

Curriculum Errata Notice

2024 Level I CFA Program

UPDATED 8 MARCH 2024

This document outlines the errors submitted to CFA Institute that have been corrected.

Due to the nature of our publishing process, we may not be able to correct errors submitted after 1 September 2024 in time for the publication of the following year's print materials. However, we update all errors in the Learning Ecosystem (LES) and in this document at the end of each month.

We recommend checking either the LES or this document regularly for the most current information. Depending on when you purchase the print materials, they may or may not have the errors corrected.



All errors can be submitted via <http://cfa.is/Errata>

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Quantitative Methods

Rates and Returns

| Lesson | Location | PDF Pg | Revised | Correction |
|---|-----------------------|--------|--------------|---|
| Rates Of Return | Holding Period Return | 9 | 31 Jan 2024 | <p>Replace: For example, an analyst may need to compute a one-year holding period return from three annual returns. In that case, the one-year holding period return is computed by compounding the three annual returns...</p> <p>With: For example, an analyst may need to compute a three-year holding period return from three annual returns. In that case, the three-year holding period return is computed by compounding the three annual returns...</p> |
| Rates Of Return | Equation 14 | | 8 March 2024 | <p>Replace: $(1 + \text{real return}) = (1 + \text{real risk-free rate})(1 + \text{risk premium}) / (1 + \text{inflation premium})$</p> <p>With: $(1 + \text{real return}) = (1 + \text{real risk-free rate})(1 + \text{risk premium})$</p> |
| Rates Of Return | Example 7 | 16 | 31 Jan 2024 | <p>The following paragraph should appear before the example:</p> <p>The harmonic mean only works for non-negative numbers, so when working with returns that are expressed as positive or negative percentages, we first convert the returns into a compounding format, assuming a reinvestment, as $(1 + R)$, as was done in the geometric mean return calculation, and then calculate $(1 + \text{harmonic mean})$, and subtract 1 to arrive at the harmonic mean return.</p> |
| Money-Weighted and Time-Weighted Return | Example 8, Question 4 | 23 | 8 March 2024 | <p>Replace the sum in the second calculation: 1.1471</p> <p>With: 1.1476</p> |

| Lesson | Location | PDF Pg | Revised | Correction |
|--|-------------|--------|--------------|---|
| Annualized Return | | 29 | 8 March 2024 | Starting on page 29, the equation numbers do not match up with the equation numbers referenced in the text. For example, on page 29, the equation is labeled as equation “7” but the text below it refers to it as “Equation 8.” Each subsequent reference to an equation in the text should be one number less than written for the rest of the learning module. For example, “Equation 9” should be “Equation 8” and “Equation 10” should be “Equation 9.” |
| Other Major Returns and Their Applications | | 33 | 31 Jan 2024 | <p>The first paragraph under Gross and Net Return should read:</p> <p>A gross return is the return on assets managed less any trading expenses and commissions. Gross return is intended to reflect the investment skill of the manager. Expenses including management fees, custody fees, and taxes are not included in the gross return because they may be different for different investors. For example, most asset managers provide lower management fee rates to larger accounts. Excluding these expenses in gross returns provides a basis for evaluation and comparison of investment management skill.</p> |
| Other Major Returns and Their Applications | Equation 14 | 34 | 8 March 2024 | <p>Fix the equation by removing the denominator: (1+inflation premium)</p> $(1 + \text{real return}) = \frac{(1 + \text{real risk-free rate})(1 + \text{risk premium})}{1 + \text{inflation premium}}$ <p>New equation should read:</p> $(1 + \text{real return}) = (1 + \text{real risk-free rate})(1 + \text{risk premium})$ |
| Practice Problem | Problem 1 | 38 | 31 Jan 2024 | <p>The full question prompt for Practice Problem 1 should read as follows:</p> <p>“The nominal risk-free rate is best described as the sum of the real risk-free rate and a premium for:”</p> |

Quantitative Methods

The Time Value of Money in Finance

| Lesson | Location | PDF Pg | Revised | Correction |
|--|--------------------------------------|--------|--------------|--|
| Time Value of Money in Fixed Income and Equity | Example 2, Question 1 | 51 | 8 March 2024 | <p>Replace:</p> $PV = EUR100$ $= \frac{2}{1.20} + \frac{2}{1.02^2} + \frac{2}{1.02^3} + \frac{2}{1.02^4} + \frac{2}{1.02^5} + \frac{2}{1.02^6} + \frac{2}{1.02^7}$ <p>With:</p> $PV = EUR100$ $= \frac{2}{1.20} + \frac{2}{1.02^2} + \frac{2}{1.02^3} + \frac{2}{1.02^4} + \frac{2}{1.02^5} + \frac{2}{1.02^6} + \frac{102}{1.02^7}$ |
| Time Value of Money in Fixed Income and Equity | Example 2, Question 2 and Solution 2 | 51 | 31 Jan 2024 | <p>Question 2 should begin:</p> <hr/> <p>The solution to Question 2 should read:</p> <p>Next, let's assume that, exactly two years later, a sharp rise....</p> <hr/> <p>3.2876 percent</p> <p>In this case, we must solve for r using Equation 6, with PV equal to 93.09, as follows:</p> $PV = 93.091 = 2/(1+r) + 2/(1+r)^2 + 2/(1+r)^3 + 2/(1+r)^4 + 2/(1+r)^5 + 102/(1+r)^6$ <p>Here we may use the Microsoft Excel or Google Sheets RATE function (RATE (6,2,93.091,100,0,0.1)) to solve for r of 3.2876 percent. Investors in fixed coupon bonds face a capital loss when investors expect a higher YTM.</p> |

| Lesson | Location | PDF Pg | Revised | Correction |
|--|-----------------------|--------|-------------|--|
| Time Value of Money in Fixed Income and Equity | Exhibit 6 | 58 | 31 Jan 2024 | Within the exhibit, the bar representing the fifth year is incorrectly labeled. The exponent 4 should be 3, so replace this expression on top of the bar: $D(1+g_s)^4 (1+g)^2$ |
| | | | | With: $D(1+g_s)^3 (1+g)^2$ |
| Time Value of Money in Fixed Income and Equity | Example 7, Question 2 | 59 | 31 Jan 2024 | Replace: We may solve for D4 as $\text{GBP}1.894 (=1.787 \times 1.02 = D3(1 + g))$ and the second expression to be $\text{GBP}9.22$ as follows: |
| | | | | $\text{GBP}9.22 = \frac{1.894/(0.15 - 0.02)}{(1.15)^3}$ |
| | | | | With: We may solve for D4 as GBP1.823 ($=1.787 \times 1.02 = D3(1 + g)$) and the second expression to be $\text{GBP}9.22$ as follows: |
| | | | | $\text{GBP}9.22 = \frac{1.823/(0.15 - 0.02)}{(1.15)^3}$ |

Quantitative Methods

Statistical Measures of Asset Returns

| Lesson | Location | PDF Pg | Revised | Correction |
|---|-------------------------------|--------|-------------|---|
| Measures of Central Tendency and Location | Paragraph following Exhibit 2 | 91 | 31 Jan 2024 | Replace: The modal interval always has the highest bar in the histogram; in this case, the modal interval is 0.0 to 0.9 percent, and this interval has 493 observations out of a total of 1,258 observations. |
| | | | | With: The modal interval always has the highest bar in the histogram; in this case, the modal interval is 0.0 to 1.0 percent, and this interval has 555 observations out of a total of 1,258 observations. |

