Retirement Planning
Part 10: Building an Annuity Ladder

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In my previous article "Investments or Annuity" (February 2002), I demonstrated how an investment portfolio and a life-annuity can be combined to increase the portfolio longevity and reduce the probability of running out of money prematurely.

When we talk about annuities, our first question is: When is the best time to buy an annuity?

Most investors think about a life-annuity only after they see big losses in their investment portfolios. Few talk about annuities in a bull market. However, in retirement planning, we need to look at all available options in all types of markets.

As business cycles unfold, the expectation of future corporate profits and other economic factors influence price of equities and bonds. As technical analysts, we like to cast these economic events into specific cyclical molds.

One of the cyclical events that fit to our retirement time frame is a well-known pattern called the "US Presidential Cycle". According to this cycle, during the first and second years of the US presidential term the markets don't move up much. On the third and the fourth year, they move up more significantly. Of course, these are statistical averages and they don't always work this way each time. The theory is, any major economic policies that may cause hardship are implemented in the first years of the presidential cycle with the expectation that the economy will recover by the next election. As the election gets closer, more money is spent. As more money is spend, economic activity picks up, the stock markets tend to rise and voters are happy again.

To demonstrate this visually, I calculated the change in the Dow Jones Industrial Average (DJIA) between 1901 and 2000 based on the presidential cycle. Then I took an average of 100 years (25 election cycles) and plotted as shown in Figure 1.

We observe that by the end of October during the second year of the presidential term (mid-term), the total average return from the start up to this point is only about 5%. From this low point on, the index rises sharply for the rest of the presidential term. It rises about 32% until it reaches about 37% at the end of the election year. Usually at this time, when the economy is firing on all cylinders, interest rates also move up.

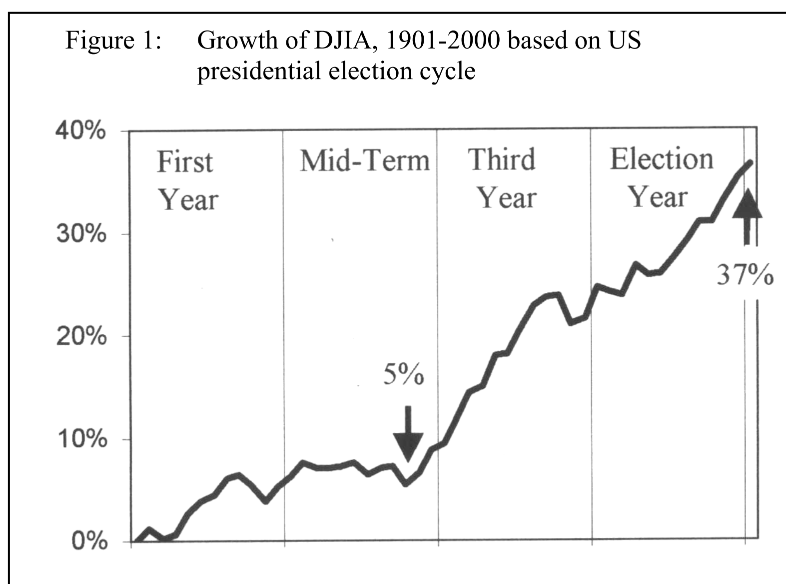
Now we know when to buy an annuity: Our investment portfolios and interest rates tend to peak towards the end of the US presidential election year. The next US presidential election is in 2004; therefore you may get the best annuity for your money at the end of 2004. If history repeats itself, by waiting two more years, your portfolio may go up about 20% based on an asset mix of 50% equity and 50% fixed income. For larger portfolios, this difference alone may buy you a reasonable-size annuity.

The next question is: How do we build an annuity ladder?

This is a more difficult question. It depends on the circumstances of the individual. Firstly, a cash flow projection must be prepared covering the entire retirement period. The retirement expenses should be categorized as "necessary" and "discretionary". The probability of running out of money in an investment portfolio must be determined. These and several other factors must be discussed with your financial planner. Depending on the outcome, an annuity ladder is built over time.

For example, say it is 2004 and you have $500,000 in your RRIFs and open investments. You need $60,000/year income. Your Canada Pension Plan, Old Age Security, private pensions and other sources of income provides you with $36,000/year income. That means a shortfall of $24,000/year must be raised from your RRIF's, open investments and annuities. In my previous articles, I wrote that if you want your portfolio to last for at least 30 years, your initial withdrawal rate should not exceed 4% of your portfolio value. This means, for an annual income of $24,000 indexed annually for inflation, you need at least $600,000 in your RRIFs

Figure 1: Growth of DJIA, 1901-2000 based on US presidential election cycle



and investments to start with. If you have more, you don't necessarily need an annuity ladder; you would only buy it for your peace of mind. If you have less than $600,000 then annuity ladder becomes necessary as it is in our example.

One thing you want to make sure is that your annuity payout should be higher than your safe withdrawal rate, in this case 4%. Otherwise, it is better to hang on to your portfolio until you are old enough to collect higher than 4% annuity payout. For an average retiree, this is never a problem, but should be checked anyways.

Following our example, in 2004, you may want to buy an annuity that pays out $8,000/year covering a third of your shortfall. The rest, $16,000 comes from your RRIFs and open investments.

In 2008, review your needs again. Do you still have the optimum split between RRIFs, open investments and annuity? If yes, you don't need to do anything. Otherwise, you may need to buy another annuity. Because you are now older, the payout rate will be higher. If your second annuity pays you $9,000/year, now you only need $7,000/year (plus adjustment for inflation) from your RRIFs and investments.

In 2012, repeat the process. And so on.

With this strategy, each time you buy a life annuity you secure a guaranteed lifetime income stream. And you do so when your portfolio, -based on historic averages-, is at its peak. With a properly designed annuity ladder, you can have money left for your estate, as well as a guaranteed lifetime income stream.

Beware that all the conclusions are based on one hundred years of market history. The future performance may be different.

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