

WILEY FINANCE

Mastering Financial Accounting Essentials

The Critical Nuts and Bolts

Stuart A. McCrary

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Mastering Financial Accounting Essentials

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To my loving wife, Nancy

Preface

Most accounting textbooks are written to teach accounting to future accountants, the creators of financial statements. This book is intended to explain financial accounting to company managers and investors, the users of financial statements. As a result, this book will give an intuitive understanding of the accounting process and standard accounting reports. This text does not focus on accounting rules and therefore is not intended to teach accounting to future accountants.

The questions at the end of each chapter follow an extended example of a new company being created. As the company is created and grows, new kinds of activities require accountants to record a widening variety of business transactions. The questions follow the topic in each chapter and don't necessarily appear in chronological order. However, a list of accounting entries sums up the year in chronological order.

The book is written as a text for an executive master's program in business school or part of the business curriculum in a professional degree program (engineering, law, medicine, etc.). To respect the scarce time of the student, the most important material will occupy the main text. Students can read the chapters without studying the questions at the end of the chapter, but they should work through both the chapters and questions for a better understanding of the material.

Not every accounting student is enthusiastic about having to learn accounting. Yet they attend the class because modern business makes it important for everyone outside the accounting department to understand the company's accounting system.

Perhaps it would be more rewarding to start over and build a logical accounting system from scratch. If no accounting system existed, we could design it to meet the needs of a modern business, to be logical, and to be understandable. But this text must describe our existing accounting system to be useful to the reader. The reader will discover that the existing accounting system is logical and does meet the needs of modern business.

Traditional accounting textbooks are much easier to understand if the reader already has a good grasp of accounting concepts. A reader without prior knowledge may need to read a traditional accounting text twice

because material in the early chapters is clear only after the reader is familiar with content in other parts of the book. This text will seek to present the material in a way that explains the key features of modern accounting step by step and will develop an intuitive understanding of accounting.

Although this text will not invent a new accounting system, it will introduce the concepts of modern accounting in an orderly way that sounds a bit like the evolution of a primitive system into our current practices. This text will start with a limited accounting system that does not include many key features of modern accounting. These features (such as accrual accounting, which can make accounting numbers more useful for business decisions) are successively added, so the reader can understand how these features work and why they are used.

Disclaimer: Financial accounting textbooks generally do not include a disclaimer. These textbooks are published to educate students interested in becoming accountants or to be an authoritative source on accounting rules and methods. As explained in the Forward, this text is not written to educate future accountants or to serve as a thorough summary of accounting rules. Instead, the book serves to explain accounting to individuals who interact with accountants and accounting records. This text should not be used to determine how financial statements should be prepared.

The text begins with the assumption that the reader is not familiar with any accounting jargon and is not familiar with double-entry accounting. Accounting concepts are introduced along with the language accountants use to describe the process. The name of a particular account (such as ASSETS or CASH) will be written in uppercase to make it clear when the text describes that account. Gradually, the main accounting statements are described using the previously introduced accounting vocabulary. In this way, the reader learns about accounting without having to have a grounding in the topic, then gets to rehearse the language used by accountants.

Later chapters describe how businesses and users can assess the usefulness of accounting records, reduce the opportunity for fraud, and to use accounting information intelligently.

Each chapter presents key accounting concepts. Questions at the end of each chapter revisit these key concepts by reviewing how accountants handle common business transactions, with answers at the back of the book. The descriptions are short by design and some readers may want to read more if they need to know more about particular topics not thoroughly covered, such as valuing intangible assets, leasing, pension fund accounting, accounting for subsidiaries, accounting for nondollar transactions, stock options, or partnership accounting.

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Stuart A. McCrary

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I also want to thank my students and the administration of Northwestern University, especially program directors Walter B. Herbst and Richard M. Lueptow. This book reflects my efforts to create an executive master's curriculum that covers financial accounting in an incredibly short period. This book reflects our mutual efforts to present essential accounting information to nonaccountants so that these students can become more effective business leaders.

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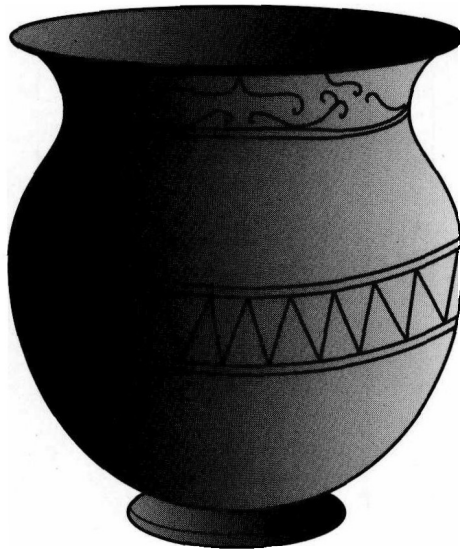
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Creating Ledger Accounting

If we set out to create the modern system of accounting, we would start with a goal. Our accounting system is a measuring and monitoring system, so we set as a goal to count the things that matter to a business and report the results in a way that is helpful to the managers. This chapter takes an important first step in providing a systematic way to count and organize business data.

