

The 2005 Social Security Coloring Book

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This entire document is under construction. Feedback is strongly encouraged/hoped for: yoram@smallparty.org.

¹This book was in large part inspired by students in a class I organized on Social Security and Medicare reform at Whitman College in 2005, so I'd like to thank those students: Brett Rawson, Caitlin Kearney, Dan Shaw, Eli Asch, Evan Carman, James Esler, Julia Talley, Meghan Bunch, Michael Wert, and Nathan King.

Background

Here is a breakdown of the U.S. economy, as measured by GDP (Gross Domestic Product). Federal government spending accounts for about 20% of the economy...

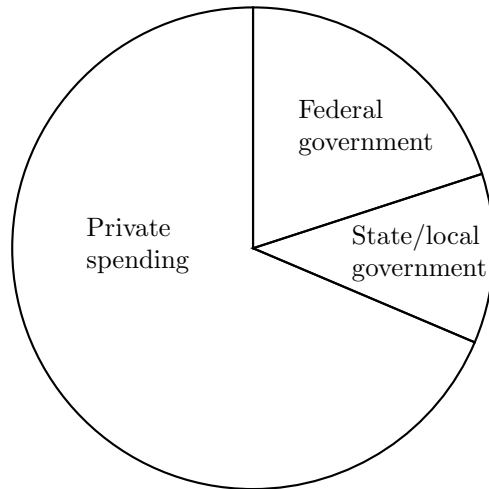


Figure 2: U.S. GDP, fiscal year 2005

	\$ (billions)	\$ (per capita)	% of GDP
TOTAL	\$12,290	\$41,460	100.0%
Government	\$3,859	\$13,020	31.4%
Federal	\$2,472	\$8,340	20.1%
State/local	\$1,387	\$4,679	11.3%
Private	\$8,431	\$28,444	68.6%

²Source: Author's calculations based on [OMB 2007](#), *Historical Tables*, Tables 10.1, 15.2, 15.3, and 17.5. Fiscal year 2005 covers October 1, 2004, through September 30, 2005. Included in the federal government amounts are grants given to state and local governments; these total about 3% of GDP. (See Tables 15.2 and 15.3 above, as well as [OMB 2002](#), p. 2.)

³As a percentage of GDP, federal government expenditures have been in a narrow range for 30 years, with a low of 18.4% in 2000 and a high of 23.5% in 1983 ([OMB 2007](#), *Historical Tables*, Table 1.2).

... and Social Security accounts for about 20% of federal government spending. In 2005 it was the single largest program of the federal government.

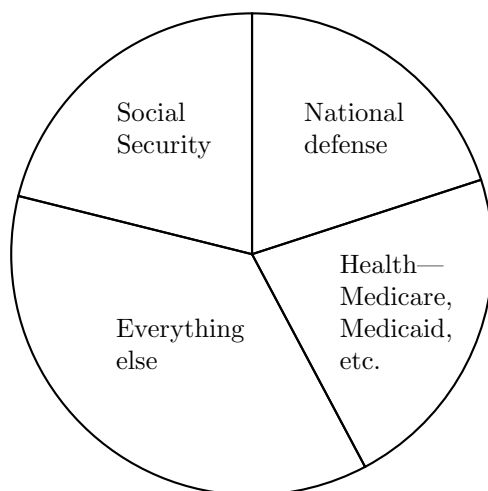


Figure 3: Federal government spending, fiscal year 2005

	\$ (billions)	\$ (per capita)	% of total
TOTAL	\$2,472	\$8,340	100.0%
Social Security	\$523	\$1,765	21.2%
National defense	\$495	\$1,671	20.0%
Health	\$549	\$1,853	22.2%
Everything else	\$904	\$3,051	36.6%

⁴Source: Author's calculations based on [OMB 2007, Historical Tables](#), Tables 3.1 and 17.5. Included in "Everything else" is \$184 billion (\$621 per capita, 7.4% of total) in interest payments on federal debt held by the public; not included in that category—or anywhere else in this figure—is \$92 billion (\$310 per capita) in interest payments on federal debt held by the Social Security Trust Fund. This issue is unimportant in the context of the federal budget as a whole, but looms larger in the upcoming discussion of the Trust Fund.

⁵Medicare is the federal government's health care program for Americans 65 and over. Medicaid is a joint federal-state program that provides health care for some (but not all) low-income Americans. The average federal-state financial split for Medicaid is 60–40, with total expenditures in 2004 of about \$300 billion. Medicare expenditures in 2004 also totaled about \$300 billion. See the [Medicaid Technical Summary](#) and [2005 CMS Statistics](#), Table 27.

Money out from Social Security goes mostly to retired workers and their spouses. Social Security also has programs for disabled workers and their families, but most reform proposals leave these programs unchanged.

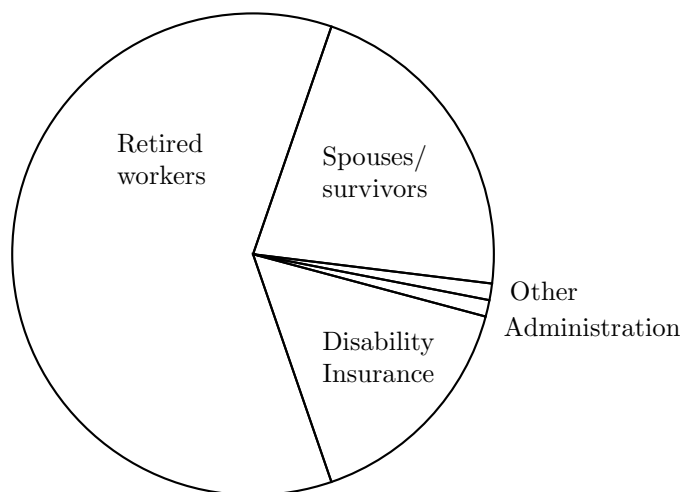


Figure 4: Social Security spending, calendar year 2004

	\$ (billions)	\$ (per capita)	% of total
TOTAL	\$502	\$1,692	100.0%
Retired workers	\$304	\$1,026	60.6%
Spouses/survivors	\$108	\$364	21.5%
Disability Insurance	\$78	\$264	15.6%
Other	\$7	\$23	1.4%
Administration	\$5	\$15	0.9%

⁶Source: [Social Security Trustees 2005](#), Tables II.B1 and III.A5. Population data from [OMB 2007, Historical Tables](#), Table 17.5. Social Security calendar year figures are slightly different than OMB fiscal year figures.

