2 Economic Decision Making

Good fortune has come your way. After several weeks of interviewing, you have received job offers from three firms. The offers differ greatly, which leaves you quite confused. You have made this list of the offers:

1. Large national firm, $12 per hour starting wage, life insurance and dental benefits paid by the company, a two-week paid vacation each year, and potential for rapid advancement.
2. Small local firm, $20 per hour starting wage, life insurance and dental benefits available but you must pay the premiums, a two-week paid vacation each year, share options and pension plan benefits, and potential for advancement.
3. Regional firm, $15 per hour starting wage, full life insurance and dental benefits, one-week paid vacation, good pension plan, and moderate advancement potential.

Will you consider the short run or the long run for this decision? Which offer provides you with the most today and which one the most over the next five years? What is the real economic value of the benefits? Aside from the monetary considerations, do you like the work you will perform in each position and the people with whom you will work? How do you organize your thoughts to make this decision?

Regardless of the form of organization or the business activity, success in the world of business—sometimes even survival—depends on making wise economic decisions. A key ingredient is an understanding of the decision-making process itself. Because economic decision making relies heavily on accounting information, it is crucial for that information to be useful to economic decision makers.

Life is a never-ending sequence of decisions, some very complex and others relatively simple. Because we cannot know the future, we strive to reduce uncertainty in any decision by collecting as much information as possible. We designed this chapter to help you learn a logical decision-making process. ■

Learning Objectives

After completing your work on this chapter, you should be able to do the following:

1. Explain the concepts of extrinsic and intrinsic rewards, sacrifices, and opportunity costs as they pertain to decision situations.
2. Describe the two types of economic decision makers and explain the basic differences between management accounting and financial accounting.
3. List the three questions all economic decision makers attempt to answer and explain why these questions are so important.
4. Describe the importance of cash as a measure of business success or failure.
5. Define accounting information and distinguish it from accounting data.
6. Describe the qualitative characteristics of useful accounting information and apply them in decision-making situations.
7. Explain the difference between reality and the measurement of reality.
8. Apply the criteria for revenue and expense recognition under the cash basis of accounting to determine periodic net income.
9. Apply the criteria for revenue and expense recognition under the accrual basis of accounting to determine periodic net income.

What Is Decision Making?

Decision making is the process of identifying alternative courses of action and selecting an appropriate alternative in a given decision situation. This definition presents two important parts:

1. *Identifying alternative courses of action* means that an ideal solution may not exist or might not be identifiable.
2. *Selecting an appropriate alternative* implies that there may be a number of appropriate alternatives and that inappropriate alternatives are to be evaluated and rejected. Thus, judgment is fundamental to decision making.

Choice is implicit in our definition of decision making. We may not like the alternatives available to us, but we are seldom left without choices.

Rewards and Sacrifices: The Trade-off

In general, the aim of all decisions is to obtain some type of reward, either economic or personal. Reward requires sacrifice. When you made the decision to attend college or university, for example, you certainly desired a reward. What was the sacrifice?

Discussion Questions

2–1. What reward or rewards do you hope to obtain by attending college or university?

2–2. What sacrifices are you personally making to attend college or university ?

Think of some things you cannot do because you are attending college. Some sacrifices cannot be measured in dollars (such as loss of sleep, lack of home-cooked meals, and loss of leisure time). Some, however, can be measured. Suppose that instead of attending college you could work full time and earn $15,000 a year. Attending college, therefore, costs you that $15,000, in addition to what you pay for tuition and books. We call the $15,000 an opportunity cost of making the decision to attend college. An **opportunity cost** is the reward we forego because we choose a particular alternative instead of another. Most decisions include opportunity costs.

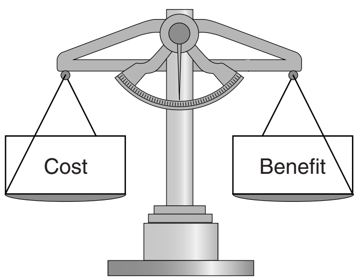
opportunity cost The benefit or benefits forgone by not selecting a particular alternative. Once an alternative is selected in a decision situation, the benefits of all rejected alternatives become part of the opportunity cost of the alternative selected.

Decision makers want the reward or benefit from a decision to be greater than the sacrifice or cost required to attain it (see Exhibit 2–1). Examining the relationship between rewards and sacrifices is known as **cost/benefit analysis.** In a condition of absolute certainty, in which the outcome of a decision is known without doubt, cost/benefit analysis provides a certain outcome. Unfortunately, absolute certainty rarely, if ever, exists.

cost/benefit analysis Deals with the trade-off between the rewards of selecting a given alternative and the sacrifices required to obtain those rewards.

In examples that accountants use to describe the trade-off between rewards and sacrifices, money is usually the reward. Money is an *extrinsic reward,* meaning that it comes from outside ourselves and is a tangible object we can acquire. An *intrinsic reward* is one that comes from inside ourselves. When you accomplish a difficult task, the intrinsic reward comes from the sense of satisfaction you feel. An old adage says, "The best things in life are free." Not so! Anything worth having requires sacrifice.

Exhibit 2–1
Cost versus Benefit



Discussion Questions

2–3. What is the one thing you desire most from life? What sacrifices must you make to obtain it?

2–4. What sacrifice does a business owner make when purchasing machinery for the production plant?

2–5. What benefit does the owner derive from the sacrifice to purchase the machinery?

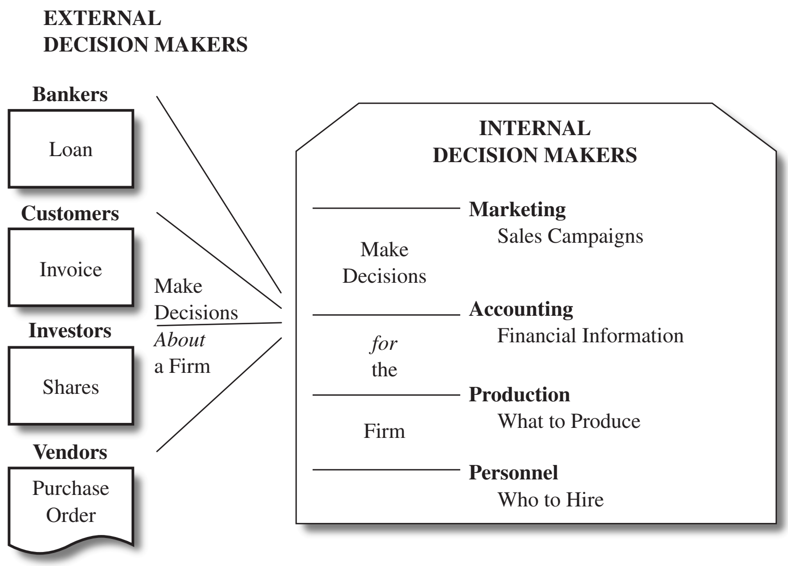
internal decision makers Economic decision makers within a company who make decisions for the company. They have access to much or all of the accounting information generated within the company.

external decision makers Economic decision makers outside a company who make decisions about the company. The accounting information they use to make those decisions is limited to what the company provides to them.

Economic decision making, in this book, refers to the process of making business decisions involving money. All economic decisions of any consequence require the use of some sort of accounting information, often in the form of financial reports. Anyone using accounting information to make economic decisions must understand the business and economic environment in which accounting information is generated, and they must also be willing to devote the necessary time and energy to make sense of the accounting reports.

Economic decision makers are either internal or external. **Internal decision makers** are individuals within a company who make decisions on behalf of the company, while **external decision makers** are individuals or organizations outside a company who make decisions that affect the company. Exhibit 2-2 illustrates some decisions made by internal and external decision makers.

Exhibit 2–2
External vs. Internal Decision Makers



Internal Decision Makers

Internal decision makers decide whether the company should sell a particular product, whether it should enter a certain market, and whether it should hire or fire employees. Note that in all these matters, the responsible internal decision maker makes the decision not for himself or herself, but rather for *the company*.

Depending on their position within the company, internal decision makers may have access to much, or even all, of the company's financial information. They do not have complete information, however, because all decisions relate to the future and always involve unknowns.

External Decision Makers

External decision makers make decisions *about* a company. External decision makers decide whether to invest in the company, whether to sell to or buy from the company, and whether to lend money to the company.

Unlike internal decision makers, external decision makers have limited financial information on which to base their decisions about the company. In fact, they have only the information the company gives them—which in most cases is not all the information the company possesses.

Discussion Questions

2–6. Identify a particular company (large or small). Who do you think are considered internal and external economic decision makers of the company?

2–7. For what reasons do you think a company would withhold certain financial information from external parties?