We could start with a primitive counting system using rocks and a clay urn. This is not a history of accounting, but this text will make reference to how primitive record keeping can be used to account for business transactions. The history of accounting is complex, and this text will not try to tell that story. However, these early accounting tools can provide the student with an understanding of why accounting methods evolved.



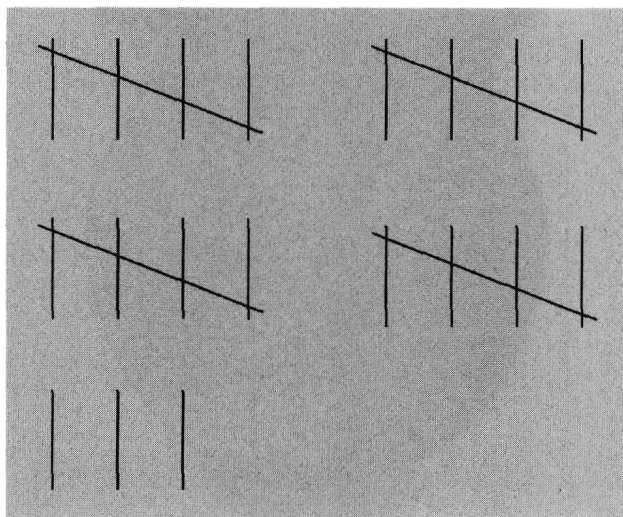
We could use the urn to contain a count of some product our company owns. If our retro business were importing and selling myrrh, we would add pebbles to the urn every time a ship came in from distant lands with a supply of myrrh. Each time we sold some myrrh, we would remove pebbles from the urn. At every point in time, the urn would contain our count of the stock of myrrh on hand.

Of course, our business may buy and sell many different products. We would need another urn for every product we want to count.

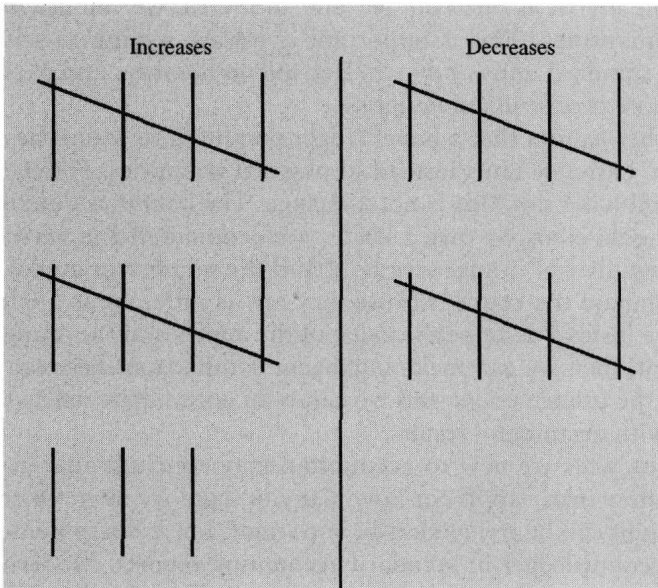
We could also devote an urn to the amount of debt we owe. If our currency were gold coins, we would record one pebble in the urn for each gold coin owed to our lenders. We may need to use smaller pebbles for the debt account, so there is room in the urn. The size of the pebble doesn't matter much because we really have to count the pebbles each time we want to see how much money we owe.

Urns could help the smallest of businesses to keep track of their business, but urns are unwieldy as the number of items we need to count grows. In addition, we do not know the count in the urn at any previous point unless we write down the count somewhere else and preserve the information outside of our counting system. Finally, when we count the pebbles and the thing we are tracking, we have no way to distinguish theft from human error in updating the pebbles in the urn.

We can fix all of these problems by making the count a little differently. If we have the clay to make urns, we might want to build a clay tablet to count our myrrh, our debt, and anything else worth counting. One system would use soft clay tablets and a blunt-tipped stick. Each time we buy more myrrh, we etch a "tally mark" into the clay.