⁷Most survivors benefits go to widows: according to [SSA 2001](#), widow beneficiaries outnumber widower beneficiaries by more than 99 to 1! The demographic and economic factors underlying this result also led [CBO 2004](#) to conclude that federal recognition of same-sex marriage would have only “modest” financial impacts on expenditures for spousal and survival benefits: same-sex partners are likely to be dual-income and have similar life expectancies.

On the income side, a 12.4% payroll tax on the first \$90,000 or so of each worker’s wages provides the bulk of Social Security’s reported revenue. The tax is officially split between employees and employers, but economists agree that employees effectively bear the entire burden.

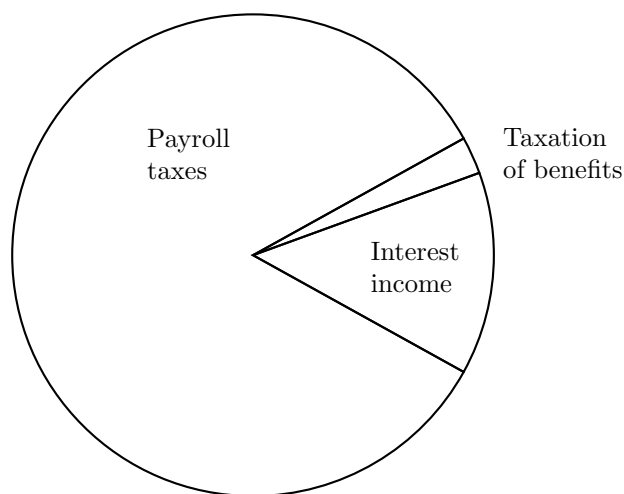


Figure 5: Reported Social Security income, calendar year 2004

	\$(billions)	\$(per capita)	% of total
TOTAL	\$658	\$2,219	100.0%
Taxes	\$569	\$1,919	86.5%
Payroll tax	\$553	\$1,866	84.1%
Taxation of benefits	\$16	\$53	2.4%
Interest income	\$89	\$300	13.5%

⁸Source: [Social Security Trustees 2005](#), Table II.B1. Population data from [OMB 2007, Historical Tables](#), Table 17.5. The relevance of interest income from the Trust Fund is disputed, hence the label of “reported” income; more on this in the Trust Fund discussion.

⁹Economic arguments suggest that employers pass “their half” of the payroll tax along to workers by paying lower wages. Given this assumption, and adding in other payroll taxes (notably a 2.9% Medicare tax), [CBO 2003](#) concludes that 70% of U.S. households pay more in payroll taxes than in income taxes.

The Problem

Social Security expenditures are expected to rise by 50%, from 4% of GDP to over 6% of GDP, as the Baby Boomers retire over the next three decades. But expenditures are projected to stay above 6% of GDP long after the Boomers cease to be a demographic force, meaning that the fundamental “problem” is *increasing lifespans*.

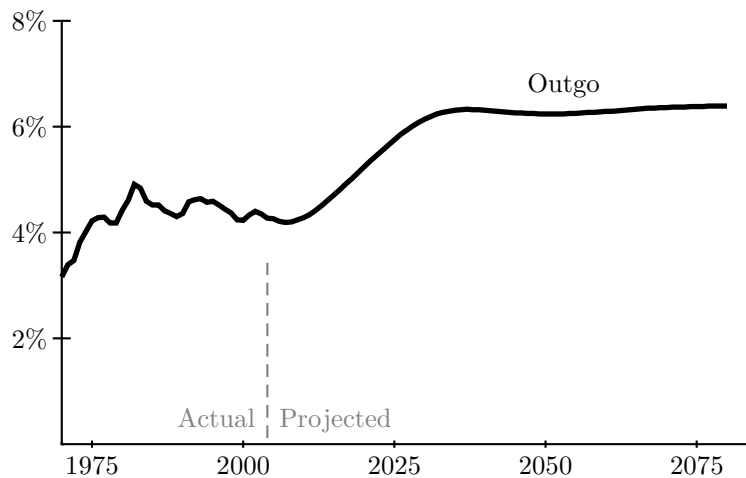


Figure 6: Social Security expenditures as a percentage of GDP, 1970–2080

¹⁰Source: Author’s calculations based on the intermediate “best guess” estimates of [Social Security Trustees 2005, Table IV.B1 and Chart B](#).

¹¹Baby Boomers were born between 1946 (Dolly Parton) and 1964 (Keanu Reeves). The oldest Boomers turn 60 in 2006 and will be eligible for reduced retirement benefits at age 62 in 2008. The youngest Boomers turn 42 in 2006 and will be 100 in 2064.

Meanwhile, Social Security tax income is expected to gently decline from its current position (4.9% of GDP, which looks good compared to current expenditures of 4% of GDP) to about 4.5% of GDP, which looks like trouble compared to estimated future expenditures of over 6% of GDP. The next graph shows that rising expenditures will overtake falling tax income in about 2014.

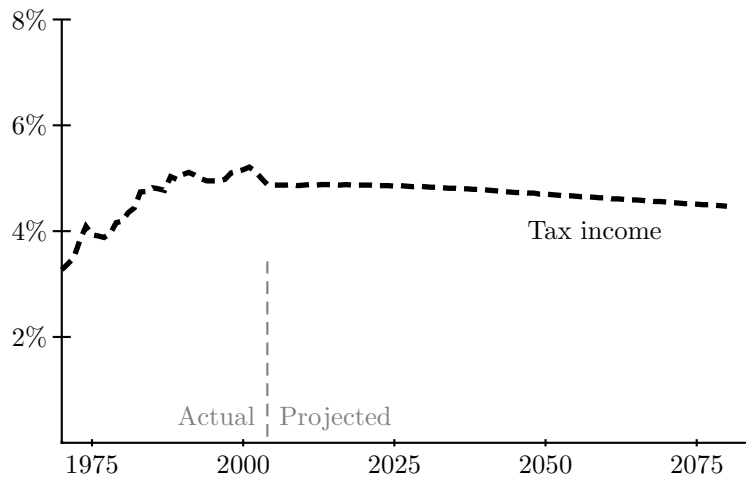


Figure 7: Social Security tax revenue as a percentage of GDP, 1970–2080

¹²Source: Author’s calculations based on the intermediate “best guess” estimates of [Social Security Trustees 2005, Table IV.B1 and Chart B](#). Note that tax income does not include interest income on Trust Fund assets.

