

# Financial Statements

## INTRODUCTION

As stated earlier, one of the most important sections of the business plan is the one that details the firm's financial statements. Therefore, the discussion in this chapter is intended as an overview of the main issues of relevance regarding key financial statements. The objective is to teach the purpose of the different statements, their components, and their significance to entrepreneurs who are not financial managers. This is the final step toward making financial statement analysis, which will be the focus of the next chapter, simple and user-friendly.

Financial statements are important because they provide valuable information that is typically used by business managers and investors. However, it is not necessary for the entrepreneur to be able to personally develop financial statements.

In this chapter, we will focus on three financial statements: the income statement, the balance sheet, and the statement of cash flows. Each of these statements, in one way or another, describes a company's financial health. For example, the income statement describes a company's profitability. It is a measurement of the company's financial performance over time. Is the company making or losing money? On the other hand, the balance sheet describes the financial condition of a company at a particular time. Does it own more than it owes? Can it remain in business?

## THE INCOME STATEMENT

The income statement, also known as the profit and loss (P&L) statement, is a scoreboard for a business and is usually prepared in accordance with generally accepted accounting principles (GAAP). It records the flow of resources over time by stating the financial condition of a business over the course of a period, usually a month, quarter, or year. It shows the revenues (i.e., sales) achieved by a company during that particular period and the expenses (i.e., costs) associated with generating these revenues. That is the reason why the income statement, in addition to being known as the P&L statement, is also referred to as the statement of revenues and expenses.

The difference between a company's total revenues and total expenses is its net income. When the revenues are greater than the costs, the company has earned a profit. When the costs are greater than the revenues gained, the company has incurred a loss.

The income statement is used to calculate a company's cash flow, which is also known as EBITDA: earnings (i.e., net income or profit) before interest (i.e., the cost of debt), taxes (i.e., the payments to the government based on a company's profit), depreciation (i.e., noncash expenditures for the decline in value of tangible assets), and amortization (i.e., noncash expenditures for the decline in value of intangible assets such as patents or goodwill). To determine a company's EBITDA for any period—that is, the cash being generated by the company after paying all the expenses directly related to its operations, and therefore the cash available to pay for nonoperational expenses such as taxes and principal and interest payments on debt—one must utilize the income statement. A sample income statement is provided in Figure 4-1.

The income statement is divided into two sections: "Revenues," a measure of the resources generated from the sales of products and services, and "Expenses," a measure of the costs associated with the selling of these products or services. The accounting equation to remember is Equation 4-1.

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### **EQUATION 4-1**

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Net Income

$$\text{Revenues} - \text{expenses} = \text{net income}$$

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**FIGURE 4-1****Bruce Company Income Statement, Year Ended 12/31/07**

Revenues	\$8,000
Expenses	
Cost of Goods Sold	<u>\$2,000</u>
<b>Gross profit</b>	<b>\$6,000</b>
Operating expenses	
Wages	\$1,000
Rent	300
Selling expense	400
Depreciation	500
Amortization	<u>300</u>
Total operating expense	\$2,500
<b>Operating profit or profit before interest and taxes</b>	<b>\$3,500</b>
Interest expense	200
<b>Profit before taxes</b>	<b>\$3,300</b>
Income tax expense	<u>\$1,320</u>
<b>Net income</b>	<b>\$1,980</b>

Using the information contained in Figure 4-1, we can calculate EBITDA at the end of the year for the Bruce Company as shown in Figure 4-2. As you can see, we added back “noncash” expenses, i.e., those for which no cash is actually disbursed, such as depreciation and amortization, to determine the company’s true cash position—EBITDA.

