# **Tax Effects on Asset Allocation**

In the March, 2010 edition of PrefLetter, I examined the effect of taxation on FixedResets trading at a premium.

Most holders of preferred shares will be taxable investors since a great deal of the attraction of preferred shares relative to bonds is due to the differential taxation of dividends as opposed to interest income. These differences, and the "Equivalency Factor" that allows the easy calculation of how much interest income is required in order to provide the same amount of after-tax income as \$1 in dividend income, are shown for Ontario in Table A-1 and for British Columbia in Table A-2, using data provided by Ernst & Young.<sup>1</sup> Table A-3 shows the Equivalency Factor for a variety of provinces and Taxable Income levels

Table A1: Tax Rates for Ontario Residents, Taxable Income of \$75,000			
Marginal Rate Capital Gains	16.49%		
Marginal Rate Eligible Dividends	14.19%		
Marginal Rate Interest Income	32.98%		
Equivalency Factor	1.28x		

Table A2: Tax Rates for BC Residents, Taxable Income of \$75,000		
Marginal Rate Capital Gains	16.25%	
Marginal Rate Eligible Dividends	10.65%	
Marginal Rate Interest Income	32.50%	
Equivalency Factor	1.32x	

Table A3: Equivalency Factors for Some Provinces and Taxable Income Levels				
Province	\$150,000	\$75,000	\$30,000	
British Columbia	1.31	1.32	1.30	
Alberta	1.32	1.34	1.33	
Manitoba	1.34	1.35	1.35	
Ontario	1.31	1.28	1.25	
Quebec	1.30	1.31	1.32	

It should be noted that these Equivalency Factors are estimates only and may vary dramatically according to the investor's personal tax situation. The most insidious effect is that of the OAS Clawback.

### Preferred Shares and the OAS Clawback<sup>2</sup>

According to the accountancy firm KPMG<sup>3</sup>: For high-income taxpayers these [Old Age Security] payments are completely taxed back through a special tax, known informally as the "clawback". The tax reduces benefits for taxpayers whose net income (after most deductions, such as RRSP contributions) is over \$67,668. If your net income exceeds about \$109,764, the clawback will apply to 100% of your OAS benefits.

At first glance, this might seem to be immaterial to our purpose. Clearly, the marginal rate of tax for individuals receiving OAS benefits will be higher – within the stated range of taxable income – but, one might think, this will not affect the calculation of the equivalency factor.

Unfortunately, there is another nuance due to the manner in which dividend income is treated under the Income Tax Act. Again, according to KPMG: Dividends received by individuals from Canadian corporations are taxed in a rather peculiar manner, designed to reflect the fact that the corporation paying the dividend has already paid tax on its profits. The amount included in the individual's income is "grossed-up" to reflect the total amount of pre-tax income that the corporation is presumed to have earned. The individual then receives a credit to offset the tax the corporation is presumed to have paid."

<sup>&</sup>lt;sup>1</sup> Ernst & Young, 2012 Personal Tax Calculator, available on-line at http://www.ey.com/CA/en/Services/Tax/Tax-Calculators-2012-Personal-Tax (accessed 2012-3-11)

<sup>&</sup>lt;sup>2</sup> This section is lifted almost word-for-word from the March, 2010, edition of this newsletter. I felt badly about this until I checked the KPMG publication cited below, and found that the cited text had changed from 2010 to 2012 only by changing the numbers.

<sup>&</sup>lt;sup>3</sup> KPMG, Tax Planning 2012 For You and Your Family, ISSN 1207-5957

This mechanism of dividend taxation has the unfortunate effect of increasing the amount of income calculated for purposes of OAS clawback, while not providing any mitigation of this higher clawback.

I have not been able to find an authoritative source that quantifies this effect in any way; the best I can provide is unattributed or non-authoritative claims on the Internet<sup>4</sup> that indicate that the equivalency factor in the presence of clawback of marginal income declines somewhat (by about 0.1), that is, that a taxable investor subject to OAS clawback will find that an Equivalency Factor that would otherwise be 1.30 will decline to about 1.20 in the presence of the OAS clawback. Note, however, that this rule of thumb will apply only to those investors who have taxable income in the range where the clawback has been initiated, but has not yet become total; i.e., this nuance will only affect investors with a taxable income between 67,668 and 109,764 (the range estimated by KPMG above).

However, this figure will change, perhaps dramatically, according to the province of residence, the precise amount of taxable income, and the sources of income (or other benefit, such as drug plans) that are subject to clawback. Investors should consult their own personal tax advisor to determine the equivalency factor that should be used when choosing between investments offering different types of income.

# Effect of Differential Taxation by Income Type on Asset Allocation

Most retirement withdrawal calculators are designed on a pre-tax basis. This is as true of my own calculator, discussed in the April, 2011, edition of this newsletter, as it is of all others I have seen.

