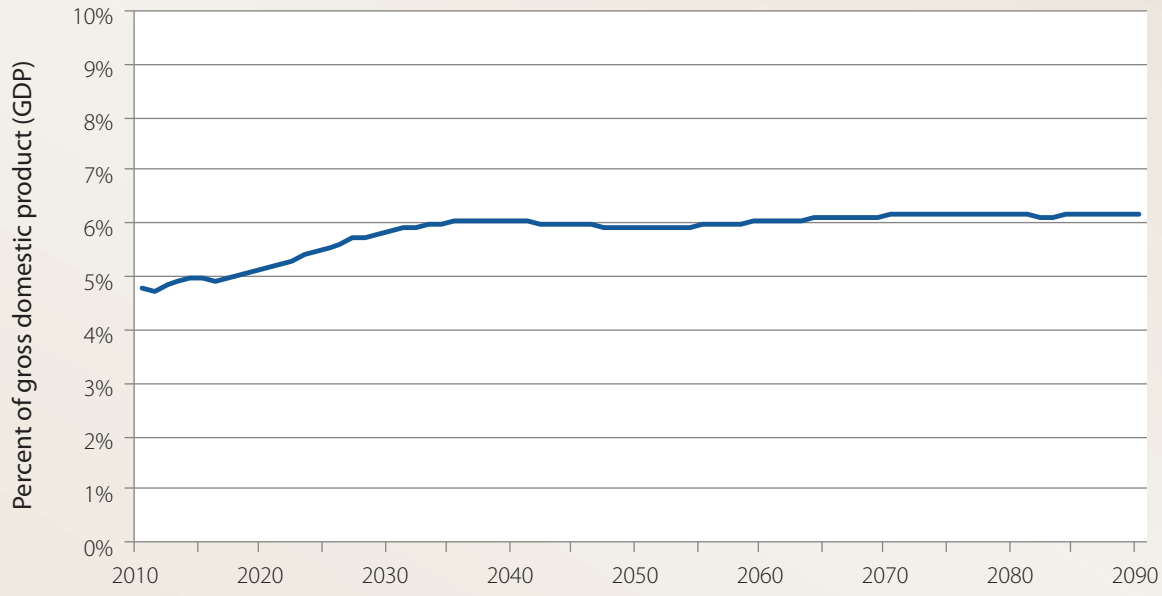
What didn't happen

The recession that began in December 2007 was the worst economic downturn since the Great Depression, earning it the moniker of the Great Recession. At its worst, job loss reached 8.7 million, or 6.3% of all jobs in the country, more than double the job loss of prior recessions. At one point in 2010, over 15 million Americans were out of work. Household wealth in the stock market and housing took an enormous hit. In the 12 months following its peak in October 2007, the stock market declined 42%, which translated to a decline of $2.0 trillion[61] in individual retirement savings accounts (401(k)s, and IRAs). The total decline in wealth felt by households directly and indirectly, when including housing wealth, was $7.4 trillion.

Social Security, however, didn't miss a beat. No benefits were cut. No benefits were delayed. In fact, Social Security was able to support the increased rates of retirement that occurred as older unemployed or discouraged workers left the labor market. Although Social Security has had to dip into the trust fund to cover the recession-driven drop in projected revenues, the recession did not derail the program. On the contrary, Social Security functioned as it was designed to do: as an economic shock absorber, paying scheduled benefits that helped stabilize millions of families and thousands of local economies all across the United States. Social Security's performance during the worst economic downturn in seven decades—the worst economic downturn since the program was created in 1935—is testimony to its structure and the soundness of the trust fund.

FIGURE 3.1

Social Security as a Percent of GDP, 2010-2090



Source: SSA. 2015. Table VI.G4.--OASDI and HI Annual Income, Cost, and Balance as a percentage of GDP, Calendar Years 1970-2090. OASDI Trustees Report. http://www.socialsecurity.gov/OACT/TR/2015/lr6g4.html

Between 2015 and 2037, Social Security's spending as a percentage of GDP will increase from about 5% to 6%., then begin to flatten out.

3.1). Social Security's cost curve after about 2030 is flat—the problem is not infinitely increasing costs, but rather that the level of spending jumps from its previous level (4.4% of GDP) to a higher level (6.0% of GDP).

Some causes of the shortfall—fertility, life expectancy, and inequality—are discussed below.

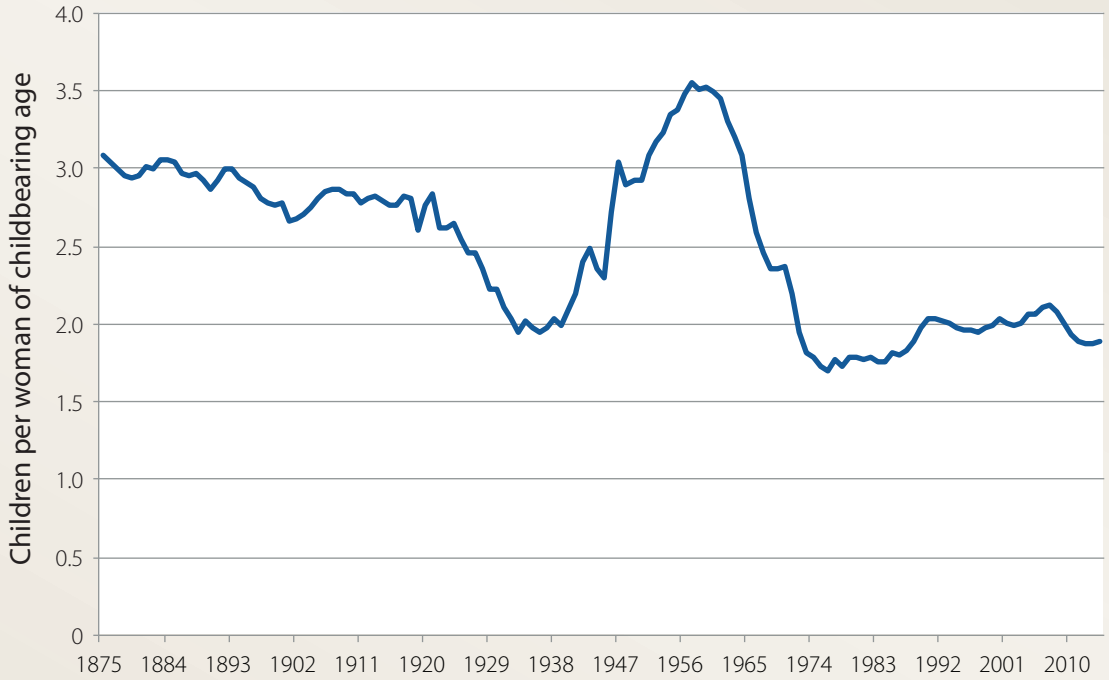
Fertility

Most people point to the retirement of the baby boomers as the principal cause of Social Security's alleged woes. The phrase "baby boomers" refers to the generation of Americans born between mid-1946 and 1964, a period of unusually high birth rates. The oldest of the roughly 78 million boomers reached full retirement age (66) in 2012, and the boomers are retiring at the unprecedented rate of 10,000 per day. Most will have retired by 2030, and their retirement en masse means that the number of workers per beneficiary will drop from 3.4 in 1990 to 2.2 in 2030.[62] For this reason—and also because longer-living boomers will be collecting benefits for decades after retiring—many conclude that the baby boomers are wrecking Social Security for later generations.

But that's not true. Remember that Social Security spreads risks and costs over a long time period so that it is insulated from short-term changes. As individual workers, we see this focus on the long term in the benefit calculation. Social Security averages the highest 35 years of earnings, so that periodic unemployment or low-paying jobs or time spent out of the labor force are balanced against all the years of higher earnings. For

FIGURE 3.2

U.S. fertility rates with adjustment for survival to age 10, 1875-2014



Source for years 1875-2003: Goss, Stephen A. 2010. The Future Financial Status of the Social Security Program. *Social Security Bulletin 70* (August). http://www. ssa.gov/policy/docs/ssb/v70n3/v70n3p111.html.
Source for years 2004-2014: SSA. 2015. The Long-Range Demographic Assumptions for the 2015 Trustees Report. OASDI Trustees Report. http://www.ssa.gov/oact/TR/2015/2015_Long-Range_Demographic_Assumptions.pdf

The adjusted fertility rate counts children who to survive to age 10. In order to make comparisons across time that take into account differences in medical advances, the Social Security Administration looks at the adjusted fertility rate.

the government, we see this in Social Security's finances. It has built up a sizeable trust fund, so that economic downturns, even if they last for years, cannot ruin Social Security's ability to pay beneficiaries. Social Security is a reflection and function of long-term trends.

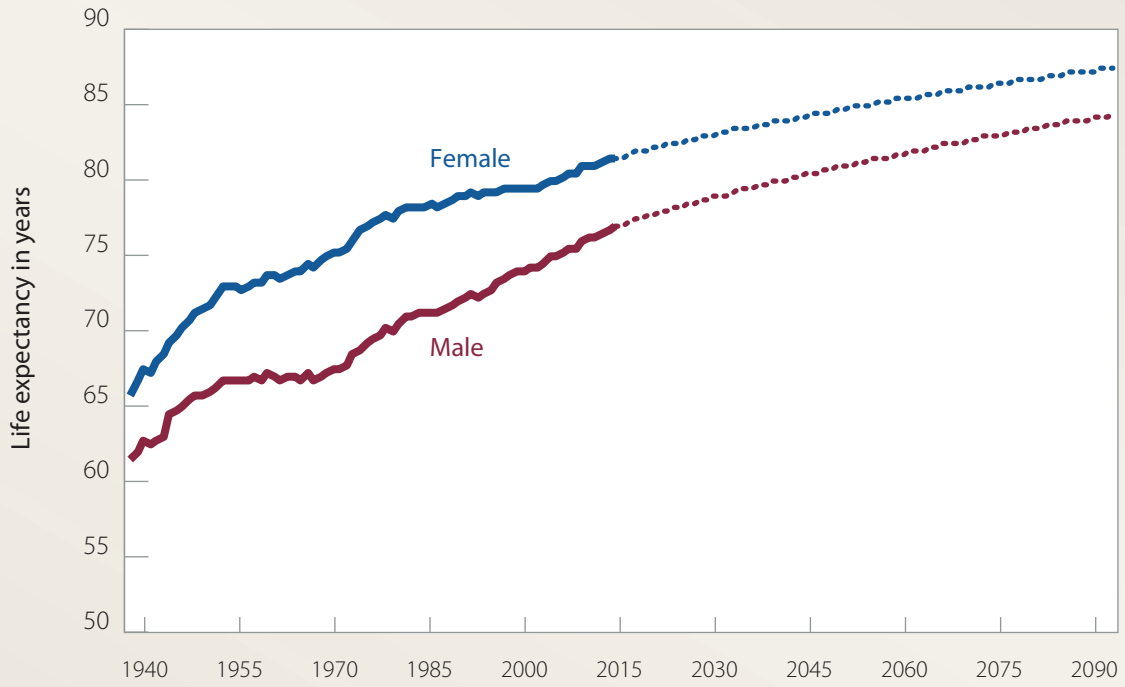
Between 1900 and 1964, the U.S. fertility rate averaged about 2.7 children per woman (**Figure 3.2**).[63] Although the baby boomers represented a jump in the rate to about 3.2 children per woman, this rise offset the years of the Great Depression and World War Two, when rates dropped to 2.3 children per woman. The boom was significant, but so was the dearth that preceded it. It was only after 1964 that the longer-term shift in birthrates occurred. The rate dropped in the 1970s to below 2 children per woman, and then it returned to 2 in the 1990s. The change in the worker-per-beneficiary ratio is a reflection of a long-term, lowered birthrate, and not just a single period of high births.

