

*Social Security  
Reform  
and Union  
Households  
in Iowa*

October 2003

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**STUDY**

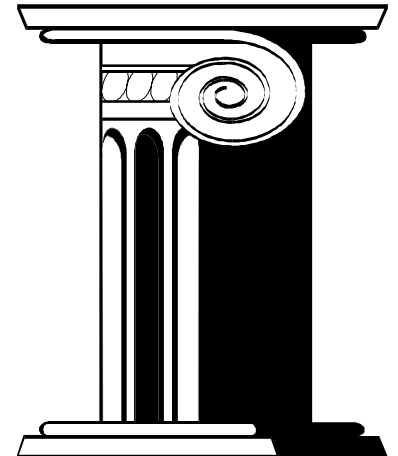
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PUBLIC INTEREST



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## Executive Summary

It is no secret that the Social Security system in the United States is headed toward an insolvency crisis in the coming years. Without substantial changes to the system, either future retirees will see substantial cuts in their Social Security benefits, or future workers will pay higher taxes, or the federal government will have to make major cuts in other government programs to fund its obligations to Social Security.

One reform that holds considerable promise is personal retirement accounts. Under this reform, workers would be able to divert a portion of their payroll tax into their own personal retirement account, much like a private 401(k). The funds in these accounts would be invested in portfolios including equities and bonds which offer better returns than the current Social Security system.

This study examines how union households in Iowa would fare under such a reform. It examines three different reform models, the 2.5% Plan, the 4% Plan, and the 3%-Bond Plan. The findings are very encouraging. Both 25-year-old and 35-year-old union households in Iowa would have, on average, more in monthly retirement benefits than under Social Security. For example, the 2.5% Plan would yield an average of \$1,063 more in monthly benefits than payable Social Security, and \$822 more in monthly benefits than promised Social Security for a 25-year-old union household in Iowa.

The results of this study show that reform of personal accounts would yield much better returns for union households in Iowa than does the current Social Security system. Ultimately, personal accounts are a way to reform Social Security in a way that provides a better retirement for all American workers.

### Acknowledgements:

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# *Social Security Reform and Union Households in Iowa*

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# *Social Security Reform and Union Households in Iowa*

*“Social Security  
is a  
'bad deal'  
for many of  
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## **Introduction**

It is no secret that the Social Security system in the United States is headed toward an insolvency crisis in the coming years. Without substantial changes to the system, either future retirees will see substantial cuts in their Social Security benefits, or future workers will pay higher taxes, or the federal government will have to make major cuts in other government programs to fund its obligations to Social Security. Unless Social Security is reformed, policy makers and, ultimately, the American public face some very unappealing choices in the not-too-distant future.

The reason Social Security is headed toward insolvency is that as the baby-boom generation begins to retire early in the next decade, the ratio of retirees to workers will decline precipitously. Eventually, there will not be enough workers paying payroll taxes to support full funding of Social Security benefits. In anticipation of this, the Social Security Trust Fund has accumulated trillions in government bonds to help finance the Social Security benefits for the baby boomers. However, this is only a temporary fix. According to the Social Security Trustees Report, the Social Security Trust Fund will deplete its store of government bonds in the year 2042. Once the Trust Fund is exhausted, “present tax rates would be sufficient to pay 73 percent of scheduled benefits” in 2042, and “65 percent of

scheduled benefits in 2077.”<sup>1</sup> Without a fundamental change in the Social Security system, today's workers will be shortchanged when they retire in years ahead.

Yet even this understates the magnitude of the problem. Even under the best assumptions, the Trustees estimate that by 2021 Social Security will begin to pay out more in benefits than it collects in payroll taxes. While the bonds in the Trust Fund can be used to make up the difference, the Federal Government *must find the additional revenue to fund those bonds*. According to the Trustees, “pressures on the Federal Budget will thus emerge well before 2042.”<sup>2</sup> Without reform, such pressures will require future generations to endure either heavy tax increases, benefit cuts, or some combination of both.

Further, Social Security is a “bad deal” for many of today's workers. Peter J. Ferrara and Michael Tanner, in their book *A New Deal for Social Security*, found “that almost all workers in two-earner couple families would receive real returns under Social Security of approximately one percent or less, with some actually receiving negative returns.”<sup>3</sup> They also found that single workers and one-earner couples received rates of return from Social Security much lower than the average return from stocks and bonds. Thus, today's workers will shoulder much of the burden if the Social Security system is not reformed, and their

own Social Security payroll taxes are unlikely to yield much return.

One reform that holds considerable promise is personal retirement accounts (henceforth “PRA”). Under this reform, workers would have the option of diverting a portion of their payroll tax into their own PRA, much like a private 401(k). The funds in these accounts would be invested in portfolios including equities and bonds which offer better returns than the current Social Security system. In exchange for using these accounts, part of the return on the investment would be used to cover the deficit in Social Security.

Many studies have examined the utility of such a reform, and these studies are summarized in the next section. However, few studies have analyzed the potential of personal investment accounts on a regional level. This study fills part of that void by examining the promise PRAs offer for union households in Iowa.

Social Security reform should be of considerable urgency to Iowans since Iowans will increasingly receive more of their personal income from Social Security. A recent study of Iowa counties by Professor John A. Miranowski of Iowa State University showed that in 2020 the “county average of dependence on Social Security will be 8.6%” of personal income, and by 2040 it will be an “average of 11.4%”<sup>24</sup> The study further shows the coming crisis will have an adverse impact on personal income levels in Iowa counties. By 2042 “Social

Security benefits will need to be cut 27% due to insolvency” which will reduce “personal income in Iowa counties from 2 to 5 percent.”<sup>25</sup> Left unchanged, the Social Security system will visit economic hardship on Iowa.

Fortunately, as this study shows, reforming Social Security with an option of personal accounts holds great promise for union households in Iowa. In most instances benefits from PRAs actually exceed the benefit levels promised by Social Security. Because of its considerable promise, a system of PRAs is a reform that all Iowans should support.