The previous system allowed us to count decreases to our stock of myrrh as easily as increases. Unlike the hard clay urn, this tablet does not easily let us indicate that previous inventory has been sold. If we were using clay urns to count our myrrh, we could pull pebbles out of the urn as we sold myrrh to our customers. To be as useful as a clay urn, we would need to count the number of units of myrrh we acquired and the number we sold. The next drawing shows a representation of how the soft clay tablets can be adapted to count both increases and decreases in the amount of myrrh on hand.



The flat stone covering a tomb or grave is called a ledger (*Random House Unabridged Dictionary of the English Language*, 1966). Perhaps this stone lends its name to the soft clay tablets used to count the assets and liabilities of this old world business. According to the New York State Society of CPAs (www.nysscpa.org), assets are defined as “an economic resource that is expected to be of benefit in the future” and liabilities are defined as the “DEBTS or obligations owed by one entity (debtor) to another entity (creditor) payable in money, goods, or services.”

This clay tablet containing tallies has a couple advantages over rocks and urns. We can indicate our location on the ledger at certain points in time, such as at month-end and year-end. When we fill out a tablet, we

can let it dry in the sun and preserve a record of our counting procedure. In addition, we may be able to count our stock of goods with fewer, more compact resources (tablets are smaller than most clay urns). Also, we can quickly see a running total of these products in our accounting records.

The next improvement over the clay tablet method is to record the tally marks on paper. Today, paper is an inexpensive material and much lighter than clay tablets. It is a small step from etching tally marks in a soft clay tablet to inking tally marks on a piece of paper. Although less durable than clay, we can introduce a second hugely important improvement. Instead of counting the myrrh as one tally per unit of myrrh, we can use numbers to represent quantities. This is important if we are willing to sell anything other than standard units of myrrh. Relying on numbers and paper, we can be much more precise in our counting.

The other feature that a paper ledger permits is to count the assets and liabilities in currency units instead of physical quantities. For certain kinds of assets and liabilities, this is not a change. The liabilities described as the number of gold coins we owe a lender are denominated in currency. If we count the number of oranges we hold and the number of apples, we can't directly compare the count because they are as different as apples and oranges. If we instead describe the value of the apples and the oranges instead of the count, then we can make intelligent comparisons between the apple count and the orange count and we can even accumulate assets into larger subtotals with meaningful results.

Students who are new to accounting may conclude that accountants don't care how many apples or how many oranges we own. Of course, this physical count can be tremendously important, but it doesn't enter into the primary account ledger or standard accounting reports. Modern information systems preserve a tremendous amount of this nonledger information, which doesn't usually appear on published financial statements. However, this text and most other accounting texts focus primarily on the value of the transactions and very little on physical quantities.

COUNT EVERYTHING

So far, it is not clear what assets and what liabilities we should count. The short answer, of course, is that we should count all of them. This is a challenging task, and the bulk of this text describes how accountants keep track of business transactions. It is important to count all assets and all liabilities because we live in a world where there is considerable pressure to disclose financial information to investors and creditors. More fundamentally, if we

TABLE 1.1 Impact of Changes in Asset and Liability Values

Type of Entry	Impact on Equity
Increase assets	Increase equity
Decrease assets	Decrease equity
Increase liabilities	Decrease equity
Decrease liabilities	Increase equity

have accurately counted all our assets and all our liabilities, we can net the two to see “how we are doing.” If assets greatly exceed our liabilities, we have equity (defined as the “residual interest in the assets of an entity that remains after deducting its liabilities” (www.nysscpa.org/prof_library/guide.htm#e)) or net worth in the business. If we don’t (or can’t) count every asset and liability, we can’t really know how much the assets exceed the liabilities (if at all).

So far, we have been counting only assets and liabilities. While it may appear to be unnecessary to count our equity, it certainly would be possible to do so. One way to count the equity is to realize that any increase in assets (all other things being equal) increases our equity or makes us richer by an equal amount. Likewise, a decrease in assets (again, all other things being equal) decreases our equity by the same amount. Similarly, an increase in liabilities makes us poorer (lowers our equity) and a decrease in a liability increases an equity account. A list of some of the combinations appears in Table 1.1.

**THE BEGINNINGS OF
DOUBLE-ENTRY ACCOUNTING**

If we count all the assets and liabilities, accountants can directly measure the benefit of a transaction. Suppose a merchant sells myrrh that costs 5 gold coins in return for 10 gold coins. The currency account increases by 10 gold coins (an asset), so our net worth increases by the same 10 gold coins. Our inventory of myrrh decreases by 5 gold coins, so the net worth declines by 5 gold coins. The net of the two transactions (which actually occur simultaneously) is to increase the firm equity by 5 gold coins.

Of course, as shown in Table 1.1, the imputed matching of transactions with changes in equity is frequently not an actual accounting reality but does offer a perspective on the link among assets, liabilities, and