

ADDING VALUE

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SUMMARY:

Retirement is scary enough without the added complexity of forecasting how long we will live and how much money we will have to do so. As Ralph Waldo Emerson said: "Money is of no value; it cannot spend itself. All depends on the skill of the spender." We do know, however, that life expectancy has increased (*Discover* recently stated that the human body can last at least 150 years), health care expenses have increased dramatically, and the US capital markets may be broadly unattractive for the next 7-10 years. That seems to leave only two solutions: reduce spending and/or work longer. For those of us still working, there are three magic words: *save, save, save.*

Adding Value is mailed quarterly to our clients and friends. The intent of this publication is to share some of our more interesting views and research with our clients.

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RETIREMENT: DO YOU KNOW WHERE YOUR MONEY IS?

The focus of this issue of our quarterly newsletter is on retirement. As the well-known commercial addressed to parents of teenagers asks: "It's 11:00 pm, do you know where your children are?" We would ask a parallel question: "You are 60 years old, do you have enough money to retire?" We address the issue of retirement from two perspectives. At the macroeconomic level, we review the demographic crisis facing future retirees and its potential impact on asset prices. At a personal level, we shed some light on the touchy question of what is a sustainable portfolio withdrawal rate for retirement.

What demographic crisis?

The post World War II generation is so famous it even has its own moniker—the baby boomers. From the time of its inception, although it was not immediately recognizable, it has created generational economic havoc. From teenagers to adults, this generation has defied all the historical averages. As the oldest of the baby boom generation begins to retire, we expect another seismic shift.

These issues are discussed in a book by Thornton Parker titled, What If Boomers Can't Retire, and more recently in a paper by Robert Arnott and Anne Casscells. Boomers have had a significant influence on our society including the social and political changes in the 60's and 70's and the inflationary spiral in the 70's and 80's, as a large young and relatively under-productive group entered the workforce. Even the bull market of the 90's was influenced by the boomers buying stocks for their 401(k) plans as they reached their peak earning years. Currently, this generation, of which we are a part, keeps building larger houses than our parents in spite of the fact that we're having fewer children. The rationale is that you can't go wrong with real estate. Real estate has always gone up in value, so the bigger, the better. But the looming question is: "Will there be enough demand when we go to sell this real estate because we want to downsize or reduce our mortgage payments or property tax bill when we retire?" In the same sense, what happens to the financial markets when we sell stocks and bonds in our IRA's, 401-K's, etc. to finance our retirement?

As Arnott and Casscells state, the coming crisis is one of demographics. We are living longer, and there are fewer people to support us. The proportion of those over 65 will soar from 12% today to 20% in 2030. The Baby Boom that occurred from 1946 to 1964 was followed by a Baby Bust that occurred from 1965 to 1990. This situation will cause a deterioration of the dependency ratio, which is a ratio of those who produce no goods and services (retirees and children) to those who provide the goods and services (the employed). This ratio is projected to rise toward the end of this decade and soar by 2015.

So what happens to the financial markets when this herd of retirees begins to sell their stocks and bonds so they can sit around and listen to their Elvis Presley and Beatles records? In the opinion of Arnott and Casscells, this will put a lid on asset returns in the coming 25 years. It's a simple matter of more sellers than buyers, causing downward pressure on security prices. Another implication is that the typical goods and services demanded by retirees, such as health care and leisure goods and services, will experience significant inflation. So now is the time to join that country club or buy that retirement home in Sun City.

What is the solution? History suggests that Americans adjust well to change. Since this a demographic problem, we need a demographic solution. Financial solutions such as placing stocks in individual Social Security accounts will not work. *We have to look for ways to adjust the demographics.* We can export retirees to foreign soil. In Quito, Ecuador a full restaurant meal costs about \$1.00 and maybe \$2.00 if you have beer or wine. But keep in mind that many European and Asian countries (especially Japan) also have the same demographic problem. We could also import more workers but if the immigrants brought their non-working parents and non-working children, it could worsen the situation.

The most likely solution is to raise the retirement age. By raising the retirement age to 72 or 73 by 2030, the current dependency ratios

would remain stable. However, this solution means a much longer working horizon.

Compounding the situation is the poor investment results of the more than 42 million workers who participate in defined contribution plans, primarily 401(k) and 403(b). In these plans workers are responsible for making contributions and choosing among investment options. A survey of 503 employers sponsoring both a 401(k) plan and a defined benefit plan found that the defined benefit plan (where company manages the investments) beat the 401(k) plan by 1.9 percentage points over a recent 5-year period. Another study of 401(k) plans of financial services firms, who also offer investment advice to the public, found that choices of **their own employees** underperformed the market index by 3.5 to 10.5 percentage points. Companies fearful of lawsuits are cautious in offering assistance. We often hear and read about retirees and people approaching retirement reassessing their situation and concluding they may have to work a few more years in light of recent stock market losses. The good news is that some of us, as a result of aggressive saving, still can retire at normal age or earlier and look forward to a healthier and more vigorous retirement compared to previous generations.

What is a safe withdrawal rate from your portfolio?