Quantitative Methods

Portfolio Mathematics

| Lesson | Location | PDF Pg | Revised | Correction |
|--|---------------------------------|--------|-------------|---|
| Portfolio Expected Return and Variance of Return | Equation 2 | 153 | 31 Jan 2024 | Replace: $\sigma^2(R_p) = E\{[R_p E(R_p)]^2\}$. With: $\sigma^2(R_p) = E\{[R_p - E(R_p)]^2\}$. |
| Portfolio Expected Return and Variance of Return | Equation 4 | 154 | 31 Jan 2024 | Replace: $\text{Cov}(R_i, R_j) = \sum_{t=1}^n (R_{i,t} - \bar{R}_i)(R_{j,t} - E\bar{R}_j) / (n-1)$. With: $\text{Cov}(R_i, R_j) = \sum_{t=1}^n (R_{i,t} - \bar{R}_i)(R_{j,t} - E\bar{R}_j) / (n-1)$. |
| Portfolio Expected Return and Variance of Return | Calculation under Equation 5 | 154 | 31 Jan 2024 | Replace: $= w_1^2 \sigma^2(R_1) + w_1 w_2 \text{Cov}(R_1, R_2) + w_1 w_3 \text{Cov}(R_1, R_3)$ $+ w_1 w_2 \text{Cov}(R_1, R_2) + w_2^2 \sigma^2(R_2) + w_2 w_3 \text{Cov}(R_2, R_3)$ $+ w_1 w_3 \text{Cov}(R_1, R_3) + w_2 w_3 \text{Cov}(R_2, R_3) + w_3^2 \sigma^2(R_3)$. With: $= w_1^2 \sigma^2(R_1) + w_1 w_2 \text{Cov}(R_1, R_2) + w_1 w_3 \text{Cov}(R_1, R_3)$ $+ w_1 w_2 \text{Cov}(R_1, R_2) + w_2^2 \sigma^2(R_2) + w_2 w_3 \text{Cov}(R_2, R_3)$ $+ w_1 w_3 \text{Cov}(R_1, R_3) + w_2 w_3 \text{Cov}(R_2, R_3) + w_3^2 \sigma^2(R_3)$ |
| Portfolio Expected Return and Variance of Return | Example 1, Solution 3 last line | 157 | 31 Jan 2024 | Replace: $\sigma(R_p) = 99.72^{1/2}$ With: $\sigma(R_p) = 99.72^{1/2} = \mathbf{9.99\%}$ |

Quantitative Methods

Hypothesis Testing

| Lesson | Location | PDF Pg | Revised | Correction | |
|-------------------------------------|-----------|--------|-------------|---|---|
| Tests of Return and Risk in Finance | Exhibit 6 | 222 | 31 Jan 2024 | <p>Replace the text in “Step 4: State the decision rule.”: We reject the null hypothesis if the calculated χ^2 statistic is less than 13.09051.</p> <hr/> <p>Replace the text in “Step 6: Make a decision.”: Fail to reject the null hypothesis because the calculated χ^2 statistic is greater than the critical value. There is insufficient evidence to indicate that the variance is less than 16% (or, equivalently, that the standard deviation is less than 4%).</p> | <p>With: We reject the null hypothesis if the calculated χ^2 statistic is greater than 13.09051.</p> <hr/> <p>With: “Reject the null hypothesis because the calculated χ^2 statistic is greater than the critical value. There is sufficient evidence to indicate that the variance is less than 16% (or, equivalently, that the standard deviation is less than 4%).”</p> |

Parametric and Non-Parametric Tests of Independence

| Lesson | Location | PDF Pg | Revised | Correction | |
|------------------------------|----------------------------------|--------|-------------|--|---|
| Tests Concerning Correlation | Question Set, Practice Problem 2 | 251 | 31 Jan 2024 | <p>Replace: $r s = 1 - 6(91(4840.5))$ $= -0.20416$.</p> | <p>With: $r s = 1 - 6(91(4840.5))$ $= -\mathbf{0.20417}$.</p> |
| Tests Concerning Correlation | Question Set, Practice Problem 3 | 251 | 31 Jan 2024 | <p>Replace: $t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$ is $t = \frac{-0.2416\sqrt{7}}{\sqrt{1-0.041681}} = \frac{-0.540156}{0.978937} = -0.55177$.</p> | <p>With: $t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$ is $t = \frac{-\mathbf{0.20417}\sqrt{7}}{\sqrt{1-0.041681}} = \frac{-\mathbf{0.540183}}{0.978937} = -\mathbf{0.55181}$.</p> |

Quantitative Methods

Simple Linear Regression

| Lesson | Location | PDF Pg | Revised | Correction |
|--|--|--------|-------------|--|
| Hypothesis Tests in the Simple Linear Regression Model | Equation 20 | 286 | 31 Jan 2024 | Replace: $t_{intercept} = \frac{\hat{\beta}_0 - B_0}{s\hat{\beta}_0} = \frac{\hat{\beta}_0 - B_0}{\sqrt{\frac{1}{n} + \frac{\bar{X}^2}{\sum_{i=1}^n (X_i - \bar{X})^2}}}$ With: $t_{intercept} = \frac{\hat{\beta}_0 - B_0}{s\hat{\beta}_0} = \frac{\hat{\beta}_0 - B_0}{\sqrt{\frac{1}{n} + \frac{\bar{X}^2}{\sum_{i=1}^n (X_i - \bar{X})^2}}}$ |
| Hypothesis Tests in the Simple Linear Regression Model | Exhibit 24 | 286 | 31 Jan 2024 | Replace equation in Step 5: $t_{intercept} = \frac{4.875 - 3.0}{\sqrt{\frac{1}{6} + \frac{6.1^2}{122.64}}} = \frac{1.875}{0.68562} = 2.73475$ With: $t_{intercept} = \frac{4.875 - 3.0}{3.4596 \times \sqrt{\frac{1}{6} + \frac{6.1^2}{122.64}}} = \frac{1.875}{3.4596 \times 0.68562} = 0.7905$ |
| Hypothesis Tests in the Simple Linear Regression Model | Exhibit 24 | 286 | 31 Jan 2024 | Replace text in Step 6: Reject the null hypothesis. There is sufficient evidence to indicate that the intercept is greater than 3%. With: Do not reject the null hypothesis. There is not sufficient evidence to indicate that the intercept is greater than 3%. |
| Hypothesis Tests in the Simple Linear Regression Model | Test of Hypotheses: Level of Significance and p-Values | 289 | 31 Jan 2024 | Replace second sentence in third paragraph under the section: The p-value corresponding to this test statistic is 0.016, which means there is just a 0.16 percent chance of rejecting the null hypotheses when it is true. With: The p-value corresponding to this test statistic is 0.016, which means that, assuming the null hypothesis is true, there is a 1.6% chance of observing a test statistic as extreme as the one observed, or more extreme. |

Economics

Monetary Policy

| Lesson | Location | PDF Pg | Revised | Correction |
|---|--------------------|--------|-------------|--|
| Interaction of Monetary and Fiscal Policy | Practice Problem 7 | 485 | 31 Jan 2024 | Replace answer options: accurately determine the neutral rate of interest. A. regulate the willingness of financial institutions to lend. B. control amounts that economic agents deposit into banks. |
| | | | | With: A. accurately determine the neutral rate of interest. B. regulate the willingness of financial institutions to lend. C. control amounts that economic agents deposit into banks. |

Portfolio Management

Portfolio Risk and Return: Part I

| Lesson | Location | PDF Pg | Revised | Correction |
|--|-----------|--------|--------------|---|
| Portfolio Risk & Portfolio of Two Risky Assets | Example 5 | 28 | 8 March 2024 | Replace formula under “The expected return of this portfolio is”: $R_p = w_1 \times R_1 + (1 - w_1) \times R_2$ $= 0.6 \times 0.055 + 0.4 \times 0.07$ $= 0.0358 \approx 3.6\%.$ |