2–8. Is it ethical for a company to limit the information available to internal decision makers? External decision makers?

The decisions made by internal and external decision makers are similar in some ways, but so different in other ways that the accounting profession developed two separate branches of accounting to meet the needs of the two categories of users. **Management accounting** is not constrained by GAAP and generates information for use by internal decision makers, whereas **financial accounting** is constrained by GAAP and generates information for use by external parties.

management accounting The branch of accounting developed to meet the informational needs of internal decision makers.

financial accounting The branch of accounting developed to meet the informational needs of external decision makers.

cash flow The movement of cash in and out of a company.

net cash flow The difference between cash inflows and cash outflows; it can be either positive or negative.

What All Economic Decision Makers Want to Know

Although internal and external parties face different decision situations, both attempt to predict the future, as do all decision makers. Specifically, all economic decision makers attempt to predict future **cash flow**—the movement of cash in and out of a company. So one of the major objectives of financial reporting is to provide helpful information to those trying to predict cash flows.

The difference between cash inflows and cash outflows is **net cash flow.** Positive net cash flow indicates that the amount of cash flowing into the company exceeds the amount flowing out of the company during a particular period. For example, a company that collects $1,000,000 during a period when it pays out $950,000 has a positive cash flow of $50,000. Negative net cash flow indicates that the amount of cash flowing out of the company exceeds the amount flowing into the company during a particular period (see Exhibit 2–3).

Exhibit 2–3
Cash Flow

Cash inflow	−	Cash outflow	=	Positive net cash flow
$1,000,000	−	$950,000	=	$50,000
Cash inflow	−	Cash outflow	=	Negative net cash flow
$ 500,000	−	$575,000	=	− $75,000

All economic decisions involve attempts to predict the future of cash flows by searching for the answers to the following three questions:

1. *Will I be paid?*
   This question refers to the *uncertainty* of cash flows.
2. *When will I be paid?*
   This question refers to the *timing* of cash flows.
3. *How much will I be paid?*
   This question refers to the *amounts* of cash flows.

The answer to each question contains two parts: return *on* investment and return *of* investment. Return on investment consists of the earnings and profits an investment returns to the investor. Return of investment is the ultimate return of the principal invested. Exhibit 2–4 shows the conceptual link between the three major questions posed by economic decision makers and the resulting cash flows using the following example. Assume you wish to invest in a $1,000 term deposit at your bank, which will earn 10 percent interest per year, payable every three months, over the course of two years. If you invest in this term deposit, you must hold it for two years, after which the bank will return your $1,000.

Exhibit 2–4
Three Big Questions for Economic Decision Makers

		Cash Outcome	
Questions	**Concepts**	**Return *on* Investment**	**Return *of* Investment**
1. Will I be paid?	Uncertainty	Interest	Term deposit maturity
2. When will I be paid?	Timing	Quarterly	2 years
3. How much will I be paid?	Amount	$25 per quarter Total of $200	$1,000

Before you make this economic decision, you must attempt to answer the three questions:

1. *Will you be paid?* Because it is impossible to know the future, making an economic decision always involves risk. However, assuming the economy does not collapse and the bank stays in business, you will be paid both your return on investment and your return of investment.
2. *When will you be paid?* You will receive an interest payment every three months for two years (return on investment), and then you will receive your initial $1,000 investment back (return of investment).
3. *How much will you be paid?* The return on your investment is the interest you receive quarterly of $25 ($1,000 × 10 percent × 3/12), and the return of your investment is the $1,000 the bank gives you back. The total received in interest in two years is $200 (8 × $25).

Initial Investment		$1,000
Return on Investment	$ 200	
Return of Investment	1,000	
Total Return		1,200
Profit on Investment		$ 200

We can answer these questions easily for the insured term deposit. In the vast majority of economic decision situations, the answers to the three questions we asked are much less certain. We will show you how to use accounting information to answer them in various economic decision situations throughout this text.

Discussion Questions

2–9. Assume that you are a lender with three customers who wish to borrow $10,000. You can lend to only one of them. What information would you require each of them to present for you to answer the three questions? How would you make your decision?

Cash Is the "Ball" of Business

If business were any game such as baseball, football, or soccer, then cash would be the ball. To be successful, the players must keep their eye on the ball. Because the business game is so complex, businesspeople easily become distracted and lose sight of (the ball) cash. Various measures of performance such as gross profit, net income, net worth, and equity help those in business to make economic decisions. These are important measures of financial performance, but they are not cash! Never allow yourself to become so focused on any of them that you lose sight of cash, because when a company runs out of cash, it dies. Only cash pays the bills that keeps the company in business. The secret to becoming a street-smart user of accounting information is learning to balance the complexity of business with the simple rule of keeping your eye on cash flow.

Accounting Information

A company or a person generates accounting data with every business transaction. You generate a number of transactions each month when you pay your rent, buy groceries, make car payments, lend money to a friend, and so on. In fact, the volume of business accounting data can be staggering.

Data versus Information

accounting information Raw data concerning transactions that have been transformed into financial numbers that can be used by economic decision makers.

information Data that have been transformed so that they are useful in the decision-making process.

Accounting data and **accounting information** are not interchangeable terms. Data are the raw results of transactions: data become **information** only when they are put into some useful form. Consider this example:

Carol Brown, vice president of sales for Balloo Industries, noticed that the recent gasoline expense for the sales staff's company cars was extremely high and she suspected that salespersons were using the company cars for personal trips. Knowing that sales personnel were required to keep detailed odometer records, she notified Jack Parsons, the sales supervisor, of her concerns. He agreed to prepare a report to provide her with the necessary information to determine if the expense was proper.

The report compiled by Mr. Parsons consisted of five columns of data:

1. salesperson's name;
2. make and model of that salesperson's company car;
3. date the car was issued to the salesperson;
4. odometer reading on the date of issue; and
5. odometer reading at time of most recent maintenance.

Ms. Brown quickly concluded that it contained little useful information. She told Parsons that she was trying to determine if any members of the sales force were using company cars for personal activities. Mr. Parsons retreated to his office to try again.

In his second attempt, Parsons included the previous five columns plus four additional columns:

6. sales region covered;
7. how long the salesperson had been with the company;
8. total sales generated by the salesperson this year; and
9. current odometer reading of the vehicle.

Was Ms. Brown pleased with the second version? No! Mr. Parsons had provided additional data, but no additional information.

Discussion Question

2–10. Evaluate the usefulness to Ms. Brown of each column (1–9) of Parsons' data. What information could Parsons have provided Ms. Brown to help her make a determination?

Clearly, the correct data items must be gathered and converted into useful information before they are of any help to economic decision makers. Suppose you consider investing in shares of Dofasco Inc., the steel producer. You call your broker and she tells you the shares are currently selling at $30 per share. Do you want to invest? Although your broker has given you a datum (singular form of data), this datum provides insufficient information upon which to base a buying decision. You need to know something about the company's current and historic earnings, the share price behaviour over the past year, the steel industry's prospects, and so on. That is why brokerage firms such as RBC Dominion Securities, Scotia Capital, and TD Securities have research departments that extract such data and synthesize them into useful information for their clients.

Useful Accounting Information

The user of accounting information has the obligation to understand the business and be willing to study the information. The information provider has an obligation to present it in such a way that economic decision makers can make sense of it. As business and economic activities have become more complex, however, the accounting profession has responded with increasingly complex rules, many of which are difficult for nonaccountants to comprehend. There are certain characteristics that accounting information must possess to be considered useful for decision making. If the accounting profession does not provide what the information users need or does not prepare it in a way that makes sense, users must demand a change. Users and preparers must be mindful of the benefits provided by information, and the costs incurred to secure it (the cost/benefit analysis), and of its ultimate ability to make a difference in the decision (the **materiality** test).

materiality Something that will influence the judgment of a reasonable person.

Two parties decide what accounting information is useful and what is not. One is the users and the second is the accounting profession through the CICA. The CICA focuses on the *qualitative characteristics* of useful accounting information—

those qualities it must possess to be useful, whether it is financial or management accounting information.

Qualitative Characteristics of Accounting Information

relevance One of the two primary qualitative characteristics of useful accounting information. It means the information must have a bearing on a particular decision situation.

reliability One of the two primary qualitative characteristics of useful accounting information. It means the information must be reasonably accurate.

timeliness A primary characteristic of relevance. To be useful, accounting information must be provided in time to influence a particular decision.

predictive value A primary characteristic of relevance. To be useful, accounting must provide information to decision makers that can be used to predict the future and timing of cash flows.

feedback value A primary characteristic of relevance. To be useful, accounting must provide decision makers with information that allows them to assess the progress of an investment.

verifiability A primary characteristic of reliability. Information is considered verifiable if several individuals, working independently, would arrive at similar conclusions using the same data.

representational faithfulness A primary characteristic of reliability. To be useful, accounting information must reasonably report what actually happened.

