Hymas | Investment Management Inc.

Floating Rate Preferreds
Theory & Practice

April 30, 2009
Toronto

This seminar is being filmed for later distribution

Preferred Shares

- Fixed rate & Schedule of income
– Holders CAN’T put company into bankruptcy
– Little or no chance for Capital Gain from issue price
– Asymmetric risk / reward profile
– No dilution of claims (quality may suffer)
– Income is received as dividends
– Have First-Loss Protection

Floating Rate Preferreds

- Long-Term Income is dependent upon Canada Prime
  - Fixed Reset issues are not strictly considered Floating Rate (controversial!)
- All are perpetuals with attendant credit risk
  - One SplitShare is sometimes an exception: PPL.PR.A
- May be redeemed at issuer's option
- Most are non-financial, cumulative
- None have been issued for quite some time
- Class is dominated by BCE issues

Three Classes of “Floating Rate”

- RatchetRate
- FixedFloater
- Floater

Ratchet Rate

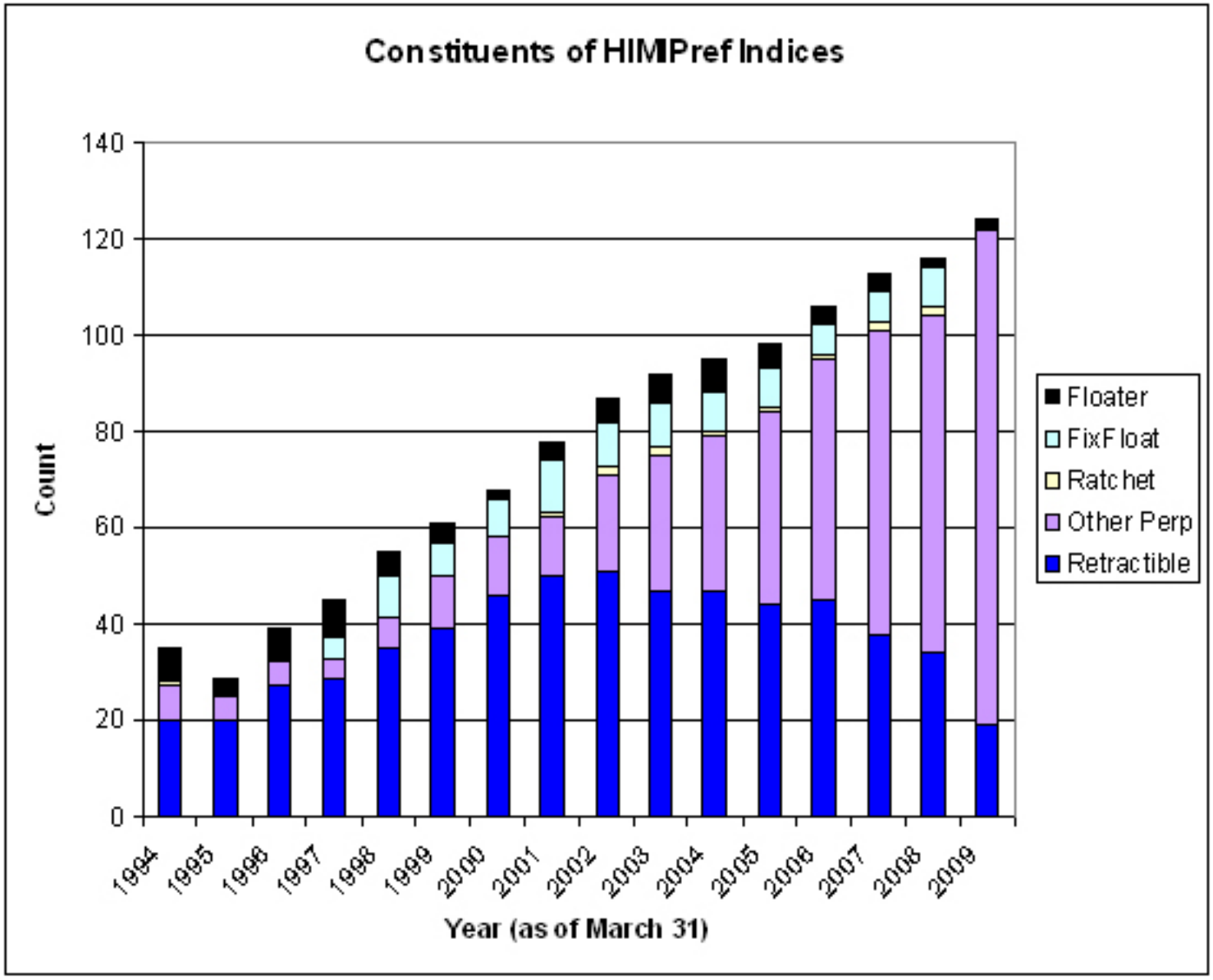
- Pay a varying percentage of Prime
  - Income is Prime*Percentage*Par
- Percentage can vary between 50% & 100%
- Changes according to Trading Price:
  - $25.50+: Decrease by 4%
  - …
  - $24.50+: Increase by 4%
- Exchangeable to Fixed-Floaters every 5 Years
- Redeemable any time at 25.50

Fixed Floaters

- Exchange Date every five years
- On Exchange Date:
  - Dividend Rate changed to percentage of five-year Canadas
    - Standard minimum is 80%; 100-110% is usual
  - Redeemable at par
  - Exchangeable to Ratchet Rate

Floaters

- Pay fixed percentage of Canadian Prime
- All are currently redeemable at par, but trading well below call price

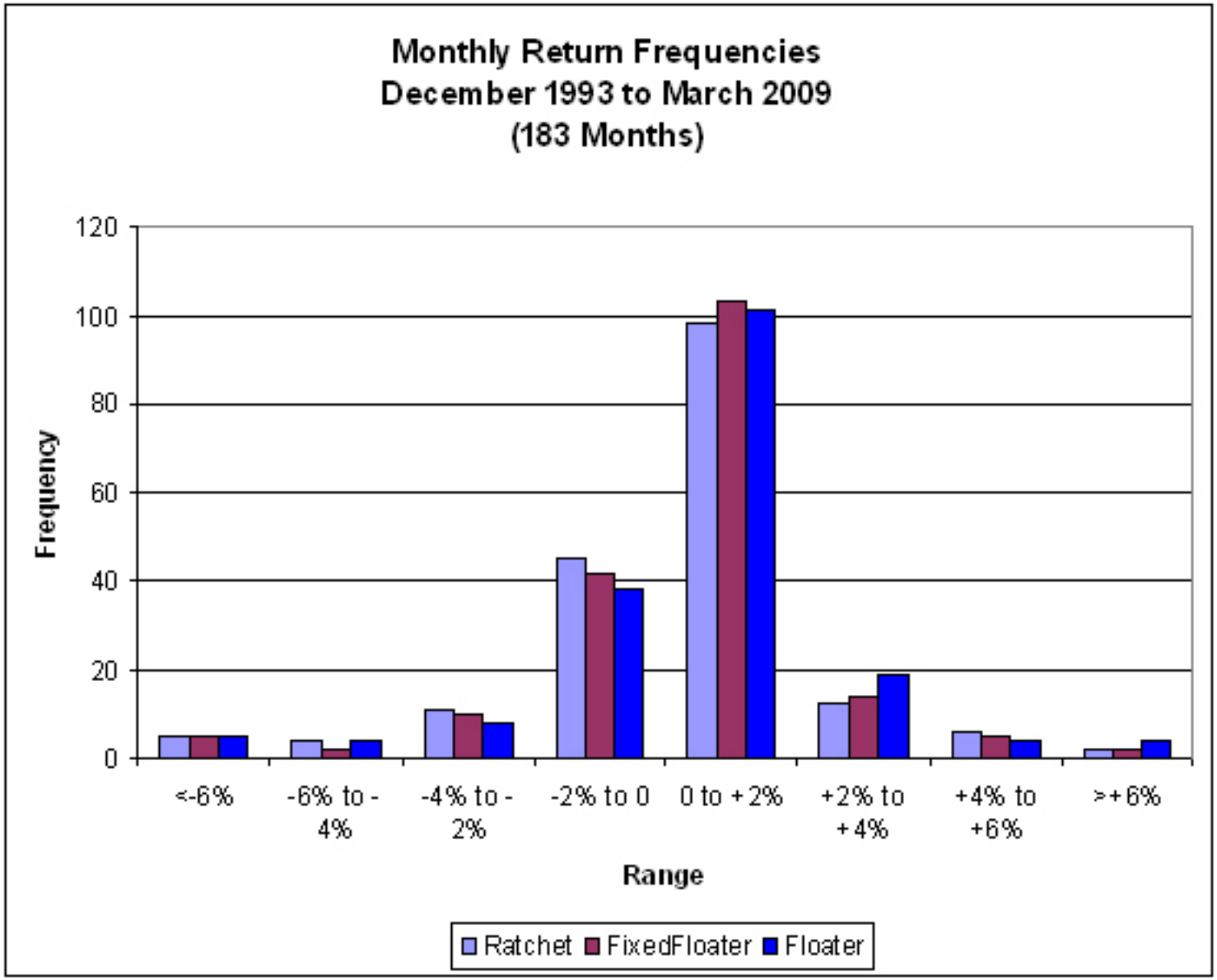

Constituents of HIMPref Indices
Count
140
120
100
80
60
40
20
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year (as of March 31)
Floater
FixFloat
Ratchet
Other Perp
Retractible

