



# Fundamentals of Accounting

# ACCOUNTING

- ▶ Accounting is the process of recording financial transactions pertaining to a business. The accounting process includes summarizing, analyzing and reporting these transactions to oversight agencies, regulators and tax collection entities.
- ▶ Accounting is one of the key functions for almost any business. It may be handled by a bookkeeper or an accountant at a small firm, or by sizable finance departments with dozens of employees at larger companies. The reports generated by various streams of accounting, such as cost accounting and managerial accounting, are invaluable in helping management make informed business decisions.
- ▶ While basic accounting functions can be handled by a bookkeeper, advanced accounting is typically handled by qualified accountants who possess designations such as Certified Public Accountant (CPA) or Certified Management Accountant (CMA)

# Types of Accounting

1. **Financial Accounting-** Financial accounting refers to the processes used to generate interim and annual financial statements. The results of all financial transactions that occur during an accounting period are summarized into the balance sheet, income statement and cash flow statement.
2. **Managerial Accounting** -Managerial accounting uses much of the same data as financial accounting, but it organizes and utilizes information in different ways. Namely, in managerial accounting, an accountant generates monthly or quarterly reports that a business's management team can use to make decisions about how the business operates. Managerial accounting also encompasses many other facets of accounting, including budgeting, forecasting and various financial analysis tools. Essentially, any information that may be useful to management falls underneath this umbrella.
3. **Cost Accounting-**Just as managerial accounting helps businesses make decisions about management, cost accounting helps businesses make decisions about costing. Essentially, cost accounting considers all of the costs related to producing a product. Analysts, managers, business owners and accountants use this information to determine what their products should cost.

# INCOME STATEMENT

- ▶ The **income statement** is one of the major financial statements used by accountants and business owners. The income statement is sometimes referred to as the profit and loss statement (P&L), statement of operations, statement of earnings, or statement of income. The income statement is important because when the accrual basis (or method) of accounting is used, it shows the *profitability* of a company during the time interval specified in its heading. The period of time that the statement covers is chosen by the business and will vary. For example, the heading may state:
  - ❖ "**For the Three Months Ended December 31, 2019**" (The period of October 1 through December 31, 2019.)
  - ❖ "**The Four Weeks Ended December 27, 2019**" (The period of November 29 through December 27, 2019.)
  - ❖ "**The Fiscal Year Ended June 30, 2019**" (The period of July 1, 2018 through June 30, 2019.)

# Income Statement

It's first important to define how it's going to be prepared. Statements of financial positions can be prepared using either the cash basis of accounting or the accrual basis of accounting. The difference between the two is the timing of which revenues and expenses are recorded.

- ✓ **Cash Basis** – This method of accounting records revenue when **cash is actually received and records expenses when they're actually paid**. So, if you sell a \$100 SaaS subscription payable in 30 days, you can't record your revenue until the 30-day period is up and money hits your bank account. The same goes for expenses. If you purchase a new computer on credit, payable in 30 days, you record the expense only when you actually pay the bill.
- ✓ **Accrual Basis** – This method, on the other hand, accounts for revenue when it's "earned" and for **expenses when they're "incurred."** This means that if you sell the same SaaS subscription for \$100 in January and expect to receive payment in February, you record the \$100 of revenue in January. The same principle applies to expenses. If you purchase a new computer on credit in January, you record the expense in January, and not when you pay off your credit card.



# INCOME STATEMENT

- ▶ People pay attention to the profitability of a company for many reasons. For example, if a company **was not** able to operate **profitably** (the bottom line of the income statement indicates a net loss) a **banker/lender/creditor** may be hesitant to extend additional credit to the company. On the other hand, a company that has operated profitably (the bottom line of the income statement indicates a net income) has demonstrated its ability to use borrowed and invested funds in a successful manner. A company's ability to operate profitably is important to current lenders and investors, potential lenders and investors, company management, competitors, government agencies, labor unions, and others.
- ▶ The format of the income statement or the profit and loss statement will vary according to the complexity of the business activities. However, most companies will have the following elements in their income statements:
  - ✓ **A. Revenues and Gains**
    1. Revenues from **primary activities** (For a retailer, wholesaler, and distributor the primary activities would be the buying of merchandise and then the sale of that merchandise. A manufacturer's primary activities would be the production and sale of products.)
    2. Revenues or income from **secondary activities** (Also referred to as peripheral activities. A company's activities outside of its main activities of **buying/producing and selling**. Examples include a retailer's financing function **involving interest revenue and interest expense, disposal of long term assets used in the business, lawsuit settlements, renting out unused space, etc.**)
    3. Gains (e.g., gain on the sale of **long-term assets, gain from lawsuits**)
  - ✓ **B. Expenses and Losses**
    1. Expenses involved in primary activities
    2. Expenses from secondary activities
    3. Losses (e.g., loss on the sale of long-term assets, loss from lawsuits)
- ▶ If the net amount of revenues and gains minus expenses and losses is positive, the bottom line of the profit and loss statement is labeled as **net income**. If the net amount (or bottom line) is negative, there is a **net loss**.

