



The Heritage Foundation

Background

Executive Summary

No. 1194

June 22, 1998

SOCIAL SECURITY'S \$20 TRILLION SHORTFALL: WHY REFORM IS NEEDED

DANIEL J. MITCHELL

Reforming Social Security has become a front-burner issue in Washington, D.C., due in large part to growing recognition that the program is a very bad deal for younger workers. Social Security provides relatively meager benefits for the record amount of payroll taxes that workers send to the federal government. By contrast, if workers were allowed to invest the bulk of their payroll taxes in professionally managed individual retirement accounts, they could triple their retirement income.

Improving the security of future retirees, however, is only part of the story. Another reason policymakers are considering reform is that the Social Security system is bankrupt. Even though the program currently is collecting more in taxes each year than it needs to pay benefits, this surplus will disappear when the baby-boom generation begins to retire in about ten years. According to the Social Security Administration's own data, annual deficits will reach gargantuan levels, and the program's long-term, inflation-adjusted unfunded liability will be more than \$20 trillion.

The long-term unfunded liability is immense because Social Security will begin paying out more than it collects in another 12 years. Although the cash deficit in 2010 is less than \$1 billion, the

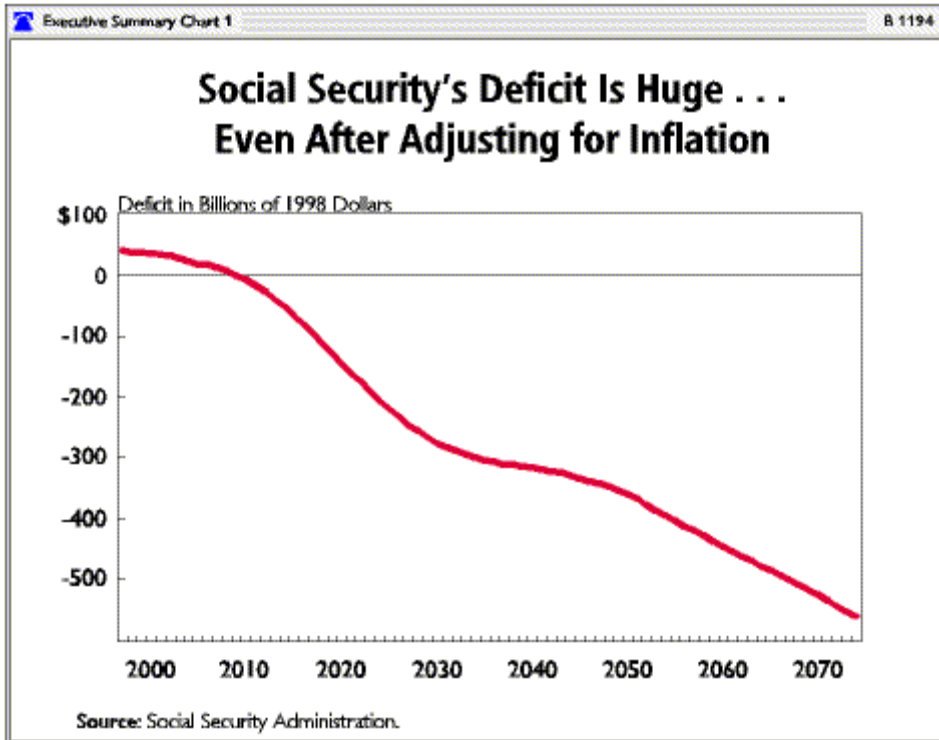
numbers quickly climb to staggering levels thereafter. Specifically:

- Social Security's annual cash shortfall will reach \$90 billion in 2015.
- By 2025, Social Security has promised to pay nearly \$500 billion more than it will collect in taxes.
- In 2035, the annual deficit will be more than \$1 trillion.
- In 2075, the last year for which the Social Security Administration provides numbers, the total annual shortfall will reach an incredible \$7.5 trillion.
- Even after adjusting for inflation, the deficits are immense, reaching \$200 billion in 2025 (in today's dollars), \$300 billion in 2035, \$400 billion in 2056, and \$500 billion in 2068.

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- The aggregate inflation-adjusted shortfall in the Social Security system between now and 2075 is more than \$20 trillion. This unfunded liability is more than 6 percent higher than it was one year ago.
- The “present value” of the shortfall (which measures how much money would need to be invested today to finance future unfunded benefits) is more than \$5 trillion.