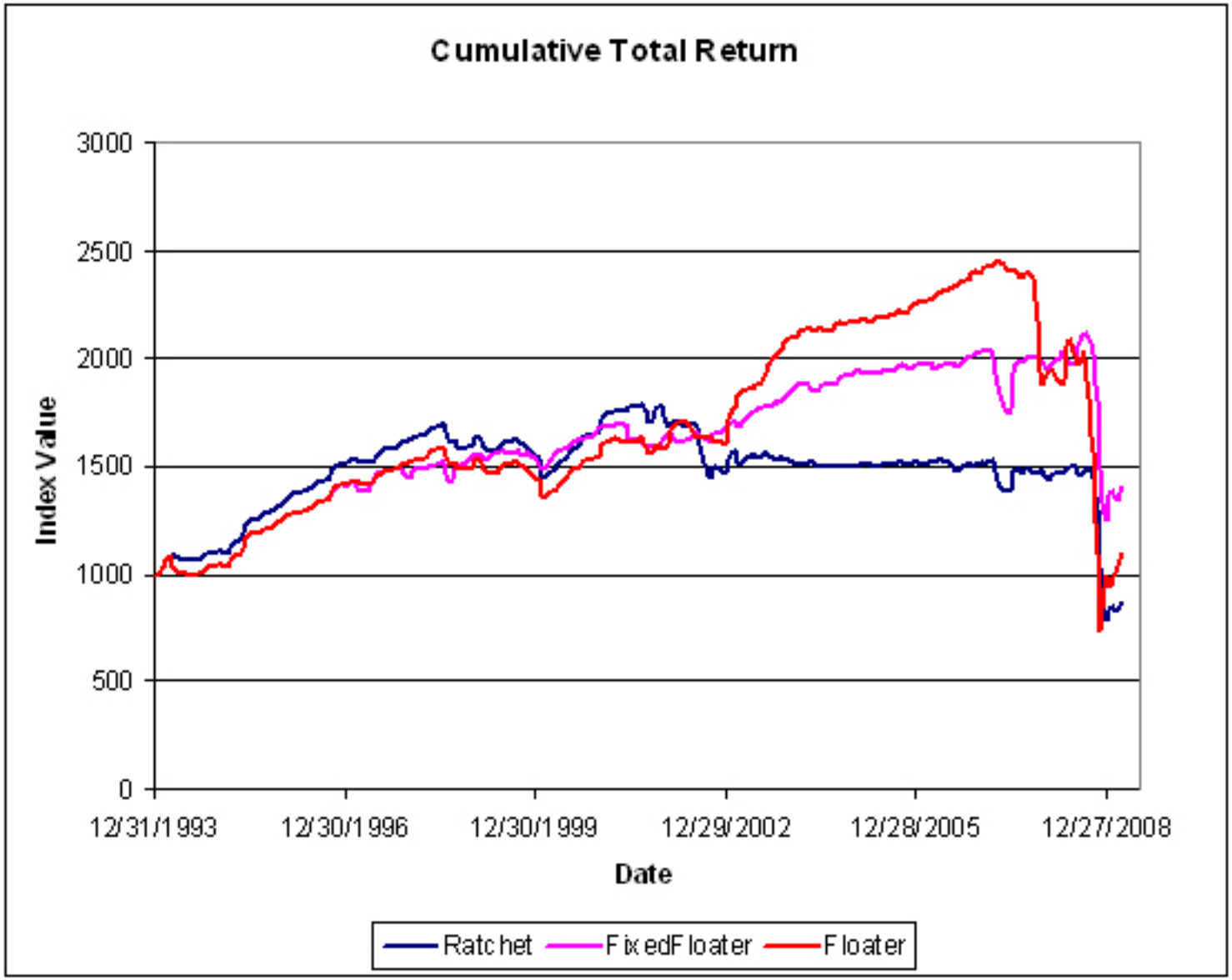
Issuance Expectations

- Not much demand for Floating Rate when Prime is Low
- Banks cannot issue Ratchets as part of Tier 1 Capital
- But … long term interest rate swaps are easy to arrange
  - Issuers can, potentially, issue floaters and swap payments to fixed rate and vice versa

Return Expectations

Note! There is a very small number of issuers in this sector; most of which have experienced deteriorating credit. Index Returns must be interpreted with caution, as they reflect a great deal more company-specific risk than is desirable for an index.


Monthly Return Frequencies
December 1993 to March 2009
(183 Months)
Frequency
120
100
80
60
40
20
0
<-6%
-6% to -4%
-4% to -2%
-2% to 0
0 to +2%
+2% to +4%
+4% to +6%
>+6%
Range
Ratchet
FixedFloater
Floater


Cumulative Total Return
3000
2500
2000
1500
1000
500
0
Index Value
12/31/1993
12/30/1996
12/30/1999
12/29/2002
12/28/2005
12/27/2008
Date
Ratchet
FixedFloater
Floater

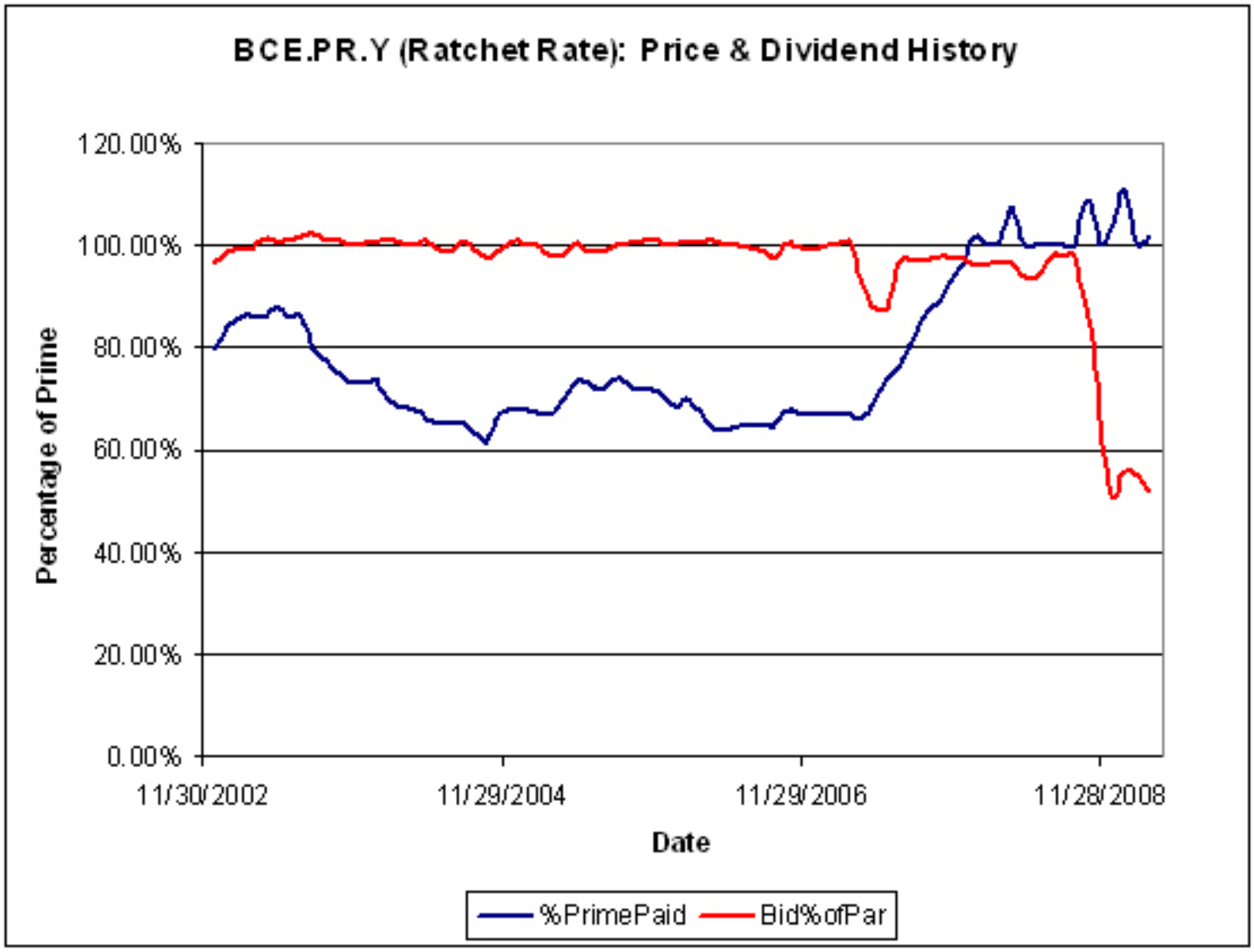
Five Months Lost >6%

- Total Return, 4Q08
  - Ratchet, -46.0% (BCE)
  - FixFloat, -39.4% (BCE)
  - Floater, -42.1% (BAM)
- In addition to credit quality concerns, there was the possibility of an extended period of low prime

