Take the Money: Should You Draw Social Security Retirement Benefits Early?

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Decisions about <u>when</u> to take Social Security retirement benefits are <u>complex</u>.

They depend on:

- age.
- marital status.
- income level.
- life expectancy.
- access to other assets.
- and many other factors.

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In this study, we **assume**:

- beneficiary **will not improve** the highest 35 years of indexed earnings for his or her benefit computation by working additional years after age 62.
- **no tax effects** associated with filing for early retirement benefits, or deferring benefits.
- the beneficiary **has the means** to do without the cash flow from his or her benefits in the years between age 62 and age 70.

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Furthermore in this study, we:

- assume **no tax effects** associated with filing for early retirement benefits, or deferring benefits.
- assume benefits are collected on an **end-of-year basis**.

- exclude **the complications** of claiming strategies based on survivor benefits.

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Methodology

Assigned values of SSRI benefits: (early) at **age 62 - 75%**, at normal retirement **age 66 – 100%**, deferred to **age 70 – 132%**.

- Assume SSRI benefits increase annually at **the CPI rate**.
- Assume benefits starting before age 70 can **be invested** in a portfolio consisting of a mix of large cap stocks and corporate bonds and
- this investment can be used to **fund annuity withdrawals based on life expectancy**, commencing at age 66 (or 70).

Five SSRI Benefit Claiming Strategies

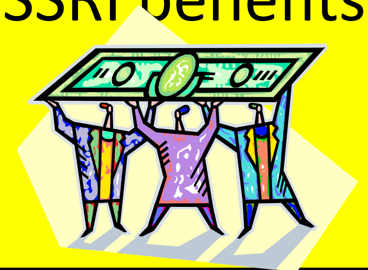
a) Reduced benefits (75 percent) at age 62 - invest benefits in said portfolio, at age 66, withdraw annuity amount based on life expectancy to supplement reduced SSRI benefits.

b) Reduced benefits (75 percent) at age 62 - invest benefits in said portfolio, at age 70, withdraw annuity amount based on life expectancy to supplement reduced SSRI benefits.

c) Full benefits (100 percent) at age 66 - invest benefits in said portfolio, at age 70, withdraw annuity amount based on life expectancy to supplement reduced SSRI benefits.

d) Full benefits (100 percent) at age 66.

e) Increased benefits (132 percent)at age 70.



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Simulation Specifics

- Crystal Ball simulation software used for Monte Carlo simulation analyses.
- Simulated returns on long-term corporate bonds, large cap stocks, the inflation rate (CPI) and long-term US Treasury bonds using Ibbotson data from 1926 through 2011.
- The simulated return vectors were computed using historical data to estimate variable distributions and correlations between variables.

Investment Opportunity Details

The investment opportunities for "early" benefits were estimated by a rate made up of various proportions of the simulated corporate bond and equity rates.

The investment rate starts at 100 percent equity return and changes by 20 percent increments to 100 percent bond returns.

These series of future values are discounted to the present using simulated long-term US Treasury bond rates.

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Life Expectancy Statistics

- A male at age 62 has an average remaining life expectancy of 19.74 years (can expect to reach age 82).*
- A female at age 62 has an average remaining life expectancy of 22.63 years (can expect to reach age 85).*
- At age 70, a male can expect to live to age 84 and a female can expect to live to age 86.*
- Therefore, in conducting our analyses, we estimate lifetime cash flows through ages 86, 91 and 96.

*http://www.ssa.gov/oact/STATS/table4c6.html

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Results – No Earnings Penalty

Probabilities based on 5000 simulations, that the PV of lifetime benefits under an early-claiming strategy with invested proceeds will exceed that of a similar deferred-claiming strategy for various longevity assumptions and portfolio compositions.			
Survive until 86	**P (pv of strategy a > pv of strategy d)**	**P (pv of strategy b > pv of strategy e)**	**P (pv of strategy c > pv of strategy e)**
100/0 percent Equity/Bond	90.77	94.50	96.11
80/20 percent Equity/Bond	92.26	95.69	96.95
60/40 percent Equity/Bond	91.62	96.19	96.76
40/60 percent Equity/Bond	90.67	96.05	96.93
20/80 percent Equity/Bond	84.93	94.43	95.76
0/100 percent Equity/Bond	73.88	85.93	90.02

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Results – No Earnings Penalty (cont.)