Eliminating Social Security’s future deficit would require a 54-percent increase in payroll taxes, a 33-percent reduction in benefits, or a combination of these approaches. This is the “transition cost” of keeping Social Security solvent. There is a transition cost for privatization as well. Because younger workers would be allowed to place the majority of their payroll taxes in private retirement accounts, lawmakers would have to come up with other sources of funding to pay benefits to current retirees and older workers who

would remain dependent on the government.

Fortunately, the transition cost of privatization is considerably less than the transition cost of fixing Social Security. Moreover, the shift to a private system would be easier because lawmakers could use the budget surplus to cover part of the transition cost, whereas the surplus is projected to disappear when the time comes to bear the transition cost of keeping the current system in balance.

Privatization, however, is about more than numbers.

Workers who chose the private option would reach retirement age with substantial nest eggs that would be capable of generating annual incomes well in excess of what Social Security currently promises them. This would occur because private income-producing assets generate much higher returns than Social Security. Adjusted for inflation, stocks historically have produced annual returns of more than 7 percent (including during the Great Depression). Private bonds generate returns of more than 4 percent. Social Security, by contrast, is a miserable investment. Dual-income couples born after 1960, for example, will receive an annual return of less than 1.4 percent. And if lawmakers tried to save the program with tax increases and benefit cuts, the rate of return would fall even further.

—Daniel J. Mitchell is McKenna Senior Fellow in Political Economy for The Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation.



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Social Security faces an enormous future deficit: Between today and 2075, the inflation-adjusted shortfall is projected to reach a staggering \$20 trillion. Although the problem with the current system is due in part to changes in demographics, the root of the problem lies in the fact that the Social Security system itself is poorly designed. Workers, particularly those under age 50, are slated to receive very low benefits in return for a record amount of payroll taxes they send to the federal government.¹ These workers could enjoy substantially greater levels of retirement income if they were allowed to place the bulk of their payroll taxes in professionally managed individual retirement accounts,² which historically have had significantly higher rates of return.

Defenders of the current system generally admit that personal accounts would make workers better off, but they also argue that the "transition cost" of privatizing would be significant. More specifically, because a major share of the payroll taxes now used to pay benefits would be invested instead in private accounts, policymakers would need to find

several trillion dollars to finance benefits for current retirees and those nearing retirement (and, therefore, too old to take advantage of private accounts).

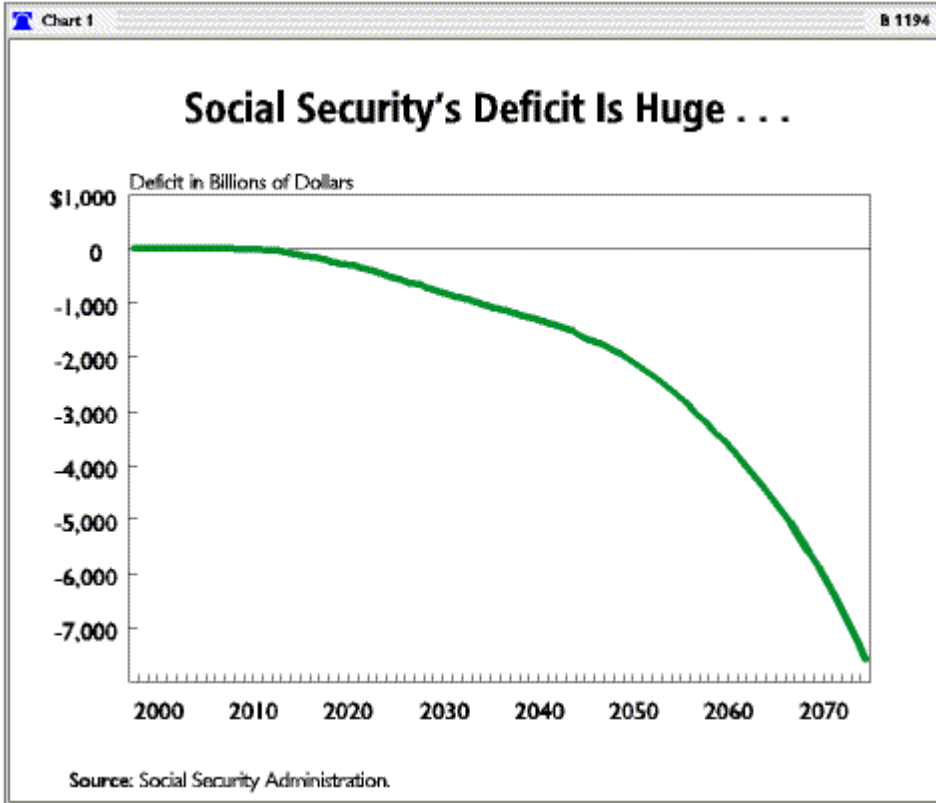
These critics are only correct in a technical sense because they omit the other side of the story. Yes, privatization entails a sizable transition cost, but keeping the current system in place and putting it on sound footing would involve a large transition cost as well. The important question to ask is whether the price tag for moving to a private system is smaller or larger than the amount of money lawmakers would have to find to fulfill the promises of the current system.

