

34. Miguel Reyes, CFA, is a U.S.-based investor, evaluating various currency trades. Reyes has noticed that the spot rate between euros (€) and U.S. dollars is \$1.2325/€. The 90-day forward rate is currently quoted at \$1.2360/€. Based on this information, the 90 day forward euro trades at an:
- annualized premium of 0.28%.
 - annualized premium of 1.14%.
 - annualized discount of 0.28%.
 - annualized discount of 1.14%.
35. Sean Quillan, a staff economist at a large investment firm, is discussing the cost structure of firms in the automobile industry. Quillan makes the following point:
- “Based on the law of diminishing returns, the firms’ short term marginal cost curve will cross BOTH the average variable cost (AVC) curve and the average total cost (ATC) curve at their minimum points.”*
- Evaluate Quillan’s statement as to crossing the AVC and ATC curves at their minimum points.
- | | <u>Avg variable cost curve</u> | <u>Avg total cost curve</u> |
|----|--------------------------------|-----------------------------|
| A. | True | True |
| B. | False | True |
| C. | True | False |
| D. | False | False |
36. Karen Wilson, CFA is a capital budgeting analyst for World Beverage; a soft drink bottling and distribution company. World Beverage is in the process of evaluating the purchase of a new \$2 million production line for its new and highly popular energy drink, Green Cow. Wilson is reviewing the various financial assumptions used in the net present value model to determine the profitability of any World Beverage capital expenditure over \$100,000.
- Determine which one of the following combinations of changes in the discount rate and cash flow time period would result in a more favorable present value of the new Green Cow production line.
- | | <u>Discount rate</u> | <u>Cash flow time period</u> |
|----|----------------------|------------------------------|
| A. | Increase | Increase |
| B. | Increase | Decrease |
| C. | Decrease | Increase |
| D. | Decrease | Decrease |
37. Country Beta has experienced stagnant real GDP for the past three years. The new Minister of Finance (MOF) of Country Beta wants to increase Beta's potential real GDP. He is currently considering economic policy alternatives based on the aggregate supply and aggregate demand or AS-AD macroeconomic model policy. The MOF has decided to focus on economic policies that would increase long-run aggregate supply within Country Beta. Which of the following four strategies under consideration by the MOF would offer the *best* potential for increasing the long-run aggregate supply of Country Beta?
- Increase both the price level and the money wage rate of the citizens of Country Beta at the same time and by the same percentage.
 - Increase the price level of Country Beta, but keep money wage rates the same.
 - Raise the money wage rate of all of the citizens of Country Beta.
 - Liberalize Country Beta's labor immigration laws to allow less expensive Country Delta workers to enter Beta in greater numbers.

Practice Exam 1
Morning Session Answers

perfectly positive. This can be verified by calculating the sample correlation, which equals the covariance divided by the product of the two sample standard deviations. The formula for the sample standard deviations equals:

$$\text{sample standard deviation for Analyst X} = \sqrt{\frac{\sum (R_X - \bar{R}_X)^2}{n-1}} = \sqrt{[(1-0)^2 + (0-0)^2 + (-1-0)^2]/2} = 1$$

$$\text{sample standard deviation for Analyst Y} = \sqrt{\frac{\sum (R_Y - \bar{R}_Y)^2}{n-1}} = \sqrt{[(2-0)^2 + (0-0)^2 + (-2-0)^2]/2} = 2$$

Therefore, the correlation equals $\frac{2}{1 \times 2} = 1.0$ (Study Session 3, LOS 12.b)

30. **B** $-100,000 = PV$; $6 = N$; $-100,000 = PMT$; $950,000 = FV$; $CPT \rightarrow I/Y = 10\%$. The annuity due will require a lower rate of return to generate Pelker's goal. (Study Session 2, LOS 5.c)
31. **C** Time-weighted returns are used when the client exercises discretionary control over timing and amount of additions and withdrawals to the portfolio.
- Time-weighted $= [(1 + 0.15)(1 + (-0.05))]^{0.5} - 1 = 0.0452$ or 4.52%. (Study Session 2, LOS 6.c)
32. **D** Pleat uses a nominal scale, and Rao uses a ratio scale. The nominal scale (the weakest scale) places data in groups but with no meaningful ranking content. An example of a nominal scale is Pleat's classification of mutual funds into 10 groups based on investment objective. The ordinal scale (the second weakest scale) groups data according to a characteristic such as a performance characteristic. For example, classifying stocks on rate of return performance: Group 1 might contain the worst performing stocks and Group 10 might contain the best performing stocks. But, stocks in Group 10 are not 10 times better than stocks in Group 1. The interval scale (the third weakest scale), attaches special meaning to the difference in numerical values. We can add and subtract interval scale amounts meaningfully. For instance, 90 degrees Fahrenheit is 10 degrees warmer than 80 degrees Fahrenheit. But we cannot multiply or divide the amounts: 90 degrees Fahrenheit is not twice as warm as 45 degrees Fahrenheit. Last, ratio scales are the strongest scale of measurement. Ratio scale amounts can be meaningfully added, subtracted, multiplied, and divided. Any money amount (e.g., bond interest payments used by Rao) is considered to be measured on a ratio scale. (Study Session 2, LOS 7.a)

