

About the Authors



Ray H. Garrison is emeritus professor of accounting at Brigham Young University, Provo, Utah. He received his BS and MS degrees from Brigham Young University and his DBA degree from Indiana University.

As a certified public accountant, Professor Garrison has been involved in management consulting work with both national and regional accounting firms. He has published articles in *The Accounting Review*, *Management Accounting*, and other professional journals. Innovation in the classroom

has earned Professor Garrison the Karl G. Maeser Distinguished Teaching Award from Brigham Young University.



Eric W. Noreen has taught at INSEAD in France and the Hong Kong Institute of Science and Technology and is emeritus professor of accounting at the University of Washington. Currently, he is the Accounting Circle Professor of Accounting, Fox School of Business, Temple University.

He received his BA degree from the University of Washington and MBA and PhD degrees from Stanford University. A Certified Management Accountant, he was awarded a Certificate of Distinguished Performance

by the Institute of Certified Management Accountants.

Professor Noreen has served as associate editor of *The Accounting Review* and the *Journal of Accounting and Economics*. He has numerous articles in academic journals including: the *Journal of Accounting Research*; *The Accounting Review*; the *Journal of Accounting and Economics*; *Accounting Horizons*; *Accounting, Organizations and Society*; *Contemporary Accounting Research*; the *Journal of Management Accounting Research*; and the *Review of Accounting Studies*.

Professor Noreen has won a number of awards from students for his teaching.

About the Authors



Peter C. Brewer is a Lecturer in the Department of Accountancy at Wake Forest University. Prior to joining the faculty at Wake Forest, he was an accounting professor at Miami University for 19 years. He holds a BS degree in accounting from Penn State University, an MS degree in accounting from the University of Virginia, and a PhD from the University of Tennessee. He has published more than 35 articles in a variety of journals including: *Management Accounting Research*; the *Journal of Information Systems*; *Cost Management*; *Strategic Finance*; the *Journal of Accountancy*; *Issues in Accounting Education*; and the *Journal of Business Logistics*.

Professor Brewer is a member of the editorial board of the *Journal of Accounting Education* and has served on the editorial board of *Issues in Accounting Education*. His article “Putting Strategy into the Balanced Scorecard” won the 2003 International Federation of Accountants’ Articles of Merit competition, and his articles “Using Six Sigma to Improve the Finance Function” and “Lean Accounting: What’s It All About?” were awarded the Institute of Management Accountants’ Lybrand Gold and Silver Medals in 2005 and 2006. He has received Miami University’s Richard T. Farmer School of Business Teaching Excellence Award.

Prior to joining the faculty at Miami University, Professor Brewer was employed as an auditor for Touche Ross in the firm’s Philadelphia office. He also worked as an internal audit manager for the Board of Pensions of the Presbyterian Church (U.S.A.).

About the Authors



Nam Sang Cheng is associate professor of accounting (practice) in the School of Accountancy at Singapore Management University (SMU). He holds a BSc (Hons) from the University of Warwick and an MSc from the London School of Economics and Political Science, University of London. He took his PhD at the University of Bradford while holding down a full-time post there. He has also taught at the National University of Singapore.

Dr. Cheng is a member of the Institute of Chartered Accountants in England and Wales, the Institute of Singapore Chartered Accountants and CPA Australia. He has a good mix of industrial and academic experience. Prior to joining SMU, he was involved in fund raising, provided mergers and acquisitions advisory services, and had held a number of senior positions including that of COO, CFO, and chairman of different audit and remuneration committees in Singapore-listed companies. His work experience from Price Waterhouse (a legacy firm of PricewaterhouseCoopers) at its U.K. and Singapore offices provided him with a solid foundation and a wide range of industrial exposure for his career advancement.

He was a member of the Singapore Ministry of Education's Syllabus Review Committee for A-Level Principles of Accounting and is currently a member of the CFO committee of CPA Australia, Singapore Division. He also serves on the Editorial Advisory Panel for the IS Chartered Accountant Journal for the Institute of Singapore Chartered Accountants. Dr Cheng also serves as a member of the vetting panel for the Practising Management Consultant Certification Board and a member of the Domain Area Committee (Financial Management) of the Singapore Business Advisors and Consultants Council.

He has published a number of quality academic papers in journals such as *Journal of Business Finance & Accounting*, *Pacific-Basin Finance Journal*, *Managerial and Decision Economics*, and *Journal of Accounting Education*.

About the Authors



Katherine YUEN is senior lecturer in accounting in the School of Accountancy at Singapore Management University. She holds a BSc (Hons) in Accounting and Financial Analysis from the University of Warwick and an MSc in Economics and Finance from the University of Leeds. She is a Fellow of the Institute of Chartered Accountants in England and Wales and is a member of the Institute of Singapore Chartered Accountants.

Katherine has extensive industrial experience, having worked in various countries. She was employed by one of the Big Four accounting firms in the United Kingdom where she undertook audit work for a wide range of clients such as banks, housing construction companies, motor dealers, pension funds, and manufacturing firms. After qualifying as a Chartered Accountant, she joined a large toy distributor in the United Kingdom as its head of department for two years. After that, she progressed to the position of Group Financial Controller of a multinational engineering group for another two years. During that period, she was overall in charge of finance of the whole group and liaised with heads of subsidiaries all over the world. In 1997, Katherine migrated to Singapore with her husband and took up the position of Financial Controller in a company engaged in the leisure industry, overseeing its finance, administrative, and global expansion activities for many years.

