## Comparing Retirement Spending Rules

Sustainable Spending Rates from an Investment Portfolio over 30 years For a 65-Year Old (Which is Relevant for the RMD Rule)
For 4\% Initial Spending Rate, 50/50 Asset Allocation, Rolling 30-Year Retirements Using SBBI Data, 1926-2015, S\&P 500 and Intermediate Term Government Bonds Retirement Date Wealth Level $=\$ 100,000$

| Spending Strategy | Initial Spending Rate | $\begin{aligned} & \text { Percentile } \\ & \text { of } \\ & \text { Distribution } \end{aligned}$ | Real Spending in 10 Years | Real Spending in 20 Years | Real Spending in 30 Years | Real Remaining Wealth After 30 Years | Change in Real Spending at Year 30 | Year 30 Spending Relative to Baseline | Downside Spending Volatility |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Constant <br> Inflation- <br> Adjusted <br> Spending <br> [BASELINE] | 4.00\% | 90th | \$4,000 | \$4,000 | \$4,000 | \$327,400 | 0\% | 0\% | 0\% |
|  |  | 50th | \$4,000 | \$4,000 | \$4,000 | \$124,740 | 0\% | 0\% | 0\% |
|  |  | 10th | \$4,000 | \$4,000 | \$4,000 | \$27,730 | 0\% | 0\% | 0\% |
| Fixed <br> Percentage <br> Withdrawals | 4.00\% | 90th | \$6,030 | \$7,780 | \$7,770 | \$202,690 | 94\% | 94\% | -3\% |
|  |  | 50th | \$4,070 | \$4,430 | \$4,750 | \$120,080 | 19\% | 19\% | -4\% |
|  |  | 10th | \$2,570 | \$2,410 | \$3,250 | \$87,400 | -19\% | -19\% | -5\% |
| Endowment Formula Weighted Average | 4.00\% | 90th | \$5,110 | \$6,510 | \$6,870 | \$257,840 | 72\% | 72\% | -2\% |
|  |  | 50th | \$4,030 | \$4,160 | \$4,280 | \$122,410 | 7\% | 7\% | -2\% |
|  |  | 10th | \$3,230 | \$3,160 | \$3,380 | \$73,150 | -16\% | -16\% | -3\% |
| Endowment Formula - 3 Year Moving Average | 4.00\% | 90th | \$5,110 | \$6,570 | \$7,110 | \$186,610 | 78\% | 78\% | -2\% |
|  |  | 50th | \$3,830 | \$4,070 | \$4,440 | \$118,790 | 11\% | 11\% | -2\% |
|  |  | 10th | \$2,580 | \$2,220 | \$2,890 | \$84,760 | -28\% | -28\% | -3\% |
| Bengen's Dollar Floor-and-Ceiling Withdrawals | 4.00\% | 90th | \$4,800 | \$4,800 | \$4,800 | \$292,880 | 20\% | 20\% | 0\% |
|  |  | 50th | \$4,070 | \$4,390 | \$4,720 | \$122,070 | 18\% | 18\% | -1\% |
|  |  | 10th | \$3,400 | \$3,400 | \$3,400 | \$68,660 | -15\% | -15\% | -3\% |
| Vanguard's <br> Percentage <br> Floor and <br> Ceiling <br> Withdrawals | 4.00\% | 90th | \$5,130 | \$5,790 | \$6,070 | \$319,340 | 52\% | 52\% | 0\% |
|  |  | 50th | \$3,730 | \$3,530 | \$4,200 | \$130,530 | 5\% | 5\% | -2\% |
|  |  | 10th | \$2,560 | \$2,070 | \$2,240 | \$94,840 | -44\% | -44\% | -3\% |
| Kitces <br> Ratcheting Rule | 4.00\% | 90th | \$4,840 | \$6,440 | \$9,430 | \$236,960 | 136\% | 136\% | 0\% |
|  |  | 50th | \$4,000 | \$5,320 | \$7,090 | \$79,500 | 77\% | 77\% | 0\% |
|  |  | 10th | \$4,000 | \$4,000 | \$4,000 | \$25,630 | 0\% | 0\% | 0\% |
| Guyton and Klinger's Decision Rules | 4.00\% | 90th | \$5,320 | \$8,030 | \$8,790 | \$224,070 | 120\% | 120\% | 0\% |
|  |  | 50th | \$4,000 | \$4,250 | \$4,660 | \$124,080 | 17\% | 17\% | -1\% |
|  |  | 10th | \$2,770 | \$2,580 | \$3,070 | \$86,360 | -23\% | -23\% | -2\% |
| Zolt's <br> Glidepath <br> Spending <br> Rule | 4.00\% | 90th | \$4,000 | \$4,000 | \$4,000 | \$365,570 | 0\% | 0\% | 0\% |
|  |  | 50th | \$3,720 | \$3,530 | \$3,530 | \$150,310 | -12\% | -12\% | -1\% |
|  |  | 10th | \$2,740 | \$2,360 | \$2,360 | \$87,580 | -41\% | -41\% | -1\% |
| Modified <br> RMD Rule [Spending <br> Rate $=1.24$ <br> x RMD \% ] | 4.00\% | 90th | \$7,510 | \$11,690 | \$10,180 | \$70,160 | 155\% | 155\% | -4\% |
|  |  | 50th | \$5,080 | \$6,650 | \$6,220 | \$41,570 | 56\% | 56\% | -5\% |
|  |  | 10th | \$3,200 | \$3,620 | \$4,250 | \$30,250 | 6\% | 6\% | -7\% |

## QUESTIONS?

Feel free to contact us at McLean:

