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Five Reasons Your Retirement Withdrawals are Too High

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One of the most vital goals of financial planning is to ensure that retirees are taking withdrawals from their portfolio in a sustainable manner so that they will not run out of money later in retirement. The question of what constitutes a “Safe Withdrawal Rate” remains one of the most vexing issues facing investors today. Scholars and financial practitioners have produced a substantial volume of research on this issue, starting with William Bengen's development of the so-called “4% Rule” in the 1990's.ⁱ While this body of work is informative, it cannot be definitive, since it is not possible to correctly predict future inflation rates, stock market volatility and returns, or other factors over the next 30-40 years. Only in hindsight will we know if any of these withdrawal approaches will prove to be successful. Instead, we are limited to estimating the probability of success in a withdrawal program.

Unfortunately, there are potential problems with the way many of the current retirement models and financial planning software programs rely on historical data to determine if a withdrawal strategy is viable. There is no guarantee that these historical assumptions will hold true over the next several decades. Looking at today's unique economic picture, I believe there are a number of reasons why the future will not be the same as the past and certainly not identical to the most recent 20 or 30 years we've just experienced. I've identified five potential risks to today's retirement withdrawal strategies. If your goal is to make sure you do not outlive your money, read on!

1) Expected Equity Returns

Expected Return is a key driver in determining the outcome of a retirement plan. A change of just a couple of percent in your rate of return can make the difference between going broke or growing by several million when compounded over the thirty year time horizon of a newly retired couple. The likelihood of a financial plan being accurate may depend largely on whether your actual returns are similar to the expected returns that are projected. There's nothing necessarily wrong with the financial planning tools we have available today, but I am reminded of the familiar warning, “garbage in, garbage out”. If the inputs are inaccurate, we know the results of the computations will be way off. Most portfolios are invested primarily in stocks and bonds, so let's consider whether the expected returns of stocks and bonds appear to be feasible inputs for our planning process today.

First, looking at stocks, the S&P 500 Index produced annualized returns of 10.40% from 1970 through 2013.ⁱⁱ However, there are several compelling reasons why equity returns could be lower in the future than they were in the past. Two components of equity returns are added together to comprise your total return: dividends received and the growth of stock price. Today, the dividend yield on the S&P 500

Index is 1.86%, less than half of the 4.4% average yield the index provided historically. Dividends today are a much smaller driver of total return.ⁱⁱⁱ A smaller contribution from dividends suggests that the future return from equities may be lower than the historical average.

As the US economy matures and our population and consumption growth begins to slow, it is also possible that rate of corporate earnings growth might slow. In recent years, this domestic stagnation has been offset by growth of overseas profits, so US companies have maintained a healthy growth rate. But if we do have slower earnings growth in the future, this will likely equate to slower growth of stock prices.

Corporate earnings are more stable than the stock market would suggest because the amount the market is willing to pay for a dollar of earnings can vary significantly. Historically, the market has paid about 16 times earnings (the P/E or Price/Earnings ratio), but sometimes the market has been at a P/E as low as 10 or as high as 20 or more. As a general rule, investors are willing to pay more for high growth stocks (think internet stocks in the 90's) than low growth stocks. The reason that this is important is that if we do, in fact, have a slow growth economy, we would also expect a lower PE ratio for the market. A change of PE is referred to as "Multiple Expansion" or "Multiple Contraction". The concern for a low growth environment is not just lower fundamental returns on equities, but also the potential for Multiple Contraction on the overall earnings of the market.

I am not suggesting we have a bubble today or an impending market collapse, but we don't need to have a catastrophic event to cause our retirement projections to be overly optimistic. The difference between a 10.4% expected return and an 8.4% actual return is enough to potentially shift a retirement plan from being in the black to being in the red. I don't know if this will prove to be true, but Bill Gross, Rob Arnott^{iv}, Michael Kitces^v, and others make a more detailed argument for a long-term slowing of equity growth, if you are interested in further reading on this subject.

2) Low Bond Yields

The situation for bonds, I think, is much clearer than equities, and unfortunately, decidedly negative for investors. In planning software, your portfolio's total expected return will be the weighting of your equity and fixed income exposure. Let's look at the Expected Returns for bonds used by one of the most popular financial planning programs.

Expected Returns

Cash	5.30%
Short-Term Bonds	6.82%
Intermediate Bonds	7.91%
Long-Term Bonds	9.12%

If you're wondering where they came up with these expected returns, they are the historical returns of these segments from 1970 to 2012. This 42-year stretch might be one of the best periods for bonds in history, a performance that may not be repeated in our lifetimes. Anyone who has purchased a bond or CD recently knows that these "Expected Returns" are completely unobtainable in today's interest rate environment.