¹³Declining tax income (as a percentage of GDP) suggests that labor income is projected to decline as a percentage of GDP. In fact it is only *wages* that are projected to decline as a percentage of GDP. Projected increases in health coverage and other fringe benefits that are not subject to Social Security taxes are expected to leave total compensation unchanged as a percentage of GDP ([Medicare Trustees 2005, p. 10n](#)).

We are currently in Area A, with tax income exceeding expenditures by about \$60 billion a year. The resulting surplus is credited to a controversial Trust Fund: some people argue that Social Security will be “bankrupt” at the end of Area A, in about 2014; other argue that the Trust Fund will keep Social Security solvent through Area B, until about 2041. Almost overlooked in all the controversy is Area C, which everybody agrees is trouble.

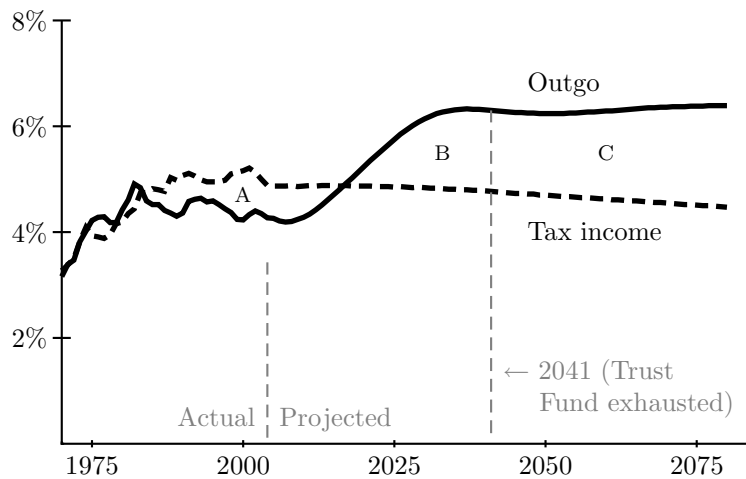


Figure 8: Social Security as a percentage of GDP, 1970–2080

¹⁴Source: Author’s calculations based on the intermediate “best guess” estimates of Social Security Trustees 2005, Table IV.B1, Chart B, and p. 2.

The year 2050 provides a good benchmark. In that year, Social Security is projected to face a shortfall equal to 1.6% of GDP. In relative terms, this isn't such a big deal: Medicare is projected to face a shortfall in that year of about 6% of GDP, and the “on-budget” federal government deficit was 4% of GDP *in 2005*.

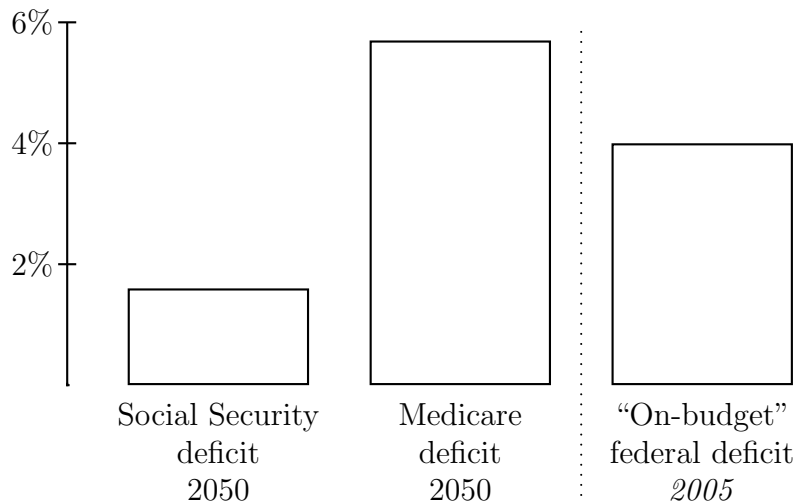


Figure 9: Deficits as a percentage of GDP

¹⁵Source: Social Security deficit of 1.6% is from the intermediate “best guess” estimates of [Social Security Trustees 2005](#), Table VI.F4. Medicare deficit of 5.7% is author’s calculation based on the intermediate “best guess” estimates of [Medicare Trustees 2005](#), Table III.A4, and breaks down to an HI deficit of 2.1% plus SMI general revenue transfers of 4.2% (adjusted downward by .6% to account for existing deficit-adjusted transfers). On-budget 2005 federal deficit of 4.0% is from [OMB 2007](#), *Historical Tables*, Table 1.2.

¹⁶The Trustees reports predict that by 2080 Social Security and Medicare together will be 20% of GDP, which historically has been the size of the entire federal government. Federal expenditures on just the Part D prescription drug benefit, which has no dedicated funding source and was passed by a Republican Congress and signed by President Bush in 2003, will be 2.3% of GDP in 2050 and 3.4% of GDP in 2080 ([Medicare Trustees 2005](#), Table III.C20).

In absolute terms, however, a shortfall of 1.6% of GDP *is* a big deal: the annual deficit that Social Security will be facing down the road amounts to almost one-fiftieth of the entire output of the U.S. economy!

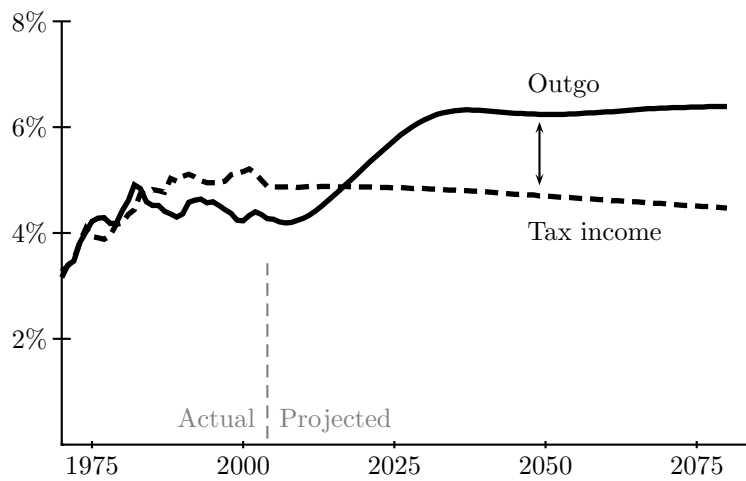


Figure 10: Social Security as a percentage of GDP, 1970–2080

¹⁷Source: Author’s calculations based on the intermediate “best guess” estimates of [Social Security Trustees 2005, Table IV.B1, Chart B](#), and p. 16.