The two primary qualities that distinguish useful accounting information are **relevance** and **reliability.** If either of these qualities is missing, accounting information will not be useful.

Relevance

To be considered relevant, accounting information must have a bearing on the particular decision situation. In other words, does it make a difference to decision makers? The accuracy of the information is not important if the content does not matter to the decision being made.

Relevant accounting information possesses at least two characteristics:

- **Timeliness.** If information providers delay making information available until every number is perfectly accurate, it may be too late to be of any value. This does not mean that accuracy does not matter. But if accounting information is not timely, it has no value.

Timeliness alone, however, is not enough. To be relevant, accounting information must also possess at least one of the following characteristics:

- **Predictive Value.** Before economic decision makers commit resources to one alternative instead of another, they must satisfy themselves that a reasonable expectation of a return on investment and a return of investment exists. Accounting information that helps reduce the uncertainty of that expectation has predictive value.

or

- **Feedback Value.** After making an investment decision, the decision maker must have information to assess the progress of that investment. The decision maker might want to reevaluate the decision if new information becomes available and would centainly want to evaluate of the final outcome of the decision. If accounting information provides input for those evaluations, it has feedback value.

Reliability

To be considered reliable, accounting information must possess four qualities:

- **Verifiability.** We consider accounting information verifiable if several qualified persons, working independently of one another, would arrive at similar conclusions using the same data. For example, if we asked several people to determine the amount of Michael Simpson's wages this year, they should all come to the same conclusion: A simple review of payroll records should provide verifiable information for the amount.
- **Representational Faithfulness.** There must be agreement between what the accounting information says and what really happened. If a company's accounting information reports sales revenue of $1,000 and the company really

had sales revenue of $1,000, the accounting information is representationally faithful. However, if a company's accounting information reports sales revenue of $1,000 and the company really had sales revenue of only $800, then the accounting information lacks representational faithfulness.

neutrality A primary characteristic of reliability. To be useful, accounting information must be free of bias.

- **Neutrality.** To be useful, accounting information must be free of bias, which means accountants should not omit details simply because the information is unpleasant. We have stressed how difficult it is to make good decisions. The problem becomes even worse when information is suppressed or slanted, either positively or negatively. The need to remain neutral is one of the most difficult challenges facing the accounting profession.

conservatism A characteristic of reliability. In times of uncertainty, it is better to underestimate the wealth and income of a business rather than overestimate it.

- **Conservatism.** There are times when the concept of neutrality needs to be altered. These times generally occur under conditions of uncertainty, when there can be no objective, verifiable method of determining the valuation of assets or revenues. In this case it is better to understate their value rather than risk overstating it. This applies conversely with liabilities and expenses. When in doubt, it is better to overstate the liability or expense. This does not mean you deliberately misrepresent the value of these items; rather, it is better to understate the wealth and net income of a business than overstate it.

Comparability and Consistency

Two secondary qualities of useful accounting information are comparability and consistency. Economic decision makers evaluate alternatives. Accounting information for one alternative must therefore be comparable to accounting information for the others. For example, assume you intend to make an investment in one of two companies. If each company uses different accounting methods, you would find it very difficult to make a useful comparison.

Now consider the concept of consistency. Imagine how difficult it would be to assess the progress of an investment if, through the years, different accounting treatments were applied to similar events. Consistency in the application of measurement methods over periods of time increases the usefulness of the accounting information provided about a company or an investment alternative.

Comparability is a quality of information from different entities or alternatives. Consistency describes information from the same source over time. Comparability and consistency often have similar effects on the decision-making process. Their presence increases the decision maker's confidence in his or her decision. The absence of these qualities decreases the decision maker's confidence or confounds the decision maker's ability to make a decision.

Reality versus the Measurement of Reality

A firm performs the following four functions:

1. it operates to produce revenues,
2. it invests resources to enable it to operate,
3. it finances its operations and investments from internal and external sources, and
4. it makes decisions.

These activities constitute the reality of conducting business. Reality happens every moment of the business day. To keep records of business transactions, the firm's officers must measure the reality of each event. But remember this: *No matter how accurately the measurement of reality reflects that reality, it is not the reality.*

To illustrate this concept, think of a person giving testimony in court. A court reporter records the exact words uttered by the witness and the transcript accurately measures the reality of the words spoken. If Rob reads the trial transcript and Keri hears the testimony in court, could Rob and Keri draw different conclusions about the substance of the testimony?

Discussion Questions

2–11. What is the difference between the transcript testimony and the actual testimony?

2–12. Is there any other measurement of the testimony that might better reflect the reality of the testimony?

Errors in measurement create more distortion between reality and the measurement of reality. Assume Laura's Business purchased some office supplies and wrote a cheque for $480. In recording the cheque in the cheque register, the accountant read the amount of the cheque incorrectly and entered $48. After the $48 was deducted, the cheque register indicated a balance of $1,127. However, the fact that the accountant entered the wrong amount for the cheque in no way changes the reality of how much money was spent and how much actually remains in the company's chequing account.

Discussion Questions

2–13. Assuming the accountant made no other errors in the check register, what is the actual cash balance in Laura's Business's chequing account?

2–14. In what ways could this incorrect measurement of reality have an effect on reality? Explain.

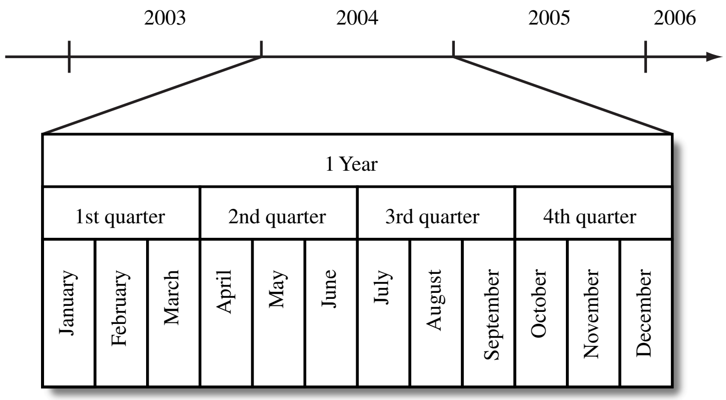
We can easily grasp the concept that errors may cause differences between reality and the measurement of reality. Many people, however, find it difficult to understand that sometimes perfectly legitimate differences exist between reality and its measure. This discrepancy can best be demonstrated in the measurement of the revenues and expenses to be reported in the income statement of a company for a particular time period.

The Problems of Periodic Measurement

periodicity The assumption that the economic activities of an entity can be traced to some specific time period and results of those activities can be reported for any arbitrary time period chosen.

Most discrepancies between reality and its measurement occur when earnings activities are measured for a specific period of time (Exhibit 2–5). An accounting assumption of the conceptual framework, called **periodicity,** states that the economic activities of an entity can be traced to some specific time period and the results of those activities can be reported for any arbitrary time period. The assumption is often easier to understand than the practice of determining which revenues and which expenses should be included in the earnings (net income) of a particular period (month, quarter, or year). In fact, the only final measure of net income for a company is a comparison between revenues and expenses over the entire life of that company.

Exhibit 2–5
Periodic Measurement



In some ways, determining net income in the fifteenth century was easier and more precise than it is today. In the era of Christopher Columbus, if an entrepreneur planned to sail to the New World and bring back goods to sell, the net income for that particular venture could be measured. The entrepreneur began with a sum of money. With those funds, he bought a ship and supplies and hired men to help with the expedition. The group would set sail, gather treasures and commodities from the New World, return, and sell the goods. Then the entrepreneur paid the workers, sold the ship, and counted the money. If the ending money exceeded the beginning funds, the difference was a net income. If the beginning money exceeded the ending funds, the entrepreneur suffered a loss on the venture.

In today's world, it is unrealistic to expect a company to stop operations and sell off all its assets to determine its "true" net income. So although lifetime net income is the only precise measurement of an operation's success or failure, users of accounting information demand current information every year, or quarter, or month. Only the need to artificially break the company's operations into various time periods requires us to make decisions about when revenues and expenses should be reported.

recognition The process of recording an event in the accounting records and reporting it on the financial statements.

revenue An accounting element representing the inflows of assets as a result of an entity's ongoing major or central operations. This is the reward for doing business.

expense An accounting element representing the outflow of assets resulting from an entity's ongoing major or central operations. This is the sacrifice required to attain the rewards (revenues) of doing business.

