Curriculum Errata Notice

2025 Level I CFA Program

UPDATED 21 November 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 2025 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 https://cfainst.is/errata

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Quantitative Methods

Rates and Returns

Lesson	Location	PDF Pg	Revised	Correction	
Rates Of Return	Holding Period Return	9	26 August 2024	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…	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…
Rates of Return	First sentence after Exhibit 2	10	1 November 2024	Replace: Beginning with an initial investment of EUR1.0000, we will have a balance of EUR0.8573 at the end of the three-year period as shown in the fourth column of Exhibit 2.	With: Beginning with an initial investment of EUR1.0000, we will have a balance of **EUR0.8574** at the end of the three-year period as shown in the fourth column of Exhibit 2.
Money-Weighted and Time-Weighted Return	Example 8, Question 4	23	26 August 2024	Replace the sum in the second calculation: 1.1471	With: 1.147**6**
Annualized Return	Equations	29	26 August 2024	Replace: Equation numbers	With: 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.”

Lesson	Location	PDF Pg	Revised	Correction	
Other Major Returns and Their Applications	Gross and Net Return	33	26 August 2024	The first paragraph under Gross and Net Return should read:	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.
Other Major Returns and Their Applications	Equation 14	34	26 August 2024	Replace: Fix the equation by removing the denominator: (1+inflation premium) $(1 + real\ return) = \frac{(1 + real\ risk\text{–}free\ rate)(1 + risk\ premium)}{1 + inflation\ premium}$	With: $(1 + real\ return) = (1 + real\ risk\text{–}free\ rate)(1 + risk\ premium)$

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	26 August 2024	Replace: PV = EUR100 $= \frac{2}{1.20} + \frac{2}{1.02^2} + \frac{2}{1.02^3} + \frac{2}{1.02^4} + \frac{2}{1.02^5} + \frac{2}{1.02^6} + \frac{2}{1.02^7}.$	With: PV = EUR100 $= \frac{2}{1.20} + \frac{2}{1.02^2} + \frac{2}{1.02^3} + \frac{2}{1.02^4} + \frac{2}{1.02^5} + \frac{2}{1.02^6} + \frac{\mathbf{102}}{1.02^7}.$
Time Value of Money in Fixed Income and Equity	Example 2, Question 2 and Solution 2	51	26 August 2024	Replace: Next, let's assume that exactly one year later, a sharp rise …	With: Next, let's assume that, exactly **two years** later, a sharp rise …

Lesson	Location	PDF Pg	Revised	Correction	
Time Value of Money in Fixed Income and Equity	Question 3	52	1 November 2024	Replace: Recalculate the discount bond price for the final principal payment in 20 years from Example 1 using a 6.70 percent semiannual discount rate.	With: Recalculate the discount bond price for **the single principal payment in 20 years from Example 1, where YTM = 6.70, and discounting is done semiannually.**
Time Value of Money in Fixed Income and Equity	Solution to 3	52	1 November 2024	Replace: INR26.77 Note that the PV calculation using the same annual discount rate for 40 semiannual periods will differ slightly using Equation 5, as follows: PV = INR27.66 = $(PMT_{40} + FV_{40})/(1+r/2)^{40}$, $PV(PMT_{40})$ = INR0.90 = 3.35 / $(1.0335)^{40}$, $PV(FV_{40})$ = INR26.77 = 100 / $(1.0335)^{40}$. Compounding on a semiannual basis for 40 periods, $PV(FV_{40})$ of 26.77 is less than the original PV of 27.33 using 20 annual periods from Example 1 (since $1/(1+r)^t > 1/(1+r/2)^{2t}$ when $r \geq 0$).	With: INR26.77 **Using Equation 5:** ~~PV = INR27.66 = $(PMT_{40} + FV_{40})/(1+r/2)^{40}$,~~ ~~$PV(PMT_{40})$ = INR0.90 = 3.35 / $(1.0335)^{40}$,~~ $PV(FV_{40})$ = INR26.77 = 100 / $(1.0335)^{40}$. **Discounting** on a semiannual basis for 40 periods, $PV(FV_{40})$ of 26.77 is less than the original PV of 27.33 using 20 annual periods from Example 1 (since $1/(1+r)^t > 1/(1+r/2)^{2t}$ when $r \geq 0$).
Time Value of Money in Fixed Income and Equity	Exhibit 6	58	26 August 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: $D(1+g_s)^4 (1+g_l)^2$	With: $D(1+g_s)^3 (1+g_l)^2$
Time Value of Money in Fixed Income and Equity	Example 7, Question 2	59	26 August 2024	Replace: We may solve for D4 as GBP1.894 (=1.787 × 1.02 = D3(1 + gl)) and the second expression to be GBP9.22 as follows: $\text{GBP9.22} = \frac{1.894/(0.15-0.02)}{(1.15)^3}$.	With: We may solve for D4 as **GBP1.823** (=1.787 × 1.02 = D3(1 + gl)) and the second expression to be GBP9.22 as follows: $\text{GBP9.22} = \frac{\mathbf{1.823}/(0.15-0.02)}{(1.15)^3}$.

Lesson	Location	PDF Pg	Revised	Correction	
Cash Flow Additivity	Example 14 – Solution to 1	76	26 August 2024	Replace: Foreign Strategy: Convert GBP1,000 at 1.2602 to receive USD1,260.20, which invested at the one-year US-dollar risk-free rate of 2.667 percent returns USD1,294.27 (=1,260.20 e(0.02667)) in one year.	With: Foreign Strategy: Convert GBP1,000 at 1.2602 to receive USD1,260.20, which invested at the one-year US-dollar risk-free rate of 2.667 percent returns **USD1,294.26** (=1,260.20 e(0.02667)) in one year.
Solutions	Solution to 5	85	26 August 2024	Replace: 2.29 percent = $(92.25/89)^{(1/3)} - 1$.	Replace: 2.29 percent = (**95.25**/89)(1/3) – 1.

Statistical Measures of Asset Returns

Lesson	Location	PDF Pg	Revised	Correction	
Measures of Central Tendency and Location	Paragraph following Exhibit 2	91	26 August 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.

Portfolio Mathematics

Lesson	Location	PDF Pg	Revised	Correction	
Measures of Dispersion	Question Set – Question 2	109	26 August 2024	Replace: 2. The fund with the mean absolute deviation (MAD) is Fund:	Replace: 2. The fund with the **highest** mean absolute deviation (MAD) is Fund:
Measures of Shape of a Distribution	Interpreting Skewness and Kurtosis – Question 2	115	26 August 2024	Replace: 2. Does the distribution displays kurtosis? Explain.	Replace: 2. Does the distribution **display** kurtosis? Explain.

