Hymas | Investment Management Inc.

SplitShares Theory & Practice

March 26, 2009
Toronto

This seminar is being filmed for later distribution

Preferred Shares

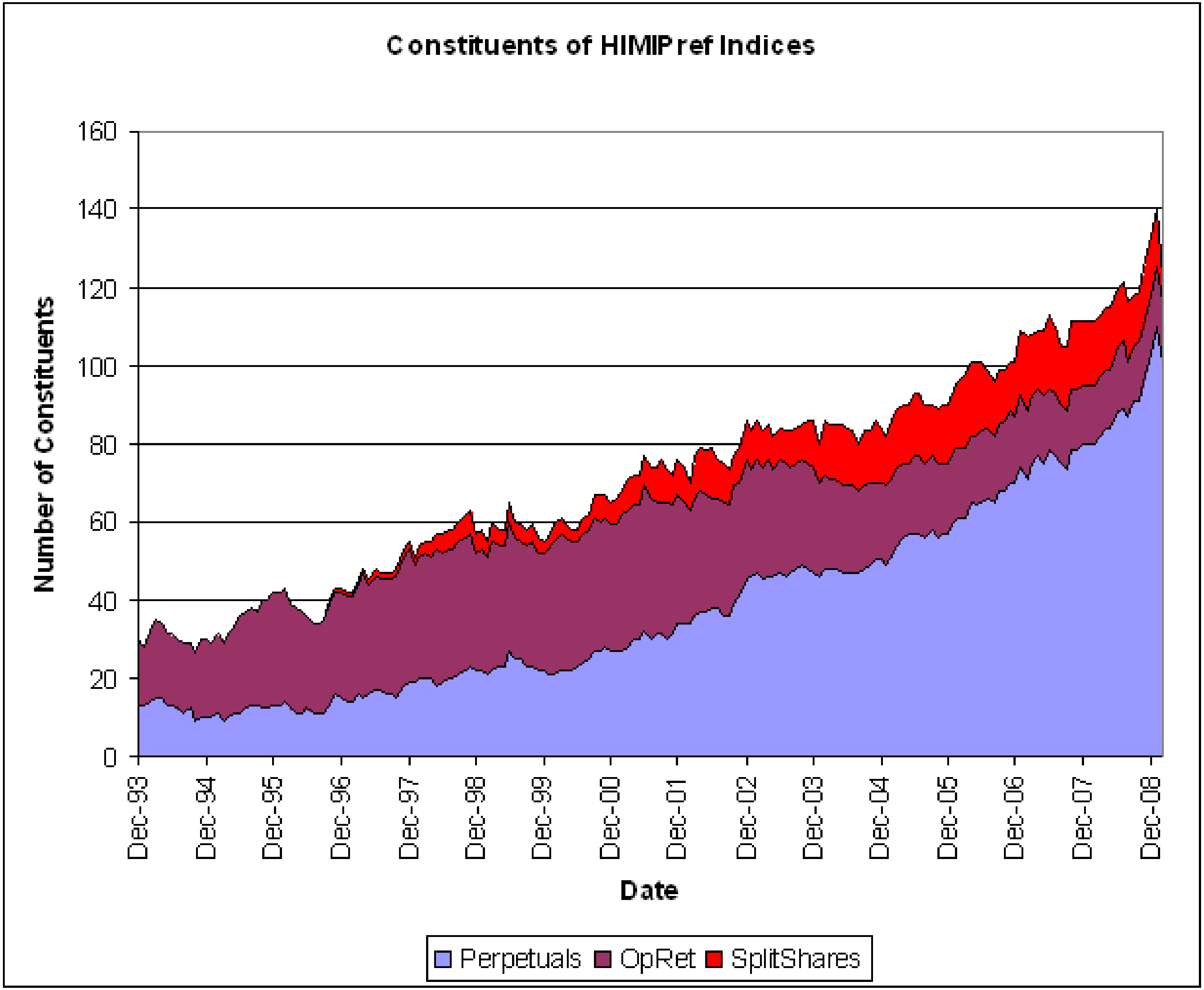
- Fixed rate & Schedule of income
  – Holders CAN'T put company into bankruptcy
  – Little or no chance for Capital Gain from issue price
  – Asymmetric risk / reward
  – No dilution of claims (quality may suffer)
  – Income is received as dividends
  – Have First-Loss Protection

Retractibles

- Fixed Income payments
- Interest Equivalency Factor can vary significantly
- Maturity or Retraction Date
  - Soft Retractions have market risk (IQW.PR.C)
- Usually have interim redemption schedule
- Usually (not always) cumulative
- Issuance declined with change in accounting rules
- Grandfathered issues, opportunists, SplitShares
- Lowest Return, Lowest Risk

SplitShares

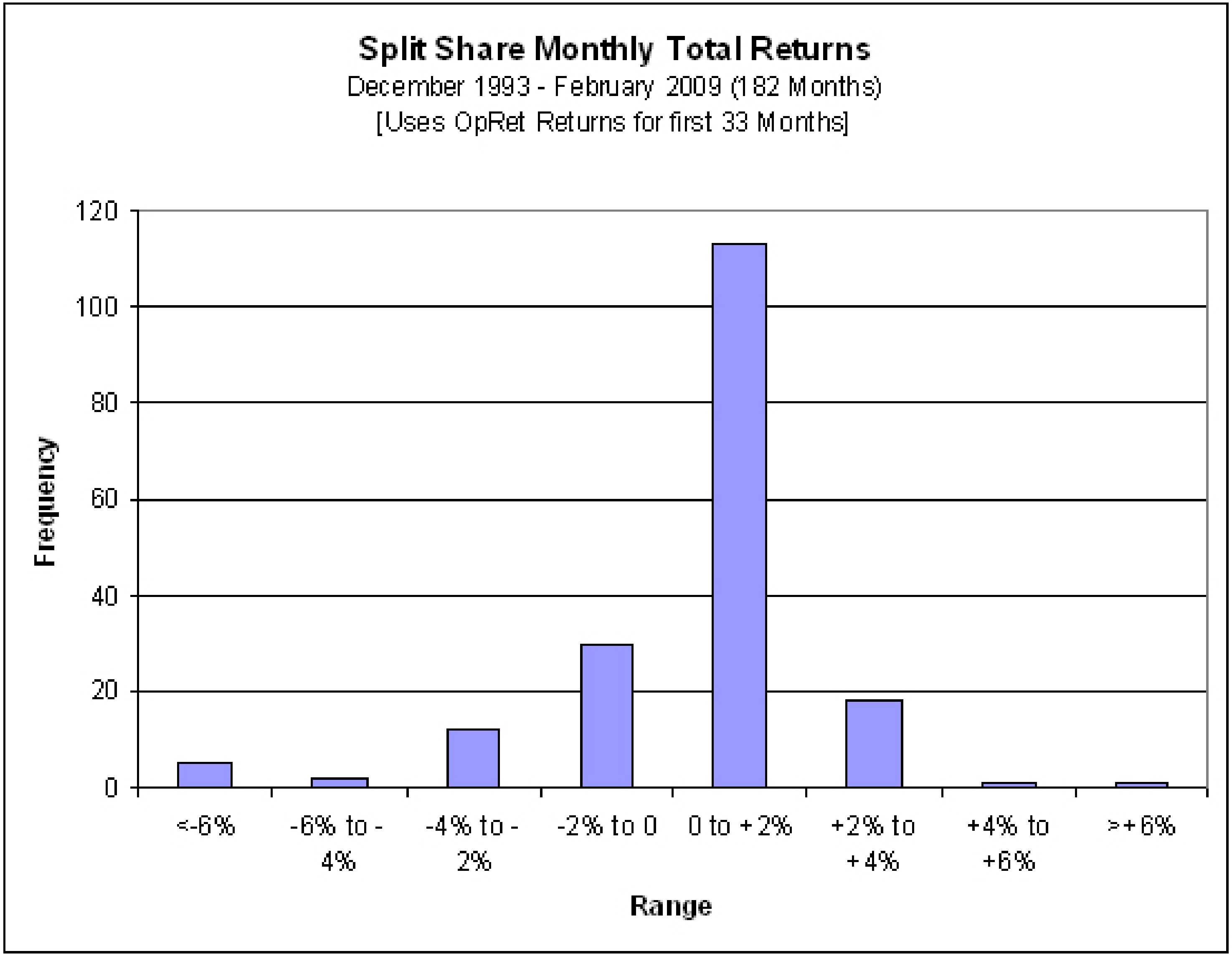
- A sub-class of Retractibles
  - There are no SplitShare Perpetuals
- Backed by a portfolio of marketable assets
  - Usually equity in financial corporations
- No other corporate operations
- A SplitShare Corporation is basically a mutual fund with two classes of shares
  - Usually! Some exceptions exist


Constituents of HIMIPref Indices
Number of Constituents
160
140
120
100
80
60
40
20
0
Dec-93
Dec-94
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Date
Perpetuals
OpRet
SplitShares

Issuance Expectations

- Demand for Capital Units is determining factor
- Passive funds don't have many selling features
- Demand is determined by market sentiment & brokers' commissions
- Issuance will come back … but not soon

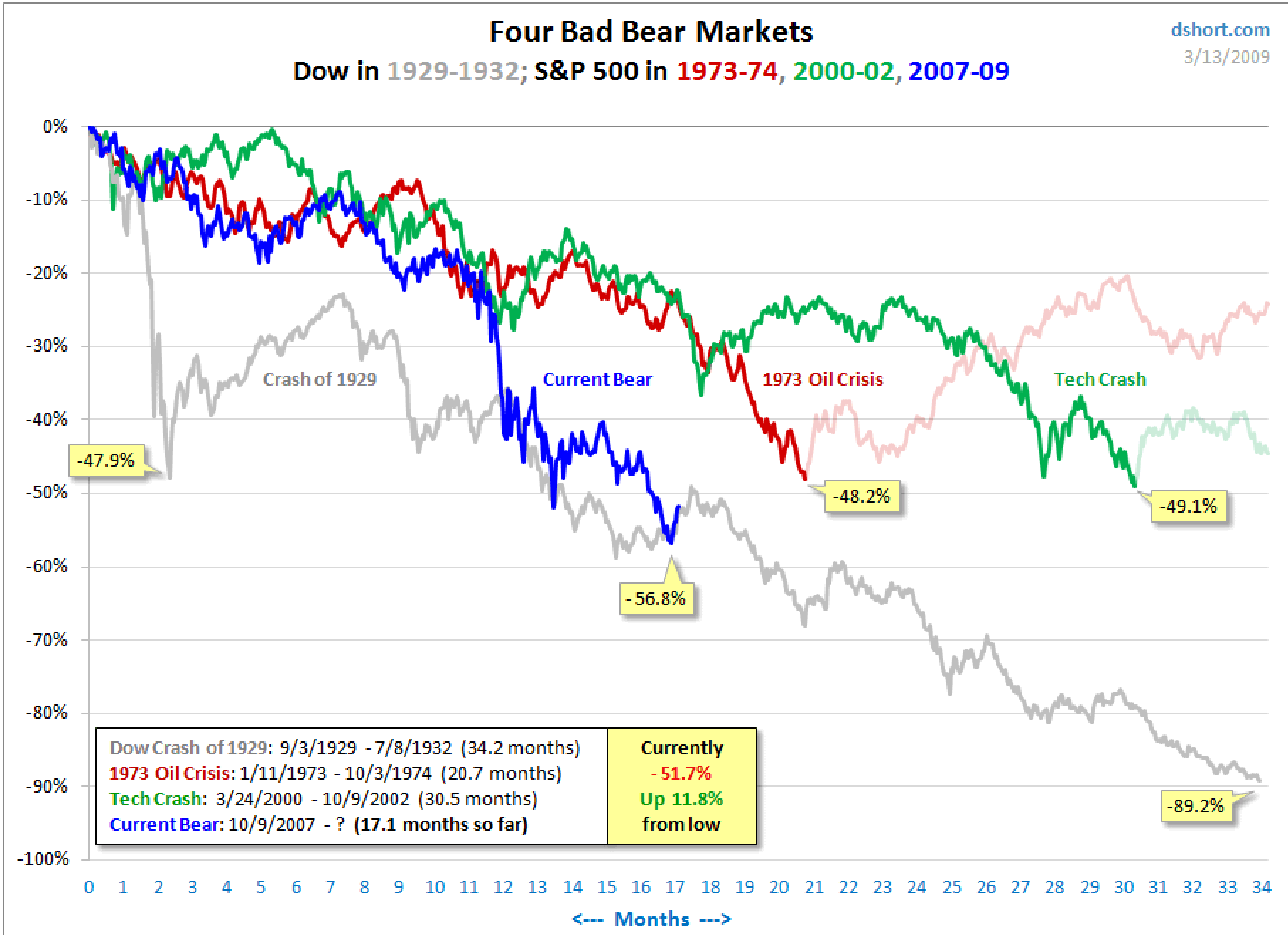
Return Expectations


Split Share Monthly Total Returns
December 1993 - February 2009 (182 Months)
[Uses OpRet Returns for first 33 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

Five Months Lost >6%

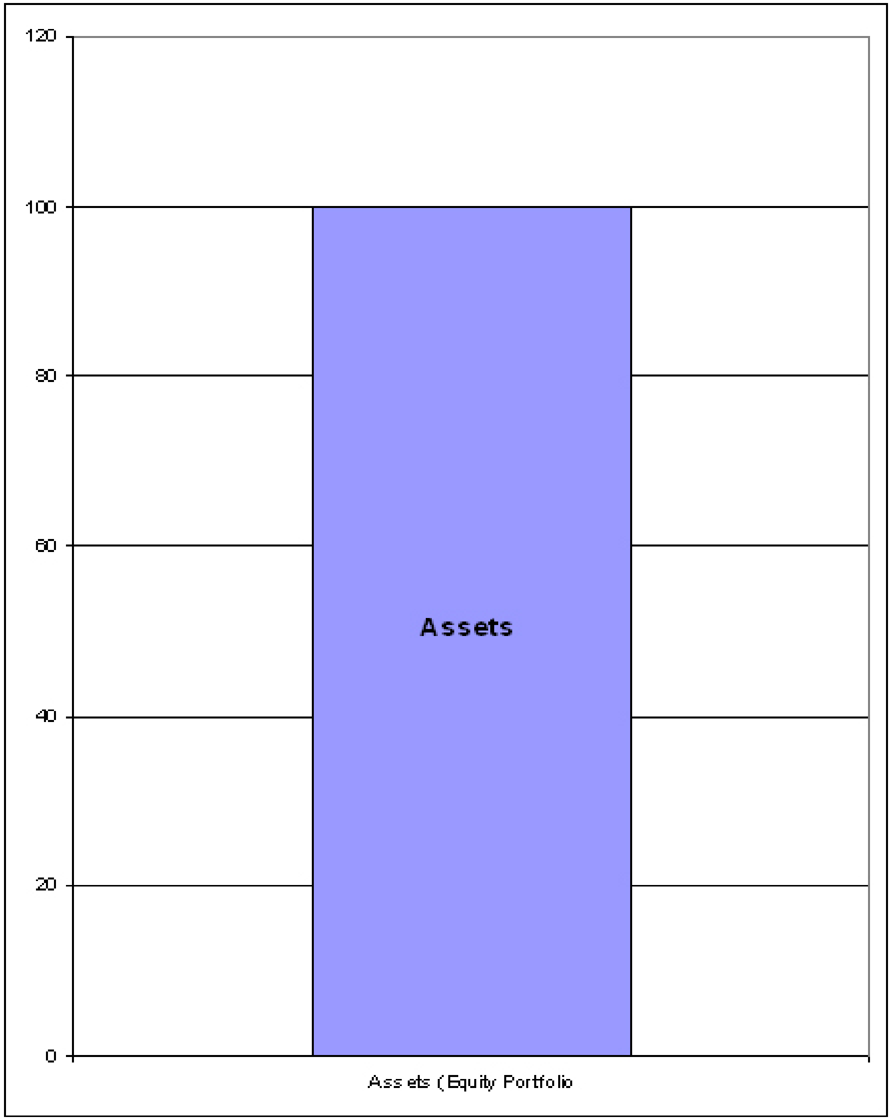
- August, 1998 [Russian Crisis, LTCM]
- Market Crash 2008-09
  - September, 2008
  - October, 2008
  - November, 2008
  - February, 2008