Revenue and Expense Recognition

In accounting, the term **recognition** has a very specific meaning. It refers to the process of (1) *recording* in the books and (2) *reporting* on the financial statements.

The problem of when to recognize an item applies to all the accounting elements that we will discuss. The greatest difficulties, however, occur in deciding when to recognize revenues and expenses.

What exactly *is* revenue? **Revenue** is an accounting element representing the inflows of assets as a result of an entity's ongoing major or central operations. In other words, it is the reward for doing business. Revenue may simply be described as the increase in wealth from engaging in a particular business transaction. Alternatively, **expense** is an accounting element representing the outflow of assets resulting from an entity's ongoing major or central operations (the sacrifice to generate revenue). Examples of expenses include salaries, rent, insurance, and advertising. An expense can therefore be thought of as a decrease in the wealth of a business. All businesses exist to generate revenues (and to avoid expenses).

The net income (or loss) of a business is the difference between the revenues generated and expenses incurred over a particular period of time. All revenues and their related expense activities must be recorded in the same fiscal period by the business to arrive at a reliable net income figure. Chapter 5 will describe the process of calculating net income in greater detail. But for now, remember the following equation:

Revenue − Expenses = Net Income (or Net Loss)

When should a revenue be recognized? When should an expense be recognized? These are two difficult questions, for which there are no perfect answers. The accounting establishment had to set criteria to determine when to recognize accounting elements, particularly revenues and expenses. Over time, the accounting profession developed several different recognition systems, each attempting to find some rational basis for the measurement of revenue and expense in a particular time period.

Discussion Questions

2–15. Revenue is defined as the reward of doing business. At what point in the cycle of sales, from the customer's order point to the seller's delivery to the customer, do you think a sale should be recognized as revenue? Explain.

2–16. If an expense is defined as the sacrifice necessary to obtain a revenue, at what point in the sales cycle do you think an expense incurred to make a sale should be recognized? Explain.

Bases of Economic Measurement

There are two basic approaches to recording economic activity. Each presents a different measurement of reality. Each depicts a different, but important, version of the measurement of accounting elements, especially revenues and expenses.

We will use a single set of data to illustrate the two bases of measurement. Consider the following information concerning McCumber Enterprises (a proprietorship) for January 2004:

1. Gertie McCumber started the company on January 2 by investing $200,000.
2. McCumber Enterprises borrowed $100,000 from the Friendly Bank on January 2 by signing a one-year note payable (ignore the interest for now).
3. The company purchased a vehicle on January 2 for $14,000 cash. Gertie estimates that the vehicle will fill the company's needs for four years, after which she estimates she can sell it for $2,000.
4. The company paid cash for $75,000 of merchandise inventory on January 8.
5. On January 15, the company sold merchandise that cost $42,000 for a total selling price of $78,000 and collected the cash the same day.
6. On January 22, the company sold merchandise that cost $15,000 for a total selling price of $32,000 on account (a credit sale). The terms of the sale were 30 days, meaning McCumber Enterprises can expect to receive payment by February 21.
7. Cash payments for operating expenses in January totalled $22,500.

8. Besides the bank loan, the only amounts owed by the company at the end of the month were:
   a. $2,000 to company employees for work performed in January. They will be paid on February 3.
   b. A $700 utility bill that was received on January 26 and will be paid on February 15.

This information is the reality of what happened in McCumber Enterprises during January 2004. The measurement of that reality will be different, depending on the basis of accounting used to recognize the transactions. Remember, both treatments we will show are based on exactly the same reality—they are simply different methods of measuring that reality.

Cash Basis of Economic Measurement

cash basis accounting A basis of accounting in which cash is the major criterion used in measuring revenue and expense for a given income statement period. Revenue is recognized when the associated cash is received, and expense is recognized when the associated cash is paid.

The first approach to measuring economic activity is **cash basis accounting**—the simpler of the two bases. Everyone understands what cash is and can readily grasp the measurement criterion of this method. Its greatest strength, however, lies in the fact that it keeps the user's eye on the ball. As its name implies, the cash basis has only one measurement criterion: CASH!

Under cash basis accounting, we recognize economic activity only when the associated cash is received or paid. Consequently, we recognize a revenue only when the company receives the associated cash as a result of the earnings process. But not all cash received by a firm is revenue. When cash is received from company owners, the inflow of assets is not due to ongoing operations but due to an owner's investment. When cash is received from lenders, the amount owed to an outside party increases. Again, the inflow of assets is not due to ongoing operations.

Similarly, we do not recognize all cash paid out as an expense in cash basis accounting. When a company pays a dividend to its owners, we recognize the expenditure not as a company expense, but as a distribution of profits or a return on the owners' original investment.

Cash Basis Revenue Recognition

The cash basis has two criteria for revenue recognition:

realization Actual receipt of cash or payment of cash. Once cash has been collected or a transaction is complete, it is considered to be realized.

1. Cash must be received, or *realized,* in the transaction. In accounting terminology, **realization** occurs.
2. The receipt of cash must relate to delivering or producing goods, rendering services, or other business activities.

If a transaction meets both these requirements, we recognize it as a revenue for cash basis accounting and report it on the income statement.

Cash Basis Expense Recognition

The cash basis has two criteria for expense recognition:

1. Cash must be paid in the transaction.
2. The disbursement, or payment, must relate to delivering or producing goods, rendering services, or conducting other business activities.

If a transaction meets both these requirements, we recognize it as an expense for cash basis accounting and report it on the income statement.

Cash Basis Accounting

As the previous two sections have illustrated, in order to complete the equation Revenue − Expenses = Net Income, we need to determine which of the cash receipts are revenues and which are additions to capital, and which are increases in the amounts owed to outside parties. Alternatively, not all cash outflows are expenses. Some may be reductions in the amounts owed to outside parties (paying off a debt), while others may be a distribution of the wealth of the business to the owners (dividends). Therefore in order to calculate the net income of McCumber Enterprises, we need to determine (recognize) which of the cash items are revenues and which are expenses. From our example of McCumber Enterprises, only the following activities meet the recognition criteria:

1. The company purchased a vehicle on January 2 for $14,000 cash. Gertie estimates that the vehicle will fill the company's needs for four years, after which she estimates she can sell it for $2,000. Under cash basis accounting, the $14,000 purchase is considered an expense in January.
2. The company paid cash for $75,000 of merchandise inventory on January 8. This is considered an expense in January.
3. On January 15, the company sold merchandise that cost $42,000 for a total selling price of $78,000 and collected cash the same day. The sale of $78,000 is considered revenue because the company received the cash. The cost of the merchandise *is not an expense at this point*, because it was already recorded as an expense when it was purchased on January 8 (item 2).
4. Cash payments for operating expenses in January totaled $22,500.

All the other activities that occurred during January were either contributions by the owner ($200,000), amounts owed to outside parties (borrowing $100,000 from the bank), or did not involve cash (the sale on account for $32,000). The money owed to employees and the utility bill *will only become expenses when they are paid* (as stated, in February).

We can record these activities according to whether they are revenues or expenses (see Exhibit 2-6).

Exhibit 2–6
Results of Cash Basis Accounting

Date	Revenue	(−)	Expenses	(=)	Net Income Loss
Jan. 2			$ 14,000		($14,000)
Jan. 8			$ 75,000		(89,000)
Jan. 15	$78,000				(11,000)
January			22,500		(33,500)
Totals	$78,000		$111,500		($33,500)

Consider the following items from Exhibit 2–6:

- *Revenue.* Because McCumber Enterprises received only $78,000 in cash from sales in the month of January, only that amount meets both cash basis revenue recognition criteria (cash received, and cash related to delivering goods or services).

- *Expenses.* The $111,500 is the total of the expenses for the month of January because it meets both of the expense recognition criteria (cash was paid, and cash related to delivering goods or service).

Therefore, when we calculate McCumber Enterprises' net income for the month of January, we find that the company experienced a loss of $33,500.

But let's not forget about the other two cash transactions. Gertie originally contributed $200,000 to the business, and the company borrowed an additional $100,000 from the bank. So the company started out with $300,000 cash in its bank account, and under the cash basis of accounting it lost $33,500, so the company's *net cash wealth* is $266,500 ($300,000 − $33,500). This would correspond to the cash balance in the company's bank account at the end of January. All the other events did not include a cash component, so therefore they have no effect on the company's net cash wealth. As we will see in Chapters 3 and 4, the net wealth (called owners' equity) of a business is reported on the *balance sheet* of the business. The balance sheet displays the total of everything a business owns (assets), minus what it owes (liabilities). In Chapter 5, we will cover the *income statement*, which is where the revenues and expenses of a business are recorded.