### **The Promise of Reform**

Considerable research has been conducted by a bevy of public policy institutes which demonstrates the promise that introducing PRAs into Social Security holds for today’s workers. For example, William Shipman states, “Assuming historical rates of return, if individuals born in 1970 were allowed to invest in stocks the amount they currently pay in Social Security taxes, those individuals could receive nearly six times the benefits that they are scheduled to receive under Social Security, as much as \$11,729 per month. Even a low-wage earner would receive nearly three times as much.”<sup>26</sup>

Cato scholar Michael Tanner goes so far as to question the effectiveness of Social Security as a retirement program. Returns

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*“Reforming Social Security with an option of personal accounts holds great promise for union households in Iowa.”*

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from Social Security have been declining for years and are now much lower than the returns for private investment. Indeed, since payroll taxes cannot be privately invested, Social Security is costing future retirees a lot in retirement income. For example, “A single-earner couple, whose wage earner is 30 years old in 2000 and earning \$24,000 per year, can expect to pay more than \$134,000 in Social Security taxes over their lifetimes and receive \$292,320 in lifetime Social Security benefits (including spousal benefits), assuming that both husband and wife live to normally expected ages. However, had they been able to invest privately, they would have received \$875,280. That means the current Social Security system is depriving them of more than half a million dollars half a million dollars.”<sup>7</sup>

A system of PRAs would also yield a greater return for women and the poor, two groups that often do not fare as well as other groups under the current Social Security system. Researchers Ekaterina Shirley and Peter Spiegler note “The tendency of women to take more time out of the workforce and to seek part-time work results in lower lifetime earnings and incomplete earnings records, which translate into lower Social Security benefits.”<sup>8</sup> They also note that a system of PRAs would yield much greater returns for women.

Federal Reserve economist Jagadeesh Gokhale finds that the current Social Security system reduces the incentive of low-

income earners to accumulate personal savings, and they often have nothing to bequeath to heirs.<sup>9</sup> According to Michael Tanner, the poor would be the ones to gain the most from privatization of Social Security.<sup>10</sup> Matt Moore notes that a worker who could only afford to put away \$500 a year in an investment portfolio beginning at age 21 would have only contributed \$23,000 if she retires at age 67.<sup>11</sup> However, due to the power of compound interest, if the portfolio had an average annual return of 8%, she would have \$225,950 at retirement.

Other research finds that union households would also fare better under a system of PRAs. According to Michael Tanner, “union workers would be among those who would gain the most” in a system of personal accounts.<sup>12</sup> He finds that for the average union worker, a PRA invested in a bond fund would yield \$2,761 a month in retirement benefits, while Social Security only promises to pay \$1,559. Other research on union workers finds that a 35-year old single male construction worker could expect to receive a monthly benefit of \$1,740 from a system of PRAs, but only \$862 a month in Social Security. Likewise, if a 45-year old married couple employed in public administration invested in a PRA, they could expect to see an increase of 125% in retirement income over traditional Social Security benefits.<sup>13</sup>

Research done by the Heritage Foundation shows that

*“The current Social Security system reduces the incentive of low-income earners to accumulate personal savings.”*

returns for Iowans would be better under a system of PRAs than it would under the current system. Although the projected rate of return from Social Security is better for Iowans than it is for people living in most other states, it still falls far short of what Iowans would earn in a system of PRAs. A married couple in Iowa, both born in 1967, both earning the average wage in Iowa, would pay \$252,897 in payroll taxes over their lifetime and would receive \$402,180 in benefits. Yet they would have received \$531,562 in benefits had they been able to invest their payroll taxes in 30-year treasury bonds, and \$796,039 in benefits had they been able to invest half in treasury bonds and half in equities.<sup>14</sup>

Some state and local governments already have retirement systems based on PRAs. Their performance shows that a system of PRAs would yield greater returns than Social Security. Carrie Lips examined the retirement systems for the roughly five million state and local employees who are exempt from Social Security. She found that these plans “generally provide plan participants with more benefits and greater flexibility over retirement age and plan payout than does Social Security.”<sup>15</sup> Indeed, in a program for municipal workers in San Diego, the average rate of return for the *lowest-risk* plan was about 8%. The city of Galveston, Texas, also opted out of Social Security over twenty years ago. The average rate of return from Galveston’s privatized system

ranges between 7.5-8%.<sup>16</sup>

We can also look at foreign countries to see how a system of PRAs would perform. The evidence suggests that they would be quite popular. Peter J. Ferrara, John C. Goodman, and Merrill Matthews Jr. found that in Britain, since a private sector option was added to the public retirement system in 1978, 75% of workers have taken the option of personal accounts. In Chile more than 90% of workers have taken the private option since it was offered in 1981.<sup>17</sup> Other research on Chile’s private system shows that as of the late 1990s the average real rate of return had been more than 11%.<sup>18</sup>

However, a system of PRAs invested in equities might make some Americans understandably nervous. The three-year slide (2000-2002) of the stock market in the wake of the bursting of the tech bubble and corporate accounting scandals leaves many Americans wondering if investing in the stock market is too risky. Yet the recent market downturn is no cause for alarm. As David C. John points out, most retirement assets are held for the long-term, between 20 to 40 years. “Stock investments held for 20 years or longer always have positive annual average returns.”<sup>19</sup> Despite the last three years of stock market decline, a worker retiring in 2002 who had invested for 35 years would still have averaged a 7.3% return on stocks.<sup>20</sup> Indeed, market volatility is reduced the longer one invests. From 1872 to 2000, there was never a 35-year period

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invested primarily  
in bonds.  
Mostly, they are  
not invested  
in anything.”*

in which the stock market did not grow.<sup>21</sup> Even in a worst-case economic scenario, stocks and bonds yield greater returns than does Social Security.<sup>22</sup>

Many critics of reform dismiss PRAs as a viable reform. Some claim that there is no need to invest payroll taxes in equities since they are already invested in government bonds. However, Social Security is not really invested in government bonds. Social Security is a pay-as-you-go program, with current payroll taxes being used to pay the benefits of today’s retirees. Only the surplus payroll taxes are put into bonds — bonds which the Federal Government, eventually, has to find a way to pay for. Other critics contend that a system of PRAs would involve workers giving up a guaranteed benefit for a “risky investment scheme.” Yet, as Tanner notes, “the U.S. Supreme Court [in *Fleming vs. Nestor*] ruled that workers have no legally binding contractual rights to their Social Security benefits, and that those benefits can be cut or even eliminated at any time.”<sup>23</sup> Furthermore, under Social Security reform “personal accounts would be the property of the worker.”<sup>24</sup> Thus, there is no “guarantee” under the current system, but there would be a guaranteed property right under a reformed system.