Lesson	Location	PDF Pg	Revised	Correction	
Portfolio Expected Return and Variance of Return	Equation 2	155	26 August 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	155	26 August 2024	Replace: $\mathrm{Cov}(R_i, R_j) = \sum_{n=1}^{n}(R_{i,t}, \bar{R}_i)(R_{j,t} - E\bar{R}_j)/(n-1).$	With: $\mathrm{Cov}(R_i, R_j) = \sum_{n=1}^{n}(R_{i,t} - \bar{R}_i)(R_{j,t} - E\bar{R}_j)/(n-1).$
Portfolio Expected Return and Variance of Return	Calculation under Equation 5	156	26 August 2024	Replace: $= w_1^2\sigma^2(R_1) + w_1 w_2 \mathrm{Cov}(R_1, R_2) + w_1 w_3 \mathrm{Cov}(R_1, R_3)$ $+ w_1 w_2 \mathrm{Cov}(R_1, R_2) + w_2^2\sigma^2(R_2) + w_2 w_3 \mathrm{Cov}(R_2, R_3)$ $+ w_1 w_3 \mathrm{Cov}(R_1, R_3) + w_2 w_3 \mathrm{Cov}(R_2, R_3) + w_2^3\sigma^2(R_3).$	With: $= w_1^2\sigma^2(R_1) + w_1 w_2 \mathrm{Cov}(R_1, R_2) + w_1 w_3 \mathrm{Cov}(R_1, R_3)$ $+ w_1 w_2 \mathrm{Cov}(R_1, R_2) + w_2^2\sigma^2(R_2) + w_2 w_3 \mathrm{Cov}(R_2, R_3)$ $+ w_1 w_3 \mathrm{Cov}(R_1, R_3) + w_2 w_3 \mathrm{Cov}(R_2, R_3) + w_2^3\sigma^2(R_3)$

Hypothesis Testing

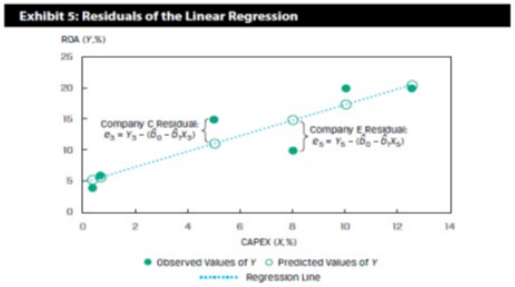
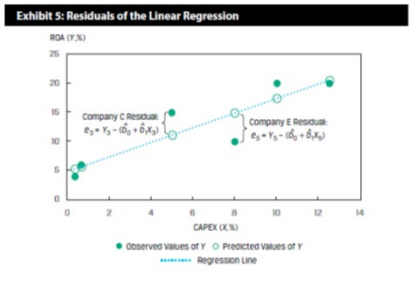
Lesson	Location	PDF Pg	Revised	Correction	
Tests of Return and Risk in Finance	Exhibit 6	226	26 August 2024	Replace the text in "Step 4: State the decision rule.": We reject the null hypothesis if the calculated $\chi 2$ statistic is less than 13.09051. _____ Replace the text in "Step 6: Make a decision.": 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%).	With: We reject the null hypothesis if the calculated $\chi 2$ statistic is **greater than** 13.09051. _____ 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%)."

Lesson	Location	PDF Pg	Revised	Correction	
Tests of Return and Risk in Finance	Question Set	234	26 August 2024	Replace: Because 5.06 is not less than 3.325, we do not reject the null hypothesis; the calculated test statistic falls to the right of the critical value, where the critical value separates the left-side rejection region from the region where we fail to reject.	With: Because 5.06 **is greater than** 3.325, we **reject the** null hypothesis; the calculated test statistic falls to the right of the critical value, **where the critical value separates the left-side region from the region where we reject the null.**

Parametric and Non-Parametric Tests of Independence

Lesson	Location	PDF Pg	Revised	Correction	
Tests Concerning Correlation	Question Set, Practice Problem 2	255	26 August 2024	Replace: r s = 1 − 6(91(4840.)5) = − 0.20416.	With: r s = 1 − 6(91(4840.)5) = **–0.20417**.
Tests Concerning Correlation	Question Set, Practice Problem 3	255	26 August 2024	Replace: $t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$ is $t = \frac{-0.2416\sqrt{7}}{\sqrt{1-0.041681}} = \frac{-0.540156}{0.978937} = -0.55177.$	With: $t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$ is $t = \frac{\mathbf{-0.20417}\sqrt{7}}{\sqrt{1-0.041681}} = \frac{\mathbf{-0.540183}}{0.978937} = \mathbf{-0.55181.}$
Tests of Independence Using Contingency Table Data	Exhibit 9 – Step 4	258	26 August 2024	Replace: We reject the null hypothesis if the calculated ÷2 statistic is greater than 9.4877.	With: We reject the null hypothesis if the calculated **χ2** statistic is greater than 9.4877.

Simple Linear Regression

Lesson	Location	PDF Pg	Revised	Correction	
Estimation of the Simple Linear Regression Model	Exhibit 5 image	272	26 August 2024	Replace: Company C residual (error term) given in Exhibit 5 as $e_3 = Y_3 - (b_0 - b_1X_3)$ Company E residual given as $e_5 = Y_5 - (b_0 - b_1X_5)$ 	With: **(minus changed to plus in equation)** Company C residual (error term) given in Exhibit 5 as $e_3 = Y_3 - (b_0 + b_1X_3)$ Company E residual given as $e_5 = Y_5 - (b_0 + b_1X_5)$ 
Hypothesis Tests in the Simple Linear Regression Model	Exhibit 22 – Step 5	285	1 November 2024	Replace: = 4.00131	With: = **4.00163**
Hypothesis Tests in the Simple Linear Regression Model	Equation 20	290	26 August 2024	Replace: $t_{intercept} = \frac{\hat{b}_0 - B_0}{s_{\hat{b}_0}} = \frac{\hat{b}_0 - B_0}{\sqrt{\frac{1}{n} + \frac{\bar{X}^2}{\sum_{i=1}^{n}(X_i - \bar{X})^2}}}$	With: $t_{intercept} = \frac{\hat{b}_0 - B_0}{s_{\hat{b}_0}} = \frac{\hat{b}_0 - B_0}{\mathbf{S}\sqrt{\frac{1}{n} + \frac{\bar{X}^2}{\sum_{i=1}^{n}(X_i - \bar{X})^2}}}$
Hypothesis Tests in the Simple Linear Regression Model	Exhibit 24	290	26 August 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: $t_{intercept} = \frac{4.875 - 3.0}{\mathbf{3.4596} \times \sqrt{\frac{1}{6} + \frac{6.1^2}{122.64}}} = \frac{1.875}{\mathbf{3.4596} \times 0.68562} = \mathbf{0.7905}.$

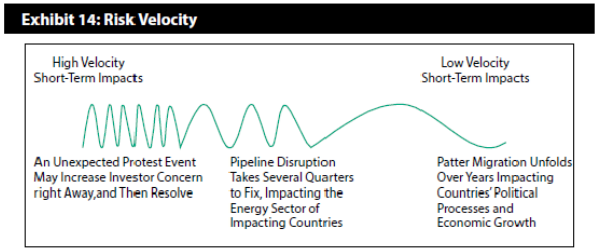
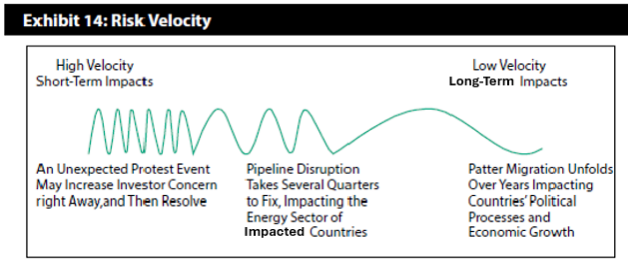
Lesson	Location	PDF Pg	Revised	Correction	
Hypothesis Tests in the Simple Linear Regression Model	Exhibit 24	290	26 August 2024	Replace text in Step 6: Reject the null hypothesis. There is sufficient evidence to indicate that the intercept is greater than 3%.	With: **Do not** reject the null hypothesis. 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	293	26 August 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	137-138	26 August 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.

