2022 CFA Program: Level II Errata

31 October 2022

- The eBook for the 2022 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.

Glossary

- The definition for Fair market value should read, "The price, expressed in terms of cash equivalents, at which a property (asset) would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at "arm's length" in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts. Fair market value is most often used in a tax reporting context in the United States."
- The definition for Funds from operations should read, "Net income (computed in accordance with generally accepted accounting principles) plus (1) ~~gains and~~ losses **(minus gains)** from sales of properties **plus** (2) depreciation and amortization **related to real estate, plus real estate impairments and write-downs unrelated to depreciation**."

Volume 1

Reading 1

- In Exhibit 5 (page 10), the Company C residual should read, "$e_3 = Y_3 - (b_0 + b_1X_3)$" and the Company E residual should read, "$e_5 = Y_5 - (b_0 + b_1X_5)$
- In Section 5.2 (page 459 of print), Equation 17 should read,

$$s_{\hat{b}_0} = S_e \sqrt{\frac{1}{n} + \frac{\bar{X}^2}{\sum_{i=1}^{n}(X_i - \bar{X})^2}}.$$

Reading 2

- In Exhibit 6 (page 88 of print), the formula for the non-baseline should be:

"$Y = (b_0 + d_0) + (b_1 + d_1)X + e$." The first sentence of the Note under the Exhibit (page 89 of print) should read "The graph shows a scenario where $d_0 > 0$ and $d_1 < 0$."

- In the Information for Questions 37-45, Exhibit 1 (page 152 of print), the p-value for b_2 (Tenure variable) should be **0.01334**
- The last sentence of the Solution to Practice Problem 10 (page 161 of print) should read, "Therefore, **we need to correct** for conditional heteroskedasticity."

Reading 3

- In Example 3, Solution to 1 (page 179 of print), Note that a $\hat{b}_1$ of **0.0295** implies that the exponential growth rate per quarter in Starbucks' sales will be **2.99394**% ($e^{0.0295} - 1 = $ **0.0299394**)."
- In the third paragraph of Section 4 (page 180 of print), the first sentence should read, "In Example 1, estimating a linear trend in the monthly CPI inflation yielded a Durbin–Watson statistic of **1.2145**." In the next paragraph, the first sentence should read, "In Example 3, estimating a linear trend with the natural logarithm of sales for the Starbucks example yielded a Durbin–Watson statistic of **0.26**."
- In Exhibit 14 (page 189 of print), the autocorrelation for lag 4 or the value of the t-test should read, "**0.2623**"
- In Example 17 (page 215 of print), the last sentence of the second paragraph should read, "Consequently, the test statistics she computed in **Exhibits 13 and 14** are not valid…"
- In Practice Problem 8 (page 229 of print), the 3Q 2019 Changes in Log of Sales should be **0.0403** in both Exhibit 6 and Exhibit 7.
- In the Solution to Practice Problem 8 (page 243 of print), the 3Q 2019 Changes in Log of Sales should be **0.0403**.
- In the Solution to Practice Problem 33 (page 248 of print), the second sentence should read, "Exhibit **5** shows that the time series…"

Reading 4

- In the last paragraph of Section 2.2 (page 256 of print), the second sentence should read, "**In (supervised) machine learning**, when the dependent variable (target) is categorical, the model relating..."
- In Section 5, first paragraph (page 266 of print), the fourth sentence should read, "The left panel in Exhibit 6 presents a simple dataset with two features (x and y coordinates) labeled in two groups (triangles and **diamonds**). In the third paragraph (page 267), the second sentence should read, "The intuitive idea behind the SVM algorithm is maximizing the probability of making a correct prediction (here, that an observation is a triangle or a **diamond**) by determining the boundary that is the furthest away from all the observations."
- In Section 6, first paragraph (page 268 of print), the fourth sentence should read, "The diamond in Exhibit 8 needs to be classified as belonging to either the **diamond** or the triangle category." The sixth sentence should read, "The right panel in Exhibit 8 presents the case where k = 5, so the algorithm will look at the diamond's five nearest neighbors, which are three triangles and two **diamonds**."
- In Exhibit 26 (page 299 of print), the vertical line circled in yellow should be deleted:

Exhibit 26   Dendrogram for Hierarchical Agglomerative Clustering
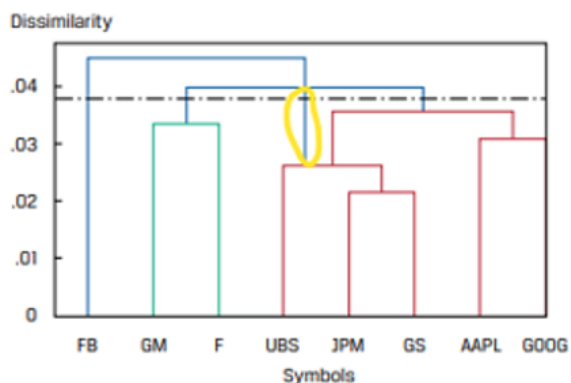
- In the Solution to Practice Problem 10 (page 325 of print), the first two sentences should read, "A is correct. It is the least accurate answer because neural networks with many hidden layers—at least **2**, but often more than 20 hidden layers—are known as deep learning nets."

Reading 6
- In the solution to Practice Problem 15 (page 493 of print), the second sentence in the second paragraph should read, "Dealer A is effectively quoting **GBP/MXN** at 0.0403/0.040.

Reading 7
- In Example 1, in the table under Solution to 4 (page 506 of print), the sixth row should read, "Tax and regulatory **policies** discouraging entrepreneurship"
- In Section 10.2.1 (page 539 of print), in the second paragraph, the equation $Y = Y/L = Ak^\alpha$ should be $y = Y/L = Ak^\alpha$
- In the second paragraph after Example 13 (page 559 of print), the second sentence should read, "In contrast, many East Asian countries, such as Singapore and South Korea, pursued outward-oriented **policies** during this same period…"
- In Example 15 (pages 561-565 of print), the first sentence in the fourth paragraph under Solution to 1 should read, "The growth rate in total factor productivity (Exhibit 20) is calculated by using a geometric average of the growth rates for **2006–2015** and is equal to **–0.85%**." The equation in the next paragraph should read,

  Growth in potential GDP = $\alpha\Delta K/K + (1 - \alpha)\Delta L/L + \Delta A/A$
  = (0.413)0.04 + (0.587)(−0.0127) + (**−0.0085**)
  = **0.06%**

The last line under Solution to 1 should read, "TFP = **–0.85%**

The second sentence in the second paragraph under Solution to 3 should read, "In contract to capital deepening, TFP made a negative contribution to growth; the average rate of growth for TFP from 2006 to 2015 was **–0.85%**.

3

The second equation under Solution to 4 should read, "Steady-state growth rate = **−0.85**%/(1 − 0.413) + (−1.27%) = **−2.7%**

Volume 2

Reading 9

- In Example 2 (page 20 of print), the first sentence of the second paragraph should read, "Blake Co. believes the value of Brown Co. is higher than the **book** value of its identifiable net assets."
- The second paragraph of Section 8.3 (page 37 of print) needs two sentences added to the end: "Income taxes are ignored in the table. In practice, however, non-controlling interest on the consolidated income statement is the non-controlling interest's share of the subsidiary's *after-tax* income."
- In the second paragraph of Section 9 (page 40 of print), the sixth and seventh sentences should read, "Note that GlaxoSmithKline has **£6,172,000,000** in contingent consideration liabilities, which relate to future events such as development milestones or sales performance for acquired companies. Of the £6 billion total contingent liability, **£1,076,000,000** is expected to be paid within one year in respect of the Novartis Vaccines business, which reached its sales milestone."
- In the information for Questions 29-35, Exhibit 2 (page 59 of print), the exhibit title should read "Selected Financial Data for Rainer Co., 1 January **2016**." The sentence immediately after Exhibit 2 should read, "Thronen notes that, for fiscal year **2016**, Raine reported total revenue of $1,740 million and net income of $360 million, and paid dividends of $220 million."

Reading 10

- In the information for Practice Problems 26–31, in Exhibit 3 (page 114 of print), the second row should read, "Change in benefit expense reported in P&L."
- The last sentence in the solution to Practice Problem 9 (page 116 of print) should read, "Here, the service costs are 320 (= 200 + 120) and the net interest expense is **218** [= (42,000 + 120 – 39,000) × 7%]."
- The last two sentences in the solution to Practice Problem 10 (pages 116–117 of print) should read, "Under US GAAP—assuming the company chooses not to immediately recognise the actuarial loss and assuming there is no amortisation of past service costs or actuarial gains and losses—the components of periodic pension cost that would be reported in P&L include the current service cost of 200, the interest expense on the pension obligation at the beginning of the period of 2,940 **[= 7.0% × (42,000 +120)]**, and the expected return on plan assets, which is a reduction of the cost of 3,120 (= 8.0% × 39,000). Summing these three components gives **28**."