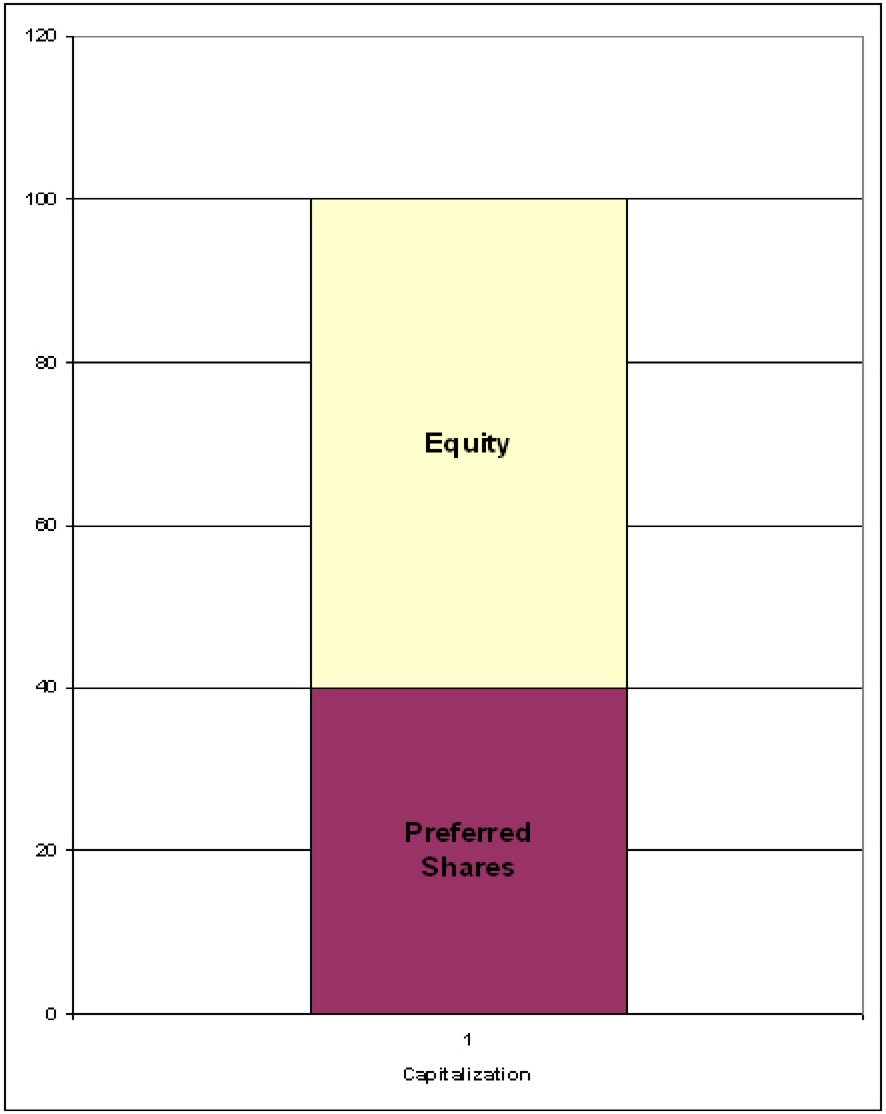
- …backed by portfolios of financial assets…


Four Bad Bear Markets
Dow in 1929-1932; S&P 500 in 1973-74, 2000-02, 2007-09
dshort.com
3/13/2009
0%
-10%
-20%
-30%
-40%
-50%
-60%
-70%
-80%
-90%
-100%
Crash of 1929
Current Bear
1973 Oil Crisis
Tech Crash
-47.9%
-48.2%
-49.1%
-56.8%
-89.2%
Dow Crash of 1929: 9/3/1929 - 7/8/1932 (34.2 months)
1973 Oil Crisis: 1/11/1973 - 10/3/1974 (20.7 months)
Tech Crash: 3/24/2000 - 10/9/2002 (30.5 months)
Current Bear: 10/9/2007 - ? (17.1 months so far)
Currently
- 51.7%
Up 11.8%
from low
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34
<--- Months --->

Credit Quality

Balance Sheets





Major Influences on Credit Quality

- Asset Coverage
- Income Coverage
- Nature of underlying portfolio
  - Single Issue, sector portfolio, or diversified?
- Ratings capped by underlying credit
  - BNA had >3x coverage, capped at Pfd-2(low)
- NAV Test on Capital Unit distributions

Credit Quality

Asset Coverage

Asset Coverage

- Asset Coverage = Assets / Maturity
- $C = A/M$
- Sometimes expressed as Downside Protection
- $A (1 – D) = M$
- $C = 1 / (1-D)$
- $D = 1 – (1 / C)$

Meaning of Ratings

Asset Coverage	Downside Protection	Rating	Five-Year Default
1.25 - 1.65	20%-40%	Pfd-3(low) - Pfd-3(high)	5.00%
1.65 - 2.00	40%-50%	Pfd-2(low) - Pfd-2	2.00%
>2.2	>55%	Pfd-2 - Pfd-1	0.60%

Ratings reflect probability that original commitments will be honoured

Downside Protection / Rating based on DBRS Guidelines for portfolio of equities with investment-grade credit. I suspect that the levels applied are actually more stringent.

“Five Year Default” is HIMI estimate of targetted default probability

DBRS Mass Downgrade

- Pfd-3: Asset coverage 1.2 – 1.8
  - higher end of range was single issuer (BCE)
- Pfd-4: Asset coverage 0.9 – 1.2
- Pfd-5: Asset Coverage 0.4 – 1.1

- SNH.PR.U downgraded to Pfd-5(high) 2008-12-4
  - Downside Protection 5%
  - matured at par 2009-2-11

Effectiveness of Asset Coverage

S&P 500 Top	Close	Bottom	Close	Decline	Months
2-Aug-56	49.64	22-Oct-57	38.98	-21.50%	15
12-Dec-61	72.64	26-Jun-62	52.32	-28.00%	7
9-Feb-66	94.06	7-Oct-66	73.2	-22.20%	8
29-Nov-68	108.37	26-May-70	69.29	-36.10%	18
11-Jan-73	120.24	3-Oct-74	62.28	-48.20%	21
28-Nov-80	140.52	12-Aug-82	102.42	-27.10%	21
25-Aug-87	336.77	4-Dec-87	223.92	-33.50%	3
24-Mar-00	1,527.46	9-Oct-02	776.76	-49.10%	31
9-Oct-07	1,565.15	?	?	-56.80%	?

