

The background of the book cover is a collage of various international banknotes. Visible notes include a 1000 Italian Lira note with a portrait of a man, a 1000 Swiss Franc note with a portrait of a woman, a 1000 Japanese Yen note with a portrait of a man, and a 1000 British Pound note with a portrait of a woman. The notes are arranged in a way that they appear to be stacked or overlapping, creating a textured, multi-colored background.

LEE H. RADEBAUGH
SIDNEY J. GRAY

**INTERNATIONAL
ACCOUNTING
AND
MULTINATIONAL
ENTERPRISES**

FOURTH EDITION

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**INTERNATIONAL ACCOUNTING AND
MULTINATIONAL ENTERPRISES**

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PREFACE

Since the first edition of this book was published in 1981, significant changes have occurred in international business and international accounting. Some of the more notable examples are:

- The transition of most of the former Communist countries of Eastern Europe and Asia from central command to market economies
- The expansion of the European Union and the drive to eliminate the remaining barriers to trade among members as well to establish a common currency
- The rapid expansion of the economies of Asia, especially China, and the opening of these economies to investment from around the world
- The establishment of the North American Free Trade Agreement and moves to expand that agreement as a counter force to the growing economic power of the European Union
- The rapid growth of global securities markets, and the need to solve key accounting issues from a global rather than strictly national perspective, to facilitate the flow of capital worldwide

The growing internationalization of business has influenced and will continue to influence the way business is conducted in any country. The real issues in this book are: How are these changes affecting the way accounting is practiced internationally? What do we need to do to prepare our students to operate more effectively in a global business environment?

INTERNATIONAL ACCOUNTING EDUCATION— A REASONABLE GOAL?

In essence, what we really want to do is to prepare our students to be able to contribute professionally in a global economy. Among the major reasons students study international accounting are to:

- Prepare for a first job and/or graduate studies
- Understand accounting theory
- Gain a more global orientation
- Develop sensitivity to differences between countries with respect to the form, content, and meaning of financial statements

Given that there is some value to having students understand international issues, there are two major approaches to cover international topics. One is to infuse the international issues in existing courses, and the other is to offer a specific international accounting course.

The infusion approach has the advantage of exposing all students to international accounting, not just those who want to take an international course. However, the major barriers to the infusion approach are:

- It is more often done as minimally/superficially as possible. Therefore, it develops nothing more than minimal awareness.
- More faculty need to be internationalized.
- Many international business topics do not fall logically or easily into existing courses.
- More coordination of the internationalization process is necessary.
- As a method, it does not develop international skills or understanding.

The establishment of a separate international accounting course corrects most of the above deficiencies, because it allows an international expert to present materials in an integrated fashion.

THE PHILOSOPHY OF OUR BOOK

In the first two editions, Jeffrey Arpan and Lee Radebaugh were the authors, and the orientation was to look at accounting in the context of the global business environment. The authors of the current and third editions are Lee Radebaugh and Sidney Gray, who would like to acknowledge Jeff's contribution to the development of the philosophy of the book. Jeff's international business background was uniquely suited to the first two editions where we tried to differentiate our work from competing books by emphasizing the broader international business environment and the context in which accounting is practiced worldwide.

Although the basic theme has continued in the third and fourth editions, the addition of Sid Gray has brought a stronger European perspective together with a renewed emphasis on accounting fundamentals. The text presents international accounting within the context of managing multinational enterprises (MNEs). It focuses on the business strategies of MNEs and how accounting applies to these strategies. This unique approach gives students the opportunity to learn about international accounting from a perspective similar to what they will experience once they graduate. However, the book also discusses accounting issues in the context of different countries. We discuss the key factors that influence accounting standards and practices in different countries, and how those factors impact the harmonization of standards worldwide. In particular, we have tried to concentrate on culture and its unique contribution to accounting standards and practices worldwide.