**FIGURE 4-2****Sample EBITDA Calculation**

Net income	\$1,980
+ Interest expense	200
+ Taxes	1,320
+ Depreciation	500
+ Amortization	<u>300</u>
<b>EBITDA</b>	<b>\$4,300</b>

Let us define and analyze each revenue and expense item on the typical income statement:

### Revenues

- Receipts from the sale of products and services
- Returns on investments, such as interest earned on a company's marketable securities, including stocks and bonds
- Franchising fees paid by franchisees
- Rental property income

### Expenses

- Cost of goods sold
- Operating expenses
- Financing expenses
- Tax expenses

### Cost of Goods Sold

The cost of goods sold (known as the COGS) or the cost of services rendered is the cost of the raw materials and direct labor required to produce the product or service that generated the revenue. The COGS does *not* include any overhead, such as utilities or management costs. The difference between revenues and the COGS is gross profit, a.k.a. gross margin. The proper way to calculate the gross profit is simply to subtract the COGS, as defined earlier, from the revenues produced by the sale of the company's goods or services. Other income, such as interest earned on investments, should not be included.

The reason for this is that in the world of finance, internal comparisons of a company's year-to-year performance, and also external comparisons of a company's performance to that of another company or an entire industry, are quite common. These kinds of comparisons are called *internal and external benchmarking*. Therefore, in order to make "apples-to-apples" comparisons that are not skewed by, for example, Company A's revenues being stronger than Company B's because the former is getting higher interest payments on investments, only the revenues from operations are used.

To determine gross profit from total revenues, regardless of the source, would be to ignore the obvious definition of the COGS, which is the cost of *only* the goods sold to generate revenues.

## Operating Expenses

Operating expenses, also known as selling, general, and administrative expenses (SG&A), are all of the other tangible and intangible (e.g., depreciation and amortization) expenses required to carry on the day-to-day activities of a company. Included in this category are fixed costs (i.e., those costs that do not vary with the volume of business), such as insurance, rent, and management salaries, and variable costs (i.e., the costs that vary depending upon the volume produced), such as utilities (e.g., electricity and water) and invoice documents. For example, in the Bruce income statement in Figure 4-1, the rent is \$300 per year—an amount that remains the same whether 200 or 2,000 widgets per year were produced.

Another simple way to think about fixed versus variable costs is to determine the expenses that would be affected by, for example, closing the company for a month. The rent would still be due to the landlord, and interest payments on bank loans would still be due to the bank. These are the fixed costs. On the other hand, since the company is closed and is not producing or shipping for a month, there would be no need to buy invoice documents, and utility bills would decrease dramatically, since electricity and water were not being used.

Excluded from this category are interest expenses, which are not operating expenses, but rather financing expenses. Therefore, revenues minus the sum of the COGS and operating expenses equals operating income, or EBIT (earnings before interest and taxes). The operating income is then used to make any interest payments on debt. The balance is called earnings before taxes (EBT), and these funds are then used to pay taxes on the company's EBT figure.

As stated earlier, “intangible, noncash” expenses—expenses that do not require actual cash disbursements, such as depreciation and amortization—are also included in the operating expense category. Every company, under GAAP, is allowed to “write off” (i.e., expense) a portion of its tangible assets each year over the life of the asset. The theory behind this practice is that the value of all assets typically depreciates over time as a result of natural

deterioration and regular use. Therefore, the depreciation of an asset is a cost to the company because the value of the asset is declining. As we will see in the discussion of the balance sheet later in this chapter, the depreciated value of the asset is recognized on the balance sheet, and the amount it depreciates each year is presented on the income statement.

The amount to be depreciated each year is determined by the accounting method that the company selects to recognize depreciation. The most common methods are straight-line (i.e., an equal percentage of the asset's cost minus salvage value is recognized each year for the predetermined number of useful years) and accelerated (i.e., double-declining-balance or sum-of-the-years'-digits, which recognize a larger portion of the depreciation in the early years).