Katherine has always wanted to teach and to share her knowledge and experiences with young and eager-to-learn students. She became a full-time member of the faculty at SMU in 2007 and enjoys teaching tremendously. Katherine is a very dedicated teacher and strives to continuously improve her teaching and students' learning experience. Katherine has won various teaching awards including the Most Outstanding Newcomer Award and the Most Outstanding Faculty Award.

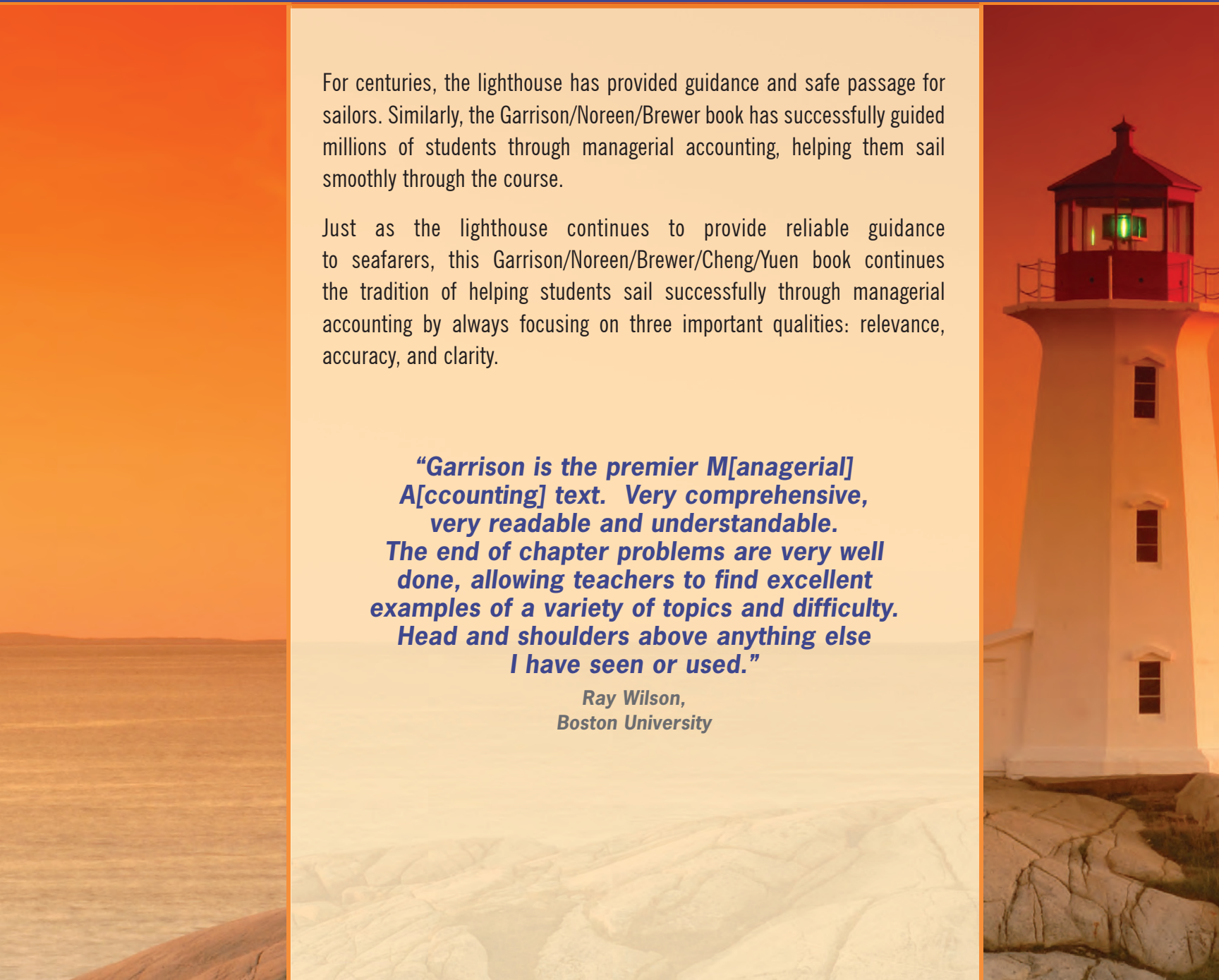
Let **Garrison** be Your Guide

For centuries, the lighthouse has provided guidance and safe passage for sailors. Similarly, the Garrison/Noreen/Brewer book has successfully guided millions of students through managerial accounting, helping them sail smoothly through the course.

Just as the lighthouse continues to provide reliable guidance to seafarers, this Garrison/Noreen/Brewer/Cheng/Yuen book continues the tradition of helping students sail successfully through managerial accounting by always focusing on three important qualities: relevance, accuracy, and clarity.

“Garrison is the premier M[anagerial] A[ccounting] text. Very comprehensive, very readable and understandable. The end of chapter problems are very well done, allowing teachers to find excellent examples of a variety of topics and difficulty. Head and shoulders above anything else I have seen or used.”

*Ray Wilson,
Boston University*



“Garrison is THE classic managerial accounting text.”

*Angela Sandberg,
Jacksonville State University*

“A well-written, well-explained text with terrific in chapter examples and excellent end of chapter materials.”