Source: http://www.dshort.com/articles/next-bear-market-01.html

Recovery on Default

- GT.PR.A defaulted; paid 83% on maturity
- Several other issues have defaulted on dividends, but have not yet matured
  - YLD.PR.B (asset coverage <0 !)
  - FTU.PR.A (0.4+:1)
  - XMF.PR.A (0.9-:1)
  - XCM.PR.A (0.9-:1)
  - Default on principal likely

Asset Coverage: Summary

- Cannot use standard volatilities
- Expect a bear market every five years (?); one in three will be a bad bear (?)
- Must look at underlying portfolio, take a view on severity of a bear market
- But … Default does not imply total loss
  - This is major difference from OpRet issues
- Recoveries are generally pretty good

Credit Quality

Income Coverage

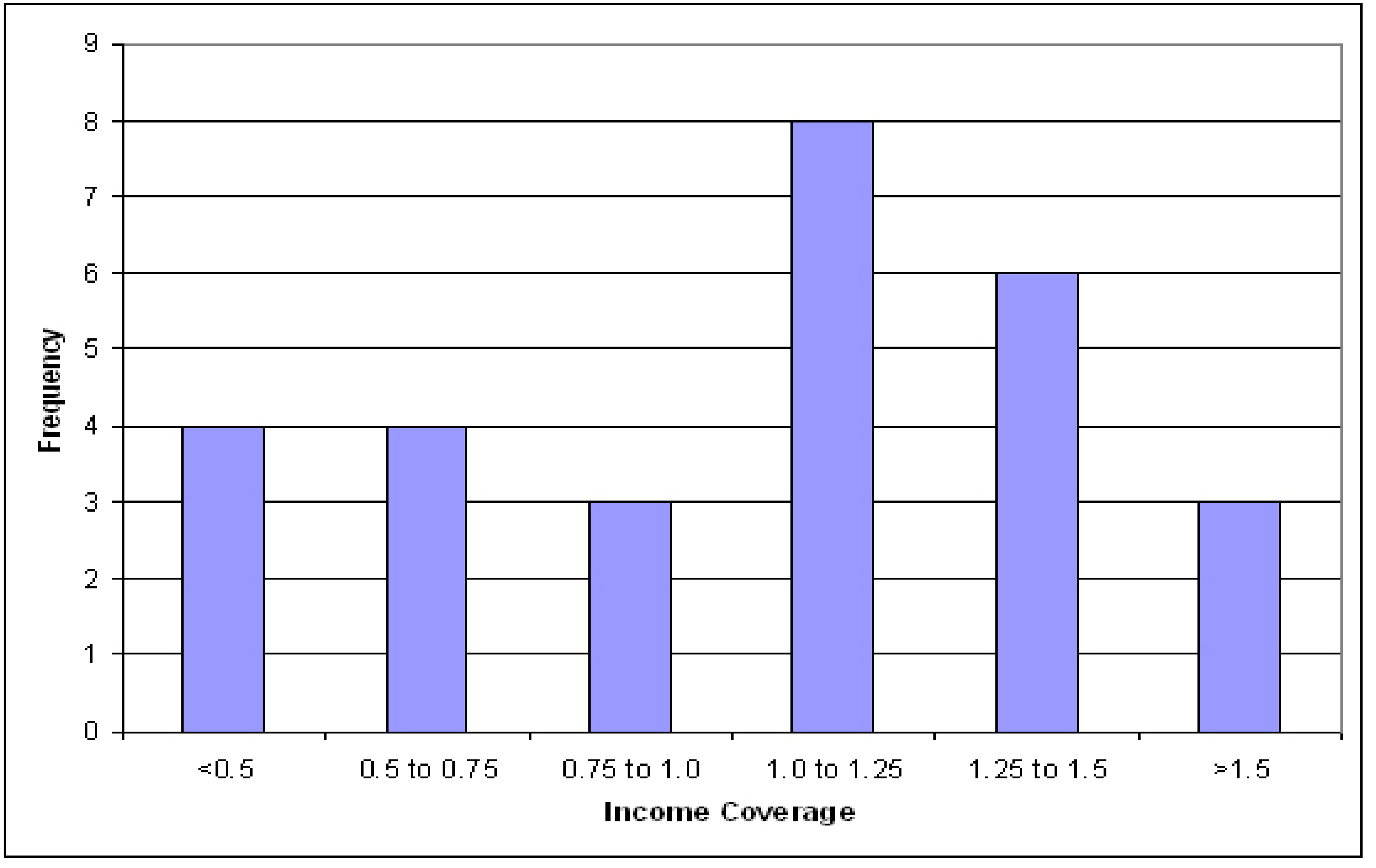
Income Coverage

- Gross Investment Income
  - Include Sustainable Items
    - Dividends
    - Interest
    - Securities Lending Income
  - Exclude Non-Reproducible Items
    - Capital Gains / Losses
    - Covered Call Premia

Income Coverage

- Expenses
  - Include
    - Management fees
      - Adjust if performance based
      - Adjust for NAV
    - “Servicing” fees
    - All corporate expenses
  - Exclude
    - Performance fees

Current Levels of Income Coverage



Management Expense Ratio

- Part of prior expenses that are deducted from investment income prior to calculation of income coverage
- May usually be ignored; MER will be paid by Capital Unit holders – if they have any money!
- Asset-Dependent, so can mitigate declines in NAV

