

- d. Wells has a desired ROI of 15 percent. Headquarters has \$96,000 of funds to assign to investment centers. The manager of the Huber division has an opportunity to invest the funds at an ROI of 17 percent. The other two divisions have investment opportunities that yield only 16 percent. Even so, the manager of Huber rejects the additional funding. Explain why the manager of Huber would reject the funds under these circumstances.
- e. Explain how residual income could be used to encourage the manager to accept the additional funds.

**LO 6****CHECK FIGURES**

- c. 15%
- d. (3) 18.75%

**Problem 15-23 Return on investment**

Soto Corporation's balance sheet indicates that the company has \$300,000 invested in operating assets. During 2011, Soto earned operating income of \$45,000 on \$600,000 of sales.

**Required**

- a. Compute Soto's profit margin for 2011.
- b. Compute Soto's turnover for 2011.
- c. Compute Soto's return on investment for 2011.
- d. Recompute Soto's ROI under each of the following independent assumptions.
  - (1) Sales increase from \$600,000 to \$750,000, thereby resulting in an increase in operating income from \$45,000 to \$60,000.
  - (2) Sales remain constant, but Soto reduces expenses resulting in an increase in operating income from \$45,000 to \$48,000.
  - (3) Soto is able to reduce its invested capital from \$300,000 to \$240,000 without affecting operating income.

**LO 6, 7****CHECK FIGURES**

- b. The ROI would decline to 19.60%.
- c. RI would increase by \$60,000.

**Problem 15-24 Comparing return on investment and residual income**

The manager of the Cohen Division of Leland Manufacturing Corporation is currently producing a 20 percent return on invested capital. Leland's desired rate of return is 16 percent. The Cohen Division has \$12,000,000 of capital invested in operating assets and access to additional funds as needed. The manager is considering a new investment in operating assets that will require a \$3,000,000 capital commitment and promises an 18 percent return.

**Required**

- a. Would it be advantageous for Leland Manufacturing Corporation if the Cohen Division makes the investment under consideration?
- b. What effect would the proposed investment have on the Cohen Division's return on investment? Show computations.
- c. What effect would the proposed investment have on the Cohen Division's residual income? Show computations.
- d. Would return on investment or residual income be the better performance measure for the Cohen Division's manager? Explain.

**ANALYZE, THINK, COMMUNICATE****ATC 15-1 Business Applications Case Static versus flexible budget variances**

Dan Ludwig is the manufacturing production supervisor for Atlantic Lighting Systems. Trying to explain why he did not get the year-end bonus that he had expected, he told his wife, "This is the dumbest place I ever worked. Last year the company set up this budget assuming it would sell 150,000 units. Well, it sold only 140,000. The company lost money and gave me a bonus for not using as much materials and labor as was called for in the budget. This year, the company has the same 150,000 units goal and it sells 160,000. The company's making all kinds of money. You'd think I'd get this big fat bonus. Instead, management tells me I used more materials and labor than was budgeted. They said the company would have made a lot more money if I'd stayed within my budget. I guess I gotta wait for another bad year before I get a bonus. Like I said, this is the dumbest place I ever worked."