The method used to calculate depreciation can have a significant impact on the timing of reported income. Using the straight-line depreciation method rather than one of the two accelerated methods, double-declining-balance or sum-of-the-years'-digits, will result in a higher net income in the early periods and lower net income in the later years of an asset's estimated useful life. Also, the change in net income from one period to the next is greater under the double-declining balance method than it is under the sum-of-the-years'-digits method. This makes the former method the most extreme form of depreciation. Finally, the two accelerated methods produce low levels of net income in the early periods that increase rapidly over the asset's life.<sup>1</sup>

While depreciation is the expensing of tangible assets, amortization is the expensing of intangible assets. Intangible assets include such items as goodwill (i.e., the surplus paid over an asset's book value), franchise rights, patents, trademarks, exploration rights, copyrights, and noncompete agreements. These items must be amortized, generally in equal annual amounts, over 15 years.

### **Other Expenses**

Found on the income statement, financing expenses are basically the interest payments paid on loans to the business. And finally, tax expenses are the taxes due on the company's profits. There are also other taxes that a company incurs, including unemployment and real estate taxes, but these fall into the operating expenses category.

If a company has a negative profit before taxes—in other words, a loss—then corporate taxes are not due to the government. In fact, not only will taxes not be due, but also the company's losses can be used to reduce tax obligations on future positive profits. This is called a *tax-loss carryforward*, where a company's previous losses can be carried forward against future profits. Interestingly, a company with a history of annual losses can be more valuable to a prospective buyer than a company that regularly has a breakeven or profitable financial history. Since tax-loss carryforwards are transferable from seller to buyer, they are attractive to a prospective buyer because they are assets for companies that are trying to shield future profits.

At the end of the year, if a company's net income after taxes is positive, it is retained in the form of retained earnings, reflected on the next year's beginning balance sheet, or distributed to investors as dividends, as shown in Equation 4-2.

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### **EQUATION 4-2**

#### **Retained Earnings and Shareholders' Dividends**

$$\begin{aligned} & \text{Revenues} - \text{expenses} = \text{net income} \\ \rightarrow & \text{Retained earnings and shareholders' dividends} \end{aligned}$$


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Before closing the discussion of the income statement, it is imperative that we clear up a few terms that are commonly used interchangeably. These include:

- Revenues and sales
- Margins, profits, earnings, and income

The three different kinds of margins, profits, earnings, and income—in the order of their appearance on the income statement—are as follows:

- *Gross*. The difference between revenues and COGS
- *Operating*. Revenues – (COGS + operating expenses)
- *Net*. The difference between revenues and *all* of the company's costs

## Cash versus Accrual Accounting

A final point to be made about the income statement is that it can be affected by the accounting method selected by the entrepreneur. The options for the entrepreneur are cash or accrual accounting. Typically, a company will select the accounting method that provides the greatest immediate tax benefit. It must also be noted that a company can, in its lifetime, change from one method to another only once, and this change must be approved by the Internal Revenue Service (IRS). The IRS usually approves a requested switch from cash to accrual accounting and usually rejects a request to change from accrual to cash accounting. What is the main difference between cash and accrual accounting? Simply stated, it is the time at which a company recognizes its revenues and expenses. Table 4-1 clearly shows the difference.

**TABLE 4-1**

Cash versus Accrual Accounting

Accounting Method	Revenues Recognized	Expenses Recognized
Cash	When actual cash is received from the customer	When actual cash is paid to the supplier
Accrual	When the product is shipped and the invoice is mailed	When the invoice is received from the supplier

The accrual accounting method gives the reader of the income statement a richer and more complete depiction of the business's financial condition, since all revenues generated by the business and all expenses incurred are included, regardless of whether actual cash has been received or disbursed. Because this method recognizes items immediately, many business owners try to use it to their advantage. For example, prior to the end of the year, many owners will increase their inventories dramatically. The result is an increase in expenses and therefore a reduction in profits and taxes.

For publicly owned companies, where the markets reward revenue and profit growth with an increasing stock price, many

owners prefer to use the accrual method because it helps them achieve the aforementioned increases. Unlike many privately owned companies, which seek to minimize taxes by reducing their reported EBT, public companies seek to show the highest possible EBT, as well as revenue growth. Given this objective, it is not unheard of for a company's owner to get too aggressive and sometimes even act unethically with regard to growth.