I confess that it had been my intent to revise the calculator to allow users to input taxation rates and use these rates to work with after-tax income rather than pre-tax income – but unfortunately the revisions are not yet complete. A place-holder has been put on-line at http://www.prefblog.com/xls/retirementWithdrawals\_2012.xls, which will be replaced with the new spreadsheet when available (an announcement will be posted on PrefBlog at http://www.prefblog.com). Until then, readers will have to make do with the 2011 edition, on-line at http://www.prefblog.com/xls/retirementWithdrawals.xls.

However, it should be clear that the application of differential taxation will increase the indicated proportion of those investments which benefit from a lower taxation rate – which most notably will imply a greater proportion of common equity than would otherwise be the case.

## Why is Differential Taxation Neglected?

Asset allocation calculators generally<sup>5</sup> ignore differential taxation; it seems reasonable to suppose that the major reason is simplicity – more variables in the calculation mean that more assumptions must go into the model, and these assumptions will (if one is to be absolutely precise) require modification in the course of a retirement simulation.

If, for instance, an investor assumes that his portfolio worth \$1-million will generate \$50,000 of annual pretax income which will attract tax of \$10,000, he will probably find very few who object to his starting parameters. However, the most important aspect of most calculators is their prediction of the potential for ruin (or, at the very least, serious cumulative losses) ... and a 20% tax rate is probably too high a figure for the income received from a \$500,000 portfolio.

Additionally, many calculations will assume a steady withdrawal of capital from the portfolio, which is on a tax free basis. Adjusting for this behaviour adds another layer of complexity to the model.

Yet another reason for the neglect is the seeming lack of awareness of the importance of cash flow in retirement planning. Sequence of Return Risk<sup>6</sup> is caused by the periodic partial liquidation of a portfolio in order to meet a pre-defined retirement income level; as discussed in the April, 2010, and April, 2011, editions of this newsletter, it can be mitigated – or even eliminated – by selecting a portfolio that spins off cash.

For example, the cashless model predicts an investment with an expected annual return of 5% and a relatively large variance of return is subject to deterioration value when returns fall below expectations during the early part of a simulation that withdraws 5% annually. However, it is easy to see that if we have instead a model utilizing a long-term bond yielding 5% cash annually, then this cash may be withdrawn as earned without having to sell any part of the holding, and the portfolio will provide a stable cash flow for a period at least equal to the term of the bond. This stability will be enjoyed even if the market value of the 5% bond varies in such a way as to make the total returns equal at all times to those of the degrading cashless model.

The point is: bonds are not junior equities, differing from their seniors only by the value of their expected return and expected variance. Bonds are bonds; the fact that all the amount of total return is expected to be received as cash on a set schedule (or very nearly all, if the issue is bought at a discount or premium to par) is a vital characteristic.

Given that such a vital characteristic of the asset class, which provides a great part of the rationale for allocation to this class, is ignored by most academics and their retirement calculators, it should come as no surprise that esoterica such as differential taxation are also ignored.

But there is yet another reason differential taxation is not deemed worthy of discussion: American politics.

<sup>5</sup> I haven't seen one that includes differential taxation, anyway.

<sup>5</sup> Moshe Milevsky, Feast or Famine First?, Research Magazine, December 2007, available on-line at http://www.ifid.ca/pdf\_newsletters/PFA\_2007DEC\_FEAST.pdf

<sup>&</sup>lt;sup>4</sup> Million Dollar Journey, unattributed blog, *TFSA vs RRSP – Clawbacks & Income Tax on Seniors*, post attributed to Ed Rempel, available on-line at http://www.milliondollarjourney.com/tfsa-vs-rrsp-clawbacks-income-tax-on-seniors.htm; PrefBlog, (my own blog, not authoritative on taxation matters), comments to *Marginal Tax Rates: Ontario 2008*, available on-line at http://www.prefblog.com/?p=2372#comment-27986; and Financial Webring Forum, *Tax Bracket Sensitivity* of *Preferred Shares*, unattributed discussion forum, available on-line at http://www.financialwebring.org/forum/viewtopic.php?f=32&t=111505

# The Bush Tax Cuts

The Bush Tax Cuts comprise a wide swath of initiatives, but for our purposes we may take the definition as:<sup>7</sup> The scheduled expiration of the Bush-era tax cuts in 2013 would mean that the tax rate on capital gains would revert to 20 percent from 15 percent. Dividends would again be taxed as ordinary income with a top rate of 39.6 percent, instead of 15 percent now.

The tax rate on investment income for Americans has been a political football for donkey's years:<sup>8</sup> The 1986 tax reform eliminated the gap between the ordinary and capital gains rates. The gap began to widen again during President Bill Clinton's second term, but the Bush tax cuts of 2003 blew it wide open.

