#### **Gentlemen Prefer Shares**



# Perpetual Misperceptions

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t will not have escaped notice that the preferred share market has been subjected to rising interest rates in recent months, with concomitant price declines. During the period March 30-July 31, my "Perpetual Discount" index declined by 8.76% (total return) and the number of issues included in this index has increased from ten to thirty-nine, with virtually all of the increase coming due to issues moving from the "Perpetual Premium" index.

It should be noted that the return of the "Perpetual Premium" index declined a relatively modest 3.56% over the same period, due to the greater interest rate protection afforded by the higher dividends paid by issues in this index. The "Premiums" certainly fulfilled their role, explained in the March/April 2007 edition of *Canadian MoneySaver*, as defensive issues through the agonizing four-month period.

However, with the great increase in the number of perpetual preferreds that are trading at a discount, the analysis

and special characteristics of this type of issue should be reviewed. There are some important considerations that should be remembered when investing in discounted perpetual preferreds – and, as implied by the title, some commonly held misperceptions. For a review of what is meant by a "Perpetual" issue, please see the June 2006 edition of *Canadian MoneySaver*.

#### Fallacy #1 - Yield Calculations

It is sometimes stated that one cannot calculate the yield of a discounted

perpetual since one cannot count on it ever maturing. Like many other statements made about investments, this represents an unwarranted generalization of an analysis performed with a very short time horizon.

Let us say that we are considering a purchase of a discounted perpetual and that we are fully cognizant of the risks. Our objective is simply to capture the current dividend of 5% on the issue, but we recognize that there are two sides to every investment decision: risk and return. We're hoping for the 5% return, but we'll say that as long as our actual return is in excess of 2% then the individual investment has not been a disaster. After all, as fully diversified investors, we have many other risk/return trade-offs in our portfolios. If one investment does worse than our projections, then we have a good chance that other elements, responding differently to the same economic conditions, will do better, leaving us with a portfolio return approximately equal to our portfolio projection.

We'll further specify, for the sake of this example, that the issue we are considering pays \$1.00 in dividends per annum and is currently priced at \$20.00. So, assuming that interest-rate risk is our only risk, what interest rates in the future will give rise to a total return of less than 2%? To answer this question, we can construct Table 1 and use the data to create Chart 1.

TABLE 1 - CALCULATION OF LEVEL OF FUTURE INTEREST RATES THAT WILL RESULT IN A 2% RETURN ON A DISCOUNTED PERPETUAL CURRENTLY YIELDING 5%

Year	Cash Flow	Discounting Factor	Sum of Future Cash Flows	Required Present Value of Principal	Future Value of Principal	Implied Future Yield
0	-20					
1	1	0.98	0.98	19.02	19.42	5.15%
2	1	0.9604	1.9404	18.06	18.80	5.32%
3	1	0.9412	2.8816	17.12	18.19	5.50%
4	1	0.9224	3.8040	16.20	17.56	5.70%
10	1	0.8171	8.96	11.04	13.51	7.40%
20	1	0.6676	16.29	3.71	5.56	17.98%

As may be seen, there is substantial short-term risk involved in investing in long-term (perpetual!) instruments. If we buy our 5% discounted perpetual today and interest rates increase to 5.15% by the end of the first year, the perpetual will then be priced at Price = Dividend / Yield = 1.00 / 0.0515 = \$19.42 and our total return (including dividends) will be equal to our floor rate of 2%.

With the passage of time, annual income does its inexo-

#### CHART 1 - FUTURE YIELDS TO REALIZE 2% ON CURRENT INVESTMENT



rable work. After ten years, our portfolio strategy can withstand an increase in rates to 7.4% and still have delivered our minimum return requirement, while after 20 years we will have earned our 2% even if rates have risen to an astronomical 17.98%. Additionally, a similar sort of calculation can determine the total rate of return if the investment pays its \$1 annual dividend for a number of years and then becomes worthless. The results of this calculation are shown in Chart 2.

As may be seen from Chart 2, there is (contrary to the

CHART 2 - TOTAL RETURN IF THE \$20 INVESTMENT PAYS \$1 PER YEAR FOR *N* YEARS, THEN GOES BANKRUPT WITH A TOTAL LOSS OF CAPITAL.



misperception) no need to assume a terminal value for a perpetual discount in order to calculate a Yield-to-Worst; the yield at the time of purchase is approached asymptotically. It is true that the time horizon needs to be fairly long – but that is a different objection entirely.

Many readers will now be shaking their heads sadly. "Hymas has finally lost it! Two percent returns! Hundredyear time horizons! Why doesn't *Canadian MoneySaver* have a 3-month T-bill column instead?"

