AN APPROACH FOR SOLVING THE COMING FINANCIAL CRISIS IN SOCIAL SECURITY

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ABSTRACT

Although Social Security contributions have increased by 961-fold since 1938 (60-fold, even after adjusting for inflation), more retirees, longer life-expectancy, increased benefits, and relatively fewer FICA workers have offset these increases.

The projected $560 billion in OASI taxes in 2004 will take care of this year's retirement payments, but demographic reality will result in outflows exceeding contributions by the year 2018 and a complete depletion of the Trust Fund by 2044.

Bipartisan commissions have tried to avert the financial crisis by adjusting the policies and formulas, but the "fixes" have been compulsory and not fully effective and have been a disincentive for people who are otherwise compelled to participate.

An average worker deferring retirement for one year is better off by $16,411 (considering net wages), and the government is better off by $22,343 for that year (with deferred payments and more taxes). These numbers create large incentive opportunities.

As a solution to the coming financial crisis we propose that the federal government offer upfront cash payments and other rewards for those who choose to defer retirement. Our models show that with only 7% of potential retirees accepting such incentives, the Social Security system would be preserved for an additional 8 years, and 14% would add nearly 20 years of financial viability.

INTRODUCTION

As is the case with many government programs, size often increases significantly with time, and so it has been with Social Security. In the approximately 65-year history of the social security programs, the worker contributions that were 1% of the first $1,400 in the late 1930s have evolved to where contributions by both employee and employer are now 15.3% of the first $87,900 (2004). So instead of a $14 "potential contribution" per year per participant, the "potential contribution" is now $13,449 or about 961 times greater. Even after being adjusted for inflation the "potential contribution" per employee is over 60 times greater than what it was in the late 1930s.

Social Security benefits are, of course, more generous than they were in the early years and involve a greater percentage of the population, and the 60-fold increase in "real" payroll contributions is not even sufficient to keep up with the future needs of the program; it is estimated

that by the year 2018 outlays will begin to fall short of contributions, and by 2044 the fund will be completely exhausted (SSA Report, 2004).

Mathematically, either (1) a greater amount needs to be paid into the fund, and/or (2) more returns need to be earned on investments, and /or (3) people need to retire at a later age, and/or (4) recipients need to be given less in benefits, and/or (5) fewer retirees need to receive benefits (i.e., through some form of means testing). Of course, there is opposition when suggestions are discussed, so what do the experts have to say?

A REVIEW OF THE LITERATURE

While some writers claim that the Social Security crisis is "just propaganda, spread by people determined to shake your faith in the government's most popular program" (Quinn, 2004), others state that "virtually everyone familiar with US Social Security financing understands that the system cannot pay currently legislated benefits for more than another three or four decades without significant, probably politically unacceptable, tax increases" (Pozen, Schieber, and Shoven, 2004).

While much of the academic literature suggests (1) increasing contributions, (2) deferring retirement, and/or (3) reducing retirement benefits, the greatest attention at present seems to be focused on increasing the trust fund earnings. One advocate, for example, states that idle tax dollars need to be "earning money through investment [and Social Security needs to be] transformed into a privatized system. It is time the world's foremost market economy put the market to work…" (Blackwell, 2002).

ESTABLISHING A FOUNDATION OF THINKING

While writers give attention to free-enterprise concepts, their suggested solutions are almost without exception heavily oriented toward compulsion and lack of incentives. In the case of Social Security, that may be part of the problem, and we suggest at the outset that free-enterprise-type incentives may be the solution. Among other things, we need to keep in mind that incentives and disincentives work, and they work in both positive and negative things as illustrated in the examples shown below in Table l.