*Charles “Tony” Wain,
Babson College*

“I love the text.”

*Pam Meyer,
University of Louisiana at Lafayette*

“The seminal text on managerial accounting.”

*Dr. Reed W. Easton,
Seton Hall University*

RELEVANCE. Every effort is made to help students relate the concepts in this book to the decisions made by working managers. With insightful chapter openers, the popular Managerial Accounting in Action segments within the chapters, and stimulating end-of-chapter exercises, a student reading Garrison should never have to ask “Why am I learning this?”

ACCURACY. The Garrison book continues to set the standard for accurate and reliable material. In this Asian edition, the authors evaluate the book and its supplements in their entirety, working diligently to ensure that the end-of-chapter material, solutions manual, and test bank, are consistent, current, and accurate.

CLARITY. Generations of students have praised Garrison for the friendliness and readability of its writing, but that is just the beginning. Technical discussions have been simplified, material has been reordered, and the entire book carefully retuned to make teaching—and learning—from Garrison as easy as it can be. In addition, the key supplements were written by Garrison, Noreen, Brewer, Cheng, and Yuen, ensuring that students and professors will work with clear, well-written supplements that employ consistent terminology.

The authors’ steady focus on these three core elements has led to tremendous results. **Managerial Accounting** has consistently led the market, being used by over two million students and earning a reputation for reliability that other texts aspire to match.

Garrison's

Managerial Accounting is full of pedagogy designed to make studying productive and hassle free. On the following pages, you will see the kind of engaging, helpful pedagogical features that have made Garrison a beacon for over two million students.

Opening Vignette

Each chapter opens with a Business Focus feature that provides a real-world example for students, allowing them to see how the chapter's information and insights apply to the world outside the classroom. **Learning Objectives** alert students to what they should expect as they progress through the chapter.

"Gives students a heads up about the materials they are about to learn in each chapter. Students know in advance about what they are going to learn and realize a real world application to that knowledge."

*Monvika Phadoongsitthi
Faculty of Commerce & Accountancy
Thammasat University, Thailand*

CHAPTER

5



Absorption Costing and Variable Costing

LEARNING OBJECTIVES

After studying Chapter 5, you should be able to:

LO1
Explain how variable costing differs from absorption costing and compute unit product costs under each method.

LO2
Prepare income statements using both variable and absorption costing.

LO3
Reconcile variable costing and absorption costing net operating incomes and explain why the two amounts differ.

LO4
Understand the advantages and disadvantages of both variable and absorption costing.

Overproducing to Boost Profits: Examples from the Car Industry

It's no secret that in the years leading up to 2008, the Big Three automakers—Ford, General Motors, and Chrysler—were producing above market demand and building up their car inventory levels. To boost profits and keep up with short-term incentives, the automakers used an accounting trick, overproducing under the "absorption costing" method according to professors from Michigan State University (MSU).

From 2005 to 2006, long before GM and Chrysler filed for bankruptcy and appealed for federal aid, the automakers had abundant excess capacity. They could make more cars with their resources than consumers were willing to buy. By nature of the automotive industry, they had high fixed costs (large leases on factories, labor contracts, etc.). To take advantage of these factors, the Big Three produced above market demand while using absorption costing—a technique that allows companies to calculate the cost of making a product by dividing total costs by the total number of products made. Using this method, the cars the automakers made "absorbed" all manufacturing costs, including the cost of paying rent on idle factories.



BUSINESS FOCUS

Powerful Pedagogy

MORE OPPORTUNITIES FOR FEDEX AND UNITED PARCEL SERVICES (UPS) IN THIS ERA OF GLOBALIZATION, OUTSOURCING, AND COST CUTTING

Analyzing its own proprietary database of 6,398 cases, a consultant firm reported that 86% of the U.S.-based Fortune 500 companies outsourced to third-party logistics providers (3PLs) their logistics and supply chain functions including filling orders, determining the best mode of transportation, and real-time information to manage inventory in motion. It found that General Motors, Procter & Gamble, and Walmart each used 50 or more 3PLs. With emphasis on cost-efficient processes and operations, most local and offshore operations of both large and small companies rely heavily on 3PLs to handle logistics and supply chain activities. Logistics giants such as FedEx and UPS, therefore, are expanding rapidly in the United States and overseas. China, dubbed "the world's factory," posed a good opportunity for their business expansion. Both companies have invested heavily in Chinese hubs for their international business to and from Asia. Before 2012, FedEx and UPS could only work together with local partners or joint ventures when delivering within China. In 2012, China relaxed the regulations and allowed overseas logistics operators to deliver within major cities. Fe-

IN BUSINESS



ACTIVITY-BASED COSTING IN CONJUNCTION WITH JOB-ORDER COSTING AND PROCESS COSTING

Continuing the IN GOVERNMENT practice discussion on page 319 (Chapter 7), this section explores relevant practices recommended by the Agriculture Financial Standards Manual (AFSM) issued by the U.S. Department of Agriculture (USDA). Activity-based costing, job-order costing, process costing, and standard costing are the key costing systems recommended by AFSM to trace and record costs. AFSM suggests an appropriate costing method should be used to match the nature of the activity and process. It, however, emphasizes that the four recommended costing methods are not mutually exclusive.