With:

$$R_p = w_1 \times R_1 + (1 - w_1) \times R_2$$

$$= 0.6 \times 0.055 + 0.4 \times \mathbf{0.007}$$

$$= 0.0358 \approx 3.6\%.$$

Portfolio Risk and Return: Part II

| Lesson | Location | PDF Pg | Revised | Correction |
|---|-----------|--------|-------------|--|
| Capital Asset Pricing Model: Assumptions and the Security Market Line | Example 8 | 89 | 31 Jan 2024 | Replace the second calculation under Solution: $E(R_i) = R_f + \beta_i[E(R_m) - R_f]$ $= 0.04 + 1.30 \times (0.16 - 0.04)$ $= 0.196$ $= 19.6\%$ |

With:

$$E(\mathbf{R}_p) = R_f + \beta_p[E(R_m) - R_f]$$

$$= 0.04 + 1.30 \times (0.16 - 0.04)$$

$$= 0.196$$

$$= 19.6\%$$

Portfolio Management

Working Capital and Liquidity

| Lesson | Location | PDF Pg | Revised | Correction |
|-----------------------|--------------|--------|-------------|---|
| Cash Conversion Cycle | Question Set | 229 | 31 Jan 2024 | Replace: B is correct. The issuer that uses the vendor financing by delaying payments is increasing its days payable outstanding and thus lengthening its cash conversion cycle. |
| | | | | With: A is correct. The issuer that uses the vendor financing by delaying payments is increasing its days payable outstanding and thus shortening its cash conversion cycle. |

Analyzing Balance Sheets

| Lesson | Location | PDF Pg | Revised | Correction |
|---------------------------------|-----------------------------------|--------|-------------|--|
| Ratios and Common-Size Analysis | Ratio Analysis practice questions | 447 | 31 Jan 2024 | Replace Solution to question 2: A, B, and C are correct. The cash ratio, quick ratio, and current ratio are lower in 2017 than in 2016. |
| | | | | Replace the Cash row in the solution table: $\frac{(\text{Cash} + \text{Marketable securities}) \div \text{Current liabilities}}{(\text{EUR}4,011 + \text{EUR}990 \div \text{EUR}10,210)} = 0.49$ |
| | | | | With: B and C are correct. The ratios are shown in the table below. The quick ratio and current ratio are lower in 2017 than in 2016. The cash ratio is slightly higher in 2017 than in 2016. |
| | | | | With: $\frac{(\text{Cash} + \text{Marketable securities}) \div \text{Current liabilities}}{(\text{€}4,011 + 0) \div \text{€}10,210} = 0.39$ $\frac{(\text{€}3,702 + 0) \div \text{€}9,674}{\text{€}9,674} = 0.38$ |

Corporate Issuers

Capital Structure

| Lesson | Location | PDF Pg | Revised | Correction |
|---------------------------|-------------------------------|--------|--------------|---|
| Optimal Capital Structure | Paragraph following Exhibit 7 | 323 | 4 March 2024 | <p>Replace:</p> <p>However, as debt increases, the possible financial distress costs rise substantially and equal the tax benefit of debt at D^*. Beyond this point, greater leverage reduces firm value, the present value of financial distress costs outweigh the tax benefit.</p> <p>With:</p> <p>However, as debt increases, the present value of expected financial distress costs begins to rise and offset the tax benefit of debt, with the optimal amount of debt D^* at the point at which the marginal benefit of the tax shield equals the marginal cost of expected financial distress. Beyond this point, greater leverage reduces firm value, as the increased present value of expected financial distress costs outweighs the marginal tax benefit.</p> |

Working Capital and Liquidity

| Lesson | Location | PDF Pg | Revised | Correction |
|-----------------------|--------------------------|--------|--------------|---|
| Cash Conversion Cycle | Question Set, Solution 3 | 229 | 4 March 2024 | <p>Replace:</p> <p>B is correct. The issuer that uses the vendor financing by delaying payments is increasing its days payable outstanding and thus lengthening its cash conversion cycle. The issuer is reducing its need for liquidity by taking advantage of the vendor financing at the cost of the forgone discount.</p> <p>With:</p> <p>A is correct. The issuer that uses the vendor financing by delaying payments is increasing its days payable outstanding and thus shortening its cash conversion cycle. The issuer is reducing its need for liquidity by taking advantage of the vendor financing at the cost of the forgone discount.</p> |

Financial Statement Analysis

Analysis of Income Tax

| Lesson | Location | PDF Pg | Revised | Correction |
|-------------------------------------|--|--------|-------------|---|
| Deferred Tax Assets and Liabilities | First paragraph under Realizability of Deferred Tax Assets | 10 | 31 Jan 2024 | <p>Replace: A deferred tax asset may be created only if the company expects to be able to realize the economic benefit of the deferred tax asset in the future.</p> <p>...the temporary difference will not lead to recognition of a deferred tax asset. If a deferred tax asset was recognized previously, but there was sufficient doubt about the economic benefits being realized, then, under IFRS, an existing deferred tax asset would be reversed. Under US GAAP, a valuation allowance would be established to reduce the amount of the deferred tax asset to the amount that is more likely than not to be realized.</p> |
| | | | | <p>With: A deferred tax liability may be created only if the company expects to be able to realize the economic benefit of the deferred tax liability in the future.</p> <p>...the temporary difference will not lead to recognition of a deferred tax liability. If a deferred tax liability was recognized previously, but there was sufficient doubt about the economic benefits being realized, then, under IFRS, an existing deferred tax liability would be reversed. Under US GAAP, a valuation allowance would be established to reduce the amount of the deferred tax liability to the amount that is more likely than not to be realized.</p> |

Analyzing Statements of Cash Flows I

| Lesson | Location | PDF Pg | Revised | Correction |
|---|-----------|--------|--------------|--|
| Linkages between the Financial Statements | Exhibit 4 | 490 | 8 March 2024 | <p>Replace table header: Income Statement for year ended 31 December 20X1</p> <hr/> <p>Replace table header: Statement of Cash Flows for year ended 31 December 20X1</p> |
| | | | | <p>With: Income Statement for year ended 31 December 20X2</p> <hr/> <p>With: Statement of Cash Flows for year ended 31 December 20X2</p> |

Financial Statement Analysis

Analyzing Statements of Cash Flows II

| Lesson | Location | PDF Pg | Revised | Correction |
|---------------------------------|---------------------------|--------|--------------|---|
| Ratios and Common-Size Analysis | Paragraph under Exhibit 5 | 525 | 8 March 2024 | <p>Replace: The common-size statement in Exhibit 5 has been developed based on Acme's cash flow statement using the indirect method for operating cash flows and using net revenue (cash received from customers) for the company in 2018 of USD23,598 from Exhibit 3.</p> <p>With: The common-size statement in Exhibit 5 has been developed based on Acme's cash flow statement using the indirect method for operating cash flows and using net revenue (cash received from customers) for the company in 2018 of USD23,598 from Exhibit 3.</p> |

Analysis of Inventories

| Lesson | Location | PDF Pg | Revised | Correction |
|-------------------|-------------|--------|--------------|--|
| Practice Problems | Question 34 | 570 | 8 March 2024 | <p>Replace solution: B is correct.</p> <p>_____</p> <p>Explanatory text should read:</p> <p>With: C is correct.</p> <p>_____</p> <p>In a period of rising inventory costs, inventory valued using FIFO would have relatively higher values compared to inventory valued using LIFO. Thus, any mark downs of inventory values to NRV would have the least impact on inventories valued using the LIFO method as they are already conservatively valued.</p> |

