

**HERE'S THE "FLOOR PLAN"
FOR PROTECTION, PARTIAL PRIVATIZATION
OF SOCIAL SECURITY**

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Social Security's expected future financial woes have been well publicized in the popular, technical, and academic media. In response, in 2001 President Bush convened the Bipartisan Commission on the Future of Social Security. This Commission focused on three purely privatized alternatives to the present benefit structure. (1)

Following is a creative response and a compromise solution to the issues examined by that Commission, one which is intended to meet the needs of all of the stakeholders in the national retirement system called Social Security: The Floor Plan.

Now, the Floor Plan is described for private—employer sponsored pensions in IRS Revenue Ruling 76-259. Under such a program as it would apply to Social Security, a worker's benefit at Social Security age for full benefits (the so-called Full Benefit Age), now age 65 to 67, would be the sum of two benefits:

Benefit 1: The monthly benefit that the individual has already accrued under the previously existing benefit formula at the date of adoption of the Floor Plan; plus

Benefit 2. The Floor Plan benefit, which is the larger of:

- A. The guaranteed monthly annuity purchasable with the individual's previously non-guaranteed account balance at the above-mentioned Full Benefit Age; or
- B. The individual's Floor Plan minimum benefit. This minimum would be a politically negotiated amount, 80% for purposes of this study, of the worker's increase in accrued benefits computed as though the present Social Security benefit arrangement had remained in effect.

NOTE: In pension parlance, this benefit structure is described as being "without wear-away."

Upon a worker's retirement, the non-guaranteed account becomes a monthly guaranteed cash refund annuity. That is, if a worker, or his spouse, as the case may be, dies before his entire account balance at retirement has been paid out as retirement benefits, the amount remaining would be paid to the worker's estate or other beneficiaries. Benefits would accumulate non-guaranteed during the worker's pre-retirement years.

Benefit 1, the accrued benefit as of the effective date of this changed benefit structure, would phase out as younger workers come into the Social Security System, thereby providing for an orderly method of phasing out the current benefit formula and phasing in the Floor Plan.

Protecting accrued benefits would mean that no so-called “Notch” would develop, as it did the last time Social Security benefits were reduced, in 1977.

The individual account plan benefit under 2A above would be an accumulation of monies invested. For the U.S. Social Security system, it is likely that deposits of 4% of annual covered payroll and an average 6% compounded annual rate of return would mean that the Floor Plan benefit in 2B would not be triggered, except for the lowest-paid workers in the workforce. The Floor Plan represents only a minimum guarantee, protecting lower-paid workers primarily, under a 4% of covered payroll individual account arrangement.

We note here that the present social insurance program already provides a means-tested flat dollar benefit through the Supplemental Security Income (SSI) program. As an alternative, we propose a partially privatized, non-means-tested floor benefit that would be a percentage, here 80%, of the present monthly benefit formula.

One of the political constraints placed by President Bush in 2001 on the design of the future Social Security benefit structure is that there be no tax increases to fund these benefits. The conclusions formed in this article is that it is not possible to develop a totally “fair”, feasible program for Social Security benefits/contributions across all wage earning brackets and all age groups without some sort of payroll tax increases.

Note that there are three elements of any guaranteed defined benefit program: the benefit amounts payable, the age at which benefits are to begin, and the mortality rates of the covered population. Some proposals would maintain the existing benefit formula but make it payable at a later age. And once the System exhausts its “reserves”, the discussion of which is well-reported and

beyond the scope of this paper, by about the year 2040, the System would revert to a pay-as-you-go system, thereby forgoing the partial advance-funding approach that had been adopted during the Reagan Administration's approach to Social Security reform.

