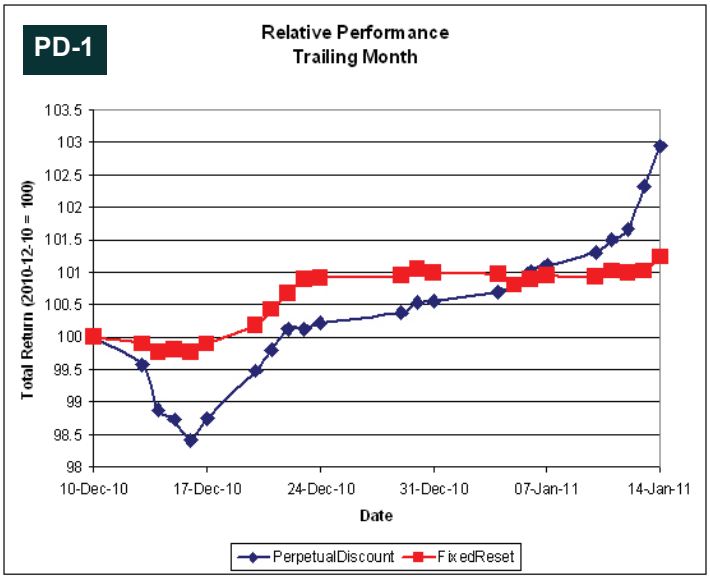
Recent Behaviour of PerpetualDiscounts

After a rocky start, PerpetualDiscounts strongly outperformed FixedResets since the last edition of this newsletter, as illustrated in Chart PD-1. In fact, the outperformance over the last two days has been quite startling, as shown in Table PD-1.

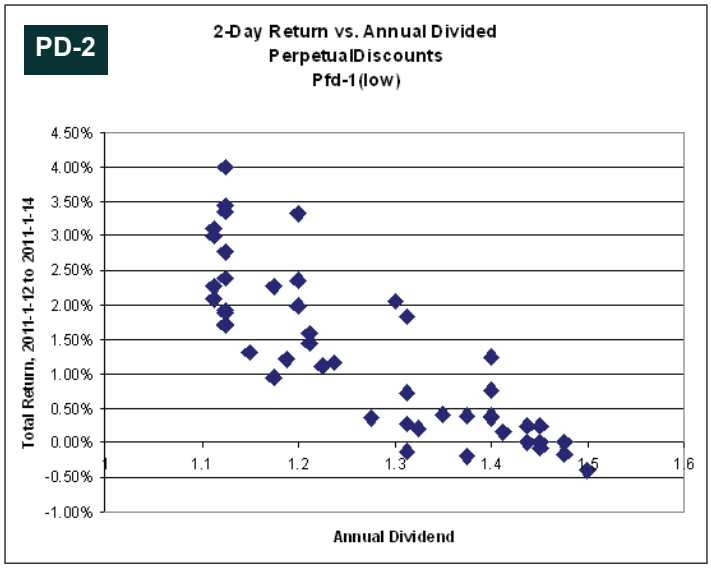
Table PD-1: HIMIPref™ Indices Total Return, 2011-1-12 to 2011-1-14

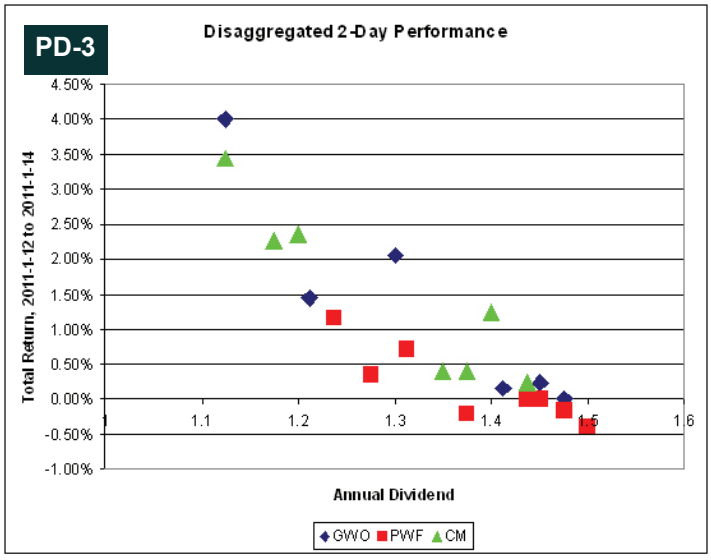
Index	Total Return
Ratchet	N/A
FixedFloater	-0.44%
Floater	+0.06%
OpRet	+0.07%
SplitShare	+0.08%
Interest Bearing	N/A
PerpetualPremium	+0.15%
PerpetualDiscount	+1.26%
FixedReset	+0.24%



Whenever something unusual happens with PerpetualDiscounts, our first thought is – or should be! – to check for a dependence on the annual dividend rate since, as has been previously discussed in this newsletter,[1] the market's assessment of the value of the issuer's right to call at par is very influential in determining relative returns within this class of preferreds.