Introduction to Geopolitics

Lesson	Location	PDF Pg	Revised	Correction	
Geopolitical Risk and the Investment Process	Exhibit 14: Risk Velocity	183	26 August 2024	Replace: Pipeline Disruption Takes Several Quarters to Fix, Impacting the Energy Sector of Impacting Countries Low Velocity/Short-Term Impacts 	With: Pipeline Disruption Takes Several Quarters to Fix, Impacting the Energy Sector of **Impacted** Countries Low Velocity/**Long**-Term Impacts 

Corporate Issuers

Working Capital and Liquidity

Lesson	Location	PDF Pg	Revised	Correction	
Cash Conversion Cycle	Question Set, Solution 3	109	26 August 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. The issuer is reducing its need for liquidity by taking advantage of the vendor financing at the cost of the forgone discount.	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. The issuer is reducing its need for liquidity by taking advantage of the vendor financing at the cost of the forgone discount.

Capital Structure

Lesson	Location	PDF Pg	Revised	Correction	
The Cost of Capital	Question Set – Solution to 3	181	4 November 2024	Replace: A is correct.	With: **C is correct.**
Modigliani-Miller Capital Structure Propositions	Firm Value with Taxes (MM Proposition II with Taxes)	198	25 September 2024	Replace: Firm Value with Taxes (MM Proposition II with Taxes)	With: **Firm Value with Taxes (MM Proposition I with Taxes)**
Optimal Capital Structure	Paragraph following Exhibit 7	204	26 August 2024	Replace: 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.	With: 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.

Financial Statement Analysis

Analyzing Income Statements

Lesson	Location	PDF Pg	Revised	Correction	
Earnings per Share	Example 10 – first sentence	71	26 August 2024	Replace: 1. Assume the same facts as Example 7 except that on 1 December 2018, a previously declared 2-for-1 stock split took effect.	With: 1. Assume the same facts as **Example 9** except that on 1 December 2018, a previously declared 2-for-1 stock split took effect.

Analyzing Statements of Cash Flows I

Lesson	Location	PDF Pg	Revised	Correction	
Linkages between the Financial Statements	Exhibit 4	128	26 August 2024	Replace table header: Income Statement for year ended 31 December 20X1 _____ Replace table header: Statement of Cash Flows for year ended 31 December 20X1	With: Income Statement for year ended 31 December **20X2** _____ With: Statement of Cash Flows for year ended 31 December **20X2**
Linkages between the Financial Statements	Exhibit 5 table – last statement of cash flows item	128	26 September 2024	Replace: Cash flows from operating activities increases by USD100	With: Cash flows from operating activities increases by **USD150**

Analyzing Statements of Cash Flows II

Lesson	Location	PDF Pg	Revised	Correction	
Ratios and Common-Size Analysis	Paragraph under Exhibit 5	162-163	26 August 2024	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.	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 **USD23,543** from Exhibit 3.

Analysis of Inventories

Lesson	Location	PDF Pg	Revised	Correction	
Practice Problems	Question 34	208	26 August 2024	Replace solution: B is correct. _____ Explanatory text should read:	With: **C** is correct. _____ 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.

Analysis of Income Tax

Lesson	Location	PDF Pg	Revised	Correction	
Deferred Tax Assets and Liabilities	First paragraph under Realizability of Deferred Tax Assets	288	26 August 2024	Replace: Assume Pinto Construction (a hypothetical company) depreciates equipment on a straight-line basis of 10 percent per year. The tax authorities allow depreciation of 15 percent per year. At the end of the fiscal year, the carrying amount of the equipment for accounting purposes would be greater than the tax base of the equipment thus resulting in a temporary difference.	With: **Pinto Construction receives advance payments from customers that are immediately taxable but these payments are not recognized as accounting income until Pinto Construction fulfills its obligations in later reporting periods.**

Financial Analysis Techniques

Lesson	Location	PDF Pg	Revised	Correction	
Integrated Financial Ratio Analysis	Example 14 – Solution last sentence	432	12 September 2024	Replace: Choices B and C are incorrect because DOH and receivables turnover are misinterpreted.	With: **Choices A and C** are incorrect because DOH and receivables turnover are misinterpreted.

Introduction to Financial Statement Modeling

Lesson	Location	PDF Pg	Revised	Correction	
Modeling Inflation and Deflation	Example 8 – Solution to 3	489	26 August 2024	Replace: The highest gross profit is projected by Analyst D.	With: The highest gross profit is projected by **Analyst C**.

Equity Investments

Company Analysis: Past and Present

Lesson	Location	PDF Pg	Revised	Correction	
Practice Problems	Paragraph intro text	242	26 August 2024	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.	With: On average, NewShips' commission, which it receives as a broker from the customer, was **5%** of the freight rate.
Practice Problems	Question 4	242-243	26 August 2024	Question should be disregarded as there is not sufficient information about Net Profit to provide a complete answer.	

Lesson	Location	PDF Pg	Revised	Correction	
Operating Profitability and Working Capital Analysis	Example 3 – Solution 4	288	26 August 2024	Replace: C is correct. Last 12 months' sales: $7,688 Last 12 months' operating profit: $1,244 Low end of guidance Next 12 months' sales: 156.360 × $62.50 = $9,773 Next 12 months' operating profit: $9,773 – (156.360 × 17.34) – 1,565 = 5,496 Degree of operating leverage: (5,496/1,244 – 1)/(9,773/7,688 – 1) = 1.95 High end of guidance Next 12 months' sales: 167.197 × $62.50 = $10,450 Next 12 months' operating profit: $10,450 – (167.197 × 17.34) – 1,565 = 5,986 Degree of operating leverage: (5,986/1,244 – 1)/(10,450/7,688 – 1) = 1.85	With: C is correct. Last 12 months' sales: $7,688 Last 12 months' operating profit: **$3,594** Low end of guidance Next 12 months' sales: 156.360 × $62.50 = $9,773 Next 12 months' operating profit: $9,773 – (156.360 × 17.34) – 1,565 = 5,496 Degree of operating leverage: (5,496/**3,594** – 1)/(9,773/7,688 – 1) = 1.95 High end of guidance Next 12 months' sales: 167.197 × $62.50 = $10,450 Next 12 months' operating profit: $10,450 – (167.197 × 17.34) – 1,565 = 5,986 Degree of operating leverage: (5,986/**3,594** – 1)/(10,450/7,688 – 1) = 1.85

Fixed Income

Yield and Yield Spread Measures for Fixed-Rate Bonds

Lesson	Location	PDF Pg	Revised	Correction	
Introduction	Learning Module Self-Assessment – Question 3	157	29 August 2024	Replace: The G-spread for Bond B is (0.01271-0.011) = 173bps.	With: The G-spread for Bond B is (**0.01213**-0.011) **= 11.3bps.**

Lesson	Location	PDF Pg	Revised	Correction	
Other Yield Measures, Conventions, and Accounting for Embedded Options	Question Set – Solution 4	171	26 August 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: $r = 0.0762 \times 2 =$ **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	26 August 2024	Replace the G-spread of: R = 0.0018662 x 2 = 0.00373. 0.01271 – 0.00373 = 89 bps.	With: **R = 0.002618 x 2 = 0.005235.** **Therefore, the G-spread is 0.01271 – 0.005235 = 75 bps.**