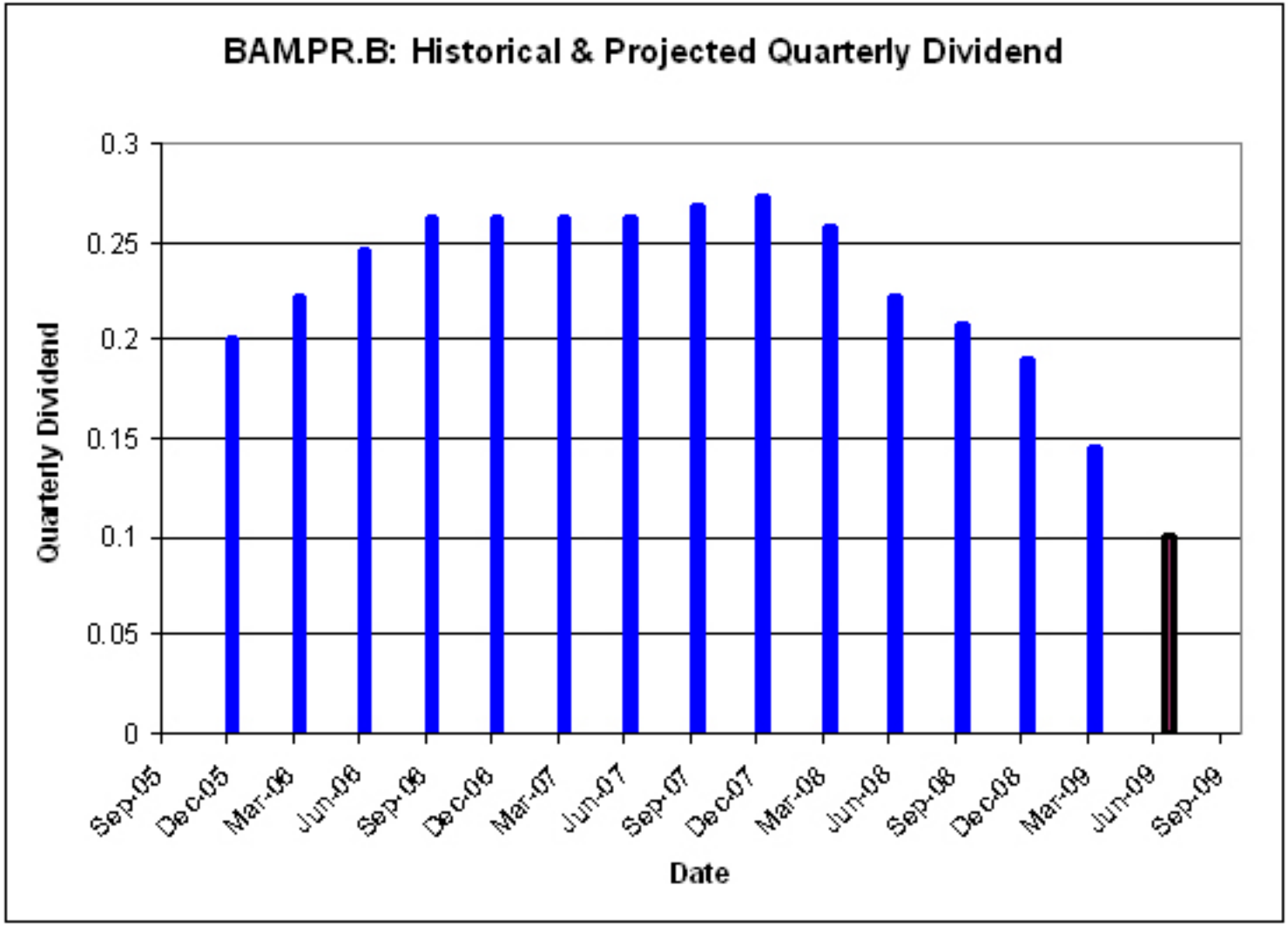
Floating Rate Preferreds Are Not Money Market Instruments!

- Dividends are (or will be) based on short-term rates
- Credit Risk is Perpetual
- Recent defaults of Quebecor World & Nortel

