Financial Planning Assumptions

There is a wealth of information being published on sophisticated planning techniques, but there is woefully little information on the fundamental attributes of a good financial plan, such as planning assumptions. What is the big deal? How hard can it be to develop reasonable assumptions for a client's financial plan?

In this article, I will review inflation assumptions and attempt to make the case that various inflation assumptions should have a definite relationship to one another because of their high degree of correlation. At the very least, I hope this article will stimulate some much-needed thought on the issue of reasonable planning assumptions.

The dilemma surrounding assumptions is that they are by their nature uncertain, yet vitally important to the projected outcome. It's those projected outcomes upon which advisors base their recommendations. Therefore, poor assumptions equal poor recommendations. It has been my experience that many planners use overly simplistic assumptions, to the point that poor advice is being given to clients.

I believe advisors should use a process by which they endeavor to construct an accurate (that is, reliable, consistent and non-arbitrary) representation of the world – otherwise known as the "scientific method." The reasonableness of planning assumptions used by advisors runs the entire gamut, nearly the antithesis of what would result from using the scientific method. By using a consistent and non-arbitrary method, planners reduce the risk of providing bad advice to clients, as well as providing them with a strong theoretical and legal footing.

It is my opinion that the consumer price index (CPI) should be the core inflation rate assumption because it is readily available and can be used as the cornerstone for many of the other assumptions. Because different inflation assumptions may be desired for expenses such as medical and education, it is important that these assumptions have a logical relationship to the core inflation assumption.

The best predictor of future inflation is the difference between the yield to maturity on Treasury Inflation-Protected Securities (TIPS) and the yield to maturity (YTM) on Treasury bonds of the same maturity. For example, on September 28, 2005 the 30-year Treasury had a YTM of 4.52% and the 30-year TIPS had a YTM of 1.79%, for a difference of 2.73%. Therefore, the best guess of the "market" as to future inflation over the next 30 years is 2.73%. The fact that it is easy to compute and doesn't require justification makes this method very appealing. This method simply provides the "market's" best guess as to what inflation will be for the next 30 years. If an advisor were to use history as an indicator of the future, the advisor would most likely use a number around 4.0%. The average from 1945 to 2004 was 4.12% and the average from 1950 to 2004 was 3.93%, according to the Bureau of Labor Statistics (BLS). There is a huge difference between 2.7% and 4.0%. Using the higher inflation rate may suggest that a higher return (more risk) is required to achieve the client's goals. My experience tells me that clients do not want to take more risk than is necessary to achieve their goals.

For the period 1950 to 2004, the average annual increase in medical care averaged 5.79% according to the BLS. This is approximately 1.4 times the overall rate inflation for the same period, which was 4.12%. Even looking at the last 30 years, the overall rate of inflation was 4.46% and the

medical expenses increased at an average of 6.71, for a difference of 1.5 times the overall rate of inflation. Therefore, if the expected long-term inflation rate were 2.7%, then the expected rate of inflation for medical care would be 3.78%. Many advisors attempt to predict the future by looking at the history and using a 6% or higher rate of inflation for medical care.

We are all aware that the information we see or hear last is the information we are most likely to remember and use even though it is probably not the most accurate representation of the situation. However, as can be seen in the graph below, there is a high degree of correlation between the two inflation rates over a long period of time. With such a high degree of correlation it seems inherently illogical to say that on one hand long-term inflation will be half of its 44-year average, but yet medical expenses will be two or three times their 44-year average, unless there is a separate assumption stating that the rules of economics that existed in the past will not hold in the future.

A big question in many parts of the country is: What should we assume for the return on real estate? The average increase in single-family homes from 1975 to 2004 was 4.7% according to the BLS, which is essentially the same as the average overall inflation rate for the same period. Using a long-term inflation rate of 2.7%, the expected rate of return on real estate would also be 2.7% if the correlation between inflation and return remained constant going forward. I am not saying you can't assume real estate will appreciate 10% per year over the long-term. I am simply suggesting that if you do so you need to have an explanation as to how things are different today than they have been in the past, and how those differences will cause the appreciation on real estate to be four times the rate of inflation when the long term average has been 1.05% of CPI. (See graph)

The last inflation assumption I want to discuss is the cost of education. Based on the information I received from *The College Board*, I broke out the cost of college attendance into public and private schools. Both numbers are the average published tuition, fee, room, and board charges at four-year institutions. From 1977 to 2004, the average rate of inflation was 6.55% for public schools and 7.18% for private schools. So a core inflation rate of 2.7% would lead to a 4% rate of inflation for public schools and a 4.35% rate of inflation for private schools.

As can been seen in the graph, inflation rates for private schools had a much higher correlation to the CPI than did public schools. My take on the fact that public schools have been less correlated to the CPI is because of the state government budget process, whereas private schools are more free market driven. I don't think it is coincidence that the latest diversion from the CPI began back in 2001. With a relatively short-term time horizon like college education this could be a real issue, but in the long run public school inflation rates should come back to their long term spread relative to the CPI.

In this article, I was only able to discuss a few areas in a very cursory way, but as I close, remember that the advisor should: 1) list every assumption made in the plan; 2) have a logical and defensible position for every assumption; and 3) every assumption should be logically consistent with the other assumptions in the plan. Advisors need to take the time to think about and document each and every assumption; the clients deserve it and courts demand it.