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# Private Accounts and Social Security: The Issue of Risk

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Robert J. Angell

Proposals to allow individuals to establish “private accounts” with a portion of their Social Security withholding have generated intense debate. Whether such accounts are proposed as an alternative to, or an integral part of Social Security, the arguments for and against private accounts have been numerous and heated. One of the most prominent arguments against private accounts is that allowing individuals to invest a portion of their Social Security withholding in equity securities is “too risky.”

Opponents of private accounts give examples of corporate abuses such as those that occurred at Enron and WorldCom, as evidence that equity investments are an unsuitable replacement for government-guaranteed

benefits. Clearly, these cases represent extreme examples of equity investments gone bad; however, the issue of risk is an appropriate consideration for policymakers charged with ensuring the viability of the Social Security system. The purpose of this article is to address this single, specific issue: Does the risk associated with investing in common stocks make “private accounts” an unreasonable alternative to the current Social Security system?

The general risk associated with investing in equities, the variability of annual returns, is well known and understood; however, the specifics of investment risk in connection with private Social Security accounts are not as apparent. One key issue in connection with this debate is selecting an appropriate time period over which to assess investment risk. A strong case can be made that the variability of *annual* returns is not an appropriate measure of the risk in private Social Security accounts. In a retirement planning setting, the critical issue is whether the amount of

funds generated over an employee’s period of active employment is likely to be greater under the current system or a system that allows private investment in equity securities. From this perspective, the annual variability of portfolio returns during the investment period is by no means the obvious measure.

Regardless of whether individuals are permitted to invest a portion of their Social Security taxes through private accounts, the most important policy issue is whether they will have adequate income upon retirement. The specifics of a Social Security system that allows private accounts have not yet been determined; however, it seems unlikely that such a system would permit participants to invest in individual stocks. Therefore, the findings presented in this article are based on the assumption that individuals choosing to direct a portion of their Social Security withholding to private accounts would be limited to investments in index funds, such as the S&P 500 index.

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The remainder of this article relies on historical data to illustrate how the owners of private accounts might have fared since the beginning of the Social Security system in 1937.

## The Study

This article addresses the issue of risk in private Social Security accounts by reviewing the historical performance of portfolios of equity securities over various time periods, beginning with the inception of Social Security in 1937. The balances that would have been accumulated by investing in diversified portfolios of stocks are then compared to those that would have resulted from investing in long-term government bonds over the same periods. Under the current system, most workers will qualify for full Social Security benefits between the ages 66 and 67, and reduced benefits at age 62. Thus, an assumed investment period of 40 years would be reasonable for most individuals beginning their working careers in their early twenties. This article reports results for investment periods of 20, 30 and 40 years.

The proxies for risk are drawn from the *Stocks, Bonds, Bills and Inflation Year Book* (SBBI) published annually by Ibbotson and Associates. SBBI reports annual rates of return for different types of portfolios of securities, including large stocks, small stocks, corporate

bonds, intermediate-term government bonds, long-term government bonds, and treasury bills. The analyses in this article are limited to small company stocks (most perceived risk); large company stocks (S&P 500); and long-term government bonds (least perceived risk).

## Data

Portfolio contributions for this study were based upon the maximum Social Security taxes that an individual might pay in a year. Table 1 presents the maximum taxable earnings subject to Social Security taxes, the applicable tax rates, and the subsequent taxes paid by an individual subject to the maximum tax for each year, for the years 1937 through 2005. Table 1 shows that both the maximum earnings subject to taxes and the Social Security tax rate were quite small in the early years; however, both have grown substantially in the 68 years since the program began. Therefore, the maximum amount of taxes (the value in the last column) has grown substantially, from \$30 per year in 1937 to \$5,580 in 2005. The overall annually compounded rate of increase in Social Security taxes has been approximately 8.0 percent, but growth in individual years have varied widely over the 68-year period. Table 2 and Figure 1 track the annual growth in the maximum social security taxes by year. Note

that *these statistics include only the taxes that would have been paid by the individual wage earner*. The matching amount paid by employers is not considered in this study.