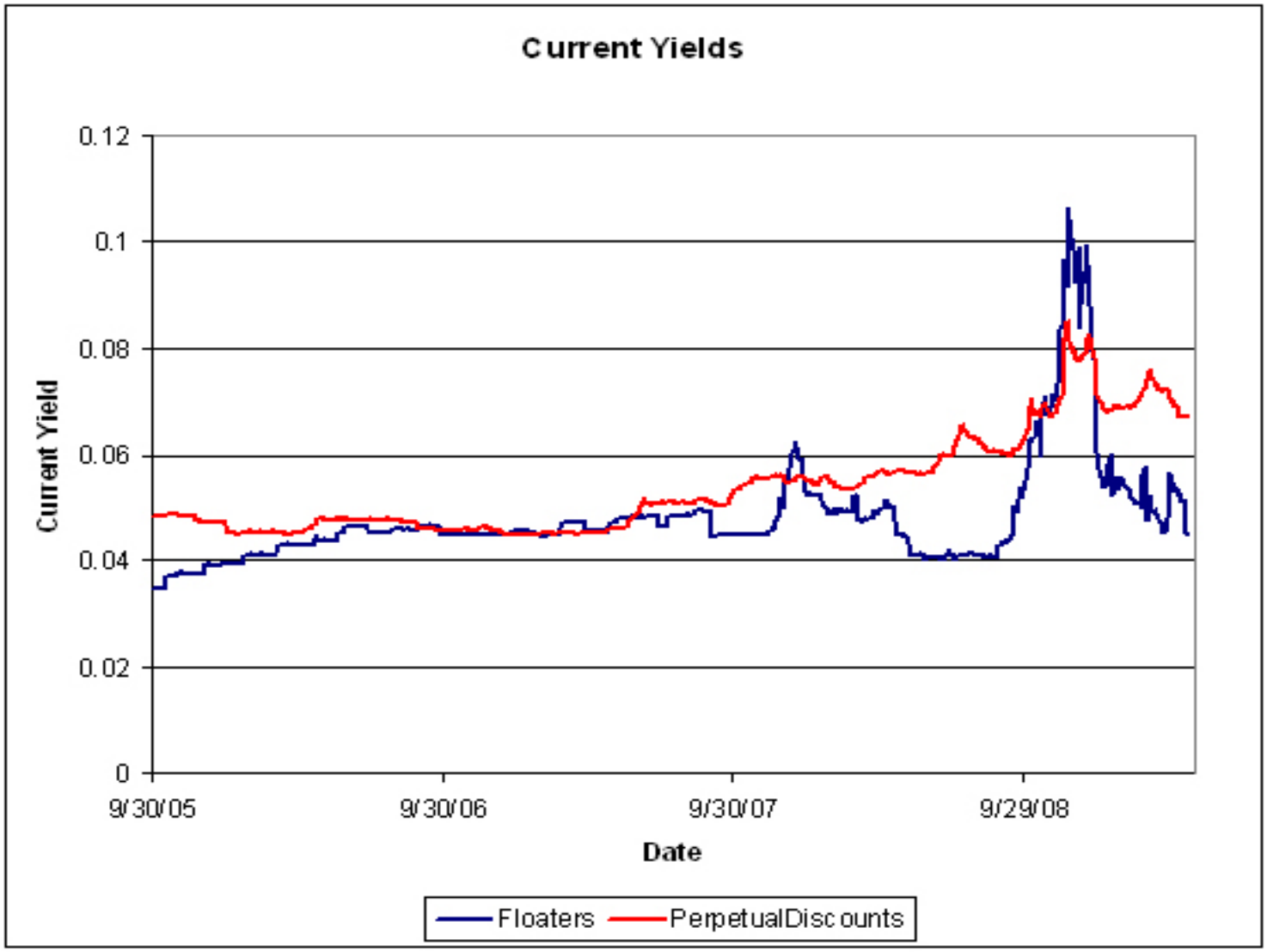
Ratchets Hit a Limit



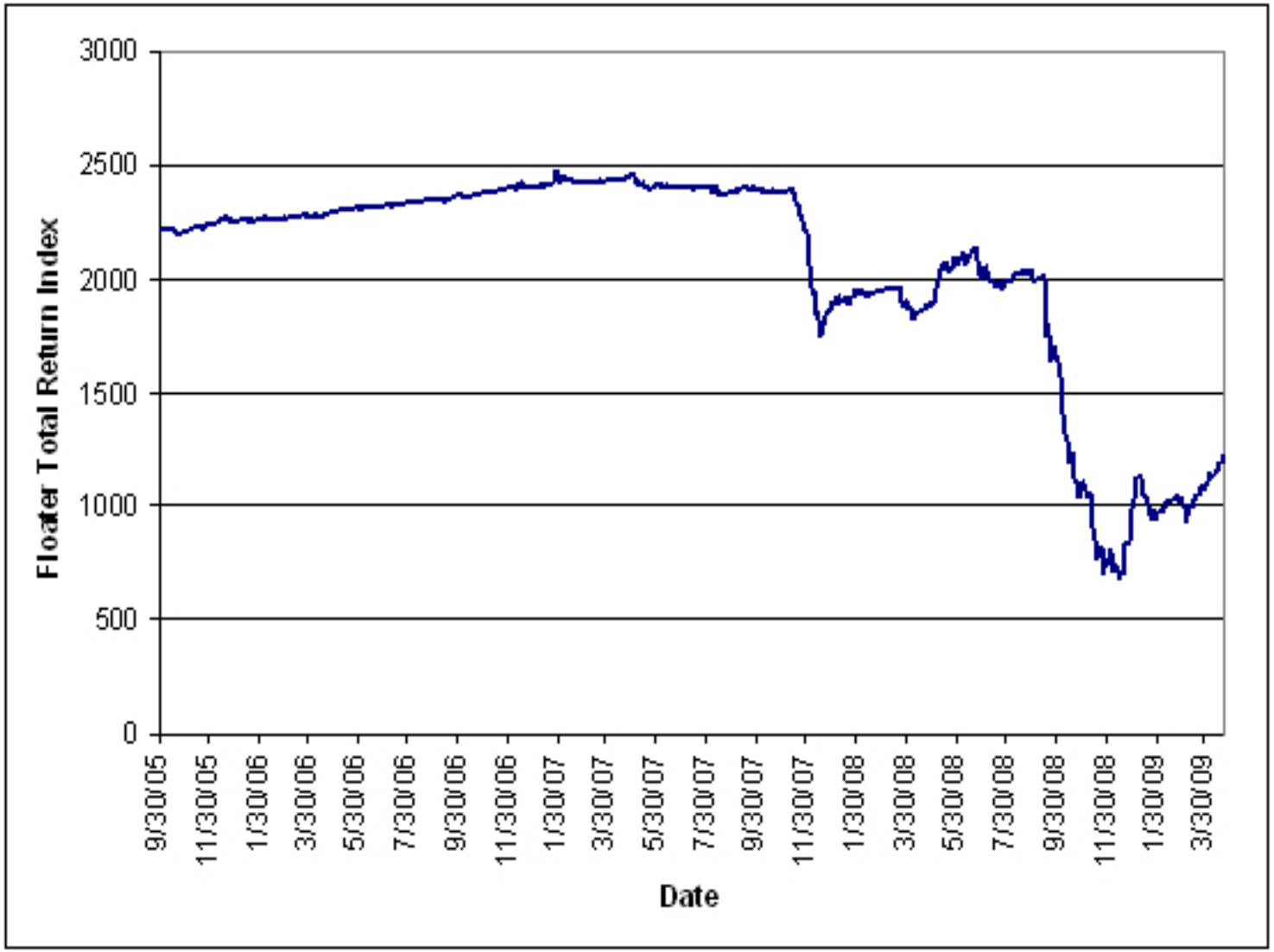
Dividends on Floaters Fall



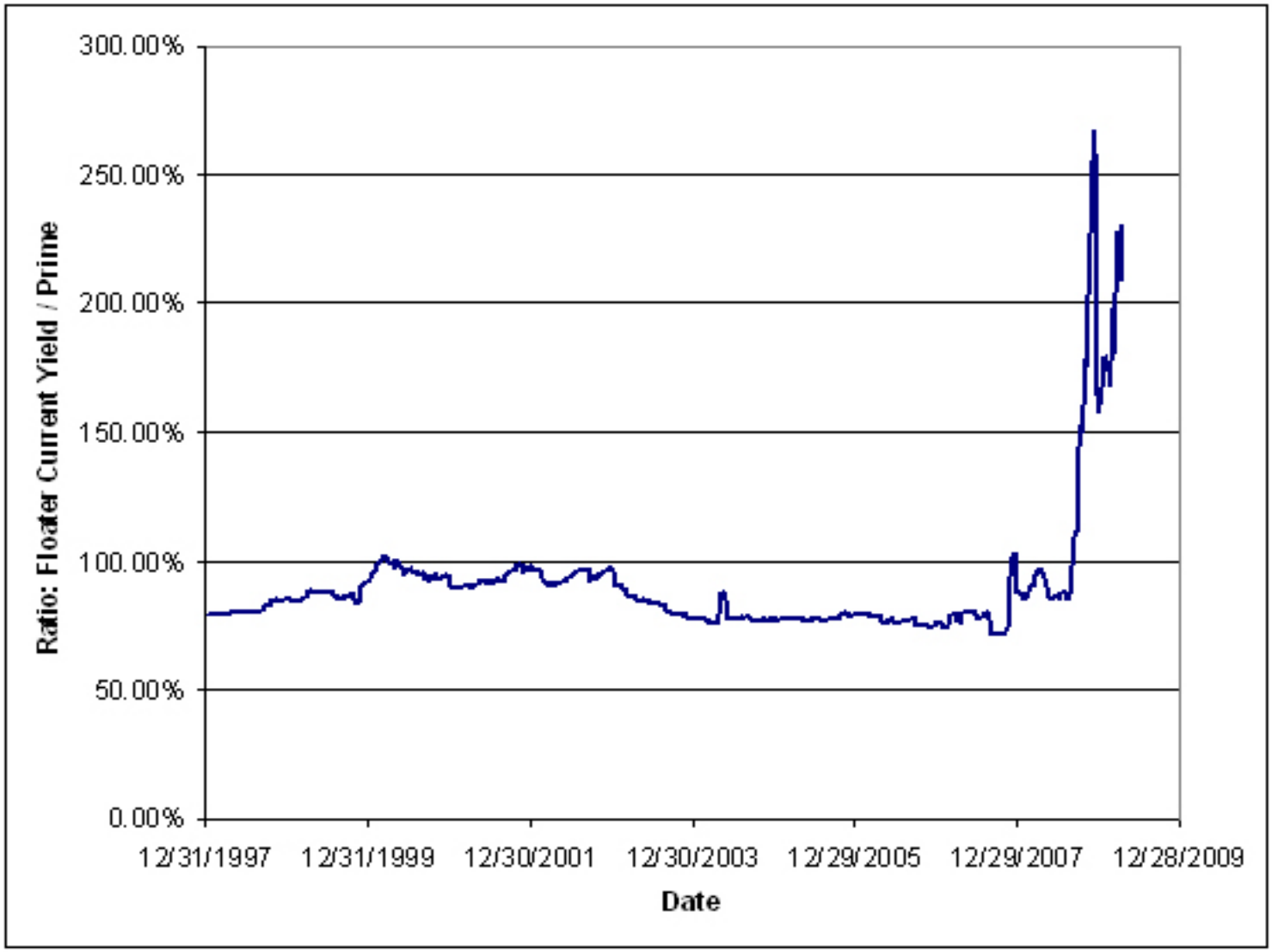
… As Yields Rise



“Double – Whammy”



Floaters Now Yield Far More Than Prime



Credit Quality

A Quick Overview

Balance Sheet Factors

- Debt to Equity Ratio
  - Is debt “with recourse” or “non-recourse”?
  - Term Structure of Debt
    - Short-Term?
    - “Lumpy”?
- Quality of Assets
  - Goodwill & intangibles?
  - Resale value in bad times (liquidation value)?
- Working Capital
- Current Ratio
- Acid Test

Off-Balance-Sheet Factors

- Unfunded pensions?
  - BCE $2.1-billion vs. $14.5-billion common equity
- Guarantees & Derivatives
  - e.g. Credit Default Swaps & options
  - More usually, companies can guarantee debt of unconsolidated subsidiaries
  - May have exposure unrelated to current value
    - PWF: $97-million exposure vs. fair value +$3-million

Income Statement Factors

- Stability of earnings?
- Coverage of required payments?

Cash Flow Effects

- Non-Cash contribution from subsidiaries?
- Cash Flow from operations?
- Required future investments?