Still other critics point to the substantial transition costs involved in switching to a system of PRAs. But, as William Shipman points out, while there are transition costs involved in

switching to a privatized system, they are less than the cost of maintaining the current system.<sup>25</sup>

Some critics would prefer raising the payroll tax. For example, one proposed solution is to raise the payroll tax by 2.2 percentage points. Neil Howe and Richard Jackson argue that a “mere” 2.2 percentage point increase in the payroll tax will not be enough to fix the Social Security system.<sup>26</sup> The problem with this solution is that it relies on Treasury bonds in the Social Security Trust Fund to help make up the difference. Unfortunately, those bonds are liabilities for future taxpayers, to the tune of \$5 trillion. Lifting the wage cap for payroll taxes, as other policy analysts have proposed, would not solve the problem either. Doing so would amount to a 10.6 percentage point increase in the top marginal income-tax rate for millions of workers. This would reduce Gross Domestic Product in the United States by \$136 billion by 2011, reduce disposable family income for a family of four by \$2,736, and result in 1.1 million fewer jobs created. In the end, it still wouldn’t cover the shortfall: the Social Security Trust Fund would still have to borrow, on average, \$203 billion to remain solvent.<sup>27</sup>

As Michael Tanner puts it, there is “no second best” alternative to PRAs for Social Security.<sup>28</sup> The other solutions do little to solve the coming crisis, and they put higher tax burdens on Americans. A system of PRAs, however, offers an alternative that can offset some of

the shortfall in Social Security while generating better returns for American workers. The return generated for union households in Iowa is examined in the following section.

### **Reform and Union Households in Iowa**

To estimate the monthly benefits from a system of PRAs, the study first gathered data from the Census Bureau on annual income for Iowa union households in 2002. The study then constructed accounts modeled on three different plans. Each plan is a hybrid of both traditional Social Security benefits and returns from private investment. The PRAs under all plans are voluntary: workers have the choice to exercise the option of a PRA. All three plans examined here have been scored by the Social Security Administration and will restore the Social Security system to solvency.

The first plan is based on the “Retirement Security Act,” a new Social Security reform recently introduced by Representative Nick Smith.<sup>29</sup> Referred to here as the “2.5% Plan,” it allows workers to invest two and one-half percent of their payroll annually in a PRA that can be invested in stocks and/or bonds. It also adds additional funds to the PRAs for low-wage workers, an additional \$300 annually for those making between \$5,000-\$25,000, and an additional \$150 annually for those making

between \$25,000-\$35,000. In exchange for using the PRA option, part of the worker’s traditional Social Security benefit is “offset” based on a 3.7% return to the PRA. As long as the PRA earns more than an average of 3.7% annually, a worker will have higher monthly benefits upon retirement than he would under Social Security.

The second is modeled on Plan II in *The Report of the President’s Commission to Strengthen Social Security*.<sup>30</sup> Referred to here as the “4% Plan,” it allows workers to invest four percent of their payroll annually, up to \$1,000, in a PRA. Each year the limit on the amount workers can invest is indexed for wage growth. The offset rate for the traditional Social Security benefit is 2%.

The third plan is modeled on the plan detailed in “Large Accounts and Small Deficits,” a recent policy study by Andrew Biggs.<sup>31</sup> Henceforth the “3%-Bond Plan,” it allows a worker to invest three percent of their payroll in a PRA. It also permits them to invest an additional two percent of payroll in their PRA, but that portion must be invested in federal government bonds. The limit on the amount that can be invested in the PRA is \$2,100, indexed annually for wage growth. Furthermore, the 3%-Bond Plan has progressive offset rates for traditional Social Security. The offset rates are 2.5% for low-income workers, 3% for middle-income workers, and 3.5% for high-income workers.

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*“Solutions [other than personal accounts] do little to solve the coming crisis, and put higher tax burdens on Americans.”*

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*“For most of the reform plans, personal accounts invested in Fidelity Funds are a better deal for union households in Iowa than traditional Social Security benefits.”*

It is important to note that the plans in this study are “modeled” on other plans.<sup>32</sup> They are not exact replicas. One important difference is that the three reform plans adjust future Social Security benefits so that they are indexed for inflation using the Consumer Price Index, rather than being indexed for wage growth. The plans in this study employ wage-based Social Security benefits and then adjust them based on what the Trustees’ report states the Social Security system can pay by 2042.<sup>33</sup>

The next step in estimating the monthly benefits involved deciding on an annual rate of return for the PRAs. The study assumed that the PRAs were invested in both actively managed funds and ones that were not actively managed. For the actively managed funds, the study used five funds from Fidelity Investments, the Contrafund, the Dividend Growth Fund, the Spartan Florida Fund, the Diversified International Fund, and the Fidelity Fifty Fund. For the funds that were not actively managed, the study employed the ones used in the Thrift Savings Plan, the retirement plan available to Federal employees. The Thrift Savings Plan has five retirement funds, the C Fund, F Fund, G Fund, I Fund, and S Fund. (For an explanation of both Fidelity and Thrift Savings Plan funds, see Appendix 2.) The rate of return for each fund over ten years is used to estimate the accrual to the PRAs.