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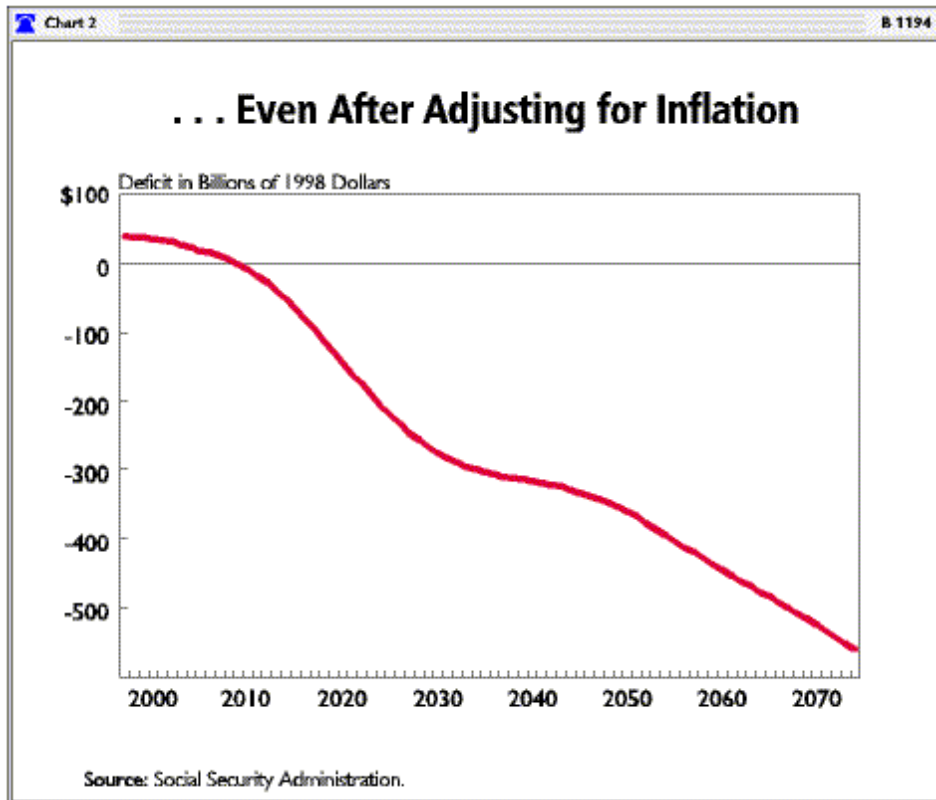
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1. William W. Beach and Gareth G. Davis, "Social Security's Rate of Return," Heritage Foundation *Center for Data Analysis Report* No. CDA98-01, January 15, 1998.
 2. *Ibid.* See also William G. Shipman, "Retiring with Dignity: Social Security vs. Private Markets," Cato Institute Policy Brief SSP No. 2, August 14, 1995.



As it turns out, privatization is less expensive. The level of savings, needless to say, would depend on the particular plan that lawmakers ultimately adopt.

HOW TO MEASURE SOCIAL SECURITY'S LONG-TERM DEFICIT

The Social Security Administration produces estimates of annual income and expenses for every year through 2075.³ These data are included in the appendices to this paper: Appendix A shows the annual data in nominal (non-inflation adjusted) dollars, while Appendix B expresses the same information using inflation-adjusted dollars and present-value calculations. In order to calculate Social Security's annual funding gap, the appendices combine the projected cash payments into the system (payroll taxes and the income taxes that the elderly pay on their benefits) and then subtract estimated benefit payments.



