Characteristics of Some Preferred Share Funds

The investment market has changed greatly over the past sixty years and it is fascinating to observe the cumulative effects of changes in the environment.

Perhaps one of the main driving trends has been the reduction in participation in Defined Benefit (DB) pension plans, as shown in Chart 1. This chart requires a little explanation: the cohorts are labeled according to their age in 1984: thus, "C45" represents those people who were 45-years old in 1984, and are now 71-years old; they were 64-years old in 2003, the last year of the available data.¹

Two important trends are apparent from Chart 1: firstly, the proportion of people of a constant age covered by a DB pension plan is declining with time; and secondly, the proportion of any selected group is also declining as that group ages.

Counterbalancing this trend is the opposite effect observed in 401(k) participation – this being roughly the American equivalent of an RRSP² – there is an increasing participation in 401(k) plans with age, and the participation within each cohort is increasing with the passage of time. These data are shown in Chart 2.



This trend has in turn correlated well with an increase in mutual fund assets, since mutual funds are the most common investment in a $401(k)^3$ and in Canadian RRSPs.⁴ Rough allocations for RRSPs are shown in Chart 3.

This tsunami of consumer demand has, naturally enough, spawned a rise in consumer choice. Chart 4 shows US data from the Investment Fund Institute⁵ (no comparable Canadian data appears to be available) showing how the number of funds available to consumers has exploded in the past sixty years. The rise in the number of accounts is equally dramatic (Chart 5).

With the increase in consumer choice comes an increase in marketing costs. As stated in the Procter & Gamble Annual Report for 2010:⁶ This investment is critical.Decades of experience have demonstrated that making people aware of our innovation and motivating them to try our new products is the key to long-term success...Total selling, general and administrative expenses (SG&A) increased 10% to \$25.0 billion in 2010 behind higher marketing, overhead and other operating expenses. SG&A as a percentage of net sales increased 220 basis points to 31.7% due to higher marketing and other operating expenses as a percentage of net sales, while overhead spending as a percentage of sales was in line with the prior year.

¹ James Poterba, Steven Venti and David A. Wise, *The Decline of Defined Benefit Retirement Plans and Asset Flows*, December 2006, available on-line at http://www.nber.org/programs/ag/rrc/NB06-01%20PVW%20FINAL.pdf (accessed 2010-9-8)

² For a brief description and comparison, see Michael Sze, Converting Defined Contribution Account Balances into Income Streams at Retirement, Society of Actuaries, 2005, available on-line at http://www.soa.org/files/pdf/03-Vancouver-Sze-120.pdf (accessed 2010-9-8)

³ ibid

⁴ Wendy Pyper, *RRSP Investments*, Statistics Canada 2008, available on-line at http://www.statcan.gc.ca/pub/75-001-x/2008102/pdf/10520-eng.pdf (accessed 2010-9-8). This paper makes some rather suspicious compartmentalizations of assets: Mutual Funds and Income Trusts are allocated to the same category; and a 5-year GIC is categorized as a "predictable" investment, while a 5-year government bond is a "variable" investment. These allocations may be due to constraints imposed by the data, but the rationale is not made clear.

⁵ Investment Company Institute, Investment Company Fact Book 50th edition, 2010, ISBN 978-1-878731-48-3, available on-line at http://www.ici.org/pdf/2010_factbook.pdf (accessed 2010-9-8)

⁶ Available on-line at http://annualreport.pg.com/annualreport2010/downloads/PG_2010_AnnualReport.pdf (accessed 2010-9-8)

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2010



Source: Statistics Canada, Survey of Financial Security, 2005.

I chose Procter & Gamble as the best example of a consumer goods firm I could imagine; I'm sure that other examples of selling expenses as a high percentage of net sales can be found quite easily. Naturally, there will be a wide variation in selling expenses between firms and between product lines – what percentage of the price of perfume is the marketing expense?⁷ Further, if one looks at the financial statements of CI Financial Corp.⁸ one sees that virtually 100% of their expenses are "Selling, General and Administrative", if we include trailer fees and dealer fees under that broad definition. The amount actually spent on investment management, their putative product, is buried in there somewhere, but one may, I think, be forgiven for suspecting that it's a rather small fraction of the whole. My guess would be somewhat less than 20bp of assets under management; Chart 6 shows the estimated disposition of their average 1.851% revenue (as a percentage of assets under management).

John Bogle charges⁹ "the [mutual fund] industry is a vast and highly successful marketing business, an industry focused primarily on salesmanship".

I will go further: I suggest that in most large shops – with both institutional and retail orientation – investment management is simply another cost to be minimized. There is evidence, in fact, that the competence of mutual fund managers as a class declined significantly in the period 1990–2006.¹⁰

With every action comes an equal and opposite reaction, and Mr. Bogle has been highly successful in marketing his anti-marketing crusade to the point at which a cult of indexation has developed. This cult holds that all costs associated with investment are almost certainly wasted¹¹ and has gained enough adherents that equity index funds now hold a market share of about 13% of the investment fund market,¹² as shown in Chart 7.

⁷ You have to figure that any product having its origins in ambergris must need a lot of marketing. I'm still puzzled about the popularity of honey, though. http://www.straightdope.com/columns/read/1072/is-honey-really-bee-vomit (accessed 2010-9-8)

- ⁸ CI Financial Corp., *Quarterly Report, June 30, 2010*, available on-line at http://www.ci.com/web/pdf/quarterly/cixq2_10.pdf (accessed 2010-9-8)
- 9 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=661361 or

¹¹ See, e.g., William F. Sharpe, *The Arithmetic of Active Management*, The Financial Analysts' Journal, 1991, available on-line at http://www.stanford.edu/~wfsharpe/art/active/active.htm (accessed 2010-9-8)

¹² Investment Company Institute, supra.

http://cfainstitute.org/learning/products/publications/faj/Pages/faj.v61.n1.2678.aspx?WPID=Topic_List_Tabbed&PageName=Publications# (accessed 2010-9-12)

¹⁰ Laurent Barras, Olivier Scaillet and russ Wermers, False Discoveries in Mutual Fund Performance: Measuring Luck in Estimated Alphas, Forthcoming, Journal of Finance, available on-line at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=869748 (accessed 2010-9-8)



The cult has become sufficiently influential as to have had a significant influence on regulation, and the Trading Expense Ratio is now required to be reported by mutual funds and has been touted¹³ as a figure that *finally gives us investors a way of telling exactly how much it costs to own our mutual funds*.