For example, *Premiere Laser Systems Inc.*, a spin-off from Pfizer, won FDA approval for a new laser device that promised to make drilling cavities painless. The publicly owned company, trading on the Nasdaq market, shipped and recognized revenues of \$2.5 million in products to *Henry Schein, Inc.*, the powerhouse distributor in the dental business, in December 1997. The only problem was that *Henry Schein* claimed that it had never ordered the products, refused to pay, and alleged that the products had been shipped to it so that *Premiere* could show current and future stockholders an increase in revenues. Obviously, the supplier used the accrual method, which allowed it to recognize the revenue immediately upon shipment. Had its accounting method been cash, the revenue would have never been recognized because the recipient company had refused to pay.<sup>2</sup> *Premiere* settled a number of class action suits; it also cooperated with a securities investigation and replaced its CEO. The company eventually filed for Chapter 11 in March 2000.<sup>3</sup>

Another "fishy numbers" case involved *Sunbeam Corporation*, which conceded that while under the leadership of Al Dunlap, a.k.a. "Chainsaw Al," its "1997 financial statements audited by Arthur Andersen LLP may not be accurate and should not be relied upon."<sup>4</sup> *Sunbeam* filed for Chapter 11 bankruptcy protection in 2001 after three years of trying to turn around its fortunes. The company was saddled with a debt load of \$2.6 billion.<sup>5</sup>

Private-practice physicians usually operate some of the most profitable small businesses in the country. Typically, doctors use the cash accounting method, which gives the reader a more limited picture of the company's financial condition. Physicians and others who use this method do so primarily because their revenues come from notoriously slow payers, such as insurance companies and the government, also known as third-party payers. Therefore, instead of recognizing this unpaid revenue and paying taxes immediately

on the profits it helps to generate, the users of the cash method prefer to delay revenue recognition until the cash is actually received, thereby reducing the company's profit before taxes and consequently the taxes paid. Using this method does not result in tax avoidance or elimination, however; it simply delays tax payments into future years.

Not all companies are allowed to use the cash method, including the following:

- Companies with average annual revenues of \$5 million or more
- Companies where inventories are a heavy part of their business, such as auto dealerships and grocery wholesalers

Let's look at Figure 4-3, which shows an end-of-the-year income statement using both methods. The company has sold and invoiced \$1 million worth of merchandise and has received payment for \$600,000. The merchandise cost was \$500,000, an amount for which the company has been billed. The company has paid its suppliers \$400,000.

### **FIGURE 4-3**

#### Cash versus Accrual Accounting Example

	Cash Method	Accrual Method
Revenues	\$600,000	\$1,000,000
Cost	\$400,000	\$ 500,000
Profit before taxes	\$200,000	\$ 500,000
Taxes (50% rate)	\$100,000	\$ 250,000
Profit after taxes	\$100,000	\$ 250,000

As is obvious from this simple example, the accounting method that a company uses can affect not only the taxes owed but also the three profit categories mentioned earlier. All three would be lower as a percentage of revenues under the cash method than under the accrual method. Therefore, it is imperative that when

comparing income statement items against those of other companies, the comparison be made with those using the same accounting method.

As mentioned earlier, a company can change its accounting method with the approval of the IRS. To see the impact of these changes, examine Figure 4-4.