Since most reform plans require the PRAs to be invested in index funds until the amount in

the PRAs reaches a specific threshold, the study assumed that all PRAs would be invested 80% in a stock fund, and 20% in a bond fund. The C Fund, which is a stock index fund, and the G Fund, which is a bond index fund, were used. All PRAs are invested for four years in these index funds before being transferred to different investments.

Once the accrual is estimated, the assets in the PRA are then put into an annuity at the time the worker retires. The annuity is based on the annuity calculator at [webannuities.com](http://webannuities.com). The annuity leaves open the possibility of payments going to an heir. All calculations assumed that the workers in the union household retired at age 67. (For a full description of the methodology, see Appendix 1.)

Table 1 displays the results of the Fidelity Funds for a union household in Iowa where both the husband and wife are assumed to be 25 years old. The PRA options are compared to (1) promised Social Security benefits and (2) payable Social Security benefits based on actuarial projections in the Trustees Report. For most of the reform plans, PRAs invested in Fidelity Funds are a better deal for union households in Iowa than traditional Social Security benefits. On average, the 2.5% Plan yields \$1,546 more in monthly benefits over payable Social Security benefits, and \$1,305 more over promised benefits. The 4% Plan performs the best, yielding, on average,

Income in 2003	Type of PRA	Monthly Benefit for:						
		Promised Social Security	Payable Social Security	Contrafund	Dividend Growth	Spartan Florida	Diversified International	Fidelity Fifty
\$9,000	1. 2.5%	\$366*	\$267	\$1,160	\$1,102	\$348	\$1,409	\$1,132
	2. 4%	\$366	\$267	\$1,060	\$1,010	\$370	\$1,226	\$1,036
	3. 3%-Bond	\$366	\$267	\$860	\$823	\$342	\$984	\$843
\$21,000	1. 2.5%	\$596	\$435	\$1,800	\$1,714	\$558	\$2,351	\$1,758
	2. 4%	\$596	\$435	\$2,285	\$2,168	\$673	\$3,005	\$2,230
	3. 3%-Bond	\$596	\$435	\$1,819	\$1,731	\$610	\$2,359	\$1,778
\$29,000	1. 2.5%	\$858	\$626	\$2,281	\$2,850	\$805	\$2,629	\$2,231
	2. 4%	\$858	\$626	\$3,180	\$3,019	\$956	\$3,714	\$3,105
	3. 3%-Bond	\$858	\$626	\$2,537	\$2,416	\$869	\$2,937	\$2,480
\$37,950	1. 2.5%	\$1,099	\$802	\$2,804	\$2,673	\$985	\$3,241	\$2,742
	2. 4%	\$1,099	\$802	\$4,152	\$3,942	\$1,241	\$4,851	\$4,054
	3. 3%-Bond	\$1,099	\$802	\$3,253	\$3,095	\$1,070	\$3,777	\$3,179
\$42,000	1. 2.5%	\$1,182	\$863	\$3,079	\$2,933	\$1,065	\$3,562	\$3,010
	2. 4%	\$1,182	\$863	\$4,562	\$2,009	\$1,340	\$5,335	\$4,452
	3. 3%-Bond	\$1,182	\$863	\$3,575	\$3,400	\$1,159	\$4,155	\$3,493
\$50,000	1. 2.5%	\$1,253	\$915	\$3,553	\$3,379	\$1,155	\$4,128	\$3,471
	2. 4%	\$1,253	\$915	\$5,318	\$5,040	\$1,482	\$6,239	\$5,188
	3. 3%-Bond	\$1,253	\$915	\$4,150	\$3,941	\$1,273	\$4,840	\$4,052

Income in 2003	Type of PRA	Monthly Benefit for:						
		Promised Social Security	Payable Social Security	C Fund	F Fund	G Fund	I Fund	S Fund
\$9,000	1. 2.5%	\$366	\$267	\$1,007	\$437	\$376	\$299	\$625
	2. 4%	\$366	\$267	\$935	\$446	\$395	\$334	\$618
	3. 3%-Bond	\$366	\$267	\$767	\$400	\$362	\$316	\$528
\$21,000	1. 2.5%	\$596	\$435	\$1,572	\$694	\$603	\$491	\$990
	2. 4%	\$596	\$435	\$1,993	\$854	\$733	\$592	\$1,253
	3. 3%-Bond	\$596	\$435	\$1,600	\$745	\$655	\$549	\$1,045
\$29,000	1. 2.5%	\$858	\$626	\$2,014	\$968	\$859	\$729	\$1,331
	2. 4%	\$858	\$626	\$2,778	\$1,204	\$1,038	\$842	\$1,755
	3. 3%-Bond	\$858	\$626	\$2,235	\$1,055	\$930	\$784	\$1,468
\$37,950	1. 2.5%	\$1,099	\$802	\$2,476	\$1,188	\$1,052	\$892	\$1,639
	2. 4%	\$1,099	\$802	\$3,626	\$1,566	\$1,349	\$1,093	\$2,288
	3. 3%-Bond	\$1,099	\$802	\$2,858	\$1,313	\$1,151	\$959	\$1,854
\$42,000	1. 2.5%	\$1,182	\$863	\$2,715	\$1,290	\$1,140	\$962	\$1,789
	2. 4%	\$1,182	\$863	\$3,979	\$1,700	\$1,459	\$1,176	\$2,498
	3. 3%-Bond	\$1,182	\$863	\$3,139	\$1,429	\$1,248	\$1,036	\$2,027
\$50,000	1. 2.5%	\$1,253	\$915	\$3,119	\$1,423	\$1,244	\$1,033	\$2,017
	2. 4%	\$1,253	\$915	\$4,625	\$1,911	\$1,625	\$1,287	\$2,861
	3. 3%-Bond	\$1,253	\$915	\$3,630	\$1,594	\$1,379	\$1,126	\$2,307

\*All numbers are in 2003 dollars.