However, the TER includes only direct costs of market action¹⁴: The trading expense ratio represents total commissions and other portfolio transaction costs expressed as an annualized percentage of daily average net asset value during the period.

Thus, the indirect costs of trading are excluded completely from this calculation; this may perhaps be due to difficulty in defining these costs, or a desire to mitigate the intellectual burden on fund companies: if forced to calculate, report and consider these costs, they might have to think about what they are doing. A 2004 study of trading by ABP, a Dutch pension fund ranking among the five largest in the world with assets of EUR 156-billion, found that¹⁵ average market impact costs equal 20 basis points for buys and 26 basis points for sells; average execution costs (defined as the sum of commission and market impact) equal 27 basis points and 33 basis points, respectively; to put it another way, only about one-quarter of the cost of trading by this fund would have been captured by the TER.

There are many different ways to measure market impact costs, but for our purpose it is sufficient to show that this component of trading cost may be expected to be greatly in excess of the relatively trivial commission expense – which, in this electronic age of \$10 retail trades, is becoming more inconsequential by the day.

However, there is one thing that may be said in favour of the TER: it represents that portion of trading expense that truly disappears from the market. Market impact costs do not disappear – one man's market impact expense is another man's market-making profit. Market making is an incredibly profitable part of the investment industry; the Investment Industry Association of Canada reports¹⁶ that fixed income trading revenue for Canadian brokerages in 2009 was \$2.1-billion, while equity trading revenue was \$459-million.



¹⁶ Investment Industry Association of Canada, Securities Industry Performance: report for the first quarter, 2010-6-28, available on-line at http://www.iiac.ca/Upload/Q1_10_SIP__.pdf (accessed 2010-9-9)

¹³ Rob Carrick, TERs tell you the exact cost of owning a fund, Globe and Mail 2006-2-28, available on-line at https://secure.globeadvisor.com/servlet/ArticleNews/story/gam/20060228/RCARRICK28 (accessed 2010-9-8)

¹⁴ See FORM 81-106F1 CONTENTS OF ANNUAL AND INTERIM MANAGEMENT REPORT OF FUND PERFORMANCE AMENDMENT INSTRUMENT, available on-line at http://www.sfsc.gov.sk.ca/ssc/files/nat-inst/81-106appendixc-june1-07.pdf (accessed 2010-9-8)

¹⁵ J. A. Bikker, L. Spierdijk and P.J. van der Sluis, Market impact costs of institutional equity trades, ISSN 0169-2690, June 2004, available on-line at http://eprints.eemcs.utwente.nl/3545/01/1725.pdf (accessed 2010-9-8)

It should be noted that these immense profits were not, by and large, made by deeply analyzing the market and displaying an almost uncanny insight into securities valuation. The profits arise more prosaically from simple market making – quoting a bid and offer with as much spread as the market will bear and turning over inventory in a workmanlike manner. In effect, market makers act as a shock-absorber for large trades, spreading the effect out over time and counterparties as circumstances permit.

Market making is one aspect of selling liquidity; Hymas Investment Management has made something of a fetish of selling liquidity in the preferred share market while in the earlier stage of my career, it was government bond prices that were analyzed into their constituent "fair value" and "liquidity premium or discount" components. There is no necessity to actually be a dealer, routinely selling at the offer and buying at the bid, to sell liquidity; any large trade in any security will affect its price. The period and size of this market impact will be dependent upon a host of factors that interact in differing ways.

This investment management principal of selling liquidity without actually being a dealer has in recent years been taken to its logical extreme with the advent of High Frequency Traders. Thanks to competition between the exchanges and the resultant payment of rebates to liquidity suppliers,¹⁷ it can be profitable to make markets at a zero spread; additionally, the increasing incompetence of investment managers as a class has made their predictable trading strategies a ripe target for exploitation.¹⁸ The frat boys are having their lunch eaten and aren't happy – which is why many firms are trying to persuade the regulators that High Frequency Trading is a problem¹⁹.

There is nothing so predictable as the trading of an index fund; and market impact costs can be expected, *ceteris paribus*, to be much higher for such funds than for other pools of capital; but in addition to the day to day mechanics of trading, there is also the effect of index-anticipation strategies.

For example, it was shown²⁰ in 1997 that, with respect to changes in the S&P 500 index: For additions, we find a significant positive announcement day abnormal return. We also find a positive cumulative abnormal return of 3.807% over the period starting the day after the announcement and ending the day before the effective date of the change. Further, we find significant negative abnormal returns following the addition itself. The pattern of price movements for deletions is very similar but inverted. That is, returns are significantly negative between announcement and delisting and significantly positive following delisting.... Fourth, the permanent price effect (excluding the announcement-day abnormal return) is found to be weakly positive for additions and significantly negative for deletions. This finding provides new evidence in support of downward-sloping long-run demand curves for stocks(downward-sloping demand hypothesis).

The authors' fourth point of interest, quoted above, show that excess returns are possible through taking a view on the potential for issues to leave or enter the index and positioning an actively managed portfolio accordingly.

These effects are detrimental to acolytes of the indexation cult, but will be invisible: the index will 'buy' the notional shares added to the index at a high point while 'selling' its notional shares at a low point. This bias will not be observable to an investor focusing solely on the index itself; they may be quantified only through comparison of the index to a superset of that index which is not affected by the index changes.

Another insidious influence on the returns of index investors is index composition. It must always be remembered that equity indices were invented by a newspaper company in order to sell newspapers,²¹ while bond indices are nearly always controlled by securities dealers, who have more of an interest in selling new issues than in reporting relative returns. Fixed Income indices, in general, are constructed with a view towards serving the dealers rather than the investors.