Chart PD-2 indicates that there is a strong relationship, with the regression over all issues rated Pfd-1(low) by DBRS having an adjusted R-Square of 70%. We recognize that – particularly since we have previously noted a substantial degree of credit stratification in the PerpetualDiscount sector – the specific issuer can have an effect, and a sample disaggregation (using three issuers with a good range of annual dividends in their issues) shows (Chart PD-3) that a substantial portion of the 30% unexplained variance in Chart PD-2 might be attributable to the specific issuer.





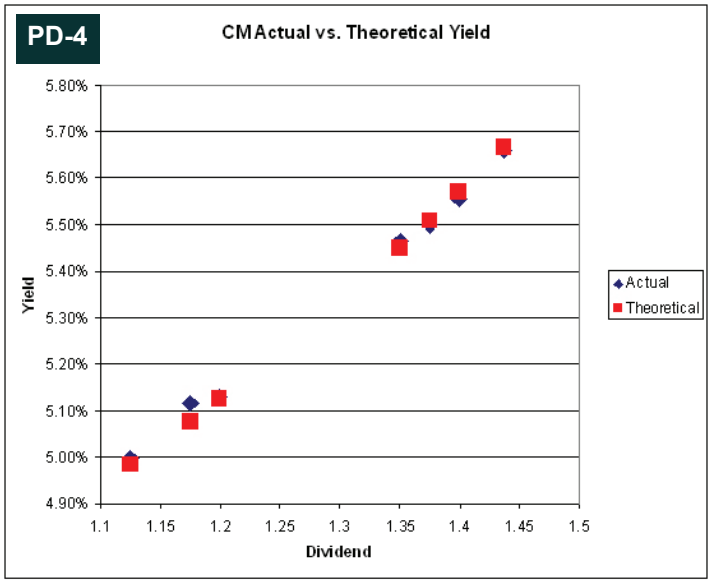
[1] Most notably the January, 2010, and October, 2010, editions

This suggests we look at the change in implied volatility over the two-day period using the Implied Volatility Calculator[2] – the results of this calculation are shown in Table PD-2.

After such a violent move in price, the fits of the data to the constraints imposed by the theory of Implied Volatility are surprisingly good, as shown in Chart PD-4.

Table PD-2: Change in Implied Volatility over Two-Day Period

	2011-1-12		2011-1-14	
Issuer	**Pure Yield**	**Implied Volatility**	**Pure Yield**	**Implied Volatility**
CM	4.65%	20%	3.20%	30%
GWO	4.70%	19%	3.20%	30%
PWF	5.15%	17%	4.90%	20%



It is clear that there has been a major increase in implied volatility over the two day period, at least with respect to CM and GWO. The third issuer checked, PWF, only experienced a slight increase in this value, but that is explainable, as will be seen below.

For the moment, however, we will look more carefully at the CM results; in Table PD-3, we calculate the relationship between the total return for the individual issues that is explained by the changes in theoretical variables described in Table PD-2, and the actual total return.

Table PD-3: Fitted vs. Actual Returns, 2011-1-12 to 2011-1-14

Ticker	Actual Bid 1/12	Actual Bid 1/14	Actual Return	Theoretical Bid 1/12	Theoretical Bid 1/14	Theoretical Return
CM.PR.D	25.33	25.39	+0.24%	25.30	25.37	+0.28%
CM.PR.E	24.89	25.20	+1.25%	25.00	25.13	+0.52%
CM.PR.G	24.60	24.70	+0.41%	24.53	24.77	+0.97%
CM.PR.H	22.86	23.40	+2.36%	22.80	23.41	+2.68%
CM.PR.I	22.46	22.97	+2.27%	22.46	23.14	+3.03%
CM.PR.J	21.76	22.51	+3.45%	21.76	22.57	+3.72%
CM.PR.P	24.90	25.00	+0.40%	24.77	24.96	+0.77%

The results of the calculations in Table PD-3 are shown in Chart PD-5. The Adjusted R-Square of the regression between actual and theoretical returns is about 86%, indicating that the theory of Implied Volatility is sufficient to explain 86% of the variance in actual returns – pretty good! There is at least one other way of looking at the problem, which will be examined later in this essay, but for now we can be content that we have a pricing theory that explains the relative prices on the two days in question pretty well.