The current rate on the 10-year Treasury Bond is 2.62% and the 30-year Treasury sits at 3.47%^{vi}. Those rates are a more probable return for intermediate and long-term bonds than the historical returns from 1970-2012. I would not use historical returns for a financial plan, but since they are the default

setting on some software programs, I fear these expected returns are giving some users a false sense of comfort in their bond allocation. A Balanced Portfolio – one with half stocks and half bonds – looks pretty good if you think the bonds will provide the historical returns above. Unfortunately, if the actual return on half of your portfolio ends up being 3-4% and not the 7-9% you have projected, you are at a much greater risk of running out of money. Professor Michael Finke of Texas Tech calculates that if today's low interest rates persist, a 4% withdrawal rate would fail in more than 50% of the Monte Carlo simulations.^{vii}

While it remains to be seen what will happen with equities, I do believe that the historical returns on bonds will prove to be much too high for the foreseeable future. And this is where my mental “garbage in, garbage out” alarm starts waving the red flags with both hands!

3) Increased Correlation

Modern Portfolio Theory aims to create the most efficient portfolio by selecting the specific combination of assets that will provide the least amount of risk (volatility) for any given return. A diversified asset allocation is beneficial because some of the assets are expected to have a low correlation – that is to say that when one asset is down, other assets will be flat or up, providing a smoother trajectory for the overall portfolio.

The total volatility is more important when a portfolio is in distribution than under accumulation. If you are saving every month, such as contributing to a 401(k), volatility is not necessarily a threat to your success. Any drop in the portfolio represents a buying opportunity, so all that really matters is your long-term rate of return.

However, for retirees who are taking withdrawals, volatility is not your friend and high portfolio volatility increases the chance your withdrawals could deplete your portfolio. For example, consider a retiree who plans to take a conservative 4% from a \$1 million dollar portfolio. What if the portfolio also suffers a 33% drop that year?

Start	\$1,000,000
Market loss	- \$330,000
Withdrawal	- \$40,000
End of Year 1 =	\$630,000

Now for year 2, to continue with a \$40,000 withdrawal, you are now taking out 6.4%, and you will reduce your principal to \$590,000, which is a long ways from your original \$1,000,000 portfolio. Unfortunately, this ugly situation was a very real problem for someone who retired in 2001 or 2008.

Portfolio volatility matters tremendously in the first decade of retirement for the likelihood of the assets being able to fund 30 years of withdrawals. The danger of poor initial returns wiping out a retirement portfolio is called sequence of returns risk.^{viii} Our desire to dampen portfolio volatility brings us back to the assumptions under Modern Portfolio Theory, which calculates the efficient portfolio by using *historical data* for the correlation coefficients between different asset classes. For example, the data tells us that international stocks have a modest correlation (0.65) to US Large-Cap Growth Stocks. While this was true over the past 42 years, there is evidence that globalization is increasing the links between economies, markets, and corporate profits. Today, the US, Europe, China, Brazil and major economies are significantly intertwined. From 2008 through 2012, virtually all markets and sectors moved down and up together. From a portfolio perspective, this meant that there was no where to hide,

and no uncorrelated assets to help offset the losses in core classes, such as US stocks. Where are the correlations today? Based on the past 3, 5, and 10 year periods, Harold Evensky, CFP®, projects that the correlation between international and US stocks (that was 0.65 historically) has now risen to 0.92.^{ix}

The case for increased correlation in stocks is fairly apparent, even if it is somewhat recent. I was encouraged in 2013, to see that international and emerging markets behaved differently than US stocks. I want to see that lower correlation, but the reality is that investors in a diversified portfolio were likely to be unhappy with their exposure to Emerging Markets, REITs, or Commodities in 2013. Time will tell if higher correlations were a temporary phenomenon or are here to stay. However, in a crisis – the time when you really need low correlation – I would expect that correlations will increase as they did in 2008-2009. That's because many investors and institutions will sell all assets indiscriminately and move into cash when panic occurs.

Turning to fixed income correlation, as yields have fallen, many investors have shifted to higher yield bonds. It is fairly common to see a significant portion of bond exposure today in corporate bonds and even below investment grade bonds. These bonds do offer a higher yield than Treasury bonds or than the Aggregate Bond Index, but they come with the trade-off of greater volatility and an increased correlation to equities. In 2008, as equities were down, the High Yield Bond Index was down a whopping 23%.^x In our efforts to increase the yield on our fixed income allocation, we are also taking on the risk that if stocks suffer a major setback, our bonds will not provide the ballast to help mitigate those equity losses. Higher correlation of assets will mean greater portfolio volatility and a larger potential loss for retirees. The higher the portfolio volatility, the lower the withdrawal rate we can safely implement.