Yield and Yield Spread Measures for Floating-Rate Instruments

Lesson	Location	PDF Pg	Revised	Correction	
Yield Spread Measures for Fixed-Rate Bonds and Matrix Pricing	Example 9	177	1 November 2024	Replace: $100.45 = \frac{0.375}{(1+r)^1} + \frac{0.375}{(1+r)^2} + \frac{0.375}{(1+r)^3} + \frac{100.375}{(1+r)^4}.$ $r = 0.0018662 \times 2 = 0.00373.$	With: $\mathbf{100.75} = \frac{0.375}{(1+r)^1} + \frac{0.375}{(1+r)^2} + \frac{0.375}{(1+r)^3} + \frac{100.375}{(1+r)^4}$ $r = 0.0018662 \times 2 = 0.00373.$
Yield and Yield Spread Measures for Floating Rate Notes	Second equation from top	191	30 October 2024	Replace: $PV = \frac{\frac{(0.0125+0.0050)\times 100}{2}}{\left(1+\frac{0.0125+0.040}{2}\right)^1} + \frac{\frac{(0.0125+0.0050)\times 100}{2}}{\left(1+\frac{0.0125+0.040}{2}\right)^2} + \frac{\frac{(0.0125+0.0050)\times 100}{2}}{\left(1+\frac{0.0125+0.040}{2}\right)^3} + \frac{\frac{(0.0125+0.0050}{2}}{\left(1+\frac{0.0125}{2}\right.}$	With: $PV = \frac{\frac{(0.0125+0.0050)\times 100}{2}}{\left(1+\frac{0.0125+0.0040}{2}\right)^1} + \frac{\frac{(0.0125+0.0050)\times 100}{2}}{\left(1+\frac{0.0125+0.0040}{2}\right)^2} + \frac{\frac{(0.0125+0.0050)\times 100}{2}}{\left(1+\frac{0.0125+0.0040}{2}\right)^3} + \frac{\frac{(0.0125+0.0050)\times 100}{2}+100}{\left(1+\frac{0.0125+0.0040}{2}\right)^4}$

Lesson	Location	PDF Pg	Revised	Correction	
Yield Measures for Money Market Instruments	Example 2	196	26 August 2024	Replace: PV = 20,004,918 / (1 + 45/365 × 0.0006) .	With: PV = **20,005,918** / (1 + 45/365 × 0.0006) .
Yield Measures for Money Market Instruments	Example 3	197-198	26 August 2024	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. $PV = FV \times (1 - \frac{\text{Days}}{\text{Year}} \times DR).$ $PV = 100 \times (1 - \frac{90}{360} \times 0.0012).$ $PV = 99.970.$ Next, use Equation 5 to solve for *AOR* for a 365-day year, where Year = 365, Days = 90, *FV* = 100, and *PV* = 99.970. $AOR = \frac{\text{Year}}{\text{Days}} \times \frac{FV - PV}{PV}.$ $AOR = \frac{365}{90} \times \frac{100 - 99.970}{99.970}.$ $AOR = 0.00122.$ The 90-day commercial paper discount rate of 0.120% converts to an add-on rate for a 365-day year of 0.122%.	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 = **0.0010**. $PV = FV \times (1 - \frac{\text{Days}}{\text{Year}} \times DR).$ $PV = 100 \times (1 - \frac{90}{360} \times \mathbf{0.0010})$ $PV = \mathbf{99.975}$ Next, use Equation 5 to solve for AOR for a 365-day year, where Year = 365, Days = 90, FV = 100, and PV = **99.975**. $AOR = \frac{\text{Year}}{\text{Days}} \times \frac{FV - PV}{PV}.$ $AOR = \frac{365}{90} \times \frac{100 - \mathbf{99.975}}{\mathbf{99.975}}.$ $AOR = 0.00122.$ The 90-day commercial paper discount rate of **0.10%** converts to an add-on rate for a 365-day year of **0.1014%**.
Yield Measures for Money Market Instruments	Question Set - Question 6	201	1 November 2024	Replace: 6. A portfolio manager has asked you to evaluate the following Thai baht–denominated money market instruments with equivalent credit risk.	With: 6. A portfolio manager has asked you to evaluate the following Thai baht–denominated **180 days** money market instruments with equivalent credit risk.

Lesson	Location	PDF Pg	Revised	Correction	
Solutions	Solution to 1	205	19 September 2024	Delete the first sentence: The estimated discount margin is 195 bps. Replace the calculation: $\frac{(MRR + QM) \times FV}{m} = \frac{(-0.0055 + 0.016) \times 100}{4} = 0.275.$ … DM=0.4525.DM=0.502144 The estimated discount margin is 50.2 bps.	~~The estimated discount margin is 195 bps.~~ With: $\frac{(MRR + QM) \times FV}{m} = \frac{(\mathbf{-0.055} + 0.016) \times 100}{4} = \mathbf{0.2625}.$ … DM=0.4525.DM=**0.4525.** The estimated discount margin is **45.25 bps**.
Practice Problems/Solutions	Question and Solution to 5	204, 205-206	26 August 2024	Replace the answer C: 0.28%. 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: $PV = FV \times (1 - \frac{\text{Days}}{\text{Year}} \times DR)$. $PV = 100 \times (1 - \frac{90}{360} \times 0.0055)$. $PV = 99.865$. The bond equivalent yield (AOR using a 365-day year) is calculated to be approximately 0.28%: $AOR = \frac{\text{Year}}{\text{Days}} \times \frac{FV - PV}{PV}$. $AOR = \frac{365}{90} \times \frac{100 - 99.8625}{99.8625}$. $AOR = 0.0028$.	With: **0.56%**. 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: $PV = FV \times (1 - \frac{\text{Days}}{\text{Year}} \times DR)$. $PV = 100 \times (1 - \frac{90}{360} \times 0.0055)$. $PV = 99.865$. The bond equivalent yield (AOR using a 365-day year) is calculated to be approximately 0.56%: $AOR = \frac{\text{Year}}{\text{Days}} \times \frac{FV - PV}{PV}$. $AOR = \frac{365}{90} \times \frac{100 - 99.8625}{99.8625}$. $AOR = 0.0056$.