Which leaves us with the question: why did the parameterization of the Implied Volatility model change so drastically over the two day period?

[2] Introduced in the January, 2010, edition and available on-line at http://www.prefblog.com/xls/PDTheoreticalPricing.xls

Marginalization of the Judiciary

As a result of the Panic of 2007, bank regulators, particularly those in Europe, have become obsessed with the idea of "burden sharing". As explained by the Basel Committee on Bank Supervision:[3] *During the financial crisis a number of distressed banks were rescued by the public sector injecting funds in the form of common equity and other forms of Tier 1 capital. While this had the effect of supporting depositors it also meant that Tier 2 capital instruments (mainly subordinated debt), and in some cases Tier 1 instruments, did not absorb losses incurred by certain large internationally-active banks that would have failed had the public sector not provided support.*

Essentially, what is happening is that the regulators and politicians have decided that the bankruptcy process does not work. In a bankruptcy, it might be expected that successive layers of bank capitalization would be wiped out in turn, starting with the equity holders and proceeding through the preferred shares, Innovative Tier 1 Capital, subordinated debt and – if losses were found to be sufficiently severe – senior bonds, trade creditors and depositors.

For good reasons or bad, the authorities did not wish to allow their banks to become bankrupt. When they were recapitalized with equity the principal of first lost protection became operative: the fundamental characteristic of fixed income is that it represents a fixed claim on the company's assets, and this claim remains good until the equity holders are wiped out. Infusions of equity meant that the more senior layers of capital were insulated, to a very large extent, from the consequences of bank losses.

In some cases, the over-riding desire of the authorities to avoid the consequences of bankruptcy has led to absurdities. Rumours abound[4] that the Irish government will abnegate its guarantee of the senior debt of Allied Irish Banks Plc and Bank of Ireland Plc, forcing the holders of this debt to take losses, despite the fact that holders of the more junior Innovative Tier 1 Capital are being offered thirty cents on the euro in a planned buyback.[5] It is fundamental to the proper functioning of capital markets that debt seniority has a well-defined effect when the issuer runs into serious trouble – but in this case, senior debt holders are faced with the prospect of taking losses without the junior notes being wiped out.

Bankruptcy law has evolved over at least two centuries in Europe,[6] with English Acts of Parliament tracing back to 1542;[7] these desperate attempts to circumvent it simply because it has become inconvenient does not speak well to the integrity of those entrusted with the preservation of our collective freedoms – but that's another story entirely! One way or another, world-wide authorities[8] – including those in Canada, as represented by Bank of Canada Governor Mark Carney[9] and Superintendent of Financial Institutions Julie Dickson[10] – have decided that it's must better that politicians and regulators have discretion to deal with commercial failure, rather than bothering with bankruptcy courts, lawyers and that whole pesky rule-of-law thing.

In order to ensure that investors in bank capital may be wiped out at a regulatory whim, without recourse to the judiciary, regulators are now demanding that:

The terms and conditions of all non-common Tier 1 and Tier 2 instruments issued by an internationally active bank must have a provision that requires such instruments, at the option of the relevant authority, to either be written off or converted into common equity upon the occurrence of the trigger event ... Any compensation paid to the instrument holders as a result of the write-off must be paid immediately in the form of common stock (or its equivalent in the case of non-joint stock companies) ...

4. The trigger event is the earlier of: (1) a decision that a write-off, without which the firm would become non-viable, is necessary, as determined by the relevant authority; and (2) the decision to make a public sector injection of capital, or equivalent support, without which the firm would have become non-viable, as determined by the relevant authority.

5. The issuance of any new shares as a result of the trigger event must occur prior to any public sector injection of capital so that the capital provided by the public sector is not diluted.

