

2022 CFA Program: Level II Errata

21 October 2021

If you find something in the curriculum that you think is in error, please submit full details via the form at <http://cfa.is/Errata>.

- The eBook for the 2022 curriculum is formatted for continuous flow, so the text will fit all screen sizes. Therefore, eBook page numbering—which is linked to section heads—does not match page numbering in the print curriculum.
- Corrections below are in bold, and new corrections will be shown in red; page numbers shown are for the print volumes.
- The short scale method of numeration is used in the CFA Program curriculum. A billion is 10^9 and a trillion is 10^{12} . This is in contrast to the long scale method where a billion is 1 million squared and a trillion is 1 million cubed. The short scale method of numeration is the prevalent method internationally and in the finance industry.

Glossary

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

Volume 1

Reading 1

- In Exhibit 5 (page 10), the Company C residual should read, “ $e_3 = Y_3 - (b_0 + b_1X_3)$ ” and the Company E residual should read, “ $e_5 = Y_5 - (b_0 + b_1X_5)$ ”

Reading 3

- In Exhibit 14 (page 189 of print), the autocorrelation for lag 4 or the value of the t-test should read, “**0.2623**”
- In Example 17 (page 215 of print), the last sentence of the second paragraph should read, “Consequently, the test statistics she computed in **Exhibits 13 and 14** are not valid...”

Reading 7

- In Example 1, in the table under Solution to 4 (page 506 of print), the sixth row should read, “Tax and regulatory **policies** discouraging entrepreneurship”

- In the second paragraph after Example 13 (page 559 of print), the second sentence should read, “In contrast, many East Asian countries, such as Singapore and South Korea, pursued outward-oriented **policies** during this same period...”

Volume 2

Reading 9

- In Example 2 (page 20 of print), the first sentence of the second paragraph should read, “Blake Co. believes the value of Brown Co. is higher than the **book** value of its identifiable net assets.”
- The second paragraph of Section 8.3 (page 37 of print) needs two sentences added to the end: “Income taxes are ignored in the table. In practice, however, non-controlling interest on the consolidated income statement is the non-controlling interest’s share of the subsidiary’s *after-tax* income.”

Reading 10

- In the information for Practice Problems 26–31, in Exhibit 3 (page 114 of print), the second row should read, “Change in benefit expense reported in P&L.”

Reading 14

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

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

Volume 3

Reading 19

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

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

Reading 21

- In the last paragraph in Section 2.2.2 (page 300 of print), the first sentence should read, “Using the Ibbotson-Chen format and a risk-free rate of **2.5%**, an estimate of the US equity risk premium is...”

Reading 22

- In Example 2 (page 344 of print), a sentence needs to be added to the question stem for item 1: “Wu’s projection is for a linear deceleration in revenue growth over four years to the long-term growth rate.”
- In Example 2, under the Solution to 1B (page 345 of print), 2015 = 4% should be **2022 = 4%**.
- **In Example 3, Question 2C (page 348 of print), the first sentence should read, “Benitez projects that Walgreens’ average selling area square footage will increase...”**
- In Exhibit 7 (page 355 of print), the figure for Underlying operating profit margin, Personal Care for 2017 should be 21.1%.
- Exhibit 48 (page 410 of print) should read as follows:

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

Reading 23

- The solution to Practice Problem 3C (page 500 of print) should read, “The estimated value of Sage Broadcasting would decrease as r **decreases** and increase as g increases, all else equal.”

Volume 4

Reading 24

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

Reading 25

- In Example 3, the third sentence of the first paragraph (page 105 of print) should read, “Adjusting for all of these items, Evergreen reported “core EPS” of £1.41 for the first quarter of 20X9, compared with core EPS of **£1.81** for the first quarter of 20X8.”
- In Practice Problem 30 (page 196 of print), Option A should read, “**€2.94**.” The Solution to Practice Problem 30 (page 206 of print) should read, “A is correct. Based on the

method of average ROE, normalized EPS are calculated as the average ROE from the most recent full business cycle multiplied by current book value per share. The most recent business cycle was 2011-2014, and the average ROE over that period was

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

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

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

So, normalized EPS is calculated as

$$\text{Average ROE} \times \text{BVPS} = 0.131 \times €22.48 = €2.94."$$

Reading 26

- The Solution to Practice Problem 7B (page 263 of print) should read, "Market value added = Market value of capital – Total capital

$$\begin{aligned} &= (\$26 \text{ stock price} \times 84 \text{ million shares}) - \$700 \text{ million} \\ &= \$1,484,000,000 \end{aligned}$$

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

$$= \$17.67 \text{ per share.}"$$

Reading 27

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

Reading 28

- Exhibit 2 (page 343 of print) and Exhibit 3 (page 344 of print) need an x-axis label: Years.

Reading 30

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

$$\begin{aligned} \text{Then, the "Market conversion premium ratio on 15 June 2019} &= \frac{\$19.26}{\$35.14} \\ &= \mathbf{54.18\%."} \end{aligned}$$

Volume 5

Reading 33

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

$$\begin{aligned} \text{VCS} &= \text{A\$}100,000,000 \times [0.00692375 (3.967683) + 0.986031] - 1.13 (\text{A\$}/1\text{US\$}) \\ &\times (\text{US\$}87,719,298) \times [0.00062425 (3.994841) + 0.998336] \\ &= \text{A\$}2,145,167. \end{aligned}$$

Under Solution to 2 (page 57 of print):

“-VCS = -A\$2,145,167, which when converted to US\$ at St is:

-VCS = -A\$2,145,167 × (1US\$/1.13A\$) = -US\$1,898,378.”

Reading 34

- The second sentence of Section 5 (page 99 of print) should read, “It is well-known that ~~non-dividend-paying~~ call options on **non-dividend-paying** stock will not be exercised early because the minimum price of the option exceeds its exercise value.”
- In the information for Practice Problems 10-17, Exhibit 1 (page 149 of print), the fourth column head should be a lowercase sigma, not a capital sigma.
- In the Solution to 6 (page 154 of print), the second equation should read, “... $[1/(1.03)][0.46(0.2517) + 0.54(8.4530)] = 4.54$ ”

Reading 35

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

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

The solution should read as follows:

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

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

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

- In the third paragraph of Section 10.2 (page 223 of print), the third sentence should read, "The revised net worth of the company divided by the number of shares outstanding is the **NAVPS**."
- In Practice Problem 40 (page 259 of print), Option C should be "\$28.**83**." In the Solution to Practice Problem 40 (page 266 of print), the second sentence should read, "The estimated value per share for the Baldwin REIT using a two-step dividend discount model is \$28.**83**." Footnote b at the bottom of the table should read, "Calculated as $\$1.00/(1.085) + \$32.77/(1.085)^2 = \$28.**83**."$

Reading 36

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

Reading 37

- In the Solution to 10 (page 367 of print), the last sentence should read, "The basis for the near-term Brent crude oil futures contract is the difference between the spot price and the near-term futures price: $\$77.56 - \$73.64 = \$3.92$."

Reading 39

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

Volume 6

Reading 43

- In Example 2 (page 100 of print), the last sentence of Solution to 3 should read, "To reconfirm, the Sharpe ratio of the combined portfolio is $(8.4\% - 2.3\%)/14.6\% = 0.42$, the same as the original 0.42 value."

Reading 44

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

Reading 46

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