# Revenues and Gains

**1. Revenues from primary activities** are often referred to as **operating revenues**. The primary activities of a retailer are purchasing merchandise and selling the merchandise. The primary activities of a manufacturer are producing the products and selling them. For retailers, manufacturers, wholesalers, and distributors the revenues resulting from their primary activities are referred to as sales revenues or sales. The primary activities of a company that provides services involve acquiring expertise and selling that expertise to clients. For companies providing services, the revenues from their primary services are referred to as service revenues or fees earned. (Some people use the word *income* interchangeably with revenues.)

- ▶ It's critical that you don't confuse revenues with receipts. Under the accrual basis of accounting, service revenues and sales revenues are shown at the top of the income statement in the period they are earned or delivered, not in the period when the cash is collected. Put simply, **revenues occur when money is earned, receipts occur when cash is received**.
- ✓ For example, if a retailer gives customers 30 days to pay, revenues occur (and are reported) when the merchandise is sold to the buyer, *not* when the cash is received 30 days later. If merchandise is sold in December, the sale is reported on the December income statement. When the retailer receives the check in January for the December sale, the retailer has a January *receipt*—not January *revenues*.
- ✓ Similarly, if a consulting company asks clients to pay within 30 days of receiving their service, revenues occur (and are reported) when the service is performed (earned), *not* 30 days later when the consulting company receives the cash from the client.
- ✓ If an attorney requires a client to *prepay* \$1,000 before beginning to research the client's case, the attorney has a receipt, but does not have revenues until some of the research is done.
- ✓ If a company sells an item to a buyer who immediately pays for it with cash, the company has both a receipt *and* revenues for that day—it has a cash receipt because it received cash; it has sales revenues because it sold merchandise

# Revenues and Gains

2. **Revenues from secondary activities** are often referred to as **non-operating revenues**. These are the amounts a business earns outside of purchasing and selling goods and services. For example, when a retail business earns interest on some of its idle cash, or earns rent from some vacant space, these revenues result from an activity outside of buying and selling merchandise. As a result the revenues are reported on the income statement separate from its primary activity of sales or service revenues.

► As is true with operating revenues, non-operating revenues are reported on the profit and loss statement during the period when they are earned, not when the cash is collected.

3. **Gains** such as the gain on the sale of long-term assets, or lawsuits result from a transaction that is outside of the primary activities of most businesses. A gain is reported on the income statement as the net of two amounts: the proceeds received from the sale of a long-term asset minus the amount listed for that item on the company's books (book value). A gain occurs when the proceeds are more than the book value.

► Consider this example: Assume that a clothing retailer decides to dispose of the company's car and sells it for \$6,000. The \$6,000 received for the car (the **proceeds** from the disposal of the car) will not be included with sales revenues since the account **Sales** is used only for the sale of *merchandise*. Since this retailer is not in the business of buying and selling cars, the sale of the car is outside of the retailer's primary activities. Over the years, the cost of the car was being depreciated on the company's accounting records and as a result, the money received for the car (\$6,000) was greater than the net amount shown for the car on the accounting records (\$3,500). This means that the company must report a *gain* equal to the amount of the difference—in this case, the gain is reported as \$2,500. This gain should not be reported as sales revenues, nor should it be shown as part of the merchandiser's primary activities. Instead, the gain will appear in a section on the income statement labeled as "non-operating gains" or "other income". The gain is reported in the period when the disposal occurred.