Financial Statement Analysis

Financial Statement Modeling

| Lesson | Location | PDF Pg | Revised | Correction |
|--|--------------|--------|-------------|--|
| Intro- duction to Financial Statement Modeling | Example 8 | 221 | 31 Jan 2024 | <p>Replace Solution to question 3: The highest gross profit is projected by Analyst D.</p> <p>With: The highest gross profit is projected by Analyst C.</p> |

Equity Investments

Company Analysis: Past and Present

| Lesson | Location | PDF Pg | Revised | Correction |
|----------------------|-------------------------|----------------|-------------|--|
| Practice Problems | Paragraph intro text | 474 | 31 Jan 2024 | <p>Replace the sentence before Practice Problem 1: On average, NewShips' commission, which it receives as a broker from the customer, was 6% of the freight rate.</p> <p>With: On average, NewShips' commission, which it receives as a broker from the customer, was 5% of the freight rate.</p> |
| Practice Problems | Question 4 | 475 and 476 | 31 Jan 2024 | Question should be disregarded as there is not sufficient information about Net Profit to provide a complete answer. |

Equity Investments

Equity Valuation: Concepts and Basic Tools

| Lesson | Location | PDF Pg | Revised | Correction |
|--|------------|--------|-------------|---|
| Method of Comparables and Valuation Based on Price Multiples | Example 14 | 596 | 31 Jan 2024 | Replace: Thus, total revenues for Boeing are expected to be about a fifth higher than those for Boeing. With: Thus, total revenues for Boeing are expected to be about a fifth higher than those for Airbus . |

Fixed Income

Yield and Yield Spread Measures for Fixed-Rate Bonds

| Lesson | Location | PDF Pg | Revised | Correction |
|--|-----------------------|--------|--------------|--|
| Other Yield Measures, Conventions, and Accounting for Embedded Options | Question Set | 171 | 31 Jan 2024 | Replace the solution to question 4: $r = 0.0762 \times 2 = 0.1512$. The yield-to-first call for the bond is 15.12%. With: $r = 0.0762 \times 2 = \mathbf{0.1525}$. The yield-to-first call for the bond is 15.25% . |
| Yield Spread Measures for Fixed-Rate Bonds and Matrix Pricing | Example 9, Solution 1 | 177 | 8 March 2024 | Replace the G-spread of: $R = 0.0018662 \times 2 = 0.00373$. $0.01271 - 0.00373 = 89$ bps. With: $R = \mathbf{0.002618} \times 2 = \mathbf{0.005235}$. Therefore, the G-spread is $\mathbf{0.01271 - 0.005235 = 75}$ bps. |

Fixed Income

Yield and Yield Spread Measures for Floating-Rate Instruments

| Lesson | Location | PDF Pg | Revised | Correction |
|---|-----------|---------|-------------|--|
| Yield Measures for Money Market Instruments | Example 3 | 197-198 | 31 Jan 2024 | <p>Replace the first equation and preceding text: The price of the commercial paper is 98.560 per 100 of face value, calculated using Equation 2 and entering $FV = 100$, Days = 90, Year = 360, and $DR = 0.0012$.</p> $PV = FV \times \left(1 - \frac{\text{Days}}{\text{Year}} \times DR\right).$ $PV = 100 \times \left(1 - \frac{90}{360} \times 0.0012\right).$ $PV = 99.970.$ <p>Next, use Equation 5 to solve for AOR for a 365-day year, where Year = 365, Days = 90, $FV = 100$, and $PV = 99.970$.</p> $AOR = \frac{\text{Year}}{\text{Days}} \times \frac{FV - PV}{PV}.$ $AOR = \frac{365}{90} \times \frac{100 - 99.970}{99.970}.$ $AOR = 0.00122.$ <p>The 90-day commercial paper discount rate of 0.120% converts to an add-on rate for a 365-day year of 0.122%.</p> |
| | | | | <p>With: The price of the commercial paper is 99.975 per 100 of face value, calculated using Equation 2 and entering $FV = 100$, Days = 90, Year = 360, and $DR = \mathbf{0.0010}$.</p> $PV = FV \times \left(1 - \frac{\text{Days}}{\text{Year}} \times DR\right).$ $PV = 100 \times \left(1 - \frac{90}{360} \times \mathbf{0.0010}\right)$ $PV = \mathbf{99.975}$ <p>Next, use Equation 5 to solve for AOR for a 365-day year, where Year = 365, Days = 90, $FV = 100$, and $PV = \mathbf{99.975}$.</p> $AOR = \frac{\text{Year}}{\text{Days}} \times \frac{FV - PV}{PV}.$ $AOR = \frac{365}{90} \times \frac{100 - \mathbf{99.975}}{\mathbf{99.975}}.$ $AOR = 0.00122.$ <p>The 90-day commercial paper discount rate of 0.10% converts to an add-on rate for a 365-day year of 0.1014%.</p> |

| Lesson | Location | PDF Pg | Revised | Correction |
|---|--|--------------|-------------|--|
| Yield Measures for Money Market Instruments | Practice Problems, solution 1 | 205 | 31 Jan 2024 | <p>Delete the first sentence: The estimated discount margin is 195 bps.</p> <p>Replace the calculation: $\frac{(MRR + QM) \times FV}{m} = \frac{(-0.0055 + 0.016) \times 100}{4} = 0.275.$ </p> |
| | | | | <p>The estimated discount margin is 195 bps.</p> <p>With: $\frac{(MRR + QM) \times FV}{m} = \frac{(-0.055 + 0.016) \times 100}{4} = 0.2625.$ </p> |
| Yield Measures for Money Market Instruments | Practice Problems, question and solution 5 | 204, 205-206 | 31 Jan 2024 | <p>Replace the answer C: 0.28%.</p> <p>Replace the solution: C is correct. The bond equivalent yield is closest to 0.28%. The present value of the banker's certificate of deposit is calculated as follows: $PV = FV \times \left(1 - \frac{\text{Days}}{\text{Year}} \times DR\right).$ $PV = 100 \times \left(1 - \frac{90}{360} \times 0.0055\right).$ $PV = 99.865.$ The bond equivalent yield (AOR using a 365-day year) is calculated to be approximately 0.28%: $AOR = \frac{\text{Year}}{\text{Days}} \times \frac{FV - PV}{PV}.$ $AOR = \frac{365}{90} \times \frac{100 - 99.8625}{99.8625}.$ $AOR = 0.0028.$ </p> |
| | | | | <p>With: 0.56%.</p> <p>With: C is correct. The bond equivalent yield is closest to 0.56%. The present value of the banker's certificate of deposit is calculated as follows: $PV = FV \times \left(1 - \frac{\text{Days}}{\text{Year}} \times DR\right).$ $PV = 100 \times \left(1 - \frac{90}{360} \times 0.0055\right).$ $PV = 99.865.$ The bond equivalent yield (AOR using a 365-day year) is calculated to be approximately 0.56%: $AOR = \frac{\text{Year}}{\text{Days}} \times \frac{FV - PV}{PV}.$ $AOR = \frac{365}{90} \times \frac{100 - 99.8625}{99.8625}.$ $AOR = 0.0056.$ </p> |