Reading 14

- In Exhibit 5 (page 389 of print), two lines should be added to the bottom:

| Investments in associates and joint ventures | 8,649 | 12,315 | 11,586 | 10,317 |
| Total equity, excluding associates and joint ventures | 63,235 | 51,824 | 51,078 | 48,025 |

Volume 3

Reading 19

- In Practice Problem 2 (page 209 of print), the second sentence should read, "The fixed capital outlay is depreciated straight-line over a **five**-year life." The B option is "$69,674 decrease." The solution to Practice Problem 2 (page 221 of print) should read, "B is correct. The additional annual depreciation is $100,000/**5 = $20,000**. The depreciation tax savings is 0.40 **($20,000**) = **$8,000**. The change in project NPV is

$$-100,000 + \sum_{t=1}^{5} \frac{8,000}{(1.10)^t} = -100,000 + \mathbf{30,326} = -\$\mathbf{69,674}$$

Reading 21

- In the last paragraph in Section 2.2.2 (page 300 of print), the first sentence should read, "Using the Ibbotson-Chen format and a risk-free rate of **2.5**%, an estimate of the US equity risk premium is..."
- In Example 7, under the Solution to 2 (page 310 of print), the second sentence should read, "The SMB premium is positive, and the company has negative exposure to it, resulting in the required return estimate being lower by **36** bps."
- In the Solution to Example 10 (page 319 of print), the final sentence should read, "Therefore, Vodafone's WACC based on the data provided is approximately **4.66**%.."
- The Solution to 18 (page 332 of print) should read, "**C** is correct."

Reading 22

- In Example 2 (page 344 of print), a sentence needs to be added to the question stem for item 1: "Wu's projection is for a linear deceleration in revenue growth over four years to the long-term growth rate."
- In Example 2, under the Solution to 1B (page 345 of print), 2015 = 4% should be 20**22** = 4%.
- In Example 2, under the Solution to 2B (page 346 of print), the final sentence should read, "Note that the figure for Trulicity was 78% (**913**/1,164 = 0.784)."
- In Example 3, Question 2C (page 348 of print), the first sentence should read, "Benitez projects that **Walgreens'** average selling area square footage will increase..."
- In Example 3, Solution to 2, the second sentence should read, "The operating margin of the mass market operations will improve by **280** bps to 20.7% because a 1,230 bps decline in gross margin (from 72.8% to 60.5%) will be more than offset by the 1,510 bps of decline in A&P expenditures (from 30.2 of sales to 15.1% of sales)."
- In Example 4, Question 2, the second bullet point (page 354 of print) should read, "L'Oreal's mass market operations will have a gross margin of **60.5**% (the average of the current gross margin of 72.8% and the 48.2% reported by its mass market peers.)"
- In Exhibit 7 (page 355 of print), the figure for Underlying operating profit margin, Personal Care for 2017 should be 21.1%.

- In Exhibit 7 (page 355 of print), the first panel of the table should read as follows:

	2017	2018	18/17 YoY	Avg 2016-2018
Personal Care	20,697	**21,339**	3.1%	3.0%
Foods	22,444	**22,893**	2.0	2.4
Home Care	10,574	**11,018**	4.2	4.3
Total Revenues	53,715	**55,250**	2.9	3.0

- In Example 10, Exhibit 27 (page 382 of print), the Total revenue growth for C should be **4.**0%.
- In Example 10, Exhibit 28 (page 382 of print), the YoY% for Gross Profit for Analyst C should be 0.5% (positive, not negative).
- Exhibit 48 (page 410 of print) should read as follows:

	2016	2017	2018	2019	2020E	2021E	2022E
Depreciation and amortization (€ millions)	19	20	22	30	35	46	56
As % of sales	1.8%	1.9%	1.9%	2.7%	3.1%	3.8%	4.3%
As % of fixed assets	**2.2%**	**2.0%**	**2.3%**	**3.2%**	**3.7%**	**4.9%**	**5.9%**
Capex (€ millions)	30	31	33	40	40	43	46
Capex as % of sales	2.9%	**2.8%**	2.9%	3.6%	**3.5%**	**3.5%**	**3.5%**
As % of fixed assets	**3.4%**	**3.2%**	**3.4%**	**4.3%**	**4.3%**	**4.6%**	**4.8%**
Capex/(depreciation and amortization)	1.6	1.8	1.5	1.3	1.3	1.2	1.2