Obviously, annual contributions over a 20-year period are not all invested for 20 years. For example, under the 20-year investment period assumption, the 1937 contribution of \$30 would be invested for 20 years. The 1938 contribution (also \$30), however, would be invested for only 19 years, and the 1956 contribution of \$84 for one year.

Table 3 shows the actual weighted average period of investment for 20-year, 30-year, and 40-year periods beginning in 1937 to date. The calculated value is the amount invested in each year multiplied by the length of that investment period, summed over the period and divided by the total amount of the investment over the period. For example, the 8.4 years for the 20-year investment for the initial investment beginning in 1937 is determined by multiplying the 1937 investment of \$30 by the 20 years of investment, the 1938 investment of \$30 by 19 years of investment ... and the 1956 investment of \$84 by 1 year of investment and dividing the summed value by the \$837 total investment over the 20-year period. The remaining table values were calculated using

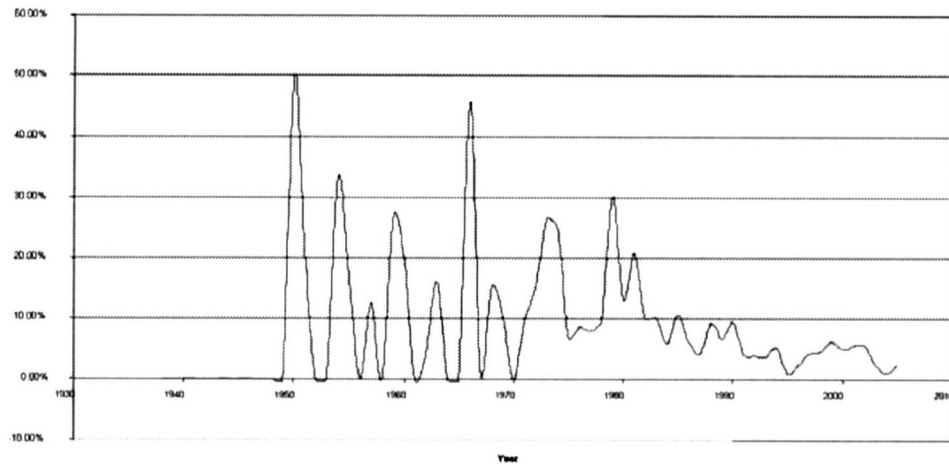
**Table 1**  
**Maximum Taxable Earnings, Applicable Rates & Subsequent Taxes**  
**For Employees and Employers (Each) Old-Age Survivors & Disability Insurance (OASDI)**