In addition to a general updating of materials from the third edition, we have enhanced the fourth edition by:

- Up-to-date coverage of recent world events, including the new World Trade Organization and the North American Free Trade Agreement

- An update of Hofstede's work on structural elements of culture to include current research into Chinese values (short term versus long term orientation, or "Confucian dynamism")
- The addition of Brazil and China to Chapter 5 on comparative international accounting systems and processes
- Expanded coverage of the nature of foreign exchange markets and the determination of exchange rates in Chapter 12
- Expanded coverage of foreign currency derivatives in Chapters 12 and 13
- The revision of previous cases and addition of new cases
- The addition to each chapter of Discussion Points, extensive thought questions designed to help students understand how to apply material in order to solve a problem

We have also continued and improved upon the innovations added in the third edition, such as

- Presenting a strong relationship between international accounting issues and global strategy. This makes the material more relevant to the real world and will broaden the student's perspective on accounting concepts.
- Covering key financial accounting topics such as business combinations and consolidations, goodwill and intangibles, segmental reporting, and inflation and foreign exchange. Each accounting issue is analyzed from three perspectives: theoretical issues, major national treatments, and international harmonization efforts.
- Balancing financial and managerial subjects better by expanding coverage of managerial topics.
- Discussing world events from an accounting perspective, including the integration of Western Europe, the struggle of Eastern European nations and the former Soviet Union to transform their economies, and the problems of developing countries.

In addition, each chapter contains the following:

- Chapter objectives at the beginning of the chapter
- A summary at the end of each chapter
- Study questions, discussion points, and problems
- A short case at the end of the chapter where appropriate; all but a few of the cases involve real companies, and special emphasis is placed on cases from countries around the world.

The book is divided into six different parts: Part 1 contains the introductory chapters to the book that are designed to set up the international business environment in which international accounting functions. Chapter 1 introduces the history of accounting and international business and provides an overview of the text. Chapter 2 discusses the nature of international business, global trade and investment patterns, the major players in international markets, and global strategy.

Part 2 includes Chapters 3–7 and discusses comparative accounting and international harmonization. In particular, we discuss the environmental influences on accounting and control systems, with special emphasis on how accounting systems and practices are influenced by the environment. In this section, we provide a key foundation of the book by discussing the impact of culture on accounting. We also provide a scheme for the international classification of accounting and show how companies need to be aware of the different accounting systems and traditions they face worldwide. We identify some of the unique accounting practices and underlying roots for these practices in a number of important countries, and then discuss the pros and cons, as well as the successes and failures of, international harmonization of accounting standards and practices. Of particular interest is a discussion of the impact of different users, including management, on accounting standards and practices.

Part 3 includes Chapters 8–13, and focuses on a variety of international financial reporting issues such as international business combinations and consolidations, accounting for goodwill and intangibles, international segmental reporting, accounting for price changes and inflation, and accounting for foreign currency transactions and the translation of foreign currency financial statements.

Part 4 includes Chapters 14 and 15, and introduces the concepts of international financial analysis. We discuss the impact of accounting differences on earnings and assets and then discuss disclosure regulations and financial reporting trends in the context of the corporate annual report.

Part 5 includes Chapters 16–18, and covers international management accounting control. This is a relatively broad section that discusses management control of MNEs, international performance evaluation and budgeting, and international product costing and transfer pricing.

Part 6 completes the book and includes Chapters 19–21: international taxation, external auditing of foreign operations, and global accounting issues into the twenty-first century. We start by covering international tax rules, especially as they relate to foreign transactions and foreign currency. In addition, we cover the differences in tax systems and philosophies worldwide. Next we discuss the nature of the accounting and auditing profession worldwide, the organization of public accounting firms as they service global clients, and the audit process itself. Finally, we take a forward look at the key issues we discuss in the earlier chapters, as well as discuss some of the issues involving emerging economies.