¹⁸Since the federal government currently accounts for 20% of GDP, a 1.6% gap also amounts to almost one-tenth of the federal budget.

The Trust Fund

As if that's not enough, there's also a short-term problem: the Social Security Trust Fund is a good-government nightmare.

Wall Street Journal
[It is a] fiction that there is actually a 'trust fund' accumulating assets. . . .
[The Social Security] "surpluses" have already been spent on other things and converted to IOUs. . . . Not a nickel [was] saved. . . . Instead of building assets, or contributing to an increase in net national saving and thus investment, all of it [went to] finance current government consumption.

New York Times
If you had a trust fund to pay your bills when your income fell short, would you consider yourself insolvent?
[Social Security surpluses are] invested in interest-bearing Treasury securities. . . . If the trust fund's Treasury securities are worthless, someone better tell investors throughout the world, who currently hold \$4.3 trillion in Treasury debt that carries the exact same government obligation to pay as the trust fund securities.

¹⁹Source: *Wall Street Journal* editorials of January 5, 2005 ("AARP's Tax Increase") and March 25, 2005 ("\$2.2 Trillion Down"), and *New York Times* editorial of January 10, 2005 ("For the Record on Social Security").

The Trust Fund controversy is a product of the generational imbalance created by the Baby Boomers. Without this imbalance, Social Security would be operating in accordance with the world's best acronym:

PAYGO = Pay As You Go.

In a pure PAYGO system, each generation pays the retirement benefits of the previous generation, and in turn has their retirement benefits paid by the following generation. Income equals outgo each year, so there is nothing to save, i.e., no Trust Fund assets to quibble over.

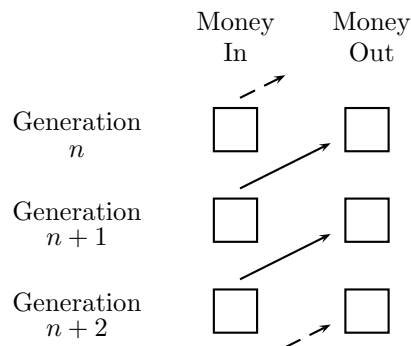


Figure 12: A pure Pay-As-You-Go (PAYGO) system

²⁰Note that the quibble between the *Wall Street Journal* and the *New York Times* is over relevance of the assets credited to the Trust Fund, not over the existence of the Trust Fund itself. A Social Security Trust Fund has existed since the program's inception, but it is only in the last 20 years that Social Security has deviated from PAYGO.

The demographic bulge created by the Baby Boomers posed twin difficulties for Social Security's PAYGO structure:

1. While the Boomers were working, what would be done with all the extra tax revenue coming in?
2. When the Boomers retired, where would the extra money come from to pay their benefits?

You don't have to have a PhD in economics to figure out one possible answer...

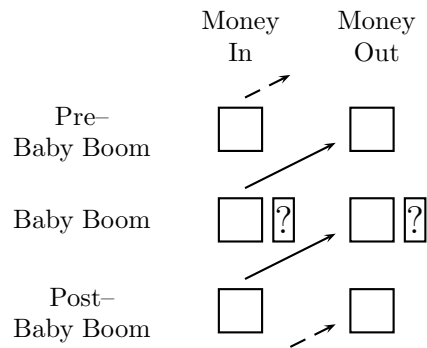


Figure 13: The problems created by the Baby Boomers

...modify PAYGO by having the Boomers “pre-fund” part of their own retirement by saving the extra tax revenue in a Trust Fund and then using that money to pay the extra benefits once the Boomers retire.

Sadly, the concept of “saving” is trickier than it seems, especially in the context of a debt-ridden federal government that “saves” the extra tax revenue by buying government bonds, i.e., by loaning the money to itself.

So, does the Trust Fund exist or not? The disappointing answer is: *It depends on your perspective.*

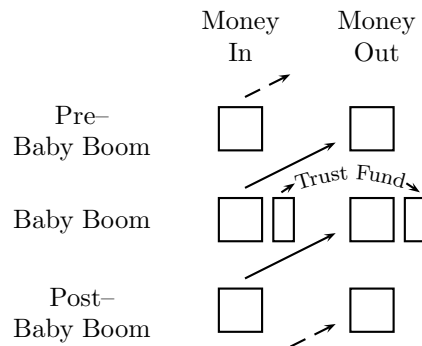


Figure 14: The idea behind the Trust Fund

²¹The concept of “savings” isn’t just tricky for governments. You might wonder, for example, whether individuals with both retirement accounts and credit card debt can legitimately be said to be saving for their retirement, or whether they can take a cash advance on their credit cards in order to fund their retirement accounts, or whether they can save for retirement using money acquired by failing to maintain their health or their automobiles.

²²Although it sounds sketchy, the premise of the federal government buying its own bonds is really not a problem. The problem (as described on the next page) is about how we do the accounting, and that problem would be the same if the federal government instead decided to invest in, say, Eurobonds.

From a “separated” perspective that splits off the “savings account” of Social Security from the “checking account” of the rest of the government, the Trust Fund is alive and well—and receiving \$90 billion a year in interest payments on its U.S. Treasury bond assets—but the rest of the federal government is in terrible shape, with a 2004 deficit of \$560 billion. From a “unified” perspective that lumps everything together, however, no money is being saved in the Trust Fund. (The good news here is that the 2004 federal deficit was “only” \$410 billion.)

Since neither perspective is “right”—each has pluses and minuses—the issue is fundamentally unresolvable.

	In billions			
	Income from public	Outgo to public	Trust Fund interest	Surplus (deficit)
2004 Actual				
Separated perspective				
Social Security	\$560	\$500	+\$90	\$150
Rest of government	\$1,320 [†]	\$1,790 [†]	−\$90	(\$560)
Unified perspective	\$1,880 [†]	\$2,290 [†]	0	(\$410)

Table 15: Income and outgo for Social Security and the federal government, fiscal year 2004.