As seen in the accompanying charts, the nominal deficit is immense. Beginning in 2010, with a deficit of under \$1 billion, the system's funding gap grows rapidly, reaching nearly \$500 billion in 2025, \$1 trillion in 2035,

3. The OASDI Trustees' report on the Trust Fund (see <http://www.ssa.gov/OACT/TR/index.html>) includes annual estimates for the next ten years and for every fifth year thereafter. Annual numbers through 2075, however, are obtainable through the Social Security Administration's Office of the Actuary.



and more than \$7.5 trillion in 2075. Between 1998 and 2075, the cumulative shortfall in nominal dollars would reach \$143 trillion.

These figures give a false impression, however, because they do not account for inflation. The Social Security Administration estimates that long-term annual inflation will be about 3.5 percent. Appendix B adjusts the annual figures with the inflation estimates used by the Social Security Administration. The long-term deficits fall dramatically when expressed in today's dollars, but the gap is still huge. The inflation-adjusted deficit reaches \$200 billion in 2025, \$300 billion in 2035, \$400 billion in 2056, and \$500 billion in 2068. The total gap between now and 2075 is more than \$20 trillion in 1998 inflation-adjusted dollars.

Present value is another way to calculate the long-term debt. In addition to considering the effects of inflation, present value calculations recognize that a dollar today is worth more than the same dollar—even after adjusting for inflation—in the future. In other words, because money today can be invested to earn a return, the unfunded liabilities of the Social Security system could be offset completely if lawmakers came up with a big enough pile of cash to invest today. The “good” news is that the present value of Social Security's unfunded promises is “only” \$5.2 trillion. The bad news is that collecting that much money today would require imposing tax rates of more than 100 percent on everyone in the country. Moreover, the viability of such an approach rests on politicians' prudently investing the money and using all the funds—interest and principal—to do nothing except pay for promised benefits. Chart 3 shows the annual present value deficit using a real interest rate of 2.8 percent (the rate used by the Social Security Administration).

WHY PHANTOM FUNDS DON'T COUNT

Some defenders of the current system assert that Social Security's finances are stronger than these figures indicate. Instead of running a deficit in 2010, they argue that the system will enjoy a surplus until 2021. Moreover, they claim that the

