

2018 CFA Program: Level III Errata
21 May 2018

To be fair to all candidates, CFA Institute does not respond directly to individual candidate inquiries. If you have a question concerning CFA Program content, please contact CFA Institute (info@cfainstitute.org) to have potential errata investigated. The eBook for the 2018 curriculum is formatted for continuous flow, so the text will fit all screen sizes. Therefore, eBook page numbering—which is linked to section heads—does not match page numbering in the print curriculum. Corrections below are in **bold** and new corrections will be shown in **red**; page numbers shown are for the print volumes.

The short scale method of numeration is used in the CFA Program curriculum. A billion is 10^9 and a trillion is 10^{12} . This is in contrast to the long scale method where a billion is 1 million squared and a trillion is 1 million cubed. The short scale method of numeration is the prevalent method internationally and in the finance industry.

Volume 1

Volume 2

- *Reading 9: Section 3.3, including Example 9 (pages 243-245 of print) should be marked “optional” and is therefore nontestable.*
- *Reading 10: In the numerator of Equation 7 (p. 294 of print), the final component should be multiplied by the size of the gift/size of estate before gift disbursement: $[1 - T_g + (T_g T_e \times g/e)]$.*
- *Reading 12: In the paragraph immediately below Exhibit 11 (p. 438 of print), **delete the phrase** “Because Jacques already has €250,000 of life insurance ... according to this method” The original statement appears to double-count the life insurance.*

Volume 3

- *Reading 14: In the first two sentences of the solution to Practice Problem 19.A (p. 124 of print), **delete –1.0**. The final answers are correct as given.*
- *Reading 16: In the first paragraph after Example 6 (page 207), the third sentence should read “In financial theory, it is the portfolio that minimizes **diversifiable** risk, which in principle is uncompensated.”*
- *Reading 17: In Example 3, on page 251 of print, the first sentence of the paragraph before Exhibit 9 should have **7.5%** (not 6.7%) as the expected nominal return.*
- *Reading 17: In Exhibit 20 (page 270), the first row under “Factor/Asset Class” should be **Treasury bonds**, and the first row under “Factor Definitions” should be **Long-term Treasury bonds***
- *Reading 17: (pages 298 and 300) The Smith’s required capital for their third goal should be **\$2,679**, not \$2,426. The percentage numbers for the third goal’s required capital and the surplus, as shown in Exhibits 37 and 39, adjust up and down, respectively, by approximately 1 percentage point.*

Volume 4

- *Reading 21: There is no single convention for how convexity numbers are presented; for example, Bloomberg has historically followed a convention of dividing the “raw” convexity number by 100. It is important to use the raw convexity number when estimating returns. Therefore, in Example 5 Exhibit 7 (p. 25 of print) and ensuing calculations, **change Average Bond Convexity from 0.18 to 18**. There is no change in the solution of –0.96% (or –0.0096). This also applies to Exhibit 2 in Practice Problems 7–12 (p. 41 of print): **Change Average Bond Convexity from 0.22 to 22**. There is no change to the calculated change in price of –0.78%.*

- *Reading 23:* There are a number of corrections in this reading:
 - In Exhibit 58 (p. 182 of print), the numbers for **Expected convexity for portfolio** should be **3.586** (instead of 0.9), **3.545** (instead of 0.9), and **1.920** (instead of 0).
 - The revised convexity numbers should be used in calculations in Exhibit 59 (corrections bolded):

	Initial Portfolio (+ 60 bps)	Revised Portfolio (+ 60 bps)
+ E(Change in price based on yield view)	$[-1.305 \times 0.006] + [1/2 \times 3.545 \times (0.006)^2] = \mathbf{-0.7766}$	$[-0.979 \times 0.006] + [1/2 \times \mathbf{1.920} \times (0.006)^2] = \mathbf{-0.5839}$
= Total expected return	1.70%	1.73%

In the closing paragraphs of this example, change 1.69% to **1.70%**; change -0.5874 to **-0.5839** , and change -0.7814 to **-0.7766** . In the final paragraph, change 4 bps to **3 bps**.

- *Reading 24:* In section 3.1.1 (Benchmark Spread and G-Spread) (page 200), third paragraph, the fourth sentence should read “The yields of the two government bonds are usually weighted so that their weighted average **maturity** matches the credit security’s **maturity**.”
- *Reading 24: Example 2 has been rewritten as follows.*

Example 2

Using G-Spread to Calculate Interest Rate Hedges and Price Changes

On 31 March 2016, a portfolio manager gathers information for the following bonds:

1. Citigroup 3.75% due 16 June 2024
2. US Treasury 1.5% due 31 March 2023 (on-the-run 7-year Treasury note)
3. US Treasury 1.625% due 15 February 2026 (on-the-run 10-year Treasury note)

Price, yield, and effective duration measures for the three bonds are as follows:

	Price	Yield	Maturity	Effective Duration
Citigroup 3.75% due 16 June 2024	103.64	3.24%	7.96	7.0
US Treasury 1.5% due 31 March 2023	99.80	1.53%	7.00	6.7
US Treasury 1.625% due 15 February 2026	98.70	1.77%	9.88	9.1

Later, the portfolio manager observes that the 7-year Treasury note's yield has fallen from 1.53% to 1.43% while the 10-year Treasury note yield remains unchanged.

1. What is the new yield on the Citigroup bond, assuming its spread remains unchanged?
2. Based on the interest rate changes, what is the new price of the Citigroup bond?

Solution to 1:

Assuming yield spreads are unchanged, the yield of the Citigroup bond is now **3.17%**.

First, calculate the G-spread spread on the Citigroup bond:

A weighting of 66.7% of the 7-year Treasury note and 33.3% of the 10-year Treasury note matches the 7.96-year maturity of the Citigroup bond:

$$(9.88 - 7.96) \div (9.88 - 7.00) = 66.7\%$$
$$(66.7\% \times 7.96) + (33.3\% \times 9.88) = 7.96$$

Therefore, the linearly interpolated yield on the 7.96-year benchmark maturity is 1.61%:

$$(66.7\% \times 1.53) + (33.3\% \times 1.77) = 1.61\%$$

and the G-spread on the Citigroup bond is 163 bps (the difference between its yield and the interpolated yield): $3.24\% - 1.61\% = 1.63\%$

Next, find the new yield on the interpolated Treasury after the interest rate change:

$$(66.7\% \times 1.43) + (33.3\% \times 1.77) = 1.54\%$$

The interpolated Treasury yield has fallen by 7 bps, from 1.61% to **1.54%**. Add the G-spread of 163 bps to the interpolated Treasury yield to arrive at a new yield for the Citigroup bond of **3.17%**. $1.54\% + 1.63\% = 3.17\%$.

Solution to 2:

The new price on the Citigroup bond can be estimated based on its yield change and its duration. The price has risen from 103.64 to **104.15** = $103.64 \times [1 + (7 \times 0.07\%)]$, representing an absolute increase of **0.51** or a percentage increase of **0.49%**.

Volume 5

Volume 6

- *Reading 32:* The coverage of volatility in Exhibit 8 (volume 6, page 92) is superseded by the analysis of it in the fourth and fifth paragraphs following Exhibit 48 in Reading 17 (volume 3, page 313).