The best illustration of this is the inclusion in the Canadian DEX indices (formerly the Scotia Capital Bond Indices) of banks' Innovative Tier 1 Capital. These instruments are simply not bonds – they are, for all intents and purposes, preferred shares dressed up as bonds in order to achieve tax deductibility of the income payments for the issuer. In many cases, they are directly convertible into preferred shares under certain circumstances – for example, the Royal Bank Annual Report 2009²² states: Without the consent of the holders, each RBC TruCS 2010, 2011, 2013 and 2015 will be exchanged automatically for 40 of our non-cumulative redeemable First Preferred Shares Series Q, R, T and Z, respectively, and each TSN – Series A will be exchanged automatically for an equal principal amount of Bank Series 10 Subordinated Notes upon occurrence of any one of the following events: (i) proceedings are commenced for our winding-up; (ii) the OSFI takes control of us; (iii) we have Tier 1 capital ratio of less than 5% or Total capital ratio of less than 8%; or (iv) the OSFI has directed us to increase our capital or provide additional liquidity and we elect such automatic exchange or we fail to comply with such direction.

¹⁷ E.g., the Toronto Stock Exchange pays a rebate to the passive side of each trade of almost one-third of a cent per share

⁽see http://www.tmx.com/en/news_events/news_releases/3-19-2010_TSX-TradingFees.html) See also the November, 2009, edition of this newsletter.

¹⁸ Quantitative Services Group LLC, Beware of the VWAP Trap, Research Note, November 2009, available on-line at http://www.nyssa.org/AM/CM/ContentDisplay.cfm?ContentFileID=1456 (accessed 2010-9-8) and referenced on Themis Trading, Comment Letter Re: File No. S7-02-10, Concept Release on Equity Market Structure, April 21, 2010, available on-line at http://www.themistrading.com/article_files/0000/0543/4-21-10_THEMIS_-__SEC_Comment_Letter.pdf (accessed 2010-9-8)

¹⁹ The standard-bearer for this effort is Themis Trading LLC, a valuable source of news and opinion on the High Frequency Trading phenomenon. See http://www.themistrading.com/ (accessed 2010-9-10)

²⁰ Anthony W. Lynch, Richard R. Mendenhall, New Evidence on Stock Price Effects Associated with Changes in the S&P 500 Index, Journal of Business, 1997, vol. 70, no. 3, available on-line at http://pages.stern.nyu.edu/~alynch/pdfs/jb97lm.pdf (accessed 2010-9-8)

²¹ Dow Jones Indexes, *Dow Jones Transportation Average*, on-line at http://www.djaverages.com/?view=transportation&page=overview (accessed 2010-9-8)

²² See http://www.rbc.com/investorrelations/pdf/cfs_07_e.pdf (accessed 2010-9-8)

As Innovative Tier 1 Capital issues are not bonds, it is therefore logical that they be excluded from bond indices – but they are included, and many so-called bond ETFs include such issues in their holdings.²³ They should no more be considered bonds than preferred shares should be considered common equity.²⁴ I am aware of only one issue which has been kept out of bond indices due to its lack of bond characteristics: the Lloyds Bank ECN²⁵ was kept out of the Merrill Lynch bond indices after some tergiversation.²⁶ This issue is particularly egregious: in times of trouble it converts to equity at a conversion price equal to the common price at time of issue, which means there is not a shred of first-loss protection for the holders of this security; but the UK Treasury and Financial Services Authority lobbied for their inclusion in the indices to make them easier to sell.²⁷

The moral of the matter is that investors may not assume that indices represent the performance of any particular asset class; it is just as important to research indices as it is to research individual issues.

In this essay, I will address:

• The effect of deletion from the TXPR Index on the performance of some issues

- Tracking Error of CPD
- · Composition of some preferred share funds
 - By issue characteristics
 - By credit rating
 - By Average Trading Value
 - By issuer concentration
- Past performance of the above funds

The effect of deletion from the TXPR Index on the performance of some issues

In the July edition of this newsletter, I reported on the contemporary semi-annual rebalancing of TXPR^{28} and commented: For example CPD now holds about \$449-million of assets,²⁹ of which 1.10% is BAM.PR.J,³⁰ implying about 187,000 shares, or about sixty times is average daily trading value (as defined by HIMIPrefTM). Rather a lot to get rid of with a market order!

Now that the CPD rebalancing appears to be complete – all issues deleted from the TXPR index on which it is based have been eliminated from the fund's portfolio – we may have a look at the effect of the index change on the performance of some selected issues.

The start date of the investigation was arbitrarily set at June 16, 2010, roughly three weeks prior to the announcement of the change, and the end date was equally arbitrarily set to September 9, 2010, the last day for which I have data at time of writing.

In order to isolate the effects of the index change it is necessary, of course, to compare the issue investigated with a benchmark of some kind; given the extreme heterogeneity of the preferred share universe, and the fact that the deleted issues were mostly "junk" issues (rated Pfd-3(high) or lower by DBRS, which makes them more susceptible to issuer-specific changes in the investment environment) it was deemed useful to examine only three of the deletions. These three issues were selected based on the availability of a closely comparable issue; the pairs are briefly described in Tables 1–3.

Table 1: Characteristics of BAM.PR.J and Comparator (Operating Retractible)		Table 2: Characteris (FixedReset	tics of FTS.PR.G)	and Comparator	
Characteristic	BAM.PR.J	BAM.PR.O	Characteristic	FTS.PR.G	FTS.PR.H
Expected Retraction Date	2018-3-30	2013-6-30	First Reset Date	2013-9-1	2015-6-1
Dividend Rate	1.35	1.25	Initial Dividend Rate	1.3125	1.0625
Price, 2010-6-16	25.90	25.80	Issue Reset Spread	213bp	145bp
			Price, 2010-6-16	25.90	24.90

²³ See my article *Bond ETFs Demystified*, Advisors' Edge Report, March 2010, available on-line at http://www.himivest.com/media/advisor_1003.pdf (accessed 2010-9-8)

²⁷ See http://www.prefblog.com/?p=8576

²⁹ See http://www.claymoreinvestments.ca/en/etf/fund/cpd

²⁴ With its customary aplomb, IIROC included two preferred share issues in its control group when investigating the effects of the post-Lehman short-selling ban on common shares. This report was also notable for quoting market capitalization to twelve significant figures. See IIROC, *Study on the Impact of the Prohibition on the Short Sale of Inter-Listed Financial Sector Issuers*, February 2009, available on-line at http://docs.iiroc.ca/DisplayDocument.aspx?DocumentID=3B4FDC12E7AA4177890D0170914D5D7A&Language=en (accessed 2010-9-8)

²⁵ See http://www.prefblog.com/?p=8547 for a critique of this issue's structure

²⁶ Reuters, Merrill in 2nd about-turn on contingent capital, 2009-11-11, available on-line at http://www.reuters.com/article/idUSLB70266120091111 (accessed 2010-9-8)