[†] For simplicity, these figures include small amounts of income from or outgo to the Medicare trust funds or other non-public sources.

²³Source: Author’s calculations based on [Medicare Trustees 2005](#), Table V.E1.

²⁴The only thing you can’t do is mix and match, e.g., by claiming that the Trust Fund exists but that the 2004 deficit is only \$410 billion. Unfortunately, this is what the *New York Times* does.

This controversy is worth keeping in mind when considering reform proposals that increase or decrease reliance on the Trust Fund. Within the existing (mostly PAYGO) structure of Social Security, however, the Trust Fund issue is a short-term matter that starts and ends with the Baby Boomers. The supposed Trust Fund build-up and draw-down (Areas A and B) are small potatoes compared to Social Security’s long-term problem (Area C).

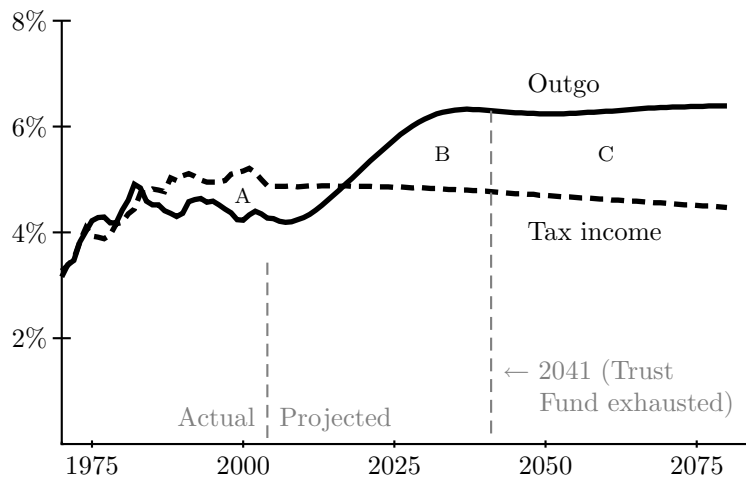


Figure 16: Social Security as a percentage of GDP, 1970–2080

²⁵Source: Author’s calculations based on the intermediate “best guess” estimates of [Social Security Trustees 2005, Table IV.B1](#) and [Chart B](#).

Mending Social Security

There are only two general approaches to solving the long-term problem facing Social Security: mend it or end it.

The “mend it” option involves modifying the existing system by increasing money in and/or decreasing money out. For example, we could slowly increase the normal retirement age—already slated to rise from 65 to 67 over the next two decades—until it hits 70, or we could eliminate the income cap, which limits Social Security taxes to the first \$90,000 or so of a worker’s salary.

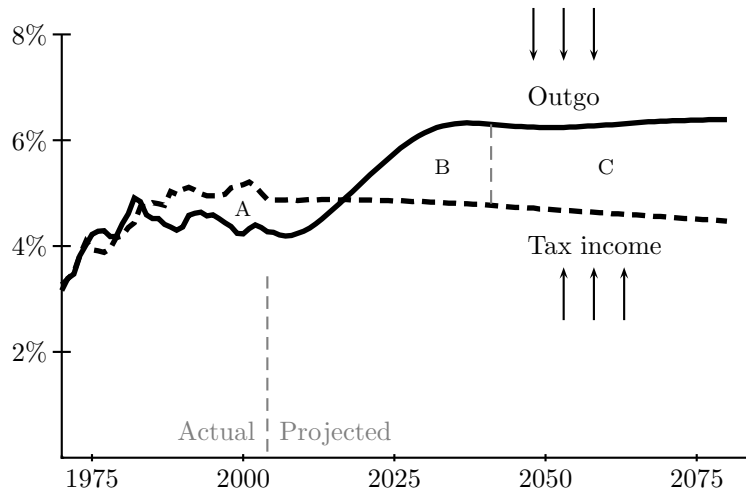


Figure 17: Social Security as a percentage of GDP, 1970–2080

²⁶Source: Author’s calculations based on the intermediate “best guess” estimates of [Social Security Trustees 2005, Table IV.B1](#) and [Chart B](#). See also [SSA 2005](#).

²⁷The income cap that limits Social Security taxes also limits Social Security benefit payments; the proposal discussed here would eliminate both, but the increase in tax revenue would outweigh the eventual increase in benefit payments.

Sadly, these proposals would only be down-payments on the system’s long-term deficit, which in 2050 is projected to be 1.6% of GDP and growing. Eliminating the income cap would only reduce that deficit by 0.7% of GDP; raising the retirement age would only reduce it by 0.4% of GDP. So we would almost certainly face more Social Security problems down the road.

Each proposal would, however, extend Areas A and B and therefore increase the lifespan of the Social Security Trust Fund. (Whether this is good or bad depends on your perspective on the Trust Fund.)

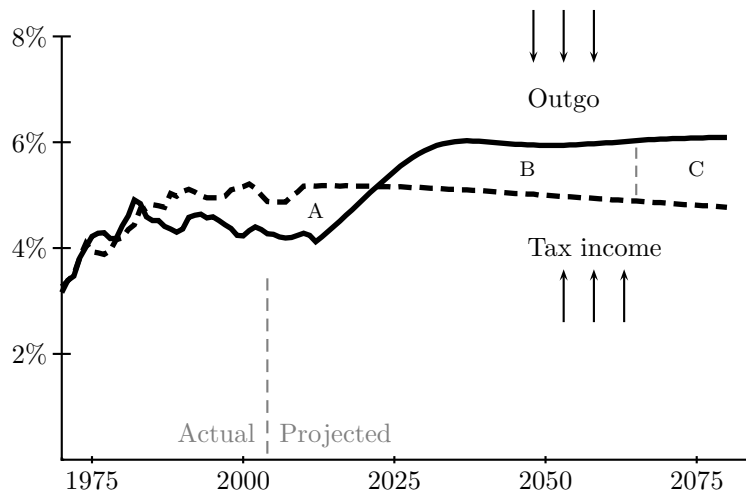


Figure 18: Hypothetical changes in Social Security as a percentage of GDP, 1970–2080. *This is an informal sketch for heuristic purposes only.*

²⁸Source: Proposal impacts are author’s calculations based on [SSA 2005](#), Tables 10 and 15, and the 2004 Social Security Trustees report. Graph is author’s heuristic based on the intermediate “best guess” estimates of [Social Security Trustees 2005](#), Table IV.B1 and Chart B.