We demonstrate that, contrary to popular belief, the proposed Floor arrangement is affordable in that the projected payroll tax increases would be modest when compared to the hardship to future retirees, as well as compared to the cost of the program if nothing is done. If there is no change to the present system, Social Security retirement benefits will default to a pay-as-you-go system by the year 2040. Without tax increases, by that time the anticipated FICA (Social Security retirement) tax rate will support only 72% of the present retirement benefit structure. This means that, in the absence of any intervention prior to 2040, taxes would need to increase by 32% at that time to maintain the system's current retirement benefit levels. (2)

We propose an alternative: partial privatization with a non-means-tested, percent of current benefit floor. Let's assume that the latter proposed formula begins to take effect ten years from now, in 2018. Let's further assume that for the Floor Plan to work, a payroll tax level of 7.45% of covered payroll is needed to cover retiree and disablement benefit costs. This means that workers presently age 55 or older would retire under the current benefit formula. In the intervening ten years, 4% of an affected worker's FICA retirement taxes would be committed to a privatized investment account. The remaining 3.25% of the employee's share of the FICA's 7.45% of covered payroll tax rate, as well as all of the employer's 7.45% of covered payroll share, would go to pay off the prior service costs of the System, as well as the cost of the Floor Benefit Guarantee. These percentages are the costs, expressed as a level percentage of payroll, over the next 75 years, to provide for the Floor Plan guaranteed retirement benefits, as well as survivor and disability benefits. Note as

well that the current payroll tax structure calls for a 6.2% of payroll contribution by each of the employer and employee. Therefore, “fixing” the System through this Floor Plan guarantee would entail a payroll tax increase of 1.25% of covered payroll for each of the employer and the employee.

Let’s also assume that the privatized investments mimic the performance of the Standard & Poor’s 500 Index, which yielded an average of 8% compounded annually from 1960 through 2005. Thus, the S & P 500 outpaced wage inflation by roughly 4% over that period. Further, the S & P 500 has had a negative return – indicative of a recession – in twelve of those forty-five years. For most covered workers, only in a recession year would the Floor Benefit minimum ever be triggered. In all other years, the privatized benefit would prevail.

The S & P 500 is chosen here for asset performance measurement because it is a **market-value-weighted** index. It is computed by calculating the total market value of its 500 component business equities that comprise the index against the value of those firms as of the day of the measurement. Then the annualized change, or rate of return, is calculated. (3)

The average S & P 500 Index yield from 1960 to 2005 was 8% compounded annually. If we assume actuarially that the privatized investments will earn 6% compounded annually, with an expected 2% “reward” to those who take the investment risk, this 80% Floor would be supported by the above payroll tax level. Note that the System’s trust funds currently are invested in special, low-yielding U.S. Treasury paper. If these funds were segregated and invested in a prudent market basket of securities, every dollar of “extra” investment income would reduce the need for additional payroll tax revenue into the System.

The Floor Plan described above would provide fewer guaranteed benefits, but more benefit opportunities, to covered workers. The amount freed up for individual account investing should be around 4%, given the yields that are prevailing in current financial market. There would be some additional cost to this Floor Plan Guarantee. However, this is the cost to provide minimal, dignified benefits to the lowest paid workers in society, while offering President Bush's opportunity program to the majority of workers.

Some see the partially privatized individual account plan as restoring equity to Social Security. Others say that it would destroy the "social adequacy" objectives of the current program. The Floor Plan satisfies both sides of the issue. For upper income earners – who would accrue large balances under the 4% of covered payroll individual account plan – only the individual account portion would become payable. For lower income earners, the defined benefit portion in 2B above would pay benefits under a skewed Social Security benefit formula not unlike today's benefit arrangement. Therefore, lower-wage earners would remain whole, whereas "equity" is restored to higher-wage earners.

The Floor Plan, then, would guarantee against:

- . Lower-than-expected investment earnings under the free-market invested individual account plan.

- . Longer-than-expected longevity of an individual. Under the guaranteed post-retirement payout structure, one cannot "outlive" one's life annuity. Note, however, that dramatic improvements in mortality could mean that there would be another Social Security financing adjustment for future retiring workers at some point down the road.

- . Inflation before retirement, which diminishes the purchasing power over a working lifetime of early years' individual account plan contributions; and, finally

- . Inflation after retirement, which diminishes the purchasing power of a fixed-dollar account balance in an individual account plan.

The Floor Plan serves as a guarantee of the individual account portion of the partially privatized arrangement. Once the younger workers of today have been covered under this individual account arrangement for a working lifetime, only the guarantees listed above would trigger the defined benefit Floor for all but the lowest-paid workers. Higher wage earners should be phased out of the Floor Plan minimum guarantee because their 4% of payroll contributions would be invested in accounts for their benefit and, therefore, would minimize the meaning of the Floor Plan guarantee for them. The only time that the guarantee would be triggered for upper-wage earners would be if they were to retire in a market downturn. This writer believes that the Floor Plan proposed here, therefore, represents a comprehensive idea of "Fairness" across all wage and income brackets, as well as much as possible among the generations of stakeholders in the System.