For example, activity-based costing can be applied to job-order costing and process costing. When making direct loans to the public, USDA needs to go through a series of process including loan origination, performing credit reviews of individual applicants, preparing loan and administrative documents, valuing collateral, making loan disbursements, computing fees and instalment value, collecting payments, and keeping records. These "first category" processes/activities affect individual loans (job order). Therefore, ABC can be used in conjunction with job-order costing.

The direct loan operations also involve "second category" activities, such as those performed by loan officers to review and assess a portfolio of loans and make policy changes that affect an entire portfolio. Therefore, ABC at this stage works in conjunction with process costing when the costs of these batch- and service-level or product-level activities are allocated to individual loans.

Source: Agriculture Financial Standards Manual, U.S. Department of Agriculture (<http://www.ocfo.usda.gov/acftpol/pdf/fasm.pdf>).

IN GOVERNMENT

In Business Boxes

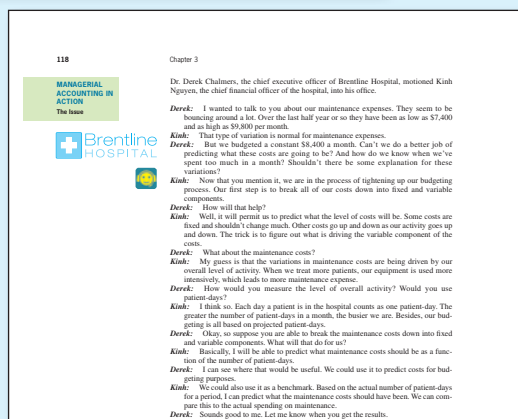
These helpful boxed features offer a glimpse into how real companies use the managerial accounting concepts discussed within the chapter. It occasionally provides useful statistics on the management accounting practices discussed. Each chapter contains from three to fourteen of these current examples.

In Government Boxes

Similar to the In Business boxes, these helpful boxed features offer a glimpse into how governments or government agencies use the relevant managerial accounting concepts discussed in the chapter.

"Good mix of businesses (manufacturing and service) which offer an insight into the applications adopted."

Lee Geok Lian, Ngee Ann Polytechnic, Singapore.



Managerial Accounting in Action Vignettes

These highly praised vignettes depict cross-functional teams working together in real-life settings, working with the products and services that students

recognize from their own lives. Students are shown step-by-step how accounting concepts are implemented in organizations and how these concepts are applied to solve everyday business problems. First, "The Issue" is introduced through a dialogue; the student then walks through the implementation process; finally, "The Wrap-up" summarizes the big picture.

Utilizing the Icons



To reflect our service-based economy, the text is replete with examples from service-based businesses. A helpful icon distinguishes service-related examples in the text.



Ethics assignments and examples serve as a reminder that good conduct is vital in business. Icons call out content that relates to ethical behavior for students.



The writing icon denotes problems that require students to use critical thinking as well as writing skills to explain their decisions.



An Excel[®] icon alerts students that spreadsheet templates are available for use with select problems and cases.



The IFRS icon highlights content that may be affected by the impending change to IFRS and possible convergence between U.S. GAAP and IFRS.

“The best managerial accounting book I have found. You can trust the accuracy of the text material as well as the accuracy of end-of-chapter exercises/problems.”

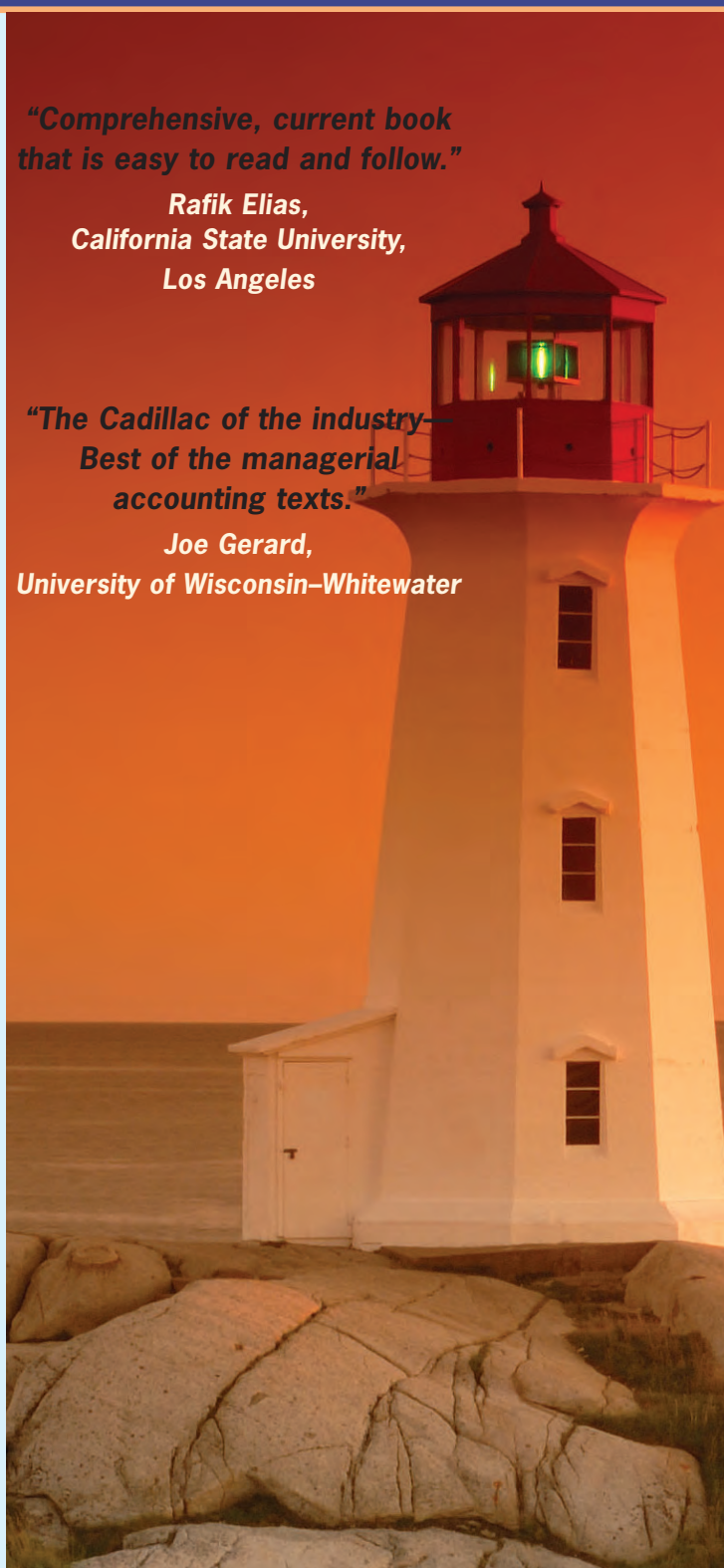
***Claudia M. Gilbertson,
North Hennepin Community College***

