## Errata and Updates for the 14<sup>th</sup> Edition of the ASM Manual for Exam FM/2 (Last updated 4/27/2021) sorted by page

- [4/12/2021] On page 100, in the solution to exercise 11, change the numerator of the second fraction to 2,607.
- [4/12/2021] On page 125, in the solution to example 1, in the last paragraph, change  $_{19}a|_{\overline{251}}$  to  $_{19}|a_{\overline{251}}$ .
- [7/17/2020] On page 210, in exercise 21, part I, change  $(D\ddot{s}_{\overline{n}|} \text{ to } (D\ddot{s})_{\overline{n}|})$ .
- [7/17/2020] On page 220, in the solution to exercise 24, on the first line, change  $(Da)_{\overline{181}}$  to  $(Da)_{\overline{681}}$ .
- [7/17/2020] On page 233, in the solution to exercise 13, on the 3rd line, change 897.86 to 897.96 and on the 9<sup>th</sup> line, change 1.059 to 1.05<sup>9</sup>.
- [7/17/2020] On page 274, in exercise 5, on the first line, change "You are giving" to "You are given".
- [4/12/2021] On page 280, in the solution to exercise 16, change "Deposit" to "Interest Earned".
- [7/17/2020] On page 302, in the solution to exercise 23, on the 5th line, change  $I_2$  to  $I_t$ .
- [4/12/2021] On page 321, on the last line, change the first number 798.28 to 789.28.
- [7/17/2020] On page 328, in the solution to exercise 3, on the first line, change "Same as #9" to "Same as #5" and on the line before the last, change  $\ddot{s}_{3|i}$  to  $\ddot{s}_{3|i}$ .
- [4/12/2021] On page 345, in the Makeham calculation of Bond #1, on the third line, change  $g = \frac{Fr}{c}$  to  $g = \frac{Fr}{c}$ .
- [4/12/2021] On page 350, in exercise 23, on the second line, a period after 372.05 is missing.
- [4/12/2021]On pages 371-373, Section 7d "price between coupon payment dates" is no longer on the syllabus.<br/>On page 376, part 1 and on pages 377-378, exercises 3, 8, 10, and 11 are no longer on the syllabus.

On page 373, in the first paragraph, third line, change "priced" to "price".

- [7/17/2020] On page 385, in the solution to exercise 6, on the 3rd line, change g = .0234 to g = .02315.
- [4/12/2021] On page 407, in Example 2 part (A), change "that" to "than".
- [4/12/2021] On page 432, exercise 9 (The method of equated time) is no longer on the syllabus.
- [4/12/2021] On page 445, in the solution to example 4, change the last equation to  $\sum t^2 v^t A_t > \sum t^2 v^t L_t$ .
- [4/27/2021] On page 470, in exercise 13, change answer choice (B) to 4.40.
- [7/17/2020] On page 471, in the solution to exercise 6, change the last fraction 50/125 to 150/125.
- [4/27/2021] On page 472, replace the solution to exercise 13 with

$$a_{\overline{4}|} = \frac{1}{(1+r_1)} + \frac{1}{(1+r_2)^2} + \frac{1}{(1+r_3)^3} + \frac{1}{(1+r_4)^4} = 0.952 + 0.898 + 0.845 + 0.792 = 3.487$$

Then, find the AV: 
$$s_{\overline{4}|} = 3.487(1 + r_4)^4 = \frac{3.407}{0.792} = 4.403$$
. ANS. (B)

- [4/12/2021] On page 499, in exercise 33, on the first line, change FMOC to FOMC.
- [4/12/2021] On page 522, in Practice Exam 3, replace exercise 28 with the exercise below because the price between coupon payment dates is no longer on the syllabus. The replacement question is:

*Question #28:* An investor would like to purchase a 15,000 bond but he only has 11,000. To do so, the investor takes out a 5-year loan of 4,000 from a bank and will make interest-only payments at the end of each quarter at a nominal annual interest rate of 6% convertible quarterly. The investor immediately pays 15,000 and buys a 5-year bond with a par value of 15,000 and 8% coupons paid quarterly.

As the investor receives each coupon payment, he immediately makes the interest payment on the loan and reinvests the money left in an account earning an annual effective interest rate of *i*.

Calculate i if the investor realized an annual effective yield rate of 8.7% on his 11,000 investment over the 5-year period.

(A) 5.18% (B) 5.72% (C) 6.35% (D) 6.91% (E) 7.22%

Solution: At the end of each quarter, the investor receives coupon payments of 15,000(.08/4) = 300 and makes an interest payment of 4,000(.06/4) = 60 on the loan. His net income is 240 at the end of each quarter which accumulates to  $240s_{\overline{20|}j}$ , where *j* is the quarterly interest rate. At the end of 5 years and in addition to the 240, the investor receives 15,000 for the bond and pays off the loan of 4,000. The equation of value at time 5 is:  $11,000(1.087)^5 = 240s_{\overline{20|}j} + 11,000$  which implies  $s_{\overline{20|}j} = 23.7218$ . Using the financial calculator, *j* = .017586 that gives *i* =  $1.017586^4 - 1 = 0.0722 = 7.22\%$ . ANS. (E)