Credit Ratings

- Credit Rating Agencies have become the scapegoat for the current crisis
- Track record is pretty good
- Agencies have access to material non-public information
  - Regulation FD
  - National Policy 51-201

Don’t Give Up Credit for Free!

- Sounds obvious?
- January, 2007: Bell Preferred (Pfd-2) shareholders vote to exchange to BCE Preferreds (Pfd-2(low)), for a pittance
- Usually better to be close to the money, unless holding company is diversified

Analysis of Floaters

Analytical Problem

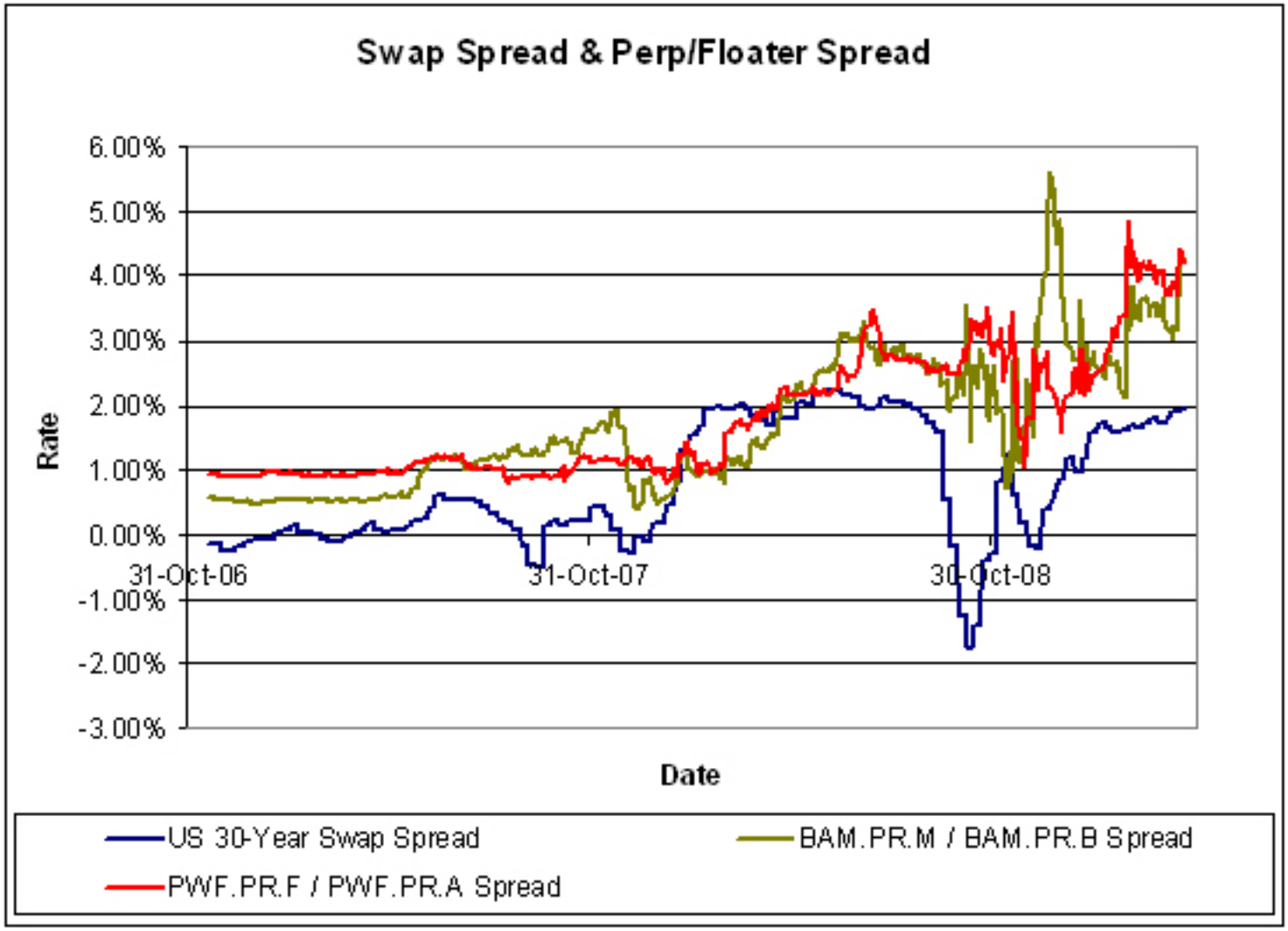
- While Floaters pay on the basis of short-term rates, their credit risk is perpetual
- There are not many long-term bonds that are suitable for benchmarking
- Liquidity is also an issue: Ratchets are very slow traders; Floaters only a little better
- There is very little data available for analysis
- Direct Arbitrage will rarely be practical, but comparisons can give clues to rich/cheap

Interest Rate Swaps

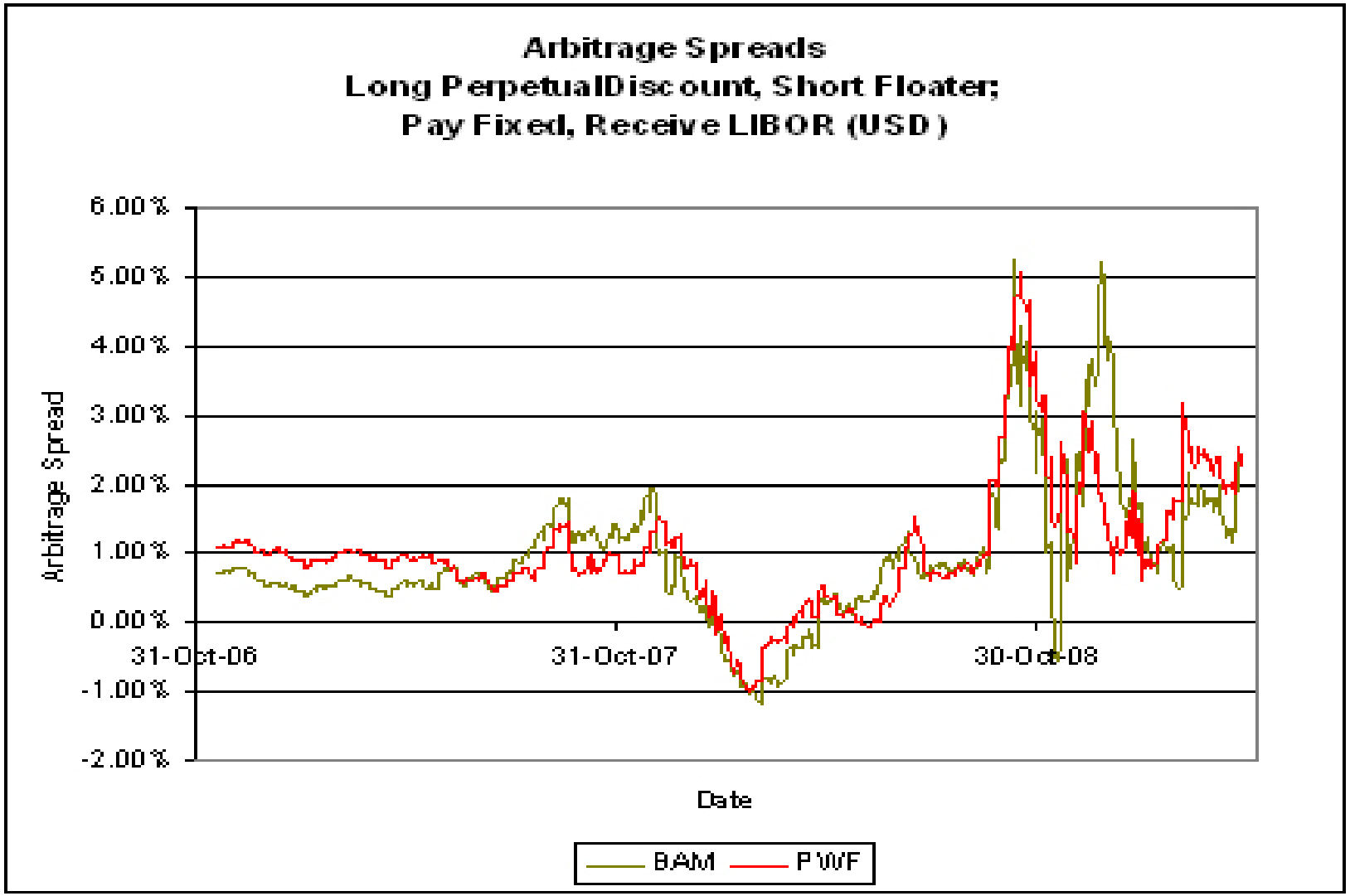
- OTC Derivatives with standardized terms
- Counterparties agree to exchange cash-flows
  - "A" pays floating, receives fixed
  - "B" pays fixed, receives floating
- June, 2008: $458-trillion notional outstanding world-wide
- USD rates available from Federal Reserve