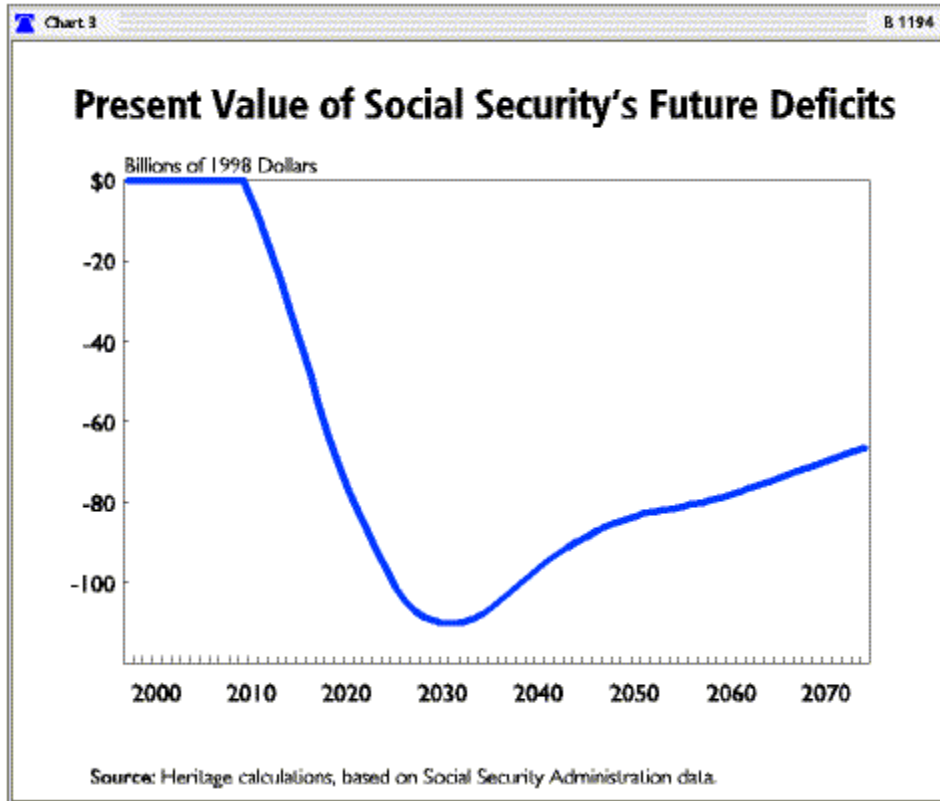
SOCIAL SECURITY'S GLOOMY NUMBERS

Social Security's long-term unfunded liability is immense because the system will begin paying out more in benefits than it collects just 12 years from now. Although the cash deficit in 2010 is less than \$1 billion, the numbers quickly climb to staggering levels thereafter:

- Social Security's annual cash shortfall will reach \$90 billion in 2015.
- Social Security has promised to pay nearly \$500 billion more than it will collect in taxes by 2025.
- In 2035, just ten years later, the annual deficit will be more than \$1 trillion.
- In 2075, the last year for which the Social Security Administration provides numbers, the total annual shortfall will reach an incredible \$7.5 trillion.
- Even after adjusting for inflation, the deficits are immense, reaching \$200 billion in 2025, \$300 billion in 2035, \$400 billion in 2056, and \$500 billion in 2068 (in 1998 dollars).
- The aggregate inflation-adjusted shortfall in the Social Security system between now and 2075 will be more than \$20 trillion. This unfunded liability is more than 6 percent higher than it was just one year ago.
- The “present value” of the shortfall (which measures how much money would need to be invested today to finance future unfunded benefits) is more than \$5 trillion.

Sources include the OASDI Trustees' Report at <http://www.ssa.gov/OACT/TR/index.html> and the Social Security Administration's Office of the Actuary. The Trust Fund report includes annual estimates for the next ten years and for every fifth year thereafter.

Trust Fund has enough assets to pay full benefits until 2032.



These assertions, however, are made possible only by counting bookkeeping entries as real income. The Social Security system currently is collecting more money than is needed to pay benefits. These surplus revenues are spent on other government programs, and the Social Security Trust Fund is given an IOU from the Department of the Treasury. Specifically, the Trust Fund receives U.S. government bonds.

Every year, these bonds supposedly "earn" interest. In 1998, for example, the Trust Fund claims that it will receive more than \$49 billion in interest from its

Q & A ABOUT SOCIAL SECURITY'S DEBT

- Q. When calculating Social Security's total debt, should short-term surpluses be used to offset a portion of the future deficits?**
- A.** If the government saved excess payroll tax revenues, then the answer would be yes. Surpluses are spent on other programs, however, and the Social Security Trust Fund receives IOUs from the Treasury in exchange. These IOUs represent claims on future taxpayers, not a store of wealth. The law could be changed so that the surpluses were invested in private, income-producing assets (much as occurs with the pension systems of state government employees). Under this approach, the Trust Fund would hold real assets that properly could be used to offset long-term debt. Because of widespread concerns that politicians would use such a fund to finance pet projects and engage in misguided industrial policy, however, this generally is not seen as a desirable option.
- Q. If the Social Security Administration provided annual spending and revenue estimates beyond 2075, wouldn't the system's total shortfall be higher than \$20 trillion?**
- A.** Yes. Annual inflation-adjusted deficits are more than \$500 billion, and continue to rise in each of the years leading up to 2075. There is no way to tell how long this trend will continue, but the cumulative shortfall certainly is far greater than \$20 trillion; it may be unlimited. Likewise, the present value debt also is higher than the \$5.2 trillion described above. The only "good" news is that present value debt peaks at about \$110 billion and then begin a gradual decline, falling to less than \$70 billion by 2075. Assuming this trend continued, the total present value debt could be less than \$8 trillion.



IMAGINE RUNNING A HOUSEHOLD USING TRUST FUND FINANCES...

To understand the reasons that the IOUs in the Social Security Trust Fund are meaningless, consider what would happen to a household that operated its finances in the same way.