Discussion Questions

2–17. Assume for a moment that you are McCumber Enterprises' loan officer at the bank. How would you evaluate the revenue and expense presented in Exhibit 2–6 in terms of the primary qualitative characteristic of relevance, including predictive value and feedback value?

2–18. If your response to Discussion Question 2–17 led you to the conclusion that there is a problem in terms of predictive value and feedback value, what item or items do you believe caused the problem? How do you think the company could account for the item or items to better relate costs to the revenues they generate?

Strengths and Weaknesses of Cash Basis Accounting

Besides its relative simplicity, the greatest strength of the cash basis of accounting is its objectivity. Cash basis accounting presents the *reality of cash,* an important reality in conducting a business. Cash basis accounting requires less subjective judgment than the other measurement basis. The cash basis has a weakness that prevents it from being the perfect measurement basis, however. Management can easily manipulate revenues and expenses reported in a particular income statement period simply by speeding up or delaying the receipt of revenues or the payment of amounts owed on expenses. The greatest weakness of the cash basis is that it makes no attempt to recognize expenses in the same period as the revenues they helped generate, offering a poor measurement of the *reality of performance.* This problem makes the cash basis income statement difficult to use either for predicting future profitability or for assessing past performance in cases where the company does not always receive cash at the point of sale or pay for expenses when it receives the goods and services.

Discussion Question

2–19. Provide two examples of situations in which your chequebook balance did not provide relevant information.

Accrual Basis of Economic Measurement

accrual basis accounting A method of accounting in which revenues are recognized when they are earned, regardless of when the associated cash is collected. The expenses incurred in generating the revenue are recognized when the benefit is derived rather than when the associated cash is paid.

accrue As used in accounting, to come into being as a legally enforceable claim.

The second basis of economic measurement is **accrual basis accounting.** The accrual basis does not rely on the receipt or payment of cash to determine when revenues and expenses should be recognized. The key to understanding accrual basis accounting is to understand the word **accrue.** To accrue means

To come into being as a legally enforceable claim.

Essentially, in accrual basis accounting, sales, purchases, and all other business transactions are recognized whenever a legally enforceable claim to the associated cash is established. The main focus of accrual accounting is determining when a legally enforceable claim to cash has been established between the parties involved in the transaction.

Accrual Basis Revenue Recognition

Accrual accounting has two criteria for revenue recognition:

receivable Money due to an entity from an enforceable claim.

1. Revenue must be earned; that is, the earning process must be substantially complete.
2. There must be a legally enforceable claim to receive the asset traded for the revenue. When a legally enforceable claim exists, the cash or other asset becomes a realizable asset such as an account **receivable.** In the cash basis, the cash receipt had to be *realized.* In the accrual basis, it must only be *realizable.*

Both criteria must be met to recognize revenue.

Three possible relationships can exist between the timing of the cash movement and the recognition of the revenue.

1. *Cash is received* ***at the time*** *the revenue is earned.* When you pay cash for a pair of Gap jeans, the Gap recognizes revenue at the point of sale. Delivery of the jeans constitutes completion of the earning process and your payment of cash realizes receipt of cash. Both criteria are met because the revenue is earned and realized.
2. *Cash is received* ***after*** *the revenue has been earned.* When you go to Office Depot to buy supplies for your office and Office Depot allows you to pay next month on a 30-day charge, Office Depot will receive your cash after the revenue has been earned. Delivery of the supplies completes the earning process and your signing of the invoice gives the store an enforceable claim to your cash.
3. *Cash is received* ***before*** *the revenue has been earned.* If you subscribe to *Maclean's* magazine for one year, you pay the subscription at the beginning of the year. *Maclean's* realizes your cash but has not yet earned it. The earning process will not be complete until *Maclean's* delivers a whole year's worth of weekly issues to you.

Because revenue must be earned before it can be recognized, the timing of the cash receipt is irrelevant. When the earning process is substantially complete *and* an enforceable claim exists to receive the cash, then the revenue is recognized. In Examples 1 and 2, the revenue is recorded in the books and shown on the financial statements at the time the sale is made. The fact that in Example 2 the company did not receive cash at that time does not affect recognition of the revenue. In Example 3, the receipt of cash does not cause revenue to be recognized because, under accrual accounting, the revenue is not recognized until it is earned (when the publisher sends the magazines to the customer).

Identifying the point in time when a revenue is earned is not always a simple matter. Accountants try to answer three questions in determining when revenue has been earned and therefore should be recognized. To emphasize that these questions are in no way related to the three examples, we are using letters to list them.

a. *Has **title** (legal ownership) to whatever was sold been transferred to the customer?* If the answer to this question is yes, revenue should be recognized. This question can be applied more easily to the sale of tangible products than to the sale of services. Services must be substantially complete to recognize revenue.

b. *Has an exchange taken place?* Each party to the exchange gives the other party something of value—goods and services in exchange for cash or receivables. In other words, has the customer taken receipt of whatever he or she purchased? If the answer to this question is yes, the revenue will likely be recognized.

c. *Is the earnings process virtually complete?* This is the toughest of the three questions to answer and applies better to the sale of services than it does to the sale of tangible products. Suppose you have contracted with Bill Austin to remodel your kitchen. It is a two-week job, and at the end of the second week, Bill has completed everything but changing the lamp over the dinette area. He ordered the lamp two months ago, but the supplier back-ordered it. It should arrive within another week. Has Bill substantially completed the work? Probably yes. He can recognize the revenue because the job is "virtually" complete.

It is not necessary for all three questions to be answered "yes" for revenue to be recognized. In most cases, a positive answer to any one of them is persuasive evidence that revenue has been earned and should be recognized.

Discussion Questions

2–20. On Saturday morning, you finally decide which model of computer to buy. The salesperson has agreed to have all the software you need installed and have the machine delivered to you by Tuesday afternoon. Because you purchased your last computer at Image Technologies, the store has agreed to extend credit to you as an established customer. You have 30 days to pay for your new computer. As of Monday,

- **a.** has title passed?
- **b.** has an exchange taken place?
- **c.** is the earnings process complete?

2–21. When should Image Technologies recognize revenue

- **a.** under the cash basis?
- **b.** under the accrual basis?

Accrual Basis Expense Recognition

Under accrual accounting, there is only one criterion for expense recognition: A firm recognizes an expense when it receives the benefit from the expense. Like revenue recognition, expense recognition under accrual accounting is unrelated to the movement of cash.

Again, there are three possible relationships between the timing of the cash movement and the recognition of an expense.

1. *Cash is paid* ***at the time*** *the expense is incurred.* If a company holds a Christmas party and pays for the food when the caterer delivers it, the company receives the benefit of the expense at the same time it transfers the cash to the vendor.
2. *Cash is paid* ***after*** *the expense has been incurred.* A public utility cannot immediately exchange electricity for cash and must bill its customers on a monthly basis. When a firm receives and pays an electric bill, it expends the cash after the receipt of the electric service.
3. *Cash is paid* ***before*** *the expense has been incurred.* All insurance contracts require cash in advance to issue the policy and keep it in force. The policy expires or the expense occurs for each day as time passes during the policy's time span.

Discussion Question

2–22. Why would insurance companies require policies to be paid in advance?

If the one criterion for expense recognition is receiving the benefit from the expense, how do we know when the expense benefits the firm? For the most part, the key to expense recognition under accrual accounting is revenue recognition. Remember that to be useful for predicting future profitability and cash flow, an income statement should measure revenues for a specific period of time and the expenses required to obtain those revenues. Thus, accrual accounting attempts to capture the relationship between revenues and expenses. This relationship is referred to as matching.

If we re-examine the McCumber Enterprises transactions for January under the accrual basis of accounting (recognizing revenues and expenses), we will find that the company's net income is different than the $33,500 loss that was recorded the using the cash basis of accounting. First, it is largely irrelevant whether or not cash was actually received or paid out.

As with cash basis accounting, the $200,000 that Gertie started the company with on January 2 is not a revenue because it does not meet the criteria of being a revenue. The company is neither richer nor poorer (no change in its net wealth) as a result of this transaction. This is the same for the $100,000 borrowed from the bank on January 2 (still ignoring interest). The company may have $100,000 more in its bank account, but it now owes the bank $100,000; therefore there is no change in net wealth. The first difference between cash and accrual accounting is the vehicle purchased on January 2 for $14,000—it is *not* an expense under accrual accounting. The vehicle is only recognized as an expense when it is actually used to generate revenue. At this point, all the company has done is exchange one asset (cash) for another asset (the vehicle). There has been no change in net wealth. What the vehicle might be worth at the end of four years ($2,000) is irrelevant.