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3 Basel Committee on Banking Supervision, *Final elements of the reforms to raise the quality of regulatory capital issued by the Basel Committee*, 2011-1-13, available on-line at http://www.bis.org/press/p110113.htm (accessed 2011-1-15)

4 James G. Neuger and Dara Doyle, *Ireland Wins $113 Billion Bailout as EU Ministers Seek to Halt Debt Crisis*, Bloomberg, 2010-11-28 available on-line at http://www.bloomberg.com/news/2010-11-28/ireland-wins-113-billion-bailout-as-eu-ministers-seek-to-halt-debt-crisis.html (accessed 2011-1-15)

5 See Laura Noonan, *AIB seeks capital gain of €1.3bn in debt buyback*, Irish Independent, 2011-1-14, available on-line at http://www.independent.ie/business/irish/aib-seeks-capital-gain-of-euro13bn-in-debt-buyback-2495830.html (accessed 2011-1-15)

6 Jerome Sgard, *Do Legal Origins Matter? The Case of Bankruptcy Laws in Europe (1808–1914)*, January 2006, available on-line at http://www.helsinki.fi/iehc2006/papers2/Sgard.pdf (accessed 2011-1-15)

7 Louis Edward Levinthal, *The Early History of English Bankruptcy*, University of Pennsylvania Law Review and American Law Register Vol. 67, No. 1 (Jan., 1919), pp. 1-20, available on-line at http://www.jstor.org/pss/3314453 (accessed 2011-1-15)

8 European Commission, *Commission seeks views on possible EU framework to deal with future bank failures*, Press release, 2011-1-6, available on-line at http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/10&format=HTML&aged=0&language=EN&guiLanguage=en (accessed 2011-1-15). See also commentary at http://www.prefblog.com/?p=13698

9 Mark Carney, *The G-20's core agenda to reduce systemic risk*, speech 2010-6-10, available on-line at http://www.bis.org/review/r100615a.pdf (accessed 2011-1-15). See also commentary at http://www.prefblog.com/?p=11221

10 Julie Dickson, *Protecting banks is best done by market discipline*, Financial Times, April 9 2010, available on-line at http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/media/2010_04_10_e.pdf (accessed 2011-1-15). See also discussion at http://www.prefblog.com/?p=10437

Contingent Capital

Contingent Capital has been around, in some form or another, for quite some time[11], but moved to the heart of financial reform after it was highlighted in a report by HM Treasury:[12] *Debt-equity conversion: When banks are forced to raise new equity capital the initial benefits are shared with the existing debt holders as they have a senior claim over equity in the event of liquidation. One solution would be to make some of the debt (perhaps the subordinated debt tranche only) convertible into equity in the event of a systemic crisis and on the authority of the financial regulator. This would immediately inject capital into the bank and reduce the need to raise any new equity capital. The holders of the debt would also have more incentive to impose market discipline on the banks.*

The idea rapidly became popular, with two important elements of the plan being debated: the Trigger Event (at what time does the conversion appear?) and the Conversion Ratio (how much equity is received per dollar of debt?). I have reviewed this debate in an article titled *Prepping for Crises*,[13] in which I argued that conversion should be triggered well before the point of non-viability at a pre-set conversion rate; this idea was later given academic respectability by Robert McDonald of Northwestern University.[14]

The main reason why an early trigger should be favoured is due to its effects on financial stability. As S&P commented:[15] *One of the difficulties in practice in our view, however, is how to assess whether contingent capital securities would convert into capital (through conversion or a form of write-down) early enough to help a bank experiencing capital pressures. Some triggers may be lagging indicators of the bank's health.*

Regulators, however, have decided[16] that the *trigger event is the earlier of: (1) a decision that a write-off, without which the firm would become non-viable, is necessary, as determined by the relevant authority*; and *(2) the decision to make a public sector injection of capital, or equivalent support, without which the firm would have become non-viable, as determined by the relevant authority*. One may hope that a regulatory determination that a bank is non-viable is something of a lagging indicator!

All non-equity capital instruments issued by banks subsequent to 2013-1-13 must, according to the Basel Committee, include provisions forcing the write-off or conversion of the instrument into equity once the trigger event has occurred. It should be noted that earlier conversions are not prohibited. I would be much more comfortable buying an instrument that converted to equity while the equity was still worth something.

But the current topic of interest for Canadian preferred share investors is the Transitional Arrangements.

Transitional Arrangements: Current Issues of Preferred Shares

Current issues of Canadian preferred shares do not have the automatic conversion clause required by the new regulations, and – unless OSFI grandfathers them – will therefore cease to be allowable as Tier 1 Capital at some point.