“Comprehensive, current book that is easy to read and follow.”

***Rafik Elias,
California State University,
Los Angeles***

***“The Cadillac of the industry—
Best of the managerial
accounting texts.”***

***Joe Gerard,
University of Wisconsin–Whitewater***





End-of-Chapter Material

Managerial Accounting has earned a reputation for the best end-of-chapter review and discussion material of any text on the market. Our problem and case material continues to conform to AACSB recommendations and makes a great starting point for class discussions and group projects. When Ray Garrison first created the *Managerial Accounting* text, he started

with the end-of-chapter material then wrote the narrative in support of it. This unique approach to textbook authoring not only ensured consistency between the practice material and text content, but also underscored Garrison's fundamental belief in the importance of applying theory through practice. It is not enough for students to read, they must also understand. To this day, the guiding principle of that first edition remains and Garrison's superior end-of-chapter material continues to provide accurate, current, and relevant practice for students.

Research and Application Cases using 10-K data from companies such as Whole Foods Market, Dell, FedEx, and Target offer end-of-chapter learning opportunities for students to identify strategy and business risks and evaluate managerial accounting concepts within a real-world context.

connect
Exercises

EXERCISE 14-1 Identifying Relevant Costs (LO1)
A number of costs are listed below that arise in activities faced by the management of...

796 Chapter 15

connect
Problems

All applicable problems are available with McGraw-Hill's Connect® Accounting.

PROBLEM 15-16 Basic Net Present Value Analysis (LO1)
Woodstock Motors, Ltd., of Nanaimo, is contemplating the purchase of equipment to exploit a sea-
out deposit on land to which the company has mineral rights. An engineering and cost analysis has
been made, and it is expected that the following cash flows would be associated with opening and
operating a mine in the area:

Cost of new equipment and trailers	\$275,000
Working capital required	\$100,000
Annual net cash receipts	\$120,000*
Cost to construct new roads in three years	\$40,000
Salvage value of equipment in four years	\$80,000

*Receipts from sales of ore, less out-of-pocket costs for salaries, utilities,
insurance, and so forth.

Author-Written Supplements

Unlike other managerial accounting texts, Garrison, Noreen, Brewer, Cheng, and Yuen, write all of the text's major supplements, ensuring a perfect fit between text and supplement. For more information on **Managerial Accounting's** supplements package, see page xviii.

- Instructor's Manual
- Test bank
- Solutions Manual

“Supplements are excellent for reinforcing the understanding of the topics in each chapter”

Raymond Ang, Singapore.

“A solid, well-balanced introductory text book which I recommend for accounting and non-accounting majors.”

Pamela Ondeck, University of Pittsburgh at Greensburg

“This is a well-written text for both accounting and general business majors. It does an excellent job of incorporating real-world examples throughout every chapter.

The online learning center is terrific and would be beneficial to all students.”

Kathleen M. Metcalf, Muscatine Community College



New Asian Content

Managerial Accounting Asia Global Edition is the 2nd edition of **Managerial Accounting: An Asian Perspective** which was an adaptation of the popular textbook **Managerial Accounting** by Garrison, Noreen, and Brewer. In addition to the major changes highlighted in the first edition of the textbook, the authors have made the following changes to the text in response to feedback and suggestions from reviewers and faculty who have adopted the book for their teaching.