The events discussed above are worst-case scenarios; examples of calculations that may assist investors in assessing the risks of investment in discounted perpetuals. Higher interest rates, as highlighted here, are not the only wolf in the forest. An investor looking for safety through a portfolio comprised entirely of three-month T-bills might well find himself embarrassed, not to mention homeless and hungry, if rates should reach Japanese levels of 0.25%. Reinvestment risk at maturity is an often ignored element of portfolio management.

Risk can never be eliminated. The best one can do is construct a portfolio that, through as wide a variety of scenarios as possible, will provide a constant benefit, making up on the swings what it loses on the roundabouts.

#### Fallacy #2 -Preferreds have a Minimal Upside

All preferred shares have some kind of provision whereby the issuer can call the issue for redemption at a set price. So, yes, the upside is limited. These limits can be fairly high, however!

Consider the example of a perpetual issued by the Royal Bank, RY.PR.F, which pays an annual dividend of \$1.1125 and was recently bid at \$22.34 to yield 4.99% as a dividend, which will be equivalent to 7% interest for many investors after accounting for taxes, as discussed in the February 2007 edition of Canadian MoneySaver. If we assume there are no major changes in the marketplace, we'll get that yield forever. If interest rates increase, we'll have to consider the risks discussed above. If, however, interest rates decrease, then this issue could quite reasonably be priced at \$25.00 to yield 4.45% - and holders will have realized a capital gain of nearly 12% in addition to the dividend.

Not bad! This illustrates another point in the analy-

#### **HIMIPref<sup>™</sup>Indices**

My firm calculates performance for various segments of the preferred share market and publishes these performances daily at www.prefblog.com. These divisions are very useful when investigating sources of risk and return, as was done in the analysis of the **Claymore Preferred** Share ETF, published in the June 2007 edition of Canadian MoneySaver.

The purpose of these indices is to indicate the returns and overall characteristics that might be reflected in a retail investor's portfolio. Hence, issues are included in the index on an equally weighted (at issue price) basis, provided that they are:

• Rated Pfd-2(low) or higher by DBRS,

• Not horribly illiquid (an average daily trading value of \$25,000 is required), and

• Included in the universe tracked by my firm (almost all, but there are some exceptions; many issues with non-standard tax treatment of dividends are excluded, as are those with dividends that vary according to some measure other than Canada Prime).

Perpetual issues are assigned to either the "Perpetual Discount" or the "Perpetual Premium" index according to the relationship between the market price and the lowest future redemption price. sis of perpetual issues that may have escaped notice by readers of the article on "Perpetual Hockey Sticks" in the March 2007 edition. Speaking very generally, and always subject to considerations of yield and credit quality, one wishes to purchase perpetuals priced as far from par as possible. When buying issues above par, the rationale is to maximize interest-rate protection; when buying issues below par, we want to leave ourselves as much upside as possible should interest rates decline. Interest rate sensitivity, always a concern with perpetuals, is a two-way street. Investors should ensure that potential rewards are never just given away!

## CHART 3 - YIELD AND POTENTIAL CAPITAL GAIN ON HIGH-QUALITY DISCOUNTED PERPETUAL PREFERREDS



The trade-off is illustrated in Chart 3, in which discounted perpetual preferreds of very high credit quality (Pfd-1(low) and Pfd-1 issues only (see the October 2006 issue) have their yields plotted against their potential for capital gain. The general trend is, as might be expected, the market place is willing to accept somewhat less yield as a trade-off for a larger potential capital gain. It should also be noted that this is not always the case. These exceptions have a different mix of risk and reward by this measure, a difference that can be profitable to exploit.

### **The Pick of PrefLetter**

After the close on August 10, my monthly newletter (www.prefletter.com) recommended BAM.PR.N, among others, for long-term, buy-and-hold investors.

TYPE OF PREFERRED	PERPETUAL DISCOUNT		
Quotation (2007-08-10)	\$20.50-60		
DBRS Rating	Pfd-2(low)		
S&P Rating	P-2		
Annual Dividend	\$1.1875		
Yield-to-Worst Scenario	Limit Maturity		
Yield-To-Worst	5.88%		
Modified Duration, YTW	14.05		
Pseudo-Convexity, YTW	1.03		

**BAM.PR.N:** Redeemable commencing 2012-7-31 at 26.00, declining by \$0.25 annually until 2016-7-31 and redeemable thereafter at 25.00. Next ex-date 2007-9-12 (declared). This was one of the last issues to reach the market during this spring's surge of issuance; it was very poorly received and has been very unpopular since. This unpopularity has now translated into a very attractive price, resulting in a yield far in excess of that available on comparable issues. Due to its credit rating, exposure to this name should be limited, but it's investment grade, so there is no need to eliminate it from consideration. The virtually identical BAM.PR.M may be substituted for this issue depending on market conditions; BAM.PR.M's redemption schedule commences six months earlier.

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