MetLife gave a quiz to over 1,200 pre-retirees aged 56 to 65 who are within 5 years of retiring. The average score was just 5 correct out of 15 questions. Most did not correctly identify mortality risk, the risk that you could out-live your retirement assets as the greatest financial risk facing retirees. They also underestimated how long they are likely to live and overestimated the total savings they can safely withdraw. A safe withdrawal rate is defined as one where you have a 100% chance of not exhausting all your retirement assets during retirement.

Some of the critical variables which can be estimated but have a significant degree of uncertainty include (1) life expectancy, (2) inflation,

and (3) investment return. As mentioned previously, we are living longer. Based on the latest government data, here's our current life expectancy.

TABLE 1

Current Life Expectancy

<u>Current Age</u>	<u>Men</u>	<u>Women</u>
55	79	82
60	80	83
65	81	84
70	83	86
75	85	87
80	87	89

In the above example, life expectancy is defined as the expected age at which 50% of those at a given age currently will be alive.

TABLE 2

Probability to Live At Least Another 30 Years

<u>Age Now</u>	<u>Men</u>	<u>Women</u>
55	34%	45%
60	15%	26%
65	7%	28%

Table 2 looks at the probability that we will live another 30 years based on our current age. This table shows there is a good chance (at least 1 in 4) that one person will survive another 30 years for a couple currently both age 65. Therefore, an investment time horizon of 30 years or greater in retirement is not unusual. With such a long time horizon, inflation can be critical, especially when one considers the impact on prices of health care and other retirement-type goods. Finally, stock and bond returns are expected to be much lower during this future time

period compared to the 80's and 90's. The yield on a 10-year Treasury Note was 13.7% in 1982. By comparison, this same Note yields 4.2% today. The annual return for the S&P 500 was 15.2% from 1982 to 2001. Today's forecasts for stock returns are single digit. Longer life expectancy and lower expected returns imply lower spending rates going forward. If one retired in 1982 with a 60% stock and 40% bond portfolio, we **now** know that one could have withdrawn as much as 10% a year without eroding the original value, according to a Sanford Bernstein study. **The financial market conditions at the time of retirement have a significant impact on withdrawal rates.**

TABLE 3

Historic Safe Withdrawal Rates

<u>Study</u>	<u>Portfolio Mix Stock/Bond</u>	<u>Safe Withdrawal Rate</u>
Harvard	50/50	4.4%
Benger	50/50	4.1%
Trinity	75/25	3-4%
Jarrett	75/25	4.0%

Several studies determined safe withdrawal rates using historical data. Table 3 summarizes those studies. Most studies use a 30-year or better time horizon and all studies adjusted the withdrawal amount for actual inflation.

Perhaps the most intensive study (which isn't shown above) was done by John Greaney. He calculated safe payout ratios using data going back to 1871 for various time horizons. For a 30-year horizon, the safe withdrawal rate was 3.85% with a 66% stock/34% bond allocation. Historical analyses suggest safe payout rates of 3-4%. If you increase the withdrawal rate, you increase the odds that you could run out of money. For example, a 4.8% withdrawal rate is 90% safe, which means that in 10% of the 30-year time horizons since 1871, the portfolio ran out of money. More information on this study is available at www.retireearlyhomepage.com.

Let's look at current market expectations for a portfolio comprised of 75% stock and 25% fixed income.

Current Market Expectations

Expected Portfolio Return	7.0%
Inflation	2.0%
Portfolio Volatility	10.0%
Time Horizon	30 Yrs

Chance of Success

3% Initial Withdrawal	100%
4% Initial withdrawal	96%
5% Initial Withdrawal	81%
6% Initial Withdrawal	57%

Current expectations confirm the 3-4% safe withdrawal rate derived from historical analysis.

You can also use the 3-4% safe withdrawal rate to estimate the amount you need to cover retirement. A simple approach is to take 70% of your current pretax income and divide that by 3.5%. That's the amount of assets you need to sustain retirement for at least 30 years.

The 3-4% safe withdrawal should be a surprise to many people. It is important to remember that this is an initial withdrawal amount that *increases with inflation*. So when you are 5-10 years into retirement, your current withdrawal rate is likely to be much higher than the initial safe rate. You also have a shorter time horizon than the 30 years assumed in the studies. And at the safe withdrawal rate, the chances of leaving a significant bequest are quite good.

If this is an impossible hurdle for retirees, one way to eliminate the chance of running out of income in retirement is the purchase of an immediate income annuity, which can guarantee income for life. But annuities have their own risks. When you buy an immediate income annuity, you are making a massive bet on interest rates because the level of interest rates on the day of purchase determines the income you will receive from the annuity for the rest of your

life. Inflation risk can be a problem since most annuities contain no provisions to maintain inflation-adjusted spending power. In addition, with annuities, you are gambling on your own longevity. If you live a long time, you will collect a lot of monthly checks. However, if you die soon after purchasing the annuity, you will have received little income and your heirs will most likely get nothing. Finally, annuities, unless carefully investigated, have massive fee structures.

In summary, challenges will abound for the retirees of the baby boom generation. Mistakes made in the early retirement years with respect to asset allocation and income withdrawals may have significant ramifications on the quality of retirement in the latter years. Those of us with big plans for an early retirement may find that possibility to be elusive. Those of us planning for independence may find ourselves living with our children. Adaptability may have a new meaning for the retirees of the baby boom generation! Talk to a financial advisor now!

Sincerely,

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