Principles of

Managerial Finance

Thirteenth Edition

Lawrence J. Gitman
San Diego State University

Chad J. Zutter
University of Pittsburgh

Prentice Hall

Boston Columbus Indianapolis New York San Francisco Upper Saddle River
Amsterdam Cape Town Dubai London Madrid Milan Munich Paris Montreal Toronto
Delhi Mexico City Sao Paulo Sydney Hong Kong Seoul Singapore Taipei Tokyo

Editor in Chief: Donna Battista
Acquisitions Editor: Tessa O'Brien
Editorial Project Managers: Melissa Pellerano and Kerri McQueen
Managing Editor: Nancy Fenton
Senior Production Project Manager: Nancy Freihofer
Supplements Editor: Alison Eusden
Marketing Assistant: Ian Gold
Media Producer: Nicole Sackin
MyFinanceLab Content Lead: Miguel Leonarte
Senior Manufacturing Buyer: Carol Melville
Cover Designer: Anthony Gemmellaro
Cover Image: Stock4B-RF/Getty Images
Image Permission Coordinator: Rachel Youdelman
Photo Researcher: Elizabeth Anderson
Interior Design, Project Coordination, and Composition: Nesbitt Graphics, Inc.
Printer/Binder: R.R. Donnelley, Willard
Cover Printer: Lehigh Phoenix
Text Font: 10/12 Sabon

Credits and acknowledgments borrowed from other sources and reproduced, with permission, in this textbook appear on appropriate page within text (or on page C1).

Library of Congress Cataloging-in-Publication Data
Gitman, Lawrence J.
Principles of managerial finance/Lawrence J. Gitman, Chad J. Zutter.—13th ed.
p. cm.—(The Prentice Hall series in finance)
Includes index.
ISBN 978-0-13-611946-3 (alk. paper)
1. Corporations—Finance. 2. Business enterprises—Finance. I. Zutter, Chad J.
II. Title.
HG4011.G52 2010
658.15—dc22

2010044526

Prentice Hall
is an imprint of
PEARSON

ISBN-13: 978-0-13-611946-3
ISBN-10: 0-13-611946-8

In order to determine the financial feasibility of purchasing the geo-tracker, Paul wants to determine the number of months it will take to break even. He plans to keep the car for another 3 years.

a. Calculate the *breakeven point* for the device in months.
b. Based on **a,** should Paul have the tracker installed in his car?

LG 1 **P13–6** **Breakeven point—Changing costs/revenues** JWG Company publishes *Creative Crosswords*. Last year the book of puzzles sold for $10 with variable operating cost per book of $8 and fixed operating costs of $40,000. How many books must JWG sell this year to achieve the *breakeven point* for the stated operating costs, given the following different circumstances?

a. All figures remain the same as for last year.
b. Fixed operating costs increase to $44,000; all other figures remain the same.
c. The selling price increases to $10.50; all costs remain the same as for last year.
d. Variable operating cost per book increases to $8.50; all other figures remain the same.
e. What conclusions about the operating breakeven point can be drawn from your answers?

LG 1 **P13–7** **Breakeven analysis** Molly Jasper and her sister, Caitlin Peters, got into the novelties business almost by accident. Molly, a talented sculptor, often made little figurines as gifts for friends. Occasionally, she and Caitlin would set up a booth at a crafts fair and sell a few of the figurines along with jewelry that Caitlin made. Little by little, demand for the figurines, now called Mollycaits, grew, and the sisters began to reproduce some of the favorites in resin, using molds of the originals. The day came when a buyer for a major department store offered them a contract to produce 1,500 figurines of various designs for $10,000. Molly and Caitlin realized that it was time to get down to business. To make bookkeeping simpler, Molly had priced all of the figurines at $8.00. Variable operating costs amounted to an average of $6.00 per unit. To produce the order, Molly and Caitlin would have to rent industrial facilities for a month, which would cost them $4,000.

a. Calculate Mollycaits' *operating breakeven point*.
b. Calculate Mollycaits' EBIT on the department store order.
c. If Molly renegotiates the contract at a price of $10.00 per figurine, what will the EBIT be?
d. If the store refuses to pay more than $8.00 per unit but is willing to negotiate quantity, what quantity of figurines will result in an EBIT of $4,000?
e. At this time, Mollycaits come in 15 different varieties. Whereas the average variable cost per unit is $6.00, the actual cost varies from unit to unit. What recommendation would you have for Molly and Caitlin with regard to pricing and/or the numbers and types of units that they offer for sale?

LG 2 **P13–8** **EBIT sensitivity** Stewart Industries sells its finished product for $9 per unit. Its fixed operating costs are $20,000, and the variable operating cost per unit is $5.

a. Calculate the firm's earnings before interest and taxes (EBIT) for sales of 10,000 units.
b. Calculate the firm's EBIT for sales of 8,000 and 12,000 units, respectively.
c. Calculate the percentage changes in sales (from the 10,000-unit base level) and associated percentage changes in EBIT for the shifts in sales indicated in part **b.**
d. On the basis of your findings in part **c,** comment on the sensitivity of changes in EBIT in response to changes in sales.