²⁹As noted in footnote 27, the income cap proposal would eliminate limits on both Social Security taxes and Social Security benefit payments; eliminating the former but keeping the latter (see [SSA 2005](#), Table 14) would reduce the deficit by 1.0% of GDP.

It is of course possible to institute more complex modifications that will make Social Security solvent in the long run, and some economists advocate doing just that.

To remember the scale of the problem, however, consider the two simplest options: an across-the-board benefit cut or an across-the-board tax increase. Since the projected shortfall in 2050 is one-quarter of Social Security’s projected expenditures in that year, closing the gap by cutting benefits would require a cut of about 25%. Alternatively, closing the gap by increasing taxes would require generating about one-third more revenue, e.g., raising the payroll tax from 12.4% to about 16.5%.

	% of GDP
TOTAL SHORTFALL IN 2050	1.6
PARTIAL SOLUTIONS	
Raise retirement age to 70	0.4
Eliminate income cap	0.7
COMPLETE SOLUTIONS	
Cut benefits by 25%	1.6
Raise payroll tax by 33%	1.6

Table 19: Addressing the long-term shortfall

³⁰Source: Author’s calculations based on [SSA 2005](#) and [Social Security Trustees 2005](#), [Tables VI.F2 and VI.F4](#). See footnotes [27](#) and [29](#) for details about the income cap proposal.

³¹For a detailed “mend it” proposal, see [Diamond and Orszag 2004](#).

Ending Social Security

In contrast to the “mend it” advocates, most “end it” advocates want to replace the existing Social Security retirement program with a system of individual accounts.

The basic idea behind such accounts is simple: workers would be required to set aside money in an investment account, an account “with your name on it” that would generate income upon retirement. Such accounts would come too late to be of use to those already retired, such as the generation born in 1935, and they would be of only modest use to older workers. But younger workers would be able to use such accounts for most if not all of their working lives.

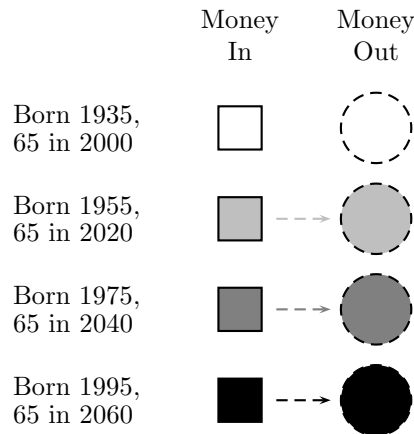


Figure 20: The basics of Individual Accounts

³²Most proposals leave the Disability Insurance portion of Social Security unchanged. Some proposals (e.g., Kotlikoff and Burns 2004) also leave the Survivors Insurance portion unchanged, focusing entirely on the Old-Age Insurance portion.

³³There are also some libertarians (e.g., Milton Friedman, “Social Security Chimeras”, *New York Times*, Jan. 11, 1999) who don’t want any mandatory Social Security–like program.

There are four main elements of Individual Account plans. The first is *contributions*, a.k.a taxes. Most proposals fund individual accounts using part of the payroll tax that currently goes into Social Security.

But the devil is in the details. For example, the proposal by economist Laurence Kotlikoff requires married couples to pool their contributions and then split them evenly between their two accounts to make things simple in case of divorce. It also creates a 3% national sales tax to “top off” accounts for disabled and low-income individuals.

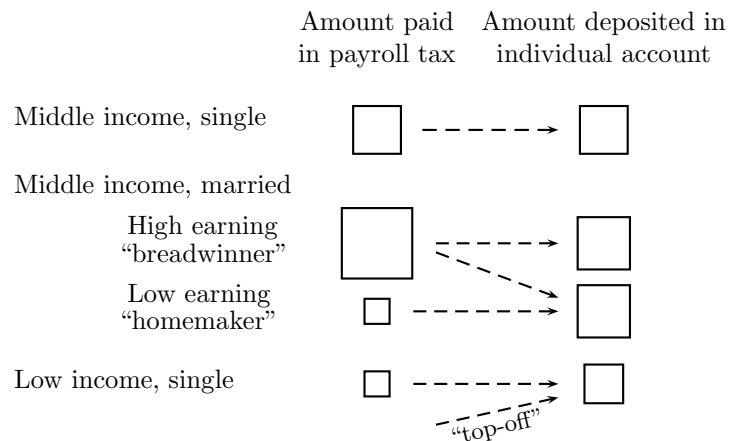


Figure 21: Examples of individual account funding in the Kotlikoff proposal

³⁴Almost all of them leave the Disability Insurance program—funded by a 1.8% payroll tax—unchanged. Some proposals (e.g., Kotlikoff and Burns 2004) also leave the Survivors Insurance portion unchanged, focusing entirely on the Old-Age Insurance portion.

The second element of Individual Account plans is *investment*. Kotlikoff’s plan requires all account balances to be invested in a single global index fund of stocks, bonds, and real estate. It is of course possible to provide multiple investment options, but a single diversified portfolio keeps administration costs down, prevents people from making excessively risky investment decisions—thereby answering one of the common criticisms of individual account plans—and may have some social value by keeping everybody in the same boat. Although past results are no guarantee of future performance, that boat has historically been quite successful.

	Stock Market	Bond Market
1802–1997	7.0%	2.9%
1871–1997	7.0%	1.7%
1946–1997	7.5%	0.5%
MAJOR SUB-PERIODS		
1802–1870	7.0%	5.1%
1871–1925	6.6%	3.2%
1926–1997	7.2%	0.6%
POST-WAR PERIODS		
1946–1965	10.5%	-0.9%
1966–1981	-0.4%	-0.2%
1982–1997	12.8%	2.9%

Table 22: Inflation-adjusted compound annual rate of return on stocks and bonds, 1802–1997 and various sub-periods

³⁵Source for all years except 1946–1965: Jeremy J. Siegel, *Stocks for the Long Run: The Definitive Guide to Financial Market Returns and Long-term Investment Strategies*, 1998, pp. 13–15. Source for 1946–1965 is author’s calculations based on Siegel’s data.