Compare Fixed Rate with Floating Rate

- BAM.PR.M / BAM.PR.B (Yield Difference)
- PWF.PR.F / PWF.PR.A (Yield Difference)
- USD 30-Year Interest Rate Swap
  - Fixed Rate Payer receives 3-Month LIBOR
  - Not directly comparable (basis risk):
    - USD
    - LIBOR is not Prime
    - 30 Years is not Perpetual
    - Embedded calls in Preferreds
    - Taxation & liquidity effects
    - Preferreds are junior to trading losses

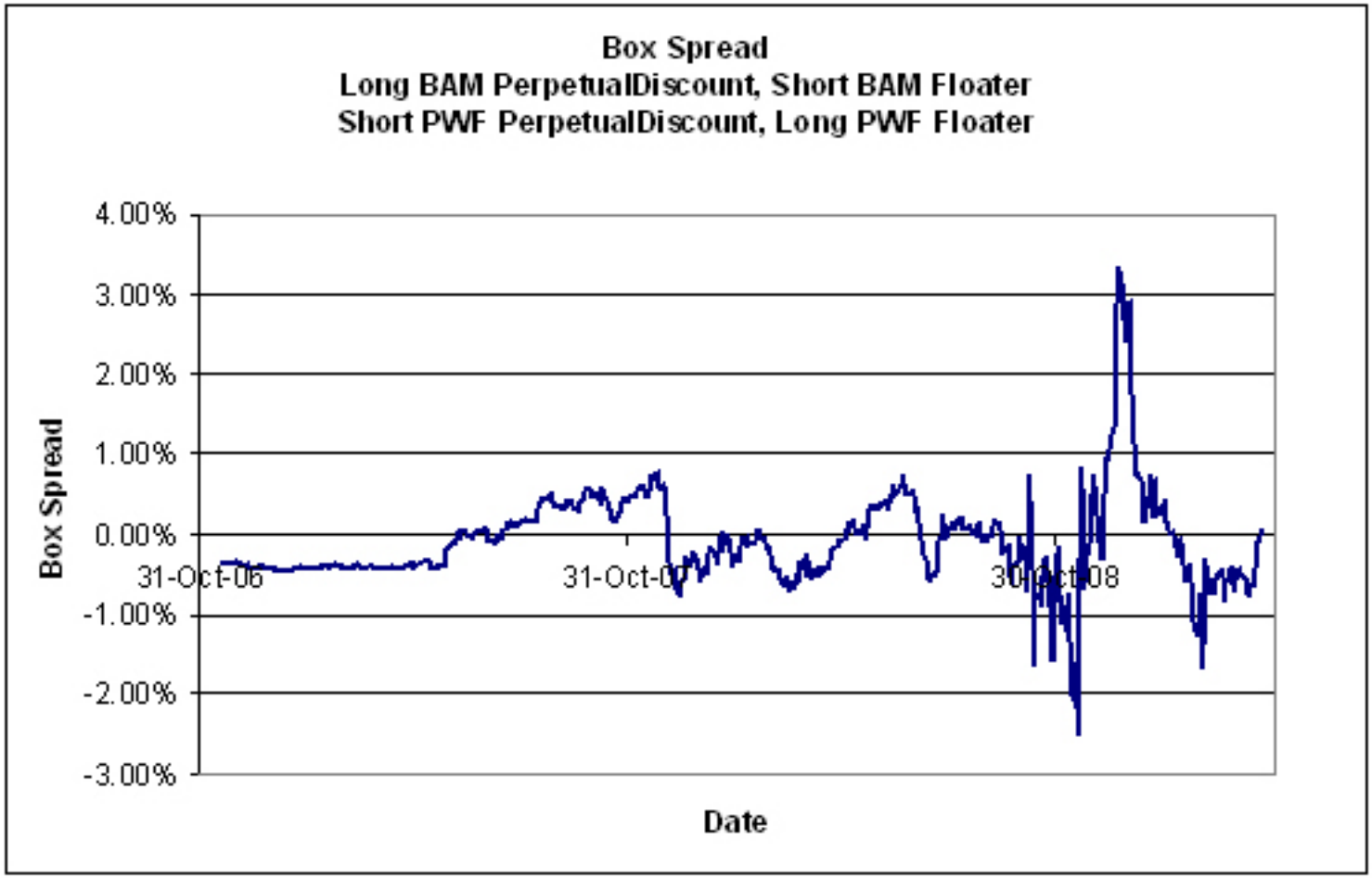

Swap Spread & Perp/Floater Spread
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
-1.00%
-2.00%
-3.00%
Rate
31-Oct-06
31-Oct-07
30-Oct-08
Date
US 30-Year Swap Spread
BAM.PR.M / BAM.PR.B Spread
PWF.PR.F / PWF.PR.A Spread

Arbitrage Calculation Makes Floaters Look Expensive



Box Arbitrage

- In bond markets, a “box trade” involves:
  - Extend term in one market
  - Shorten term in a related market
  - Duration neutral
  - Credit neutral
- An attempt to take advantage of changing slopes in the yield curve
- A PerpetualDiscount / Floater box trade analysis should provide clues regarding relative valuation


Box Spread
Long BAM PerpetualDiscount, Short BAM Floater
Short PWF PerpetualDiscount, Long PWF Floater
4.00%
3.00%
2.00%
1.00%
0.00%
-1.00%
-2.00%
-3.00%
Box Spread
31-Oct-06
31-Oct-07
30-Oct-08
Date

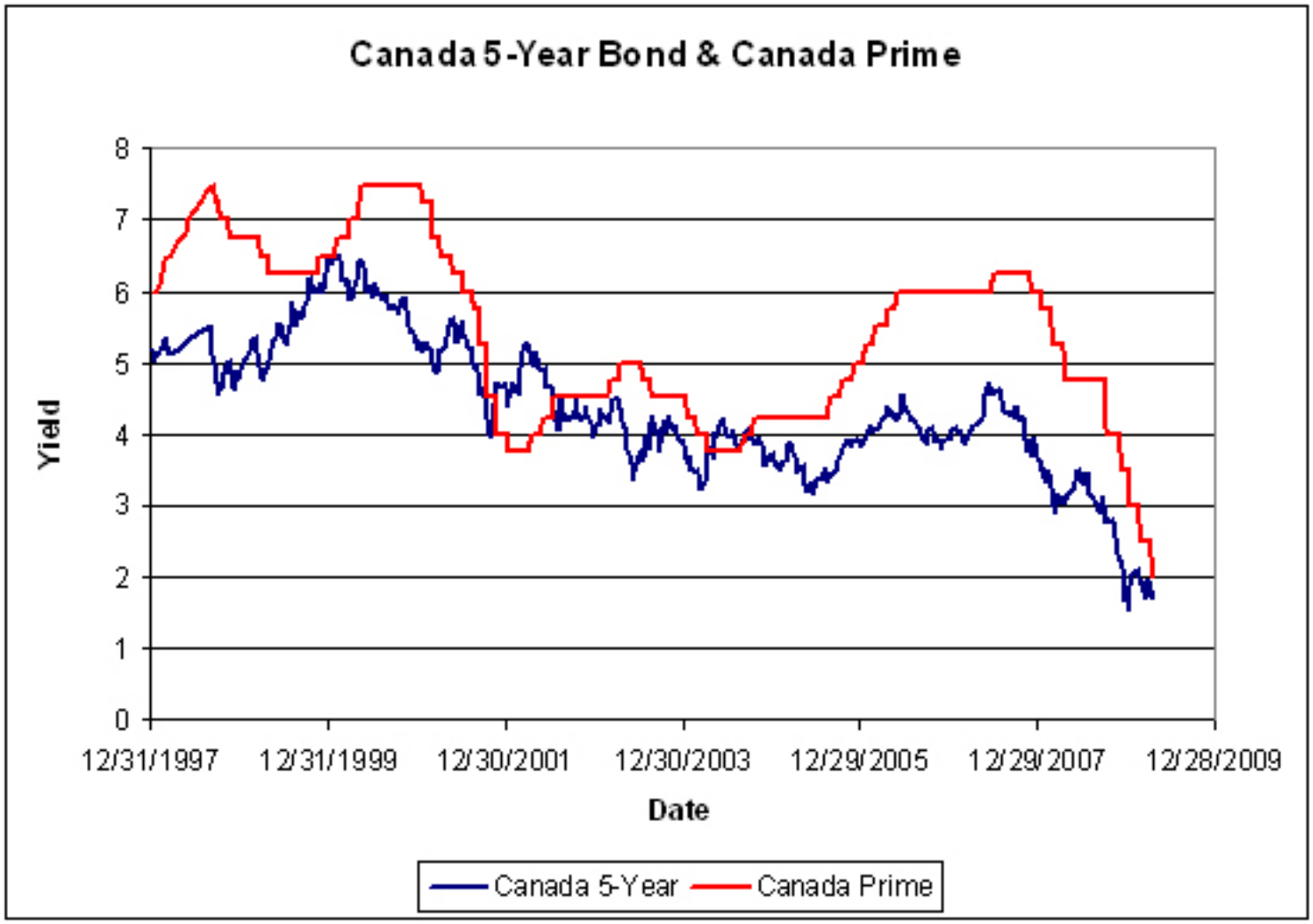
Conclusion

- Arbitrage analysis can be used as a guideline to indicate relative valuation
- Currently, Floaters look somewhat rich to Perpetuals (but maybe cheap to bank accounts!)
- Relative valuations have been volatile
- Once we have an indication of whether particular floaters are rich or cheap, we can use these to benchmark the others
- Trading & Speculation opportunities