Life expectancy

Another often-referenced cause of Social Security's long-run shortfall is increasing life expectancy. Some have even pointed out that the retirement age now is higher than life expectancy was in 1935 when the Social Security Act was passed. Life expectancy for people born in 1940 was 61.4 for men and 65.7 for women; after seven decades it has climbed to 76.8 for men and 81.4 for women (**Figure 3.3**).[64] Increasing life expectancy is neither unwelcome nor unexpected. It would have hardly been the goal for workers retiring in 2010 (born in 1945) to only live as long as workers retiring in 1940 (born in 1885). An increase in life expectancy was predicted by the Social Security Administration as soon as the program started. Most of the gains in life expectancy occurred between 1940 and 1990, and the increase was not sudden. In addition, much of the gains are due

FIGURE 3.3

Life expectancy at birth, by gender, 1940-2090

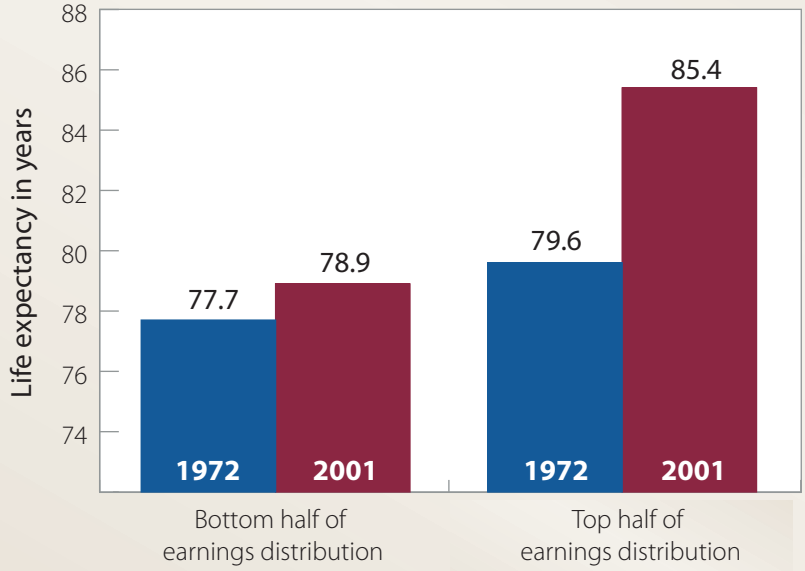


The solid lines denote actual life expectancy; the dotted lines denote projected life expectancy. The largest gains occurred between 1940 and 1950 and between 1970 and 1990.

Source: SSA. 2015. Table V.A3.-Period Life Expectancy. OASDITrustees Report. http://www.ssa.gov/oact/TR/2015/lr5a3.html

FIGURE 3.4

Life expectancy for male Social Security-covered workers (age 60) by earnings group, 1972 and 2001



Life expectancy can be measured at different ages. The most common ages are zero (life expectancy at birth) and 60 or 65 (life expectancy at retirement).

Between 1972 and 2001, men who were 60 years old saw a gain in life expectancy. However, the poorer half saw a gain of only1.2 years while the richer half saw a gain of 5.8 years.

Source: Waldron, Hilary. 2007. Trends in Mortality Differentials and Life Expectancy for Male Social Security-Covered Workers, by Socioeconomic Status. *Social Security Bulletin 67* (April 2008). http://www.ssa.gov/policy/docs/workingpapers/wp108.html

to reduced infant and child mortality, rather than an increase in longevity for those who make it to adulthood.

It is important to note that life expectancy varies across the income distribution, meaning that how long you are expected to live is different based on how much money you make. The richer you are, the more likely you are to have health insurance, have greater access to health care, and have a job that is not physically straining. Gains in life expectancy have not been equal (**Figure 3.4**).[65]

Inequality

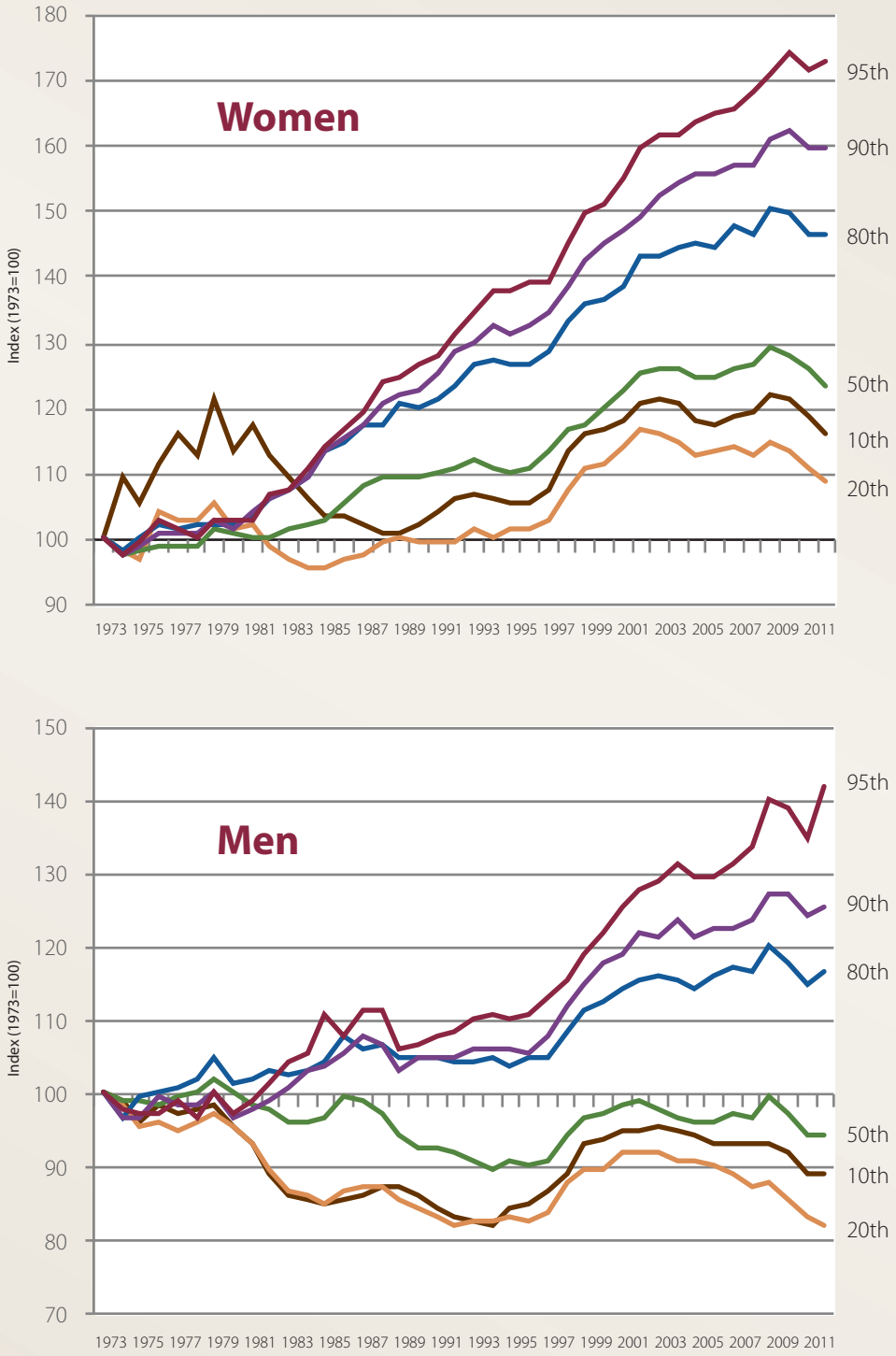
Inequality is a relative measure. There is no single definitive metric that is used to measure how unequal a country is. One could look at health, housing, education, or any number of statistics. Identifying the most relevant measure of inequality often depends on the country and economy under discussion. For example, in a developing country where the main industry is agriculture, inequality could be measured in the distribution of land. On the other hand, in an advanced economy, like the United States, the more relevant measures of inequality may be job-based variables, such as compensation. But even compensation can mean different things—wages, non-wage income (such as stock investments), and non-wage benefits (such as health care and retirement benefits).

By virtually all compensation measures, inequality has grown over the past 30 years, but in the context of Social Security we will talk about wages only. The past 40 years have been marked by a sharp rise in wage inequality. The top 20% of earners have seen their hourly wage grow much faster than the bottom 80%, and the richer you are, the more your wages have grown. However, the bottom half has grown more slowly (for women) or even fell (for men) (**Figure 3.5**).

Why are we talking about the growth in inequality in a chapter about Social Security's finances? Social Security collects taxes on annual wages below a certain level, called the tax cap, which was $118,500 in 2015. The basis for this level was set in 1977, when the tax cap captured 90% of aggregate wages. This means that if you took every American worker's salary and added them together, 90% of that total would have been subject to the payroll tax. This pool is referred to as Social Security's tax base. Every year since, the tax cap was adjusted based on the average wages of all workers. If, on average, every worker in America made 5% more in a given year, the tax cap increased by 5%. Averages, however, are not

FIGURE 3.5

Change in real hourly wages by wage percentile, 1973-2012



Wage percentile refers to the wages at key markers in the wage distribution. If you lined up every person in the U.S. who worked, from richest to poorest, the median wage earner would be the person in the middle. This is called the 50th percentile, because 50% of wage earners make more and 50% make less. Note that growth at the 50th percentile refers to that one person and not the average for the bottom 50%.

This is also the case for the 95th, 90th, 80th, 20th, and 10th percentiles shown here. None of them are averages or representative of some share of the population. Rather, they represent the performance of the wages at key levels.

For men, workers at each level in the bottom half have lost ground since 1973. For women, the bottom half has grown, but not as quickly as the top half.

Source: Authors' analysis of Economic Policy Institute. 2015. The State of Working America 12th edition. Table 4.4. Real wage deciles, male and female workers, 2012 dollars. http://stateofworkingamerica.org/data/

always representative of a uniform experience. Since 1983, the roughly 6% of Americans who earn above the tax cap saw their wages grow faster than the average.[66] The result is that the tax cap did not grow fast enough to keep pace with rising wages at the high end: by 2013, Social Security's taxable base had eroded from 90% of wages in 1983 to 82.7%.[67]

Estimates vary, but roughly a third of Social Security's shortfall comes from the rise in inequality and the fact that now 17.3% of aggregate earnings, instead of 10%, are not subject to the Social Security tax.

Options for reform

Even though the trust fund is not projected to exhaust its resources until 2034, we do not want to wait that long to fix the long-run shortfall, mostly because we do not want to unnecessarily deplete the trust fund. Not only does it provide a buffer during economic downturns, as it did in the 1970s and during the Great Recession, but it is also a significant source of revenue thanks to the interest it earns.

The Office of the Chief Actuary (OACT) is the chief source of information regarding Social Security's finances. Any proposal that is made to modify Social Security is "scored" by the actuary—the OACT calculates how much the proposal costs or saves over the 75-year window. All scored proposals are kept on the OACT website. This section reviews some of the major options for improving Social Security's finances. The options presented are not exhaustive, and each reform has variations in terms of extent and timing.[68]

Ways to increase revenue

1. Raise the payroll tax rate

WAYS TO INCREASE REVENUE

The current tax rate for Social Security's payroll contributions is 12.4% on the taxable maximum, shared between workers and employers, who each pay 6.2%. A 13-year phase-in to this level was implemented in 1977, but the 1983 reforms accelerated the phase-in period.

Pros

- Straightforward method for closing the projected shortfall
- Maintains the link between taxes and benefits
- Increased taxes could be offset for low-income workers by increases in the Earned Income Tax Credit

Cons

- Increasing the cost of compensation could result in fewer jobs overall
- The payroll tax is regressive with respect to wages—increased contributions will disproportionately burden lower-wage earners
- Tax increases result in deadweight loss in the economy; they are inefficient, and the higher the tax, the more inefficient it is

Options	Change in actuarial balance (the deficit as a percent of payroll)	Percent of 75-year shortfall (2.68% of payroll) eliminated
Raise payroll tax rate of 12.4% (for employees and employers combined) by 2.9 percentage points to 15.3% in 2016 and later.	-2.76	103%
Raise payroll tax rate gradually (for employees and employers combined) by 0.1 percentage points in 2021; continue this increase each year for 20 years. By 2040, the combined rate would be 14.4%.	-1.43	53%

2. Raise the tax cap

As previously discussed, not all of a worker's earnings are subject to the payroll tax. Given the growth in wage inequality, Social Security's tax base—the maximum amount of earnings that can be taxed for Social Security—has eroded over time as the share of wages that are untaxed has increased. Various proposals would restore the cap to the 90% level, eliminate it altogether, or add a smaller tax above the cap.