- Added two **NEW** chapters: **Statement of Cash Flows** (Chapter 16) and **Financial Statement Analysis** (Chapter 17), with financial statements presented in the format in accordance with the International Financial Reporting Standards (IFRS).
- Introduced Two **NEW** end-of-chapter features in most chapters: **The Foundational 15** and **Applying Excel**.
- Added **NEW IN BUSINESS** boxes throughout to provide relevant and updated real-world examples, expert's advisory/ comments, and statistics of management accounting practices for use in classroom discussion and to support student understanding of key concepts as they read through a chapter.
- Introduced **NEW IN GOVERNMENT** boxes to provide relevant real-life practicing of management accounting techniques employed by governments or government agents.
- **NEW problems** (with suggested answers) have been added to the question banks available only to instructors adopting the textbook.
- Majority of the chapters have been renamed: Chapters 2, 5, 6, 8, 9, 10, 12, 13 and 14.

To each chapter, we have also done the following:

Chapter 1 – Managerial Accounting and the Business Environment

- Rewrote the chapter significantly by:
 - Shifting the differences between financial and management accounting to this chapter from Chapter 2.
 - Highlighting how management accounting can be used as a tool for value creation and management.
 - Adding various strategic perspectives of management accounting including leadership and culture.
- Updated with In Business boxes and latest statistics.

Chapter 2 – Cost Concepts

- Updated with new In Business boxes.
- Added a Supplement C to provide a clear visual demonstration and explanation on how product costs are recorded in manufacturing companies.
- Re-labeled and renumbered learning objectives pertaining to moving differences between financial and management accounting to Chapter 1.

Chapter 3 – Cost Behavior: Analysis and Use

- Updated with new In Business boxes.

Chapter 4 – Cost-Volume-Profit Relationships

- Swapped learning objectives 5 and 6 pertaining to the change of the flow of the contents.
- Introduced and proved a simple formula for breakeven percentage: $(\text{fixed expense} \div \text{contribution margin}) \times 100\%$.
- Emphasized the ease of using breakeven percentage for getting breakeven information, especially for multiproduct breakeven computation as no product mix information being required.
- Updated with new In Business boxes.
- Relocated the proof of the breakeven ratio relationship with margin of safety and degree of operating leverage to Appendix 4A.
- Renumbered the proof of the relationship between margin of safety and degree of operating leverage to Appendix 4B.

Chapter 5 – Absorption Costing and Variable Costing

- Updated with new Business Focus.
- Improved and added explanations for the Exhibits in Appendix 5C.

Chapter 6 – Cost Allocations of Service Departments

- Updated with new In Business and In Government boxes.

Chapter 7 – Activity-Based Costing: A Tool to Aid Decision Making

- Updated with new Business Focus, In Business and In Government boxes.

Chapter 8 – Job-Order Costing

- Renumbered learning objectives after inserting a new learning objective (LO4) - Compute the total cost and average cost per unit of a job
- Updated with new In Business and In Government boxes.

Chapter 9 – Process Costing

- Added a new In Government box.

Chapter 10 – Master Budgeting

- Updated with new In Business and In Government boxes.

Chapter 11 – Flexible Budgets and Performance Analysis

- Inserted variance analysis cycle and management by exception (previously in Chapter 12, Standard Costs and Operating Performance Measures) in the front of this chapter.
- Updated with new Business Focus, In Business and In Government boxes.

Chapter 12 – Standard Costs and Variances

- Renumbered learning objectives pertaining to the content related to
 - Elimination of minor details on how materials and direct labor standards are being set to focus on the application of the standards.
 - “Compute delivery cycle time, throughput time, and manufacturing cycle efficiency (MCE)” being moved to Chapter 13.
- Improved explanation on the generalized row-by-row variance calculations introduced in the supplementary note section.
- Updated chapter’s example.
- Updated with new In Business boxes.

Chapter 13 – Performance Measurement in Decentralized Organizations

- Renumbered learning objectives after inserting a learning objective (LO4) pertaining to the content related to “compute delivery cycle time, throughput time, and manufacturing cycle efficiency (MCE)” being moved from Chapter 12.
- Updated with new Business Focus, In Business and In Government boxes.

Chapter 14 – Differential Analysis: The Key to Decision Making

- Extended the chapter example to identify different relevant costs for different decisions.
- Updated explanation on the deprival value concept.
- Updated with new In Business boxes.

Chapter 15 – Capital Budgeting Decisions

- Explained the pros and cons of the total cost approach method and the incremental method of capital budgeting.
- Updated with new Business Focus and In Business boxes.


Chapter 16 – Statement of Cash Flows

- Added new chapter

Chapter 17 – Financial Statement Analysis

- Added new chapter

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McGraw-Hill's *Connect Accounting* is a digital teaching and learning environment that gives students the means to better connect with their coursework, with their instructors, and with the important concepts that they will need to know for success now and in the future. With *Connect Accounting*, instructors can deliver assignments, quizzes, and tests easily online. Students can practice important skills at their own pace and on their own schedule.

Online Assignments

Connect Accounting helps students learn more efficiently by providing feedback and practice material when and where they need it. *Connect Accounting* grades homework automatically and gives immediate feedback on any questions students may have missed.

Intelligent Response Technology (IRT)

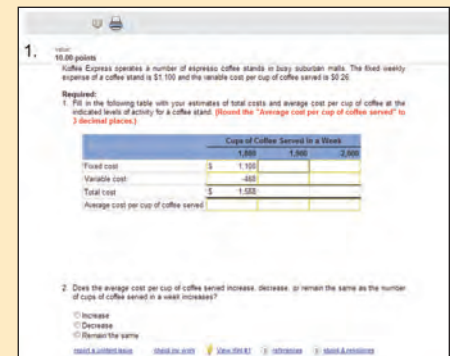
IRT is a redesigned student interface for our end-of-chapter assessment content. The benefits include improved answer acceptance to reduce students' frustration with formatting issues (such as rounding). Also, select questions have been redesigned to test students' knowledge more fully. They now include tables for students to work through rather than requiring that all calculations be done offline.