²⁸ See news release, *Standard & Poor's Announces Review of S&P/TSX Preferred Share Index*, 2009-7-9, available on-line at http://www.cnw.ca/en/releases/archive/July2010/09/c3374.html (accessed 2010-9-8)

³⁰ See http://www.claymoreinvestments.ca/en/etf/fund/cpd/holdings

Table 3: Characteristics of IAG.PR.E and Comparator(Straight Perpetual)						
Characteristic	IAG.PR.E	IAG.PR.F				
Dividend Rate	1.50	1.475				
Par Redemption possible commencing	2018-12-31	2019-3-31				
Price, 2010-6-16	24.61	23.95				

BAMPR.J vs. BAMPR.O 8 105 104 fotal Return (2010-6-16 = 100) 103 102 101 100 99 98 28-Jul-10 16-Jun-10 30-Jun-10 14-Jul-10 11-A uq-10 25-Aug-10 08-Sep-10 Date -BAM.PR.J -BAM.PR.O -–Announcement – -Effective



The results for the FTS pair are inconclusive, but the other two pairs of comparisons are consistent with the idea that:

- There is a significant temporary downward effect on the price of an issue when it is deleted from the index
- Much of this effect takes place following the announcement date but prior to the effective date, implying that this downward effect is not captured by the index (which implies that the index will underperform its superset for which composition is constant).

Tracking Error of CPD

We have seen above that there is a strong indication that there is an 'invisible tracking error', which is caused by the market impact of changes to the index which are reflected in the index itself.

However, when we compare the returns of CPD to the index TXPR, we see that there is also significant visible tracking error. Chart 11 shows the total return of the index and its ETF over the same time period as examined in the issue pairs above. It is difficult to discern any useful information from such graphs;³¹ the only observation that comes to mind is that the summer rally in the preferred share market (as represented by TXPR) has been remarkably smooth.³²

Useful information may be extracted from Chart 12, in which the difference between the two series of Chart 11 has been plotted. Additionally the expected tracking error is also shown, derived as a 0.50% charge accrued daily through the period. Note that Management Fees are reported by Claymore³³ to be 0.45%, but the Management Expense Ratio is higher³⁴ as there are taxes to be paid on the management fees – a very common state of reporting amongst ETFs.³⁵ Reporting issues aside, it is clear that CPD incurred an excess tracking error of about 10bp between the announcement and effective dates, and another 10bp towards the end of August. I confess that I do not know, and have not investigated, the source of this latter error.

A total return index for each issue was constructed by using the daily closing bid prices, adjusting when necessary for dividend accruals. The results of the exercise are shown in Charts 8–10.

³¹ Which is why they are so popular

³² I do not believe there is any truth to the rumour that a movie will be made about the Canadian preferred share market during the summer, to be titled *How Clean was my Rally*

³³ See http://www.claymoreinvestments.ca/en/etf/fund/cpd (accessed 2010-9-8)

 $^{^{34}} See http://www.claymoreinvestments.ca/libraries/literature_en/cpd_2010_interim_financials.sflb.ashx (accessed 2010-9-8) and a set of the set of th$

³⁵ See Rob Carrick, iShares not as transparent as they used to be, Globe & Mail, available on-line at http://www.theglobeandmail.com/globe-investor/funds-and-etfs/etfs/ishares-not-as-transparent-as-they-used-to-be/article1645363/ (accessed 2010-9-8)

Ominously, the tracking error due to rebalancing appears to be increasing over time, as shown in Chart 13. Readers of this newsletter will remember the January, 2010, error on rebalancing, which was highlighted in the February edition with trading in POW.PR.C displayed as an egregious example of high trading costs, that month remains the single largest period of tracking error. However, as the fund gets larger (and the AUM now stands³⁶ at \$494-million, compared to \$369-million at year-end³⁷), the trading forced by index changes may be expected to increase.



Table 4 shows the performance of CPD against TXPR on an annual/annualized basis in standard format. To prepare this table, NAV³⁸ and distribution³⁹ data were downloaded from the CPD website and performance figures calculated using an Excel spreadsheet. Similarly, Total Return Index Values for TXPR were obtained from the Toronto Stock Exchange.⁴⁰

Table 4: Total Ret	urn of CPD Comp 1-Year	ared to Its TXP 2-Years	R Benchmark 3-Years
2010	5.08% 6.02%	5.53% 6.24%	1.24% 1.85%
2009	5.98% 6.47%	-0.62% -0.18%	
2008	-6.82% -6.41%		
Total Return of CPD Total Return of TXPR	-0.41% NAV (annual/annualized)	zed)	

It should be noted that there is a discrepancy between the calculated data of Table 4 and the performance figures for the fund reported by Claymore,⁴¹ who report a 1-Year figure of 5.08% and a 3-Year figure of 1.20%. Notes that I have maintained regarding their historical performance reporting⁴² lead me to suspect that the discrepancy in the 3-Year figure is due to computational errors in the month or two around December 2008, but this has not been confirmed. However, the difference is small.

Importantly, however, we may conclude from the data that it is only the past year that tracking error has become a significant problem for the fund – as noted above, a difference in return of approximately 0.50% may be expected due to normal MER and transaction costs. However, this error has become quite significant over the past twelve months, almost doubling the advertised cost of the fund.

³⁸ See http://www.claymoreinvestments.ca/en/etf/fund/cpd/history (accessed 2010-9-10)

³⁶ See http://www.claymoreinvestments.ca/en/etf/fund/cpd (accessed 2010-9-8)

³⁷ See http://www.claymoreinvestments.ca/libraries/literature_en/annual_report_2009.sflb.ashx (accessed 2010-9-8)

³⁹ See http://www.claymoreinvestments.ca/en/etf/fund/cpd/distributions (accessed 2010-9-10)

⁴⁰ See http://marketdata.tsx.com/cgi-bin/index.cgi (accessed 2010-9-10) There is a charge for such data.

⁴¹ See http://www.claymoreinvestments.ca/en/etf/fund/cpd/performance (accessed 2010-9-10)

⁴² See http://www.prefblog.com/?cat=12 (accessed 2010-9-10)



The ludicrous nature of the Trading Expense Ratio is well illustrated by CPD's semi-annual report dated June 30, 2010,⁴³ which reports this figure as 0.02% (the figure for the full year ended 2009-12-31 is 0.03%). The data show that this figure, so beloved of Canada's sharp-eyed regulators, so grossly understates the true costs of the fund's trading as to be completely meaningless.