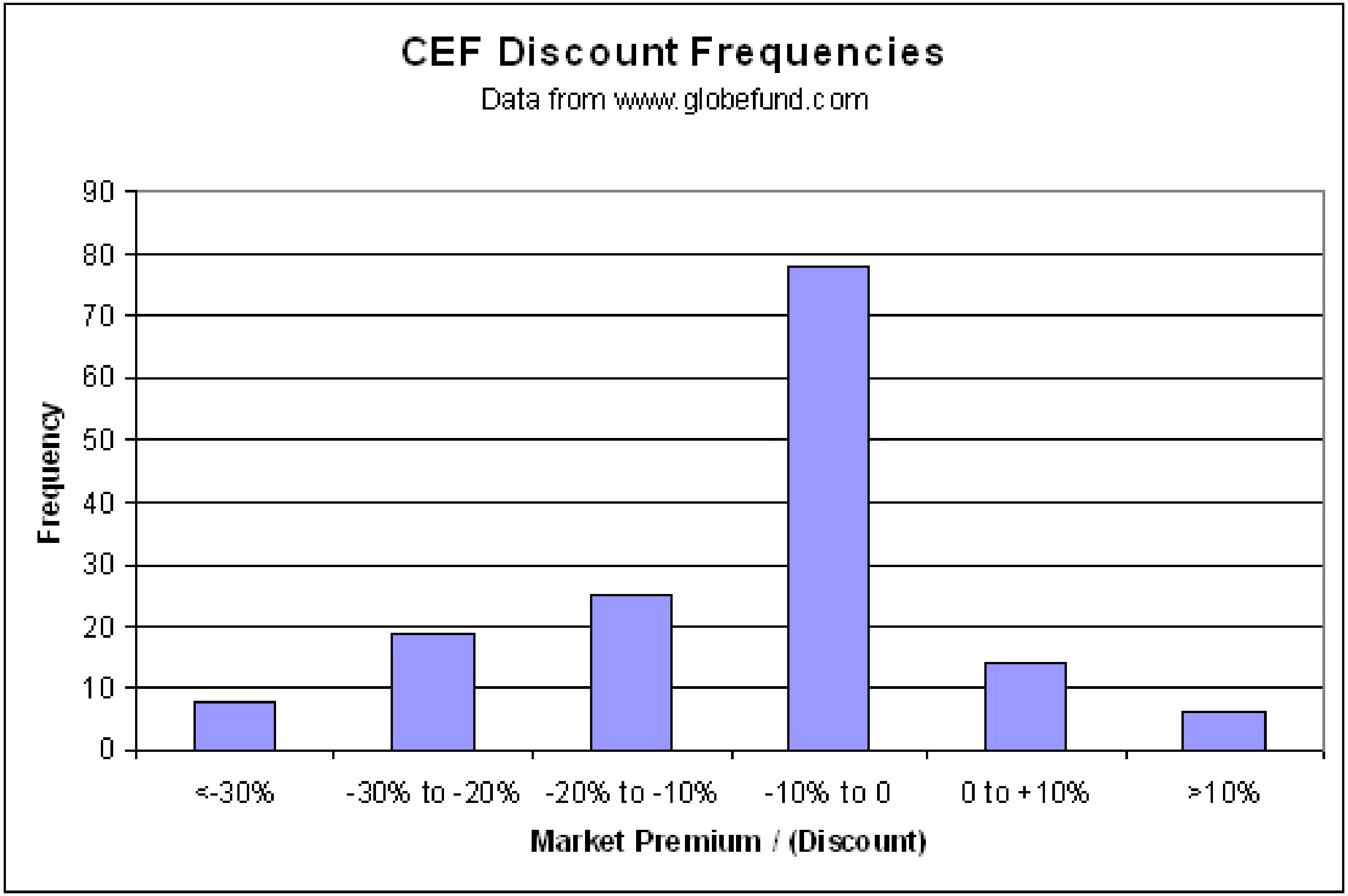
Option Writing Programmes

- Gimmick – sponsors have to offer more than a passive portfolio to justify MER
- Portfolios will gain premia on calls and realize capital gains on exercised calls, but lose unrealized capital gains when market jumps
- Prospectuses do not address success, only “experience”
- Disclosure in financials is inadequate

Retractions

Retractions: An Escape Hatch

- Almost all issues will have an annual retraction feature
- Most issues have special monthly retraction features
- Difficult to generalize and model since value is based on several variables
  – Market Price Preferreds
  – Market Price Capital Units
  – NAV


CEF Discount Frequencies
Data from www.globefund.com
Frequency
0
10
20
30
40
50
60
70
80
90
<-30%
-30% to -20%
-20% to -10%
-10% to 0
0 to +10%
>10%
Market Premium / (Discount)

Annual Retraction

- Usually 1 Capital Unit + 1 Preferred gets full NAV
- Most common exception: retraction fee to cover issuance costs
- Can usually be suspended due to illiquid markets etc., but there are other factors
- Can trigger valuable redemption of Preferreds

Special Monthly Retraction

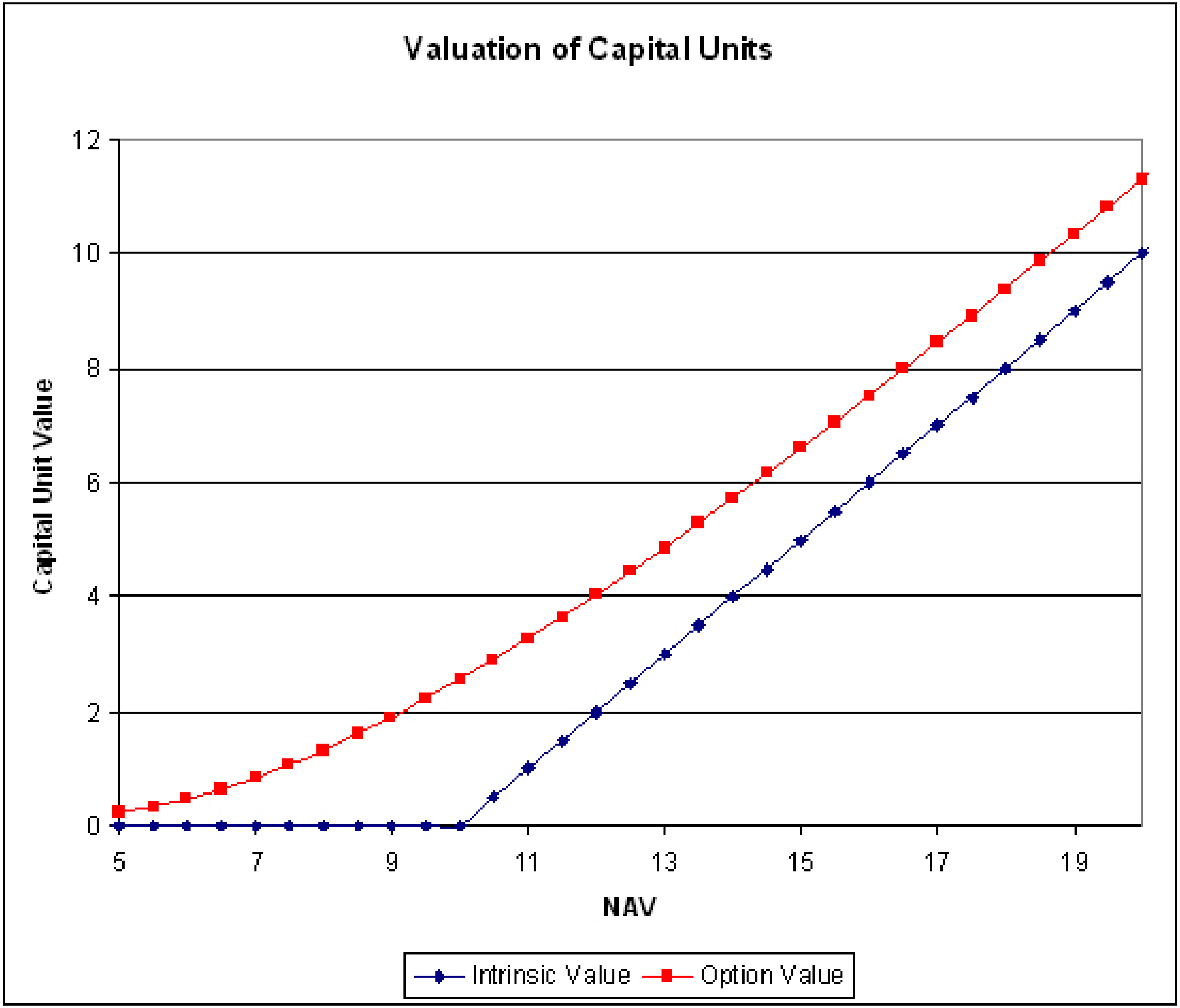
- Usual formula is R = 96%(NAV-C)
  – R: Retraction Price
  – C: Capital Units Price
- "96%" has usually made this not worth looking at
- Market declines in fall 2008 made some special retractions immensely profitable
- Timing & estimation problems
  – Usually must provide two weeks notice
  – Stale NAV
- Be cautious! Will you hold the units if retractions are suspended?