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*“The results... show that personal accounts hold considerable promise for low-wage Iowa union households.”*

\$2,290 more in monthly benefits over the payable Social Security benefits, and about \$2,049 more than promised benefits. The 3%-Bond Plan also performs well, yielding an average of \$1,742 more than payable benefits and \$1,501 more than promised benefits. Only the Spartan Florida Fund yields fewer benefits than promised Social Security in any way; however, it still outperforms promised Social Security in half of the cases. In all cases, it yields more benefits than payable Social Security.

Table 2 shows the results for the same household with PRAs invested in the Thrift Savings Plan. The results are not as impressive as the Fidelity Funds, yet they are still robust. Only the I Fund generally underperforms, but in all cases it still yields more in monthly benefits than payable Social Security. With the exception of three cases in the G Fund, PRAs invested in all of the other funds pay more in monthly benefits than the *promised* Social Security benefits. The average benefit increase over both the promised and payable Social Security benefits for the 2.5% Plan, 4% Plan, and 3%-Bond Plan are, respectively, \$340 and \$581, \$735 and \$976, and \$457 and \$698.

To see what the plans would mean for the average Iowa union household, one should examine the benefits for household income at the 50th percentile. For Iowa union households in 2002, that income was about \$37,950. Tables 1 and 2 show that an Iowa union household of age 25 making

\$37,950 annually would have more retirement benefits through a system of PRAs than under a system of *promised* Social Security benefits. When compared to the promised benefit, the 2.5% Plan yields an average of \$870 more per month in retirement income, while the 4% Plan yields an average of \$1,717 more, and the 3%-Bond Plan yields an average of \$1,152 more.

The results also show that PRAs hold considerable promise for low-wage Iowa union households. In the case of the households with \$9,000 and \$21,000 in annual income, almost all of the reform plans outperform promised Social Security benefits when invested in Fidelity Funds. Only the Spartan Florida Fund under the 2.5% Plan for households with \$9,000 and \$21,000 in income, and the 3%-Bond Plan for household with \$9,000 income yield less than the promised Social Security benefit. In the Thrift Savings Plan, the PRAs only under-perform promised benefits when invested in the I Fund. In all other cases, for both income levels, PRAs yield higher benefits than promised Social Security.

Next the study examined what the benefits would look like for an Iowa union household where the husband and wife are 35 years old. The results are displayed in Tables 3 and 4. Despite having less time to accrue interest, PRAs for 35-year-olds still perform remarkably well. PRAs invested in Fidelity Funds only under-perform when invested in the

Income in 2003	Type of PRA	Monthly Benefit for:						
		Promised Social Security	Payable Social Security	Contrafund	Dividend Growth	Spartan Florida	Diversified International	Fidelity Fifty
\$9,000	1. 2.5%	\$385*	\$281	\$676	\$661	\$322	\$718	\$666
	2. 4%	\$385	\$281	\$624	\$611	\$332	\$659	\$616
	3. 3%-Bond	\$385	\$281	\$538	\$527	\$319	\$564	\$531
\$21,000	1. 2.5%	\$677	\$494	\$1,091	\$1,068	\$556	\$1,152	\$1,076
	2. 4%	\$677	\$494	\$1,457	\$1,425	\$776	\$1,539	\$1,438
	3. 3%-Bond	\$677	\$494	\$1,309	\$1,286	\$799	\$1,371	\$1,295
\$29,000	1. 2.5%	\$1,008	\$736	\$1,435	\$1,408	\$808	\$1,508	\$1,417
	2. 4%	\$1,008	\$736	\$2,066	\$2,022	\$1,285	\$2,338	\$2,198
	3. 3%-Bond	\$1,008	\$736	\$1,862	\$1,828	\$1,156	\$1,946	\$1,841
\$37,950	1. 2.5%	\$1,226	\$895	\$1,752	\$1,716	\$983	\$1,844	\$1,730
	2. 4%	\$1,226	\$895	\$2,636	\$2,578	\$1,405	\$2,784	\$2,600
	3. 3%-Bond	\$1,226	\$895	\$2,368	\$2,325	\$1,445	\$2,479	\$2,341
\$42,000	1. 2.5%	\$1,343	\$980	\$1,929	\$1,889	\$1,077	\$2,031	\$1,904
	2. 4%	\$1,343	\$980	\$2,907	\$2,843	\$1,545	\$3,071	\$2,867
	3. 3%-Bond	\$1,343	\$980	\$2,611	\$2,563	\$1,589	\$2,733	\$2,159
\$50,000	1. 2.5%	\$1,484	\$1,083	\$2,212	\$2,165	\$1,199	\$2,334	\$2,183
	2. 4%	\$1,484	\$1,083	\$3,377	\$3,301	\$1,755	\$3,571	\$3,330
	3. 3%-Bond	\$1,484	\$1,083	\$3,024	\$2,967	\$1,260	\$2,622	\$2,441

Income in 2003	Type of PRA	Monthly Benefit for:						
		Promised Social Security	Payable Social Security	C Fund	F Fund	G Fund	I Fund	S Fund
\$9,000	1. 2.5%	\$385	\$281	\$641	\$362	\$339	\$312	\$481
	2. 4%	\$385	\$281	\$596	\$366	\$347	\$328	\$468
	3. 3%-Bond	\$385	\$281	\$517	\$344	\$330	\$315	\$420
\$21,000	1. 2.5%	\$677	\$494	\$1,038	\$617	\$582	\$543	\$797
	2. 4%	\$677	\$494	\$1,230	\$693	\$649	\$604	\$930
	3. 3%-Bond	\$677	\$494	\$1,044	\$641	\$608	\$574	\$819
\$29,000	1. 2.5%	\$1,008	\$736	\$1,375	\$879	\$839	\$797	\$1,096
	2. 4%	\$1,008	\$736	\$1,751	\$1,009	\$949	\$888	\$1,337
	3. 3%-Bond	\$1,008	\$736	\$1,494	\$938	\$892	\$847	\$1,184
\$37,950	1. 2.5%	\$1,226	\$895	\$1,678	\$1,071	\$1,021	\$972	\$1,339
	2. 4%	\$1,226	\$895	\$2,224	\$1,253	\$1,174	\$1,094	\$1,682
	3. 3%-Bond	\$1,226	\$895	\$1,860	\$1,132	\$1,072	\$1,012	\$1,454
\$42,000	1. 2.5%	\$1,343	\$980	\$1,847	\$1,175	\$1,120	\$1,065	\$1,472
	2. 4%	\$1,343	\$980	\$2,451	\$1,377	\$1,289	\$1,200	\$1,851
	3. 3%-Bond	\$1,343	\$980	\$2,049	\$1,243	\$1,177	\$1,110	\$1,599
\$50,000	1. 2.5%	\$1,484	\$1,083	\$2,115	\$1,315	\$1,250	\$1,184	\$1,668
	2. 4%	\$1,484	\$1,083	\$2,835	\$1,555	\$1,451	\$1,345	\$2,120
	3. 3%-Bond	\$1,484	\$1,083	\$2,359	\$1,400	\$1,321	\$1,242	\$1,823