# Expenses and Losses

- ▶ **1. Expenses involved in primary activities** are expenses that are incurred in order to earn normal operating revenues. Under the accrual basis of accounting sales commissions expense should appear on the income statement in the same period that the related sales are reported, regardless of when the commission is actually paid. In the same way, the cost of goods sold is matched with the related sales on the income statement, regardless of when the supplier of the merchandise is paid.
- ▶ Costs used up (or expiring) in the accounting period shown in the heading of the income statement are also considered to be expenses of that period. For example, the utilities used in a retail store in December should appear on the December income statement, even if the utility's meters are not read until January 1 and the bill is paid on February 1.
- ▶ The above examples reflect the matching principle and show that under the accrual basis of accounting, expenses on the income statement are likely to be reported at different times than the cash expenditures/disbursements.
- ▶ It is common for expenses to occur *before* the company pays for them (e.g., wages earned by employees, employee bonuses and vacations, utilities, and sales commissions). However, some expenses occur *after* the company has paid for them. For example, let's say a company buys a building on December 31, 2018 for \$300,000 (excluding the cost of land). The building is assumed to have a useful life of 30 years. The company paid cash for the building on December 31, 2018 but it will record depreciation expense of \$10,000 in each of the years 2019 through 2048.
- ▶ Cash payments do not always mean that an expense has occurred. For example, a company might pay \$20,000 to the bank to reduce its bank loan. This payment will reduce the company's cash and its liability to the bank, but it is not an expense.
- ▶ Some expenses are matched against sales on the income statement because there is a cause and effect linkage—the sale of the merchandise *caused* the cost of goods sold and the sales commission expense. Other expenses are not directly linked to sales and as a result they are matched to the accounting period when they are consumed or used—examples include utilities expense, office salaries expense, and depreciation expense. Some expenses such as advertising expense and research and development expense can neither be linked with sales nor a specific accounting period and as a result, they are reported as expenses as soon as they occur.

# Expenses and Losses

The income statements or profit and loss statements of merchandisers and manufacturers will use a separate line for the cost of goods sold. The other expenses involved in their primary activities will either be grouped together as operating expenses or subdivided into the categories "selling" and "administrative."

**2. Expenses from secondary activities** are referred to as nonoperating expenses. For example, interest expense is a non-operating expense because it involves the finance function of the business, rather than the primary activities of buying/producing and selling.

**3. Losses** such as the loss from the sale of long-term assets, or the loss on lawsuits result from a transaction that is outside of a business's primary activities. A loss is reported as the net of two amounts: the amount listed for the item on the company's books (book value) minus the proceeds received from the sale. A loss occurs when the proceeds are less than the book value.

► Let's assume that a clothing retailer decides to dispose of the company's car. The proceeds from the disposal are \$2,800. This is *less* than the \$3,500 amount shown in the company's accounting records. Since this retailer is not in the business of buying and selling cars (the sale of the car is outside of the operating activities of buying and selling clothing), the money received for the car will not be included in sales revenues, and the loss experienced on the sale of the car (\$700) will not be included in operating expenses. Instead, the \$700 loss will appear in a section on the income statement labeled "non-operating gains or losses" or "other income or losses". The loss is reported in the time period when the disposal occurs.

► **4. Impairment losses.** Some long-term assets owned by a company will experience a significant decline in value and the assets' book (carrying) values will have to be reduced. The amount of the reduction is known as an impairment loss and will be reported on the company's income statement.

One example of an impairment loss involves the intangible asset known as goodwill. Goodwill arises when a company acquires another company for an amount that is greater than the fair value of the tangible assets acquired. The amount of goodwill is assumed to not decrease in value and therefore is not amortized to expense. However, each year the company must test the value. If the test indicates that an adjustment is necessary, an impairment loss will reduce the book value and will be recorded as a loss on the income statement. Impairment losses can also occur for tangible assets.

# Multiple-Step Income Statement

**Sample Products Co.  
Income Statement  
For the Five Months Ended May 31, 2019**

Sales		\$100,000
Cost of goods sold		<u>75,000</u>
Gross profit		<u>25,000</u>
Operating expenses		
Selling expenses		
Advertising expense	2,000	
Commissions expense	<u>5,000</u>	7,000
Administrative expenses		
Office supplies expense	3,500	
Office equipment expense	<u>2,500</u>	<u>6,000</u>
Total operating expenses		<u>13,000</u>
Operating income		<u>12,000</u>
Non-Operating or other		
Interest revenues		5,000
Gain on sale of investments		3,000
Interest expense		(500)
Loss from lawsuit		<u>(1,500)</u>
Total non-operating		<u>6,000</u>
Net Income		<u><u>\$ 18,000</u></u>



# Multiple-Step Income Statement

- ▶ **Step 1:** Cost of goods sold is subtracted from net sales to arrive at the gross profit.