The savings from these proposals vary based on the redistribution back to benefits. Social Security is an insurance program—you pay into the system while you're a worker, and it pays back to you when you stop working. Thus, if you pay more (your taxes are raised), then maybe you should get more back. If the cap is raised (or eliminated), some (or all) earnings above the cap will be brought beneath it, thus increasing the effective tax rate for these workers. If the cap is raised, a worker's additional contributions could either be credited toward benefits, or not.

Pros

- Directly addresses inequality, a main source of the current shortfall
- Increases the progressivity of Social Security
- Does not add additional burdens to low- and middle-income families

Cons

- If more earnings are subject to taxes but these contributions ***are not*** credited, the historical link between contributions and benefits would be weakened
- If more earnings are subject to taxes and these contributions ***are*** credited, the effect on reducing the shortfall will be diminished
- Increases Social Security contributions for higher earners, which may encourage tax shifting

Options	Change in actuarial balance (the deficit as a percent of payroll)	Percent of 75-year short-fall (2.68% of payroll) eliminated
Beginning in 2016, make all earnings subject to the payroll tax (but do not credit contributions).	-2.36	88%
Beginning in 2016, make all earnings subject to the payroll tax (and credit contributions).	-1.91	71%
Raise the taxable maximum amount to include 90% of total OASDI covered earnings (and credit contributions). Phase in this increase gradually between 2016 and 2025.	-.77	29%
Raise the taxable maximum amount to include 90% of total OASDI covered earnings (but do not credit contributions). Begin in 2018 and raise the taxable maximum each year by an additional 2% over the current-law, wage-indexed amount.	-.73	27%
Impose a 3% payroll tax on OASDI covered earnings above the current taxable maximum starting in 2016 (but do not credit contributions).	-.61	23%

3. Extend Social Security coverage

WAYS TO INCREASE REVENUE

When Social Security was enacted in 1935, it covered only about half of workers. This share has been increased over time to move toward Social Security's goal of universal coverage; today, over 90% of workers are covered. Public employees at the federal, state, and local level were a special case because they had their own retirement system and were excluded from Social Security. The 1983 reform brought federal workers into Social Security—all new workers became part of Social Security, and existing employees had the option to join. However, this change did not apply to state and local public employees, about a quarter of whom were not covered by Social Security as of 2008.[69] Bringing those new workers into Social Security, while giving existing employees the option to join, would immediately increase Social Security's tax revenue.

Pros

- Keeps with Social Security's social insurance principle of universal coverage
- Provides seamless coverage for workers who change employment between covered and uncovered work
- Extends Social Security's life and disability insurance to new workers

Cons

- These workers and state governments would now be subject to the Social Security tax
- State and local governments already have alternative retirement systems

Options	Change in actuarial balance (the deficit as a percent of payroll)	Percent of 75-year short-fall (2.68% of payroll) eliminated
Cover newly hired state and local government employees beginning in 2016.	-.15	6%

4. Invest part of the trust fund in equities

WAYS TO INCREASE REVENUE

Social Security's trust fund is required by law to be converted into U.S. Treasury securities, for which the actuary projects a real return of 2.9%.[70] This return is lower, albeit safer, compared to most equity investments. In order to raise revenue, part of the trust fund could be invested in equity markets. Although the risk to assets would be higher in equities, downturns in the market would be tempered by the length of investment—Social Security has a long time to recover from any drop in prices. This option is more difficult to score, because the assumed return on the equity investment is subject to much uncertainty.

Pros

- Could generate higher returns on the trust fund compared to lower-yield Treasury securities
- Social Security is in a good position to act as a long-term investor

Cons

- Trust fund would be exposed to greater risk

Options	Change in actuarial balance (the deficit as a percent of payroll)	Percent of 75-year short-fall (2.68% of payroll) eliminated
Gradually invest 15% of OASDI Trust Fund assets in equities assuming an ultimate 6.4% annual real rate of return. Increase the portion in equities by 1.5% each year from 2016 through 2025. Maintain the percentage at 15% thereafter.	-.23	9%
Invest 40% of the trust fund assets in equities (phased in 2016-30), assuming an ultimate 5.4% real rate of return on equities.	-.42	16%
Invest 40% of the trust fund assets in equities (phased in 2016-30), assuming an ultimate 6.4% real rate of return on equities.	-.57	21%

5. Dedicate other taxes to Social Security

The payroll tax is regressive with respect to wage incomes. Increasing the tax on workers only increases its regressivity. In order to increase revenue, other tax sources could be dedicated to Social Security. The most frequently suggested is the estate tax, a tax on the assets transferred from a deceased individual. This tax is applied only to wealthy individuals. Currently, for example, estates are taxed only if they are worth more than $5.43 million for an individual or $10.86 million for a couple. If the estate tax were to be dedicated to Social Security, Social Security would remain an independent program with its own revenue, but the number of revenue sources would increase from three (payroll tax, benefit tax, interest) to four (payroll tax, benefit tax, interest, and estate tax).

Pros

- The tax is progressive—it affects only the very wealthy
- It is an equitable way to pay off the "legacy debt" of Social Security. This debt was accrued in the early years of Social Security's history when Congress decided to allow the first generations of beneficiaries to receive far more in Social Security benefits than their contributions plus interest would have yielded.[71]

Cons

- Higher tax rates for the wealthy could encourage tax shifting
- The estate tax is already a part of government general revenue, so a proportional increase in other taxes would be needed to offset this reallocation

Option (estimates from 2009)	Change in actuarial balance (the deficit as a percent of payroll in year of estimate)	Percent of 75-year short-fall (2.68% of payroll) eliminated
Dedicate estate tax revenue at the 2009 level to Social Security.[72]	-.51	19%

Ways to cut benefits

1. Increase the retirement age

The Social Security amendments of 1983 provided for a gradual increase in the full retirement age (or FRA, the age of first eligibility for unreduced benefits) from 65 to 67, phased in over 22 years.[73] The full retirement age is already at 66 for those reaching that age in 2015.

FULL RETIREMENT AGE

Year of birth	Age	Year of birth	Age	Year of birth	Age
1937 and prior	65	1942	65 and 10 months	1958	66 and 8 months
1938	65 and 2 months	1943-54	66	1959	66 and 10 months
1939	65 and 4 months	1955	66 and 2 months	1960 and later	67
1940	65 and 6 months	1956	66 and 4 months		
1941	65 and 8 months	1957	66 and 6 months		

One way to slow the growth of benefits would be to gradually raise the full retirement age again, or to index it to life expectancy.

Pros

- Keeps pace with improvements in average life expectancy

Cons

- An increase in the FRA is equivalent to an across-the-board benefit cut, which places disproportionate burdens on the most vulnerable retirees
- Gains in life expectancy have gone overwhelmingly to high-income individuals
- Benefit cut will affect disadvantaged populations with lower life expectancies as well as those that work in physically demanding jobs
- Life expectancy for people who are 65 has only increased by 3.7 years for men and 2.0 years for women since 1985; it is not projected to gain another two years until 2039 for men and 2046 for women; increasing the retirement age is premature[74]
- Will likely result in an increased number of claims for disability insurance, as people who are disabled and have not reached the full retirement age seek assistance

Options	Change in actuarial balance (the deficit as a percent of payroll)	Percent of 75-year shortfall (2.68% of payroll) eliminated
Index benefits to longevity after the full retirement age (FRA) reaches age 67 under current law.	-.48	17%
Gradually raise the normal retirement age to 68 by 2028.	-.43	15%
Gradually raise the normal retirement age to 70 by 2070.	-.68	23%

2. Change the benefit calculation

Social Security uses a progressive formula to calculate benefits. The benefit, or primary insurance amount (PIA), is based on a worker's average indexed monthly earnings (AIME), a monthly amount that summarizes the worker's lifetime earnings. The AIME is based on the highest 35 years of earnings. There are proposals to include an additional five years and base the AIME on the highest 40 years of earnings. Because it adds up to five of a worker's lowest-earning years to the equation, this change would lower the average wages upon which the AIME is based, amounting to a cut to benefits.

Pros

- Reflects that people are working longer

Cons

- Penalizes workers with gaps in their work history, often caused by such life events as taking time out to raise children, seeking additional education, or suffering periods of unemployment

After taking the highest 35 years of earnings, Social Security then adjusts this amount based on the average growth of wages over that time period. This is a key step: wages grow over time, generally faster than prices, which is the source of improvement in living standards in America. If wage and price growth were equal, then living standards would stagnate; but because wage growth outpaces price growth, living standards improve. An option to reduce benefits would be to change the indexing of initial benefit levels from average wage growth to average price growth. This would yield initial benefits that reflect a mix of American living standards over time from the beginning, middle, and end of one's career. In contrast, the current system of wage-indexing initial benefits preserves the living standards at the end of one's working life.

Pros

- Biggest benefit cuts are for higher-wage earners, who rely less on Social Security
- Many of these proposals exempt the lowest earners

Cons

- The benefit cut increases over time because prices grow more slowly than wages
- High-wage earners will pay the same in taxes but receive less in benefits, possibly causing them to reduce their support of the program

Options	Change in actuarial balance (the deficit as a percent of payroll)	Percent of 75-year shortfall (2.68% of payroll) eliminated
Increase the number of years used to calculate benefits for retirees and survivors (but not for disabled workers) from 35 to 40, phased in 2015-23.	-.46	16%
Beginning with those newly eligible for OASDI benefits in 2021 and later, reduce PIA formula factors so that when initial benefits are calculated, earlier earnings are adjusted for inflation rather than for increases in real wages.	-2.56	89%
Maintain current benefits for the bottom 30% of workers (those whose career earnings averaged about $25,000 [in today's dollars] or less); reduce formula factors so that when initial benefits are calculated, earlier earnings are adjusted for inflation rather than for increases in real wages.	-1.41	49%

Options	Change in actuarial balance (the deficit as a percent of payroll)	Percent of 75-year short-fall (2.68% of payroll) eliminated
Maintain current benefits for bottom 40% of workers (those whose career earnings averaged about $33,000 [in today's dollars] or less); reduce formula factors so that when initial benefits are calculated, earlier earnings are adjusted for inflation rather than for increases in real wages.	-1.18	41%
Maintain current benefits for bottom 50% of workers (those whose career earnings averaged about $42,000 [in today's dollars] or less); reduce formula factors so that when initial benefits are calculated, earlier earnings are adjusted for inflation rather than for increases in real wages.	-.95	33%

3. Across-the-board cuts

A simple way to cut benefits is to introduce an across-the-board benefit cut, reducing all benefits for new recipients.

Pros

- Simple

Cons

- Already, the current average annual benefit for a retiree is around $16,000, which is barely above poverty
- Arbitrarily cuts benefits for workers

Options	Change in actuarial balance (the deficit as a percent of payroll)	Percent of 75-year short-fall (2.68% of payroll) eliminated
Reduce benefits by 3% for those newly eligible for benefits in 2015 and later.	-.37	13%
Reduce benefits by 5% for those newly eligible for benefits in 2015 and later.	-.62	22%

4. Reduce the cost-of-living adjustment — ways to cut benefits

Beginning in 1975,[75] benefits were automatically adjusted each year based on inflation, called the cost-of-living adjustment (COLA). Before then, Congress frequently amended the Social Security Act in order to raise benefits and keep up with the growth in prices. There are many measures of the change in prices; the consumer price index (CPI) comes in many forms. The CPI-W is the consumer price index for urban wage earners and clerical workers, and is currently used for the COLA calculation. The CPI-U is the consumer price index for all urban consumers. The most common proposal is to switch to the "chained" CPI, a variation of the CPI-U, which would yield a smaller increase on average.