INSTRUCTOR MATERIALS

We have also written an instructor's manual that includes the following sections:

- Suggested course outlines
- An outline of each chapter
- Solutions for problems and cases in the text
- A multiple-choice test bank
- Transparency masters

ACKNOWLEDGMENTS

We feel very fortunate to have the book enter the fourth edition. Many people were responsible for the previous and current editions—editors and editorial staff members, faculty reviewers, students, and practitioners. We would like to thank the following faculty members who contributed to the development of the book and/or who provided detailed comments on this and previous drafts: Ajay Adhikari, The American University; Jeffrey Arpan, University of South Carolina; Kathleen Bindon, University of Alabama; Thomas Buchman, University of Colorado; Ray Carroll, Dalhousie University (Canada); Clive Emmanuel, University of Glasgow (Scotland); Stephen Goldberg, Georgia Tech University; Claire Grant, University of Stirling (Scotland); Irene Herremans, University of Calgary (Canada); Brendan McSweeney, University of Warwick (England); Gary Meek, Oklahoma State University; Hans Peter Möller, RWTH–Aachen (Germany); Clare Roberts, University of Exeter (England); Stephen Salter, University of Cincinnati; David Sharp, University of Western Ontario (Canada); Donna Street, James Madison University; Pauline Weetman, Heriot-Watt University (Scotland); and William Zacchaeus, St. Edward's University.

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Even with the collective help and prodding of all these persons and our own best effort, there may remain some errors or omissions in the fourth edition. As authors, we assume full responsibility. But as all accountants know, there inevitably comes a time when the books must be closed. So we once again solicit our external auditors, those who use our book, to let us know how it can be improved further. We hope you enjoy using the book as much as we have enjoyed conceptualizing and writing it.

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CHAPTER ONE

INTERNATIONAL DIMENSIONS OF ACCOUNTING AND CONTROL

Chapter Objectives

- Identify the key trends in the development of accounting through history
- Introduce some of the key national differences in accounting systems worldwide
- Highlight the evolution of business to modern times
- Discuss the important accounting dimensions of global business and the major topics that comprise the field of international accounting
- Introduce the chapters in the book

INTRODUCTION

The field of accounting has had a notable international history and promises to have an even more significant future. Like the other functional areas of business, accounting has changed as the environments it serves have changed, moving sequentially from the more rudimentary to the more complex and sophisticated. This chapter traces the international development of accounting, highlights some of the critical factors that determine national differences in accounting systems, provides an initial perspective on these differences and their importance for accountants in the modern world, and outlines the focus of the book.

THE INTERNATIONAL DEVELOPMENT OF THE ACCOUNTING DISCIPLINE

Many books have been written on the origin of accounting, but no one has been able to establish when it really began. Clearly, accounting is a function of the

business environment in which it operates, and it originated in order to record business transactions. The origin of accounting and its subsequent changes are therefore best studied in the context of the history of commercial transactions. Although the recording of transactions is probably as old as the history of record keeping, we tend to think of the establishment of double-entry accounting, the basis for modern accounting, as the key event. In 1994, the seventeenth annual congress of the European Accounting Association (EAA) was held in Venice to celebrate the five-hundred-year anniversary of the publication of the first printed book on double-entry accounting by Luca Pacioli.¹ Why were the Italians so influential in the development of double-entry accounting, and could it have developed elsewhere?

Early Italian Influence

Record keeping, the foundation of accounting, has been traced back as far as 3600 B.C., and historians know that mathematical concepts were understood in various ancient civilizations from China, India, and Mesopotamia—often referred to as the “Cradle of Civilization”—to some of the ancient native cultures of Central and South America. Business transactions in different areas around the world, including the city-states of central and northern Europe, probably gave rise to the recording of business transactions.

However, double-entry accounting was probably developed in the Italian city-states between the thirteenth and fifteenth centuries. When the Turks conquered Jerusalem in 1076, Western Europe unleashed a series of crusades to free Jerusalem of Muslim rule that lasted for nearly two-hundred years. The Crusades resulted in the establishment of trade routes between East and West, with Italy in the center of things. In essence, the Italian cities constituted the link between the Eastern and European cultures. In fact, accounting was already highly developed by the Arabs, and many of their concepts were adopted by the Italians. However, there is no evidence that the Arabs understood the concepts of double-entry accounting or passed those concepts on to the Italians.²