Student Library

The *Connect Accounting* Student Library gives students access to additional resources such as recorded lectures, online practice materials, an eBook, and more.

Guided Examples

Guided Examples, embedded within *Connect Accounting*, provide a narrated, animated, step-by-step walkthrough of select exercises similar to those assigned. These short presentations provide reinforcement when students need it most.



1. Java Express operates a number of espresso coffee stands in busy suburban malls. The fixed weekly expense of a coffee stand is \$1,100 and the variable cost per cup of coffee served is \$0.20.

Required:

1. Fill in the following table with your estimates of total costs and average cost per cup of coffee at the indicated levels of activity for a coffee stand. (Round the "Average cost per cup of coffee served" to 2 decimal places.)

	1,500	1,400	2,000
Fixed cost	\$ 1,100		
Variable cost		480	
Total cost	\$ 1,500		
Average cost per cup of coffee served			

2. Does the average cost per cup of coffee served increase, decrease, or remain the same as the number of cups of coffee served in a week increases?

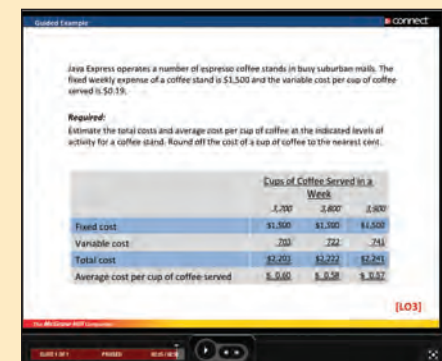
Increase
 Decrease
 Remain the same



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Java Express operates a number of espresso coffee stands in busy suburban malls. The fixed weekly expense of a coffee stand is \$1,300 and the variable cost per cup of coffee served is \$0.19.

Required:

Estimate the total costs and average cost per cup of coffee at the indicated levels of activity for a coffee stand. Round off the cost of a cup of coffee to the nearest cent.

	1,500	1,400	2,000
Fixed cost	\$1,300	\$1,300	\$1,300
Variable cost	285	266	380
Total cost	\$1,585	\$1,566	\$1,680
Average cost per cup of coffee served	\$ 1.06	\$ 1.12	\$ 0.84

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Connect Accounting offers a number of powerful tools and features to make managing assignments easier, so faculty can spend more time teaching.

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- Create and deliver assignments easily with selectable end-of-chapter questions and test bank items.
- Go paperless with the eBook and online submission and grading of student assignments.
- Have assignments scored automatically, giving students immediate feedback on their work and side-by-side comparisons with correct answers.
- Access and review each response; manually change grades or leave comments for students to review.
- Reinforce classroom concepts with practice tests and instant quizzes.



Instructor Library

The *Connect Accounting* Instructor Library is a repository for additional resources to improve student engagement in and out of class. You can select and use any asset that enhances your lecture. The *Connect Accounting* Instructor Library includes access to the eBook version of the text, PowerPoint slides, Solutions Manual, Instructor's Manual, and Test Bank. The *Connect Accounting* Instructor Library also allows you to upload your own files.



Student Reports

Connect Accounting keeps instructors informed about how each student, section, and class is performing, allowing for more productive use of lecture and office hours. The progress-tracking enables you to:

- View scored work immediately and track individual or group performance with assignment and grade reports.
- Access an instant view of student or class performance relative to learning objectives.
- Collect data and generate reports required by many accreditation organizations, such as AACSB and AICPA.



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- An integrated media-rich eBook, allowing for anytime, anywhere access to the textbook.
 - Media-rich capabilities like embedded audio/visual presentations, highlighting, and note sharing.
 - Dynamic links between the problems or questions you assign to your students and the location in the eBook where the concept is covered.
- A powerful search function to pinpoint and connect key concepts in a snap.

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Tegrity Campus, a McGraw-Hill company, provides a service that makes class time available 24/7 by automatically capturing every lecture. With a simple one-click start-and-stop process, you capture all computer screens and corresponding audio in a format that is easily searchable, frame by frame. Students can replay any part of any class with easy-to-use browser-based viewing on a PC or Mac, an iPod, or other mobile device.

Educators know that the more students can see, hear, and experience class resources, the better they learn. In fact, studies prove it. Tegrity Campus's unique search feature helps students efficiently find what they need, when they need it, across an entire semester of class recordings. Help turn your students' study time into learning moments immediately supported by your lecture. With Tegrity Campus, you also increase intent listening and class participation by easing students' concerns about note-taking. Lecture Capture will make it more likely you will see students' faces, not the tops of their heads.

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McGraw-Hill Campus



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Instructor Supplements

Assurance of Learning Ready

Many educational institutions today are focused on the notion of assurance of learning, an important element of some accreditation standards. *Managerial Accounting Asia Global Edition 2e* is designed specifically to support your assurance of learning initiatives with a simple, yet powerful, solution.