Pros

- Reduces costs

Cons

- Lowers the standard of living of retirees, the disabled, and their dependents
- Older beneficiaries have very high medical costs, whose prices already rise faster than inflation

Options	Change in actuarial balance (the deficit as a percent of payroll)	Percent of 75-year short-fall (2.68% of payroll) eliminated
Beginning in December 2015, reduce the annual COLA by 1 percentage point	-1.76	61%
Starting with the December 2015 COLA, compute the COLA using a chained version of the consumer price index for wage and salary workers (CPI-W). This new computation is estimated to result in an annual COLA that is 0.3 percentage point less, on average.	-.56	19%

Conclusion

Social Security is self-sustaining and solvent; it is neither broken nor bankrupt. It faces a manageable shortfall over a 75-year actuarial window that is a reflection of long-term trends in the economy, whether they be good (increased life expectancy), bad (increased inequality), or simply a change from the past (declining fertility rates).

CHAPTER 4

Social Security in context: the third rail of politics

OUTLINE

I. Social Security and public opinion
II. Social Security and retirement security
III. Five arguments against Social Security
   A. Budgetary – Social Security is too expensive
   B. Philosophical – we should not have government involvement in market outcomes
   C. Financial – Social Security is a poor financial investment
   D. Economic – Social Security is a poor government investment
   E. Behavioral – Social Security alters individual economic behavior
IV. Five ways to improve Social Security
   A. New minimum benefit
   B. Wage credits for child care
   C. Accurate COLA calculation for seniors
   D. Restored student benefit
   E. Increased benefit for the oldest beneficiaries

Social Security occupies a unique place in politics. As an aide to the speaker of the House noted during the heated debate surrounding the Greenspan Commission in 1982, "Social Security is the third rail of politics. Touch it, you're dead."[76]

Why is the debate so contentious? How does Social Security manage to be incredibly popular, vitally important, and yet so frequently attacked? In this chapter, we will discuss the context of Social Security in three spheres—public opinion, retirement security, and policy—and answer why a program that is deeply ingrained in the American economy causes so much debate.

Social Security and public opinion

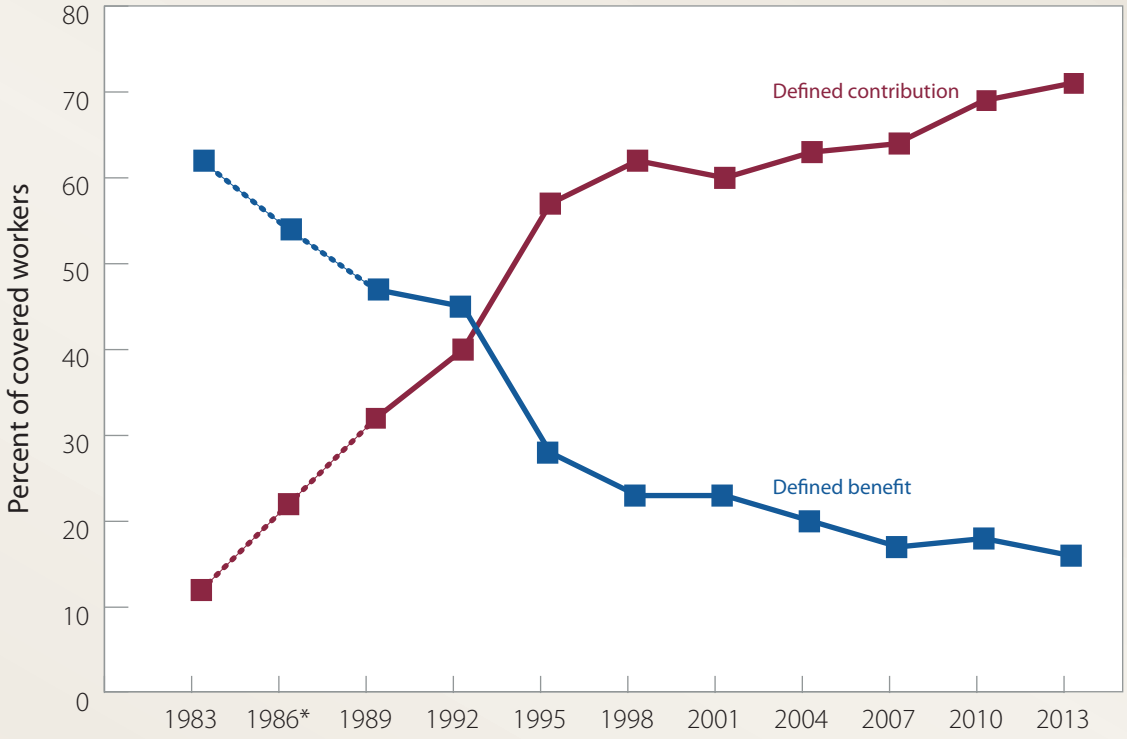
Social Security is popular. In most situations, an accurate read on public opinion is hard to nail down. Polling data is difficult to compare. Data often come from different sources that ask different questions at different times. Some polls will contact 2,000 or more households by phone, while some will talk to 500 in person. And when it comes to polling, even slight differences in wording can make large differences in responses. Any single poll should be met with skepticism. But Social Security has been the subject of hundreds of polls since becoming law in 1935. And while the pollsters have changed, the answer, for the most part, hasn't.[77] Americans like Social Security.

The American Association of Retired Persons (AARP) commissioned polls on Social Security's 60th, 70th, and 75th anniversaries.[78] A different private survey research firm conducted each poll. The results were consistent. Not only do Americans think Social Security is important, but they understand why it is important. Over 70% completely agreed with the statement that maybe they wouldn't need Social Security when they retired but they wanted to know it was there just in case. Over 60% completely agreed that everyone who pays into Social Security should receive benefits, regardless of income. And over 80% said that, even though they might do better on their own, it's important to contribute to Social Security for the common good.

Support for Social Security translates into the desire to see it expanded. Since the early 1980s, more than half of Americans have said they think that too little is spent on Social Security, according to the General Social Survey, as opposed to the less than 10% who think that too much is spent on Social Security.[79]

FIGURE 4.1

Workers with pension coverage by type of plan, 1983-2007



*There are no data for 1986. Data used here are the midpoint between 1983 and 1989.

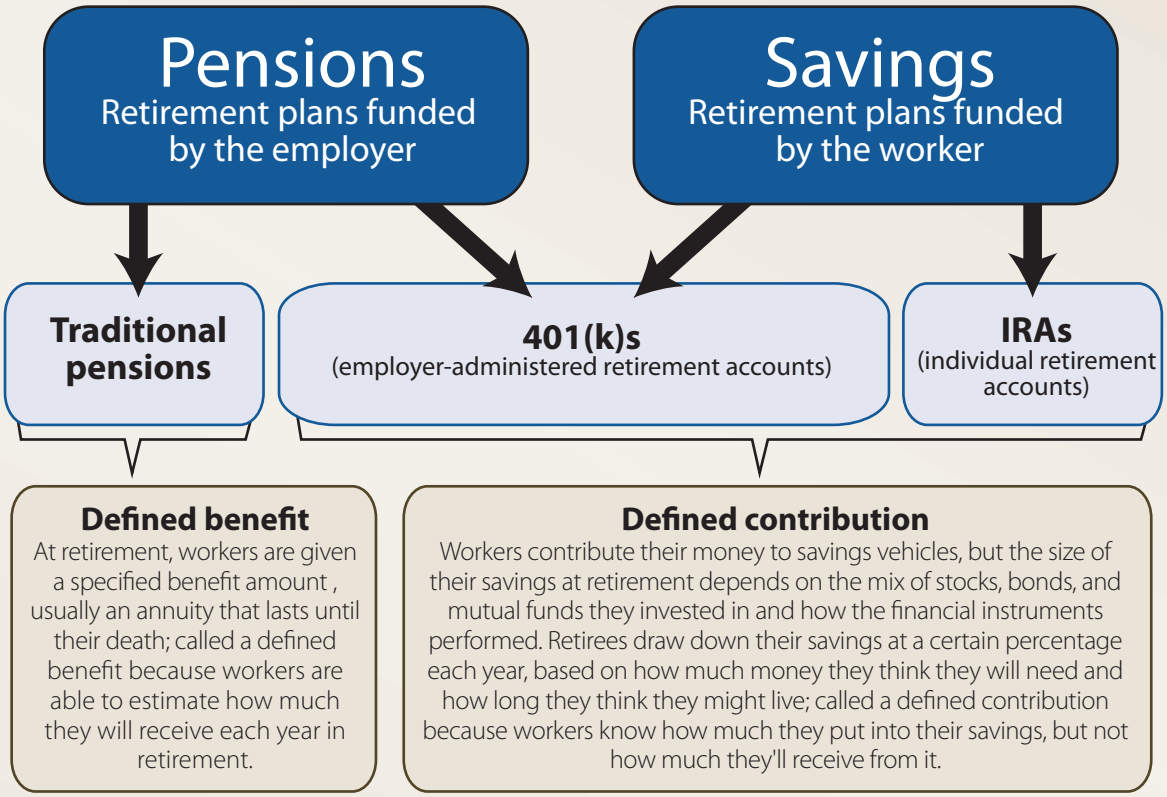
Source: Munnell, Alicia. 2014. 401(K)/IRA Holdings in 2013: An Update from the SCF. Center for Retirement Research at Boston College Brief No. #14-15. http://crr.bc.edu/wp-content/uploads/2014/09/IB_14-151.pdf.

Defined-benefit plans are those, like pensions, in which the worker receives a predetermined benefit. Defined-contribution plans, like 401(k)s, have no benefit guarantee at all, but there is a predetermined contribution to an account.

Since their introduction in 1981, 401(k)s have been replacing pensions as the primary form of employee retirement benefits.

FIGURE 4.2

Framework for understanding retirement planning



The terminology of retirement planning can be confusing because there is so much overlap. While pension might mean a traditional pension that has defined lifetime benefits, it can also be applied to any employer-funded retirement plan, including 401(k)s.

And while in general savings is defined as money that we don't spend, in retirement planning, savings refers to vehicles to which workers contribute to on a tax-preferred basis, as well as asset savings, such as a home.

Moreover, Americans don't want to see their benefits reduced. In more than 15 polls conducted since 1981, roughly 80% of Americans opposed cutting Social Security.[80] And Americans have said again and again that they don't mind paying taxes for Social Security. It is the second most popular tax, behind state income taxes.[81] Granted, tax popularity is measured by which taxes Americans dislike the least, but the payroll tax still consistently performs better than other taxes, such as the sales tax, the federal income tax, or property taxes.[82]

Support for the program is strong regardless of age; young people in particular would rather pay more for Social Security than see it cut. In a survey conducted in mid-2009 by the Rockefeller Foundation and the National Academy of Social Insurance, 79% of respondents age 18-34 agreed that it was critical to preserve Social Security "even if it means increasing working Americans' contributions to Social Security taxes."[83] Other surveys have found similar levels of support among young people. Another survey from 2010 showed that 92% of women and 80% of men age 18-44 don't mind paying Social Security taxes because it provides economic security to millions of Americans.[84] When a 2011 Pew survey asked about Social Security and deficit reduction, a majority of young people believed keeping Social Security benefits as they are was more important than reducing the deficit.[85]

Why is the program popular? Advocates for Social Security point to several aspects of the program that workers value. First, it has clear contributions and benefits. The payroll tax is straightforward and automatic, and it requires no extra effort on workers' part. And there is little confusion about who gets benefits and in what circumstances.

Second, Social Security targets sympathetic parts of the population—the elderly, the disabled, and the survivors of the deceased. While there is some discussion over whether certain beneficiaries, especially the very wealthy, need Social Security, there is little to no objection that they have earned it. Most Americans don't want to see the elderly population fall into poverty, and think it is right that they are supported in their old age after contributing to the economy and society for so long.

Third, Social Security resonates with American values. It appeals to a sense of fairness. Social Security is not a handout; recipients have to earn coverage through employment. There are no free riders in the Social Security system—there are only people of a certain age and the survivors of the deceased; even applicants for disability face a rigorous approval process.

Social Security is just that—security. None of us knows how much money we will need in retirement, because we don't know how long we're going to live, we don't know how fast inflation will rise, we don't know how the market will perform, and we don't know how much our biggest outlays—such as health care and energy—will cost. Social Security is insurance that protects workers from the risk of poverty in retirement, a risk that is real for every worker, and a program successfully offering this protection will always garner broad support. In other words, Social Security is popular because Social Security works.