### **FIGURE 4-4**

#### **Income Statement for the Bruce Company**

	<b>Cash Business with No Receivables</b>	<b>Business with Receivables</b>
Cash to accrual	<ul style="list-style-type: none"> <li>■ Revenues remain the same.</li> <li>■ Expenses increase</li> <li>■ Profit before taxes decreases.</li> <li>■ Taxes decrease.</li> <li>■ Net income decreases.</li> </ul>	<ul style="list-style-type: none"> <li>■ Revenues increase.</li> <li>■ Expenses increase</li> <li>■ Profit before taxes increases.</li> <li>■ Taxes increase.</li> <li>■ Net income increases.</li> </ul>
Accrual to cash	<ul style="list-style-type: none"> <li>■ Revenues remain the same.</li> <li>■ Expenses decrease.</li> <li>■ Profit before taxes increases.</li> <li>■ Taxes increase.</li> <li>■ Net income increases.</li> </ul>	<ul style="list-style-type: none"> <li>■ Revenues decrease.</li> <li>■ Expenses decrease.</li> <li>■ Profit before taxes decreases.</li> <li>■ Taxes decrease.</li> <li>■ Net income decreases.</li> </ul>

Why would someone in a business with receivables want to switch from the cash method to the accrual accounting method when the result can be an increase in taxes? There could be several legitimate business reasons, including the following:

- For better comparison purposes, the company may want to use the same accounting method used by its competitors.
- The entrepreneur may be preparing the company to go public or to be sold. The accrual method would show the company to be bigger and more profitable than it would appear using the cash method.

Before ending the discussion on accounting methods, it should be pointed out that in December 1999, the IRS issued new

rules regarding this topic. Specifically, the IRS said that companies carrying no inventory and having annual revenues between \$1 million and \$5 million could no longer choose the cash method. They must use the accrual method. The result of this change has been quite significant for the cash flow of businesses in this revenue range. They now pay more taxes sooner. The beneficiary has been the U.S. Treasury, which was expected to collect an additional \$1.8 billion by 2005 as a result of accelerated tax payments.<sup>6</sup>

## THE BALANCE SHEET

An example of a balance sheet is shown in Figure 4-5.

### **FIGURE 4-5**

#### Bruce Company Balance Sheet, Year End 12/31/07

<b>Assets</b>	
Current assets	
Cash	\$300
Accounts receivable	300
Less: Uncollectibles	(10)
Inventory	600
<b>Total current assets</b>	<b>\$1,190</b>
Property, plant, and equipment	
Property	\$5,000
Buildings	4,000
Less: Accumulated depreciation	(1,000)
Equipment	3,000
Less: Accumulated depreciation	(1,000)
<b>Total property, plant, and equipment</b>	<b>\$10,000</b>
Other assets	
Automobiles	\$4,500
Patents	1,000
<b>Total other assets</b>	<b>\$5,500</b>
<b>Total assets</b>	<b>\$16,690</b>

*continued on next page*

**FIGURE 4-5****Bruce Company Balance Sheet, Year End 12/31/07  
(continued.)**

<b>Liabilities and shareholders' equity</b>	
Current liabilities	
Accounts payable	\$500
Wages	700
Short-term debt	900
<b>Total current liabilities</b>	<b>\$2,100</b>
Long-term liabilities	
Bank loans	\$4,000
Mortgages	5,000
<b>Total long-term liabilities</b>	<b>\$7,000</b>
Shareholders' equity	
Contributed capital	\$5,000
Retained earnings	2,590
<b>Total shareholders' equity</b>	<b>\$7,590</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$16,690</b>

The information contained on the balance sheet is also often presented in the format shown in Figure 4-6. The balance sheet is a financial snapshot of a company's assets, liabilities, and stockholders' equity at a particular time. Bankers have historically relied on analysis of ratios of various assets and liabilities on the balance sheet to determine a company's creditworthiness and solvency position.

**FIGURE 4-6****Balance Sheet Information**

<b>Assets</b>	<b>Liabilities</b>
■ Current	■ Current
■ Long-term	■ Long-term
■ Tangible	
■ Intangible	<b>Equity</b>
	■ Stock—common, preferred, etc.
	■ Retained earnings

A company's assets on the balance sheet are separated into current and long-term categories. Current assets are those items that can be converted into cash within one year, including a company's cash balance, the dollar amount due to the company from customers (i.e., accounts receivable), inventory, marketable securities, and prepaid expenses.