The most significant influences on accounting took place in Genoa, Florence, and Venice. There is no defining moment when double-entry accounting was born, but it seems to have evolved independently in different places, responding to the changing nature of business transactions and the need to record them properly. The Genoese system was probably a development of the ancient Roman system. Commercial activity had been flourishing in Genoa for a long time, and Genoa was at the height of her wealth and power during the fourteenth century. The Genoese system assumed the concept of a business entity. Because it recorded items in terms of money, it was the first to imply that unlike items could be compared in terms of a common monetary unit. The system also implied some understanding of the distinction between capital and income in that it included both expenses and equity accounts. The oldest double-entry books were the Massari (treasury officials) ledgers of the Commune of Genoa, dating from 1340. Given that they were written in perfect double-entry form, it stands to reason that the concepts must have originated and evolved earlier than that. In fact, the government of the Commune of Genoa decreed in 1327 that government accounts had to be kept in

the same way that the banks kept their accounts, so it would seem natural that double-entry accounting existed with Genoese banks prior to 1327, even though we have no records of Genoese banks prior to 1408.³

Florentine commerce also flourished in the thirteenth and fourteenth centuries, giving rise to double-entry accounting there as well. In 1252, Florence coined the gold florin, soon accepted as the standard gold piece all over Europe. A major achievement in Florence was the development of large associations and *compagnie* (partnerships) that pooled capital, initially within family groups and then from outside the family groups. Given the nature of Florence as an artistic center, it is easier to find manuscripts relating to the development of bookkeeping. The account books of the fourteenth century reflect the partnership contracts of the *compagnie*, which identified the capital of the separate partners, made provisions for the division of profits and losses, clearly defined the duties of each partner, and provided for the dissolution of the *compagnie*. Records were often kept in great detail, almost in narrative form. Until the influence of the Venetians, Florentine accounts listed debits above credits rather than on separate pages. Separate columns for transactions were needed to record which monetary value was used.⁴

However, the key influence on double-entry accounting, not so much for its development as its spread, came from Venice. Venice was the key commercial city of the Renaissance because of its commercial empire and advantages as a port. The Venetians may not have developed double-entry accounting before the Genoese and Florentines, but Venice “developed it, perfected it, and made it her own, and it was under the name of the Venetian method that it became known the world over.”⁵ The earliest Venetian records show an accounting system that was highly developed, including the first true journal used in Renaissance bookkeeping.

Luca Pacioli

Luca Pacioli, who was born in San Sepolcro in the Tuscany region of Italy in 1447, was not an accountant but was educated as a mathematician by Franciscans and actually became a Franciscan monk himself. In 1464, he became the tutor of the three sons of a Venetian merchant, then left Venice to study mathematics. After becoming a Franciscan monk, he accepted a teaching position at the University of Parage, then traveled extensively and taught at the Universities of Florence, Rome, Naples, Papua, and Bologna.⁶ In 1494 in Venice, he published the first significant work on accounting up to that point, *Summa de arithmetica geometria proportioni et proportionalita*, more commonly known as *Summa de arithmetica*. His discussion of accounting comprises one of the chapters in the *Summa de arithmetica*. Given the extreme detail included in the book and the fact that Pacioli was not a merchant or bookkeeper, many historians believe he got his information from somewhere else. In fact, Pacioli did not claim that his ideas were original, just that he was the one who was trying to organize and publish them. His objective was to publish a popular book that could be used by all, following the influence of the Venetian businessmen rather than the bankers. Wherever his ideas originated, the Venetian method became the standard for not only the Italians but also the Dutch, German, and English authors on accounting.

Pacioli introduced three important books of record: the memorandum book, the journal, and the ledger. The memorandum book included all information on a transaction. From the memorandum book, a journal entry was made into the journal. Information was then posted to the ledger, the center of the accounting system. Pacioli felt that all transactions required both a debit and credit in order for the transaction to remain in equilibrium.⁷

Subsequent Developments

The growing literature on accounting represented an attempt to describe good practices rather than challenge underlying assumptions or develop a general theory of accounting. The literature began to change during the 1550s to reflect new commercial and political realities. The rise of nation-states and the need to manage public finances increased the importance of good accounting practice. However, a major change was the decline of Italy as a world commercial power. As commercial traffic shifted from the ports of Venice to the Atlantic shipping routes, Italy slipped in importance and relatively few new developments took place in accounting. It is true that changing business forms that emphasized large-scale business enterprises caused a change in focus, but accounting authors still clung to the old forms of accounting, and no new theories developed.⁸