Survive until 91	P (pv of strategy a > pv of strategy d)	P (pv of strategy b > pv of strategy e)	P (pv of strategy c > pv of strategy e)
100/0 percent Equity/Bond	80.55	86.32	88.09
80/20 percent Equity/Bond	81.38	87.26	89.11
60/40 percent Equity/Bond	80.34	87.13	89.54
40/60 percent Equity/Bond	76.06	83.95	87.22
20/80 percent Equity/Bond	65.69	74.54	81.24
0/100 percent Equity/Bond	50.51	54.24	66.97
Survive until 96			
100/0 percent Equity/Bond	79.86	85.34	87.35
80/20 percent Equity/Bond	79.46	83.71	86.33
60/40 percent Equity/Bond	76.00	81.83	84.92
40/60 percent Equity/Bond	68.83	74.32	79.69
20/80 percent Equity/Bond	52.57	56.05	66.93
0/100 percent Equity/Bond	34.47	31.88	47.39

Results – With Early Earnings Penalties

25 Percent Penalty 50 Percent Penalty	P (pv of strategy a > pv of strategy d)	P (pv of strategy b > pv of strategy e)	P (pv of strategy c > pv of strategy e)	P (pv of strategy a > pv of strategy d)	P (pv of strategy b > pv of strategy e)	P (pv of strategy c > pv of strategy e)
Survive until 86						
100/0 percent Equity/Bond	74.63	89.57	96.24	82.44	92.00	96.10
80/20 percent Equity/Bond	73.28	90.46	96.69	83.40	92.71	96.75
60/40 percent Equity/Bond	71.80	90.96	96.92	83.14	93.77	97.18
40/60 percent Equity/Bond	60.89	89.96	96.27	79.42	92.28	96.60
20/80 percent Equity/Bond	41.43	82.54	95.77	64.79	88.73	95.61
0/100 percent Equity/Bond	16.88	62.99	90.31	35.48	74.24	90.22
Survive until 91						
100/0 percent Equity/Bond	54.88	76.44	88.58	64.61	80.90	88.82
80/20 percent Equity/Bond	50.57	75.35	89.94	63.37	84.42	89.97
60/40 percent Equity/Bond	43.86	73.37	89.70	59.14	79.52	89.33
40/60 percent Equity/Bond	28.08	64.66	87.66	46.39	73.78	88.01
20/80 percent Equity/Bond	9.83	45.20	80.88	23.36	57.59	80.82
0/100 percent Equity/Bond	1.46	19.91	66.67	6.24	33.26	66.23
Survive until 96						
100/0 percent Equity/Bond	53.51	72.63	86.62	91.51	76.22	85.99
80/20 percent Equity/Bond	47.74	71.04	86.57	60.04	76.55	86.94
60/40 percent Equity/Bond	38.32	65.78	84.28	52.32	71.67	84.77
40/60 percent Equity/Bond	20.40	50.54	80.02	34.81	59.54	79.68
20/80 percent Equity/Bond	4.21	25.76	67.69	11.22	37.81	67.38
0/100 percent Equity/Bond	0.49	6.75	47.51	1.65	14.38	47.57

Conclusions

- Our analyses apply to single claimants or married claimants with similar incomes and ages.

- Therefore, it ignores the strategy implications related to survivor's benefits.

- Our simulation analyses indicate claiming strategies which invest early benefits in portfolios containing both equity and debt to support additional future income have high likelihoods of producing larger lifetime present values of cash flows than comparable social security deferral options.

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