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

Lesson	Location	PDF Pg	Revised	Correction	
Introduction	Learning Module Self Assessment Solution to 3	209	25 September 2024	Replace: *IFR*2,1 = 3.01%.	With: *IFR*2,1 = **2.50%.**
Maturity Structure of Interest Rates and Spot Rates	Example 1, question 2	215-216	26 August 2024	Replace solution of: *PV* = 100.01	With: *PV* = **99.99**
Par and Forward Rates	Example 2, Solution to question 1	218	26 August 2024	Replace: $100 = \frac{PMT}{(1+z_1)^1} + \frac{PMT}{(1+z_2)^2} + \cdots + \frac{PMT+100}{(1+z_N)^N}$. $100 = \frac{PMT}{(1+0.003117)^1} + \frac{PMT}{(1+0.568)^2} + \frac{PMT+100}{(1+0.7977)^3}$. 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: $100 = \frac{PMT}{(1+z_1)^1} + \frac{PMT}{(1+z_2)^2} + \cdots + \frac{PMT+100}{(1+z_N)^N}$. $100 = \frac{PMT}{(1+0.003117)^1 (1+\mathbf{0.00568})^2} + \frac{PMT}{(1+\mathbf{0.007977})^3}$. We can factor out *PMT* and then solve for it: $100 = PMT \times \left(\frac{1}{(1+0.003117)^1} + \frac{1}{(1+\mathbf{0.00568})^2} + \frac{1}{(1+\mathbf{0.007977})^3}\right) + \frac{100}{(1+\mathbf{0.007977})^3}$. *PMT* = 0.7952.
Par and Forward Rates	Example 3, Solution	220	26 August 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	26 August 2024	Replace second from last equation: $(1 + 0.00568)^2 \times (1 + IFR2,1)^1 = (1 + 0.007977)^3$	With: **$(1+0.0188) \times (1+0.0277)=(1+Z2)^2$**

Interest Rate Risk and Return

Lesson	Location	PDF Pg	Revised	Correction	
Macaulay Duration	Equation 3	254	26 August 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	Solution to 2	260	26 August 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.

Yield-Based Bond Duration Measures and Properties

Lesson	Location	PDF Pg	Revised	Correction	
Introduction	Learning Module Self Assessment, Solution to 3	265	26 August 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* = **380**. $\Delta PVFull \approx -\mathbf{380} \times 0.005$.

Lesson	Location	PDF Pg	Revised	Correction	
Modified Duration	Example 1	269	26 August 2024	Replace row in first table: Maturity 15 Oct. 2035 Replace row in third table: Settlement date 15 Oct. 2025 Maturity 15 Oct. 2035	With: Maturity 15 Oct. **2030** With: Settlement date **11 Dec.** 2025 Maturity 15 Oct. **2030**
Money Duration and Price Value of a Basis Point	Equation 7	278	24 September 2024	Replace: $\%\Delta PVFull \approx -MoneyDur \times \Delta Yield$	With: $\boldsymbol{\Delta PVFull \approx -MoneyDur \times \Delta Yield}$
Properties of Duration	Following first paragraph	284	26 August 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: $MacDur = \left\{\frac{1+r}{r} - \frac{1+r+[N\times(c-r)]}{c\times[(1+r)^N-1]+r}\right\} - \frac{t}{T}$
Properties of Duration	Question Set, solution to 1	287	26 August 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%**

Yield-Based Bond Convexity and Portfolio Properties

Lesson	Location	PDF Pg	Revised	Correction
Bond Risk and Return Using Duration and Convexity	Question Set	305-306	24 September 2024	Replace:

1. Calculate the full price of the bond per 100 of par value.

Solution:

Because Excel's PRICE function does not work for negative yields, the equation for *PV* of a zero-coupon bond must be used. There are five annual periods, settlement is 30 days into the 365-day year, and because $1 + r = 1 + (-0.0072) = 0.9928$, the full price of the bond is 103.6175 per 100 of par value:

$$PV_0 = \left[\frac{100}{(0.9928)^5}\right] \times (0.9928)^{\frac{30}{365}}$$

$$PV_0 = 103.6175.$$

2. Calculate *ApproxModDur* and *ApproxCon* using a 1 bp increase and decrease in the yield-to-maturity.

Solution:

$PV_+ = 103.5662$, and $PV_- = 103.6689$:

$$PV_+ = \left[\frac{100}{(0.9929)^5}\right] \times (0.9929)^{\frac{30}{365}}$$

$$PV_+ = 103.5662.$$

$$PV_- = \left[\frac{100}{(0.9927)^5}\right] \times (0.9927)^{\frac{30}{365}}$$

$$PV_- = 103.6689.$$

The approximate modified duration is 4.9535:

$$ApproxModDur = \frac{103.6689 - 103.5662}{2 \times (0.0001) \times 103.6175} = 4.9535.$$

The approximate convexity is 29.918:

$$ApproxCon = \frac{103.6689 + 103.5662 - (2 \times 103.6175)}{(0.0001)^2 \times 103.6175} = 29.918.$$

With:

1. Calculate the full price of the bond per 100 of par value.

Solution:

Because Excel's PRICE function does not work for negative yields, the equation for *PV* of a zero-coupon bond must be used. There are five annual periods, settlement is 30 days into the 365-day year, and because $1 + r = 1 + (-0.0072) = 0.9928$, the full price of the bond is 103.6175 per 100 of par value:

$$PV_0 = \left[\frac{100}{(0.9928)^5}\right] \times (0.9928)^{\frac{30}{365}}$$

$$PV_0 = 103.617526.$$

2. Calculate *ApproxModDur* and *ApproxCon* using a 1 bp increase and decrease in the yield-to-maturity.

Solution:

$PV_+ = 103.566215$, and $PV_- = 103.668868$:

$$PV_+ = \left[\frac{100}{(0.9929)^5}\right] \times (0.9929)^{\frac{30}{365}}$$

$$PV_+ = 103.566215.$$

$$PV_- = \left[\frac{100}{(0.9927)^5}\right] \times (0.9927)^{\frac{30}{365}}$$

$$PV_- = 103.668868$$

The approximate modified duration is 4.9535:

$$ApproxModDur = \frac{103.668868 - 103.566215}{2 \times (0.0001) \times 103.617526} = 4.9535.$$

The approximate convexity is 29.918:

$$ApproxCon = \frac{103.668868 + 103.566215 - (2 \times 103.617526)}{(0.0001)^2 \times 103.617526} = 29.918.$$

Lesson	Location	PDF Pg	Revised	Correction	
Bond Risk and Return Using Duration and Convexity	Question Set	306-307	26 August 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. _____ Replace Solution to 4: PV^{Full} = PRICE(DATE(2025,6,30),DATE(2032,6,30),0.0295,0.0345,100,2,0) = 103.198. The actual increase in the bond price is 3.1984%: ΔPV^{Full} = 3.1984% × $10,000,000 = EUR319,840. 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. _____ With: PV^{Full} = PRICE(DATE(2025,6,30),DATE(2032,6,30),**0.0246**,0.0345,100,2,0) = **103.1333**. The actual increase in the bond price is **3.1333%**: ΔPV^{Full} = **3.1333%** × $10,000,000 = **EUR313,330**. The difference between the actual and the estimated price change is **EUR6,437** (= **313,330** – 319,767).
Practice Problems	Question 1	312	24 September 2024	Replace: For a 5bps increase and decrease in yield-to-maturity, PV_+ and PV_- are 98.245077 and 101.792534, respectively.	With: For a **50bps** increase and decrease in yield-to-maturity, PV_+ and PV_- are **99.82283** and **100.177546**, respectively.
Practice Problems	Question 2	312	26 August 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%.**
Solutions	Solution to 1	314	24 September 2024	Replace: $\text{ApproxCon} = \frac{101.792534 + 98.245077 - (2 \times 100)}{(0.0005)\ 2 \times 100} = 15.044498$	With: $\text{ApproxCon} = \frac{\mathbf{100.177546} + \mathbf{98.82283} - (2 \times 100)}{(\mathbf{0.005})\ 2 \times 100} = \mathbf{15.04}$
Practice Problems	Solution to 8	315	26 August 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.

