# Tell-Tale Signs of A Shortened Retirement Plan 

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Several years ago, I saw a wonderful movie called " 28 Up". It was a biographical documentary directed by Michael Apted. He interviewed 14 British children diverse in gender, race and economic background at ages 7, 14, 21 and 28. He observed the changes in their lives as they reach these ages. To make a long story short, it convinced me that whatever dreams, personalities and ethics children develop by age 7, they pretty well carry these for the rest of their lives.

What does this have to do with retirement portfolios? This column is not about film reviews! That is correct. However, this story has one thing in common with retirement portfolios: How your portfolio performs in its first four years (we will use a four-year cycle to match the US Presidential cycle of equity markets), sets the tone for the rest of your retirement years. After the four years, you can pretty well tell whether your portfolio can last you a lifetime or not.

Here is how it goes: Assume you have saved $\$ 500,000$ for your retirement in investments. Now you are retiring. You need $\$ 30,000$ from this portfolio during the first year of your retirement, indexed annually for inflation. The initial withdrawal rate is $6 \%$, calculated as $\$ 30,000$ divided by $\$ 500,000$. For this example, I assumed that you have an asset mix of $60 \%$ equities and $40 \%$ fixed income and you rebalance this portfolio annually. I calculated the portfolio value over time if you were to retire in each of the years between 1900 and 1996. Then, I observed the portfolio values four years after the year of retirement. I divided these portfolios into two groups: Group W (W - "Winners") included only the portfolios that had a higher market value after four years. Group L (L "Losers") included only the portfolios with a lower market value after the same time period. Figure 1 shows all the portfolio values in Group W between 1900 and 1996.
Figure 2 shows the same for Group L. You can see clearly in Figure 2 that most portfolios run out of money between the $13^{\text {th }}$ year and $20^{\text {th }}$ year of retirement in Group L.

Figure 1: Portfolio Value over time, Group W, 1900-1996


Figure 2: Portfolio Value over time, Group L, 1900-1996


The average portfolio life was 24.9 years for Group W, and 17.8 years for Group L. After 20 years, only $15 \%$ of the portfolios in Group W ran out of money whereas in Group L, $70 \%$ of portfolios did so. These numbers are based on our example of $6 \%$ initial withdrawal rate. The statistics for different initial withdrawal rates are as following:
Average Portfolio Life:

| $\begin{array}{c}\text { Initial } \\ \begin{array}{c}\text { Withdrawal } \\ \text { Rate }\end{array}\end{array}$ | $\begin{array}{c}\text { Average Portfolio } \\ \text { Life, years } \\ \text { Group W }\end{array}$ |  | Group L |
| :---: | :---: | :---: | :---: |$)$

Probability of Depletion:

| Initial <br> Withdrawal <br> Rate | After 20 years |  | After 25 years |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Group W | Group L | Group W | Group L |
| $4 \%$ | $0 \%$ | $0 \%$ | $13 \%$ | $27 \%$ |
| $5 \%$ | $5 \%$ | $45 \%$ | $26 \%$ | $87 \%$ |
| $6 \%$ | $15 \%$ | $70 \%$ | $44 \%$ | $91 \%$ |
| $8 \%$ | $48 \%$ | $90 \%$ | $91 \%$ | $98 \%$ |

Why does the performance of a portfolio during its first four years set the tone for the rest of its life? There are two types of reasons: external and internal. External reasons are: the markets may be in a secular bear mode, markets may be in a multi-year sideways range, or it may be a high inflation environment. For a retiree, a sideways market is considered a bear market because of the effects of reverse-dollar-cost-averaging.

Internal reasons are: your asset mix may not be set to optimum for the income taken out, you may be rebalancing too frequently, your investments may be chronically underperforming, you may be taking your income from volatile investments amplifying
the effects of reverse-dollar cost averaging, your portfolio management expenses may be too high.

Regardless of the reason, the bottom line is, if your portfolio value has a lower market value four years after the start of your retirement, the chances are its average life will be between $30 \%$ and $40 \%$ less than a portfolio that has a higher market value. This should ring alarm bells, because if you continue with your existing strategy, you will likely run out of money prematurely. Keep in mind, history shows that megabull markets usually don't come back so fast as we have just left one behind in 1999, the longest one of the last century. Annuities should be considered as more reliable income sources.

In conclusion, if you retired four years ago and your portfolio value is less than what you started with, and your advisor is telling you to hang on for the "long term", your definition of "long term" may be a lot shorter than his. Be cautious.

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