The concept of an accounting period did not emerge until the seventeenth and eighteenth centuries, when end-of-the-year reconciliations became prominent. During this period, the center of commerce shifted sequentially from Italy to Spain, to Portugal, and then to northern Europe. With the commercial shift was an accompanying shift in accounting development. In 1673, France adopted the first official accounting code, which required, among other things, that balance sheets be drawn up every two years. This period also saw the first personification of accounts (i.e., the practice of treating accounts as independent, living entities) and the standardization of debits on the left, credits on the right.

The French Revolution in the late 1700s marked the beginning of a great social upheaval that affected governments, finances, laws, and customs. Italy came under the influence of the French and then the Austrians, and their system of double-entry accounting was also influenced. It is interesting to note that Napoleon was surprised at how efficient the Italian system of accounting was. The serious study of accounting and development of accounting theory also began in this period and has continued to the present day. However, the influence of the Arabs, Genoese, Florentines, and Venetians continues to be felt in the double-entry system we use today. Even the British, who acquired their knowledge of double-entry accounting soon after Pacioli's *Summa de arithmetica* was published, did not begin adopting double-entry accounting quickly until the Industrial Revolution of the period 1760–1830. At that point, the importance of accounting grew substantially.⁹

As the scale of enterprises increased following technological breakthroughs such as mass production, and as fixed assets grew in importance, it became necessary to account for depreciation, the allocation of overhead, and inventory. In addition, the basic form of business organization shifted from proprietorships and partnerships to limited liability and stock companies and ultimately to stock exchange listed corporations. Accounting had to adapt to satisfy these new

needs. Increased government regulation of business made new demands on firms, which also generated new accounting systems. Most notable was the increased taxation of business and individuals, which brought with it new tax accounting systems and procedures.

Since the early 1900s, the rapidity of change and the increasing complexity of the world's industrial economies necessitated still more changes in accounting. Mergers, acquisitions, and the growth of multinational corporations fostered new internal and external reporting and control systems. With widespread ownership of modern corporations came new audit and reporting procedures and new agencies became involved in promulgating accounting standards: namely, stock exchanges, securities regulating commissions, internal revenue agencies, and so on.

Finally, with the dramatic increase in foreign investment and world trade and the formation of regional economic groups such as the European Union, problems arose concerning the international activities of business. This phenomenon remains particularly complex, for it involves reconciling the accounting practices of different nations in which each multinational operates, as well as dealing with accounting problems unique to international business.

NATIONAL DIFFERENCES IN ACCOUNTING SYSTEMS

One might infer that these historical developments had a uniform effect on accounting systems throughout the world, yet nothing could be further from the truth. Despite some similarities, there are at least as many accounting systems as there are countries, and no two systems are exactly alike. The underlying reasons for these differences are essentially environmental: accounting systems evolve from and reflect the environments they serve, just as in Genoa, Florence, and Venice in the 1400s. The reality of the world is that environments have not evolved uniformly or simultaneously. Countries today are at stages of economic development ranging from subsistence, barter economies to highly complex industrial societies.

While accounting practices evolved there were, for example, differences in the amount of private ownership, the degree of industrialization, the rate of inflation, and the level of economic growth. Given these differences in economic conditions, differences in accounting practices should not be surprising. Just as the accounting needs of a small proprietorship are different from those of a multinational corporation, so are the accounting needs of an underdeveloped, agrarian country different from those of a highly developed industrial country.

Economic factors, however, are not the only influences. Educational systems, legal systems, political systems, and sociocultural characteristics also influence the need for accounting and the direction and speed of its development. For example, in some Muslim countries where religious doctrine does not permit the charging of interest, there are unlikely to be elaborate accounting procedures related to interest.

The ways in which environmental factors affect the evolution of accounting practices are covered in greater detail in chapter 3. For the moment, it is sufficient to acknowledge their role and the fact that in each country their unique combination results in a unique system of accounting.