The merchandise purchased on January 8 for $75,000 is *not* an expense under accrual accounting. Just as with the vehicle, all the company has done is exchange one asset for another. When the company actually *sells* the merchandise, *then* it will record the cost of the merchandise sold as an expense. This occurs on January 15, when the company sold merchandise that cost $42,000 for $78,000 cash. The $42,000 is considered an expense of the business (called Cost of Goods Sold). The $78,000 is revenue, and the $42,000 is an expense. On January 22 the company sold merchandise that cost $15,000 for $32,000 (credit sale). It did not receive cash for this sale, but did receive something else of value. That thing of value is the *customer's promise to pay* cash at some future date (called an account receivable). This is considered revenue just as if the company had received cash (and the $15,000 is an expense). The cash payments ($22,000) for expenses incurred in January are expenses just like under cash basis accounting. The thing to remember is that those expenses must have been incurred in January for them to be considered an expense in January. It actually does not matter whether they were *paid* in January (but in this case they were). The $2,000 still owed to the company's employees is an expense for the month of January (since that is when the employees did the work), and, likewise, the $700 utility bill is also an expense in January. The fact that these expenses will not be paid until February is irrelevant.

Just as with cash basis accounting, we can record these activities according to whether they are revenues or expenses (see Exhibit 2.7).

Exhibit 2–7
Results of Accrual Basis Accounting

Date	Revenue	(−)	Expenses	(=)	Net Income
Jan. 15	$78,000		$42,000		$36,000
Jan. 22	32,000		15,000		53,000
January			22,000		31,000
January			2,000		29,000
January			700		28,300
Totals	$110,000		$81,700		$28,300

Under accrual basis accounting, we can see that in January, McCumber Enterprises experienced a *profit* of $28,300. Under cash basis accounting the company recorded a *loss* of $33,500. Which is correct? Well, they both are correct because they are both recording the same events, but in different ways and at different times.

We can see that ultimately there is a considerable difference between cash basis and accrual basis accounting when we look at McCumber Enterprise's net wealth. Cash basis accounting never took into consideration the $100,000 the company owes the bank. Nor did it consider that the company owns a valuable asset (the vehicle worth $14,000). The company still has unsold merchandise that cost $18,000 and a customer that owes $32,000. Additionally, the company owes its employees $2,000, and has an unpaid utility bill for $700.

Therefore, in order to calculate McCumber Enterprises' net wealth, we need to take all these things into consideration. The company still has $266,500 in the bank (that doesn't change). Subtract from that the $100,000 owing to the bank, add the value of the vehicle ($14,000), add the remaining inventory ($18,000), add the money owed by the customer ($32,000), subtract the money owed to employees ($2,000) and subtract the utility bill ($700). This gives McCumber Enterprises a net wealth of $227,800.

At this point you should notice that under cash basis accounting, McCumber Enterprises *lost* $33,500 and ended up being worth *more* ($266,500) than under accrual basis accounting ($227,800). How is this possible? The answer lies in the timing of events and which ones get recognized. Eventually, the company will pay the money it owes and receive the money that is owed to it. Additionally, the company will eventually use up the vehicle (which was listed as an expense under cash basis accounting but not under accrual basis accounting) and sell all the remaining merchandise. When the company finally comes to the end of its business life and everything is liquidated (turned into cash), the company's change in wealth will be the same no matter which basis of accounting was used.

The important thing to remember is not which accounting system is "right," but which one provides the most useful and broadest method of measuring economic performance. Cash is a very narrow measure of economic performance because it only deals with one thing: cash. Accrual basis accounting expands how we view the performance of a business by recognizing all events leading to a legally enforceable claim to cash, no matter when cash is actually received or paid. Accrual accounting is much more useful to the decision maker because it includes more relevant information.

And finally, under GAAP, accrual basis accounting is the only acceptable basis for reporting economic performance to external parties. That is, all financial statements must be prepared using accrual accounting methods. Cash basis accounting may be used for internal reporting purposes, but not for external reporting.

Discussion Question

2–23. Checker Business Systems sells computer equipment to small businesses. During 2004, the sales activity was as follows:

February: Sold $6,000 worth of equipment on account. The customers paid in full on March 15.

March: Sold $4,500 worth of equipment on account. Customers paid in full on April 15.

Describe the impact of different periodic measurements by determining how much should be included in each period if the business activity is measured

a. each month,
b. each quarter,
c. each year.

Decision Makers and Understandability

Now that you know the qualities required to make accounting information useful, you can appreciate the fact that, as a decision maker and user of accounting information, you must evaluate the qualities of available information to assess its usefulness. You must also recognize that the information you receive from accountants constitutes only a part of the information you need to make sound economic decisions. It is an important part, to be sure, but only a part. The reports generated from accounting information can be thought of as the tools of the accounting trade. As financial tools are introduced and discussed throughout the rest of this text, keep in mind that each has its limitations and imperfections. After working with the material provided here, however, you should be able to use each financial tool to its fullest potential.

Summary

The aim of all decisions is to obtain some type of reward, either extrinsic or intrinsic, at a cost. Good decisions are made when a reasonable balance is found between the sacrifice and the reward in the context of uncertainty.

Economic decisions are those involving business transactions. Internal decision makers are individuals within a company who have access to most of the company's financial information and who make decisions on behalf of the organization. External decision makers are individuals or organizations outside a company who have access to the limited information provided to them by the company and who make decisions about the organization. Management accounting information is prepared for use by internal parties, and financial accounting information is prepared for use by external parties (but is also used by internal parties).

Both internal and external parties attempt to predict the future and timing of cash flows. Essentially, they are all trying to determine whether they will be paid, when they will be paid, and how much they will be paid. Cash flow becomes an important criterion to evaluate business success or failure, with other accounting measures of performance.

Accounting information is a key ingredient of good decision making. Business activity produces data. These data are of no value to decision makers until they are put into a useful form and become information. Accounting information must possess certain qualitative characteristics: (1) relevance, including timeliness and either predictive value or feedback value; and (2) reliability, including verifiability, representational faithfulness, and neutrality. Useful accounting information should also possess comparability and consistency, and be understandable to economic decision makers.

A firm performs four functions: It operates to produce revenues, invests in productive resources, finances those investments, and makes decisions. Such activities constitute the reality of business transactions and events. Accountants attempt to measure that reality in the accounting records and reports. The measurement of reality may not precisely reflect reality because of the basis selected to recognize revenues and expenses in a particular time period. This chapter presents two distinct bases: the cash basis and the accrual basis.

The cash basis of accounting recognizes revenues and expenses when realized—when the cash associated with revenue is received, and when the cash associated with an expense is paid. Periodic net income (or loss) under the cash basis is simply the difference between cash revenues received and cash expenses paid.

The accrual basis of accounting provides a broader measure of economic performance because it includes factors that a decision maker would be interested in knowing about. These factors include the future cash flows of a business (both inflows and outflows) as well as the obligations of the business and the business's other non-cash assets (vehicles, inventory, money owed to the business by customers). Because this provides a more useful measure of economic performance, future chapters will focus on the collection, summation, reporting, and presentation of accounting information under the accrual basis of accounting.

Key Terms

accounting information, p. 38
accrual basis accounting, p. 48
accrue, p. 48
cash basis accounting, p. 45
cash flow, p. 36
cost/benefit analysis, p. 34
expense, p. 43
external decision makers, p. 35
feedback value, p. 40
financial accounting, p. 36
information, p. 38
internal decision makers, p. 35
management accounting, p. 36
materiality, p. 39
net cash flow, p. 36
neutrality, p. 41
opportunity cost, p. 34
periodicity, p. 42
predictive value, p. 40
realization, p. 45
receivable, p. 48
recognition, p. 43
relevance, p. 40
reliability, p. 40
representational faithfullness, p. 40
revenue, p. 43
timeliness, p. 40
verifiability, p. 40

Review the Facts

1. Provide two examples of rewards and sacrifices that may be involved when a decision is being made.
2. What is an opportunity cost?
3. Define *cost/benefit analysis.*
4. What is economic decision making?
5. Name the two broad categories of economic decision makers, and explain the differences between them.
6. What are the two major branches of accounting and how do they differ?
7. List the three major questions asked by economic decision makers.
8. What is accounting information?
9. Explain the difference between data and information.
10. Name the two primary qualitative characteristics of useful accounting information.
11. What characteristics are necessary for accounting information to be relevant?
12. List the characteristics necessary for accounting information to be reliable.
13. Explain the difference between the primary and secondary qualities of useful accounting information.
14. What are the secondary qualities of useful accounting information?
15. Explain the responsibility of both the accounting profession and the user for the understandability of accounting information.
16. Explain the difference between reality and the measurement of reality, and provide an example of each.
17. How does periodic measurement create complications?
18. In accounting, what does it mean for an item to be "recognized"?
19. In accounting, what does it mean for an item to be "realized"?
20. Under the cash basis of measurement, when does revenue recognition occur?
21. Under the cash basis, when are expenses recognized?
22. What is the greatest strength of the cash basis?
23. What is the greatest weakness of the cash basis?
24. Under the accrual basis of measurement, when does revenue recognition occur?
25. Explain the difference between the reality of cash and the reality of performance.