Long-term assets, tangible and intangible, are the remaining assets. They are recorded at their original cost, not their present market value, minus the accumulated depreciation from each year's depreciation expense, which is found on the income statement. The assets that fall into this category include buildings, land, equipment, furnaces, automobiles, trucks, and lighting fixtures.

As stated earlier in this chapter, all long-term assets, except land, can be depreciated over time. This is permissible under GAAP despite the fact that some assets, in fact, appreciate over time. An example is real estate, which usually tends to appreciate over time, but the balance sheet does not reflect this fact. Therefore, it is commonly known that the balance sheet often undervalues a company's assets, especially when real estate is owned. This fact was highlighted in the mid-1980s during the leveraged-buyout, hostile-takeover craze. Corporate raiders, as the hostile-takeover artists were known, would forcibly buy a company at an exorbitant price because they believed that the company had "hidden value" in excess of what the financial statements showed. One of the primary items they were concerned with was the real estate owned by the company, which was recorded on the balance sheet at cost minus accumulated depreciation. The raiders would take over the company, financing the purchase primarily with debt. Then they would sell the real estate at market prices, using the proceeds to reduce their debt obligations, and lease the property from the new owners.

The other components of the balance sheet belongs to the liabilities and shareholders' (stockholders') equity sections. A company's liabilities consist of the amounts owed by the company to creditors, secured and unsecured. The liabilities section of the balance sheet, like the assets section, is divided into current and long-term. Current liabilities are those that must be paid within 12 months. Included in this category is the current portion of any principal payments due on loans for which the company is responsible—remember, the current interest payments on the loan are on

the income statement—and accounts payable, which is very simply money owed to suppliers. Long-term liabilities are all of the company's other obligations. For example, if the company owns real estate and has a mortgage, the total balance due on that mortgage minus the current portion would be reflected in the long-term liabilities category.

Stockholders' equity is the difference between total assets and total liabilities. It is the net worth of the company, including the stock issued by the company and the accumulated earnings that the company has retained each year. Remember, the retained earnings are an accumulation of the profits from the income statement. Note that the company's net worth is not necessarily the company's value or what it would sell for. A company with a negative net worth, where total liabilities exceed total assets, may sell for quite a bit of money without any problems. As we will see in Chapter 7, the net worth of a company typically has no bearing on its valuation. A few important equations to remember are shown in Equation 4-3.

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**EQUATION 4-3**

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**Shareholders' Equity**

$$\text{Total assets} - \text{total liabilities} = \text{shareholders' equity}$$

$$\text{Net worth} = \text{total assets} - \text{total liabilities}$$

$$\text{Therefore Net worth} = \text{shareholders' equity}$$

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Finally, the items on the balance sheet are also used to compute a company's working capital and working capital needs. Net working capital is simply a measure of the company's ability to pay its bills—in other words, the company's short-term financial strength. A company's net working capital is measured as shown in Equation 4-4.

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**EQUATION 4-4**

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**Net Working Capital**

$$\text{Net working capital} = \text{current assets} - \text{current liabilities}$$

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The fact that two companies have the exact same level of working capital does not mean that they have equal short-term financial strength. Look, for example, at Figure 4-7. While both companies have the same amount of working capital, a banker would prefer to lend to Cheers Company because Cheers has greater financial strength. Specifically, for every dollar that Cheers owes, it has \$6 in potentially liquid assets, whereas Hill Company has only \$2 in assets for every dollar owed.

### **FIGURE 4-7**

#### Working Capital Comparison

	Hill Company	Cheers Company
Current assets	\$1,000,000	\$600,000
Current liabilities	500,000	100,000
Working capital	\$ 500,000	\$500,000

Now look at the example in Figure 4-8. It shows that a company with greater working capital than another is again not necessarily stronger. With a 10-to-1 asset-to-liability ratio, Jardine is obviously financially stronger than Webb, with a 2-to-1 ratio, despite the fact that Webb has more working capital.