Capital Unit Price & Retractions

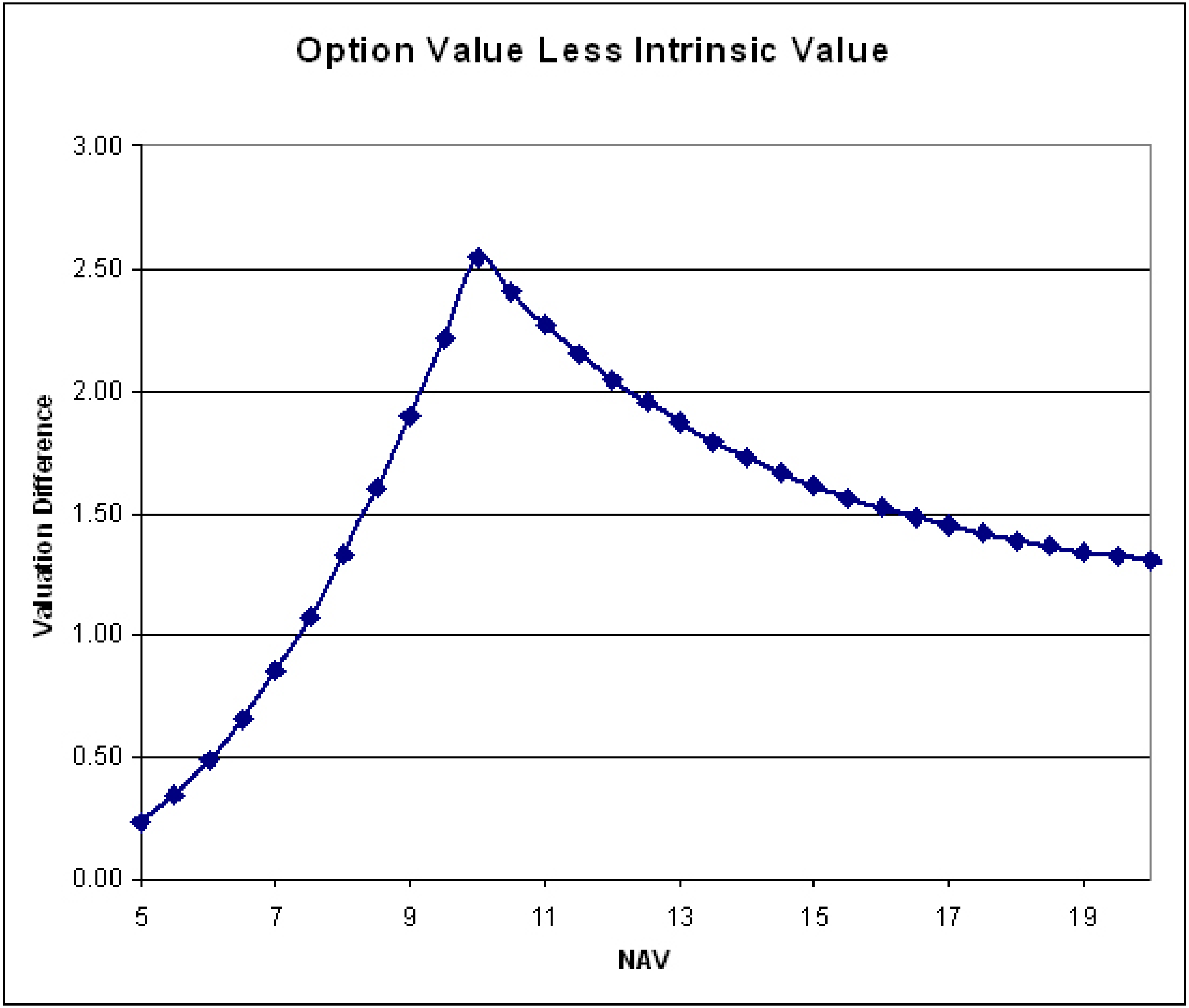
- Capital Unit market price has direct implications for preferred share retraction price
- When close to NAV, option value becomes dominant
- This option value can make retractions unfavourable

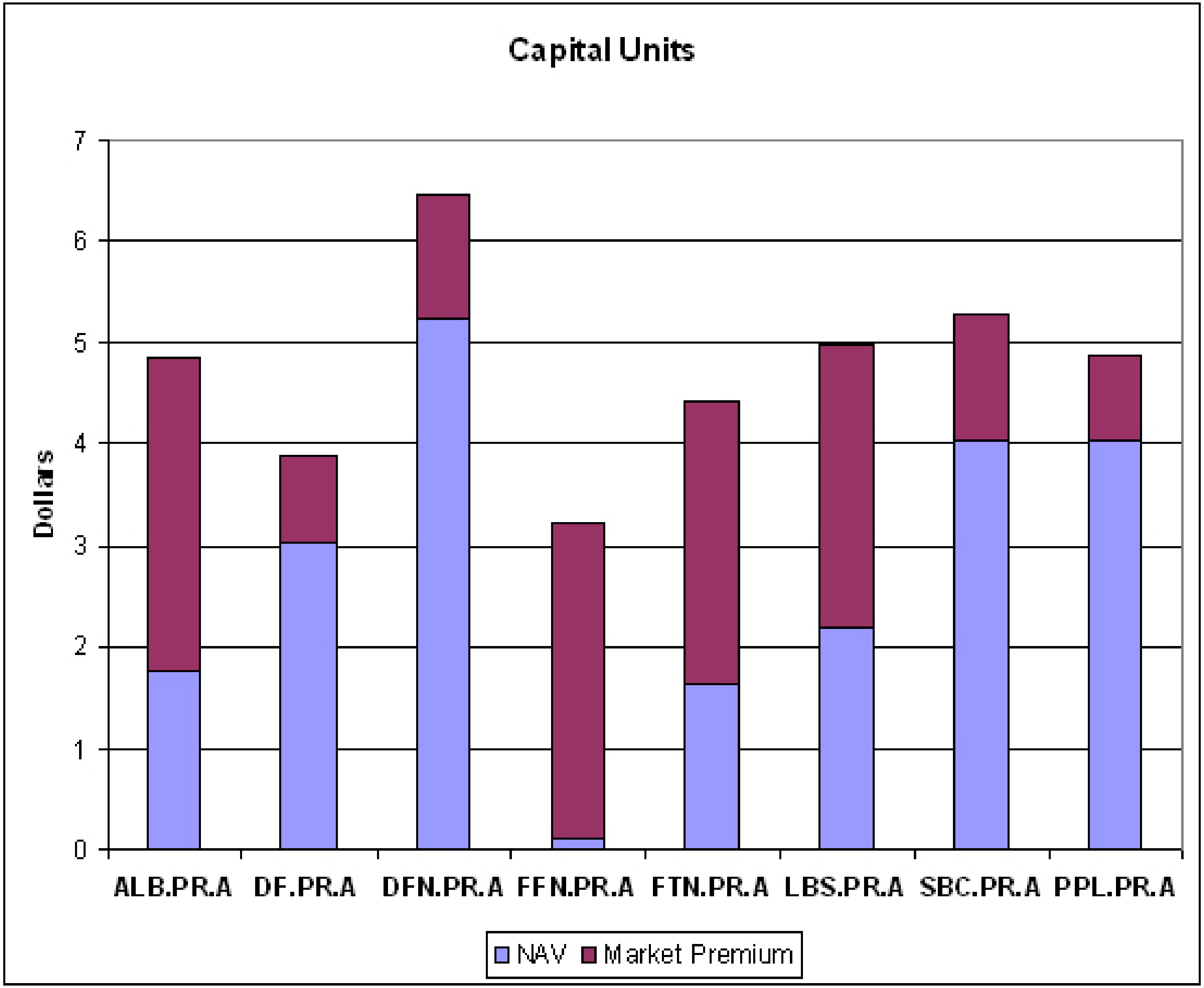
Pricing Capital Units as Options

- Black-Scholes Option Pricing Model
- Complicated by:
  - Portfolio Income
  - Corporate Expenses
  - Preferred Share Dividends
- Ignore and define:
  - $T = 3$ Years
  - $\sigma = 30\%$
  - Risk-free rate = 4%