Social Security and retirement security

Social Security is insurance for the most important investments most of us will ever make: our income in retirement. One reason Social Security has become more important in recent decades is that other investments intended to provide income in retirement have become more risky and less secure.

One cause of the increase in retirement-income risk is the decline in defined-benefit retirement plans. Defined-benefit plans are excellent for workers because the workers don't bear as much of the investment risk. The onus is on the employer or plan provider to create a large investment fund that can grow large enough to cover future retirement expenses. With defined-contribution plans, however, the worker bears all of the risk, and the onus is on the worker to manage the investment so that it grows large enough to cover future retirement expenses. Unfortunately, defined-benefit plans are not as common as they once were (**Figure 4.1**).

What do defined-benefit and defined-contribution plans look like? The three most common forms are traditional pensions, 401(k)s, and individual retirement accounts, or IRAs (**Figure 4.2**).

Traditional pensions

Traditional pensions are, outside of Social Security, the most secure form of retirement income. The benefit is provided by an employer to former employees during retirement. The size of the benefit is based on a formula that is tied to earnings and length of service and varies by employer, but it is almost always an annuity that is not adjusted to keep up with inflation. Workers with a traditional pension receive a set dollar amount every year in retirement until they die.

Key features:

- Pensions are a *defined benefit:* workers know how much they'll get from the plan each month or each year for their lifetimes.
- Workers often do not contribute directly to their pensions, but economists almost universally agree that workers pay for pensions in reduced wages.
- Employers bear the investment risk. They have a pension fund in which they invest to cover their future costs, and the worker is not responsible for its success or failure.
- 21% of workers had traditional pension coverage in 2013, mainly public employees.[86]

Problems:

- In order to qualify for a pension, workers have to work with a single employer for a specified length of service. This is difficult to achieve if a worker changes jobs or takes time off.
- Pensions are affected by the rise and fall of a market economy. During sustained economic downturns, when pension plans' revenues fall short of projections, workers and employers may find themselves forced to contribute more to help keep the plan in balance.

401(k)s

401(k)s are retirement savings vehicles offered by private employers. Most 401(k)s are of the type known as "salary reduction plans" because they allow workers to reduce their take-home pay and have that portion of their wages go to a retirement investment account. These deferred wages are given preferential tax treatment, which means that they are not taxed when they are contributed, only when they are withdrawn (during retirement). The account is invested in some mix of stocks and bonds. The statutory authority for the accounts was added to the Internal Revenue Code by the Revenue Act of 1978 as section 401(k), which is where the name comes from. There are many variations in 401(k)s:

- *Coverage*. Employers are not required to offer 401(k)s, so many don't. Some will offer them automatically, some will offer them only after a certain length of service, and some to only certain employees.
- *Employer contribution.* Some employers do not contribute at all, some will match what an employee contributes, and some will contribute a specified amount, regardless of what the employee contributes. If an employer contributes a set amount, the 401(k) can be thought of as a type of pension, albeit without a guarantee of how much the worker will receive in retirement or for how long. If an employer does not contribute to the account, the 401(k) can be thought of as an employer-administered IRA.
- *Investment.* 401(k)s are typically invested in stock or stock-and-bond mutual funds, but the amount of employee control over investment decisions depends on the employer. Some allow their employees to have total control, others allow for choice among a selection of mutual and investment funds, and some control the investment decision completely.

Key features:

- 401(k)s are *defined contribution;* workers know how much they put into the plan, but the amount they receive in retirement depends on where they invest and how the investment performs.
- There is a limit on salary-reduction, tax-preferred contributions. In 2015 the limit was $18,000 for employee contributions and $53,000 for the combination of both employee and employer contributions.[87]
- Workers pay income tax on their 401(k) when the funds are withdrawn, at which point they will likely face a lower tax rate (because they'll have a smaller income). Withdrawals before age 59.5 are subject to a 10% penalty.
- Workers fund most of the 401(k) through their deferred wages.

Problems:

- Workers bear all the risk. If the investment performs poorly, workers lose wealth in their 401(k), but there is no consequence for the employer. Poor results can follow from a market-wide decline, such as during the 2008 financial crisis, when a 57% drop in equity prices resulted in a loss of $2.8 trillion in 401(k)s and IRAs.[88] Or it can happen from the decline of a specific company, such as Enron, whose employees had 62% of their 401(k) assets in the company's stock, which became virtually worthless after the company filed for Chapter 11 bankruptcy.[89]

IRAs

IRAs were created by the Employee Retirement Income Security Act of 1974. Only about half of all workers work for an employer that sponsors some kind of retirement plan, whether it is defined benefit or defined contribution.[90] Workers who do not have retirement plans need a vehicle in which to save. IRAs are like 401(k)s in that they are tax-preferred contributions to an investment account; the only difference is that the 401(k) is administered by the employer (who can contribute) while the IRA is administered solely by the individual.

Key features:

- Workers who do not have retirement coverage through their work, or workers who are covered but make below a certain amount of money ($70,000 in 2015), are eligible.[91]
- Contributions are limited; the limit in 2015 was $5,500, $6,500 for individuals age 50 or older.[92]
- IRAs are often used to roll over 401(k)s. When workers move from one job to another, they can roll over their 401(k) to an IRA. For many workers, IRAs are repositories for their retirement plans.
- Like 401(k)s, workers pay income tax on their withdrawals, and withdrawals before age 59.5 incur a penalty.

Problems:

- The individual bears all the risk. The problem is similar to that of 401(k)s, in which workers are at risk of losing assets in volatile financial markets.

IRAs and 401(k)s are flexible, but they expose workers to risk. Although workers can have some control over their investments, they don't have control over the performance of the market. And the result is that Americans feel less secure than ever about their retirement, especially in the wake of the market collapse and the financial crash of 2008. For example, in the 2015 Retirement Confidence Survey conducted by the Employee Benefit Research Institute, nearly one in four Americans said they were "not at all confident" about having enough money for a comfortable retirement, close to the record high in the survey's 23-year history (the record high was in 2013).[93]

Social Security is the most reliable part of an increasingly unreliable system, and almost any proposal to change Social Security is met with heated debate and opposition because the benefits are so important to retirement security. The arguments against Social Security can be grouped into five key ideas. We present them, and a response to each argument, below.

Five arguments against Social Security

1. Budgetary – Social Security is too expensive

Argument

This is by far the simplest argument made against Social Security: it is a good program, we just can't afford it. Few deny the value that Social Security has for society and the economy, but some argue that it is not sustainable. This argument is not about the program itself but rather part of the broader drive for fiscal solvency. From this basic stance, we hear many variants: *"Social Security is in crisis," "Social Security is bankrupt,"* or *"Social Security is a Ponzi scheme."* The budget argument against Social Security avoids discussions of program efficiency and the importance of benefits and instead becomes a fiscal one.

The main evidence used to support the budget argument is the long-run shortfall. Social Security's shortfall has averaged 2.14% of taxable earnings over the 75-year actuarial window since 1994.[94] The gap between what it owes to workers who have paid in and what it will collect in taxes is a result of demographic changes. Critics of Social Security point out that Americans are living longer and having fewer children and claim that Social Security is trapped between a rock (more benefits to be paid) and a hard place (fewer workers to fund it). Social Security might have worked 30 years ago, but it doesn't work today, the argument goes.

Their conclusion: in order to save Social Security, we must cut it.

The ways proposed to cut Social Security are numerous. Cut benefits by raising the retirement age, cut benefits by reducing the yearly cost-of-living adjustment, cut benefits by changing the benefit calculation, cut benefits by means testing the program and making it available only to low-income workers—any move to cut benefits saves Social Security.

Response

There are three problems with the budgetary argument against Social Security.

1. **Social Security is the most solvent part of the United States government.** It will not need to dip into its trust fund until 2020 in order to pay full benefits through 2034. Even then, it will be able to pay about 80 percent of scheduled benefits. No other part of the government, no program, no agency, no entitlement is fully funded right now, let alone in surplus. If Social Security must be cut because in 20 to 30 years it will no longer be fully funded but only partially funded, that means in 20 to 30 years it will still be more solvent than the rest of the government today.
2. **The shortfall is not large.** Social Security's spending, which has averaged 4.4% of GDP for 30 years, will increase to 6.05% of GDP by 2037 and level off between 5.9% and 6.2% through 2086. This is a one-time increase in its size as a share of the economy, not persistently high growth.
3. **The shortfall is completely fixable**. Benefit cuts should be used as a last resort. The long-term shortfall is a problem, but that does not mean that the only option is to cut benefits. Social Security could increase revenue by covering all state and local employees (6% of the gap), investing part of the trust fund in equities (9-21% of the gap), increasing the payroll tax one percentage point (53% of the gap), imposing a 3% tax on income above the current tax cap (23% of the gap), raising the tax cap to once again cover 90% of earnings (27-29% of the gap), or eliminating the tax cap without increasing benefits (88% of the gap, or almost all of the gap).[95]

2. Philosophical – we should not have government involvement in market outcomes

Argument

The normative or values-based argument against Social Security takes issue with government involvement in the redistribution of income. People know how to handle their money better than the government, and if they don't, they should. It's not the government's place to interfere.

It is important to note that this is a not an argument specific to Social Security, but relevant to most government programs, including most forms of taxation or regulation of any kind. Little empirical evidence is presented for this argument, since it is essentially a philosophical one. But it does rely on three key assumptions. First, markets are better at distributing income. Second, the government mismanages money. And third, if people do not have money saved up for retirement, it is their own fault.

The conclusion: Social Security is welfare that the government makes everyone receive.

The policy implications of this argument are broad, ranging from ending the program completely to giving individuals more control. The proposals resulting from this position include converting Social Security to a system of individual accounts, allowing individuals to opt out of Social Security, and means testing Social Security so only low-income individuals receive it. The proposals all have one aim—reduce the size of the program and limit government involvement as much as possible.

Response

The libertarian critique of Social Security is a philosophical stance about the proper sphere of government with regard to the program. But the argument reveals a critical misunderstanding of Social Security.

1. **Social Security is insurance.** It is not primarily income redistribution or welfare, and should not be thought of as such. Taxes collected by Social Security are premium payments that extend insurance coverage to workers and their families should they no longer be able to work, either because they are too old, become disabled, or die.
2. **Risk is not mitigated by intelligence**. Retirement savings are not solely under the control of the individual; rather, they are subject to the strength of the market and the state of the economy. Every worker is at risk of being laid off, becoming disabled, dying before retirement, losing 401(k) assets in a stock market crash, or outliving his or her assets. The idea that we need protection provided by a government program only because we weren't smart enough does not stand up to historical experience. We can do everything right and still lose everything because we face risks that are external to our decision making. Workers do not reduce their risk by becoming smarter than the market and knowing when a crash or recession will occur.
3. **Social Security is an efficient program**. Social Security spends less than one cent of every dollar on administration, even though it collects taxes from over 90% of the workforce and sends benefits to **59 million Americans.** While there is a notion that because it is a massive government program it must be mismanaged and burdened with bureaucratic waste, the facts prove otherwise. Contrast Social Security's one cent on the dollar with that of private retirement plans, where administrative costs can be **10 times higher.**[96]

3. Financial – Social Security is a poor financial investment

Argument

Workers contribute 6.2% of their wages to Social Security for their entire working lives. Although higher earners above the tax cap will contribute a smaller portion of their wages, it is still a significant share of earnings. Those who argue that Social Security is a financially wasteful program are looking at the returns forfeited by investing in government securities rather than the stock market.

The evidence for this argument is hypothetical. It is measuring the difference between Social Security's return and what the return *could be* from the stock market. If the stock market were 100% predictable, no one would ever have losses from it. In reality, returns vary based on what is invested in and when the investment is made. Proponents of investing Social Security contributions in equities point to historical averages in the stock market that show a 4 to 6% return over time, which is about what the Social Security Administration estimates, versus Social Security's real return on U.S. Treasury holdings of around 2 to 3%.

