2024 CFA Program: Level III Errata

29 January 2024

- Corrections below are in bold, and new corrections will be shown in red; page numbers shown are for the print volumes.
- The short scale method of numeration is used in the CFA Program curriculum. A billion is 10^9 and a trillion is 10^{12}. This is in contrast to the long scale method where a billion is 1 million squared and a trillion is 1 million cubed. The short scale method of numeration is the prevalent method internationally and in the finance industry.

Volume 1

Capital Market Expectations, Part 2: Forecasting Asset Returns (LM 2)

- In the solution for Example 1 on page 71, The YTM of DAM's portfolio in the equation should be **1%** and not 3.25%.
- The last sentence of the second-to-last paragraph before Example 5 (page 87 of print) should read, "Adding in the risk-free rate, the expected returns for German shares and bonds would be 4.93% and **2.16%**, respectively."
- In the Solution to Practice Question 1 (page 127 of print), the sentence under the table should read, "Estimate of the expected return of an equal-weighted investment in the three securities: (1% + 2% + 3.3%)/3 = **42.1%**.

Volume 2

Swaps, Forwards, and Futures Strategies (LM2)

- For the information and Questions 2-8 on pages 125 and 126, the Regan and Global statements should be Statement 4 and Statement 5. References to Statements 4 and 5 in questions 2-8 refer to these statements.
- The last sentence of Practice Problem 24 (page 131 of print) should read, "Explain how Ko can use this information to understand potential movements in the ~~current~~ federal funds rate." And the following sentence should be added: "Calculate the probability of an increase in 25 bps in the target range."

Currency Management: An Introduction (LM3)

- In Practice Problem 14 (page 217 of print), the third sentence should read, "Overall returns can be enhanced by capturing opportunities between the US dollar and the Indian rupee (INR) within a range of plus or minus 25% from the neutral position **consisting of 100% of the portfolio as valued in USD**."
- The equation in step 1 Problem 34 (page 236 of print) should read, "USD2,500,000 / 0.8875 = EUR2,816,901."

Overview of Fixed-Income Portfolio Management (LM4)

- Equation 6 (page 260 of print) should read:

  E(ΔPrice based on investor's view of yields and yield volatility) = (− ModDur × ΔYield) + [½ × Convexity × (ΔYield)^2]

- Equation 7 (page 261 of print) should read,

  E(ΔPrice based on investor's view of yield spreads) = (− ModSpreadDur × ΔSpread) + [½ × Convexity × (ΔSpread)^2]

Volume 3

Yield Curve Strategies (LM1)

- In the Rolldown Return section of Example 3 (page 16 of print), the second PV should also be 0.029535.
- The first sentence in Example 4 (page 17 of print) should read, "An investment manager who pursues the cash-based yield curve strategies described in Exhibit 5 faces an inverted yield curve (with a decline in long-term yields-to-maturity and a sharp increase in short-term yields-to-maturity) instead **of a static yield curve post implementation**."
- In the table under Exhibit 9 (page 27 of print), the column heading "Coupon" should instead read "Yield to Maturity."

Fixed-Income Active Management: Credit Strategies (LM2)

- In Example 4, the Solution to Question 2 (page 71 of print) should read,
  For the yield spread measure, neither the **1.29%** spread nor the 7-year government rate of 1.39% has changed, so an analyst considering only these two factors would expect the bank bond price to remain unchanged.
  However, for the G-spread measure, the **20** bp increase in the 10-year government YTM causes the 8-year interpolated government YTM to change.
  - The 7-year and the 10-year bond weights for the interpolation are the same as for Question 1, $w_7 = 66.7\%$ and $w_{10} = 33.3\%$.
  - The new 8-year government rate is a weighted average of the 7-year bond rate and the 10-year bond rate using the weights in Step 1.
    $r_{8yr} = w_7 \times r_{7yr} + w_{10} \times r_{10yr}$
    $= (66.7\% \times 1.39\%) + (33.3\% \times \textbf{1.86\%}) = \textbf{1.55\%}$
  - The bank bond YTM has risen by **0.07%** to **2.75%** (=**1.55%** + **1.20%**).
  - The bank bond price change can be estimated by multiplying the yield change by modified duration (−ModDur × ΔYield) as in earlier lessons. This change can be calculated as **−0.497%** (=−7.1 × **0.07%**).

    Note that we can confirm this using the Excel PV function (=−PV (rate, nper, pmt, FV, type)) where "rate" is the interest rate per period (0.0268), "nper" is the number of periods (8), "pmt" is the periodic coupon (2.75), "FV" is future value (100), and "type" corresponds to payments made at the end of each period (0).
    Initial bank bond price: 100.50 (=−PV (0.0268, 8, 2.75, 100, 0)
    New bank bond price: **100** (=−PV (**0.0275**, 8, 2.75, 100, 0)
    Price change: **−0.497%** (= (**99.39** − 100.50)/100.50)
- Equation 10 (page 82 of print) should read,

  E [**ExcessSpreadReturn**] ≈ Spread$_0$ − (EffSpreadDur × ΔSpread) − (POD × LGD)

- In Example 28, in the Solutions to 1 and 2 (page 116 of print), Equation 10 is repeated but should read,

  E [**ExcessSpreadReturn**] ≈ Spread$_0$ − (EffSpreadDur × ΔSpread) − (POD × LGD)
  In the tables for both these solutions, the column header "Excess Spread" should read "Excess Spread **Return**."