Fixed Income

The Term Structure of Interest Rates: Spot, Par, and Forward Curves

| Lesson | Location | PDF Pg | Revised | Correction |
|---|-----------------------------------|--------|--------------|---|
| Maturity Structure of Interest Rates and Spot Rates | Example 1, question 2 | 215 | 31 Jan 2024 | Replace solution of: $PV = 100.01$ With: $PV = 99.99$ |
| Par and Forward Rates | Example 2, Solution to question 1 | 218 | 8 March 2024 | Replace: $100 = \frac{PMT}{(1+z_1)^1} + \frac{PMT}{(1+z_2)^2} + \dots + \frac{PMT+100}{(1+z_N)^N}$ $100 = \frac{PMT}{(1+0.003117)^1} + \frac{PMT}{(1+0.568)^2} + \frac{PMT+100}{(1+0.7977)^3}$ We can factor out PMT and then solve for it: $100 = PMT \times \left(\frac{1}{(1+0.003117)^1} + \frac{1}{(1+0.568)^2} + \frac{1}{(1+0.7977)^3} \right) + \frac{100}{(1+0.7977)^3}$ $PMT = 0.7952.$ With: $100 = \frac{PMT}{(1+z_1)^1} + \frac{PMT}{(1+z_2)^2} + \dots + \frac{PMT+100}{(1+z_N)^N}$ $100 = \frac{PMT}{(1+0.003117)^1} + \frac{PMT}{(1+0.00568)^2} + \frac{PMT+100}{(1+0.007977)^3}$ We can factor out PMT and then solve for it: $100 = PMT \times \left(\frac{1}{(1+0.003117)^1} + \frac{1}{(1+0.00568)^2} + \frac{1}{(1+0.007977)^3} \right) + \frac{100}{(1+0.007977)^3}$ $PMT = 0.7952.$ |
| Par and Forward Rates | Example 3, Solution | 220 | 31 Jan 2024 | Replace: Therefore, $A = 1$, $B = 3$, ZA is the two-year spot rate, and ZB is the three-year spot rate: With: Therefore, $A = 2$, $B = 3$, ZA is the two-year spot rate, and ZB is the three-year spot rate: |

| Lesson | Location | PDF Pg | Revised | Correction |
|-----------------------|---------------------|--------|-------------|---|
| Par and Forward Rates | Example 3. Solution | 220 | 31 Jan 2024 | Replace second from last equation: $(1 + 0.00568)^2 \times (1 + \text{IFR2},1)^1 = (1 + 0.007977)^3$ |

With:
 $(1+0.0188) \times (1+0.0277)=(1+Z2)^2$

Fixed Income

Interest Rate Risk and Return

| Lesson | Location | PDF Pg | Revised | Correction |
|-------------------|------------|--------|--------------|--|
| Macaulay Duration | Equation 3 | 254 | 8 March 2024 | There is a missing bracket in the denominator of the second term, after subtracting 1. Replace: $MacDur = \left\{ \frac{1+r}{r} - \frac{1+r + [N \times (c-r)]}{c \times [(1+r)^N - 1 + r]} \right\} - \frac{t}{T}$ |

With:
$$MacDur = \left\{ \frac{1+r}{r} - \frac{1+r + [N \times (c-r)]}{c \times [(1+r)^N - 1] + r} \right\} - \frac{t}{T}$$

| | | | | |
|-------------------|-----------------------|-----|-------------|--|
| Practice Problems | Solutions, solution 2 | 258 | 31 Jan 2024 | Replace: A is correct. The future value of reinvested coupon interest is $= FV(0.054, 6, 6.4, 0, 0) = 46.245.$ |
|-------------------|-----------------------|-----|-------------|--|

With:
A is correct. The future value of reinvested coupon interest is
 $= FV(0.074, 6, 6.4, 0, 0) = 46.245.$

Fixed Income

Yield-Based Bond Duration Measures and Properties

| Lesson | Location | PDF Pg | Revised | Correction |
|------------------------|--|--------|--------------|--|
| Introduction | Learning Module Self Assessment, Solution to 3 | 265 | 8 March 2024 | Replace two instances in calculation that says “308” with “380”: C is correct. The money duration is 380: $MoneyDur = 308$. $\Delta PVFull \approx -308 \times 0.005$. |
| | | | | With: C is correct. The money duration is 380: $MoneyDur = \mathbf{380}$. $\Delta PVFull \approx -\mathbf{380} \times 0.005$. |
| Modified Duration | Example 1 | 269 | 31 Jan 2024 | Replace row in first table: Maturity 15 Oct. 2035 <hr/> Replace row in third table: Settlement date 15 Oct. 2025 Maturity 15 Oct. 2035 |
| | | | | With: Maturity 15 Oct. 2030 <hr/> With: Settlement date 11 Dec. 2025 Maturity 15 Oct. 2030 |
| Properties of Duration | Following first paragraph | 284 | 8 March 2024 | There is a missing bracket in the denominator of the second term, after subtracting 1. Replace: $MacDur = \left\{ \frac{1+r}{r} - \frac{1+r + [N \times (c-r)]}{c \times [(1+r)^N - 1 + r]} \right\} - \frac{t}{T}$ |
| | | | | With: $MacDur = \left\{ \frac{1+r}{r} - \frac{1+r + [N \times (c-r)]}{c \times [(1+r)^N - 1] + r} \right\} - \frac{t}{T}$ |

| Lesson | Location | PDF Pg | Revised | Correction |
|------------------------|-----------------------------|--------|-------------|--|
| Properties of Duration | Question Set, solution to 1 | 287 | 31 Jan 2024 | Replace last cell in “Second bond” column: 4% coupon, paid semiannually, and five years to maturity, priced to yield 4% |
| | | | | With: 4% coupon, paid semiannually, and five years to maturity, priced to yield 8% |

Fixed Income

Yield-Based Bond Convexity and Portfolio Properties

| Lesson | Location | PDF Pg | Revised | Correction |
|---|---------------|---------|-------------|--|
| Bond Risk and Return Using Duration and Convexity | Question Set | 306-307 | 31 Jan 2024 | Replace Question Set introductory text: An investor purchases a €10 million semi-annual 3.75% coupon bond with a yield-to-maturity of 2.95%, settling 30 June 2025 and maturing 30 June 2032. <hr/> Replace Solution to 4: $PV^{Full} = \text{PRICE}(\text{DATE}(2025,6,30), \text{DATE}(2032,6,30), 0.0295, 0.0345, 100, 2, 0)$ $= 103.198.$ The actual increase in the bond price is 3.1984%: $\Delta PV^{Full} = 3.1984\% \times \$10,000,000 = \text{EUR}319,840.$ The difference between the actual and the estimated price change is EUR73 (= 319,840 – 319,767). |
| | | | | With: An investor purchases a €10 million semi-annual 2.95% coupon bond with a yield-to-maturity of 2.95%, settling 30 June 2025 and maturing 30 June 2032. <hr/> With: $PV^{Full} = \text{PRICE}(\text{DATE}(2025,6,30), \text{DATE}(2032,6,30), \mathbf{0.0246}, 0.0345, 100, 2, 0)$ $= \mathbf{103.1333}.$ The actual increase in the bond price is 3.1333% : $\Delta PV^{Full} = \mathbf{3.1333\%} \times \$10,000,000 = \text{EUR}\mathbf{313,330}.$ The difference between the actual and the estimated price change is EUR6,437 (= 313,330 – 319,767). |
| Practice Problems | Question 2 | 312 | 31 Jan 2024 | Replace text in question: A bond pays a semiannual fixed coupon of 4.75%. |
| | | | | With: A bond pays a semiannual fixed coupon of 4.70% . |
| Practice Problems | Solution to 8 | 315 | 31 Jan 2024 | Replace last sentence of solution text: All else equal, the portfolio should outperform the lower-duration benchmark portfolio in both rising and falling interest rate environments. |
| | | | | With: All else equal, the portfolio should outperform the lower-convexity benchmark portfolio in both rising and falling interest rate environments. |