The third element of most Individual Account plans is *mandatory annuitization*: as each individual approaches age 65, their investment account balance is used to purchase something akin to today’s Social Security benefits: inflation-adjusted monthly payments that continue for the duration of that individual’s life.

The size of those monthly payments depends on how much is in that person’s account, on economic forecasts, and—if purchased in a free market—on statistical estimates of that person’s life expectancy. (Higher life expectancies translate to lower monthly payments, which may seem unfair until you consider the alternative.)

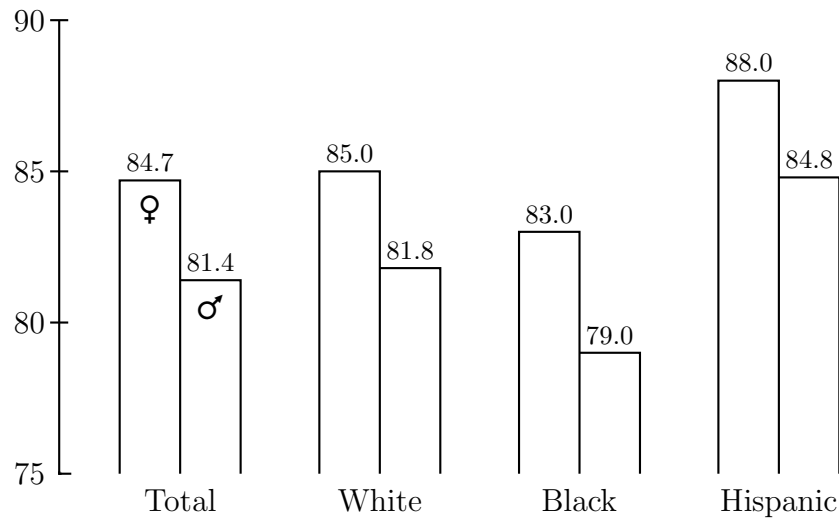


Figure 23: Life expectancy at age 65 for females/males turning 65 in 2005

³⁶Source: [Census Bureau 1996](#), Table B-2. Kotlikoff and Burns 2004 pool age cohorts together so that all individuals with the same age and contributions history end up with the same annuity.

³⁷For American Indian, Eskimo, and Aleut, the numbers are 88.0 for females and 83.6 for males; for Asian and Pacific Islander, they’re 88.2 for females and 84.8 for males. These numbers, and those for whites and blacks, are similar if limited to non-Hispanics.

Because most Individual Account plans feature mandatory annuitization, the idea of “passing assets on to your heirs” is less important than it may sound. Exchanging your account balance for monthly payments that are guaranteed to continue for life means that nothing is left after death, so the only way to leave anything to your heirs is to die before your account is annuitized at age 65. Most Americans (about 83% overall, though only 66% of black males) will avoid such an early death.

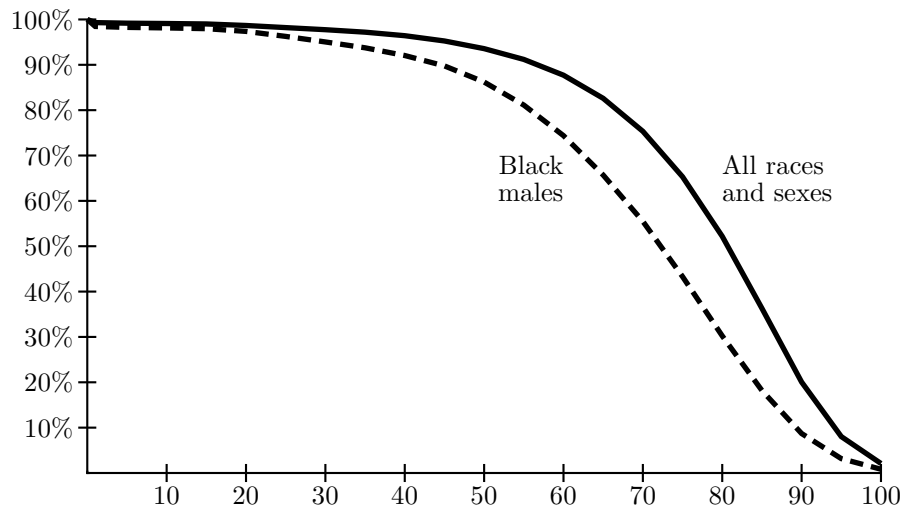


Figure 24: Percent of American newborns surviving to a given age, based on 2002 period life expectancies

³⁸Source: [National Center for Health Statistics 2004](#), Table 10.

³⁹Note that the percentage of Americans who *will* inherit is slightly inflated because not everybody will live long enough to build up a sizeable account balance: 3% of all Americans (and 5% of black males) die before the age of 30.

The fourth and final element of Individual Account plans is the *transition* between the existing Social Security system and the new system. Although transitions can range from immediate to very gradual, they must all confront the *legacy debt* of shutting down the existing system.

The problem with ending a PAYGO system is that somebody ends up paying in without getting any money out. Most reform proposals honor the benefit payments “earned” by the last generation, but this simply transfers the legacy debt to a different generation. Ultimately, someone is going to be left holding the bag.

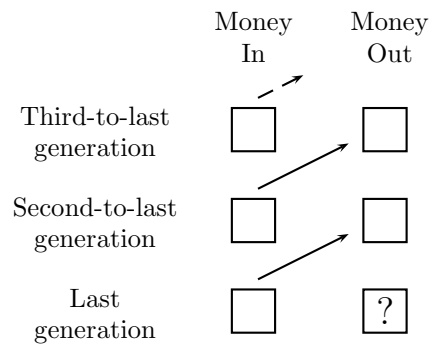


Figure 25: A pure Pay-As-You-Go (PAYGO) system

⁴⁰Milton Friedman (“Social Security Chimeras”, *New York Times*, Jan. 11, 1999) argues that the legacy debt is a sunk cost. This is true, but as long as it is included in the same way in all proposals under consideration it’s not misleading. Another alternative is to exclude legacy costs, and this is the implicit choice made by many advocates of individual accounts who tout “rate-of-return” calculations. But if legacy costs are excluded then they should be excluded across the board, a practice that would raise the rate of return for mend-it proposals as well as end-it proposals.