The answer to a low government return, the argument goes, is either to change Social Security to a system of private accounts that workers can invest in the stock market; or to invest the trust fund in the stock market and to no longer hold it in Treasury securities.

The conclusion: When one considers the counterfactual of investing payroll tax contributions in the stock market, Social Security is making retirees worse off.

Response

The stock market is highly volatile and will continue to be a gamble. There are two clear reasons why Social Security should not become one large investment in the stock market.

1. **Social Security is not an investment**. It is insurance. Its function is to protect workers from the risks associated with financial and economic losses. These risks are real—within 17 months of its peak in October 2007, the stock market had declined 57%.[97] In three 20-year periods in the last century the real return to the stock market was zero.[98] Social Security is not a money-making venture, it is protection from poverty should those money-making ventures fail.
2. **There are already vehicles for retirement investment in the stock market—401(k)s and IRAs.** These vehicles allow individuals to take advantage of the potential high returns from the stock market in order to save for retirement.

4. Economic – Social Security is a poor government investment

Argument

The federal government spends more money on Social Security than any other federal program. It is both the largest revenue stream and largest outlay. Critics claim this is a poor investment for the government to make because it prioritizes spending on the elderly population over spending on children, education, infrastructure, or other public investments.

The evidence for this argument is the sheer size of Social Security. In 2015, $884.3 billion went to Social Security's 59 million beneficiaries. This accounted for about 24% of total federal government spending, dwarfing the 3% spent on education, 3% on transportation, and the 17% spent on defense.[99] Political cynics are quick to point out that the elderly get so much money through Social Security because they are more likely to vote.

The conclusion: Social Security is crowding out public spending in needed areas.

The policy implications are clear—anything that redirects Social Security's funding stream to other outlets is worth pursuing. This requires a substantial cut in benefits, via an increased retirement age, means testing, an across-the-board cut, a changed benefit calculation, or any other alteration that reduces outlays.

Response

The problems with this complaint derive from the conflation of Social Security and the federal government. Social Security's finances are separate from the federal government's budget; it has dedicated revenues, which come from the contributions of workers and their employers, taxes paid by high-income beneficiaries, and interest earned on Treasury securities. The majority of the government's spending comes from the annual budget, which is debated and voted on each year. The federal government's failure to spend enough money on education has nothing to do with Social Security. Social Security doesn't dictate federal spending.

There are three additional problems with this argument:

1. **Non-elderly people benefit from Social Security.** They do this in one of three ways:
   - First, they are a child beneficiary because they are the dependent of a retired, disabled, or deceased worker. There are around 3.2 million children who receive benefits from Social Security.[100]
   - Second, they live with someone who receives Social Security. This can either be a situation in which the child's parent or guardian receives Social Security, or a situation known as "grandfamilies," in which children live with their grandparents instead of their parents. Roughly 8.5 million children live in households with a Social Security beneficiary.[101]
   - Third, they benefit from having economic independence from their parents and grandparents. Social Security keeps 21.4 million Americans over 65 out of poverty.[102] Absent Social Security, about 4 in 10 elderly people would be impoverished, a financial burden that would undoubtedly be passed on to their children and grandchildren.
2. **Public spending is not a zero-sum game.** In the wake of bridge collapses and levee breaks, many have called for a renewed investment in America's infrastructure. Infrastructure, however, is an expensive prospect. One way to finance it is to create a National Infrastructure Bank that would issue bonds in order to fund infrastructure projects. That way, the bank would leverage both private and public spending to fund needed public works. There is no clear reason why Social Security—which relies on its own tax and interest from its own trust fund to pay for its beneficiaries—prevents the creation of a National Infrastructure Bank.
3. **Most spending on education and children occurs at the state and local level.** Education policy in America is decentralized. There is federal spending on education and federal education policy, but the majority of the money and policy comes from states. In fact, state and local spending on education ($877 billion in 2013[103]) is larger than spending on Social Security (which was $823 billion in 2013[104]). Again, the amount of money that policy makers decide to spend on education has nothing to do with Social Security, which in no way prohibits or dictates spending and policy in states, counties, and cities.

5. Behavioral – Social Security alters individual economic behavior

Argument

This is the most academic argument against Social Security and it essentially holds that the program distorts economic behavior in two ways. First, it discourages household savings. Second, it distorts the labor supply.

In terms of distorting household savings, the logic is that Social Security is a massive retirement program that enables workers to plan less for their future. If you're going to get Social Security, then you don't need to save. Followed to its logical conclusion, if Social Security did not exist, individuals would save more.

The claim that Social Security distorts the labor supply requires some explanation. The labor supply can be thought of as the total number of hours worked in the economy. It can be distorted by a change in the number of hours, either because fewer jobs are available or fewer workers are willing to sell their labor. Social Security is a tax on labor, so it must necessarily distort the labor supply and cause inefficiencies in the labor market. This could occur by discouraging people to work as long as they would otherwise, encouraging people to work longer than they should or would otherwise, or, as is the most documented, distorting the compensation of labor.

The conclusion: Social Security creates economic inefficiencies.

In order to decrease the distortion, Social Security would have to decrease its impact on the labor market. Policies that achieve this would be those that lower taxes or move Social Security's revenue stream away from a tax on labor.

Response

Although this line of argument gets rather theoretical and touches on pieces of economic theory that academics have debated for decades, there are three simple responses to it:

1. **Savings is a function of income and consumption**. Savings is whatever you don't spend. If you don't earn a lot, or if you have to spend most of your income, you have a low savings rate. This is why saving behavior tends to vary directly with income or income growth; low earners or earners who do not see wage increases have little extra money to save. There is no real evidence that Social Security distorts the savings rate.
2. **Social Security's effect on the labor supply is complex**. Social Security is a tax on wages, and therefore does have a negative effect on labor supply. However, it also incentivizes work because workers must earn enough credits in employment in order to receive Social Security coverage, and the benefits are higher the longer one works. In this sense, Social Security is both a disincentive and an incentive to work. The net effect is not clear.
3. **A non-distorted labor supply is not necessarily a goal.** The labor supply is distorted by a lot of things. Even without Social Security, the labor supply would not be perfectly compensated and perfectly efficient. It is distorted by taxes, laws, and regulations that most Americans would consider good distortions. Child labor laws, for example, distort the labor market because they reduce the supply of (child) labor. So do antidiscrimination laws that say you can't pay a man and a woman different wages for the same job, or a black person and a white person, or Christian or Jewish, because they alter the price at which some workers would sell their labor.

Social Security is the subject of heated debate. Most of the criticisms of its most vehement critics are represented in the arguments here. While these arguments don't draw on false evidence, they do often rely on a misunderstanding of Social Security and its function in workers' lives. This mistaken view takes Social Security to be welfare, income redistribution, a financial investment, or a tradeoff with other worthy public investments. But the reality is different. Social Security is insurance.

Five ways to improve Social Security

Given Social Security's popularity, importance, and efficiency, many call for its expansion. We present five ways to increase Social Security's benefits. The response to each is that it would cost too much, but as with any expenditure we just need to determine that it's worth it.

1. New minimum benefit

A special minimum benefit was enacted in 1972 for workers who fit a specific category: low earners with long work histories.[105] The primary insurance amount (PIA) is based on a worker's average indexed monthly earnings (AIME), which is based on the highest 35 years of earnings. If a worker had gaps in work history (a lot of zeroes in the AIME calculation), he or she would have a lower PIA. In another instance, a worker could also have had no gaps in work history yet consistently have had low earnings, and thus would still have a lower PIA. The special minimum benefit was designed to protect the low-wage, long-time worker and is paid to a beneficiary if the special minimum benefit is higher than his or her original PIA. Unfortunately, the minimum benefit calculation as originally designed was indexed to prices, rather than wages, and as such has eroded over time.

To restore the special minimum benefit for workers with long work histories, Social Security can be improved by either updating the current minimum benefit and indexing it to earnings,[106] so that it does not erode again; or by indexing it to the poverty line,[107] so that anyone with a long enough work history would always be above the federal poverty line. Or, the PIA calculation could include a bonus for long-term, low-wage workers. These expansions would help workers who have long careers and are also less likely to have a pension or 401(k).

2. Wage credits for child care

Workers who take time out of the labor force to raise children do not contribute to Social Security during that period. Although the calculation of the AIME looks at only the 35 highest years of earnings, so that there is time to make up for any "zero years" spent taking care of children, parents re-entering the workforce often have lower lifetime earnings and still have zeroes in the AIME calculation.

To help workers who are taking care of young children, Social Security can expand benefits by crediting parents in their AIME calculation.[108] Instead of showing up as a zero, a year spent taking care of children under 5 could be credited as half of average wages, or around $23,100 in 2014. This change would slightly raise the AIME, and therefore the benefit, for parents.

3. Accurate COLA calculation for seniors

Social Security benefits are indexed to inflation using the consumer price index (CPI). The CPI measures the change over time in the average prices of a specific bundle of goods. However, different parts of the population tend to have different spending habits. The CPI is officially calculated to represent two groups: the CPI-U for urban consumers (87% of the population) and CPI-W for urban wage earners and clerical workers (32% of the population).[109] Social Security is adjusted using the CPI-W. However, the Bureau of Labor Statistics has created a new series, called the CPI-E,[110] which looks at the elderly population. The CPI-E places a much heavier weight on medical expenses, which grow faster than regular prices and represent a large share of a retiree's spending.

The CPI-E has grown faster than the CPI-U or the CPI-W, indicating that the increases in Social Security are not keeping up with the costs that retirees are facing. Changing the CPI used for the annual cost-of-living adjustment would increase benefits for retirees.[111]

4. Restored student benefit

Children of the retired, deceased, or disabled receive benefits until they are 18 if they are out of school or 19 if they are still attending high school. Between 1965 and 1985 Social Security had a student exception, which continued benefits until age 22 if the child of the retired, deceased, or disabled worker was attending college or vocational school. Congress ended this student benefit in 1981 and phased out the benefit by 1985.[112]

To assist students who do not have a working parent to pay for their education, Social Security could be improved by restoring the student benefit.[113]

5. Increased benefit for the oldest beneficiaries

After retirement, the longer people live, the poorer they get. Younger retirees are more likely to work or receive non-work income than older retirees. Defined-benefit pensions are rarely indexed to inflation, and they erode in value over time. IRAs, 401(k)s, and other savings come closer to running out, or do run out, the longer one lives. Social Security can be improved by giving a benefit increase to retirees at age 85, either at some percentage of their benefits,[114] or some at a dollar amount determined from average retiree benefits,[115] that can help the oldest retirees maintain their standard of living.

Conclusion

Whatever Social Security's place in politics, and however vitriolic the rhetoric in debates, Social Security is a fully functional insurance program that has provided benefits to millions of American workers. And for many people—people who are older, people who are disabled, people who have lost a parent—Social Security is the difference between living sustainably and living in poverty. Its strength in this regard makes it a pillar of the American economy. Perhaps a program cannot be so important and not inspire debate. Social Security works, and every worker—from the 22-year-old college graduate starting her first job to the 66-year-old electrician about to retire from his last one—receives the benefits that they earned.

Endnotes

1 Clingman, Michael, Kyle Burkhalter, and Chris Chaplain. 2014. "The Present Value of Expected Lifetime Benefits for a Hypothetical Worker Dying or Becoming Disabled at Age 30." Unpublished memorandum. Baltimore, MD: Social Security Administration, Office of the Chief Actuary.

2 Thrift Savings Plan. Annuity Calculator. https://www.tsp.gov/planningtools/annuities/annuityCalc_select.shtml.

3 Social Security Administration (SSA). Historical Background and Development of Social Security. http://www.ssa.gov/history/briefhistory3.html.

4 Franklin Roosevelt's Statement on Signing the Social Security Act, August 14, 1935. http://docs.fdrlibrary.marist.edu/odssast.html

5 Office of the Chief Actuary. SSA. Social Security Beneficiary Statistics. http://www.socialsecurity.gov/OACT/STATS/OASDIbenies.html.

