

ACTEX IFM Study Manual. Uwo o gt '423:

April 2018 Edition

Errata

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M1-29, line -2 of Example 1.2.1: $R_P = 52\%$

M1-33, Example 1.2.2 Solution: (a) $\text{Var}(R_P) = 0.097669$, the volatility is 31.252%
(b) $\text{Var}(R_P) = 0.069873$, the volatility is 26.434%

M1-40 paragraph -3 line 3: each of the stocks in the market, ... each of the stocks in

M1-46 #8: 1st line: $20 \times 75 = \underline{1500}$, 2nd line: would be 2200. He can then purchase 110 shares of B. 3rd line onward:

$$x_A = \frac{-1500}{700} = -\frac{15}{7}, \quad x_B = \frac{2200}{700} = \frac{22}{7}$$

The mean return is $-\frac{15}{7} \times 0.14 + \frac{22}{7} \times 0.1 = 1.4286\%$.

$$\text{Var}(R_P) = \left(-\frac{15}{7}\right)^2 \times 0.3 + 2 \times \left(-\frac{15}{7} \times \frac{22}{7}\right) \times 0.12 + \left(\frac{22}{7}\right)^2 \times 0.15 = 1.242857$$

The volatility is $1.242857^{0.5} = 111.4835\%$.

M1-61, the line preceding Q12: change to "... of firms 1 and 3, and 50% of firm 2."

M2-5 Example 2.1.3 line 2: Assuming that the firm has a debt beta of 0.01 and ...

M2-12 #15 first line: change to "A firm has 30 million shares outstanding"

M2-13 #3 last line: change to "Hence YTM = 4.585%."

$$\text{M2-15 #15: } r_{wacc} = 0.225 - \frac{120}{720} \times 0.07 \times 0.4 = 22.03\%$$

M3-25, Example 3.2.2: "(b) Suppose that you observe a 6-month prepaid forward price of 98..."

M5-16 Ex 5.19 solution line 4: Since $a\sigma\sqrt{T}Z \sim N(0, a^2\sigma^2T)$, by (5.1.2) we have

$$E[e^{a\sigma\sqrt{T}Z}] = e^{a^2\sigma^2T/2}. \quad \text{line 5: Change } e^{a\sigma^2T/2} \text{ to } e^{a^2\sigma^2T/2}$$

M7-25 Ex 18 solution: $E = 30, D = 0, E^* = 25, D^* = 5, V = 500 \times 15 = \mathbf{7500}$.

$$\text{The amount in equity is } \frac{E}{E^*} \times V = \frac{30}{25} \times \mathbf{7500} = \mathbf{9000}.$$

The amount of debt is $7500 - 9000 = -1500$.

So Phil should borrow \$1500 at 4% to purchase an additional 100 shares of Gogle's equity (which is worth 1500).

T1-6 #12, for all choices, insert "synthetic" before the first "forward", and delete "synthetic" that appears before the second "forward".

T2-2 #3 line 5: change 150 to 510.

T3-14 #28: change (iii) to " $u = e^{0.15}$ and $d = 1/u$ "