Fixed Income

Curve-Based and Empirical Fixed-Income Risk Measures

| Lesson | Location | PDF Pg | Revised | Correction |
|--|-----------|--------|--------------|---|
| Key Rate Duration as a Measure of Yield Curve Risk | Exhibit 5 | 331 | 8 March 2024 | <p>Replace:</p> <p>Assume the portfolio is weighted by the prices of the respective 2-, 5-, and 10-year bonds for a total portfolio value of \$293 million, or \$1 million \times (99.50 + 98.31 + 95.43). The portfolio's modified duration is calculated as</p> $5.345 = [1.991 \times (99.5/293.2)] + [4.869 \times (98.3/293.2)] + [9.333 \times (95.4/293.2)].$ <p>Alternatively, we could calculate each key rate duration by maturity. For example, the two-year key rate duration (KeyRateDur2) is</p> $0.676 = 1.991 \times (99.5/293.2).$ <p>Note that the three key rate duration values sum to the portfolio duration value of 5.345.</p> |
| | | | | <p>With:</p> <p>Assume the portfolio is weighted by the prices of the respective 2-, 5-, and 10-year bonds for a total portfolio value of \$277 million, or \$1 million \times (99.006 + 93.96 + 81.01). The portfolio's modified duration is calculated as</p> $5.368 = [1.990 \times (99.006/277)] + [4.938 \times 93.96/277] + [9.828 \times (84.01/277)]$ <p>Alternatively, we could calculate each key rate duration by maturity. For example, the two-year key rate duration (KeyRateDur2) is</p> $0.711 = 1.990 \times (99.006/277).$ <p>Note that the three key rate duration values sum to the portfolio duration value of 5.368.</p> |

| Lesson | Location | PDF Pg | Revised | Correction |
|---|-----------------------------------|--------|--------------|--|
| Curve-Based Interest Rate Risk Measures | Example 1 | 324 | 8 March 2024 | Replace: $EffDur = \frac{(PV_-) - (PV_+)}{2 \times (\Delta Curve) \times (PV_0)}$ $EffDur = \frac{(102.891) - (99.050)}{2 \times (0.00025) \times (101.060)}$ $EffDur = 7.601.$ $EffCon = \frac{[(PV_-) + (PV_+) - 2 \times (PV_0)]}{(\Delta Curve)^2 \times (PV_0)}$ $EffCon = \frac{[(102.891) + (99.050) - [2 \times (101.060)]}{(0.00025)^2 \times (101.060)}$ |
| | | | | With: $EffDur = \frac{(PV_-) - (PV_+)}{2 \times (\Delta Curve) \times (PV_0)}$ $EffDur = \frac{(102.891) - (99.050)}{2 \times (0.0025) \times (101.060)}$ $EffDur = 7.601.$ $EffCon = \frac{[(PV_-) + (PV_+) - 2 \times (PV_0)]}{(\Delta Curve)^2 \times (PV_0)}$ $EffCon = \frac{[(102.891) + (99.050) - [2 \times (101.060)]}{(0.0025)^2 \times (101.060)}$ |
| Curve-Based Interest Rate Risk Measures | Example 1, Solution to question 2 | 325 | 8 March 2024 | Replace: $EffDur = \frac{(PV_-) - (PV_+)}{2 \times (\Delta Curve) \times (PV_0)}$ $EffDur = \frac{(103.891) - (100.004)}{2 \times (0.00025) \times (102.208)}$ $EffDur = 76.061.$ |
| | | | | With: $EffDur = \frac{(PV_-) - (PV_+)}{2 \times (\Delta Curve) \times (PV_0)}$ $EffDur = \frac{(103.891) - (100.004)}{2 \times (0.0025) \times (102.208)}$ $EffDur = 7.6061.$ |
| Curve-Based Interest Rate Risk Measures | Example 1, Solution to question 4 | 326 | 8 March 2024 | Replace: $EffDur = \frac{(PV_-) + (PV_+) - [2 \times (PV_0)]}{(\Delta Curve)^2 \times (PV_0)}$ $EffDur = \frac{[(103.891) + (98.504)] - [2 \times (102.208)]}{(0.00025)^2 \times (102.208)}$ $EffDur = -3,164.$ |
| | | | | With: $EffDur = \frac{(PV_-) + (PV_+) - [2 \times (PV_0)]}{(\Delta Curve)^2 \times (PV_0)}$ $EffDur = \frac{[(103.891) + (98.504)] - [2 \times (102.208)]}{(0.0025)^2 \times (102.208)}$ $EffDur = -3,164.$ |

Fixed Income

Credit Risk

| Lesson | Location | PDF Pg | Revised | Correction |
|--------------|---|--------|--------------|--|
| Introduction | Learning Module Self Assessment, Question and Solution2 | 342 | 8 March 2024 | <p>Replace question: A EUR500,000 loan has the following characteristics:</p> <ul style="list-style-type: none"> • Probability of default 5% • Collateral EUR100,000 • Recovery rate 90% • Expected exposure EUR400,000 <p>The expected loss for this loan in event of default is: A. EUR1,500 B. EUR2,000</p> <hr/> <p>Replace solution: The correct answer is A. We solve for expected loss (EL) as follows: $EL = POD \times (EE - \text{Collateral}) \times (1 - RR)$. Since probability of default (POD) is 5%, expected exposure (EE) is EUR400,000, collateral is EUR100,000, and the recovery rate (RR) is 90%: $EL = EUR1,500 = 0.05 \times (400,000 - 100,000) \times (1 - 0.9)$. B is incorrect as it fails to reduce the expected exposure by the collateral, while C is incorrect as it simply multiplies EE and POD.</p> |
| | | | | <p>With: A EUR500,000 loan has the following characteristics:</p> <ul style="list-style-type: none"> • Probability of default 5% • Collateral EUR100,000 • Recovery rate 90% • Expected exposure EUR400,000 <p>The expected loss for this loan in event of default is: A. EUR1,500 B. EUR2,000</p> <hr/> <p>With: The correct answer is B. We solve for expected loss (EL) as follows: $EL = POD \times LGD = POD \times EE \times (1 - RR)$. Since probability of default (POD) is 5%, expected exposure (EE) is EUR400,000, collateral is EUR100,000, and the recovery rate (RR) is 90%: $EL = \mathbf{EUR2,000} = 0.05 \times (400,000 - \mathbf{100,000}) \times (1 - 0.9)$</p> |

| Lesson | Location | PDF Pg | Revised | Correction |
|---------------------------------|---------------------------------------|--------|-------------|--|
| Factors Impacting Yield Spreads | Question Set, question and solution 2 | 373 | 31 Jan 2024 | <p>Replace option C in question: C. 54 bps.</p> <hr/> <p>Replace solution: Bid yield: $93.75 = 100 / (1 + r)^5$ $r_{bid} = 1.2937\%$ Offer yield: $93.75 = 100 / (1 + r)^5$ $r_{offer} = 1.2991\%$</p> <p>The liquidity spread of 54 bps (0.0054%) is equal to the difference in the bid yield and the offer yield ($= 1.2991\% - 1.2937\%$).</p> |
| | | | | <p>With: C. 0.54 bps</p> <hr/> <p>With: Bid yield: $93.75 = 100 / (1 + r)^5$ $r_{bid} = \mathbf{1.2991\%}$ Offer yield: $\mathbf{93.7755} = 100 / (1 + r)^5$ $r_{offer} = \mathbf{1.2937\%}$</p> <p>The liquidity spread of 0.54 bps (0.0054%) is equal to the difference in the bid yield and the offer yield ($= 1.2991\% - 1.2937\%$).</p> |
| Practice Problems | Solutions, solution to 6 | 375 | 31 Jan 2024 | <p>Replace: $\Delta\text{Spread} = -0.015 = -1.5\%$.</p> <p>Lower spreads make the first expression in the equation positive, along with the equation's second convexity-based term. The answer must therefore involve a decline in spreads as in answers A and B. However, B is incorrect since it fails to rescale convexity.</p> |
| | | | | <p>With: $\Delta\text{Spread} = \mathbf{-0.0135} = \mathbf{-1.35\%}$</p> <p>Lower spreads make the first expression in the equation positive, along with the equation's second convexity-based term. The answer must therefore involve a decline in spreads as in answers A. and B. However, B is incorrect since it fails to rescale convexity.</p> |