Curve-Based and Empirical Fixed-Income Risk Measures

Lesson	Location	PDF Pg	Revised	Correction	
Curve-Based Interest Rate Risk Measures	Example 1	324	26 August 2024	Replace: $EffDur = \frac{(PV_-) - (PV_+)}{2 \times (\Delta Curve) \times (PV_0)}$. $EffDur = \frac{(102.891) - (99.050)}{2 \times (0.00025) \times (101.060)}$. $EffDur = 7.601$. $EffCon = \frac{[(PV_-) + (PV_+) - 2 \times (PV_0)]}{(\Delta Curve)^2 \times (PV_0)}$. $EffCon = \frac{[(102.891) + (99.050)] - [2 \times (101.060)]}{(0.00025)^2 \times (101.060)}$. $EffCon = -283$.	With: $EffDur = \frac{(PV_-) - (PV_+)}{2 \times (\Delta Curve) \times (PV_0)}$. $EffDur = \frac{(102.891) - (99.050)}{2 \times \mathbf{(0.0025)} \times (101.060)}$. $EffDur = 7.601$. $EffCon = \frac{[(PV_-) + (PV_+) - 2 \times (PV_0)]}{(\Delta Curve)^2 \times (PV_0)}$. $EffCon = \frac{[(102.891) + (99.050)] - [2 \times (101.060)]}{\mathbf{(0.0025)}^2 \times (101.060)}$. $EffCon = -283$.
Curve-Based Interest Rate Risk Measures	Question Set – Solution 2	325	26 August 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: $EffDur = \frac{(PV_-) - (PV_+)}{2 \times (\Delta Curve) \times (PV_0)}$. $EffDur = \frac{(103.891) - (100.004)}{2 \times \mathbf{(0.0025)} \times (102.208)}$. $EffDur = \mathbf{7.6061}$.

Lesson	Location	PDF Pg	Revised	Correction	
Curve-Based Interest Rate Risk Measures	Question Set – Solution 4	326	26 August 2024	Replace: **Solution:** $EffCon = \frac{[(PV_-) + (PV_+)] - [2 \times (PV_0)]}{(\Delta Curve)^2 \times (PV_0)}$. $EffCon = \frac{[(103.891) + (98.504)] - [2 \times (102.208)]}{(0.00025)^2 \times (102.208)}$. $EffCon = -3{,}164$.	With: **Solution:** $EffCon = \frac{[(PV_-) + (PV_+)] - [2 \times (PV_0)]}{(\Delta Curve)^2 \times (PV_0)}$. $EffCon = \frac{[(103.891) + (98.504)] - [2 \times (102.208)]}{\mathbf{(0.0025)}^2 \times (102.208)}$. $EffCon = -3{,}164$.
Key Rate Duration as a Measure of Yield Curve Risk	Exhibit 5	331	26 August 2024	Replace: 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 × (99.50 + 98.31 + 95.43). The portfolio's modified duration is calculated as 5.345 = [1.991 × (99.5/293.2)] + [4.869 × (98.3/293.2)] + [9.333 × (95.4/293.2)]. Alternatively, we could calculate each key rate duration by maturity. For example, the two-year key rate duration (KeyRateDur2) is 0.676 = 1.991 × (99.5/293.2). Note that the three key rate duration values sum to the portfolio duration value of 5.345.	With: 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 × (99.006 + 93.96 + 81.01).** The portfolio's modified duration is calculated as **5.368 = [1.990 x (99.006/277)] + [4.938 x 93.96/277)] + [9.828 x (84.01/277)]** Alternatively, we could calculate each key rate duration by maturity. For example, the two-year key rate duration (KeyRateDur2) is **0.711 = 1.990 x (99.006/277).** Note that the three key rate duration values sum to the portfolio duration value of **5.368**.
Solutions	Solution to 3	339	15 October 2024	Replace: %Δ*PVFull* Bond A ≈ (–7.48621 × 0.0100) + [½ × 29.35972 × (–0.0100)2] = –7.33941%. %Δ*PVFull* Bond B ≈ (–7.23853 × 0.0100) + [½ × –321.75618 × (0.0100)2] = –8.84730%.	With: %Δ*PVFull* Bond A ≈ (–7.48621 × **0.0200**) + [½ × 29.35972 × (–**0.0200**)2] = –7.33941%. %Δ*PVFull* Bond B ≈ (–7.23853 × **0.0200**) + [½ × –321.75618 × (**0.0200**)2] = –8.84730%.

Credit Risk

Lesson	Location	PDF Pg	Revised	Correction	
Introduction	Learning Module Self Assessment, Question and Solution 2	342	26 August 2024	Replace question: A EUR500,000 loan has the following characteristics: • Probability of default 5% • Collateral EUR100,000 • Recovery rate 90% • Expected exposure EUR400,000 The expected loss for this loan in event of default is: **A.** EUR1,500 **B.** EUR2,000 _____ Replace solution: The correct answer is A. We solve for expected loss (EL) as follows: EL = POD × (EE – Collateral) × (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 × (400,000 – 100,000) × (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.	With: A EUR500,000 loan has the following characteristics: • Probability of default 5% • ~~**Collateral EUR100,000**~~ • Recovery rate 90% • Expected exposure EUR400,000 The expected loss for this loan ~~**in event of default**~~ is: **A.** EUR1,500 **B.** EUR2,000 _____ With: The **correct answer is B.** We solve for expected loss (EL) as follows: EL= POD **× LGD = POD × EE × (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 = **EUR2,000** = 0.05 × (400,000-~~**100,000**~~) × (1 – 0.9)

Lesson	Location	PDF Pg	Revised	Correction	
Factors Impacting Yield Spreads	Question Set, question and Solution 2	373	26 August 2024	Replace option C in question: C. 54 bps. _____ 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% 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%).	With: C. **0.54 bps** _____ With: Bid yield: 93.75 = 100 / (1 + *r*) 5 r_{bid} = **1.2991%** Offer yield: **93.7755** = 100 / (1 + *r*) 5 r_{offer} = **1.2937%** 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%).
Solutions	Solution to 6	375	26 August 2024	Replace: ΔSpread =-0.015 = -1.5%. 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.	With: ΔSpread = **-0.0135** = **-1.35%** 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.~~

Mortgage-Backed Security (MBS) Instrument and Market Features

Lesson	Location	PDF Pg	Revised	Correction
Practice Problems	Practice Problem 7 – 8	524	26 August 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

Derivative Benefits, Risks, and Issuer and Investor Uses

Lesson	Location	PDF Pg	Revised	Correction	
Derivative Risks	Question Set – Derivative Risks – Solution to 2	66	26 August 2024	Replace: The seller of a call option receives an upfront premium in exchange for the right to purchase the underlying at the exercise price at maturity. Once the seller of a call option receives the premium from the option buyer, it has no further counterparty credit risk to the option buyer.	With: The seller of a call option receives an upfront premium in exchange for the **obligation to sell the underlying asset at the exercise price if the option is exercised**. Once the seller of a call option receives the premium from the option buyer, it has no further counterparty credit risk to the option buyer.