| Year    | Maximum<br>Taxable<br>Earnings<br>(in dollars) | Tax Rate<br>(Percent) | Annual<br>Taxes (in<br>dollars) | Year | Maximum<br>Taxable<br>Earnings<br>(in dollars) | Tax Rate<br>(Percent) | Annual<br>Taxes (in<br>dollars) |
|---------|--|-----------------------|---------------------------------|------|--|-----------------------|---------------------------------|
| 1937-49 | 3,000  | 1.000                 | 30.00                           | 1982 | 32,400   | 5.400                 | 1,749.60                        |
| 1950    | 3,000  | 1.500                 | 45.00                           | 1983 | 35,700   | 5.400                 | 1,927.80                        |
| 1951-53 | 3,600  | 1.500                 | 54.00                           | 1984 | 37,800   | 5.700                 | 2,154.60                        |
| 1954    | 3,600  | 2.000                 | 72.00                           | 1985 | 39,600   | 5.700                 | 2,257.20                        |
| 1955-56 | 4,200  | 2.000                 | 84.00                           | 1986 | 42,000   | 5.700                 | 2,394.00                        |
| 1957-58 | 4,200  | 2.250                 | 94.50                           | 1987 | 43,800   | 5.700                 | 2,496.60                        |
| 1959    | 4,800  | 2.500                 | 120.00                          | 1988 | 45,000   | 6.060                 | 2,727.00                        |
| 1960-61 | 4,800  | 3.000                 | 144.00                          | 1989 | 48,000   | 6.060                 | 2,908.80                        |
| 1962    | 4,800  | 3.125                 | 150.00                          | 1990 | 51,300   | 6.200                 | 3,180.60                        |
| 1963-65 | 4,800  | 3.625                 | 174.00                          | 1991 | 53,400   | 6.200                 | 3,310.80                        |
| 1966    | 6,600  | 3.850                 | 254.10                          | 1992 | 55,500   | 6.200                 | 3,441.00                        |
| 1967    | 6,600  | 3.900                 | 257.40                          | 1993 | 57,600   | 6.200                 | 3,571.20                        |
| 1968    | 7,800  | 3.800                 | 296.40                          | 1994 | 60,600   | 6.200                 | 3,757.20                        |
| 1969-70 | 7,800  | 4.200                 | 327.60                          | 1995 | 61,200   | 6.200                 | 3,794.40                        |
| 1971    | 7,800  | 4.600                 | 358.80                          | 1996 | 62,700   | 6.200                 | 3,887.40                        |
| 1972    | 9,000  | 4.600                 | 414.00                          | 1997 | 64,400   | 6.200                 | 3,992.80                        |
| 1973    | 10,800   | 4.850                 | 523.80                          | 1998 | 68,400   | 6.200                 | 4,240.80                        |
| 1974    | 13,200   | 4.950                 | 653.40                          | 1999 | 72,600   | 6.200                 | 4,501.20                        |
| 1975    | 14,100   | 4.950                 | 697.95                          | 2000 | 76,200   | 6.200                 | 4,724.40                        |
| 1976    | 15,300   | 4.950                 | 757.35                          | 2001 | 80,400   | 6.200                 | 4,984.80                        |
| 1977    | 16,500   | 4.950                 | 816.75                          | 2002 | 84,900   | 6.200                 | 5,263.80                        |
| 1978    | 17,700   | 5.050                 | 893.85                          | 2003 | 87,000   | 6.200                 | 5,394.00                        |
| 1979    | 22,900   | 5.080                 | 1,163.32                        | 2004 | 87,900   | 6.200                 | 5,449.80                        |
| 1980    | 25,900   | 5.080                 | 1,315.72                        | 2005 | 90,000   | 6.200                 | 5,580.00                        |
| 1981    | 29,700   | 5.350                 | 1,588.95                        |      |  |                       |                                 |

**Table 2**  
**Growth Rate in Maximum Social Security Taxes**

| <b>Year</b> | <b>Rate (%)</b> | <b>Year</b> | <b>Rate(%)</b> |
|-------------|-----------------|-------------|----------------|
| 1937-49     | 0.00            | 1979        | 30.15          |
| 1950        | 50.00           | 1980        | 13.10          |
| 1951        | 20.00           | 1981        | 20.77          |
| 1952-53     | 0.00            | 1982        | 10.11          |
| 1954        | 33.33           | 1983        | 10.19          |
| 1955        | 16.67           | 1984        | 5.88           |
| 1956        | 0.00            | 1985        | 10.58          |
| 1957        | 12.50           | 1986        | 6.06           |
| 1958        | 0.00            | 1987        | 4.29           |
| 1959        | 26.98           | 1988        | 9.23           |
| 1960        | 20.00           | 1989        | 6.67           |
| 1961        | 0.00            | 1990        | 9.34           |
| 1962        | 4.17            | 1991        | 4.09           |
| 1963        | 16.00           | 1992        | 3.93           |
| 1964-65     | 0.00            | 1993        | 3.78           |
| 1966        | 46.03           | 1994        | 5.21           |
| 1967        | 1.30            | 1995        | 0.99           |
| 1968        | 15.15           | 1996        | 2.45           |
| 1969        | 10.53           | 1997        | 4.31           |
| 1970        | 0.00            | 1998        | 4.59           |
| 1971        | 9.52            | 1999        | 6.14           |
| 1972        | 15.38           | 2000        | 4.96           |
| 1973        | 26.52           | 2001        | 5.51           |
| 1974        | 24.74           | 2002        | 5.60           |
| 1975        | 6.82            | 2003        | 2.47           |
| 1976        | 8.51            | 2004        | 1.03           |
| 1977        | 7.84            | 2005        | 2.39           |
| 1978        | 9.44            |             |                |

