Investing for Retirement

A New Approach

I often ask people what they want from their retirement investments. The answer is almost always something along the lines of "7 – 8%". In other words, they are thinking in terms of nominal growth in market value. Then I suggest they ignore everything they have heard or read from the investment industry and define what they want their retirement portfolio to do for them. In most cases, people arrive at the following mandate:

> *"It has to provide income to supplement my CPP, OAS and pension in retirement.*
>
> *This income must at least keep pace with my spending needs – after inflation and taxes – for the rest of my life."*

This seems obvious and less than radical but it actually has far-reaching implications. Consider the traditional investment industry financial planning process. You estimate your nominal returns, inflation rate, taxes, expenses, and lifespan. The planner then crunches the numbers and says you will need a certain amount at retirement. This number is guaranteed to be incorrect because there is zero probability of getting all those estimates correct.

Even if you did have perfect foresight with respect to the estimates, the actual results are path dependent. If your actual returns in retirement happen to perfectly match your estimate but the returns in the first 5 years are above or below your estimate, you will get very different results. In other words, the traditional approach to retirement planning is complicated, mysterious, impractical, and does not even directly address most peoples' objectives.

Now consider retirement planning based on an income rather than an asset approach. Here are the steps for a hypothetical example:

Estimate Income Requirements in Retirement

Step	Amount per year	Comments
Current household take-home income	85,000	Income after tax, CPP, EI, pension contributions etc.
Less mortgage payments	(20,000)	You will have paid off your mortgage by retirement
Less savings	(5,000)	This includes TFSA, RRSP, RESP contributions and all other savings. There should be no need to save in retirement
After tax income requirements	60,000	This is your current spending estimate excluding mortgage and savings
Adjusted after tax income requirements	48,000	Some planners believe 70% of this figure is sufficient for retirement, but to be conservative I assume 80%

Estimate Sources of Income in Retirement

Step	Amount per year	Comments
After tax income requirements	48,000	From previous table
Pre tax income requirements	60,000	A blended (not marginal) tax rate of 20% has been assumed. Different blended rates will apply at other income levels. The calculation is 48,000/(1-.20)
CPP pre tax	11,500	Maximum CPP payment in current dollars
OAS pre tax	6,200	OAS in current dollars before clawback which starts at 67,688
Company Pension pre tax	20,000	Even if your pension is non-indexed, the current estimated payout at retirement is a reasonable approximation based on the assumption that your wage increases will at least match inflation
Portfolio income pre tax	22,300	This is the approximate pre-tax income you require, in current dollars, to meet your income requirements

- You can use current CPP and OAS figures because these payments are indexed to inflation
- You can use your current pension estimate in today's dollars even if it is not indexed because this future payment will tend to grow with wage increases that will typically exceed inflation. Note that this is an approximation. Wage gains will likely result in an inflation indexed payout at retirement which is larger than the current estimate. However, during retirement, the purchasing power of this payout will gradually decline as it is not indexed.
- The portfolio income amount is a plug that is required to bring your retirement income in line with your requirements

Investment Planning Implications

The question is, of course, can you realistically build a portfolio to generate the necessary income?

The following is an example of such a saving and investment program which, for simplicity's sake, assumes 100% investment in dividend stocks inside a tax deferred account such as an RRSP:

Assumptions								
Opening Investment	250,000							
Current Dividend Yld	3.2%							
Real Dividend Growth	2.0%							
Inflation	3.0%							
Nominal Dividend Growth	5.0%							
Initial Annual Contributions	5,000							
Nominal Contribution Growth	5.0%							
Year	**1**	**2**	**3**	**4**	**17**	**18**	**19**	**20**
First year dividends	8,000							
Prior year dividends		8,000	8,816	9,707	32,004	34,961	38,177	41,674
Nominal growth of above		400	441	485	1,600	1,748	1,909	2,084
Total nominal dividends on prior investment	8,000	8,400	9,257	10,192	33,604	36,709	40,086	43,758
Prior year dividends re-invested		8,000	8,816	9,707	32,004	34,961	38,177	41,674
Prior year contributions		5,000	5,250	5,513	10,395	10,914	11,460	12,033
Incremental earning assets		13,000	14,066	15,219	42,399	45,875	49,637	53,707
Dividend yield on above		3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%
Dividends on incremental investment		416	450	487	1,357	1,468	1,588	1,719
Total nominal income	8,000	8,816	9,707	10,679	34,961	38,177	41,674	45,477
Total income in current dollars	**7,767**	**8,310**	**8,883**	**9,488**	**21,152**	**22,425**	**23,766**	**25,179**

- Though the S&P500 dividend yield is currently 2.0% and the S&P/TSX is 2.9%, it is not difficult to construct a well-diversified and high quality portfolio which yields a little over 3%
- Real dividend growth of 2.0% is a reasonable assumption. The equivalent figure for the S&P500 since 1900 (and notably including the Great Depression) is 1.1%, but a significant portion of the index members never paid any dividends
- There is an inflation assumption in this worksheet. The results are still satisfactory at 6% inflation and improve with lower inflation
- It is important to note that the above analysis does not include fees. Assume these are paid outside the account

Dividends – Less Risky than You Might Think

The above hypothetical planning exercise assumed 100% invested in dividend paying equities. The typical reaction is that equities are risky and bonds are required to moderate the risk. While there is some validity to this when looking at market values, dividends are quite a bit less volatile than market prices. Since 1871, the real dividends of the S&P500 have been about half as volatile as the real prices. This actually overstates the relative variability of dividends since dividend policy changed substantially over this period. Since 1975, real dividends have been a third as volatile as real stock prices.

Extending back to 1900, dividend growth failed to keep up with inflation in 28% of the rolling 10 year periods. In all cases, these periods were preceded by either

1. Payout ratios for the index of over 80% vs less than 30% currently. High payout ratios leave little room for earnings declines before the dividend must be cut.
2. Inflation of over 7.5% vs less than 3.0% currently. Corporate earnings and hence dividends have a hard time keeping up in the medium term when inflation is very high, although they do generally catch up in the long-run

Interestingly, at no time during the recent “great recession” did the rolling 10 year real dividend growth rate of the S&P500 turn negative.

Focusing on Dividends is Profitable and Liberating

How can a focus on dividends be liberating? From October 1, 2007 until June 30, 2009, on a non-annualized basis, the Toronto index dropped 22% and the S&P 500 index dropped 26% in Canadian dollar terms including dividends. However, over the same period, the increase in dividend income per dollar invested in equities by Panoply was over 27%.

If you focus on the drop in market prices you will lose sleep, and that’s the best case. The worst case is you worry so much that you sell your stocks. Instead, focus on the dividends; after all that’s what you really care about. You will feel quite a bit better about your portfolio. You are unlikely to be tempted to sell those stocks that keep paying you more each year. You may even take advantage of these great stocks that are on sale and buy some more. That, of course, is exactly what Panoply did for its clients.