This has become a social issue<sup>9</sup> in the States because, not surprisingly, the proportion of investment income in total income tends to rise with income, reaching 38.2% in 2006 for the infamous 1%.<sup>10</sup> The question of repeal (or, more precisely, of refusal to extend) the cuts has been touted as a major issue in this year's American elections.<sup>11</sup>

Differential taxation (and the ability of investors to choose the timing of a capital gain) has been suggested as a reason behind the popularity of share buy-backs,<sup>12</sup> although this thesis has attracted the usual number of detractors<sup>13</sup> and counter-examples<sup>14</sup> on the internet.

However, my point is not to discuss the social utility of differential taxation, nor is it to opine on the mechanisms whereby corporations can maximize shareholder wealth. Instead, the point I wish to make in this section is that differential taxation is a volatile political issue in the States; this means that academics, as a group, will focus on the political ramifications of policy and, possibly, the macro-level effects of changes, rather than the micro-level question of how a comfortable (not rich, merely comfortable) investor can best arrange his affairs under any given tax regime. After all, there is not much point carefully proving that cash-flow-aware, taxation-aware asset allocation strategies can improve the quality of life, and to ensure that these theories are in the hands of practitioners<sup>15</sup> if there is a good chance that the taxation regime will change between manuscript preparation and publication!

We are blessed in Canada with the Dividend Tax Credit and Gross-Up. Whatever the merits or lack thereof of this aspect of taxation law, however much the precise benefit available to investors may change due to relatively small changes in corporate taxation levels (the decline in the Interest Equivalency Factor was due to a reduction in corporate tax rates), the basic mechanism is not a political issue in Canada – at least, not a major one! This implies that the area is worthy of study.

#### Conclusion

As previously stated, it had been my intention to publish a differential-taxation-aware retirement withdrawal calculator with this edition of the monthly newsletter, but to my chagrin I simply ran out of time. I hope to be in a position to publish it, together with observations of the effect of this awareness on asset allocation, in the April, 2011, edition which is currently expected to update information previously discussed regarding retirement withdrawals in general and annuities in particular.

<sup>7</sup> Henry Goldman and Heidi Przbyla, Bloomberg Calls for Ending Bush-Era Tax Cuts, 'Loopholes', Bloomberg, 2011-11-15, available on-line at http://www.businessweek.com/news/2011-11-15/bloomberg-calls-for-ending-bush-era-tax-cuts-loopholes-.html (accessed 2012-3-11)

<sup>8</sup> Washington Post Editorial Board, Bush tax cuts helped the rich get richer, Washington Post, 2012-1-16, available on-line at http://www.washingtonpost.com/opinions/bush-tax-cuts-helped-the-rich-get-richer/2012/01/06/gIQALoi53P\_story.html (accessed 2012-3-11)

9 James Kwak, Occupy Wall Steet's Top Priority Should Be to Kill the Bush Tax Cuts, The Atlantic, 2011-10-17, available on-line at http://www.theatlantic.com/business/archive/2011/10/occupy-wall-streets-top-priority-should-be-to-kill-the-bush-tax-cuts/246817/ (accessed 2012-3-11)

<sup>10</sup> Thomas L. Hungerford, Changes in the Distribution of Income Among Tax Filers Between 1996 and 2006: The Role of Labor Income, Capital Income, and Tax Policy, Congressional Research Service, 2011-12-29, available on-line at http://www.fas.org/sgp/crs/misc/R42131.pdf (accessed 2012-3-11)

<sup>11</sup> Peter Coy, Is Ending the Top-Bracket Bush Tax Cuts a Winning Issue for Democrats?, Bloomberg Businessweek, 2012-3-5, http://www.businessweek.com/articles/2012-03-05/is-ending-the-top-bracket-bush-tax-cuts-a-winning-issue-for-democrats (accessed 2012-3-11)

<sup>12</sup> Peter Atrill, Share Buybacks, Association of Chartered Certified Accountants, undated, available on-line at http://www2.accaglobal.com/pubs/students/publications/student\_accountant/archive/sa\_feb09\_atrill.pdf (accessed 2012-3-11)

13 John Oswin Schroy, The Great Misleading, Capital Flow Analysis, 2004-7-25, available on-line at http://www.capital-flow-analysis.com/investment-essays/buyback\_fallacies.html (accessed 2012-3-11)

<sup>14</sup> Anonymous, *Dividends versus Share Buybacks/Stock repurchases*, Dividend Growth Investor, 2009-6-23, available on-line at http://www.dividendgrowthinvestor.com/2009/06/dividends-versus-share-buybacksstock.html (accessed 2012-3-11)

<sup>15</sup> That's a career in itself!