

BTDT Manual for exam FM, 2019 Edition
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Errata

Posted February 9, 2019

The first equation in the solution of Problem 10 in Practice Examination 9 should be

$$100 \cdot (1+i)^{10} \cdot i = 50 \cdot (1+i)^{16} \cdot i,$$

instead of

$$100 \cdot (1+i)^{10} \cdot i = 100 \cdot (1+i)^{16} \cdot i.$$

Posted January 26, 2019

Sinking funds are no longer covered on exam FM. Treat any sinking funds problems as interesting exercises.

Posted October 21, 2018

In the solution of Problem 8 in Practice Examination 10, in the second to last sentence of the solution the phrase (referring to 12.04% dollar-weighted rate of return)

Using the information about the time-weighted rate of return,

has a typo, it should say:

Using the information about the dollar-weighted rate of return,

Posted October 17, 2018

The first calculation of the limit of the Macaulay duration should be:

$$\lim_{n \rightarrow \infty} d(n) = \lim_{n \rightarrow \infty} \frac{50 \cdot \frac{\ddot{a}_{\overline{n}|} - n \cdot 1.04^{-n}}{0.04} + 1000n \cdot 1.04^{-n}}{50a_{\overline{n}|4\%} + 1000 \cdot 1.04^{-n}} = \frac{50 \cdot \frac{1.04}{0.04} - 0}{50 \cdot \frac{1}{0.04} + 0} = \frac{1.04}{0.04} = 26.$$

The solution currently given has a typo in the denominator $50a_{\overline{n}|4\%} + 1000n \cdot 1.04^{-n}$

instead of: $50a_{\overline{n}|4\%} + 1000 \cdot 1.04^{-n}$. The answer and the answer choice are unaffected.

Posted October 17, 2018

The last part of the solution of Problem 13 in Practice Examination 20 should be

Note that in general, the difference between Macaulay duration a level annual perpetuity immediate and a level bi-annual perpetuity immediate is:

$$\frac{1}{1-v} - 2 \cdot \frac{1}{1-v^2} = \frac{1+v}{1-v^2} - \frac{2}{1-v^2} = \frac{1+v-2}{1-v^2} = \frac{v-1}{1-v^2} = -\frac{1}{1+v}.$$

instead of

Note that in general, the difference between Macaulay duration a level annual annuity immediate and a level bi-annual annuity immediate is:

$$\frac{1}{1-v} - 2 \cdot \frac{1}{1-v^2} = \frac{1+v}{1-v^2} - \frac{2}{1-v^2} = \frac{1+v-2}{1-v^2} = \frac{v-1}{1-v^2} = -\frac{1}{1+v}.$$

Posted October 6, 2018

Problem 4 in Practice Examination 10 should read as follows:

Your company owns an asset, which pays continuously at a rate of $10 - t$ thousand dollars, for $0 \leq t \leq 10$, where t is time, in years. The current market yield curve is flat with force of interest for all maturities equal to 5%. Find the Macaulay duration of this asset held by your company.

The solution is correct. Video solution can be viewed at:

<http://smartURL.it/KO-FM-Exercise38>