The BCBS announcement of 2011-1-13 states *Instruments issued on or after 1 January 2013 must meet the criteria set out above to be included in regulatory capital. Instruments issued prior to 1 January 2013 that do not meet the criteria set out above, but that meet all of the entry criteria for Additional Tier 1 or Tier 2 capital set out in* Basel III: A global regulatory framework for more resilient banks and banking systems, *will be considered as an "instrument that no longer qualifies as Additional Tier 1 or Tier 2" and will be phased out from 1 January 2013 according to paragraph 94(g).*

The referenced document's[17] paragraph 94(g) states, in part: *Capital instruments that no longer qualify as non-common equity Tier 1 capital or Tier 2 capital will be phased out beginning 1 January 2013. Fixing the base at the nominal amount of such instruments outstanding on 1 January 2013, their recognition will be capped at 90% from 1 January 2013, with the cap reducing by 10 percentage points in each subsequent year. This cap will be applied to Additional Tier 1 and Tier 2 separately and refers to the total amount of instruments outstanding that no longer meet the relevant entry criteria. To the extent an instrument is redeemed, or its recognition in capital is amortised, after 1 January 2013, the nominal amount serving as the base is not reduced.*

As a result, some market participants have reasoned:

i) currently extant preferred shares will no longer qualify as Tier 1 Capital past a certain, and declining, limit commencing 2013-1-1

ii) If they cannot be claimed by the issuer as Tier 1 Capital, the issuer will then regard them as being simply an expensive form of senior financing

iii) Therefore, the issues will be redeemed at par at some point between 2013-1-13 and 2022-1-13.

However, this reasoning is dependent upon the idea that OSFI applies the new global standard to the Canadian financial system without revision.

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[11] For example, RBC did a deal with Swiss Re that was termed CLOCS (Committed Long Term Capital Solutions). See Christopher L. Culp, *The ART of Risk Management: Alternative Risk Transfer, Capital Structure, and the Convergence of Insurance and Capital Markets*, 2002, ISBN 0-471-12495-8, selections available on-line at http://books.google.ca/books?id=KPB5sbnESu0C&printsec=frontcover&source=gbs_navlinks_s#v=onepage&q&f=false (accessed 2011-1-15). See also discussion at http://www.prefblog.com/?p=8522. This was structured as an insurance contract; the equity was not pre-funded.

[12] HM Treasury, *Reforming financial markets*, July 2009, available on-line at http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/d/reforming_financial_markets080709.pdf (accessed 2011-1-15). See also discussion at http://www.prefblog.com/?p=8041

[13] James Hymas, *Prepping for Crises*, Advisors Edge Report 01/2010, available on-line at http://www.himivest.com/media/advisor_1001.pdf. See also footnoted draft at http://www.himivest.com/media/advisorDraft_1001.pdf

[14] Robert L. McDonald, *Contingent Capital with a Dual Price Trigger*, 2010-2-15, available on-line at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1553430 (accessed 2011-1-15). See also discussion at http://www.prefblog.com/?p=11096

[15] Standard & Poor's, no longer freely available on-line, but quoted at http://www.prefblog.com/?p=10489

[16] BCBS 2011-1-13, supra

[17] Basel Committee on Banking Supervision, *Basel III: A global regulatory framework for more resilient banks and banking systems*, December 2010, available on-line at http://www.bis.org/publ/bcbs189.pdf (accessed 2011-1-15)

OSFI's Implementation of the New Standards

Mark White, OSFI's Assistant Superintendent, stated in a recent speech:[18] *On December 16, 2010 OSFI responded to the release of the Basel III text to signal that work is continuing on the transition for non-qualifying capital instruments – and that further guidance will be issued as implementation progresses. We realize that many are anxiously awaiting guidance on how non-qualifying capital will be phased out in Canada. However, it could do a disservice if OSFI provides premature guidance before the minimum international requirements are set. Suffice it to say that OSFI currently expects, at a minimum, to follow the minimum transition requirements with respect to phasing-out disqualified capital. Our goals will be to maximize the regulatory capital in the system and, where practicable, to give effect to the legitimate expectations of the issuers and investors.*

In his letter dated December 16,[19] Mark White advised: *Once the Basel III rules text governing [Non-Viability Contingent Capital] requirements has been finalized by the [Basel Committee on Banking Supervision], OSFI intends to issue guidance clarifying the phase-out of all non-qualifying instruments by [Deposit Taking Institutions], including OSFI's expectations with respect to rights of redemption under regulatory event [footnote] clauses.*

Footnote: In general, a regulatory event may be defined as receipt by the bank of a notice or advice by the Superintendent, or the determination by the bank, after consultation with the Superintendent, that an instrument no longer qualifies as eligible regulatory capital under the capital guidelines issued by OSFI. The definition of regulatory event is governed by the terms of the capital instrument and interested persons should refer to the relevant issuance documents.