6 SSA. Social Security Tax Rates. http://www.ssa.gov/oact/ProgData/oasdiRates.html

7 Office of the Chief Actuary. SSA. Contribution and Benefit Base. http://www.ssa.gov/OACT/COLA/cbb.html.

8 SSA. 2012. Social Security Basic Facts. http://www.ssa.gov/news/press/basicfact.html.

9 Bethell, Thomas N., Kristen Arnold, and Elliot Schreur. 2015. "Social Security Finances: Findings of the 2015 Trustees Report." National Academy of Social Insurance. https://www.nasi.org/research/2015/social-security-finances-findings-2015-trustees-report .

10 SSA. 2015. Table IV.B1.—Annual Income Rates, Cost Rates, and Balances, Calendar Years 1970-2090. 2015 OASDI Trustees Report. http://www.ssa.gov/oact/TR/2015/lr4b1.html

11 SSA. 2015. Table IV.B3.—Covered Workers and Beneficiaries, Calendar Years 1945-2090. 2015 OASDI Trustees Report. http://www.ssa.gov/oact/TR/2015/lr4b3.html.

12 Bethell, Arnold, and Schreur. 2015. "Social Security Finances: Findings of the 2015 Trustees Report." National Academy of Social Insurance. https://www.nasi.org/research/2015/social-security-finances-findings-2015-trustees-report

13 SSA. n.d. Benefits Planner: Income Taxes and Your Social Security Benefits. http://www.socialsecurity.gov/planners/taxes.htm.

14 Bethell, Arnold, and Schreur. 2015. "Social Security Finances: Findings of the 2015 Trustees Report." National Academy of Social Insurance. https://www.nasi.org/research/2015/social-security-finances-findings-2015-trustees-report

15 SSA. 2015. Table III.A3.— Operations of the Combined OASI and DI Trust Funds, Calendar Year 2014. Trustees Report. http://www.ssa.gov/oact/TR/2015/III_A_cyoper.html

16 National Commission on Social Security Reform. 1983. Report of the National Commission on Social Security Reform. http://www.ssa.gov/history/reports/gspan.html.

17 Office of Legislation & Congressional Affairs. SSA. 1984. Summary of P.L. 98-21, (H.R. 1900) Social Security Amendments of 1983. http://www.ssa.gov/history/1983amend.html.

18 Ronald Reagan. April 20, 1983. Remarks on Signing the Social Security Amendments of 1983. http://www.reagan.utexas.edu/archives/speeches/1983/42083a.htm.

19 SSA. 2015. Table III.A1.— Operations of the OASI Trust Fund, Calendar Year 2014. Trustees Report. http://www.ssa.gov/oact/TR/2015/III_A_cyoper.html#990519

20 SSA. 2015. Table III.A2.— Operations of the DI Trust Fund, Calendar Year 2014. Trustees Report. http://www.ssa.gov/oact/TR/2015/III_A_cyoper.html#990519

21 SSA. 2015. Table III.A3.— Operations of the Combined OASI and DI Trust Funds, Calendar Year 2014. Trustees Report. http://www.ssa.gov/oact/TR/2015/III_A_cyoper.html#990519

22 Congressional Budget Office (CBO). March 2004. Administrative Costs of Private Accounts in Social Security. http://www.cbo.gov/publication/15467.

23 SSA. How credits are earned. *Retirement Planner*. http://www.ssa.gov/retire2/credits1.htm.

24 Biggs, Andrew G., Mark Sarney, and Christopher R. Tamborini. 2009. "A Progressivity Index for Social Security." Office of Retirement and Disability Policy Issue Paper No. 2009-01. SSA. http://www.ssa.gov/policy/docs/issuepapers/ip2009-01.html.

25 SSA. Cost-Of-Living Adjustment (COLA). Office of the Chief Actuary. http://www.ssa.gov/oact/cola/colasummary.html.

26 SSA. "Full Retirement and Age 62 Benefit by Year Of Birth." http://www.ssa.gov/planners/retire/agereduction.html.

27 SSA. 2015. Table 5.A1—Number and average monthly benefit, by type of benefit and race, December 2014. Annual Statistical Supplement. http://www.ssa.gov/policy/docs/statcomps/supplement/2015/5a.pdf.

28 U.S. Census Bureau. Poverty thresholds by Size of Family and Number of Children. Poverty Data. http://www.census.gov/hhes/www/poverty/data/threshld/index.html.

29 SSA. 2014. Table 10.5--Percentage of aggregate income of aged units from specified source, by marital status and quintile of total money income, 2012. Income of the Population 55 and Older, 2012. http://www.ssa.gov/policy/docs/statcomps/income_pop55/2012/sect10.html.

30 U.S. Census Bureau. 2015. Current Population Survey. Annual Social and Economic Supplement. Impact on Poverty of Alternative Resource Measures by Age: 1981 to 2014. http://www.census.gov/hhes/www/poverty/data/incpovhlth/2014/tables.html.

31 Bureau of Labor Statistics. 2015. CPI Detailed Report Data for August 2015. Table 24. Historical Consumer Price Index for All Urban Consumers (CPI-U): U. S. city average, all items. http://www.bls.gov/cpi; SSA. 2015. Old-Age and Survivors Insurance Trust Fund, 1937-2014. http://www.ssa.gov/OACT/STATS/table4a1.html; U.S. Census Bureau. Various dates. Population Estimates. Historical Data. http://www.census.gov/popest/data/historical/index.html.

32 U.S. Census Bureau. 2015. Poverty Data. Table 3: Poverty Status of People, by Age, Race, and Hispanic Origin: 1959 to 2014. http://www.census.gov/hhes/www/poverty/data/historical/people.html

33 SSA. Disability Benefits. SSA Publication http://www.ssa.gov/pubs/EN-05-10029.pdf.

34 Clingman, Michael, Kyle Burkhalter, and Chris Chaplain. 2014. "The Present Value of Expected Lifetime Benefits for a Hypothetical Worker Dying or Becoming Disabled at Age 30." Unpublished memorandum. Baltimore, MD: Social Security Administration, Office of the Chief Actuary.

35 SSA. 2001. Income of Disabled-Worker Beneficiaries. http://www.ssa.gov/policy/docs/chartbooks/income_workers/di_chart.pdf.

36 SSA. 2014. Table 5.E2—Average monthly benefit, by type of benefit, sex, and age, December 1957–2013. *Annual Statistical Supplement*. https://www.socialsecurity.gov/policy/docs/statcomps/supplement/2014/5e.pdf .

37 SSA. 2014. Table 5.E1—Average monthly benefit, by type of benefit, sex, and age, December 1957–2013. *Annual Statistical Supplement*. https://www.socialsecurity.gov/policy/docs/statcomps/supplement/2014/5e.pdf.

38 SSA. 2014. Table 5.E2—Average monthly benefit, by type of benefit, sex, and age, December 1957–2013. *Annual Statistical Supplement*. https://www.socialsecurity.gov/policy/docs/statcomps/supplement/2014/5e.pdf.

39 SSA. 2014. Table 5.A1—Number and average monthly benefit, by type of benefit and sex, December 2013. *Annual Statistical Supplement*. https://www.socialsecurity.gov/policy/docs/statcomps/supplement/2014/5a.pdf.

40 SSA. 2014. Table 5.F6—Average monthly benefit for survivors, by type of benefit, December 1940–2013, selected years (in dollars). *Annual Statistical Supplement*. https://www.socialsecurity.gov/policy/docs/statcomps/supplement/2014/5f.pdf.

41 Gabe, Thomas. 2015. Social Security's Effect on Child Poverty. CRS Report RL33289. http://www.pennyhill.com/jmsfileseller/docs/RL33289.pdf.

42 Olsen, Anya and Samantha O'Leary. 2011. Military Veterans and Social Security: 2010 Update. Social Security Bulletin, Vol. 71 No. 2. https://www.ssa.gov/policy/docs/ssb/v71n2/v71n2p1.html.

43 National Academy of Social Insurance. 2002. Social Security Pays Benefits in Wake of September 11th Attacks. http://www.nasi.org/sites/default/files/research/Survivor_Fact_Sheet_SS_3_11_02.pdf.

44 Szymendera, Scott. 2005. Hurricane Katrina: Activities of the Social Security Administration. CRS Report RS22250. http://www.au.af.mil/au/awc/awcgate/crs/rs22250.pdf.

45 SSA. Pre-Social Security Period. Historical Background and Development of Social Security. http://www.ssa.gov/history/briefhistory3.html.

46 DeWitt, Larry. 2010. The Development of Social Security in America. *Social Security Bulletin* 70 (August). http://www.ssa.gov/policy/docs/ssb/v70n3/v70n3p1.html.

47 Financial Crisis Inquiry Commission. 2011. September 2008: The Bailout of AIG. *The Financial Crisis Inquiry Report*. http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/fcic_final_report_chapter19.pdf.

48 Munnell, Alicia, and Jean-Pierre Aubry. 2010. Returns on 401(k) Assets by Cohort. Center for Retirement Research at Boston College Brief #10-6. http://crr.bc.edu/briefs/returns-on-401k-assets-by-cohort/.

49 Munnell, Alicia H., Wenliang Hou, and Anthony Webb. 2014. NRRI [National Retirement Risk Index]Update Shows Half Still Falling Short. http://crr.bc.edu/briefs/nrri-update-shows-half-still-falling-short/.

50 Lavery, Joni and Virginia P. Reno. 2008. Children's Stake in Social Security. National Academy of Social Insurance Brief No. 27. http://www.nasi.org/usr_doc/SS_Brief_027.pdf.

51 SSA. 2015. OASDI Trustees Report. http://ssa.gov/oact/TR/2015/II_A_highlights.html#.

52 SSA. Trust Fund Data. http://www.socialsecurity.gov/OACT/STATS/table4a3.html.

53 U.S. Department of the Treasury. 2015. "Major Foreign Holders of U.S. Treasury Securities (monthly)." http://www.treasury.gov/ticdata/Publish/mfh.txt.

54 SSA. 2015. Old-Age, Survivors, and Disability Insurance Trust Funds, 1957-2014. Office of the Chief Actuary. http://www.socialsecurity.gov/OACT/STATS/table4a3.html.

55 SSA. 2015. Table VI.G8.- Operations of the Combined OASI and DI Trust Funds, in Current Dollars, Calendar Years 2015-90. OASDI Trustees Report. http://www.ssa.gov/oact/TR/2015/VI_G3_OASDHI_dollars.html#231830.

56 Bethell, Thomas N., Kristen Arnold, and Elliot Schreur. 2015. "Social Security Finances: Findings of the 2015 Trustees Report." National Academy of Social Insurance. https://www.nasi.org/research/2015/social-security-finances-findings-2015-trustees-report.

57 SSA. 2012. Table VI.B1.—Long-Range OASDI Actuarial Balances and Trust Fund Exhaustion Dates as Shown in the Trustees Reports for 1982-2012. OASDI Trsutees Report. http://www.socialsecurity.gov/OACT/TR/2012/VI_B_LRact_bal.html#103557.

58 SSA. 2015. Assumptions and Methods Underlying Actuarial Estimates: Demographic Assumptions and Methods. OASDI Trustees Report. http://www.socialsecurity.gov/OACT/TR/2015/V_A_demo.html#253046.

59 SSA. 2015. Figure II.D7.— Long-Range OASI and DI Combined Trust Fund Ratios Under Alternative Scenarios. OASDI Trustees Report. http://www.socialsecurity.gov/OACT/TR/2015/II_D_project.html#105057.

60 SSA. 2015. Table VI.G4.--OASDI and HI Annual Income, Cost, and Balance as a percentage of GDP, Calendar Years 1970-2090. OASDI Trustees Report. http://www.socialsecurity.gov/OACT/TR/2015/lr6g4.html.

61 Munnell, Alicia, and Dan Muldoon. 2008. Are Retirement Savings Too Exposed to Market Risk? Center for Retirement Research at Boston College Brief #8-16. http://crr.bc.edu/briefs/are-retirement-savings-too-exposed-to-market-risk/.

62 SSA. 2015. Table IV.B3.- Covered Workers and Beneficiaries, Calendar Years 1945-2090. OASDI Trustees Report. http://www.socialsecurity.gov/OACT/TR/2015/lr4b3.html.

