

Mathematics of Investment and Credit 4th Edition

Errata List, by S. Broverman Updated August 23, 2010

- Jan 24/10 Page 8, Example 1.3, 2nd last line, January 1, 2009 should be Jan. 1, 2010
- Apr 22/09 Page 95, in Figure 2.8, $s_{\overline{n}|i}$ and $\ddot{s}_{\overline{n}|i}$ should be shifted to the right by one period
- Mar 30/10 Page 138, Example 2.39 Solution, in line 1 2.22b should be 2.39b
- Apr 22/09 Page 150, *2.1.33(d) should be labeled *2.1.33(b)
- Apr 22/09 Page 151, 2.2.2, line 3 should say ... of accumulation over 25 years in a Registered ...
- Mar 29/09 Page 156, 2.2.25(b), last line should say
... Show that $s_{\overline{n}|i}$ from part (b) is equal to $P \cdot s_{\overline{m \cdot n}|j} = s_{\overline{n}|i}$.
- Aug 23/10 Page 167, 2.3.34, the last line should read “Show that the present value of this perpetuity-due is $\ddot{a}_{\infty|i} * (I\ddot{a})_{\infty|i}$.”
- Apr 22/09 Page 167, *2.3.37(b), $(Ia)a_{\overline{n}|i}$ should be $(Ia)_{\overline{n}|i}$
- Apr 22/09 Page 207, 3.1.7, in line 3 PR_r should be PR_t
- Apr 22/09 Page 242, TABLE 4.3a, the entries for $k = 4$ and $k = 5$ in the “Outstanding Balance” column are reversed
- Apr 30/10 Page 312, The entries in Table 6.3 should be:
.9959 , .9903 , .9831 , .9728 , .9600 , .9451

The paragraph following Table 6.3 should be:

The entry in Table 6.3 for August 15, 2004 is based on the STRIP quote from Table 6.2 of a price of 99.19 for an August 2004 STRIP maturity. The value 99.19 refers to a price of $99\frac{19}{32} = 99.59$ for a STRIP of face amount 100. This corresponds to a present value factor of .9959. The average of the two bid entries for the Aug 04 maturity were used. The other entries in Table 6.3 are found in a similar way using bid values averaged over STRIPS with the same maturity date..

In the second paragraph from the end should be

Using these zero-coupon bond values, the present value of the bond payments would be

$$1.125(.9959+.9903+.9831+.9728+.9600)+101.25(.9451) = 101.21.$$

To get the quoted price, we subtract the accrued coupon, which is $\frac{26}{182} \times 1.125 = .16$ (26 days from February 15, 2004 to March 12, 2004, out of a coupon period of 182 days from Feb. 15 to Aug. 15, 2004). According to this method of pricing the bond, the quoted price should be 101.05. This is somewhat different from the quoted price on the Bloomberg website of 100.91. The bond price for March 12, 2004 was quoted in the *Wall Street Journal* at a price of 100.97, still a little different from 101.05. The difference between the Bloomberg quote and the Wall Street Journal quote might be due to different times at which the quotes were taken.

Apr 22/09 Page 322, Sports Betting Arbitrage note, the URL in the 2nd last line should be arbhunters.co.uk

Apr 22/09 Page 339, Definition 6.7, in the last line, “(checking with Sam)” should be replaced with “par.”

Aug 23/10 Page 347, Definition 6.8, in the last line, “(checking with Sam)” should be replaced with “par.”

Apr 15/10 Page 377, The expression for effective convexity should have h^2 in the denominator (not $2h$)

Apr 30/10 Page 381, In the numerator of the middle expression on the bottom of the page there is an extra factor of $\frac{i^{(2)}}{2}$

Apr 22/09 Page 401, *7.2.12, in line 4, all the v -factors should have subscript .08 (not .1)

Apr 22/09 Page 404, Example 8.1(a) solution, .02 in the denominator should be .05

Jan 24/10 Page 499, 2.1.11(b), the expression in the square root sign should be $1 - \frac{4(Y - X)}{Y}$

Jan 24/10 Page 500, 2.2.1, 2013 should be 2023

May 11/09 Page 501, 2.3.1 answer is based on some slight roundoff, if exact calculator values are used with no roundoff, then the answer is 419,253

May 10/10 Page 514, 7.2.5(e), 18.30 should be 20.223