Fixed Income

Mortgage-Backed Security (MBS) Instrument and Market Features

| Lesson | Location | PDF Pg | Revised | Correction |
|-------------------|------------------------|--------|-------------|--|
| Practice Problems | Practice Problem 7 – 8 | 524 | 31 Jan 2024 | Practice Problems 7 and 8 should be together one question. The solution to this Practice Problem appears as the solution to 7, and the subsequent solutions are all off one number: (Solution to 8 in print is actually the solution to Practice Problem 9, solution to 9 is actually the solution to Practice Problem 10, etc.) |

Derivatives

Arbitrage, Replication, and the Cost of Carry in Pricing Derivatives

| Lesson | Location | PDF Pg | Revised | Correction |
|--|-----------|--------|-------------|--|
| Costs and Benefits Associated with Owning the Underlying | Example 6 | 90 | 31 Jan 2024 | Replace the formula: $F_{0,(f/d)}(T) = 1.3325 = \frac{\text{AUD1,333.80}}{\text{AUD1,001}}$ With: $F_{0,(f/d)}(T) = 1.3325 = \frac{\text{AUD1,333.83}}{\text{USD1,001}}$ |

| Lesson | Location | PDF Pg | Revised | Correction |
|--|---------------------------|--------|--------------|--|
| Costs and Benefits Associated with Owning the Underlying | Question Set, Question #2 | 93 | 8 March 2024 | Replace: B is correct. The FX forward rate is greater than the spot rate if the domestic risk-free rate is greater than the foreign risk-free rate. |

With:
 B is correct. The FX forward rate is greater than the spot rate if the **foreign** risk-free rate is greater than the **domestic** risk-free rate.

Derivatives

Pricing and Valuation of Futures Contracts

| Lesson | Location | PDF Pg | Revised | Correction |
|--|------------|---------|--------------|--|
| Pricing and Valuation of Interest Rate Forward Contracts | Solution 5 | 110-111 | 8 March 2024 | Replace all references to “gain” in the answer with “loss” |

An immediate appreciation in the ZAR/EUR spot price after contract inception will result in an MTM **loss** from Rook Point’s perspective as the forward seller of ZAR/EUR.

The FX forward MTM from Rook Point’s perspective equals the present value of the forward price discounted at the interest rate differential between the foreign currency and the domestic currency minus the spot price:

$$V_0(T) = F_{0,f/d}(T) e^{-(r_f - r_d)T} - S_{0,f/d}$$

Note that ZAR is the price, or foreign, currency and EUR is the base, or domestic, currency, so we can rewrite the equation as:

$$V_0(T) = F_{0,ZAR/EUR}(T) e^{-(r_{ZAR} - r_{EUR})T} - S_{0,ZAR/EUR}$$

If the ZAR price ($S_{0,ZAR/EUR}$) appreciates from 16.909 to 16.5, we can show that Rook Point would have a 0.4090 **loss**, as follows:

$$\begin{aligned}
 V_t(T) &= 17.2506e^{-(0.035 - -0.005) \times (0.5)} - 16.5 \\
 &= 16.909 - 16.5 \\
 &= 0.4090
 \end{aligned}$$

| Lesson | Location | PDF Pg | Revised | Correction |
|---|-----------|--------|-------------|--|
| Pricing Futures of Contracts at Inception | Example 2 | 131 | 31 Jan 2024 | <p>In the last two calculations, remove the negative sign from the exponent to replace:</p> $PV_0(C) = \$1.99 = [\$2(1.02)^{-0.24982}]$ <p>and</p> $f_0(T) = (\$1,770.00 + \$1.99)(1.02)^{-0.24982}$ |

With:
and

$$PV_0(C) = \$1.99 = [\$2(1.02)^{0.24982}]$$

$$f_0(T) = (\$1,770.00 + \$1.99)(1.02)^{0.24982} = \$1,780.78 \text{ per ounce.}$$

Derivatives

Option Replication Using Put–Call Parity

| Lesson | Location | PDF Pg | Revised | Correction |
|-----------------|-----------|--------|--------------|------------------------------|
| Put-Call Parity | Exhibit 3 | 199 | 8 March 2024 | <p>Replace:</p> <p>With:</p> |

Derivatives

Valuing a Derivative Using a One-Period Binomial Model

| Lesson | Location | PDF Pg | Revised | Correction |
|--------------------------------|------------|--------|-------------|--|
| Pricing a European Call Option | Equation 8 | 224 | 31 Jan 2024 | Replace: $V1 = \text{€}12 = \text{€}11.43$ |
| | | | | With: $V1 = \text{€}12 = \text{€}11.43 (1 + 0.5)$ |

Alternative Investments

Alternative Investment Features, Methods, Structures

| Lesson | Location | PDF Pg | Revised | Correction |
|-------------------|---------------|--------|----------|---|
| Practice Problems | Solution to 6 | 268 | Jan 2024 | Replace: <ul style="list-style-type: none"> A. 2 is correct. In alternative fund investing, the fund manager pays the net return (gross return less management fees) to investors. B. 3 is correct. The returns generated by fund investments are gross returns. From these, management deducts its fees, paying the remainder (net fees) to fund investors. C. 1 is correct. Management fees and performance fees are how alternative fund managers are compensated for managing the fund and its investments. |
| | | | | With: <ul style="list-style-type: none"> A. 3 is correct. The returns generated by fund investments are gross returns. From these, management deducts its fees, paying the remainder (net fees) to fund investors. B. 2 is correct. In alternative fund investing, the fund manager pays the net return (gross return less management fees) to investors. C. 1 is correct. Management fees and performance fees are how alternative fund managers are compensated for managing the fund and its investments. |

Alternative Investments

Alternative Investment Performance and Returns

| Lesson | Location | PDF Pg | Revised | Correction |
|--------------------------------|-----------------------|---------|--------------|--|
| Alternative Investment Returns | Example 4, Question 2 | 283 | 31 Jan 2024 | <p>Replace:</p> <p>In the second year, Kettleside fund value declines to \$110 million. The fee structure is as specified in Question 1 but also includes the use of a high-water mark (PHWM) computed net of fees.</p> <p>With:</p> <p>In the second year, Kettleside fund value declines to \$110 million. The fee structure is as specified in Question 1 of Example 3 but also includes the use of a high-water mark (PHWM) computed net of fees.</p> |
| Alternative Investment Returns | Example 4, Question 2 | 283-284 | 8 March 2024 | <p>Replace solution:</p> <p>We must again alter Equation 4 to include the high-water mark (P_{HWM}) provision, as follows:</p> $R_{GP(\text{Net with High-Water Mark})} = (P_2 \times r_m) + \max\{0, (P_2 - P_{HWM}) \times p\}$ <p>where P_{HWM} is defined as the maximum fund value at the end of any previous period net of fees. We may solve for investor return r_i in Period 2 as follows:</p> $r_i = (P_2 - P_1 - R_{GP})/P_1,$ $R_{GP(\text{Net with High-Water Mark})}$ $= \$110 \text{ million} \times 1\% + \max\{0, (\$110 \text{ million} - \$122.7 \text{ million}) \times 20\%$ $= \$1.1 \text{ million.}$ $r_i = (\$110 \text{ million} - \$122.7 \text{ million} - \$1.1 \text{ million})/\$122.7 \text{ million}$ $= -11.247\%.$ <p>The beginning capital position in the second year for the investors is \$130 million - \$7.3 million = \$122.7 million. The ending capital position at the end of the second year is \$110 million - \$1.1 million = \$108.9 million.</p> <p>With:</p> <p>We must again alter Equation 4 to include the high-water mark (P_{HWM}) provision, as follows:</p> $R_{GP(\text{Net with High-Water Mark})} = (P_2 \times r_m) + \max\{0, P_2(1 - r_m) - P_{HWM}\} \times p]$ <p>where P_{HWM} is defined as the maximum fund value at the end of any previous period net of fees. We may solve for investor return r_i in Period 2 as follows:</p> $r_i = (P_2 - P_1 - R_{GP})/P_1,$ $R_{GP(\text{Net with High-Water Mark})}$ $= \$110 \text{ million} \times 1\% + \max\{0, [\$110 \times 0.99 - \$124.16] \times 20\%$ $= \$1.1 \text{ million.}$ $r_i = (\$110 \text{ million} - \$124.16 \text{ million} - \$1.1 \text{ million})/\$124.16 \text{ million}$ $= -12.291\%$ <p>The beginning capital position in the second year for the investors is \$130 million - \$5.84 million = \$124.16 million. The ending capital position at the end of the second year is \$110 million - \$1.1 million = \$108.9 million.</p> |