\*All numbers are in 2003 dollars.

# *Social Security Reform and Union Households in Iowa*

Spartan Florida Fund, yet they still yield more benefits than payable Social Security. PRAs invested in the Thrift Savings Plan under-perform when invested in the I Fund, G Fund, and in over half of the cases in the F Fund. However, PRAs invested in these still outperform payable Social Security benefits in all cases. Nevertheless, the accounts in the Thrift Savings Plan Funds generally outperform Social Security benefits. On average, the accounts under the 2.5% Plan yields \$463 more than payable Social Security and \$188 more than promised benefits, the 4% Plan yields \$872 and \$596 more, and the 3%-Bond Plan yields \$670 and \$394 more.

Overall, what the results show is that the current Social Security system is a “bad deal” for today’s union households in Iowa. They would do much better under a system of PRAs.

## **What About Investments With Low Return?**

The lackluster performance of the I Fund rightly raises concerns about a union household that invests in a poorly performing fund. Are such households fated to a monthly retirement benefit less than what Social Security would have paid?

First, many reform proposals, such as the one proposed by Representative Nick Smith, suggest offering a guaranteed benefit similar to what Social Security promises to pay as an insurance against underperforming investments. “Such a safety net is

feasible since the personal accounts are so likely to pay workers more than what Social Security promises today.”<sup>34</sup> Second, no one who exercises the option of a PRA must keep the assets in the account invested in any one fund indefinitely. Most reform plans propose allowing workers to change their investments annually. Thus, workers who felt their PRAs are not yielding high enough returns can invest the accounts in other funds.

Another way to guard against poorly performing investments is to provide workers who exercise the PRA with information about their projected benefits. Under such a scenario, the Social Security Administration would annually mail all workers who have a PRA a summary of their investments. The summary would include a comparison of promised Social Security benefits vs. the benefits their personal accounts are likely to yield based on both the 10- and 20-year performance of the fund in which the PRA is invested. Knowledge is power, and the knowledge provided by the summary would empower workers to make better investments.

Finally, it is worthwhile to examine how a union household in Iowa that switched investments would fare. Let’s examine the worst-performing case, the 35-year-old household earning \$9,000 that invests in the I Fund. If a household invested in the I Fund for the first ten years of the PRA (after the account threshold was achieved), and then switches

*“Most reform plans propose allowing workers to change their investments annually.”*

to the Fidelity Contrafund, the monthly benefits would improve considerably. Under such a scenario the 2.5% Plan yields \$535 in monthly benefits, the 4% Plan yields \$518, and the 3%-Bond Plan yields \$458. All plans yield more than the promised Social Security benefit.

There are plenty of ways to safeguard against a PRA invested in an underperforming fund. Such safeguards will help ensure that workers do not receive less in retirement benefits from their personal accounts than they would from Social Security.

## **Conclusion**

The Social Security system will face a serious crisis in the next few decades. To fix it will require either large tax increases, large benefit cuts, large cuts in other forms of government spending, or some combination of all three — unless there is fundamental reform of the system. One such reform is permitting workers to have the option of a personal retirement account in which a portion of their payroll taxes are diverted annually.

There is much reason for today's workers to be optimistic about the outcome of such a reform. The results of this study show that such a reform would yield much better returns for union households in Iowa than does the current Social Security system. Ultimately, personal retirement accounts can reform Social Security in a way that provides a better retirement for all American

workers. Hopefully, policy makers will soon enact this vital reform.

# *Social Security Reform and Union Households in Iowa*

*“There is much reason for today's workers to be optimistic about the outcome of [Social Security] reform.”*

## ENDNOTES:

<sup>1</sup>The Board of Trustees, “The 2003 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds,” U.S. Government Printing Office, March 17, 2003, p.8.

<sup>2</sup>Ibid.

<sup>3</sup>Peter J. Ferrara and Michael Tanner, *A New Deal For Social Security*, Cato Institute, Washington, D.C., 1998, p.68.

<sup>4</sup>John A. Miranowski, “Impact of Social Security Payments on Iowa Counties: Contributions to Personal Income in 1969 and 2000, with Projections for 2020 and 2040,” *For Our Grandchildren*, May 2003, p. 2.

<sup>5</sup>Ibid, pp. 2-3.

<sup>6</sup>William G. Shipman, “Retiring With Dignity: Social Security vs. Private Markets,” *The Cato Project on Social Security Privatization*, SSP, No. 2, August 14, 1995, pp.1-2.

<sup>7</sup>Michael Tanner, “‘Saving’ Social Security Is Not Enough,” *The Cato Project On Social Security Privatization*,” SSP No. 20, May 25, 2000, p.5.

<sup>8</sup>Ekaterina Shirley and Peter Spiegler, “The Benefits of Social Security Privatization for Women,” *The Cato Project on Social Security Privatization*, SSP No. 12, July 20, 1998, p.2.

<sup>9</sup>Jagadeesh Gokhale, “The Impact of Social Security Reform on Low-Income Workers,” *The Cato Project on Social Security Privatization*, SSP No. 23, December 6, 2001.