It will be most interesting to see how the tracking error changes in the future. While S&P has announced⁴⁴ a number of methodological changes clearly aimed at making the index easier to track, it must be borne in mind that:

- the Canadian preferred share market is intrinsically illiquid
- the fund continues to increase in size
- the fund is obliged to trade mechanically according to targets that are public

What Claymore should do is allow for a 10% "basket clause", whereby the fund could deviate from the index for a period while a portfolio manager whittled down the differences at fair prices⁴⁵. However, this would not only make the fund somewhat reliant on the portfolio manager's judgment of "fair", but it would destroy much of the marketing appeal of the fund, which is targeted towards those who feel that every dollar spent on analysis and execution is wasted.

Composition of Some Preferred Share Funds

The funds analyzed are the same that were analyzed in the September, 2009, edition of this newsletter:

- Claymore S&P/TSX Cdn Preferred Share ETF (CPD)⁴⁶
- Diversified Preferred Share Trust (DPS.UN)47
- The BMO-CM "50" Index⁴⁸
- Malachite Aggressive Preferred Fund (MAPF)⁴⁹

CPD holdings were taken from its holdings page⁵⁰ on September 1,2010. Weightings were converted into shareholdings, with the special cases as set out in Table 5.

⁴³ See http://www.claymoreinvestments.ca/libraries/literature_en/cpd_2010_interim_financials.sflb.ashx (accessed 2010-9-10)

⁴⁴ See http://www.prefblog.com/?p=11487 (accessed 2010-9-10)

⁴⁵ Naturally, this would require a change to the prospectus, in addition to portfolio management fees.

⁴⁶ See http://www.claymoreinvestments.ca/en/etf/fund/cpd (accessed 2010-9-10)

⁴⁷ See http://sentry.ca/en/products/structuredproducts/dpst.html?fundId=163 (accessed 2010-9-10)

⁴⁸ Maintained and unpublicized by BMO Capital Markets. I am astounded that they have not added an ETF based on this fund to their ETF line-up (see http://www.etfs.bmo.com/).

⁴⁹ A pooled fund managed by Hymas Investment Management Inc. See http://www.himivest.com/malachite/MAPFMain.php

⁵⁰ See http://www.claymoreinvestments.ca/en/etf/fund/cpd/holdings (accessed 2010-9-11)

or Inconsistent Issue Descriptions for CPD					
Claymore Description of Issue	Presumed Ticker				
BANK OF MONTREAL NON CUM 5YR RESET CL B	BMO.PR.N				
BANK OF MONTREAL NON CUM PERP CL B PFD-1	BMO.PR.H				
BANK OF MONTREAL PFD	BMO.PR.K				
BCE INC. 5.55% PREF – SERIES 19	BCE.PR.I				
BROOKFIELD ASSET MGMT INC 5YR R/R PFD SE	BAM.PR.P				
BROOKFIELD ASSET MGMT INC CUM CL A SER 1	BAM.PR.I				
CANADIAN IMPER BK OF COM PFD CL A SER 2	CM.PR.G				
DUNDEE CORP CUM 5-YR RTE RESET 1ST PFD S	DC.PR.B				
GEORGE WESTON 5.20% PFD	WN.PR.C				
HSBC BANK CANADA 5.1% SERIES 5 PFD	HSB.PR.C				
ROYAL BANK OF CANADA 5YR NON CUM RST PFD	RY.PR.I				
ROYAL BANK OF CANADA 5YR NON CUM RST PFD	RY.PR.Y				
ROYAL BK OF CANADA1ST PRF NON CUM 5 YR R	RY.PR.X				
SUN LIFE FINANCIAL 6% SER. 6R	SLF.PR.F				
TORONTO DOMINION BK N-CUM 5YR CL A PFD S	TD.PR.Q				

DPS holdings were taken from the semi-annual report dated 2010-6-30,⁵¹ with the following special cases:

- "Brookfield Properties Corporation Class AAA Preferred Series H" is assumed to be BPO.PR.H
- "Brookfield Properties Corporation 5.75% Class AAA Preferred Series H Convertible" is presumed to be BPO.PR.L
- Brookfield Asset Management Inc. Class A Preferred Series 4 (BAM.PR.C)⁵² is a floater not tracked by HIMIPrefTM. It has therefore been eliminated from the analyzed portfolio and the allocations to the other constituents increased proportionately.
- Power Financial Corporation Non-Cumulative 4.70% First Preferred Series J has been redeemed.⁵³ It has therefore been eliminated from the analyzed portfolio and the allocations to the other constituents increased proportionately.

The BMO-CM "50" Index constituents were provided by BMO Capital Markets. The index includes a 2.41% weighting in BMO.PR.V, a USD denominated OperatingRetractible⁵⁴ not tracked by HIMIPref[™]. This issue has been eliminated from consideration and allocations to the other 49 index constituents increased proportionately.

The MAPF analysis follows the analysis for August month-end previously published on PrefBlog.55

⁵¹ Surprisingly, this document does not appear to be available on the Sentry Select website; it is, however, available on SEDAR at http://www.sedar.com, Name "Diversified Preferred Share Trust", Date of Filing 2010-8-18, Type "Interim financial statements – English", format PDF, Size 243K

⁵² See http://www.brookfield.com/content/stock_and_dividend_info/preferred_shares-82.html (accessed 2010-9-10)

⁵³ See http://www.powerfinancial.com/news/2010_0628_eng.pdf (accessed 2010-9-10)

⁵⁴ See http://www2.bmo.com/content/0,1089,divId-3_langId-1_navCode-4977,00.html (accessed 2010-9-10)

Sector Weightings

In the September 2009 edition, I did not differentiate between Investment Grade and Junk when displaying the sector weightings, but I will do so this year; the additional insight conveyed into the fund risk profile is well worth the extra effort required to read the table.