63 These rates refer to the adjusted fertility rate, which adjusts for survival to age 10. Goss, Stephen A. 2010. The Future Financial Status of the Social Security Program. Social Security Bulletin 70 (August). http://www.ssa.gov/policy/docs/ssb/v70n3/v70n3p111.html.

64 SSA. 2015. Table V.A3.-Period Life Expectancy. OASDI Trustees Report. http://www.ssa.gov/oact/TR/2015/lr5a3.html.

65 Waldron, Hilary. 2007. Trends in Mortality Differentials and Life Expectancy for Male Social Security-Covered Workers, by Socioeconomic Status. Social Security Bulletin 67 (April 2008). http://www.ssa.gov/policy/docs/workingpapers/wp108.html.

66 SSA. 2015. Table 4.B4—Percentage of workers with earnings below annual maximum taxable, by sex, selected years 1937–2012. Annual Statistical Supplement, 2014. https://www.socialsecurity.gov/policy/docs/statcomps/supplement/2014/4b.pdf.

67 SSA, 2015. Table 4.B1—Number of workers with taxable earnings, amount of earnings, and Social Security numbers issued, selected years 1937–2013. Annual Statistical Supplement, 2014. https://www.socialsecurity.gov/policy/docs/statcomps/supplement/2014/4b.pdf.

68 Except where noted, all estimates are from the Office of the Chief Actuary, SSA. http://www.ssa.gov/OACT/solvency/provisions/index.html.

69 Dawn Nuschler, Alison M. Shelton, and John J. Topoleski. 2011. Social Security: Mandatory Coverage of New State and Local Government Employees. Congressional Research Service. http://www.teacherpensions.org/sites/default/files/CRS%20 2011%20Report.pdf.

70 SSA. 2015. Table II.C1.—Long-Range Values of Key Demographic and Economic Assumptions for the 75-year Projection Period. OASDI Trustees Report. http://www.ssa.gov/oact/TR/2015/II_C_assump.html#101021

71 Veghte, Benjamin W. 2015. Social Inequality, Retirement Security, and the Future of Social Security. *Poverty & Public Policy 7*(2), 97–122. http://onlinelibrary.wiley.com/doi/10.1002/pop4.104/abstract.

72 Veghte, Benjamin W. 2015. Social Inequality, Retirement Security, and the Future of Social Security. Poverty & Pub*lic Policy 7(2), 97–122.* http://onlinelibrary.wiley.com/doi/10.1002/pop4.104/abstract.

73 SSA. Retirement benefits by year of birth. http://www.socialsecurity.gov/retire2/agereduction.htm.

74 SSA. 2015. Table V.A3.—Period Life Expectancy. OASDI Trustees Report. http://www.ssa.gov/oact/TR/2015/lr5a3.html.

75 Office of the Chief Actuary. SSA. Cost-Of-Living Adjustments. http://www.ssa.gov/oact/COLA/colaseries.html.

76 Safire, William. Language: Tracking the source of the 'third rail' warning. *New York Times*. February 18, 2007. http://www.nytimes.com/2007/02/18/opinion/18iht-edsafmon.4632394.html?_r=1.

77 Sherman, Sally. 1989. Public Attitudes Toward Social Security. *Social Security Bulletin* 52 (December). http://www.ssa.gov/policy/docs/ssb/v52n12/v52n12p2.pdf.

78 AARP. 2010. Social Security 75th Anniversary Survey Report: Public Opinion Trends. http://assets.aarp.org/rgcenter/econ/social_security_75th.pdf.

79 Page, Benjamin I. and Lawrence R. Jacobs. 2010. Understanding Public Opinion on Deficits and Social Security. Testimony before the National Commission on Fiscal Responsibility and Reform. http://www.fiscalcommission.gov/meetings/public-forum/additional/Benjamin_Page.pdf.

80 Jacobs, Lawrence R. and Robert Y. Shapiro. 1999. *Myths and Misunderstandings about Public Opinion toward Social Security: Knowledge, Support, and Reformism*. The Century Foundation.

81 Cole, Richard L., and John Kincaid. 2006. Public Opinion on U.S. Federal and Intergovernmental Issues in 2006: Continuity and Change. Publius (2006). http://publius.oxfordjournals.org/content/36/3/443.short.

82 Campbell, Andrea Louise. 2010. What the Social Security Experience Tells Us About Taxes Americans Can Embrace. http://www.scholarsstrategynetwork.org/scholar-profile/42.

83 National Academy of Social Insurance. 2015. Social Security Benefits, Finances, and Policy Options: A Primer. https://www.nasi.org/socialsecurityprimer.

84 Hess, Cynthia, Ph.D., Jeff Hayes, Ph.D., Heidi Hartmann, Ph.D. 2011. Retirement on the Edge: Women, Men, and Economic Insecurity after the Great Recession. Institute for Women's Policy Research. http://www.iwpr.org/publications/pubs/retirement-on-the-edge-women-men-and-economic-insecurity-after-the-great-recession.

85 Pew Research Center for the People & the Press. 2011. The Generation Gap and the 2012 Election. http://www.people-press.org/2011/11/03/section-6-generations-and-entitlements/?src=prc-section.

86 Authors' calculations from Rhee, Nari and Ilana Boivie. 2015. The Continuing Retirement Savings Crisis. National Institute on Retirement Security. http://www.nirsonline.org/storage/nirs/documents/RSC%202015/final_rsc_2015.pdf.

87 Internal Revenue Service (IRS). 401(k) Resource Guide - Plan Participants - Limitation on Elective Deferrals. http://www.irs.gov/Retirement-Plans/Plan-Participant,-Employee/Retirement-Topics-401k-and-Profit-Sharing-Plan-Contribution-Limits.

88 Munnell, Alicia, and Jean-Pierre Aubry. 2010. Returns on 401(k) Assets by Cohort. Center for Retirement Research at Boston College Brief #10-6. http://crr.bc.edu/briefs/returns-on-401k-assets-by-cohort/.

89 Purcell, Patrick J. 2002. The Enron Bankruptcy and Employer Stock in Retirement Plans. Congressional Research Service Report RS21115. http://fpc.state.gov/documents/organization/9102.pdf.

90 Copeland, Craig. 2014. Employment-Based Retirement Plan Participation: Geographic Differences and Trends, 2013. EBRI Issue Brief #405. http://www.ebri.org/publications/ib/index.cfm?fa=ibDisp&content_id=5451.

91 IRS. Traditional IRAs. Publication 590. http://www.irs.gov/publications/p590a/ch01.html.

92 IRS. Retirement Topics: IRA Contribution Limits. http://www.irs.gov/Retirement-Plans/Plan-Participant,-Employee/Retirement-Topics-IRA-Contribution-Limits.

93 Helman, Ruth, Craig Copeland, and Jack VanDerhei. 2015. The 2015 Retirement Confidence Survey: Having a Retirement Savings Plan a Key Factor in Americans' Retirement Confidence. EBRI Issue Brief #413. http://www.ebri.org/pdf/briefspdf/EBRI_IB_413_Apr15_RCS-2015.pdf.

94 Trustees reports for 2013, 2014, 2015, and SSA. 2012. Table VI.B1.—Long-Range OASDI Actuarial Balances and Trust Fund Exhaustion Dates as Shown in the Trustees Reports for 1982-2012. OASDI Trustees Report. http://www.socialsecurity.gov/OACT/TR/2012/VI_B_LRact_bal.html#103557.

95 See the policy options in Chapter 3.

96 Congressional Budget Office (CBO). March 2004. Administrative Costs of Private Accounts in Social Security. http://www.cbo.gov/publication/15467.

97 Munnell, Alicia, and Jean-Pierre Aubry. 2010. Returns on 401(k) Assets by Cohort. Center for Retirement Research at Boston College Brief #10-6. http://crr.bc.edu/briefs/returns-on-401k-assets-by-cohort/.

98 Mueller, John D. 1997. If Economic Growth Falls to 1.4%, What Happens to the Stock Market? http://eppc.org/publications/if-economic-growth-falls-to-1-4-what-happens-to-the-stock-market/.

99 Office of Management and Budget. 2015. Historical Tables. The President's Budget for Fiscal Year 2016. https://www.whitehouse.gov/omb/budget/Historicals.

100 Gabe, Thomas. 2015. Social Security's Effect on Child Poverty. CRS Report RL33289. http://www.pennyhill.com/jmsfileseller/docs/RL33289.pdf.

101 Gabe, Thomas. 2015. Social Security's Effect on Child Poverty. CRS Report RL33289. http://www.pennyhill.com/jmsfileseller/docs/RL33289.pdf.

102 U.S. Census Bureau. 2015. Current Population Survey. Annual Social and Economic Supplement. Impact on Poverty of Alternative Resource Measures by Age: 1981 to 2014. http://www.census.gov/hhes/www/poverty/data/incpovhlth/2014/tables.html.

103 U.S. Census Bureau. 2015. 2013 Annual Surveys of State and Local Government Finances. http://www.census.gov/govs/local/.

104 SSA. 2015. Table VI.G8.- Operations of the Combined OASI and DI Trust Funds, in Current Dollars, Calendar Years 1970-2090. 2015 OASDI Trustees Report. https://ssa.gov/OACT/TR/2015/lr6g8.html.

105 SSA. 2014. Special Minimum Benefit. Program Explainers. http://www.ssa.gov/retirementpolicy/program/special-minimum.html.

106 Office of the Chief Actuary, SSA. 2015. Summary Measures and Graphs. Solvency Provisions. http://www.ssa.gov/OACT/solvency/provisions/charts/chart_run277.html.

107 Office of the Chief Actuary, SSA. 2015. Summary Measures and Graphs. Solvency Provisions. http://www.ssa.gov/OACT/solvency/provisions/charts/chart_run310.html.

108 Office of the Chief Actuary, SSA. 2015. Summary Measures and Graphs. Solvency Provisions. http://www.ssa.gov/OACT/solvency/provisions/charts/chart_run272.html.

109 Bureau of Labor Statistics (BLS). Consumer Price Index Frequently Asked Questions. http://www.bls.gov/cpi/cpifaq.htm.

110 Stewart, Kenneth J. 2008. The experimental consumer price index for elderly Americans (CPI-E): 1982–2007. Monthly Labor Review. http://www.bls.gov/opub/mlr/2008/04/art2full.pdf.

111 Office of the Chief Actuary, SSA. 2015. Summary Measures and Graphs. Solvency Provisions. http://www.ssa.gov/OACT/solvency/provisions/charts/chart_run136.html.

112 SSA. 2001. Research Note #11: The History of Social Security "Student" Benefits. http://www.ssa.gov/history/studentbenefit.html.

113 Office of the Chief Actuary, SSA. 2015. Summary Measures and Graphs. Solvency Provisions. http://www.ssa.gov/OACT/solvency/provisions/charts/chart_run240.html.

114 Office of the Chief Actuary, SSA. 2015. Summary Measures and Graphs. Solvency Provisions. http://www.ssa.gov/OACT/solvency/provisions/charts/chart_run251.html.

115 Office of the Chief Actuary, SSA. 2015. Summary Measures and Graphs. Solvency Provisions. http://www.ssa.gov/OACT/solvency/provisions/charts/chart_run249.html.

THE ECONOMIC POLICY INSTITUTE is a nonprofit, nonpartisan think tank that seeks to broaden the public debate about strategies to achieve a prosperous and fair economy. The Institute stresses real world analysis and a concern for the living standards of working people, and it makes its findings accessible to the general public, the media, and policy makers. EPI's books, studies, and popular education materials address important economic issues, analyze pressing problems facing the U.S. economy, and propose new policies.

Economic Policy Institute books are available in bookstores and at www.epi.org.

THE NATIONAL ACADEMY OF SOCIAL INSURANCE is a non-profit, non-partisan organization made up of the nation's leading experts on social insurance. Its mission is to advance solutions to challenges facing the nation by increasing public understanding of how social insurance contributes to economic security.

National Academy of Social Insurance publications and resources are available online at www.nasi.org.

NATIONAL
ACADEMY
OF·SOCIAL
INSURANCE