One may parse these statements in a number of ways. On the one hand, it is fairly clear that they do intend to phase out the non-qualifying capital in accordance with the Basel Committee's statement; on the other hand, it is not entirely clear that the idea of grandfathering some of the suddenly non-qualifying investments has been rejected. The last sentence quoted of Mr. White's speech was, after all: *Our goals will be to maximize the regulatory capital in the system and, where practicable, to give effect to the legitimate expectations of the issuers and investors.*

It is the easiest thing in the world to argue that the legitimate expectations of issuers and investors with respect to a Straight Perpetual are that, unless called for economic reasons, it should exist in perpetuity. It should also be clear that in the event of near-misses with respect to non-viability, it is also fairly easy to put together a coercive exchange offer, as Citigroup did with some of its preferreds.[20] In addition to coercive exchange offers, coercive buying at a discount is also possible: in Europe, over one-hundred issues have been repurchased or exchanged in this manner, with the total gain to the issuers being in excess of €11-billion.[21] Finally, one would hope that the legitimate expectations of investors include the rule of law and a public bankruptcy process, rather than the seizure of a firm by administrative fiat – but I'm afraid that argument has already been disregarded.

I consider it imperative for the integrity of the capital markets that extant preferred share issues be grandfathered. Ever since the beginning of the Panic of 2007, we have been told that the problems were due to planning horizons that were too short term; 'think long-term' the regulators exhort, 'and all our problems will be over'.

I submit that it is ludicrous to expect investors and bank employees to take a long-term view if regulatory change means that perpetual investments and financing should suddenly be called every few years. At the very least, the regulators should take a leaf from the book of the Canadian government: when it decided in 1976 to call its 3% Perpetual Bonds issued forty years prior, the decision took effect in 1996 after a twenty-year warning period.[22] I suggest that this could be applied to extant non-qualifying, non-grandfathered Tier 1 and Tier 2 capital issues: a certain date of maturity could be specified, with this date being sufficiently far in the future that the broad investment characteristics of the instruments are minimally changed – e.g., Straight Perpetuals could be stated to have a maturity date 30–40 years hence, staggered to ensure that the prospect of short-term tumult in the market is eliminated, not merely delayed.

According to OSFI,[23] banks had outstanding issues of approximately $21.8-billion in "Non-cumulative perpetual preferred shares" and $16.0-billion in "Innovative instruments included in tier 1 capital" as of 2010Q3. These are sufficiently large numbers that unnecessary disruption should be avoided; and should give OSFI reason to make its decision sooner, rather than later.

An Alternate Pricing Model of PerpetualDiscounts

Earlier in this essay, we were able to fit the prices of selected groups of Straight Perpetuals to a pricing model based on the value of the call to the issuer – the Implied Volatility model.

However, Implied Volatility depends on the concept that the probability that the call will be exercised is a strictly economic computation: if the probability distribution of future interest rates can be modeled as a normal distribution, with meaningful values of mean and standard deviation, then this normal distribution can be used to compute a fair value of the option and, hence, of the instrument with the embedded call.

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18 Mark White, *Basel III: Balancing of Risk and Regulation*, Speech, 2011-1-11, available on-line at http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/speeches/RBC20110111_e.pdf (accessed 2011-1-15)

19 OSFI, *Treatment of non-qualifying capital instruments under Basel III*, 2010-12-16, available on-line at http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/guidelines/capital/advisories/nqci_e.pdf (accessed 2011-1-15)

20 Citigroup, *Offer To Exchange*, Prospectus, 2009-7-17, available on-line at http://www.citigroup.com/citi/fin/data/prosp090717.pdf?ieNocache=828 (accessed 2011-1-15) and Citigroup, *Citi Announces Public Share Exchange Launch, Finalizes Definitive Agreement with U.S. Government*, press release, 2009-6-10, available on-line at http://www.citigroup.com/citi/press/2009/090610a.htm (accessed 2011-1-15).