Table 6: Composition of Portfolios by Preferred Share Type, 2010-8-31								
Sector	CPD	DPS.UN	BMOCM-50	MAPF				
Investment Grade								
Ratchet	0%	0%	0%	0%				
FixFloat	0%	0%	0%	0%				
Floater	0%	3.7%	3.3%	0%				
OperatingRetractible	5.5%	5.7%	10.2%	0%				
SplitShare	0%	0%	0%	0.6%				
Interest Bearing	0%	0%	0%	0%				
PerpetualPremium	6.4%	7.2%	1.5%	0%				
PerpetualDiscount	31.0%	38.5%	36.9%	86.7%				
FixedReset	37.5%	15.8%	33.0%	8.9%				
		Junk						
Ratchet	0%	3.5%	2.8%	0%				
FixFloat	4.1%	5.5%	7.5%	0%				
Floater	0%	0%	0%	0%				
OperatingRetractible	6.0%	9.3%	3.0%	0%				
SplitShare	0%	0%	0%	0%				
Interest Bearing	0%	0%	0%	0%				
PerpetualPremium	0%	0%	0%	0%				
PerpetualDiscount	2.6%	6.5%	1.7%	0%				
FixedReset	6.9%	4.5%	0%	4.0%				

Of interest is the change in the sectoral allocations of CPD: last year the allocation to OperatingRetractibles was 24.9%, which has now been reduced to a total of 11.5%. The shift has been into FixedResets, which were at 33.9% last year and are now 44.4%, a gain of 10.5%.

A similar move has been made by DPS.UN, but the shift is not so dramatic: last years figures were 21.4% OperatingRetractible and 12.3% FixedReset.

The BMO-CM "50" index has shifted from 21.7% OperatingRetractible last year to 13.2% currently, with the FixedReset allocation moving from 10.9% to 33%. In this particular case, the shift into FixedResets was assisted by a significant reduction in the allocation to Straight Perpetuals⁵⁶, from 51.6% to 40.1%.

The exception to the trend was the actively managed MAPF, which increased its allocation to Straight Perpetuals to 86.7% from last year's figure of 67.2%, at the expense of allocations to OperatingRetractibles, SplitShares and FixedResets.

Credit Quality

DBRS has muddled the waters somewhat with its announcement⁵⁷ that it was changing the definition of default⁵⁸ so that With respect to preferred share securities, the non payment of a dividend will only be considered as a "default" if the non payment constitutes default per the legal documents. As such, the non payment of a dividend does not necessarily give rise to the assignment of a 'D' rating.

Their clarification⁵⁹ made the situation even more confusing: *DBRS does not view the ability to defer payments as a credit risk, but rather, a risk that holders of the deferrable instruments have agreed to as per the contractual terms of the instrument and DBRS does not consider "deferral" as being equal to "default".*

⁵⁶ The class of preferred share comprised of PerpetualDiscounts and PerpetualPremiums

⁵⁷ DBRS, DBRS Updates Default Definitions, 2009-11-9, available on-line at http://www.dbrs.com/research/230546 (accessed 2010-9-11)

⁵⁸ DBRS, Rating Definitions & Other Rating Information, available on-line at http://dbrs.com/about/ratingDefinitions?anchor=default#default (accessed 2010-9-11)

⁵⁹ DBRS, DBRS Clarifies its Approach to Rating Bank Subordinated Debt and Hybrid Instruments, 2009-12-21, available on-line at http://www.dbrs.com/research/230963/dbrs-clarifies-its-approach-to-rating-bank-subordinated-debt-and-hybrid-instruments.html (accessed 2010-9-11)

This sentiment is reiterated in their discussion of preferred share rating scales.⁶⁰

This attitude may be constrasted with their earlier treatment of Quebecor World:⁶¹ While the cumulative nature of the Series 3 and Series 5 preferred shares affords Quebecor World the flexibility to suspend dividends, provided dividends are paid in arrears, DBRS notes preferred shareholders maintain a level of expectation that these dividends will be paid in a timely manner, and this expectation is reflected in the preferred share ratings. Having not met the expectation of preferred shareholders, DBRS notes the preferred shares are more reflective of a "D" rating

It is also of great interest to note that the word "default" does not occur in – to take one example at random – the Supplementary Prospectus for CM.PR. E^{62} . or in the base prospective it supplements.⁶³ Given that the word does not occur ... when does default occur? This is rather important, as the credit rating should be taken as a rough estimate of the probability of default, although this presumption is not explicitly supported in their discussion of the preferred share rating scales⁶⁴ – it arises from the structure of their transitions studies.⁶⁵

I suspect that the confusion arises from the political and regulatory response to the Panic of 2007 and the desire on the part of the authorities to ensure that loss-absorption by preferred shares is possible without a formal default⁶⁶. Until the situation clarifies – as perhaps it will, when the Basel 3 Accord finally gets approved⁶⁷ – we will just have to muddle along, taking some comfort in the fact that the changing definitions of default had no effect on ratings. Eventually, the regulators will want to have some type of issue rated as debt by the major agencies, and it will become apparent that to have a debt rating, there must be a clear definition of default … but the word "eventually" covers a lot of territory.

Be that as it may, Table 7 compares the credit quality, according to DBRS, of the four portfolios studied.

Table 7: Composition of Portfolios by DBRS Credit Rating, 2010-8-31							
DBRS Credit Rating	CPD	DPS.UN	ВМО-СМ "50"	MAPF			
Pfd-1	0.0%	0.0%	0.0%	0.0%			
Pfd-1(low)	54.8%	42.3%	58.9%	62.0%			
Pfd-2(high)	14.0%	12.2%	10.5%	19.4%			
Pfd-2	3.0%	1.6%	1.5%	0%			
Pfd-2(low)	8.6%	14.7%	14.3%	14.8%			
Pfd-3(high)	12.9%	21.2%	13.4%	4.0%			
Pfd-3	4.2%	4.8%	1.7%	0.0%			
Pfd-3(low)	2.6%	3.2%	0.0%	0.0%			

Given the enormous issuance of junk over the past year, it is surprising to note that the credit quality of CPD has not realized a significant deterioration. This appears to be a fortuitous result of the new S&P methodology⁶⁸ of index construction, which emphasizes liquidity: as shown in Table 8, the junk issues deleted from the TXPR index in the July rebalancing⁶⁹ had average daily trading values (as computed by HIMIPref^M) well below the index average (see the discussion of liquidity, below). Without these deletions, and in the absence of other methodological changes to accomplish the same result, there would have been a significant decline in the credit quality of CPD.