Table 1
Examples of the Impact of Incentives

Primarily Economic:		
	Leading to positive results:	**Leading to negative results**
Positive economic incentives (that give more money):	Increasing tax breaks to businesses creates jobs in central cities	Increasing welfare payments results in more people on welfare
Economic disincentives (that take away money):	Increasing fines reduces speeding in highway construction zones	Reducing welfare payments forces many mothers to leave their homes for jobs

Primarily Non-Economic:		
Positive non-economic incentives (that provide more "psychic" benefits):	Increasing patriotism brings more people into the military after Pearl Harbor	Glamorizing violence leads to more violence
Negative non-economic incentives (that take away "psychic" benefits):	Increasing jail time and other punishments reduce various types of crimes	Punishing people leads to bitterness and more undesirable behavior

THE CURRENT SOCIAL SECURITY PLAN IN RELATIONSHIP TO INCENTIVES

Policies and formulas that have been established in the past to help with the problems have generally required people (1) to pay more money into the system while they work, (2) to work more years before they retire, and (3) to receive fewer benefits when they do retire. Likewise, (4) social security trust funds have been continually placed in investments that yield lower returns than commercial pensions and (5) surveys show that most people question whether they will ever receive the retirement benefits for which they've paid. In relationship to the incentives and disincentives format of Table 1, all five of these realities would be plotted on the negative side under disincentives--hardly an encouraging note.

POTENTIAL INCENTIVES IN THE SOCIAL SECURITY PROGRAM

To illustrate the power of free-enterprise incentives that potentially exist in the social security program, consider the positive impact that deferring retirement has on both workers and the government. If we consider a worker who earns $36,000 per year and has a taxable income of $30,000 per year, deferring retirement by one year will mean that the worker gives up about $12,597 in after-tax retirement benefits ($14,400 minus $1,803 in approximate taxes) but will have another $29,008 in net yearly earnings ($36,000 minus $2,754 in FICA and $4,238 in approximate income taxes). The net benefit to the worker in deferring retirement for a year will be $16,411.

As to the government, the benefit is even greater. When the same worker decides to work another year, the government saves $12,597 in retirement payments ($14,400 minus $1,803 in approximate taxes) but also receives another $9,746 in revenue ($5,508 in FICA and $4,238 in approximate income taxes). The net benefit to the government is $22,343. When an investment return on the trust fund is added, the benefit to the government is even greater. Since the government is coming out even better on the deal, couldn't a case be made for giving upfront cash incentives, even generous incentives, to entice potential retirees to defer retirement?

A PROPOSED APPROACH FOR BUILDING IN MORE INCENTIVES

To illustrate, what if there were simple formulas that were well communicated through advertising campaigns that gave those at retirement age some upfront cash incentives to defer retirement as well as significant increases in their retirement benefits when they did retire. The government would continue to receive more FICA and income taxes as well as defer social security payments; the recipient would benefit from (1) additional years of wages, (2) upfront cash payments for deferring retirement, and (3) increased benefits when the retirement was taken.

We have considered, for example, "upfront cash" payments of $100 per month in the first year of deferred retirement, $200 per month in the second year, and have continued this $1,200 per year increase with no maximum cutoff. As to the "increased benefits" when retirement is taken, we have used an even 6% increase in eventual retirement benefits for the first year of retirement, an additional 6% increase in the second year and so on with no maximum cut-off. The results are shown below:

Table 2
Financial Projections under the Current and Proposed Social Security Plans (Eight-year increments)