And what a big bag it is! If we honor all of the benefit payments currently owed, current retirees and near-retirees will keep those payments at or above current levels for decades to come. This will require generating new revenue (Kotlikoff advocates using a national sales tax starting at a rate of 9%) or borrowing huge sums of money. And the legacy debt obligations will continue—albeit at progressively lower levels—for as long as people currently in their late 20’s are still alive.

In case you’re not thrilled with the idea of a 9% national sales tax that would gradually decline to zero by the end of the 21st century, here are three final thoughts.

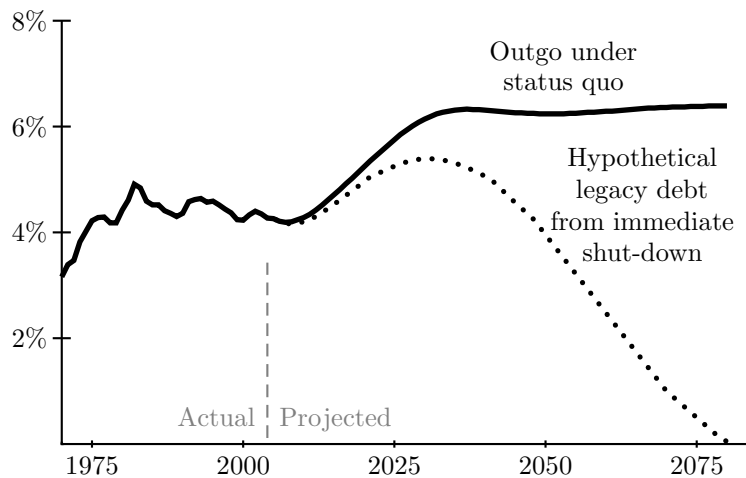


Figure 26: Social Security expenditures as a percentage of GDP under status quo, 1970–2080, and hypothetical legacy debt from immediate shut-down. *Legacy costs are sketched informally for heuristic purposes only.*

⁴¹Source: Outgo under status quo is from author’s calculations based on the intermediate “best guess” estimates of [Social Security Trustees 2005, Table IV.B1](#) and [Chart B](#). Hypothetical legacy costs are a heuristic created by the author based on the same data.

First, the “legacy debt” is really just the flip side of the “legacy bonus” that allowed early participants to make out like bandits. For example, Ida May Fuller—the first recipient of monthly Social Security checks—paid \$24.75 in taxes from the system’s inception (in 1937) until her retirement (in 1939), and then collected over \$22,000 in benefits before her death (in 1975, at age 100). As in the three-generation model below, the shut-down costs of having a generation pay taxes without receiving benefits is a perfect match for the start-up benefits of having a generation receive benefits without paying taxes.

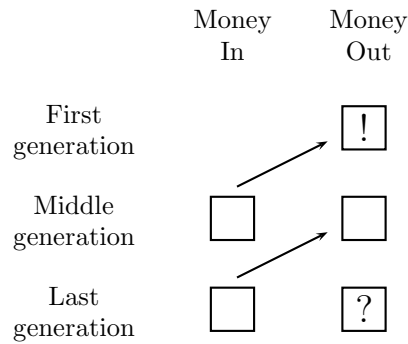


Figure 27: The start-up bonus

⁴²Source: <http://www.ssa.gov/history/briefhistory3.html>

⁴³Even if you could, would you choose to be less generous to Mrs. Fuller and the rest of a generation that lived through the Great Depression and two world wars?

Second, many economists think that Americans need to save more. Requiring workers to continue to pay the existing payroll tax while simultaneously imposing a new national sales tax (or something similar) is one way to accomplish this goal.

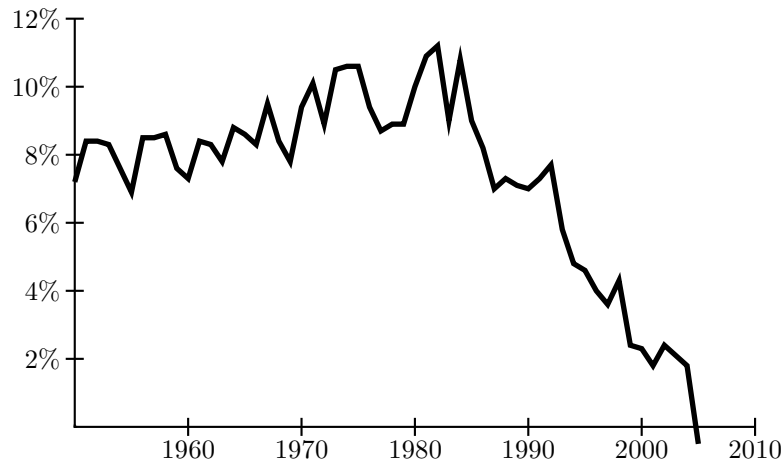


Figure 28: U.S. personal savings rate, 1950–2005

⁴⁴Source: [BEA 2006](#), Table 2.1.

⁴⁵There is some disagreement among macroeconomists (what else is new?) about whether the personal savings rate is really the right thing to be looking at here. But plenty of economists (e.g., Kotlikoff and Burns 2004) argue that Americans should be saving more, and the personal savings rate provides a graphical device for making point. Can anybody suggest anything better?

Finally, if incurring legacy debt seems unattractive, keep in mind that continuing with the status quo isn't so attractive either: remember the 25% benefit cut or 33% tax increase from Table 19? And waiting is likely to just make make it worse: projections for 2080 suggest the need for a benefit cut of almost one-third or a tax increase of almost 50%.

So trying to avoid legacy debt could be likened to leading police on a high-speed chase because you don't want a DUI, or telling the doctor that you can't stop cutting yourself because you need to drink the blood to survive.

And on that happy note. . .

% of GDP	In 2050	In 2080
TOTAL SHORTFALL	1.6	2.0
PARTIAL SOLUTIONS		
Raise retirement age to 70	0.4	0.6
Eliminate income cap	0.7	0.6
COMPLETE SOLUTIONS		
Cut benefits by 25%	1.6	
Cut benefits by 32%		2.0
Raise payroll tax by 33%	1.6	
Raise payroll tax by 46%		2.0

Table 29: The projected long-term shortfall under the current system

⁴⁶Source: Page 16 of [Social Security Trustees 2005](#) and author's calculation based on "Estimated OASDI Long-Range Financial Effects of Several Provisions Requested by the Social Security Advisory Board" ([Social Security Administration 2005](#)).

The

End

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