**Figure 1**  
**Growth Rates in Social Security Taxes**



**Table 3**  
**Weighted Average Period of Investment**

| Initial Year | 20-Years | 30-Years | 40-Years |
|--------------|----------|----------|----------|
| 1937         | 8.4      | 9.6      | 9.6      |
| 1942         | 8.3      | 9.0      | 8.8      |
| 1947         | 7.3      | 8.4      | 8.6      |
| 1952         | 7.4      | 8.1      | 9.2      |
| 1957         | 7.0      | 8.0      | 10.3     |
| 1962         | 6.7      | 8.6      | 11.5     |
| 1967         | 6.8      | 9.6      |          |
| 1972         | 7.4      | 10.7     |          |
| 1977         | 8.2      |          |          |
| 1982         | 8.9      |          |          |

Note that the average period of investment has been lengthening for the later investment periods. This is due to the fact that Social Security payments have been increasing at a *lower rate*. As long as the *rate of growth* in the maximum taxes declines, the average length of the investment will increase. If the rate of growth were zero, the 20-year weighted average time period would be 10.5, the 30-year weighted average time period would be 15.5, and the 40-year weighted average time period would be 20.5.

the same process with appropriate inputs. In the early years, the percentage increase in taxes was quite large because the base level of taxes was so low. As the system matured, the percentage increase in taxes decreased. This slowdown in the percentage increase in taxes results in longer average time periods invested in more recent years. Social Security investments in private accounts are likely to remain long-term investments.

## Results

Tables 4, 5, and 6 report the accumulation results for 20-year, 30-year, and 40-year investment periods, respectively. Table 4 shows the amounts accumulated by investing the individual's portion of Social Security taxes in each of the three portfolios at the end forty-seven 20-year overlapping calendar periods beginning with investment of tax payments in 1937 and ending 20-years later. For example, the values \$4,435, \$3,520, and \$991 for beginning-year 1937 were determined by investing the \$30 in taxes paid by the individual in 1937 (from Table 1, last column) for 20 years, the \$30 in taxes paid in 1938 for 19 years, etc., at the rates actually earned over the 20-year period for small stocks, large stocks, and long-term government bonds, respectively. Each subsequent-year set of values was

determined in the same manner. Tables 5 and 6 show the corresponding amounts accumulated for the thirty-seven 30-year, and twenty-seven 40-year periods, respectively.

As expected, the amounts accumulated in the small stock portfolio were generally higher than those in the large stock portfolio and those in the large stock portfolio were higher than those in the long-term government bond portfolio. This result is consistent with the fact that investors view stocks as being more risky than bonds and, thus, require higher returns. Likewise, the long-term rates of return on smaller (riskier) stocks should be higher than those on larger (less risky) stocks, which, in turn, would be higher than returns on bonds.

Focusing on shorter time periods would undoubtedly reveal numerous occasions that differ from these expectations. If, however, the investment period is sufficiently long, the results should match with long-term averages. What may not be so apparent is what constitutes sufficiently long. The summary of exceptions presented in the next section offers some insight into the investment period necessary to achieve long-term expectations.

## Exceptions

*Italicized and bolded* areas in Tables 4, 5, 6 & 7 indicate exceptions

to the expected results. Table 7 summarizes the exceptions.

For the 20-year accumulations (Table 4), the amounts accumulated in large company portfolios were more than the small company accumulations in 10 of the 47 periods, specifically for periods beginning in 1942 through 1944, 1970, and 1976 through 1981. Even more interesting is the fact that accumulations in the long-term government bond portfolio exceed those in the large company stocks portfolio twice in the 47 periods, specifically the 1954-74 and 1982-2002 periods.

The differences, however, are relatively small. In the 20-year period beginning in 1954 and ending in 1974, the amounts accumulated in the long-term government bond and large stock portfolios were \$5,346 and \$5,012, respectively. The difference of \$334 is 6.664 percent of the \$5,012. For the beginning-year 1982 portfolios, the difference in amounts accumulated is only \$229 (\$187,593 verses \$187,364) and only .122 percent of the amount accumulated in the large stock portfolio. For the 20-year investment period, the small stock portfolio outperformed the long-term government portfolio in every case.