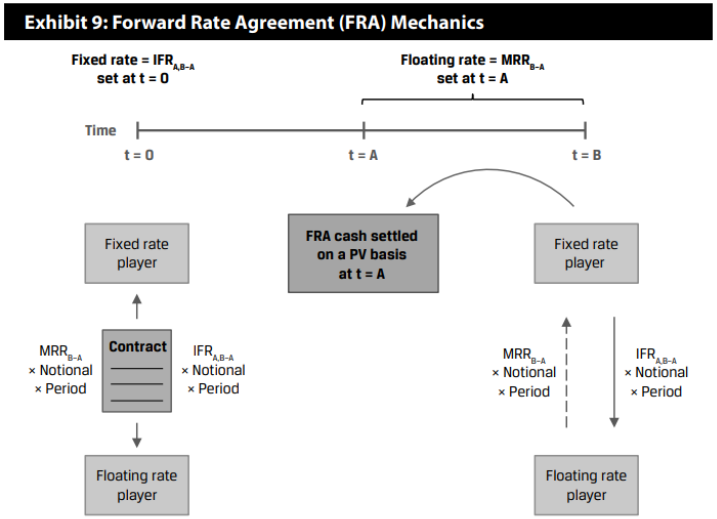
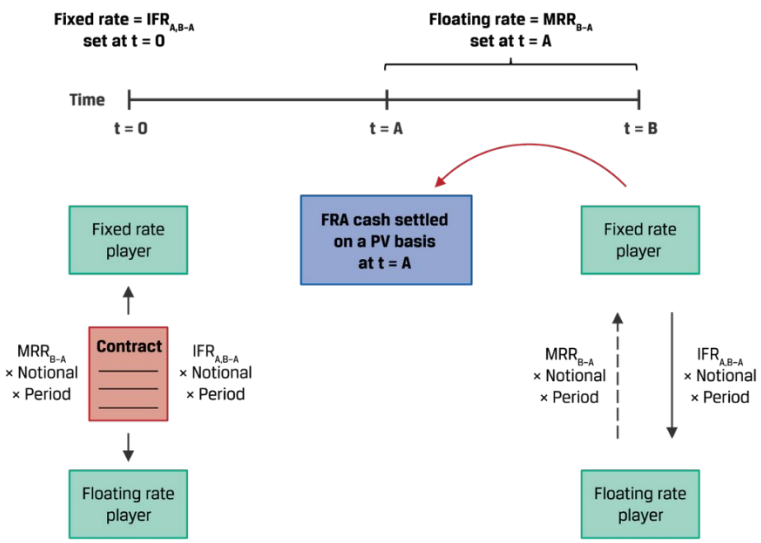
Arbitrage, Replication, and the Cost of Carry in Pricing Derivatives

Lesson	Location	PDF Pg	Revised	Correction	
Costs and Benefits Associated with Owning the Underlying	Example diagram	92	26 August 2024	Replace the formula: $F_{0,(f/d)}(T) = 1.3325 = \frac{AUD1,333.80}{AUD1,001}$	With: $F_{0,(f/d)}(T) = 1.3325 = \frac{\mathbf{AUD1,333.83}}{\mathbf{USD1,001}}$
Costs and Benefits Associated with Owning the Underlying	Question Set, Question 2	93	26 August 2024	Replace: B. A foreign currency forward where the domestic risk-free rate is greater than the foreign risk-free rate	With: B. A foreign currency forward where the **foreign** risk-free rate is greater than the **domestic** risk-free rate

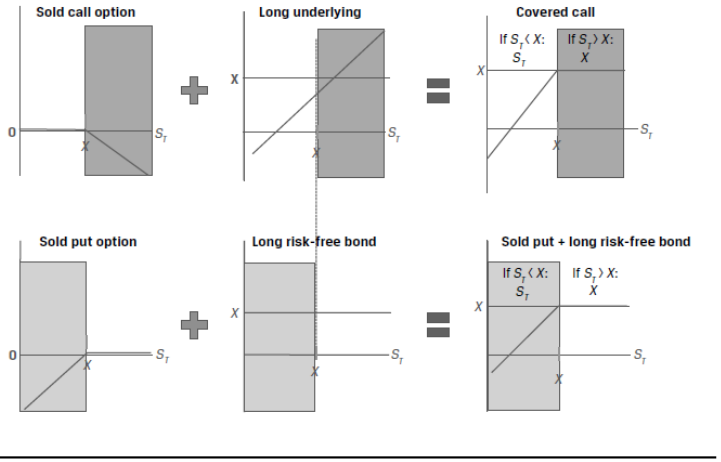
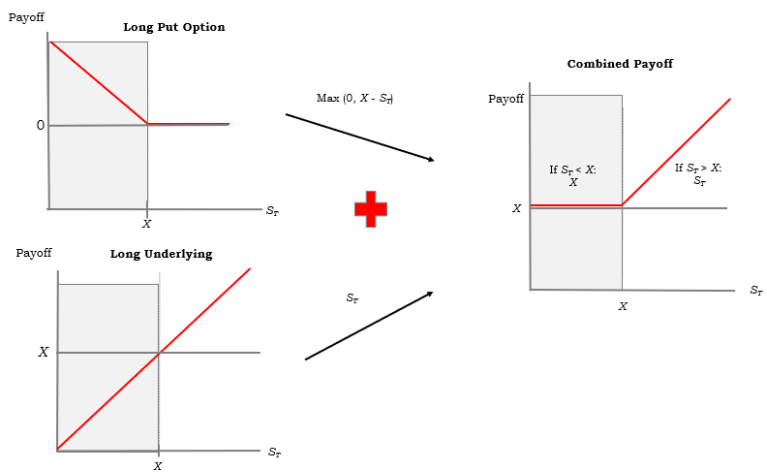
Lesson	Location	PDF Pg	Revised	Correction	
Costs and Benefits Associated with Owning the Underlying	Question Set, Question #2	93	26 August 2024	Replace: B is correct. The FX forward rate is greater than the spot rate if the domestic risk-free rate is greater than the foreign risk-free rate.	With: B is 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.

Pricing and Valuation of Forward Contracts

Lesson	Location	PDF Pg	Revised	Correction	
Pricing and Valuation of Interest Rate Forward Contracts	Solution 5	113	26 August 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: $V0(T) = F0,f/d (T) e-(r f –r d)T − S0,f/d$ Note that ZAR is the price, or foreign, currency and EUR is the base, or domestic, currency, so we can rewrite the equation as: $V0(T) = F0,ZAR/EUR (T) e-(r ZAR–r EUR)T − S0,ZAR/EUR$ If the ZAR price (S0,ZAR/EUR) appreciates from 16.909 to 16.5, we can show that Rook Point would have a 0.4090 **loss**, as follows: $Vt (T) = 17.2506e-(0.035 – -0.005)×(0.5) − 16.5$ $= 16.909 − 16.5$ $= 0.4090$

Lesson	Location	PDF Pg	Revised	Correction
Pricing and Valuation of Interest Rate Forward Contracts	Exhibit 9	118	15 October 2024	Replace: Mentions of the word “player”  	With: The word “payer” 

Option Replication Using Put–Call Parity

Lesson	Location	PDF Pg	Revised	Correction
Put-Call Parity	Exhibit 3	199	26 August 2024	Replace:  With 

Pricing and Valuation of Futures Contracts

Lesson	Location	PDF Pg	Revised	Correction
Pricing of Futures Contracts at Inception	Example 2	133	11 November 2024	Replace: $PV_0(C) = \$1.99 = [\$2(1.02)^{0.24982}]$. With $PV_0(C) = \$1.99 = [\$2(1.02)^{\mathbf{-0.24982}}]$.