Once the Floor Plan is fully phased in, only 4% for the individual accounts and 3.25% for the guarantee of the Social Security payroll tax should be needed to pay for most covered retirement, survivor's, and disability benefits. The employer's share of the tax, would also be used for death and disability benefits, as well as the presently unfunded liabilities for benefit commitments to current and future retirees.

There would still be some risk, relative to the present arrangement, to those workers under the Floor Plan. However, they will also enjoy a potential reward of the additional 2% average rate of return that will improve their retirement income security. Nonetheless,

this arrangement is prudent and, in the absence of an economic catastrophe, would avoid the well-documented “train-wreck” that Social Security retirees are facing.

Of course, the Congress, with the aid of the Social Security Administration, would need to determine the affordability and political acceptability of such an approach. The individual account investments would be invested in government-approved stock and bond mutual funds, pooled insurance company assets, and other prudent securities, since the investment performance of this Floor Plan affects payouts under the defined benefit guaranteed portion. Still, this arrangement ought to work, lessening the crisis for Social Security for many decades to come.

APPENDIX 1

The proposed Social Security retirement benefit for a given covered worker would be as follows under the Floor Plan:

$$\text{SSRB}(\text{new}) = \max (0.00, (82\% * \text{SSRB}(\text{old})) - \text{Floor Offset}) \\ + \text{Floor Offset} + \text{SS Accrued Benefit (old)}.$$

That is, the Floor Offset is computed as follows:

$$\text{Floor Offset} = 4\% * [\text{SS wages} * ((1 + \text{salary scale})^{(\text{RA} - \text{AA})} \\ * (1 + i)^{(\text{RA} - \text{AA})} - 1) / (1 - i * \text{salary scale})] / \\ \text{Annuity Factor at Retirement Age}.$$

Where,

SSwages are the worker's Social Security covered wages for a given calendar year.

Salary scale is the assumed compound average rate of salary increase in the projection period.

(RA-AA) is the number of anticipated future years of covered employment.

i = the expected accumulation rate of return on the S & P 500 Index over the 75-year projection period.

SSRB(old) = the Social Security Retirement Benefit under the current benefit formula.

APPENDIX 2

ASSUMPTIONS AND TECHNIQUES IN VALUING THIS FLOOR PLAN

The following assumptions were used, in addition to those included in the actuarial valuation report – which is attached:

1. Assets presently on hand in the Social Security OASDI trust funds are adequate to pay the retirement benefits of today's current retirees, survivors' and disabled recipients.
2. A minimum Floor guarantee of 80 percent of the present PIA is assumed.

The result of this actuarial valuation is that an economically sound method produces an annual cost of approximately 14.49% of covered payroll, and this is more than adequate, on a simulated annual cash flow basis, to keep this projection adequate for the next thirty years. No assumptions are made beyond that period, but only because I have not had the opportunity to continue this projection on an Excel spreadsheet.

This cost projection compares with the 12.8% of payroll for the current OASDI system, which by the admission of their own trustees' as well as actuarial reports, is inadequate and unsustainable for the future simulated 30 years.

In conclusion, the Floor Plan as generated here demonstrates a considerable actuarial surplus using reasonable economic as well as actuarial projections. No assumptions consistent with the "open group" method of Social Security were taken into account here,

however. That is, there were no assumptions made regarding the impact of birth rates and migration either into or out of covered employment were made.

APPENDIX 3

The writer would like to acknowledge the Datair Software Service for providing the actuarial software upon which this cost upper bound was computed.

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Carol A. Caruthers holds a B.A. in mathematics from Duquesne University (1971) and a Master of Applied Mathematics from North Carolina State University (1973). For nearly thirty-five years she has worked in the pension and employee benefits fields in an actuarial and optimization theory capacity. She is the President of Caruthers Benefit Systems, Inc., a Member of the American Society of Pension Professionals and Actuaries, and an Enrolled Actuary.