Reading 23

- In the paragraph right before Example 16 (page 462 of print), the middle line of the equation should read:

$$= \frac{\mathbf{0.55}(1.05) + \mathbf{0.55}(5)(0.09 - 0.05)}{0.0588 - 0.05}$$

- [Updated] In Practice Problem 11 (page 485 of print), the third sentence should read, "The company's dividend per share for the **previous year** was A$0.58." In the Solution to 11A (page 501 of print), the third sentence should read, "Because the dividend growth rate becomes constant from the **beginning** of 2022 (t = 3), this can be solved using the two-stage dividend discount model as follows..."
- The solution to Practice Problem 3C (page 500 of print) should read, "The estimated value of Sage Broadcasting would decrease as r **decreases** and increase as g increases, all else equal."

Volume 4
Reading 24

- In Example 10 (page 34 of print), the first bullet should read, "the **net** profit margin will remain at 8% (= 240/3,000), and." The line after the bullets should read, "Espinosa's forecast for **2021** is as follows (dollars in millions)."

- In Example 16, some numbers need to be updated in the last paragraph. It should read as follows:

$$V_{2023} = \frac{FCFE_{2024}}{r - g} = \frac{3.759}{0.104 - 0.07} = \$110.56 \text{ per share}$$

To find the present value of V_{2023} as of the end of 2019, V_{2019}, we discount V_{2023} at 10.4% for four years:

PV = 110.56/(1.104)⁴ - $74,425 per share.

The total present value of the company is the present value of the first four years' FCFE plus the present value of the terminal value, or

V_{2019} = −0.0027 + 0.867 + 1.504 + 1.965 + 74.42 = $78.73 per share.

- In Practice Problem 13, Exhibit 1 (page 67 of print), under Balance Sheet, the first row should read "Current assets (includes $5 cash in **2019** and **2020**."

Reading 25

- In Example 3, the third sentence of the first paragraph (page 105 of print) should read, "Adjusting for all of these items, Evergreen reported "core EPS" of £1.41 for the first quarter of 20X9, compared with core EPS of **£1.81** for the first quarter of 20X8."
- In Example 12, Solution to 1 (page 125 of print), the last sentence should read, "Stock B is trading at a high P/E, even higher than its historical relationship to the S&P 500's P/E (1.2 × 21.8 = **26.2**).
- The Solution to 1 in Example 26 (page 149 of print) should read, "From Equation **6**, GETI's justified P/S is calculated as follows..."
- The Solutions to Example 30 (page 155 of print) should read:

Solution to 1:

Calculate intrinsic value as (1.032 × $2.66)/(0.074 − 0.032) = $**65.36**.

Solution to 2:

Calculate a justified P/CF based on forecasted fundamentals as $**65.36**/$3.26 = **20.05**.

Solution to 3:

The justified P/FCFE is $**65.36**/$2.66 = **24.57**.

- The Solution to Example 34 (pages 162-163 of print) should read as follows:

Solution:

- For EV, we first calculate the total value of CL's equity: 863 million shares outstanding times $66.48 price per share equals $57,372 million market capitalization.

  CL has only one class of common stock, no preferred shares, and no minority interest. For companies that have multiple classes of common stock, market capitalization includes the total value of all classes of common stock. Similarly, for companies that have preferred stock and/or minority interest, the market value of preferred stock and the amount of minority interest are added to market capitalization.

  EV also includes the value of long-term debt obligations. Per CL's balance sheet, this is the sum of long-term debt ($6,354 million), the current portion of long-term debt ($0 million), and other non-current liabilities (**$2,269** million), or **$8,623** million. Typically, the book value of long-term debt is used in EV. If, however, the market value of the debt is readily available and materially different from the book value, the market value should be used.

  EV excludes cash, cash equivalents, and short-term investments. Per CL's balance sheet, the total of cash and cash equivalents is $**720** million.

  So, CL's EV is $57,372 million + $**8,623** million − $720 million = $65,**275** million.

- For EBITDA, we use the trailing 12-month (TTM) data, which are shown in the table above for the year ending 31 December 2018. The EBITDA calculation is

  EBITDA = Net income + Interest + Income taxes + Depreciation and amortization.

