## **ACTEX IFM Study Manual**

## **April 2018 Edition**

## Errata

## July 1, 2018

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

M1-33, Example 1.2.2 Solution: (a)  $Var(R_P) = 0.097669$ , the volatility is 31.252% (b)  $Var(R_P) = 0.069873$ , 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: 1<sup>st</sup> line:  $20 \times 75 = \underline{1500}$ , 2<sup>nd</sup> line: would be  $\underline{2200}$ . He can then purchase  $\underline{110}$  shares of B. 3<sup>rd</sup> line onward:

$$x_{A} = \frac{-1500}{700} = -\frac{15}{7}, \ x_{B} = \frac{2200}{700} = \frac{22}{7}$$
  
The mean return is  $-\frac{15}{7} \times 0.14 + \frac{22}{7} \times 0.1 = 1.4286\%$ .  
 $Var(R_{P}) = \left(-\frac{15}{7}\right)^{2} \times 0.3 + 2 \times \left(-\frac{15}{7} \times \frac{22}{7}\right) \times 0.12 + \left(\frac{22}{7}\right)^{2} \times 0.15 = 1.242857$   
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 <u>0.01</u> 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%."

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 <u>prepaid</u> 6-month forward price of 98...."

- M5-16 Ex 5.19 solution line 4: Since  $a\sigma\sqrt{T}Z \sim N(0, a^2\sigma^2 T)$ , by (5.1.2) we have  $E[e^{a\sigma\sqrt{T}Z}] = e^{a^2\sigma^2 T/2}$ . line 5: Change  $e^{a\sigma^2 T/2}$  to  $e^{a^2\sigma^2 T/2}$
- 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"