The 30- and 40-year accumulation results are even more consistent with expectations. For the 30-year accumulations (Table 5), the

**Table 4**  
**20-Year Accumulations\***  
**Employee Contributions Only**

| <b>Beginning Year</b> | <b>Small Stock<br/>Portfolio (in dollars)</b> | <b>Large Stock<br/>Portfolio (in dollars)</b> | <b>Long-term Government<br/>Portfolio (in dollars)</b> |
|-----------------------|---|---|--|
| 1937                  | 4,435   | 3,520   | 991  |
| 1938                  | 6,396   | 4,688   | 973  |
| 1939                  | 6,615   | 4,933   | 1,000  |
| 1940                  | 5,607   | 4,651   | 1,228  |
| 1941                  | 6,334   | 5,487   | 1,340  |
| <b>1942</b>           | <b>4,484</b>                                  | <b>4,522</b>                                  | <b>1,540</b>   |
| <b>1943</b>           | <b>4,682</b>                                  | <b>5,108</b>                                  | <b>1,664</b>   |
| <b>1944</b>           | <b>5,313</b>                                  | <b>5,569</b>                                  | <b>1,856</b>   |
| 1945                  | 7,146   | 5,911   | 1,998  |
| 1946                  | 6,468   | 5,112   | 2,209  |
| ...                   | ...   | ...   | ...  |
| 1953                  | 6,748   | 6,716   | 4,681  |
| <b>1954</b>           | <b>5,401</b>                                  | <b>5,012</b>                                  | <b>5,346</b>   |
| 1955                  | 8,719   | 7,400   | 6,436  |
| ...                   | ...   | ...   | ...  |
| 1969                  | 109,943                                       | 90,410  | 61,718   |
| 1970                  | 85,205  | 87,581  | 66,666   |
| 1971                  | 122,028                                       | 114,946                                       | 81,251   |
| 1972                  | 147,870                                       | 123,672                                       | 89,200   |
| 1973                  | 174,052                                       | 135,913                                       | 106,737  |
| 1974                  | 166,152                                       | 135,455                                       | 98,429   |
| 1975                  | 192,852                                       | 177,666                                       | 129,341  |
| <b>1976</b>           | <b>202,019</b>                                | <b>210,242</b>                                | <b>126,851</b>   |
| <b>1977</b>           | <b>228,028</b>                                | <b>270,277</b>                                | <b>146,028</b>   |
| <b>1978</b>           | <b>195,359</b>                                | <b>329,899</b>                                | <b>163,172</b>   |
| <b>1979</b>           | <b>236,327</b>                                | <b>376,055</b>                                | <b>145,688</b>   |
| <b>1980</b>           | <b>212,300</b>                                | <b>317,535</b>                                | <b>171,686</b>   |
| <b>1981</b>           | <b>246,703</b>                                | <b>262,635</b>                                | <b>169,792</b>   |
| <b>1982</b>           | <b>200,112</b>                                | <b>187,364</b>                                | <b>187,593</b>   |
| 1983                  | 304,947                                       | 223,270                                       | 181,039  |

\* Beginning years 1947 through 1952 and 1956 through 1968 were omitted for space considerations. Omitted years show no unusual patterns.



