

sary in the current (i.e., today's) prices?

5. Suppose that three stocks (A, B, and C) and two common risk factors (1 and 2) have the following relationship:

$$E(R_A) = (1.1)\lambda_1 + (0.8)\lambda_2$$

$$E(R_B) = (0.7)\lambda_1 + (0.6)\lambda_2$$

$$E(R_C) = (0.3)\lambda_1 + (0.4)\lambda_2$$

- a. If $\lambda_1 = 4\%$ and $\lambda_2 = 2\%$, what are the prices expected next year for each of the stocks? Assume that all three stocks currently sell for \$30 and will not pay a dividend in the next year.
- b. Suppose that you know that next year the prices for Stocks A, B, and C will actually be \$31.50, \$35.00, and \$30.50. Create and demonstrate a riskless, arbitrage investment to take advantage of these mispriced securities. What is the profit from your investment? You may assume that you can use the proceeds from any necessary short sale.

Problems 6 and 7 refer to the data contained in Exhibit 9.12, which lists 30 monthly excess returns to two different actively managed stock portfolios (A and B) and three different common risk factors (1, 2, and 3). (Note: You may find it useful to use a computer spreadsheet program such as Microsoft Excel to calculate your answers.)