  EBITDA = $2,400 + $143 + $906 + $511 = $3,960 million.

  CL does not have preferred equity. Companies that do have preferred equity typically present in their financial statement net income available to common shareholders. In those cases, the EBITDA calculation uses net income available to both preferred and common equity holders.

  For CL, we conclude that EV/EBITDA = ($65,**275** million)/($3,960 million) = 16.**5**.

- In Example 39, Solution to 1 (page 174 of print), the third sentence should read, "The relative-strength indicator for the STOXX Europe 50 Index is **0.847**."
- In Practice Problem 3 (page 186 of print), the last bullet should read, "For 2020, Stewart expects RUF to achieve net income of $30 million. RUF has 30 million shares outstanding and options outstanding for an additional ~~33,333,333~~ shares."
- In Practice Problem 30 (page 196 of print), Option A should read, "€2.9**4**." The Solution to Practice Problem 30 (page 206 of print) should read, "A is correct. Based on the method of average ROE, normalized EPS are calculated as the average ROE from the most recent full business cycle multiplied by current book value per share. The most recent business cycle was 2011-2014, and the average ROE over that period was

- (0.1301 + 0.1371 + 0.1158 + 0.1421) / 4 = 0.131

- The book value of (common) equity, or simply book value, is the value of shareholders' equity less any value attributable to the preferred stock: €1,027 million - €84 million = €943 million.

- Current book value per share (BVPS) is calculate as €943 million / 41.94 million = €22.48.

- So, normalized EPS is calculated as

- Average ROE x BVPS = 0.131 x €22.48 = €2.94."

Reading 26

- In Example 10 (page 229 of print), the first sentence should read, "Rosato extends her analysis to consider the possibility that ROE will slowly decay toward r in 2040 and beyond, rather than using a perpetuity of Year **2039** residual income."
- The Solution to Practice Problem 7B (page 263 of print) should read, "Market value added = Market value of capital – Total capital

  = ($26 stock price x 84 million shares) - $700 million
  = $1,484,000,000

  Market value added per share = $1,484,000,000 / 84 million shares

  = $17.67 per share."
- The solution to Practice Problem 16D (page 267 of print) needs the following two corrections, "Discounting the dividends from the table show in the solution to Part A above at **5.10**% gives..." and "The estimated terminal stock price, calculated in the solution to Part C above, is $**129.767**, which equals..."
- The solution to Practice Problem 17A (page 268 of print) should be corrected to indicate the justified P/B is **5**.37

Reading 27

- In Example 2 (page 285 of print), the first bullet should read, "Long-term growth of revenues ~~and after-tax operating income~~ is 3% annually."

Reading 28

- In Example 1, the Solution to 3 should read, "Using Equation 2, 0.7722 = 0.9346 × $F_{1,2}$.

  $F_{1,2}$ = 0.7722 ÷ 0.9346 = 0.8262." The first sentence in Solution to 4 should read, "The forward contract price of $DF_{1,2}$ = 0.8262 is the price agreed on today, to be paid one year from today for a bond with a two-year maturity and a risk-free unit-principal payment (e.g., $1, €1, or £1) at maturity in three years."

- In Equation 3 (page 339 of print), the expression in the denominator should read,

$$(1+f_{A,B-A})^{B-A}$$

- In Equations 5a and 5b (page 341 of print), there is a missing $(1 + f_{1,1})$ after the $(1 + z_1)$
- Exhibit 2 (page 343 of print) and Exhibit 3 (page 344 of print) need an x-axis label: Years.
- In the third paragraph after Exhibit 4 (page 353 of print), the first sentence should read, "The 6% five-year bond purchased for 100 returns 120.61 in two years [(6 × 1.02) + 6 + 108.49], which consists of the first year's coupon reinvested at the one-year rate, the second annual coupon, and the capital gain on the sale of the 6% bond with three years to maturity at an unchanged three-year yield of 4% [**105.55** = 6/1.04 + 6/(1.04)2 + 106/(1.04)3]." In the fourth paragraph, the last sentence should be, "The excess return of nearly 2% results from both higher coupon income than the five-year matched maturity bond as well as a larger capital gain on the sale of the 7% bond with four years to maturity at an unchanged four-year yield of 5% [**107.09** = 7/1.05 + 7/(1.05)2 + + 7/(1.05)3 + 107/(1.05)4]."
- [Updated:] In the paragraph before Equation 13 (page 357 of print), the second sentence should read, "Because the value of a swap at origination is set to zero, the swap rates must satisfy Equation **12**."
- Equation 15 in Section 8.2 (page 372 of print) should read,

$$KeyDur_{Full} = \%\Delta P = \left(\frac{\Delta P}{P}\right) \approx -KeyDur_L \Delta x_L - KeyDur_S \Delta x_S - KeyDur_C \Delta x_C$$