21 Ben Katz, Barclays Capital, presentation at the London Financial Regulation Conference, 2009-7-2, *How to revitalize the Financial System – Raising additional Capital*, available on-line at http://fmg.lse.ac.uk/upload_file/1268_Ben%20Katz.pdf (accessed 2009-11-6). This presentation does not appear to be currently accessible.

22 Serge Joyal, Commons Debate May 2, 1975, available online at http://www.sen.parl.gc.ca/sjoyal/e/debates/bonds_government_perpetual.html (accessed 2009-4-9)

23 See http://www.osfi-bsif.gc.ca/osfi/index_e.aspx?ArticleID=554 with settings "Domestic Banks", "Total All Banks", "Quarterly", "BCAR Capital Components", "Q3 – 2010".

However, as discussed, the reason for the recent run-up in PerpetualDiscount prices appears to be a conviction that all these issues will be redeemed in the relatively near future for non-economic reasons. This is a different rationale and hence a different pricing model may be required.

Table PD-4 shows the yields on CM issues that will be realized from 2011-1-12 to 2021-1-15 under two different scenarios:

- The price remains constant
- The price becomes $25 (i.e., the issue is redeemed on 2021-1-15)

Table PD-4: CM Yields on 2011-1-12 with Two Scenarios for Price in Ten Years

Ticker	Annual Dividend	Actual Bid 2011-1-12	Yield with constant bid	Yield with $25.00 end-price	N(d2) from Implied Volatility Calculation
CM.PR.D	1.4375	25.33	5.63%	5.53%	56.7%
CM.PR.E	1.40	24.89	5.58%	5.62%	53.2%
CM.PR.G	1.35	24.60	5.45%	5.57%	48.7%
CM.PR.H	1.20	22.86	5.21%	5.90%	36.9%
CM.PR.I	1.175	22.46	5.19%	6.02%	35.2%
CM.PR.J	1.125	21.76	5.13%	6.21%	32.9%
CM.PR.P	1.375	24.90	5.48%	5.51%	50.9%

All yield calculations were performed using the YTC Calculator with values of

Settlement Date: 2011-1-12 *Cycle: 1* *Include First Dividend: No*
Call Date: 2021-1-15 *Pay Date: 31* *First Dividend Value: (blank)*

Included in Tables PD-4 and PD-5 is a column reporting N(d2) from the Black-Scholes equation used to calculate the Implied Volatilities reported in Table PD-2. This value can be thought of as the risk-adjusted probability of option exercise at the end of the three-year term assumed when performing that calculation.[24]

Note that the yields calculated in the tables are quarterly-compounded, and the calculation have been performed using a standard preferred share yield calculator[25] (a bond calculator will not work, since a bond calculator will normally apply accrued interest to the initial price and will report yields with semi-annual compounding).

As may be seen by inspection of the tables, the events of the last two days indicate that the market has already arbitraged away most of the potential gains that will arise if redemption can be taken as a certainty. While a yield pick-up of 70bp (from the lowest-yielding CM issue to the highest) was possible on January 12, this value has declined to only 33bp on January 14; while this is still a significant pick-up for those prepared to take the risk that the issues may not, in fact, be called, the so-called easy gains have disappeared and further incremental returns will depend on more precise speculation – the actual date on which the presumed certain redemption will be presumed to happen. Clearly, if one believes that there will be a mass redemption of all issues at the end of next week, the lower coupon issues are still highly favoured – but this preference declines as the period until this presumed mass redemption increases.

Table PD-5: CM Yields on 2011-1-14 with Two Scenarios for Price in Ten Years

Ticker	Annual Dividend	Actual Bid 2011-1-14	Yield with constant bid	Yield with $25.00 end-price	N(d2) from Implied Volatility Calculation
CM.PR.D	1.4375	25.39	5.62%	5.51%	66.6%
CM.PR.E	1.40	25.20	5.52%	5.46%	64.4%
CM.PR.G	1.35	24.70	5.43%	5.52%	61.6%
CM.PR.H	1.20	23.40	5.09%	5.61%	53.8%
CM.PR.I	1.175	22.97	5.08%	5.74%	52.5%
CM.PR.J	1.125	22.51	4.97%	5.79%	50.2%
CM.PR.P	1.375	25.00	5.46%	5.46%	63.0%