Imagine that a husband and wife decided they needed to set aside \$1,000 annually so that their newborn would be able to attend college. Instead of investing the money in real assets, however, the parents followed the government's example: The family spent the money and issued itself an IOU—exactly as the federal government does when it spends the Social Security surplus—that it proceeded to place in a safe deposit box. Moreover, like the government, the family kept a ledger that showed the IOU growing each year because of interest. By the time the child turned 18, the family would have IOUs in the safe deposit box totaling about \$34,000 (assuming they promised to “pay” themselves 7 percent interest).

Now imagine that this family took the child to the college tuition office and attempted to pay with these IOUs. Needless to say, college officials would point out that the IOUs were meaningless because the \$34,000 “asset” was offset exactly by the family's \$34,000 “liability.” With no actual money to pay the tuition fees, the college would refuse to register the child.

\$650 billion collection of bonds. The only problem is that none of this is real money. All that happens is that the amount of IOUs in the Trust Fund will increase by that amount (plus new IOUs issued as the annual cash surplus of Social Security is spent on other government programs). The interest payments simply represent one part of the government's pretending to make a payment to another part of the government.

Opponents of reforming Social Security dispute this analysis, arguing that the bonds in the Trust Fund are backed by the “full faith and credit” of the U.S. government. All this means, however, is

that the bonds are a claim on future taxpayers. In short, all future Social Security benefit payments will be financed by revenues collected that year. The bulk of those revenues will continue to be raised through the payroll tax. Some of those benefits may be paid for from income tax revenues (in which case, the government will undertake the meaningless exercise of retiring IOUs held by the Trust Fund). And some of the benefits may be financed by government borrowing (in which case the IOUs in the Trust Fund will be replaced by IOUs held by the public).

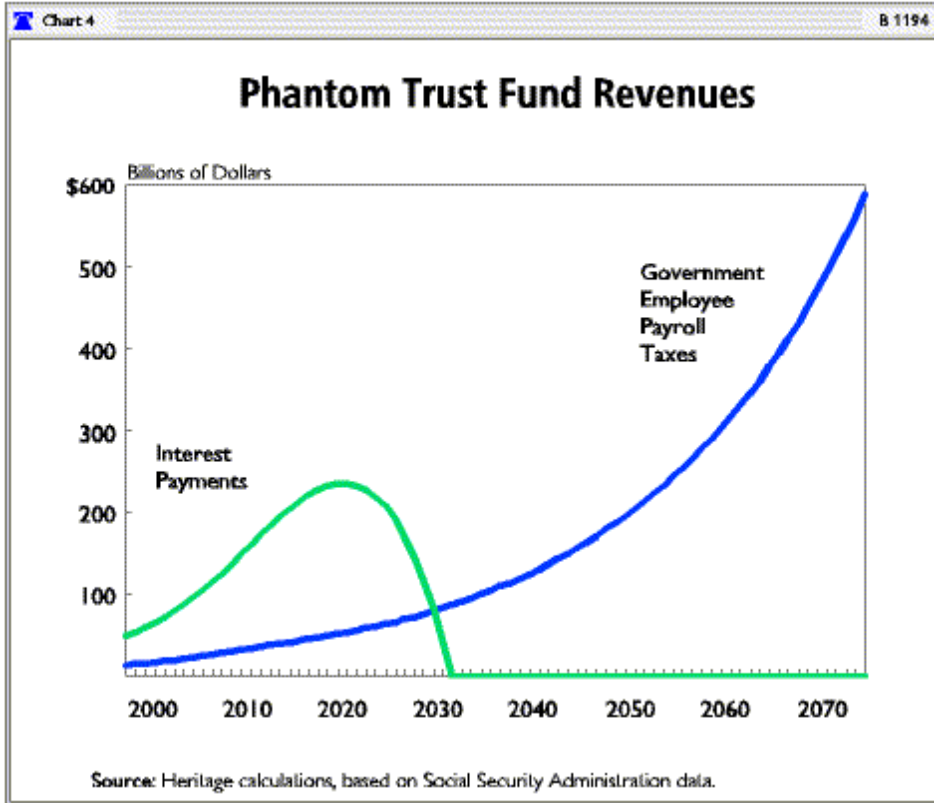
Legislators could enact a law that doubled the size of the Trust Fund. They even could pass legislation arbitrarily that made the Trust Fund ten times larger than it is today. Nothing they could do, however, would change the fact that the Trust Fund is nothing but a pile of IOUs, and that the interest paid to these IOUs is meaningless.