| Lesson | Location | PDF Pg | Revised | Correction | | | | | | | | |
|--------------------------------|------------------------------|--------|--------------|--|------|------------------------------|---|--------|---|--------|---|--------|
| Alternative Investment Returns | Example 4, Question 3 | 284 | 8 March 2024 | <p>Replace the Solution: We amend Equations 8 and 9 to reflect returns for the third period and calculate as follows:</p> $R_{GP(\text{High-Water Mark})} = (P_3 \times r_m) + \max[0, (P_3 - P_{HWM}) \times p].$ $r_i = (P_3 - P_2 - RGP)/P_2.$ <p>Note that the high-water mark, PHWM, is the highest value of the fund after fees in all previous years. In Kettleside's case, it was \$122.7 million, the ending value in the first year, P1.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center; background-color: black; color: white; margin: 0;">Kettleside Timberland LP Performance Fee Modifications</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Year</th> <th style="width: 65%;">Fund Value (\$m), after Fees</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">100.00</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">122.70</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">108.90</td> </tr> </tbody> </table> <div style="text-align: right; margin-top: 5px;"> High-Water Mark </div> </div> <p>RGP(High-Water Mark)</p> $= \$128 \text{ million} \times 1\% + \max[0, (\$128 \text{ million} - \$122.7 \text{ million}) \times 20\%]$ $= \$2.34 \text{ million.}$ $r_i = (\$128 \text{ million} - \$108.9 \text{ million} - \$2.34 \text{ million})/\$108.9 \text{ million}$ $= 15.39\%.$ <p>The beginning capital position in the third year for the investors is \$110 million – \$1.1 million = \$108.9 million. The ending capital position for the third year is \$128 million – \$2.34 million = \$125.66 million, which represents a new high-water mark to be applied the following year for this investor.</p> | Year | Fund Value (\$m), after Fees | 0 | 100.00 | 1 | 122.70 | 2 | 108.90 |
| Year | Fund Value (\$m), after Fees | | | | | | | | | | | |
| 0 | 100.00 | | | | | | | | | | | |
| 1 | 122.70 | | | | | | | | | | | |
| 2 | 108.90 | | | | | | | | | | | |
| | | | | <p>With: We amend Equations 8 and 9 to reflect returns for the third period and calculate as follows:</p> $R_{GP(\text{Net with High-Water Mark})} = (P_3 \times r_m) + \max [0, P_3(1-r_m) - P_{HWM}] \times p]$ $r_i = (P_3 - P_2 - RGP)/P_2.$ <p>Note that the high-water mark, PHWM, is the highest value of the fund after fees in all previous years. In Kettleside's case, it was \$122.7 million, the ending value in the first year, P1.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center; background-color: black; color: white; margin: 0;">Kettleside Timberland LP Performance Fee Modifications</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Year</th> <th style="width: 65%;">Fund Value (\$m), after Fees</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">100.00</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">122.70</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">108.90</td> </tr> </tbody> </table> <div style="text-align: right; margin-top: 5px;"> High-Water Mark </div> </div> <p>RGP(High-Water Mark)</p> $= \$128 \text{ million} \times 1\% + \max[0, (\$128 \times 0.99 - \$124.16) \times 20\%]$ $= \$1.792 \text{ million.}$ $r_i = (\$128 \text{ million} - \$108.9 \text{ million} - \$1.792 \text{ million})/\$108.9 \text{ million}$ $= 15.89\%.$ <p>The beginning capital position in the third year for the investors is \$110 million – \$1.1 million = \$108.9 million. The ending capital position for the third year is \$128 million – \$1.792 million = \$126.208 million, which represents a new high-water mark to be applied the following year for this investor.</p> | Year | Fund Value (\$m), after Fees | 0 | 100.00 | 1 | 122.70 | 2 | 108.90 |
| Year | Fund Value (\$m), after Fees | | | | | | | | | | | |
| 0 | 100.00 | | | | | | | | | | | |
| 1 | 122.70 | | | | | | | | | | | |
| 2 | 108.90 | | | | | | | | | | | |

Alternative Investments

Investments in Private Capital: Equity and Debt

| Lesson | Location | PDF Pg | Revised | Correction |
|---|------------|--------|--------------|---|
| Diversification Benefits of Private Capital | Solution 7 | 324 | 8 March 2024 | <p>The Solution to Practice Problem 7 on page 324 should be changed to:</p> <p>C is correct. Private capital can have overall positive contributions to diversification. Note, however, that direct lending can involve a large capital commitment to a single borrower, with increased concentration risk and reduced diversification.</p> |

Real Estate and Infrastructure

| Lesson | Location | PDF Pg | Revised | Correction |
|---|-------------------|--------|-------------|---|
| Infrastructure Investment Characteristics | Practice Problems | 351 | 31 Jan 2024 | <p>Replace:</p> <p>Akasaka Investment Company established a portfolio of warehouse properties with a total market value of THB3.60 billion. It secured mortgage financing of THB2.61 billion. The terms of the mortgage required Akasaka to maintain a loan-to-value ratio of 0.725.</p> <p>After 18 months, the portfolio value had dropped to THB2.23 billion and the mortgage liability was THB2.35 billion.</p> <p>With:</p> <p>Akasaka Investment Company established a portfolio of warehouse properties with a total market value of THB3.60 billion. It secured mortgage financing of THB2.61 billion. The terms of the mortgage required Akasaka to maintain a loan-to-value ratio of 0.725.</p> <p>After 18 months, the portfolio value had dropped to THB3.23 billion and the mortgage liability was THB2.35 billion.</p> |

Ethical and Professional Standards

Guidance for Standards I-VII

| Lesson | Location | PDF Pg | Revised | Correction |
|--|--|--------|-------------|---|
| Standard IV(A): Recommended Procedures | Text under Incident-Reporting Procedures | 323 | 31 Jan 2024 | <p>Part of the print page is not appearing. The full paragraph is as follows:</p> <p>Members and candidates should be aware of their firm's policies related to whistleblowing and encourage their firm to adopt industry best practices in this area. Many firms are required by regulatory mandates to establish confidential and anonymous reporting procedures that allow employees to report potentially unethical and illegal activities in the firm.</p> |

Ethics Application

| Lesson | Location | PDF Pg | Revised | Correction |
|---|---|--------|-------------|---|
| Responsibilities as a CFA Institute Member or CFA Candidate | Conduct as Participants in CFA Institute Programs | 460 | 31 Jan 2024 | <p>Replace under Analysis: B is correct.</p> <p>With: C is correct.</p> |