The next equation (page 373 of print) should read,

$$KeyDur_{Full} = \%\Delta P = \left(\frac{\Delta P}{P}\right) \approx --5.333\Delta x_L - 3.0\Delta x_S - 3.6667\Delta x_C$$

- The fifth paragraph in Section 9 (page 375 of print) should read, "Research shows that although inflation, GDP, and monetary policy explain most of the variance of bond yields, short- and intermediate-term bond yields are driven mostly by **monetary policy**, whereas other factors such as **inflation** are key drivers of long-term yields. **Monetary policy** explains about two-thirds of short- and intermediate-term bond yield variation, with the remaining third roughly equally attributable to economic growth and factors including **inflation**. In contrast, **inflation** explains nearly two-thirds of long-term yield variation, and the remaining third is largely attributable to **monetary policy**."

Reading 30

- In Section 10.2.3 (page 498 of print), the "Market conversion premium per share on 15 June 2019
  = $**54.40** – $**35.14**
  = $**19.26**"

Then, the "Market conversion premium ratio on 15 June 2019 $= \dfrac{\$\mathbf{19.26}}{\$35.14}$

$= \mathbf{54.18}\%$."

- In Section 10.2.4, the first equation should read,

$$\text{Premium over straight value} = \frac{\$952.25}{\$894.86} - \mathbf{1}$$

$$= 6.41\%$$

Reading 32

- In the first paragraph after Example 1 (page 606 of print), the third sentence should read, "The two most commonly traded CDS index products are the North American indexes (**CDX**) and the European, Asian, and Australian indexes (iTraxx).
- In Section 4.4 (page 618 of print), the first equation in the second paragraph should read, "Profit **or loss** for the buyer of protection ≈ Change in spread in bps × Duration × Notional"

Volume 5

Reading 33

- In Example 16, under Solution to 1 (page 56 of print), under Quarterly Cash Flows Exchanged, 0.00692381 should be 0.00692375 and 0.00062422 should be 0.00062425. Then, the equation should read as follows:

  VCS = A\$100,000,000 × [0.0069237**5** (3.967683) + 0.986031] − 1.13 (A\$/1US\$) × (US\$87,719,298) × [0.0006242**5** (3.994841) + 0.998336] = A\$2,145,**167**."

  Under Solution to 2 (page 57 of print):
  "−VCS = −A\$2,145,**167**, which when converted to US\$ at St is:
  −VCS = −A\$2,145,**167** × (1US\$/1.13A\$) = −US\$1,898,**378**."

- In the Solution to Practice Problem 16 (page 89 of print), the first AI equation should read:

AI = (60/180) × (**1.5**/2) = 0.25

And the second should read:

AI = (120/180) × (**1.5**/2) = 0.50

In the Solution to Practice Problem 17, the fifth equation should read:

AI_T = (120/180 × **2**/2) = 0.67

Reading 34

- The second sentence of Section 5 (page 99 of print) should read, "It is well-known that ~~non-dividend-paying~~ call options on **non-dividend-paying** stock will not be exercised early because the minimum price of the option exceeds its exercise value."
- In the information for Practice Problems 10-17, Exhibit 1 (page 149 of print), the fourth column head should be a lowercase sigma, not a capital sigma.

- [updated] The Solution to 6 (page 154 of print) should begin "**B** is correct." The third paragraph in the solution should begin, "Following is a supplementary note regarding Exhibit 1 **(these computations refer to European-style put options)**."

Reading 35

- Example 15 (pages 198–199 of print) has been updated. The numbers under Valuation Metrics in the table should read as follows:

	Taller Towers/City of London	Fairview Ally/Mayfair	Real Estate Road/Knightsbridge
Price Per Square Foot	£1,450	£1,600	£875
Price/Rental Revenue	22.7×	21.1×	16.8×
Price/Operating Income	25.3×	23.4×	19.8×

The solution should read as follows:

"The target property has more in common with the other Class B property based on quality, age, and rents trailing the market average. In contrast, the two Class A, or Grade A, properties, rent at a premium to the local market, and Taller Towers has the highest occupancy.