Analysis of Fixed-Floaters

Assume Conversion to Ratchet

- Issuer has
  - Some discretion regarding fixed-rate
  - No discretion over ratchet rate
- Won't do you any favours!
- All current issues specify minimum of 80% of 5-Year GOC Rate
  - Average is 105-115% of 5-Year GOC
  - Compares unfavourably with FixedResets


Canada 5-Year Bond & Canada Prime
Yield
8
7
6
5
4
3
2
1
0
12/31/1997
12/31/1999
12/30/2001
12/30/2003
12/29/2005
12/29/2007
12/28/2009
Date
Canada 5-Year
Canada Prime

Assuming Conversion to Ratchets…

- Then price of Fixed-Floater part should be sum of:
  - Price of Ratchet
  - Adjustment for dividends for current period
- In current environment this is easier:
  - Prices are far away from ratcheting trigger
  - May assume dividend is 100% of Prime
- This leads to concept of “Preferred Pairs”

Preferred Pairs

What Makes a Pair?

- Strong Pairs
  - Interconvertible on defined dates
  - Ratchets / FixedFloaters
  - (Someday) FixedResets / Floaters
  - Price MUST (sort-of) be equal on Conversion Date
- Weak Pairs
  - Ratchets & Floaters from same issuer
  - Price SHOULD be equal (at some point)

Strong Pairs: Current Yield?

$$R_F * (25 / P_F) = R_R * (25 / P_R)$$

$$\rightarrow R_R = R_F * (P_R / P_F)$$

Where:

- R_F is the rate payable on the FixedFloater
- P_F is the price of the FixedFloater
- R_R is the rate payable on the Ratchet (= Prime)
- P_R is the price of the Ratchet

This is wrong … but this is what the market is doing!

Why is Current Yield Wrong?

- Fixed Rate will change at conversion time
- Two elements of Strong Pair become inter-convertible
  - Therefore, difference in price should reflect difference in yields *only until conversion date*

Correction for Interconversion

$$R_F * (25 / P_F) = R_R * (25 / P_R) + \underline{(P_F - P_R)/(P_R * T)}$$

Correction Factor amortizes the difference until conversion date

$$\rightarrow R_R = (P_R * R_F)/P_F + \underline{(P_R - P_F)/(25*T)}$$

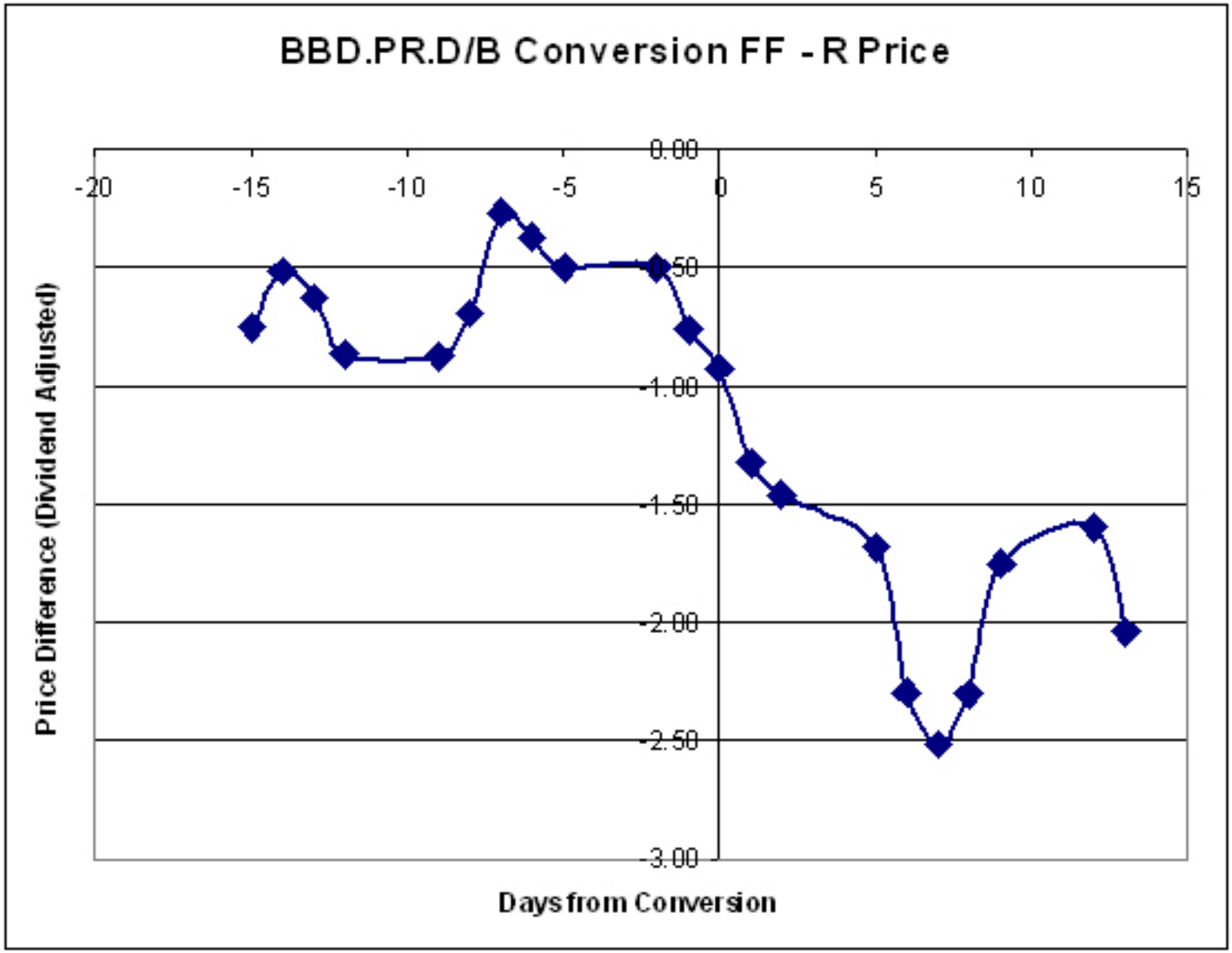
R_R is now the break-even Prime-Rate until Conversion