In addition to the phantom interest payments, another source of make-believe revenue for the Social Security system are payroll taxes supposedly paid by employees of the federal government. Like other workers, federal employees are covered by Social Security. And like other workers, their employer is responsible for withholding and paying those payroll taxes. In the federal government's case, however, each agency of the government pretends to make a payment on behalf of its workers and the Social Security system pretends that it has received the money.

Chart 4 shows the amount of “income” the Social Security Trust Fund pretends it will receive from interest payments and the payroll taxes of federal government workers. Neither of these amounts, however, represents a real transfer of resources.

CONCLUSION

The Social Security system is hovering on the brink of a financial abyss. Bringing the system into balance would require imposing a 54-percent increase in payroll taxes, reducing benefits by 33 percent, or using a combination of both approaches. These drastic measures are the transition cost of maintaining the current system and



workers. Younger workers already face real rates of return that are barely above zero; in some cases they face negative returns. Forcing them to pay more and to get less hardly represents good public policy.

Privatization, on the other hand, would mean that taxpayers would realize transition benefits because the additional costs needed to finance the shift to a private system would be so much less than the additional costs needed to preserve the status quo.

—Daniel J. Mitchell is McKenna Senior Fellow in Political Economy for The Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation.

paying out promised benefits. These policies would exacerbate the Social Security crisis by making the system an even worse deal for



APPENDIX A

Social Security Nominal Cash Flow Finances (in Billions of Dollars)

	Payroll Taxes	Tax on Benefits	Total Income	Total Outlays	Total Deficit/ (Surplus)		Payroll Taxes	Tax on Benefits	Total Income	Total Outlays	Total Deficit
1998	413	9	421	383	(38)	2037	2388	154	2,542	3,665	-1,123
1999	426	9	435	396	(39)	2038	2500	162	2,662	3,834	-1,172
2000	443	9	452	413	(38)	2039	2617	171	2,787	4,009	-1,222
2001	461	10	471	433	(38)	2040	2738	180	2,918	4,190	-1,272
2002	480	11	491	455	(36)	2041	2865	189	3,054	4,380	-1,326
2003	500	11	512	478	(34)	2042	2996	199	3,195	4,580	-1,385
2004	523	12	535	504	(31)	2043	3133	209	3,342	4,790	-1,448
2005	549	13	562	533	(29)	2044	3277	219	3,497	5,011	-1,514
2006	575	14	590	565	(25)	2045	3426	231	3,657	5,243	-1,586
2007	606	16	621	599	(22)	2046	3582	243	3,824	5,486	-1,662
2008	636	17	653	637	(16)	2047	3744	255	3,999	5,744	-1,744
2009	669	18	687	679	(8)	2048	3914	269	4,183	6,015	-1,832
2010	703	20	724	724	-1	2049	4091	283	4,374	6,299	-1,926
2011	739	22	761	773	-11	2050	4276	297	4,573	6,600	-2,027
2012	776	24	800	826	-26	2051	4468	313	4,781	6,919	-2,139
2013	814	26	840	884	-44	2052	4669	330	4,999	7,259	-2,260
2014	852	29	881	946	-65	2053	4880	347	5,227	7,617	-2,390
2015	893	31	924	1,014	-90	2054	5099	366	5,465	7,994	-2,529
2016	934	34	969	1,087	-118	2055	5328	386	5,714	8,390	-2,677
2017	977	38	1,015	1,165	-150	2056	5567	406	5,973	8,807	-2,834
2018	1,022	41	1,063	1,249	-185	2057	5817	428	6,245	9,243	-2,998
2019	1,069	45	1,114	1,337	-224	2058	6,079	451	6,530	9,699	-3,169
2020	1,117	49	1,166	1,430	-265	2059	6,354	475	6,829	10,176	-3,347
2021	1,167	53	1,220	1,528	-308	2060	6,640	500	7,141	10,673	-3,532
2022	1,219	57	1,277	1,626	-349	2061	6,940	526	7,467	11,191	-3,725
2023	1,273	62	1,335	1,729	-394	2062	7,254	553	7,807	11,732	-3,925
2024	1,330	67	1,397	1,841	-444	2063	7,582	582	8,164	12,297	-4,133
2025	1,389	72	1,461	1,958	-497	2064	7,925	611	8,536	12,888	-4,351
2026	1,451	78	1,529	2,080	-551	2065	8,283	642	8,926	13,500	-4,574
2027	1,516	83	1,599	2,205	-606	2066	8,658	675	9,333	14,145	-4,812
2028	1,585	89	1,675	2,333	-659	2067	9,050	708	9,758	14,822	-5,064
2029	1,658	96	1,754	2,465	-711	2068	9,459	744	10,202	15,527	-5,325
2030	1,735	102	1,837	2,601	-763	2069	9,885	781	10,666	16,265	-5,599
2031	1,816	109	1,925	2,741	-817	2070	10,330	819	11,149	17,037	-5,888
2032	1,901	116	2,017	2,887	-870	2071	10,795	860	11,655	17,847	-6,191
2033	1,990	123	2,113	3,036	-923	2072	11,280	903	12,182	18,695	-6,513
2034	2,083	131	2,214	3,188	-974	2073	11,785	947	12,732	19,583	-6,850
2035	2,180	138	2,318	3,342	-1,024	2074	12,314	994	13,308	20,513	-7,206
2036	2,281	146	2,427	3,501	-1,074	2075	12,867	1,043	13,909	21,488	-7,579