Valuing a Derivative Using a One-Period Binomial Model

Lesson	Location	PDF Pg	Revised	Correction	
Pricing a European Call Option	Second sentence	225	23 September 2024	Replace: Equation 4 gives us the hedge ratio of the option, or the proportion of the underlying that will offset the risk associated with an option.	With: **Equation 6** gives us the hedge ratio of the option, or the proportion of the underlying that will offset the risk associated with an option.

Alternative Investments

Alternative Investment Features, Methods, Structures

Lesson	Location	PDF Pg	Revised	Correction	
Practice Problems	Solution to 6	268	26 August 2024	Replace: 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: **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	47	26 August 2024	Replace: 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.	With: 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.
Alternative Investment Returns	Example 4, Question 2	48	26 August 2024	Replace solution: We must again alter Equation 4 to include the high-water mark (P_{HWM}) provision, as follows: $R_{GP(Net\ with\ High\text{-}Water\ Mark)} = (P_2 \times r_m) + \max[0, (P_2 - P_{HWM}] \times p\}$ 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 ri in Period 2 as follows: $r_i = (P_2 - P_1 - R_{GP})/P_1$, $R_{GP(Net\ with\ High\text{-}Water\ Mark)}$ = $110 million × 1% + max[0, ($110 million – $122.7 million) × 20%] = $1.1 million. r_i = ($110 million – $122.7 million – $1.1 million)/$122.7 million = –11.247%. 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.	With: We must again alter Equation 4 to include the high-water mark (P_{HWM}) provision, as follows: $R_{GP(Net\ with\ High\text{-}Water\ Mark)} = \mathbf{(P_2 \times r_m) + \max\{0, P_2(1-r_m) - P_{HWM}] \times p]}$ 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: $r_i = (P_2 - P_1 - R_{GP})/P_1$, $R_{GP(Net\ with\ High\text{-}Water\ Mark)}$ **= $110 million x 1% + max[0,[$110 x 0.99 - $124.16] x 20%]** = $1.1 million. r_i = ($110 million - **$124.16 million** - $1.1 million)/**$124.16 million** **= –12.291%** **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.

Lesson	Location	PDF Pg	Revised	Correction	
Alternative Investment Returns	Example 4, Question 3	48-49	26 August 2024	Replace the Solution: We amend Equations 8 and 9 to reflect returns for the third period and calculate as follows: $R_{GP(\text{High-Water Mark})} = (P_3 \times r_m) + \max[0, (P_3 - P_{HWM}) \times p]$. ri = (P3 – P2 – RGP)/P2. 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 $122.7 million, the ending value in the first year, P1. **Kettleside Timberland LP Performance Fee Modifications** Year 0: Fund Value ($m), after Fees: 100.00 Year 1: 122.70 ← High-Water Mark Year 2: 108.90 RGP(High-Water Mark) = $128 million × 1% + max[0, ($128 million – $122.7 million) × 20%] = $2.34 million. r_i = ($128 million – $108.9 million – $2.34 million)/$108.9 million = 15.39%. 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.	With: We amend Equations 8 and 9 to reflect returns for the third period and calculate as follows: $R_{GP(\text{Net with High-Water Mark})} = (P_3 \times r_m) + \max[0, P_3(1-r_m) - P_{HWM}) \times p]$ ri = (P3 – P2 – RGP)/P2. 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 $122.7 million, the ending value in the first year, P1. **Kettleside Timberland LP Performance Fee Modifications** Year 0: Fund Value ($m), after Fees: 100.00 Year 1: 122.70 ← High-Water Mark Year 2: 108.90 RGP(High-Water Mark) **= $128 million × 1% + max[0, ($128 x 0.99 – $124.16) × 20%]** **= $1.792 million.** **$r_i$ = ($128 million – $108.9 million – $1.792 million)/$108.9 million** **= 15.89%.** 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.

Investments in Private Capital: Equity and Debt

Lesson	Location	PDF Pg	Revised	Correction	
Introduction	Self-Assessment – Question 4	67	4 November 2024	Replace: As the loan amortizes, its outstanding principal declines, increasing LTV.	With: As the loan amortizes, its outstanding principal declines, **decreasing** LTV.
Private Debt Investment Characteristics	Example 4	81	29 August 2024	Replace: As Peterburgh amortizes the loan, the outstanding principal of the mortgages decline, which increases the LTV value.	With: As Peterburgh amortizes the loan, the outstanding principal of the mortgages decline, which **decreases** the LTV value.
Solutions	Solution 7	90	26 August 2024	The Solution to Practice Problem 7 on page 324 should be changed to:	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.

Real Estate and Infrastructure

Lesson	Location	PDF Pg	Revised	Correction	
Practice Problems	Question 6	117	26 August 2024	Replace: 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. After 18 months, the portfolio value had dropped to THB2.23 billion and the mortgage liability was THB2.35 billion.	With: 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. After 18 months, the portfolio value had dropped to **THB3.23** billion and the mortgage liability was THB2.35 billion.

Natural Resources

Lesson	Location	PDF Pg	Revised	Correction	
Introduction	Learning Module Self-Assessment – Solution to 4	123	13 September 2024	Replace: A and B are both incorrect because interest and storage reflect costs associated with owning the physical commodity.	With: A and **C** are both incorrect because interest and storage reflect costs associated with owning the physical commodity.

Portfolio Management

Portfolio Risk and Return: Part I

Lesson	Location	PDF Pg	Revised	Correction	
Portfolio Risk & Portfolio of Two Risky Assets	Example 5	28	26 August 2024	Replace formula under "The expected return of this portfolio is": $Rp = w1 \times R1 + (1 - w1) \times R2 = 0.6 \times 0.055 + 0.4 \times 0.07 = 0.0358 \approx 3.6\%$.	With: $Rp = w1 \times R1 + (1 - w1) \times R2 = 0.6 \times 0.055 + 0.4 \times \mathbf{0.007} = 0.0358 \approx 3.6\%$.

Portfolio Risk and Return: Part II

Lesson	Location	PDF Pg	Revised	Correction	
Capital Asset Pricing Model: Assumptions and the Security Market Line	Example 8	91	26 August 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: $E(\mathbf{R_p}) = R_f + \boldsymbol{\beta_p}[E(R_m) - R_f] = 0.04 + 1.30 \times (0.16 - 0.04) = 0.196 = 19.6\%$
Portfolio Performance Appraisal Measures	Example 10 – paragraph after Exhibit 8	101	1 November 2024	Replace: Mˆ2 and αˆi are performance measures relative to the market, so they are both equal to zero for the market portfolio.	Replace: Mˆ2 **alpha** and αˆi are performance measures relative to the market, so they are both equal to zero for the market portfolio.

Ethical and Professional Standards

Guidance for Standards I-VII

Lesson	Location	PDF Pg	Revised	Correction	
CFA Institute Code of Ethics and Standards of Professional Conduct	After D. Misconduct	217	29 August 2024	Replace: Add after D. Misconduct	**E. Competence Members and Candidates must act with and maintain the competence necessary to fulfill their professional responsibilities**

Glossary

Lesson	Location	PDF Pg	Revised	Correction	
	Amortizing debt	G-1	4 November 2024	Replace: A loan or bond with a payment schedule that calls for periodic payments of interest and repayments of principal.	Replace: A loan or bond with a payment schedule that calls for **the complete repayment of principal over the instrument's time to maturity.**