### **FIGURE 4-8**

#### Working Capital Comparison

	Jardine Company	Webb Company
Current assets	\$10,000,000	\$20,000,000
Current liabilities	1,000,000	10,000,000
Working capital	\$ 9,000,000	\$10,000,000

The entrepreneur must recognize that potential investors use the company's working capital situation to determine whether they will provide financing. In addition, loan covenants may establish a

working capital level that the company must always maintain or risk technical loan default, resulting in the entire loan being called for immediate payment.

The balance sheet assumes greater importance for manufacturing companies than for service companies, primarily because the former tend to have tangible assets, such as machinery and real estate, whereas the latter tend to have people as their primary assets.

## THE STATEMENT OF CASH FLOWS

The statement of cash flows uses information from the two other financial statements, the balance sheet (B/S) and the income statement (I/S), to develop a statement that explains changes in cash flows resulting from operations, investing, and financing activities. Figure 4-9 provides an example of a cash flow statement.

### FIGURE 4-9

#### Richardson Company Cash Flow Statement, Year Ended 12/31/07

<b>Cash flow from operations</b>	
Net income	\$400,000
Noncash expenditures	
Depreciation	110,000
Amortization	95,000
Net working capital	10,000
<b>Cash available for investing and financing activities</b>	<b>\$615,000</b>
<b>Cash flow from investing activities</b>	
Equipment purchases	(\$140,000)
Automobile purchases	(50,000)
Sale of old equipment	70,000
<b>Cash available for investing activities</b>	<b>\$495,000</b>
<b>Cash flow from financing activities</b>	
Dividends paid	(\$30,000)
Mortgage payments	(100,000)
Loan payments	(200,000)
Repurchase company stock	(65,000)
<b>Net cash flow</b>	<b>\$100,000</b>

The relationship between the sources and uses of cash is shown in Equation 4-5.

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### **EQUATION 4-5**

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#### **Cash Flow**

$$\text{Cash sources} - \text{cash uses} = \text{net cash flow}$$

→ Fund operations and return to investors

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## **Cash Flow Ledgers and Planners**

The cash flow ledger, regardless of accounting issues such as cash versus accrual methods or noncash expenses such as depreciation, provides a summary of the increases (inflows) and decreases (outflows) in actual cash over a period of time. It provides important information primarily to the entrepreneur, but also possibly to investors and creditors (such as banks), about the balance of the cash account, enabling them to assess a company's ability to meet its debt payments when they come due. A famous (but unnamed) economist once said, "Cash flow is more important than your mother"—well, maybe not *more* important, but it is essential because it is the lifeline of any business. Cash flow is different from profit and more important, as we will see later in this chapter.

The cash flow at the end of a period (for example, a month) is calculated as shown in Figure 4-10. And Figure 4-11 provides an example of a monthly cash flow ledger. It indicates, on a transaction basis, all cash received and disbursed during a month's period. As shown, the cash balance at the end of the month is equal to the total cash received less the total cash disbursed for the month.

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### **FIGURE 4-10**

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#### **Sample Cash Flow Calculation**

	<b>Cash on hand at the beginning of the month</b>
<i>plus</i>	Monthly cash received from customer payments, etc.
<i>equals</i>	Total cash
<i>minus</i>	Monthly cash disbursements for fixed and variable costs
<i>equals</i>	<b>Cash available at the end of the month</b>