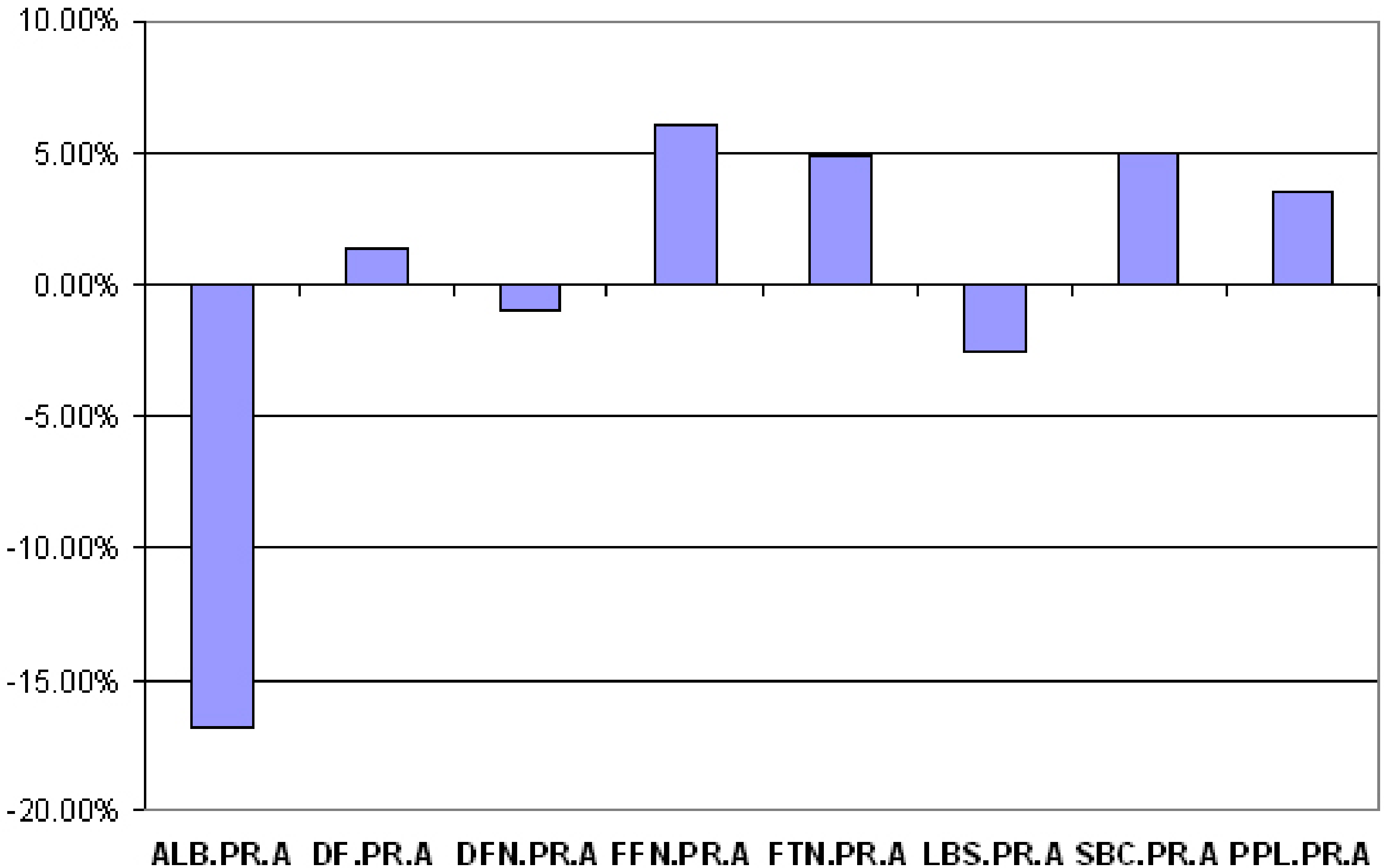


Valuation of Capital Units
Capital Unit Value
12
10
8
6
4
2
0
5
7
9
11
13
15
17
19
NAV
Intrinsic Value
Option Value


Option Value Less Intrinsic Value
3.00
2.50
2.00
1.50
1.00
0.50
0.00
Valuation Difference
5
7
9
11
13
15
17
19
NAV


Capital Units
Dollars
0
1
2
3
4
5
6
7
ALB.PR.A
DF.PR.A
DFN.PR.A
FFN.PR.A
FTN.PR.A
LBS.PR.A
SBC.PR.A
PPL.PR.A
NAV
Market Premium

Percent Profit on Retraction
Estimated!