Note: Payroll taxes do not include intra-government credits for federal workers.
Sources: Social Security Administration and Heritage calculations.



APPENDIX B

Social Security Inflation-Adjusted and Present Value Cash Flow Finances (In Billions of 1998 Dollars)

	Total Income	Total Outlays	Total Deficit/ (Surplus)	Present Value of Deficit		Total Income	Total Outlays	Total Deficit	Present Value of Deficit
1998	421	383	(38)		2037	693	999	-306	-104
1999	425	387	(38)		2038	701	1010	-309	-102
2000	430	394	(37)		2039	709	1020	-311	-100
2001	437	402	(35)		2040	717	1030	-313	-98
2002	442	410	(32)		2041	725	1040	-315	-96
2003	448	418	(29)		2042	733	1051	-318	-94
2004	454	427	(26)		2043	741	1062	-321	-93
2005	460	437	(24)		2044	749	1073	-324	-91
2006	467	447	(20)		2045	757	1085	-328	-90
2007	475	458	(17)		2046	765	1097	-332	-88
2008	482	470	(12)		2047	773	1110	-337	-87
2009	491	485	(6)		2048	781	1123	-342	-86
2010	499	500	0		2049	789	1136	-347	-85
2011	507	515	-8	-5	2050	797	1150	-353	-84
2012	515	532	-17	-11	2051	805	1165	-360	-83
2013	523	550	-27	-18	2052	813	1181	-368	-83
2014	530	569	-39	-25	2053	822	1197	-376	-82
2015	537	589	-52	-33	2054	830	1214	-384	-82
2016	544	610	-66	-40	2055	838	1231	-393	-81
2017	550	632	-82	-48	2056	847	1248	-402	-81
2018	557	654	-97	-56	2057	855	1266	-411	-81
2019	564	677	-113	-63	2058	864	1284	-419	-80
2020	570	700	-129	-71	2059	873	1301	-428	-79
2021	577	722	-145	-77	2060	882	1318	-436	-79
2022	583	742	-159	-82	2061	891	1336	-445	-78
2023	589	763	-174	-87	2062	900	1353	-453	-77
2024	595	785	-189	-92	2063	910	1370	-461	-77
2025	602	806	-205	-97	2064	919	1387	-468	-76
2026	608	828	-219	-101	2065	928	1405	-476	-75
2027	615	848	-233	-105	2066	938	1422	-484	-74
2028	622	867	-245	-107	2067	948	1439	-492	-73
2029	629	885	-255	-108	2068	957	1457	-500	-72
2030	637	902	-265	-109	2069	967	1474	-507	-71
2031	645	918	-274	-110	2070	976	1492	-516	-71
2032	653	934	-282	-110	2071	986	1510	-524	-70
2033	661	950	-289	-110	2072	996	1528	-532	-69
2034	669	963	-294	-109	2073	1006	1547	-541	-68
2035	677	976	-299	-108	2074	1016	1566	-550	-67
2036	685	988	-303	-106	2075	1026	1584	-559	-67

Note: Payroll taxes do not include intra-government credits for federal workers.
Sources: Social Security Administration and Heritage calculations.