<sup>10</sup>Michael Tanner, “Privatizing Social Security: A Big Boost for the Poor,” *The Cato Project On Social Security Privatization*, SSP No. 4, July 29, 1996.

<sup>11</sup>Matt Moore, “The Power of Compounding and Social Security,” *National Center for Policy Analysis, Brief Analysis*, No. 343, October 12, 2000.

<sup>12</sup>Michael Tanner, “Union Workers Should Support Social Security Privatization,” *Cato Briefing Paper*, No. 39, September 7, 1998. p.1.

<sup>13</sup>William W. Beach and Gareth G. Davis, “Social Security’s Rates of Return for Union Households,” *A Report of the Heritage Center for Data Analysis*, No. 98-06, September 7, 1998.

<sup>14</sup>William W. Beach, Gareth G. Davis, and Sarah E. Youssef, “A State-By-State Analysis of the Returns From Social Security,” *A Report of the Heritage Center for Data Analysis*, No. 98-05, July 30, 1998.

<sup>15</sup>Carrie Lips, “State and Local Government Retirement Programs: Lessons in Alternatives to Social Security,” *The Cato Project on Social Security Privatization*, SSP No. 16, March 17, 1999.

<sup>16</sup>Merril Matthews Jr., “No Risky Scheme: Retirement Savings Accounts That Are Personal and Safe,” *Institute for Policy Innovation, Policy Report*, No. 163, January 2002.

<sup>17</sup>Peter J. Ferrara, John C. Goodman, and Merrill Matthews Jr. “Private Alternatives to Social Security in Other Countries,” *National Center for Policy Analysis, Policy Report*, No. 200, October 1995.

<sup>18</sup>L. Jacobo Rodriguez, “Chile’s Private Pension System at 18: Its Current State and Future Challenges,” The Cato Project on Social Security Privatization, SSP No. 17, July 30, 1999.

<sup>19</sup>David C. John, “Bear Markets Do Not Hurt the Case for Social Security Retirement Accounts,” *The Heritage Foundation Executive Memorandum*, No. 742, May 1, 2001.

<sup>20</sup>Matt Moore, “Social Security and Stock Risk,” National Center for Policy Analysis, *Brief Analysis*, No. 429, January 16, 2003.

<sup>21</sup>Liqun Liu, Andrew J. Rettenmaier, and Zijun Wang, “Social Security and Market Risk,” National Center for Policy Analysis, *Policy Report*, No. 244, July 2001.

<sup>22</sup>Andrew G. Biggs, “Perspectives on the President’s Commission to Strengthen Social Security,” The Cato Project on Social Security Privatization, SSP No. 27, August 22, 2002, p.18.

<sup>23</sup>Michael Tanner, “Is There a Right to Social Security?” *Cato Daily Comment*, November 25, 1998. at <<http://www.cato.org/dailys/11-25-98.html>>.

<sup>24</sup>Andrew G. Biggs, “Social Security: Is It ‘A Crisis That Doesn’t Exist?’” The Cato Project on Social Security Privatization, SSP No. 21, October 5, 2000.

<sup>25</sup>William Shipman, “Facts and Fantasies About Transition Costs,” The Cato Project On Social Security Privatization, SSP, No. 13, October 13, 1998.

<sup>26</sup>Neil Howe and Richard Jackson, “The Myth of the 2.2 Percent Solution,” The Cato Project on Social Security Privatization, SSP No. 11, June 15, 1998.

<sup>27</sup>D. Mark Wilson, “Removing Social Security’s Tax Cap on Wages Would Do More Harm Than Good,” *A Report of the Heritage Center for Data Analysis*, No. 01-07, October 18, 2001.

<sup>28</sup>Michael Tanner, “No Second Best: The Unappetizing Alternative to Social Security Privatization,” The Cato Project on Social Security Privatization, SSP No. 24, January 29, 2002.

<sup>29</sup>For more on Representative Smith’s plan, see <<http://www.house.gov/nicksmith/pr30910.htm>>.

<sup>30</sup>The President’s Commission to Strengthen Social Security, “Strengthening Social Security and Creating Personal Wealth for All Americans; Report of the President’s Commission,” December 2001, pp.109-18.

<sup>31</sup>Andrew G. Biggs, “Large Accounts and Small Cash Deficits; Increasing Personal Account Size Within a Fiscally Responsible Framework,” The Cato Project on Social Security Choice, SSP No. 30, April 25, 2003.

<sup>32</sup>Another difference occurs in the modeling of the 3%-Bond. Andrew Biggs states that the plan is progressive, in that lower-income workers could invest more in their PRAs. This study assumes that it is not progressive.

<sup>33</sup>The expected Social Security benefits are based on the Trustees’ estimate that Social Security will only be able to pay 73% of benefits starting in 2042. See the Trustees’ Report, p.8. Also see “Social Security Reform; Analysis of a Trust Fund Exhaustion Scenario,” Government Accounting Office, *Report to Congressional Requesters*, GAO-03-907, July 2003.

<sup>34</sup>Peter J. Ferrara, “A Progressive Proposal for Social Security Personal Accounts,” Institute for Policy Innovation, IPI Center for Economic Growth, *Policy Report*, No. 176, p.15.