All yield calculations were performed using the YTC Calculator with values of

Settlement Date: 2011-1-12 *Cycle: 1* *Include First Dividend: No*
Call Date: 2021-1-15 *Pay Date: 31* *First Dividend Value: (blank)*

[24] Lars Tyge Nielsen, *Understanding N(d1) and N(d2): Risk-Adjusted Probabilities in the Black-Scholes Model*, available on-line at http://www.ltnielsen.com/wp-content/uploads/Understanding.pdf (accessed 2011-1-15)

[25] Available on-line at http://www.telusplanet.net/public/kbetty/ytc.xls and discussed at http://www.himivest.com/media/moneysaver_0607.pdf

In this regard, it should be noted that the new BCBS regulations only state that the total allowable amount of non-equity capital issues will be reduced; it does not apply the progressive reduction in this allowance to every issue. Hence, one may assume that to the extent it is effective, the banks will endeavor to redeem their most expensive issues first. One may expect, therefore, that CM.PR.D, with an annual dividend of $1.4375 will be redeemed prior to the redemption of CM.PR.J, with its dividend of $1.125.

Just how long prior is a question for the speculators to worry about!

Non-Regulated Issuers

Humans love patterns. This is a basic psychological fact: when we see something happen, we desperately want to know what caused it.[26] This has certainly helped us evolve from apes, but can also be taken too far: I always feel sorry for television pundits who are required, each and every day, to come up with some reason, however tenuous, explaining why the market did what it did, whether it was political developments, economic data or, my favourite, "profit taking". If they were ever to be honest and say something like 'The market went down today because it felt like it', ratings would plummet.

But the fact that market movements can be a matter of random chance – or the result of a complex confluence of influences that would take a lifetime to tease apart – should not dissuade us from trying to find first causes; it should only encourage us to examine our hypotheses critically.

As reported in Table PD-2, the implied volatility of PWF issues barely moved over the two days in question; and those who have made a fetish of avoiding financial issues when buying PerpetualDiscounts will be chagrined to learn that they have participated in the rally only to a very small extent, if at all.

This fact gives considerable support to the hypothesis that the rally is driven by consideration of regulatory implications rather than economic considerations. It is also of interest to see that the PWF issues did not participate in the rally as much as their subsidiary, GWO; and that the ultimate parent of the group, POW, saw its issues gain only fractionally. This would imply that the markets feel that the potential for regulation of insurers as a consolidated group, as urged by the Treasury Department,[27] is remote – much less likely that the presumed mass redemption.

Investment Conclusions

I think it's still too early to risk money on a hypothesis that revision of regulation will require redemptions for non-economic issues – but that is largely a matter of taste. I have found, over the years, that a workmanlike concentration on the comparisons between issues and the reliance upon provable facts has served me very well.

The great divide in investment styles is between those who seek to exploit momentum and those who rely on reversion.[28] The current level of Implied Volatility in the PerpetualDiscount sector is unreasonably high, far too high to be supported by economic arguments, and thus far I have taken the view that extant instruments are likely to be grandfathered and relative prices will revert to a more sustainable level of Implied Volatility. To that end, accounts under my management have been selectively selling the lower coupon issues that have done so well in the past two days to buy higher coupon issues. I have more faith in my ability to understand fundamental economic relationships than my ability to outguess speculators regarding what regulators will do next!

It is true that, should mass redemption occur, those who read the entrails correctly and invested accordingly will outperform by a significant margin – and even now, as shown in Table PD-4, there's still significant room for excess returns if one takes this view and is proven correct.

However, another thing I have learnt over the years is that the "top quartile" of investment managers in any given year is comprised largely of those who made significant market calls and were proven correct; while the fourth quartile is comprised of those who were not so lucky in their guesses in that particular year. Particularly when managing institutional bond portfolios, I found that being consistently in each year's second quartile – by however small a margin – was quite good enough to achieve top-quartile results over a longer period.

And isn't that what we generally claim to want?

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[26] My girlfriend says she's isn't obsessed with cause and effect, but I think she's just saying that because she's PMSing.

[27] US Treasury, Principles for Reforming the U.S. and International Regulatory Capital Framework for Banking Firms, 2009-9-3, available on-line at http://www.treasury.gov/press-center/press-releases/Documents/capital-statement_090309.pdf (accessed 2011-1-15)

[28] Don't tell me you emphasize either momentum or reversion based on the individual facts of each case, based on your uncanny ability to penetrate to the heart of the matter quickly, decisively and accurately. Not unless you can prove it.