⁶⁰ See http://www.dbrs.com/about/ratingScales (accessed 2010-9-11)

⁶² Available on-line at http://www.cibc.com/ca/pdf/investor/preferred-shares/series-27-prospectus-en.pdf (accessed 2010-9-11)

⁶⁷ Expected in November 2010. See Bank for International Settlements, Progress on regulatory reform package: Basel Committee press release, 2010-7-16 http://www.bis.org/press/p100716.htm (accessed 2010-9-12)

68 See http://www.prefblog.com/?p=11487

⁶¹ See http://www.dbrs.com/research/216489/quebecor-world-inc/downgrades-preferred-shares-to-d.html (accessed 2010-9-11)

⁶³ Available on SEDAR, http://www.sedar.com, "Canadian Imperial Bank of Commerce", "Dec 6, 2001", "Final short form prospectus - English"

⁶⁴ See http://www.dbrs.com/about/ratingScales (accessed 2010-9-11)

⁶⁵ See http://www.dbrs.com/research/232188/2009-dbrs-corporate-rating-transition-and-default-study.pdf (accessed 2010-9-11)

⁶⁶ See Bank for International Settlements, Basel Committee proposal to ensure the loss absorbency of regulatory capital at the point of non-viability, 2010-8-19, available on-line at http://www.bis.org/press/p100819.htm (accessed 2010-9-11)

at http://www.ois.oig/piess/pi00019.html (accessed 2010-9-11

Deleted Issue	Average Daily Trading Value 2010-7-9 (dollars)	Average Daily Trading Value 2010-9-9 (dollars)
CCS.PR.D	80M	61M
CZP.PR.B	100M	41M
DC.PR.A	80M	77M
DW.PR.A	70M	78M
FTS.PR.E	41M	40M
FTS.PR.G	79M	85M

There has been a slight deterioration in the credit quality of DPS.UN, as the total weight of the two highest quality tiers has declined from 58.1% to 54.5% over the year; this small shift has increased the allocation to junk.

The opposite trend is evident for the BMO-CM "50" index, in which the total allocation to junk has declined from 17.8% to 15.1%.

The only change of interest in the active fund, MAPF, is a shift of about 17% of portfolio weight from Pfd-1(low) to Pfd-2(high), which in turn may be ascribed to the downgrade of MFC in August.⁷⁰

Liquidity

In distinction to last year's review, the average trading value calculations are currently a more meaningful measure of the relative difficulty of trading large blocks of shares. This has occurred as the FixedReset new issues are becoming more seasoned and finding their way into the hands of buy and hold investors, rather than those of speculators and investors seeking a short-term investment. Additionally, the flood of new issues has slowed to a trickle – at least as far as investment grade is concerned – so there is less motivation for investors to swap their holdings between issues.

HIMIPref[™] calculates the Average Daily Trading Value as an exponential moving average, which gives greater weight to recent periods, while older data still remains influential. Additionally, there are adjustments to the daily value that is used to adjust the average, which seek to minimize the effect of sporadic block trades, and to the exponent of the weighting factor, which makes low volume days more important than high volume days – these adjustments were necessary in order to allow the software to take a conservative view regarding the potential for executing a trade on any given day when back-testing the valuation algorithms.

The recent history of the median weighted average trading value for the two main indices is shown in Chart 14, while Table 9 reports the composition of the four portfolios under consideration when analyzed for liquidity.



Table 9: Composition of Portfolios by Average Trading Value, 2010-8-31							
Average Daily Trading Value Range	CPD	DPS.UN	BMO-CM "50"	MAPF			
< 50M	0.4%	14.5%	6.8%	0.0%			
50M – 100M	4.6%	19.7%	8.7%	11.9%			
100M - 200M	29.5%	29.0%	27.0%	25.5%			
200M - 300M	29.0%	18.0%	21.1%	31.1%			
> 300M	36.6%	18.7%	36.4%	31.7%			

Yields⁷¹

In October, 2006, Advisor's Edge Report published my essay *Closed End Preferred Funds: Effect of Calls*⁷² in which I warned that the very high proportion of issues held by closed end funds that were trading above their call price led to the conclusion that their dividend pay-outs were unsustainable – as these issues with their high coupons were called, the principal would have to be reinvested in lower-coupon issues and the distributions from the fund would necessarily suffer.

Of the issues held by DPS.UN at the time of that essay, no less than 57.1% were trading at levels that indicated a probable call within five years. As it turns out, the forecast was gloomy in some respects – a YTW calculation assumes a constant market environment and the precipitous decline in market prices since that time has taken most of those issues below their call price. Holders might be forgiven for considering this a rather small blessing!

I have pointed out in recent issues of this newsletter that FixedResets appear to be trading on the basis of their Current Yield with, at best, an imperfect accounting for the amortization of their premia to their expected call price. With this in mind, we can compare the Current Yields to the Yields-to-Worst to gain some understanding of the prospects for future income distributions, as shown in Table 10:

Table 10: Portfolios Yields and Modified Duration, 2010-8-31						
	CPD	DPS.UN	ВМО-СМ "50"	MAPF		
Current Yield	5.44%	5.38%	5.20%	5.91%		
Yield-to-Worst (unadjusted)	4.04%	4.23%	3.18%	5.77%		
Yield-to-Worst (adjusted)	4.41%	4.67%	4.00%	5.77%		
Modified Duration (YTW Scenario)	8.28	10.69	9.50	13.08		

The Adjusted Yield-to-Worst for the portfolios is computed by resetting the negative yields-to-worst to zero. The affected issues are shown in Table 11 – readers may decide for themselves how reasonable this adjustment is!

Table 11: Issues with Negative YTW Held in at Least One of the Portfolios						
Ticker	Class	Quote, 2010-8-31	YTW Scenario	YTW		
BPO.PR.F	OpRet	26.25-39	Call 2010-10-30 at 25.50	-5.82%		
CL.PR.B	PerpetualPremium	25.76-99	Call 2010-9-30 at 25.25	-22.92%		
CM.PR.R	OpRet	26.00-10	Call 2010-9-30 at 25.45	-15.54%		
DC.PR.B	FixedReset	26.90-10	Call 2010-9-30 at 26.00	-9.97%		
FTS.PR.C	OpRet	26.40-60	Call 2010-9-30 at 25.75	-23.72%		
TD.PR.M	OpRet	26.30-33	Call 2010-9-30 at 25.75	-15.83%		
TD.PR.N	OpRet	26.07-15	Call 2010-9-30 at 25.75	-5.90%		

⁷¹ The first two paragraphs of this section are a straight copy-paste from the September 2009 edition. Some things never change!