Apply What You Have Learned

LO 2 & 3: Economic Decision Making

1. Tommy Hoag is a commercial artist who paints various types of signs for other businesses. He received a $15,000 order from Bill Bates Inc. for 1,500 signs to be displayed in Bates' retail outlets. This is a very large job for Tommy's new business. He has concerns because he estimates it will take him a month working full time to complete the signs and Bates proposes to pay him the full contract amount 30 days after he delivers the signs. These are Bates' standard payment terms. Tommy did a small job for Bates last year ($1,500) and received payment 50 days after completing the work.

Tommy estimates the materials (sign board, paint, brushes, etc.) will cost $9,500, which he can buy on 30-day terms from Long's Art Supply Company (Tommy can pay for the materials 30 days after he buys them).

Having taken the accounting course in which you are now enrolled, Tommy remembers that any economic decision entails attempting to answer the following three questions:

- Will I be paid?
- When will I be paid?
- How much will I be paid?

REQUIRED:

a. If Tommy can satisfy himself as to the first question (Will I be paid?), what are the answers to the other two questions? Remember the last question (How much?) has two parts.

b. The problem states that Tommy has concerns. What do you think is troubling him about the order from Bill Bates Inc.?

c. Based on your answer to the previous requirement, identify three things Tommy could do to solve his dilemma.

LO 2 & 3: Economic Decision Making

2. Jon Smythe is a trained automobile engine mechanic. He has received a $25,000 contract from David Watts Limited to repair 25 automobile engines for Watts' taxicabs. Jon has concerns about the terms of the contract. He estimates it will take him a month working full time to complete the engines and Watts will pay him 30 days after he completes the engines. These are Watts' standard payment terms, and in the past Watts has paid Jon on average after 40 days.

Jon estimates the parts will cost $13,000, which he can buy on a 30-day charge from Sam's Auto Supply Company (meaning Jon can pay 30 days after the purchase). Jon has the normal questions of any economic decision:

- Will I be paid?
- When will I be paid?
- How much will I be paid?

REQUIRED:

a. Jon believes that Watts will pay him based on their prior dealings. What are the answers to the other two questions? Remember the last question (How much?) has two parts.

b. The problem states that Jon is concerned about the contract terms. Why do you think he is concerned?

c. Based on your answer to the previous requirement, identify three things Jon could do to lessen his concerns.

LO 2 & 3: Economic Decision Making

3. Rob Schwinn is a manufacturer of quality furniture specializing in high-quality wooden tables and chairs. He received a $50,000 contract from Dillon Corporation to build 100 upholstered sofas, to be sold in Dillon's stores. Rob believes he needs two months to complete the sofas. He must purchase an industrial sewing machine for the fabric work on the sofas at a cost of $10,000 for the machine and training, which will equal the profit that he will make on this contract. Dillon has agreed to pay Rob Schwinn 30 days after delivery of the sofas.

Rob knows that he can buy the sewing machine on a 90-day plan from Dan's Sewing Machine Company. Rob knows that any economic decision entails attempting to answer the following three questions:

- Will I be paid?
- When will I be paid?
- How much will I be paid?

REQUIRED:

a. Assuming Rob can satisfy himself as to the first question (Will I be paid?), what are the answers to the other two questions? Remember the last question (How much?) has two parts.

b. List the pros and cons of Rob's accepting this contract.

LO 4: Cash Concepts

4. Interpret the following statement: "Cash is the 'ball' of business."

LO 5 & 6: Qualitative Characteristics of Accounting Information

5. Presented below are the qualitative characteristics of useful accounting information as discussed in the chapter, followed by definitions of those items in scrambled order.

a. Relevance
b. Timeliness
c. Predictive value
d. Feedback value
e. Reliability
f. Verifiability
g. Representational faithfulness
h. Neutrality
i. Comparability
j. Consistency

1. _____ The same measurement application methods are used over time.
2. _____ The accounting information is free of bias.
3. _____ The information provides input to evaluate a previously made decision.

4. _____ The information allows the evaluation of one alternative against another alternative.
5. _____ In assessing the information, qualified persons working independently would arrive at similar conclusions.
6. _____ The information helps reduce the uncertainty of the future.
7. _____ The information has a bearing on a particular decision situation.
8. _____ The information is available soon enough to be of value.
9. _____ The information can be dependable.
10. _____ There must be agreement between what the information says and what really happened.

REQUIRED:
Match the letter next to each item with the appropriate definition. Each letter will be used only once.

LO 2, 3, 4, 5, & 6: Chapter Concepts

6. Presented below are items relating to the concepts discussed in this chapter, followed by the definitions of those items in scrambled order:

a. Cash flow
b. Comparability
c. Data
d. Financial accounting
e. Information
f. Management accounting
g. Net cash flow
h. Economic decision making

1. _____ The raw results of transactions and events
2. _____ A branch of accounting developed to meet the information needs of internal decision makers
3. _____ Data transformed so they are useful in the decision-making process
4. _____ The movement of cash in and out of a company
5. _____ Any decision involving money
6. _____ Reports generated for one entity may be compared with reports generated for other entities
7. _____ The difference between the cash coming into a company and the cash going out of a company
8. _____ A branch of accounting developed to meet the information needs of external decision makers

REQUIRED:
Match the letter next to each item with the appropriate definition. Each letter will be used only once.

LO 2 & 6: Qualitative Characteristics of Accounting Information

7. Emma Peel is the chief accountant of Venture Enterprises. She is trying to decide whether to extend credit to Freed Company, a new customer. Venture does most of its business on credit, but is very strict in granting credit terms. Frank Freed, the owner and president of Freed Company, has sent the following items for Emma to examine as she performs her evaluation.

1. All company bank statements for the past seven years (a total of 84 bank statements)
2. A detailed analysis showing the amount of sales the company expects to have in the coming year and its estimated profit

3. Another, less-detailed analysis outlining projected company growth over the next 20 years
4. A biographical sketch of each of the company's officers and a description of the function each performs in the company
5. Ten letters of reference from close friends and relatives of the company's officers
6. A report of the company's credit history prepared by company employees on Freed Company letterhead
7. A letter signed by all company officers expressing their willingness to personally guarantee the credit Venture extends to Freed. (You may assume this is a legally binding document.)

REQUIRED:

a. As she evaluates Freed Company's application for credit, is Emma Peel an internal decision maker or an external decision maker? Explain your reasoning.

b. Analyze each item Freed sent in light of the primary qualitative characteristics of relevance (including timeliness, predictive value, and feedback value) and reliability (including verifiability, representational faithfulness, and neutrality). Explain how each item either possesses or does not possess these characteristics.

LO 6: Qualitative Characteristics of Accounting Information

8. You are in the market for a used car. You notice a promising advertisement in the local newspaper and make an appointment to meet with the seller, whose name is Chet. During your meeting you obtain the following information:

1. The car is a 1999 model.
2. Chet said he has used the car only for commuting to and from work.
3. You notice the car has out-of-province licence tags.
4. The odometer reading is 105,118 km.
5. Chet reports that he has had the oil changed every 5,000 km since he bought the car new.
6. Chet says this is the greatest car he has ever owned.
7. The glove box contains a maintenance record prepared by a licensed mechanic.

REQUIRED:

a. Evaluate each item from the list above in terms of its relevance (specifically, predictive value and timeliness) to your decision about whether to buy Chet's car.

b. Evaluate each item from the list above in terms of its reliability (verifiability, representational faithfulness, and neutrality) for deciding whether to buy Chet's car.

LO 6: Qualitative Characteristics of Accounting Information

9. The chapter states that to be useful, accounting information must possess the primary qualitative characteristics of relevance (timeliness and predictive value or feedback value) and reliability (verifiability, representational faithfulness, and neutrality). These characteristics are also applicable to other types of information.

Suppose that prior to taking your midterm exam in this course, your instructor gives you two options:

Option 1: One week before the midterm exam you will be given a rough idea of what is going to be on the exam.

or

Option 2: On the day following the exam, you will be given a copy of the actual midterm exam with an answer key.