**Table 5**  
**30-Year Accumulations\***  
**Employee Contributions Only**

| <b>Beginning Year</b> | <b>Small Stock<br/>Portfolio (in dollars)</b> | <b>Large Stock<br/>Portfolio (in dollars)</b> | <b>Long-term Government<br/>Portfolio (in dollars)</b> |
|-----------------------|---|---|--|
| 1937                  | 40,434  | 14,362  | 2,661  |
| 1942                  | 20,855  | 15,537  | 4,974  |
| 1947                  | 28,772  | 14,385  | 10,010   |
| 1952                  | 95,079  | 30,450  | 20,561   |
| 1957                  | 130,208                                       | 72,266  | 51,300   |
| 1962                  | 217,983                                       | 156,886                                       | 106,563  |
| 1967                  | 460,381                                       | 392,337                                       | 190,265  |
| <b>1968</b>           | <b>419,853</b>                                | <b>499,443</b>                                | <b>216,209</b>   |
| <b>1969</b>           | <b>538,744</b>                                | <b>596,811</b>                                | <b>197,030</b>   |
| <b>1970</b>           | <b>507,126</b>                                | <b>532,657</b>                                | <b>239,634</b>   |
| 1971                  | 603,692                                       | 461,588                                       | 248,603  |
| 1972                  | 507,702                                       | 354,540                                       | 293,359  |
| 1973                  | 788,572                                       | 451,933                                       | 296,896  |

\*All unusual results are shown.

**Table 6**  
**40-Year Accumulations**  
**Employee Contributions Only**

| <b>Beginning Year</b> | <b>Small Stock<br/>Portfolio (in dollars)</b> | <b>Large Stock<br/>Portfolio (in dollars)</b> | <b>Long-term Government<br/>Portfolio (in dollars)</b> |
|-----------------------|---|---|--|
| 1937                  | 77,932  | 25,911  | 10,795   |
| 1942                  | 160,057                                       | 44,690  | 21,555   |
| 1947                  | 194,076                                       | 95,546  | 53,950   |
| 1952                  | 328,342                                       | 190,426                                       | 114,422  |
| 1953                  | 385,940                                       | 208,605                                       | 138,785  |
| 1954                  | 384,592                                       | 210,221                                       | 130,781  |
| 1955                  | 503,288                                       | 288,385                                       | 176,303  |
| 1956                  | 574,764                                       | 353,381                                       | 177,435  |
| 1957                  | 684,957                                       | 468,689                                       | 208,851  |
| 1958                  | 607,508                                       | 595,264                                       | 239,277  |
| 1959                  | 769,478                                       | 715,012                                       | 220,309  |
| 1960                  | 720,415                                       | 643,008                                       | 270,906  |
| 1961                  | 850,982                                       | 559,249                                       | 283,430  |
| 1962                  | 716,512                                       | 432,457                                       | 337,067  |
| 1963                  | 1,110,902                                     | 552,947                                       | 344,526  |

**Table 7**  
**Exceptions to Expectations**  
**Portfolio with Greater Accumulation**

|                           | <b>Small Stock Portfolio</b> | <b>Large Stock Portfolio</b>          |
|---------------------------|------------------------------|---------------------------------------|
| 20-Year Investment Period | 37                           | 10                                    |
| 30-Year Investment Period | 34                           | 3                                     |
| 40-Year Investment Period | 27                           | 0                                     |
|                           | <b>Small Stock Portfolio</b> | <b>Long-term Government Portfolio</b> |
| 20-Year Investment Period | 47                           | 0                                     |
| 30-Year Investment Period | 37                           | 0                                     |
| 40-Year Investment Period | 27                           | 0                                     |
|                           | <b>Large Stock Portfolio</b> | <b>Long-term Government Portfolio</b> |
| 20-Year Investment Period | 45                           | 2                                     |
| 30-Year Investment Period | 37                           | 0                                     |
| 40-Year Investment Period | 27                           | 0                                     |

amounts accumulated from investment in large company stocks were greater than the amounts accumulated in small company stocks in only three periods, those with investment beginning in 1968, 1969, and 1970. In no cases among the 30-year periods did the long-term government bond portfolio accumulate more than either the small stock or large stock portfolios. Among the 40-year periods (Table 6), no exceptions to the normal expectations occurred. Apparently, the 40-year investment period was sufficiently long enough in order for the higher long-term rates to dominate the variability in the rates.

Recall that the purpose of this article is to determine whether it is too risky to allow individuals to invest a portion of their Social Security taxes in private accounts. Regardless of the variability of the accumu-

lated amounts, if one plan is better in *all* cases, then that plan has less risk than the alternative plan. In all cases for the 30-year and 40-year investment periods evaluated in this study, investing in diversified portfolios of equity securities provided larger balances than investing in a portfolio of long-term government securities. The fact that the variability in the amounts accumulated in the stock portfolios was greater demonstrates that the net advantage of investing in equity securities rather than long-term government securities was very large in some cases. The bottom line conclusion suggested by these findings is that, although there are undoubtedly valid objections to allowing investments in equity securities through private accounts, too much risk does not appear to be one of them.