⁷² Available on-line at http://www.himivest.com/media/advisor_0610.pdf (accessed 2009-9-12)

Mercifully, the importance of the 'negative YTW effect' has declined significantly since last year's review: of the ten Investment Grade OperatingRetractible issues with a negative YTW on 2009-9-11, only three are listed in Table 10 (CM.PR.R, TD.PR.M and TD.PR.N), five have been redeemed (ACO.PR.A, GWO.PR.E, GWO.PR.X, IGM.PR.A and PWF.PR.J), one has been called for redemption (PWF.PR.D) and one now has a positive YTW without having been called (CM.PR.A). Perhaps at some point in the near future I should reprise one of my earlier writing efforts⁷³ that compared YTW and Current Yield as a predictor of future performance of PerpetualPremium issues and focus on OperatingRetractibles!

The differences between Current Yield and Adjusted Yield-to-Worst for the funds listed in Table 9 are due to the expected calls of FixedReset issues. 2014, the year in which a very large proportion of the FixedReset class has their first Reset Date, may well be one of tumult and confusion! However, I have spent so much time in recent issues writing about the "FixedReset Computation Spread" (the difference between Current Yield and YTW for FixedReset issues), that I will simply refer readers to those recent editions and leave it at that.

However, I will remind readers that YTW is a far better indicator of future distributions than Current Yield; investors in the funds with significant holdings of FixedResets should account for an expected drop in distributions in the short term.

Issuer Concentration

Readers of this newsletter will be aware that I am always telling readers to consolidate related issuers for issuer concentration calculation purposes. It is, perhaps, not quite right to count a diversified company and its subsidiary as a single company, but that is a much better approximation than counting them as two completely separate companies!

Calculations for the two more common consolidations are shown in tables 12 & 13.

Table 12: Issuer Concentration Calculations for Brookfield Group							
Issuer	CPD	DPS.UN	ВМО-СМ "50"	MAPF			
BAM	4.17%	6.20%	6.60%	9.30%			
BPO	4.24%	4.41%	3.02%	0%			
BPP	0%	0%	0%	0%			
BNA	0%	0%	0%	0.6%			
BRF	0.60%	0.67%	0%	0%			
Total for Brookfield Group	9.01%	11.28%	9.62%	9.90%			

Table 13: Issuer Concentration Calculations for Power Group						
Issuer	CPD	DPS.UN	ВМО-СМ "50"	MAPF		
CL	0%	0.80%	0%	0%		
GWL	0%	0.78%	0%	0%		
GWO	4.41%	3.65%	1.85%	7.70%		
IGM	0.69%	0.68%	0%	0%		
PWF	3.85%	6.91%	2.73%	12.90%		
POW	2.63%	3.07%	1.33%	0%		
Total for Power Group	11.58%	15.89%	5.91%	20.60%		

⁷³ A Call, too, Harms, Advisor's Edge Report, June 2006, available on-line at http://www.himivest.com/media/advisor_0606.pdf

Performance

No matter how much I try to present data that will allow readers to take an informed view on the future prospects for each fund, I know that the only thing that will appeal to the majority is a comparison of past performance with very little attention being paid to the details of how such performance was accomplished.

Be that as it may, Table 14 shows the past few years of performance for the four portfolios examined in this essay.

Table 14: Recent Performance Data for the Four Portfolios				
Period	CPD ⁷⁴	DPS.UN ⁷⁵	BMO-CM "50" ⁷⁶	MAPF ⁷⁷
1-Year	5.08%	7.59%	6.26%	9.49%
2-Year	5.48%	8.60%	7.35%	31.78%
3-Year	1.20%	4.00%	2.90%	19.66%
4-Year	Х	N/A	2.26%	15.36%
5-Year	Х	2.10%	2.54%	13.41%

I will note that the long-term performance of my fund, MAPF, does not reflect its composition at any given time – for example, the 1-year performance for PerpetualDiscounts to August 31, 2010, was +5.22%, while FixedResets returned +7.09% (the BMO-CM index did better due to its weighting in Floaters, which returned +20.78% through the period). The reason for the discrepancy is trading: the fund seeks to "sell liquidity" in the market place, which may be considered to be seeking to capitalize on other participants' market impact costs. The fund's turnover has been about 400% in the twelve months to August 31^{78} ; I can't say I'm overly concerned by the Trading Expense Ratio that some consider to be an important metric!⁷⁹

Conclusion⁸⁰

After this analysis, readers might be forgiven for asking for a clear recommendation of one of the passive vehicles over another – to the undoubted surprise of some cynics, I will restrain my natural inclination to recommend my Malachite Aggressive Preferred Fund.

Sadly, a simple choice is not possible. Some investors, having particular portfolio objectives, will choose one; other investors with differing objectives will choose the other. The important thing to realize is that not all passive vehicles are identical; as noted earlier, the preferred share market in Canada is too heterogeneous to be treated with such simplicity and it is necessary to look inside each vehicle and determine its holdings.

⁷⁴ Data are taken from the "NAV" row of Claymore S&P/TSX CDN Preferred Share ETF Performance Month End, available on line at http://www.claymoreinvestments.ca/en/etf/fund/cpd/performance (accessed 2010-9-12). The 2-year data is not reported there; it has been calculated from the author's notes at http://www.prefblog.com/?p=7810

- ⁷⁸ Calculated from the author's monthly notes at http://www.prefblog.com/?cat=12
- 79 Although I have been criticized on these grounds. See http://www.prefblog.com/?p=9649
- ⁸⁰ This entire section is copy-pasted from last year's effort: Reduce, Re-Use and Recycle, that's me!

⁷⁵ Data are taken from the Sentry Select Prices and Performance Long Term page at http://sentry.ca/en/pricesperformance/longterm.html (accessed 2010-9-12). The 1-year data is not reported there; it has been calculated from the author's notes at http://www.prefblog.com/?cat=6

 $^{^{76}\,}$ Calculated by the author from figures provided by BMO-CM

⁷⁷ Calculated by the author