Economics

33. **C** If demand elasticity differs between different groups of consumers, the firm can maximize profits by setting different prices for each group—in this case the idea would be to raise weekend prices to take advantage of the low elasticity, and lower weekday prices to take advantage of the high elasticity. (Study Session 4, LOS 19.d)
34. **B** Since it will take more dollars to buy euros in 90 days' time, the euro is expected to appreciate in value and therefore trades at a premium. The annualized premium is determined by:
- $$\left(\frac{\text{forward rate} - \text{spot rate}}{\text{spot rate}} \right) \left(\frac{12}{\text{no. mths forward}} \right) = \left(\frac{1.2360 - 1.2325}{1.2325} \right) \left(\frac{12}{3} \right) = 1.14\% \quad (\text{Study Session 6, LOS 31.f})$$
35. **A** The MC curve would cross both curves at their minimum points. Both AVC and ATC would be declining until the marginal cost exceeded the respective AVC or ATC level. Once MC exceeded those levels, the higher MC would increase both average variable costs and average total costs. (Study Session 4, LOS 17.b, c)

36. D Decreasing both the discount rate and the cash flow time period at the same time generates the greatest gain in the value of the cash flow of the project. A lower capitalization rate discounts cash flow less than a higher capitalization rate, making the cash flow worth more to World Beverage. A decrease in the time period in which the cash flow from the project adds value to the project as well. In summary, a decreased discount rate combined with a decrease in the time period to receive the cash flow from the projects makes the present value of the project more worthwhile and increases the net present value of the project. (Study Session 5, LOS 21.d)
37. D By liberalizing Country Beta's labor immigration laws and allowing more of Country Delta's labor force into Country Beta, the full-employment quantity of labor has increased. As the full-employment labor force increases, aggregate supply increases; more of this incremental labor is put to work producing goods and services for Country Beta. Thus, the long-run aggregate supply (LAS) and the short-run aggregate supply (SAS) curves are pushed to the right creating a higher real GDP and the same price level. Note that price level and money wage changes merely move up and down the LAS or along the SAS and ultimately back to the same LAS, creating no real long lasting incremental increases in aggregate supply. (Study Session 5, LOS 23.a)
38. A Relative purchasing power parity holds that exchange rate movements should offset inflation differentials between two countries. In this case, the higher inflation in South Africa should cause the rand to depreciate relative to the dollar. (Study Session 6, LOS 32.g)
39. C The direct quote is the home currency price of foreign currency. In a direct quote, the home currency is in the numerator of the exchange rate. The COP/AUD cross rate is $2,875/1.52 = 1,891.4$ COP/AUD. (Study Session 6, LOS 31.a, c)
40. D For any sloping demand curve, the elasticity changes as you move along the curve. Elasticity will be higher at low levels of demand (or high price levels) and lower at high levels of demand (when prices are low). (Study Session 4, LOS 13.a)
41. C For all firms, profit is maximized at the output where the incremental revenue from selling an additional unit (marginal revenue) is equal to the incremental cost of producing it (marginal cost). Since marginal revenue is still higher than marginal cost, Tetra can expand output. (Study Session 4, LOS 19.b)
42. C At equilibrium, a monopolistically competitive firm will charge a higher price and produce a lower quantity of goods than a firm operating in a highly competitive industry. In the short run, a firm in a monopolistically competitive industry can generate either an economic loss or profit. However, in the long run, as more purse manufacturers are enticed into the purse industry, the demand curve for Spaddy purses shifts left and economic profits gradually disappear. (Study Session 4, LOS 20.a)
43. C Potential deposit expansion multiplier = $(1/\text{required reserve ratio}) = 1/0.2 = 5$
- Excess reserve = $(\text{actual reserves} - \text{required reserves}) = 30 - (105 \times 0.2) = 30 - 21 = 9$
- Potential increase in the money supply = $(\text{potential deposit expansion multiplier} \times \text{increase in excess reserve}) = 9 \times 5 = 45$ (Study Session 5, LOS 24.c)
44. C An unanticipated increase in aggregate demand lowers unemployment (more jobs) and increases inflation; or a move up the SRPC. An unanticipated decrease in aggregate demand increases unemployment (less jobs) and lowers inflation; or a movement down the SRPC. An increase in the expected inflation rate shifts the SRPC upwards. If there is a decrease in the expected rate of inflation, then the SRPC shifts, but not the LRPC. (Study Session 6, LOS 26.e)

Financial Statement Analysis

45. D The quality of stewardship is determined by the users of financial information. All of the other statements are objectives of the FASB conceptual framework. (Study Session 7, LOS 33.a)
46. C The development of raw land is one example of a situation in which it is appropriate to use the cost recovery method. The uncertainty of collection requires a delayed revenue method. (Study Session 7, LOS 34.b)