Each test bank question for *Managerial Accounting Asia Global Edition 2e* maps to a specific chapter learning outcome/objective listed in the text. You can use our test bank software, EZ Test, to easily query for learning outcomes/objectives that directly relate to the learning objectives for your course. You can then use the reporting features of EZ Test to aggregate student results in similar fashion, making the collection and presentation of assurance of learning data simple and easy. You can also use our Algorithmic-Diploma Test Bank to do this.

AACSB Statement

McGraw-Hill Companies is a proud corporate member of AACSB International. Recognizing the importance and value of AACSB accreditation, we have sought to recognize the curricula guidelines detailed in AACSB standards for business accreditation by connecting selected questions in *Managerial Accounting Asia Global Edition 2e* to the general knowledge and skill guidelines found in the AACSB standards. The statements contained in *Managerial Accounting Asia Global Edition 2e* are provided only as a guide for the users of this text. The AACSB leaves content coverage and assessment clearly within the realm and control of individual schools, the mission of the school, and the faculty. The AACSB does also charge schools with the obligation of doing assessment against their own content and learning goals. While *Managerial Accounting Asia Global Edition 2e* and its teaching package make no claim of any specific AACSB qualification or evaluation, we have, within *Managerial Accounting Asia Global Edition 2e* labeled selected questions according to the six general knowledge and skills areas. The labels or tags within *Managerial Accounting Asia Global Edition 2e* are as indicated. There are, of course, many more within the test bank, the text, and the teaching package which might be used as a “standard” for your course. However, the labeled questions are suggested for your consideration.

Instructor's Manual

Available on the OLC.

Extensive chapter-by-chapter lecture notes help with classroom presentations and contain useful suggestions for presenting key concepts and ideas. This edition has been updated to coordinate the lecture notes closely with the PowerPoint Slides, making lesson planning even easier.

Test Bank

Over 2,000 questions are organized by chapter and include true/false, multiple-choice, and problems. This edition of the test bank includes worked out solutions and all items have been tied to AACSB-AICPA standards.

Microsoft Excel® Templates

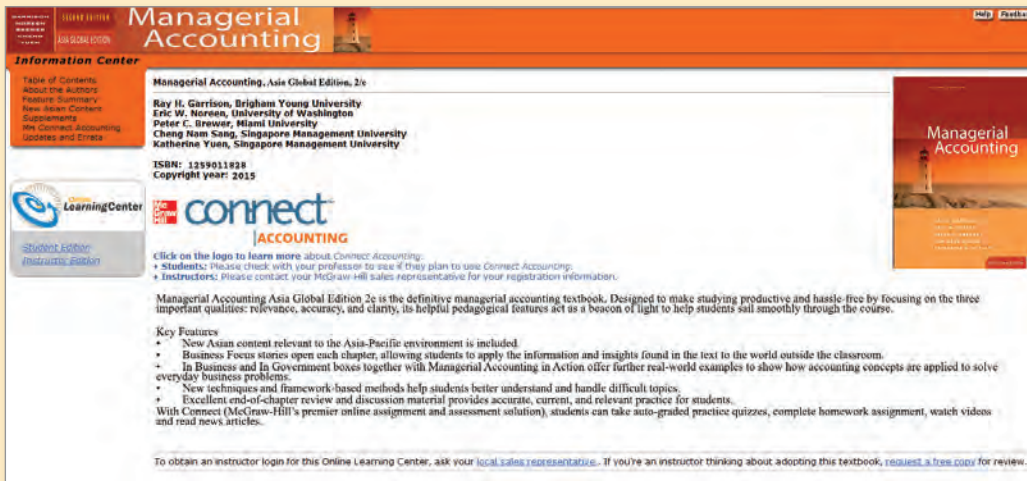
Available on the OLC.

Prepared by Jack Terry of ComSource Associates, Inc., these Excel templates offer solutions to the student version.

Check Figures

These provide key answers for selected problems and cases should you want to make them available for your students. They are available on the text's Website.

Student Supplements



The screenshot displays the website for *Managerial Accounting, Asia Global Edition, 2e*. The page features a navigation menu on the left with links for 'Table of Contents', 'About the Authors', 'Feature Summary', 'New Asian Content', 'Supplementing My Connect Accounting', and 'Updates and Errata'. The main content area includes the authors' names: Ray H. Garrison (Brigham Young University), Eric W. Noreen (University of Washington), Peter C. Brewer (Miami University), Cheng Nam Sang (Singapore Management University), and Katherine Yuen (Singapore Management University). It also lists the ISBN (1259011928) and the copyright year (2015). A 'connect ACCOUNTING' logo is prominently displayed. Below the logo, there are instructions for students and instructors to access the OLC. A 'Key Features' section highlights new Asian content, Business Focus stories, and In Business and In Government boxes. The page concludes with a note about obtaining an instructor login.

Online Learning Center (OLC)

When it comes to getting the most out of your textbook, the Online Learning Center is the place to start. The OLC follows *Managerial Accounting* chapter by chapter, offering all kinds of supplementary help for you as you read. Before you even start reading Chapter 1, go to this address and bookmark it:

www.mheducation.asia/olc/garrison

Remember, your Online Learning Center was created specifically to accompany *Managerial Accounting*—so don't let this great resource pass you by!



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Ray H. Garrison • Eric Noreen • Peter Brewer

**Managerial Accounting:
An Asian Perspective**

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