4) Inflation

Inflation has remained muted over the past several years, confounding economists who were predicting higher rates. Our economy was so weakened and damaged by the 2008 collapse that all of the subsequent fiscal stimulus and money-printing that should have been inflationary has been just sufficient to prevent deflation. However, the fact that we have not yet seen inflation is not proof that we are out of the woods. As government debt in the US, Europe, and Japan has grown over the past five years, it may become increasingly desirable or even necessary for countries to inflate their way out of debt. That is because with higher inflation, the value of one dollar of debt becomes smaller and it becomes easier for a debtor (the government) to pay off its fixed debts.

Unfortunately for the retired investor who holds fixed income, you are an owner and not a debtor, so inflation increases your cost of living and decreases the purchasing power of your investment portfolio. If your retirement plan underestimates inflation, your actual expenses will be higher than the projected figures and you again risk running out of money. For example, one popular Retirement Income Evaluator tool uses a fixed inflation rate of 2.3%. If it does prove to be only 2.3% over the next 30 years, this would mean that the global money-printing programs had zero impact on the historical inflation rate. Is that a reasonable assumption? I don't know, but it appears to me that the potential risk to retirees might be underestimating future inflation.

5) Social Security

According to the 2013 Report of the Social Security Trustees, Social Security has been paying more in benefits than it receives in income since 2010. The Trustees anticipate that the Trust Fund will be depleted by 2033. Social Security and Medicare accounted for 38% of Federal Expenditures in 2012,

and benefits are projected to grow substantially.^{xi} In 1950, the ratio of workers to beneficiaries in the Social Security program was 16.5 to 1. By 2010, this ratio had fallen to 2.9 workers to 1 retiree, and it continues to fall.^{xii}

We are on a path that is simply unsustainable. The future projected benefits are not going to be feasible. Unfortunately, any solutions to fix this problem (and it is fixable), have proved to be politically unpopular and Washington has simply lacked the will to make these tough decisions. I don't expect that Social Security will cease to exist, however, I do anticipate that future benefits will have to be reduced. This could be through a means test (reducing benefits for retirees above a certain income or net worth), increasing the retirement age, or as has been recently proposed, by changing the way Social Security calculates their Cost of Living Adjustments (COLAs).

Currently, Social Security COLAs are based on changes to the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). A proposal last year was to change the COLA calculation to the "Chained CPI" which would take into consideration consumers' ability to substitute products, such as substituting chicken for beef if beef prices rose. This small change would result in lower COLA increases, saving billions of dollars in future Social Security payments. I'm not here to argue the merits of the plan, but I will say that if your retirement planning software assumes your Social Security benefits will increase at the 100% of the rate of inflation from now until death, this may ultimately prove to be an unrealistic projection. And if future benefits are less than you assumed in your retirement plan, you will need to increase portfolio withdrawals to cover this shortfall.

SUMMARY

The burden of paying for retirement today has largely been shifted from Defined Benefit Pension plans to withdrawals from a retiree's 401(k)s, IRAs, and investment portfolios. This responsibility requires a greater level of diligence and careful planning about how you implement your Withdrawal Strategy.

I've identified five potential threats to your retirement plan:

- Overestimating expected equity returns
- Low bond yields
- Increased correlation of asset classes
- Rising inflation
- Potential reductions in Social Security benefits

It seems unlikely that all five of these risks will prove to be real, but even one or two of them could have a significant impact on your withdrawal strategy over the next 30 years. As a result, our financial plan is not a once-and-done event, but one in which we evaluate our financial position continually, question our assumptions, and consider what risks could compromise our approach. As part of the Good Life Wealth Management Process, you will be advised of your withdrawal rate during your client monitoring meetings and counseled of any adjustments which might help nurture the success of your personal retirement plan.

If you'd like to discuss how this may apply to your individual situation, please send me a message at scott@goodlifewealth.com, and we can schedule a time to talk.

- i William P. Bengen, [Determining Withdrawal Rates Using Historical Data](#) Journal of Financial Planning, October 1994, pp. 14–24
- ii http://en.wikipedia.org/wiki/S&P_500#Total_annual_returns
- iii <http://www.multpl.com/s-p-500-dividend-yield/>
- iv “Rob Arnott: Demographics are the Markets' 800-Pound Gorilla”, Barrons, April 19, 2014.
- v <http://www.kitces.com/blog/should-we-forget-shiller-cape-ratios-and-focus-on-ep-instead/>
- vi As of May 9, 2014. Source: Barrons.com.
- vii <http://www.thinkadvisor.com/2013/04/29/michael-finke-is-the-4-rule-folly>
- viii <http://wpfau.blogspot.com/2013/09/lifetime-sequence-of-returns-risk.html>
- ix MoneyGuidePro’s Default Asset Class and Portfolio Information, 2013, page 4.
- x http://us.ishares.com/product_info/fund/performance/HYG.htm
- xi <http://www.ssa.gov/oact/trsum/>
- xii <http://www.ssa.gov/history/ratios.html>