## Appendix 1: Methodology for Calculating Monthly Benefits from Personal Accounts

1. The income levels for union households in Iowa were taken from the Census Bureau's Current Population Survey, March Supplement, 2002. The variables used were GMSTCEN, WSAL\_VAL, and A\_UNMEM. Two income levels were selected from below the 25<sup>th</sup> income percentile, one was selected from between the 25<sup>th</sup> and 50<sup>th</sup> percentile, the income level at the 50<sup>th</sup> percentile was selected, and two were selected from above the 50<sup>th</sup> percentile.
2. The Social Security Calculator available at <http://www.ssa.gov/OACT/ANYPIA/download.html> was used to calculate Social Security benefits. For income over \$25,000, benefits were calculated by assuming two workers in the household, one worker making \$25,000, the other making the difference. The income entered into the calculator assumed wage-growth based on the Trustees' intermediate assumption (see Trustees Report, page 93). Specified earnings for a 25-year-old included years 2003 to 2044; wages were projected back until 1999. Specified earning for a 35-year-old included years 2003 to 2034; wages were projected back until 1989. "2003 Trustees Report Alternative II" was used as the assumption for benefit increase assumptions. The expected Social Security benefits used in this study were then calculated by multiplying the promised benefit by .73.
3. The income projections from Step 2—annual wage increases based on the Trustees' intermediate assumptions—were then used to determine the amount put in the personal accounts annually. The study assumes there are two personal accounts for households with income over \$25,000 for the 4% Plan, and two personal accounts for income of \$50,000 for the 3%-Bond Plan. For the 2.5% Plan, an extra \$300 was added to each account for incomes between \$5,000-\$25,000, and an extra \$150 was added to each account for incomes between \$25,000-\$35,000. The annual amount put into the accounts was multiplied by the rate of return over the last 10 years in Fidelity's Contrafund, Dividend Growth Fund, Spartan Municipal Income Fund, Diversified International Fund, and Fidelity Fifty Fund, and in the Thrift Savings Plan's C Fund, F Fund, G Fund, I Fund, and S Fund. The Fidelity Funds can be viewed at <http://content.members.fidelity.com/mfl/mrv/home>. All Fidelity Funds used in this study were given an overall five star rating by MorningStar. The Thrift Savings Plan funds can be viewed at <http://www.tsp.gov/rates/monthly-history.html>.
4. A maintenance fee, known as an expense ratio, is subtracted from each account invested in the Fidelity funds annually since the Fidelity Funds are actively managed. For the Contrafund, Dividend Growth Fund, Spartan Municipal Income Fund, Diversified International Fund, and Fidelity Fifty Fund, the expense ratios are 103 basis points, 107 basis points, 50 basis points, 128 basis points, and 108 basis points, respectively.
5. To determine the monthly retirement payment, the account assets are put into an annuity upon retirement. (Retirement age is assumed to be 67.) The annuity calculator at the WebAnnuities.com website, at <http://www.tsp.gov/calc/annuity.html>, was used. The options used were joint lifetime income, 100% to the survivor, and payments guaranteed to a beneficiary if the both recipients die before 10 years after opening the annuity. WebAnnuities.com provides an average annuity based on the annuities from over sixteen major investment companies, including Allianz LIC, American General, Fidelity and Guaranty, MetLife, United of Omaha, and USG Annuity.
6. The Social Security benefits and the monthly annuity payments are both transformed into 2003 dollars. This was done by calculating an inflation factor based on the Consumer Price Index in the Trustees intermediate assumptions (see Trustees Report, page 93.)
7. To calculate the monthly benefit under the three plans, the payable Social Security benefit with an offset was added to the monthly annuity payment. The offset was calculated by assuming the offset rate of return for each plan (for the offset rates, see page 9) as the annual return on the personal accounts, then entering the total amount into the annuity calculator used in Step 5. Since the 3%-Bond Plan has progressive offset rates, it should be noted that a 2.5% rate was used for incomes of \$29,000 or less, a 3% rate was used on incomes \$37,950 and \$42,000, and a mix of the 2.5% and 3% rate was used on the \$50,000 income level. That number yielded by the annuity calculator was transformed into 2003 dollars and then subtracted from the combined expected Social Security benefit and annuity payment to determine the final monthly benefit.

## Appendix 2: Description of Fidelity Funds and Thrift Savings Plan Funds

### Fidelity:

**Contrafund:** This fund invests in companies experiencing positive fundamental change such as a new management team or product launch or companies that are undervalued in relation to securities of other companies in the same industry. Invests in foreign and domestic stocks.

**Dividend Growth:** Invests primarily in stocks from companies that Fidelity Management & Research Company believes have the potential to pay dividends in the future. Invests in domestic and foreign issuers.

**Spartan Florida Municipal Income:** This fund invests at least 80% of the fund's assets in investment-grade municipal securities whose interest is exempt from federal and Florida income taxes, if any. It also invests in municipal bonds exempt from the Florida intangible tax.

**Fidelity Fifty:** This fund usually invests primarily in common stocks of domestic and foreign issuers that Fidelity Management & Research Company believes have the greatest potential for growth. The fund normally invests in 50-60 stocks and invests in either "growth" stocks or "value" stocks or both.

**Diversified International:** This fund invests primarily in non-U.S. securities. It allocates investments across countries and regions considering size of the market in each country and region relative to size of the international market as a whole.

For a more detailed description of these funds, visit the Fidelity website at <http://www.fidelity.com/>.

### Thrift Savings Plan:

**C Fund:** The C Fund is invested in the equities market. Specifically, it is invested in the Standard and Poor's 500 Index. The S&P 500 tracks the performance of major companies and industries in the U.S. stock market.

**F Fund:** This fund is invested in fixed-income securities in the Barclays U.S. Debt Index Fund. The Barclays Fund invests in bonds in the LBA index. Earnings fluctuate with returns from the bond market.

**G Fund:** The G Fund is invested in U.S. Treasury bonds. The bonds are all short-term securities with maturities ranging from one to four days. The earnings fluctuate with interest rates set by the Treasury Department.

**I Fund:** The I Fund is invested in foreign stocks. It is invested in the Morgan Stanley Capital International Index which tracks the overall performance of the major companies and industries in the European, Australian, and Asian stock markets.

**S Fund:** This fund is invested in a fund that tracks a portion of the equities market not covered by the S&P 500. It is invested in the Barclays Extended Market Index Fund which tracks much of the non-S&P 500 portion of the stock market. The Barclays Index holds the stock of all companies not in the S&P 500 with a market capitalization greater than \$1 billion.

For a more detailed description of these funds see "Guide to TSP Investments," at <http://www.tsp.gov/forms/tspbk03.pdf>.

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