**FIGURE 4-11****Oscar's Business Ledger\***

Date	Explanation	To/From	Received	Disbursed	Balance
6/30/05					\$1,000
7/1/05	Silkscreen start-up supplies	Ace Arts		\$ 250	750
7/2/05	Bought 4 doz. T-shirts	Joe		240	510
7/6/05	Monthly registration fee	Flea market		100	410
7/6/05	Business cards	Print shop		20	390
7/6/05	Flyers	Print shop		10	380
7/7/05	Sold 4 doz. @ \$12	Flea market	\$ 576		956
7/10/05	Bought 5 doz. T-shirts	Joe		300	656
7/14/05	Sold 4 doz. @ \$12, 1 doz. @ \$10	Flea market	696		1,352
7/16/05	Bought 5 doz. T-shirts	Joe		300	1,052
7/16/05	Silkscreen ink	Print shop		50	1,002
7/16/05	Flyers	Print shop		10	992
7/21/05	Sold 3 doz. @ \$12 (rained)	Flea market	432		1,424
7/25/05	Bought 2 doz. T-shirts	Joe		120	1,304
7/26/05	Sold 4 doz. @ \$12	Flea market	576		1,880
<b>Totals</b>			<b>\$2,280</b>	<b>\$1,400</b>	<b>\$1,880</b>

\* Adapted from Steve Mariotti, *The Young Entrepreneur's Guide to Starting and Running a Business*.

The successful entrepreneurs are those who know their company's actual cash position on any given day. Therefore, unlike the comparatively few number of times they need to reread the income statement and balance sheet, it is recommended that entrepreneurs, especially the inexperienced and those in the early stages of their ventures, review the cash flow ledger at least weekly.

Figure 4-12 provides a weekly cash flow projection summary, which every new and inexperienced entrepreneur should prepare immediately upon opening for business and each month thereafter. It indicates the anticipated cash inflow during the month and cash payments to be made. In the figure, the anticipated cash inflow—59—is less than the expected cash outflow—60—for the month; therefore, the cash balance for the month will be negative 1.

The projection in Figure 4-12 was prepared at the end of September for the following month. It anticipates the cash inflows during the month and the cash payments to be made. The "Cash in" section includes expected payments from specific customers

**FIGURE 4-12****Sample Weekly Cash Flow Projections**

Week of	Oct. 1	Oct. 8	Oct. 15	Oct. 22	Oct. 29	Oct.'s Total Cash Received
<b>(Cash in)</b>						
1. Beginning cash	10					10
2. Receivables						
Customer 1					5	5
Customer 2		3	3	3		9
Customer 3		8				8
Customer 4			12			12
3. Cash payments	5	3	1	1	5	15
	<u>15</u>	<u>14</u>	<u>16</u>	<u>4</u>	<u>10</u>	<u>59</u>
<b>(Cash out)</b>						
1. Payroll	3	3	3	3	3	15
2. Loan payments			6			6
3. Rent	5					5
4. Insurance						
Property	2					2
Health	3					3
5. Vendor payments						
Vendor 1	1	2	3	4	4	14
Vendor 2	1		3			4
Vendor 3		2	6			8
Vendor 4	1		2			3
	<u>16</u>	<u>7</u>	<u>23</u>	<u>7</u>	<u>7</u>	<u>60</u>

Source: Teri Lammers, "The Weekly Cash-Flow Planner," *Inc.*, June 1992, p. 99.

based on the terms of the invoices and the aging of the corresponding receivables. The terms were net 30, which means that the payment was due 30 days following the invoice date. But the entrepreneur who completed this projection did not simply project October 29 because that was 30 days after invoicing. To do this would be too theoretical and quite frankly naïve on the entrepreneur's part. Instead, she used common sense and factored in the extra 7 days that Customer 1 typically takes before paying the bills. Thus, the product was invoiced on September 22, and the entrepreneur is forecasting the actual receipt of payment on October 29.

This section also includes the cash payments expected each week throughout the month. These are expected to be actual cash payments that customers make when they pick up their merchandise. In these cases, the entrepreneur is not supplying any credit to the customer.

By doing this kind of projection each month, the entrepreneur can schedule her payments to suppliers to match her expected cash receipts. This planner allows her to be proactive, as all entrepreneurs should be, with regard to the money owed to her suppliers. It enables her to let specific vendors know in advance that her payment will probably be late. The cash flow ledger and planner are simple and very useful tools that the entrepreneur should use to manage cash flow successfully.

## NOTES

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5. *U.S. Business Journal*, February 2001.
6. *Crain’s Chicago Business*, July 10, 2000.