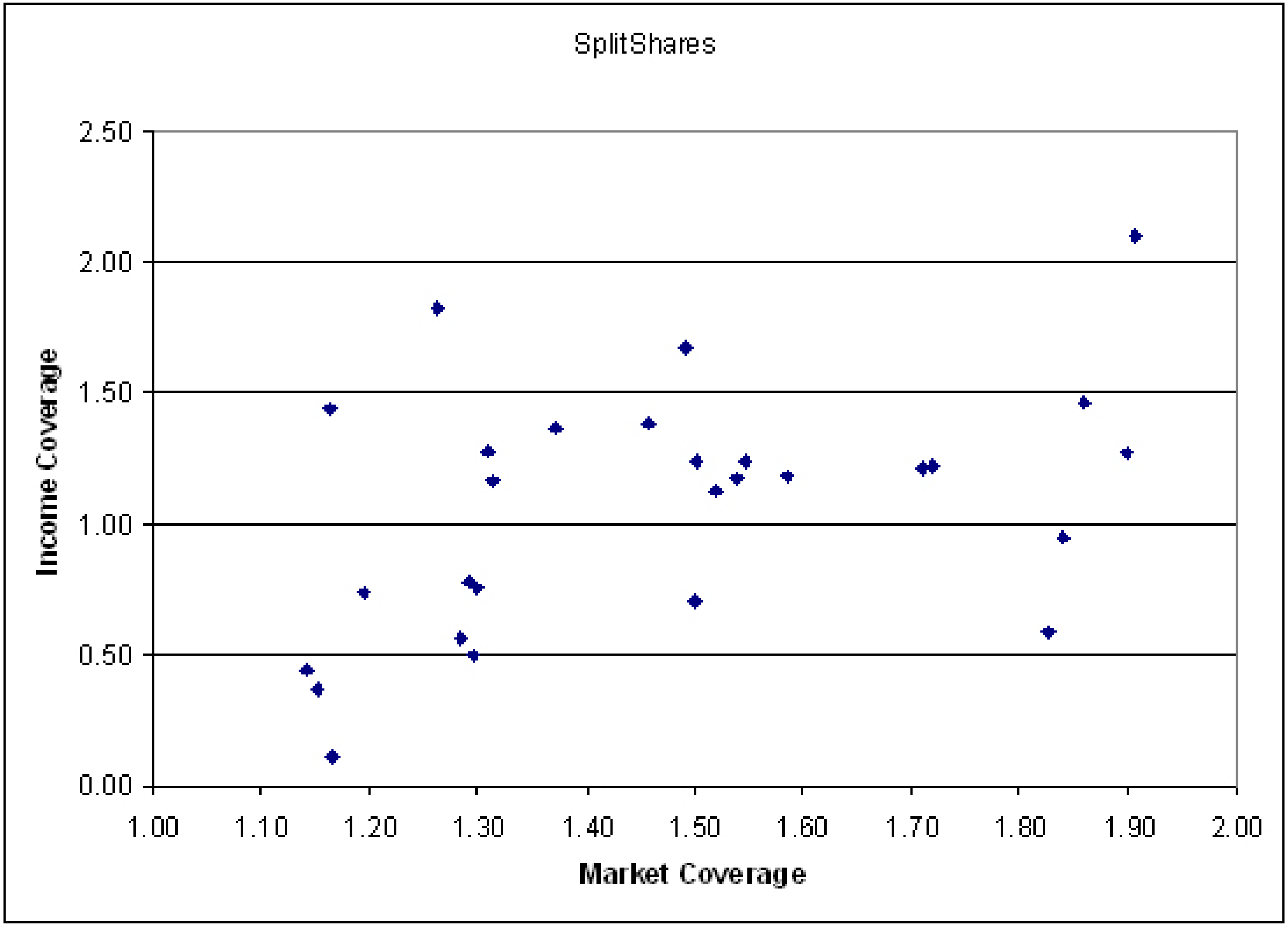
Retraction Summary

- SplitShare Preferreds are being supported by their retraction price
- Retraction Price
  - based on discount to NAV
  - Forced down by option pricing of Capital Units
- Options are probably overpriced
- Watch carefully!

Market Considerations

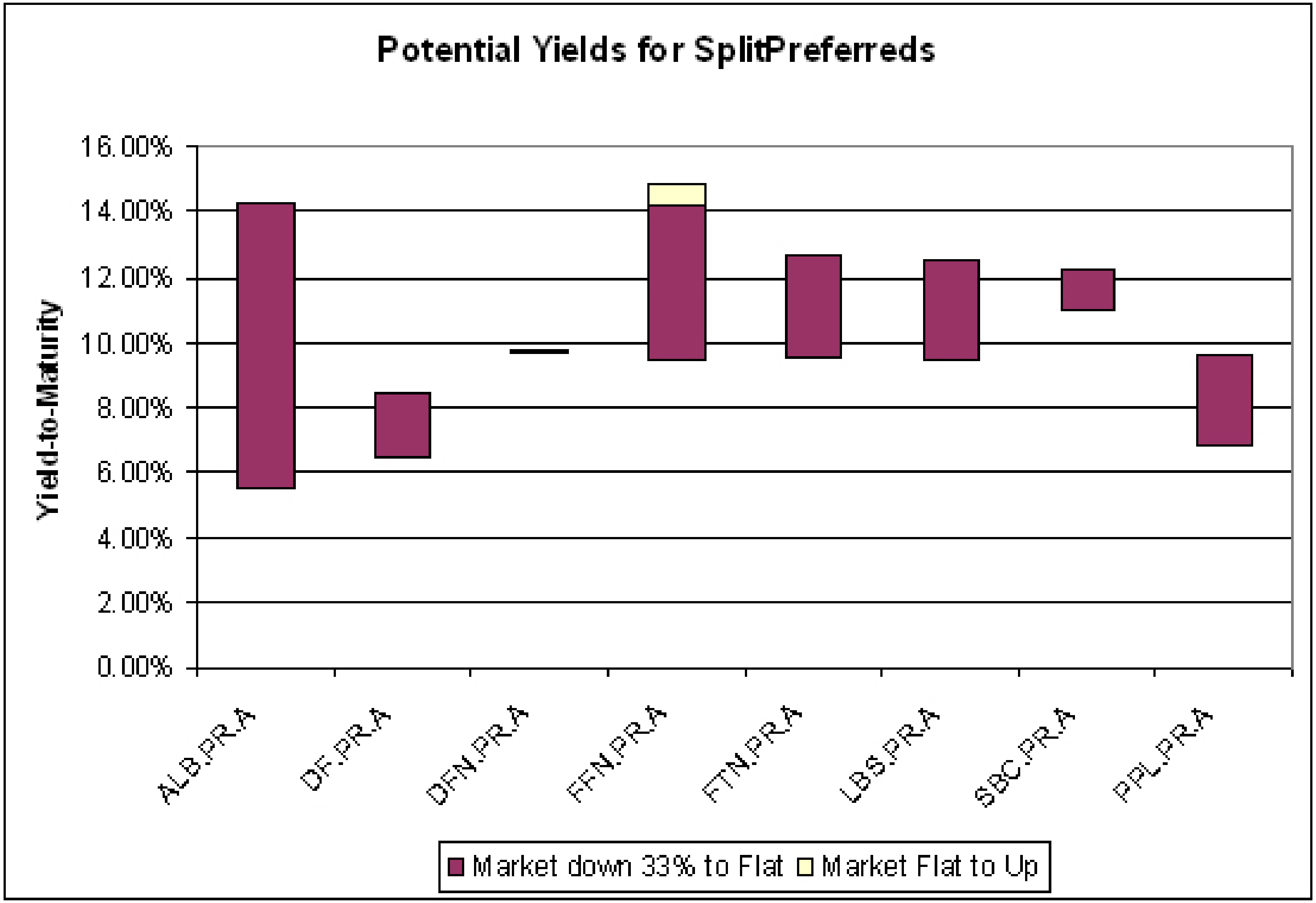
Important!

- Asset Coverage of <u>amount invested</u>
- Income Coverage
- NAV Test on Capital Unit distributions
- Retraction terms and current valuation
- Underlying portfolio
- Term to Maturity
- Yield
- Special factors (e.g., long puts, cash, dynamic hedging)


SplitShares
Income Coverage
Market Coverage
2.50
2.00
1.50
1.00
0.50
0.00
1.00
1.10
1.20
1.30
1.40
1.50
1.60
1.70
1.80
1.90
2.00

Default? Who Cares?

- Consider FFN.PR.A
  - Income Coverage 1.2:1
    - Annual Dividend $0.525
  - NAV $9.48
  - Obligation $10.00 … asset coverage <1
  - Market Price $5.98
  - Coverage of Market Price = 1.58:1
  - Projected Maturity Value: $6.32-$10.00


Potential Yields for SplitPreferreds
Yield-to-Maturity
16.00%
14.00%
12.00%
10.00%
8.00%
6.00%
4.00%
2.00%
0.00%
ALB.PR.A
DF.PR.A
DFN.PR.A
FFN.PR.A
FTN.PR.A
LBS.PR.A
SBC.PR.A
PPL.PR.A
Market down 33% to Flat
Market Flat to Up

Yield Calculation

- Cannot use bond calculator (no accrued interest)
- Careful with ex-Dividend Dates!
- Do not confuse yield definitions
  - IRR (annual)
  - Bond Equivalent (semi-annual)
  - Preferred Share convention (quarterly)

Interest-Equivalency

- Normally, multiplying by 1.4 is good enough
- Deep discounts to par confuse the issue
- Large portion of return is back-end loaded
- Tax on capital gain portion is deferred

BNA.PR.C

- Price \$11.00 on 2009-3-19
- Matures 2019-1-10 at \$25.00
- Pays \$1.0875 p.a., payable quarterly
- Payments commence 6/7, last dividend \$0.1027
- IRR=16.56%, Bond Equivalent=15.92%
- Tax Dividends=21%, CG=23%, Interest=46%
- After Tax=13.44%
- Interest Equivalent=24.90%, Factor 1.56x

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
    - Similarity of underlying portfolios helps
  - Buy-and-Holders simply buy the cheapest
    - Rebalancing periodically will help – provided you're not paying full retail commission.

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