As the appraiser, you may come up with a range of values based on the property in its current condition, with the in-place tenant leases and occupancy, and what the property would be worth if occupancy and income were higher.

Using the most comparable property valuation metrics without any adjustments, values would range from a low of **£87.5 million**, based on a purchase price of **£875** per square foot, to **£90.9 million** using the same price-to-revenue multiple **of 16.8×**. A discount to these multiples may be warranted because the target property is older. Alternatively, if the target property's occupancy were to readily increase to 80%, the upper range of the valuation could move **higher**. It is beyond the scope of this example to consider how much it would cost to raise occupancy by spending capital to improve the vacant space and pay broker leasing commissions, nor are we considering the property potential if larger amounts were invested in renovating the property. If you were to estimate the property value following such a renovation, you would subtract the cost of the renovation from the post-renovation value."

- In the third paragraph of Section 5.1 (page 200 of print), the last sentence should read, "If another developer could build an office for an all-in cost of $2.5 million-including its profit requirement-and sell the property for $4.25 million, then the developer would be willing to pay as much as **$1.75 million** for the land. In that case, the value under the existing use falls below the land value ($1.5 million warehouse value minus **$1.75 million** for the land based on the highest and best use) and any buildings on the site will likely be demolished so the building that represents the highest and best use of the site can be constructed."

- In Example 22 (page 210 of print), in the table in part one, the row for Lease 2 (m^2) should read, "6,897 / NOI in Year **7** (millions) / AUD 3.79"

- In the third paragraph of Section 10.2 (page 223 of print), the third sentence should read, "The revised net worth of the company divided by the number of shares outstanding is the **NAVPS**."

- In Practice Problem 40 (page 259 of print), Option C should be "$28.**83**." In the Solution to Practice Problem 40 (page 266 of print), the second sentence should read, "The estimated value per share for the Baldwin REIT using a two-step dividend discount model is $28.**83**." Footnote b at the bottom of the table should read, "Calculated as $1.00/(1.085) + $32.77/(1.085)^2 = $28.**83**."

Reading 36

- In the third-to-last paragraph in Section 4 (page 280 of print), the last sentence should read, "The preference shares component of the private equity fund earns an IRR of 12% per annum."

Reading 37

- In the Solution to 10 (page 367 of print), the last sentence should read, "The basis for the near-term Brent crude oil futures contract is the difference between the spot price and the near-term futures price: $77.56 − $73.**64** = $3.9**2**."

Reading 39

- In the Solution to 14 (page 465 of print), the second sentence should read, "When using a macroeconomic factor **model**, the expected return is the intercept (when all model factors take on a value of zero)."

Reading 40

- The text introducing Exhibit 2 (page 472 of print) should read, "Exhibit 2 provides statistical summary information based on the **four** years of daily data in the lookback period..."

Volume 6

Reading 42

- In Example 6 (page 18 of print), the last equation should read,

$$P_{t,s} = \frac{E_t(\tilde{P}_{t+1,s-1})}{1+l_{t,1}} - 0.000008$$

Reading 43

- In Example 2 (page 100 of print), the last sentence of Solution to 3 should read, "To reconfirm, the Sharpe ratio of the combined portfolio is (**8.4%** − 2.3%)/14.6% = 0.42, the same as the original 0.42 value."
- In the second paragraph after Exhibit 7 (page 121 of print), the last sentence should read, "As explained later, the information coefficient used in fundamental law accounting will be adjusted down to **0.099**, as shown at the bottom of Exhibit 7, to account for the assignment of scores in this particular example.

Reading 44

- In Example 1, under Solution to 4 (page 160 of print), the fourth sentence should read, "A similar calculation using only the sales **made** by the mutual fund gives a trade VWAP of C$10.0680"

Reading 46

- In the Solution to Practice Problem 36 (page 404 of print), the second sentence should read, "Standard VII(A)–**Conduct as Participants in CFA Institute Programs** prohibits providing information to candidates or the public that is considered confidential to the CFA Program."
- In the Solution to Practice Problem 61 (page 408 of print), the third sentence should read, "Standard VII(A)–**Conduct as Participants in CFA Institute Programs** prohibits conduct that compromises the reputation of the CFA designation including misrepresenting information on the Professional Conduct Statement."