1.	**Calendar Year:**	2004	2012	2020	2028	2036	2044	2052
2.	Percent increase in OASI workers	.0125	.0125	.0125	.0125	.0125	.0125	.0125
3.	Number of OASI workers (millions)	155.8	172.1	190.1	209.9	231.9	256.1	282.9
4.	Percent increase in OASI recipients	.0258	.0258	.0258	.0258	.0370	.0370	.0370
5.	Number of OASI recipients (millions)	40.4	49.6	60.8	74.5	98.5	131.8	176.2
6.	**Social Security (OASI) projections under the "current plan" (adjusted for inflation):**							
7.	Beginning OASI Trust Fund ($ billions)	$1,355.3	$2,230.9	$2,951.0	$3,340.7	$2,885.6	$399.6	-$5,616.8
8.	OASI contributions per worker and employer	$2,964	$2,964	$2,964	$2,964	$2,964	$2,964	$2,964
9.	Total OASI contributions ($ billions)	$461.8	$510.1	$563.3	$622.2	$687.2	$759.0	$838.3
10.	OASI taxes on benefits per recipient	$317	$317	$317	$317	$317	$317	$317
11.	Total OASI taxes on benefits ($ billions)	$12.8	$15.7	$19.3	$23.6	$31.3	$41.8	$55.9
12.	OASI Trust Fund rate of return	.0618	.0400	.0400	.0400	.0400	.0400	.0400
13.	Total OASI Trust Fund earnings ($ billions)	$75.2	$85.1	$115.0	$132.8	$121.2	$34.7	-$184.1
14.	Total inflow of OASI funds ($ billions)	$549.8	$610.9	$697.6	$778.6	$839.7	$835.5	$710.1
15.	**Status quo outflow to OASI funds:**							
16.	Average OASI payments to recipients	$10,289	$10,289	$10,289	$10,289	$10,289	$10,289	$10,289
17.	Total OASI payments to recipients ($ billions)	$415.9	$509.9	$625.1	$766.4	$1,013.8	$1,355.8	$1,813.1
18.	OASI administrative expenses ($ billions)	$0.6	$0.6	$0.6	$0.6	$0.6	$0.6	$0.6
19.	Total outflow of OASI funds ($ billions)	$416.5	$510.5	$625.7	$767.0	$1,014.4	$1,356.4	$1,813.7
20.	**Net status quo OASI changes:**							
21.	Net increase in OASI funds ($ billions)	$133.4	$100.5	$71.9	$11.6	-$174.8	-$520.9	-$1,103.6
22.	Ending OASI Trust Fund ($ billions)	$1,488.7	$2,331.4	$3,022.9	$3,352.4	$2,710.8	-$121.3	-$6,720.4
23.	**Calculations on deferring retirement:**							
24.	Workers at the retirement age (millions)	40.4	49.6	60.8	74.5	98.5	131.8	176.2
25.	Percent of potential recipients deferring retirement	0	.07	.07	.07	.07	.07	.07
26.	Number of workers deferring retirement (millions)	0	3.5	4.3	5.2	6.9	9.2	12.3
27.	**Social Security (OASI) projections under the "proposed incentives plan" (adjusted for inflation):**							
28.	Begin. OASI Trust Fund (for deferral assumptions)	$1,355.3	$2,331.4	$3,713.9	$4,646.6	$4,877.5	$3,307.8	-$1,483.2
29.	More OASI contributions per deferred retiree	$0	$3,816	$3,816	$3,816	$3,816	$3,816	$3,816
30.	More OASI total contributions ($ billions)	$0	$13.2	$16.2	$19.9	$26.3	$35.2	$47.1
31.	Less in OASI payments per deferred retiree	$0	$14,400	$14,400	$14,400	$14,400	$14,400	$14,400
32.	Less in OASI total payments ($ billions)	$0	$49.9	$61.2	$75.1	$99.3	$132.8	$177.6
33.	Total OASI positives ($ billions)	$0	$63.2	$77.5	$95.0	$125.6	$168.0	$224.7
34.	**Negative assumptions for the OASI fund:**							
35.	Incentive cash payments per deferred retiree	$0	$2,400	$2,400	$2,400	$2,400	$2,400	$2,400
36.	Total cash incentives paid ($ billions)	$0	$8.3	$10.2	$12.5	$16.6	$22.1	$29.6
37.	Less in OASI taxes received per retiree	$0	$1,803	$1,803	$1,803	$1,803	$1,803	$1,803
38.	Less in total OASI taxes ($ billions)	$0	$6.3	$7.7	$9.4	$12.4	$16.6	$22.2
39.	Total OASI negatives ($ billions)	$0	$14.6	$17.9	$21.9	$29.0	$38.8	$51.8
40.	**Net OASI changes from deferred retirements:**							
41.	Difference in OASI Trust Fund before earnings ($ b.)	$0	$48.6	$59.6	$73.1	$96.7	$129.3	$172.8
42.	Earnings on additional amt. in Trust Fund ($ billions)	$0	$1.9	$2.4	$2.9	$3.9	$5.2	$6.9
43.	Increase in OASI earnings from deferred retirements	$0	$50.6	$62.0	$76.0	$100.5	$134.4	$179.8
44.	Add in original Trust Fund increase ($ billions)	$133.4	$100.5	$71.9	$11.6	-$174.8	-$520.9	-$1,103.6
45.	New end. balance in OASI Trust Fund ($ billions)	$1,488.7	$2,701.9	$3,847.7	$4,734.2	$4,803.2	$2,921.3	-$2,407.0

