Retirement Planning: Part 1: Roadmap to Where?

Do you have a retirement plan? Here is how it works: Your financial planner interviews you for a couple of hours, collects your vital financial information - how much you have now, how much you can save until your retirement, at what age you wish to retire, how much money you want after retirement, how much legacy you want to leave to your children, to your favorite charities, and to the grandchildren of your cousin-twice-removed.

You can also prepare your retirement plan using one of the many available "do-it-yourself" financial web sites.

You'll end up with a computer-printed report outlining your financial "plan", which invariably includes a graph showing your projected asset growth until the end of your expected life. Typically, it looks similar to the graph shown in Figure 1.

This "standard" retirement plan chart consist of two parts:

- 1. Saving: The bars rising parabolic on the left hand side of the chart show how your assets build up over the years while you save money for your retirement.
- 2. Withdrawals: The right part of the chart shows your assets after your retirement.



After reviewing this chart, you conclude that if you put aside X dollars each month until your retirement, then you can retire at age XX and withdraw XXX dollars from your investments, adjusted for an assumed inflation rate. Now you are confident about your future, and nothing can prevent you reaching this goal. Right?

Wrong! My next set of articles will reveal how misleading some "standard" retirement plans can be.

This article, Part 1, shows the discrepancy between the "standard" retirement plan and market cycle model based on historic business cycles.

In Part 2, I will compare the "standard" retirement plan with one hundred years of historic market data. Reader discretion is advised, as this article contains some frightening scenes.

In Part 3, I will talk about the potential perils of muchpraised "Dollar Cost Averaging".

In subsequent parts, I will offer solutions, as related to mutual funds and "Annuity Ladders" - a term that I coined.

All financial plans assume a steady state growth rate of the equity markets. However, there is a problem with this assumption: Stock market does not grow steadily, it fluctuates. I don't mean the daily, weekly or monthly fluctuations, which can also wreak havoc in your portfolio occasionally. I mean the business cycles. Since 1854, the average business cycle lasted 53 months, the average bull market was 35 months and the average bear market was 18 months in duration.

Between 1945 and 1991, the average bull market was 50 months, and the average bear market was 11 months. Figure 2 shows the difference between the steady state growth rate –as assumed in all retirement plans -, and the typical growth rate, which incorporates the "average" market cycles.

The business cycles should be incorporated in your retirement plan. It makes a big difference whether you start your retirement at the start of a bear market or a bull market. Not only that, withdrawals during bear markets can deplete your portfolio much sooner than anticipated with a steady growth equity model. Just because we missed the 1994-1995 bear market should not mean that you should drop your guard against market cycles.

Here is a worked example: Assume that you retire with one million dollars in investment assets, growing 8% annually, and you start withdrawing \$65,000 each year adjusted by 3.5% for inflation.



Figure 2: Steady-state growth rate used by all financial planning models versus a typical market model with bull and bear markets

I studied four different scenarios. The first scenario is your "standard" retirement plan, and the other three scenarios are based on the typical business cycle.

- <u>Case A.</u> Steady state growth rate, as with all "standard" retirement plans,
- <u>Case B.</u> Retiring just before the start of a bull market cycle,
- <u>Case C.</u> Retiring just before the start of a bear market cycle,
- Case D. Retiring at mid-cycle

I calculated a retirement plan for each of these four scenarios. Figure 3 depicts the portfolio value over the years.

The "standard" retirement plan projects that your assets will last about 26 years.

If you were fortunate enough to retire just before the start of a bull market cycle, the model projects that your assets will last about 33 years. If you retired halfway in a market cycle, your assets are projected to last about 25 years.

If you retired just before the start of a bear market, you will likely run out of money after about 20 years, - several years sooner than what your "standard" retirement plan had projected. If you wanted your assets to last as long in your "standard" retirement plan, you would then need either \$1,180,000 capital at the start of your retirement, or you could take a pay cut of \$9,000 for the rest of your life, or you can delay your retirement by about three years. The other alternative would be to die six years sooner.

Furthermore, the random volatility of the markets (in addition to market cycles) can also remove a few years from the life of your portfolio.

I developed a spreadsheet model for Excel that incorporates the market cycles for your retirement plan. It also includes an adjustable random volatility generator to show the effects of routine fluctuations to your retirement horizon. You can plug in your own numbers and see how these factors can effect your retirement assets. As far as I know, it is the first of its kind. Canadian MoneySaver readers are the first ones to know about it. For details, send me an e-mail: cotar@home.com

Next time somebody offers you a retirement plan, ask if it includes the effect of the business cycles. The difference may be your financial freedom or your financial ruin in later years of your life.

In my next article, I will compare the "standard" retirement plan with the last one hundred years' of actual Dow Jones Industrials Average performance. It is dedicated to those who were talked into cashing out their indexed pension benefits and investing it for "better returns", and "estate value", and also handsome commissions for your salesperson.