- In Example 29, the second sentence in the second paragraph of the Solution to 2 (page 118 of print) should read, "~~In this case, the investor takes the opposite position to that of Question 1, namely long CDX HY and short CDX IG, so~~ **The** net annual premium **paid** is $400,000 ~~(=$10,000,000 × (5.00% − 1.00%)~~." The last sentence should read, "**Subtracting** the $400,000 net premium results in a one-year gain from the strategy of **$697,000** under this scenario."
- Practice Problem 17 (page 136 of print) should read, "Which bond rating category offers the highest expected excess return if spreads ~~instantaneously~~ rise 10% across all ratings categories?"
- Practice Problem 32 (page 140 of print) should read "What is the **expected** unhedged excess return . . ." instead of "What is the approximate unhedged excess return . . ."

Allocating the Risk Budget (Portfolio Management LM6)
- The references to Exhibit 15 on pages 345, 346, and 350 should instead be references to Exhibit 16.

Volume 4

Asset Allocation to Alternative Investments (Alts LM2)
- The solution to Practice Problem 20 (page 200 of print) should be,

The expected NAV of the fund at the end of the current year is €**22,755,000**, calculated as follows:

First, the expected distribution at the end of the current year is calculated as

Expected distribution = [Prior-year NAV × (1 + Growth rate)] × (Distribution rate).

Expected distribution = [(€25,000,000 × 1.11) × 18%] = €4,995,000.

Therefore, the expected NAV of the fund at the end of the current year is

Expected NAV = [Prior-year NAV × (1 + Growth rate) + Capital contributions − Distributions)] ~~× (1 + Growth rate)~~.

Expected NAV = [(€25,000,000 × 1.11) + 0 − €4,995,000] ~~× 1.11~~ = €22,755,000.

Topics in Private Wealth Management (PM LM 4)

- In the section immediately preceding Example 4 (page 288 of print), the equation should be:

$$R_{PL} = \left[(1 + R_1') \ldots (1 + R_2')\left(1 - \frac{\text{liquidation tax}}{\text{final value}}\right)\right]^{1/n} - 1$$

  And in Example 4 that follows, the last two sentences should read:

  Therefore, the portfolio value net of the tax liability is **1.173**:

  1.197(1 − 0.02) = **1.173**,

  and the annualized post-liquidation return is **3.24**%:

  1.173(1/5) - 1 = **3.24**%.

  This compares to an annualized return for the non-taxable investor of 4.13%.

- In Example 5, the Solution to 3, the last bullet (page 293 of print) should read, "Her after-tax return is **9.12%** [(25,000 + 500) − (500 × 0.535) − (25,000 × 0.535)]/130,000."
- In Example 5, the Solution to 5, the fifth sentence (page 294 of print) should read, "Her after-tax return is **−3.40%** [(−10,000 + 500 − 500 × 0.535 + 10,000 × 0.535) / 130,000]."
- The Solution to Question 9 on page 360 should read in part:
  - Tax under HIFO = ($124 − $135) × 0.25 × 200 = −$550 (tax loss or benefit).
- The Solution to Question 10 on page 360 should read in part:
  - "The portfolio's risk-to-reward ratio (**the amount of risk Omo's portfolio has compared with the portfolio's potential returns**) is **higher** than what could be achieved in the absence of the concentrated positions."

Volume 5
Case Study in Risk Management: Institutional (PM LM 7)

- In the Investment Committee Meeting Memo 2.0, the figure in the second bullet under Memo 2A: Asset Allocation and Performance (page 487 of print) should read:
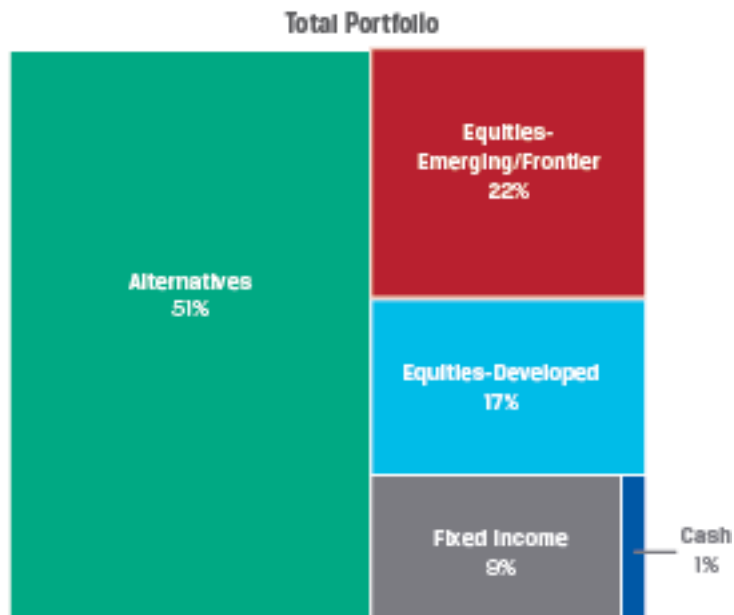
Total Portfolio

- Under Exhibit 12, the third bullet (page 220 of print) should read:
  The large-cap growth benchmark underperformed the total benchmark (**−1.08%** versus -0.03%). Because the portfolio was underweight large-cap value, this led to a positive allocation effect of 0.03.
- The second bullet point of the summary on page 233 should read:
  - Investor (Mismeasured) Active Return = Mgr Return − Investor Benchmark return = (Mgr Return - Normal portfolio Return) + (Normal Portfolio Return - Investor Benchmark return) = True Active Return + Misfit Active Return = (18.0 − 9.0) + (9.0 − 20.0) = 9.0+ (-11.0) = −2.0%
- In Exhibit 1 on page 271, "Investment due diligence" should only appear under "Qualitative Analysis" and not also under "Quantitative Analysis."