A SIMULATION MODEL TO TEST THE POTENTIAL IMPACT

To test the implications of such an incentive program with voluntary participation, a fairly extensive simulation model was created for the purposes of this study, and several scenarios were tested to evaluate the sensitivity of the individual variables. A fine-tuning of the model eventually made it quite accurate in duplicating the official projections that are published each year in the Social Security Administration's Annual Report. For example, the SSA Report currently projects expenditures to become greater than contributions in the year 2018, expenditures to become greater than both contributions and trust fund earnings in 2029, and the OASI trust fund to be fully depleted by the year 2044 (as shown in lines 6 through 22 of Table 2).

In the simulation numbers that are shown in Table 2, a net growth rate of 1.5% per year has been used for the growth in the nation's workforce, and a net growth ranging from 2.58% to 3.70% per year has been used for the number of Social Security recipients. To effectively communicate the mathematical implications of the model, most variables have been held constant including currency valuation. In other words, inflation has been taken out of the equation by using 2003 dollars. It has also been assumed that contributions to FICA have remained at 15.3%.

In lines 27 through 45 of Table 2, the mathematical results are shown using the assumptions established for the new incentives program for deferral of retirement. For this incentives program, it has been assumed that 7% of the potential recipients would be "in deferred retirement" in any given year. The 7% of the recipient pool is about 2.8 million Americans which is less than 1% of the total population of America.

As shown in lines 27 through 45, the peak in the Social Security Trust Fund comes 8 years later in the proposed incentives program than it did under the current program (in 2036 rather than in 2028). Also notice that rather than being in the negative range in 2044, there would still be nearly $3 trillion in the Trust Fund. All told, over the 75-year period (used by the SSA as the planning period), the funds generated by a voluntary deferral program would generate over $13 trillion just in the OASI Trust Fund (with the assumptions given). With a 14% deferral rate, nearly 20 years of financial stability would be added to the program. With other assumptions, the incentives could be designed to eliminate the imbalances in the program and provide even longer viability.

SUMMARY

The evaluation of the approaching financial crisis in Social Security and alternative possibilities for solving the crisis has yielded the following observations:

(1) Payments into the Social Security program have increased by 961 times since its inception, and even adjusted for inflation, there has been a 60-fold increase.

(2) Offsetting the 60-fold increase have been (a) more retirees, (b) greater life expectancy, (c) greater benefits, and (d) proportionally fewer workers to pay the benefits.

(3) The Social Security trust fund will see (a) expenditures exceeding contributions in the year 2018 and (b) a depletion of the trust fund by 2044.

(4) Although government commissions have instituted changes to help avert the financial crisis, these compulsory programs have not brought viability to the program.

(5) Presented in the paper is an incentives program consisting of upfront cash payments and other rewards to entice workers to defer retirement.

(6) A simulation model shows that with only 7% of potential retirees accepting such incentives, the Social Security system would be preserved for an additional 8 years, and 14% would add nearly 20 years of financial viability.

REFERENCES AVAILABLE UPON REQUEST