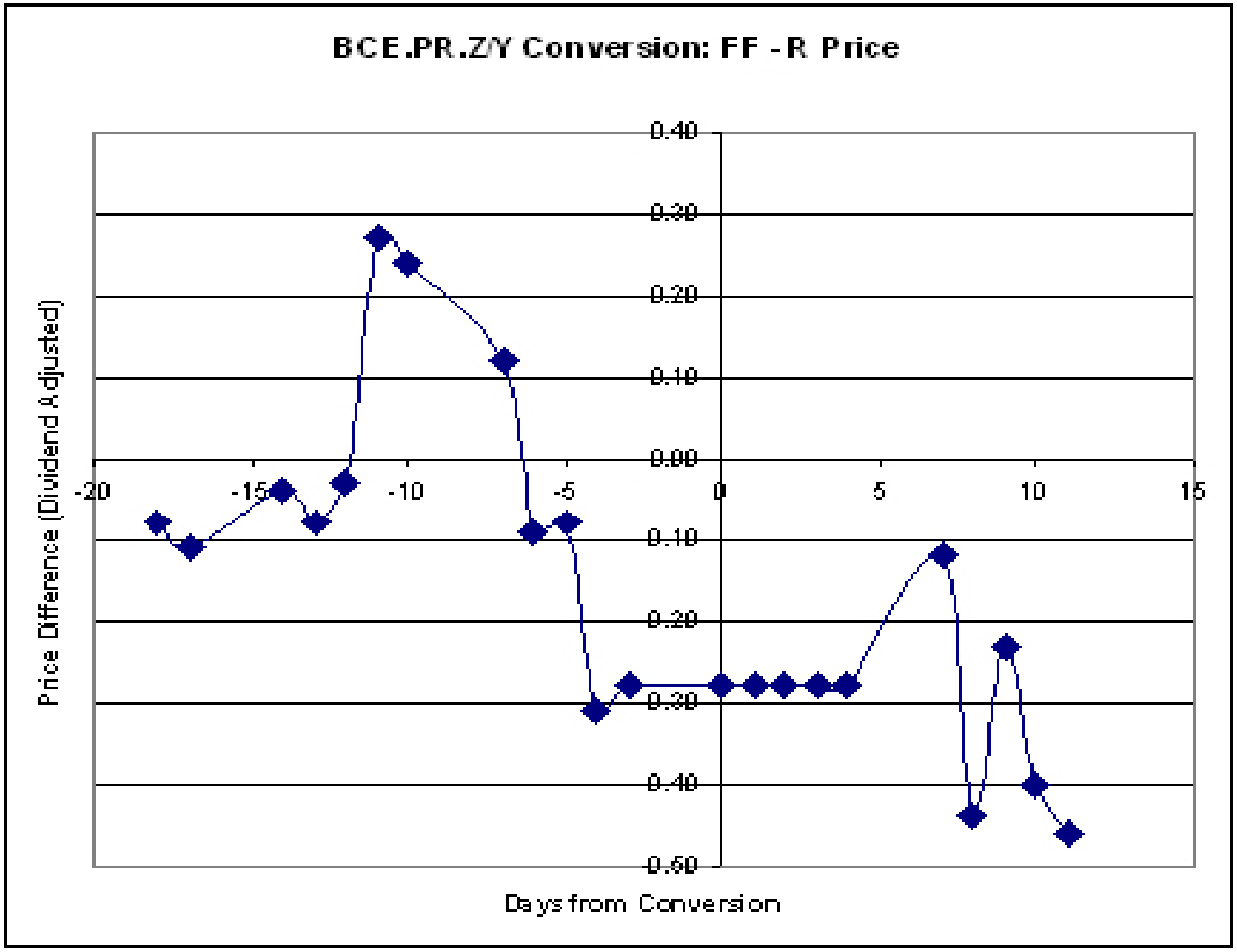
Data

FF/Ratchet	NextExch	RF	PF	PR	Term
BCE.PR.T/S	11/1/2011	4.502%	15.03	13.15	2.5
BCE.PR.Z/Y	12/1/2012	4.331%	14.84	12.97	3.6
BCE.PR.A/B	9/1/2012	4.800%	16.09	13	3.4
BCE.PR.C/D	3/1/2013	4.600%	15.57	12.83	3.9
BCE.PR.F/E	2/1/2010	4.400%	15.08	13.25	0.8
BCE.PR.G/H	5/1/2011	4.350%	14.55	12.81	2.0
BBD.PR.D/B	8/1/2012	5.267%	14.26	8.8	3.3
BAM.PR.G/E	11/1/2011	4.350%	12.3	10.65	2.5

FF/Ratchet	Wrong R_R	Right R_R
BCE.PR.T/S	3.94%	0.97%
BCE.PR.Z/Y	3.79%	1.72%
BCE.PR.A/B	3.88%	0.20%
BCE.PR.C/D	3.79%	0.95%
BCE.PR.F/E	3.87%	-5.48%
BCE.PR.G/H	3.83%	0.39%
BBD.PR.D/B	3.25%	-3.41%
BAM.PR.G/E	3.77%	1.16%
Average	***3.76%***	***-0.44%***
Std. Dev.	***0.21%***	***2.58%***

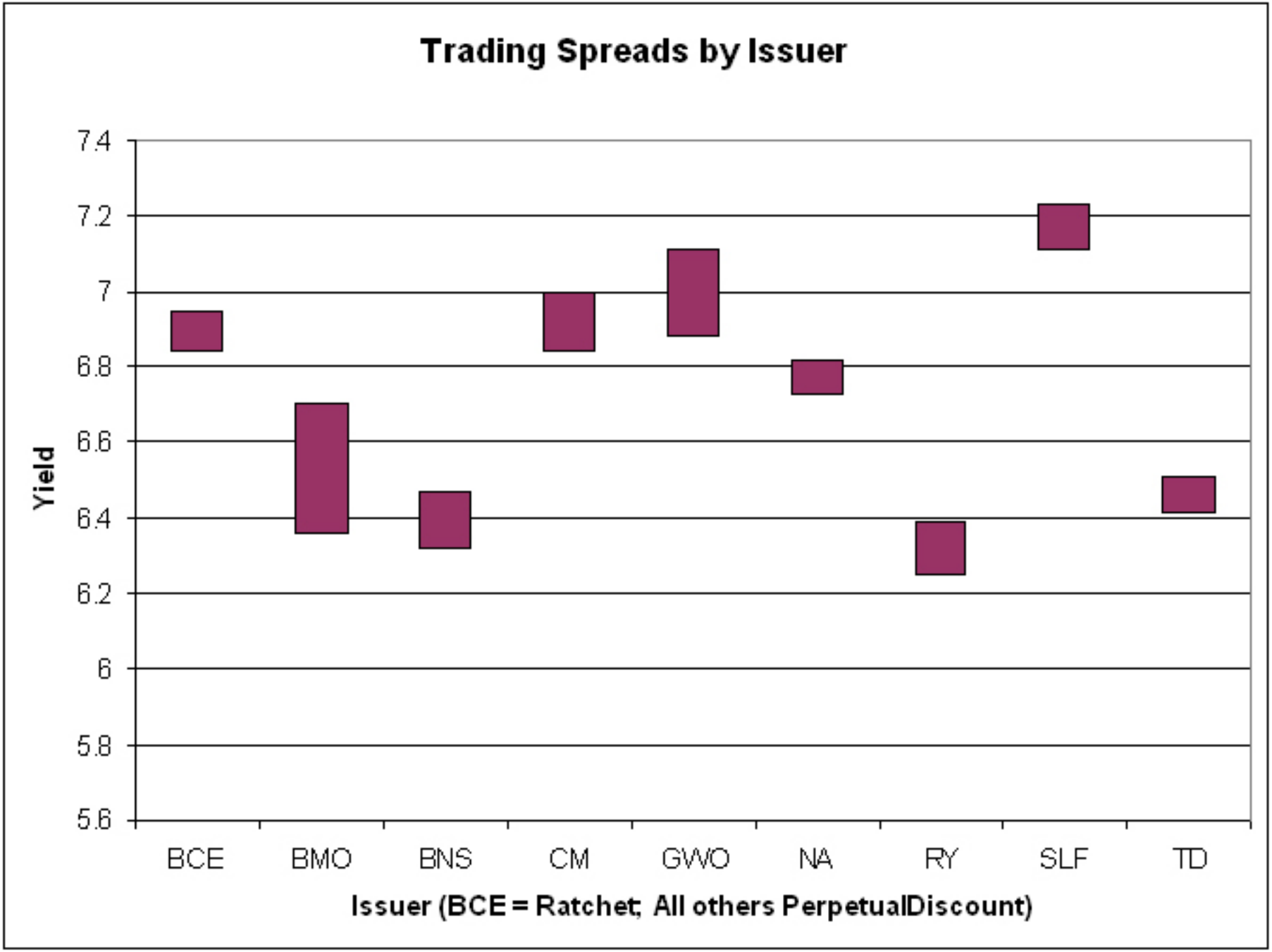
If Prime is Less than R_R through the period, FixedFloaters are better


BBD.PR.D/B Conversion FF - R Price
0.00
-0.50
-1.00
-1.50
-2.00
-2.50
-3.00
-20
-15
-10
-5
0
5
10
15
Price Difference (Dividend Adjusted)
Days from Conversion


BCE.PR.Z/Y Conversion: FF - R Price
Price Difference (Dividend Adjusted)
0.40
0.30
0.20
0.10
0.00
-0.10
-0.20
-0.30
-0.40
-0.50
-20
-15
-10
-5
0
5
10
15
Days from Conversion

Weak Pairs

- Prices merely SHOULD be the same
  - e.g. Ratchet Rate issues from same issuer
- Ratchet Market is currently very efficient
  - Comprised almost entirely of BCE issues


Trading Spreads by Issuer
Yield
7.4
7.2
7
6.8
6.6
6.4
6.2
6
5.8
5.6
BCE
BMO
BNS
CM
GWO
NA
RY
SLF
TD
Issuer (BCE = Ratchet; All others PerpetualDiscount)

Market Efficiency

Why is the Market Inefficient?

- Small issue size
- Irrational fear of default
- Not enough “hot money”
- Not enough dealer capital
- Not enough people watching
- Arbitrary Investment Manager policies
- Tax Effects

Sell Liquidity – Don't Buy It

- Place Limit Orders, not Market Orders
- Let the market come to you
- Any investor can pick up extra money
  - Spreadsheet, discount brokerage for traders
  - Buy-and-Holders simply buy the cheapest
    - Rebalancing periodically will help – provided you're not paying full retail commission.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