#### **Nature of the Amounts Accumulated**

The primary purpose of this article is to evaluate the relative riskiness of investing Social Security taxes in equities securities. The results, however, also provide some insight (not proof) into the larger issue of using private accounts at all. The major question is, of course, whether the amounts accumulated in private accounts would be sufficient to generate retirement income comparable to that expected from Social Security. In other words, would the accumulations in private accounts (and the resulting retirement earnings) be sufficient to justify the individuals agreeing to give up government-guaranteed payments? Remember that the data generated for this study consider only the individual's portion of the Social Security

taxes. Employers' matching contributions have not been considered.

One way to evaluate this question is to estimate the amount of the monthly payment that the accumulated investment balances would generate. The monthly payment would depend on both the number of months of income the balance would need to support and the assumed rate at which the funds are invested. The Social Security Online Statistical Tables indicate that the life expectancy of a 66-year old male is 15.36 years (185 months), and that of a 66-year old female is 18.3 years (220 months). In order to be conservative, the estimates presented below are based upon a 5 percent annual rate of return.

For each \$100,000 accumulated and invested at an annual rate of only 5 percent, a monthly payment of \$773.23 for males and \$692.27 for females can be generated for the expected life of the individual. Based upon the most current data in Table 6, males could expect a monthly payment of approximately \$8,590, \$4,276 and \$2,664 if investments had been made in small company stocks, large company stocks, and government bonds, respectively. Currently, the maximum payment from Social Security is approximately \$2,000 per month.

Based upon the amounts accumulated for the 40-year

investment period (Table 6), it seems apparent that investing in equity securities would have been a superior alternative (for the most recent periods) to the guaranteed Social Security payments. This is so even though Social Security payments increase over time, and the annuity amounts would not; however, the monthly annuity amounts would likely be even larger because 5 percent is a conservative assumed investment rate.

For earlier periods the advantage would not have been as obviously superior because the annual amounts of Social Security taxes, and thus funds available for investment, in early years were so small. This is not likely to be an issue for future participants.

## Conclusions

This article attempts to address the issue of the risk associated with allowing individuals to invest in equity securities in private accounts as an alternative to participating fully in Social Security. Actual tax payments made by those paying the maximum tax each year were used to determine the amounts those taxes would have provided had taxpayers been permitted to invest in three different portfolios rather than pay into Social Security. Monthly incomes from those accumulations were then computed based upon life expectancy and a 5 percent

annual rate of interest. Results were generated using historical data and assuming individuals had been permitted to invest their Social Security taxes in portfolios of varying risk securities.

Although this article reports results for 20-year, 30-year, and 40-year periods of investment, the 40-year investment period most closely approximates the time period over which individuals will pay into the Social Security system in the future. In fact, as individuals live longer, the beginning age for receiving benefits may well be delayed beyond the current age of 67 for those born after 1959. Thus, the length of the investment is much more likely to increase than decrease.

The past does not always indicate the future; however, investors' risk aversion, combined with the majority perception that equity instruments are riskier than fixed income investments, suggest that equity securities should continue to generate higher average long-term returns than fixed income securities in the future. The size of this risk premium and the length of time necessary for higher rates to offset higher variability are less certain.

In spite of all of the uncertainties, findings reported in this article demonstrate that investments in "higher risk portfolios" would have accumulated

substantially more funds than investments in less risky portfolios, offsetting the “additional risk” in almost all cases considered. Moreover, lengthening the investment period (especially to the 40-year period that most taxpayers can expect to be paying into the system), increases the likelihood that investing in “riskier” equity securities would provide a far superior outcome. In conclusion, while the reasons to oppose private accounts as an alternative to the current social security system may be valid, the relative risk of investing in equity securities does not appear to be one of them.

## References

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