Assume further that you have two goals:

Goal 1: To prepare for the midterm exam.
Goal 2: To evaluate your performance on the midterm exam.

REQUIRED:
Within the context of each of your two goals, evaluate both options using the primary qualitative characteristics. Be sure to explain how the primary characteristics are present or absent, and how such presence or absence affects you as a rational decision maker.

LO 6: Qualitative Characteristics of Accounting Information

10. Suppose you are about to buy a new car. The car you want is a Nissan Maxima. You have $30,000 in the bank, ready to spend on the new car. You obtain the following items of information:

1. On your first visit to Quality Nissan, a salesperson casually tells you that the price of a new Nissan Maxima is $25,500.
2. A friend tells you he heard that someone was selling a three-year-old Maxima for $18,000.
3. Another friend just bought a new Chevy pickup truck for $22,000.
4. The sticker price of a Maxima with the options you want is $26,800.
5. A Nissan dealer in the area is advertising a new Maxima with the options you want for $26,200.
6. A friend tells you she heard that someone bought a new Maxima a couple of months ago for around $24,000.

Assume that you are about to visit a Nissan dealership and your goal is to buy a new Maxima for the best price. You intend to use the previous information to evaluate whether or not the price you get is a good deal.

REQUIRED:

a. Evaluate each item from the list above in terms of its relevance (feedback value, predictive value, and timeliness). Explain how the presence or absence of the characteristics affects your ability to use the information to determine if you are getting a good deal.

b. Evaluate each item from the list above in terms of its reliability (verifiability, representational faithfulness, and neutrality). Explain how the presence or absence of these characteristics affects your ability to use the information to determine if you are getting a good deal.

LO 6: Qualitative Characteristics of Accounting Information

11. Exactly two weeks from today you must take the midterm exam for this class. You feel you are in trouble because you cannot seem to grasp exactly how you should prepare for the exam. As you are walking across campus, you see the following notice pinned to a bulletin board:

I CAN HELP!!!

I GUARANTEE AN "A" OR "B"

WILL TUTOR FOR $15 PER HOUR

Qualifications:

1. Got an "A" in the course myself.
2. Have outlines of all chapters of the text.
3. Have over 120 satisfied customers from previous semesters.
4. Know the Professor personally.
5. Know the authors of the text personally.
6. Working on a graduate degree in History.

CALL BILL AUSTIN AT 555-5555

REQUIRED:
Evaluate each of Bill's claimed qualifications in relation to the primary characteristics of:

a. Relevance (including timeliness and predictive value or feedback value).
b. Reliability (including verifiability, representational faithfulness, and neutrality).

LO 7 & 8: Cash Basis Measurement

12. Katie Bales Enterprises began operation on January 2, 2004. During its first month of operation, the company had the following transactions:

- Purchased $35,000 worth of merchandise inventory on January 2. The amount due is payable on February 2.
- Paid January office rent of $3,000 on January 3.
- Purchased $10,000 worth of merchandise inventory on January 5. Paid cash at the time of purchase.
- Sold inventory that cost $18,000 for $30,000 to a customer on January 10 and received the cash on that date.
- Sold inventory that cost $5,000 for $9,000 to a customer on January 20. The sale was on account and the customer has until February 20 to pay.
- Paid cash expenses of $7,500 during January.
- Received bills for utilities, advertising, and phone service totalling $1,500. All these bills were for services received in January. They will all be paid the first week in February.

REQUIRED:

a. Calculate the revenues, expenses, and net income or loss for Katie Bales Enterprises for the month of January 2004 using the cash basis of accounting.
b. Do you think that the net income figure calculated in the previous requirement provides a good measure of the reality of the company's economic performance during the month of January? Explain your reasoning.

LO 9: Accrual Basis Measurement

13. Katie Bales Enterprises began operation on January 2, 2004. During its first month of operation, the company had the same seven transactions as noted in problem 12.

REQUIRED:

a. Calculate the revenues, expenses, and net income or loss for Katie Bales Enterprises for the month of January 2004 using the accrual basis of accounting.

b. Do you think that the net income figure calculated in the previous requirement provides a good measure of the reality of the company's economic performance during the month of January? Explain your reasoning.

LO 7 & 8: Cash Basis Measurement

14. Snow and Ice Enterprises began operation on June 1, 2004. During its first month of operation, the company had the following transactions:

- Purchased $40,000 worth of merchandise inventory on June 1. The amount due is payable on August 1.
- Paid June office rent of $2,000 on June 3.
- Purchased $20,000 worth of merchandise inventory on June 4. Paid cash at the time of purchase.
- Sold inventory that cost $30,000 for $42,000 to a customer on June 10 and received the cash on that date.
- Sold inventory that cost $10,000 for $14,000 to a customer on June 20. The sale was on account and the customer has until July 20 to pay.
- Paid cash expenses of $9,500 during June.
- Received bills for utilities, advertising, and phone service totalling $3,500. All these bills were for services received in June. They will all be paid the first week in July.

REQUIRED:

a. Calculate the revenues, expenses, and net income or loss for Snow and Ice Enterprises for the month of June 2004 using the cash basis of accounting.

b. Do you think that the net income figure calculated in the previous requirement provides a good measure of the reality of the company's economic performance during the month of June? Explain your reasoning.

LO 9: Accrual Basis Measurement

15. Snow and Ice Enterprises began operation on June 1, 2004. During its first month of operation, the company had the same seven transactions as noted in problem 14.

REQUIRED:

a. Calculate the revenues, expenses, and net income or loss for Snow and Ice Enterprises for the month of June 2004 using the accrual basis of accounting.

b. Do you think that the net income figure calculated in the previous requirement provides a good measure of the reality of the company's economic performance during the month of June? Explain your reasoning.

LO 8 & 9: Cash versus Accrual

16. Roger Webb Enterprises began operation on January 2, 2004. During its first month of operation, the company had the following transactions:

- Paid January office rent of $2,000 on January 2.
- Purchased $25,000 worth of merchandise inventory on January 5. The amount due is payable on February 5.
- Purchased $15,000 worth of merchandise inventory on January 8. Paid cash at the time of purchase.
- Sold merchandise that cost $12,000 for $18,000 to a customer on January 16 and received the cash on that date.
- Sold merchandise that cost $9,000 for $13,500 to a customer on January 26. The sale was on account and the customer has until February 26 to pay.
- Paid February office rent of $2,000 on January 31.

REQUIRED:

a. Calculate the revenues, expenses, and net income or loss for Roger Webb Enterprises for the month of January 2004 using the cash basis of accounting.
b. Calculate the revenues, expenses, and net income or loss for Roger Webb Enterprises for the month of January 2004 using the accrual basis of accounting.
c. Explain in your own words what caused the differences between the net income reported under the cash basis of accounting and the one reported under the accrual basis.
d. Which of the two accounting approaches do you think:
(1) provides better information as to cash flow for the month of January?
(2) provides better information as to what Roger Webb Enterprises earned during the month of January?
(3) better reflects the company's ability to generate future earnings and cash flow?

FINANCIAL REPORTING CASE

17. Look at Sobeys Inc.'s annual report to answer the following questions.

a. List the divisions of Sobeys and the primary market of each division.
b. What factors should Sobeys consider before adding a new division?
c. For what reasons would Sobeys sell or close a division? What factors should management consider to make such a decision?

ANNUAL REPORT PROJECT

You now have your annual report and have prepared an index of its contents. Your annual report project eventually will contain the following sections.

I. General Information
II. SWOT Analysis
III. Capital Structure
IV. Assets
V. Cash Flows

VI. Financial Ratio Analysis
VII. Internet and Library Research
VIII. Summary and Conclusions

17. Section I contains the following subsections.

A. Record the Internet address of your company.
B. Identify the company's industry.
C. Identify the Standard Industrial Classification (SIC) code of your company. You can find SIC codes in several ways:
   1. Sometimes the annual report contains the SIC. Look in general information often at the end of the annual report.
   2. Try the Internet address of the firm. Look on the web site, or e-mail the company for the information.
   3. If all these fail, go to the library and consult a reference librarian to find a reference publication that will give you this information.
D. Identify the stock exchange(s) where your company's shares trade.
E. Record the ticker symbol of the company.
F. Find the auditor's report and record the name of the auditing firm.
G. Read the president's (or CEO's) message and prepare a brief summary of this message.
H. Read any other promotional or informational material about the company. This information usually relates the firm's views on social responsibility, marketing strategy, direction for the future, environmental issues, and so on. Write a brief summary of this information provided in the annual report.

REQUIRED:
Complete section I of your project. Turn in one copy to your instructor and retain a clean copy for your final project folder. For group projects, divide the parts equitably among the group members.