Gross Profit	=	Net Sales	-	Cost of Goods Sold
Gross Profit	=	\$100,000	-	\$75,000
Gross Profit	=	\$25,000		

- ▶ **Step 2:** Operating expenses are subtracted from gross profit to arrive at **operating income**.

Operating Income	=	Gross Profit	-	Operating Expenses
Operating Income	=	\$25,000	-	\$13,000
Operating Income	=	\$12,000		

- Step 3: The net amount of non-operating revenues, gains, non-operating expenses and losses is combined with the operating income to arrive at the net income or net loss

Net Income	=	Operating Income	+	Non-Operating Items
Net Income	=	\$12,000	+	\$6,000
Net Income	=	\$18,000		



**Innovative Products, Inc.**  
**Income Statement**  
For Year Ending December 31, 2012

<b>Sales</b>		\$50,00,000
Cost of Goods Sold		
Materials	8,00,000	
Labor	11,00,000	
Overhead	6,00,000	25,00,000
<b>Gross Margin</b>		<b>\$25,00,000</b>
<b>Operating Expenses</b>		
Selling Expenses	9,00,000	
Administrative Expenses	6,00,000	
Depreciation and Amortization	5,00,000	2000000
<b>Operating Income</b>		<b>\$5,00,000</b>
<b>Other Income &amp; Expenses</b>		
Interest Revenue	50000	
Interest Expense	-1,00,000	
Extraordinary items	2,00,000	1,50,000
<b>Income Before Tax</b>		<b>\$6,50,000</b>
Income Tax (at 35%)		\$2,27,500
<b>Net Income</b>		<b>\$4,22,500</b>

	Jan	Feb	Mar	April	May
<b>Revenue</b>					
Subscription Software Revenue	\$ 350,000	\$ 360,000	\$ 385,000	\$ 370,000	\$ 375,000
Professional Services	\$ 40,000	\$ 35,000	\$ 20,000	\$ 55,000	\$ 40,000
<b>Total Revenue</b>	<b>\$ 390,000</b>	<b>\$ 395,000</b>	<b>\$ 405,000</b>	<b>\$ 425,000</b>	<b>\$ 415,000</b>
<b>Cost of Goods</b>					
Third Party and/or Transaction Fees	\$ 3,500	\$ 3,600	\$ 3,850	\$ 3,700	\$ 3,750
Hosting Expenses	\$ 8,750	\$ 9,000	\$ 9,625	\$ 9,250	\$ 9,375
Customer Support	\$ 12,300	\$ 14,000	\$ 14,500	\$ 13,000	\$ 13,000
Internal Engineering Support	\$ 4,100	\$ 4,300	\$ 4,000	\$ 3,900	\$ 4,300
Professional Services	\$ 32,000	\$ 30,000	\$ 35,000	\$ 33,000	\$ 34,000
<b>Total CoGS</b>	<b>\$ 60,650</b>	<b>\$ 60,900</b>	<b>\$ 66,975</b>	<b>\$ 62,850</b>	<b>\$ 64,425</b>
<b>Gross Profit</b>	<b>\$ 329,350</b>	<b>\$ 334,100</b>	<b>\$ 338,025</b>	<b>\$ 362,150</b>	<b>\$ 350,575</b>
<b>Gross Margin</b>	<b>84%</b>	<b>85%</b>	<b>83%</b>	<b>85%</b>	<b>84%</b>
<b>Operating Expenses</b>					
Sales	\$ 145,000	\$ 125,000	\$ 122,000	\$ 135,000	\$ 140,000
Marketing	\$ 87,000	\$ 62,000	\$ 89,000	\$ 79,000	\$ 90,000
Product Development	\$ 135,000	\$ 130,000	\$ 128,000	\$ 133,000	\$ 135,000
General and Administrative	\$ 56,000	\$ 71,000	\$ 73,000	\$ 81,000	\$ 83,000
<b>Total Operating Expenses</b>	<b>\$ 423,000</b>	<b>\$ 388,000</b>	<b>\$ 412,000</b>	<b>\$ 428,000</b>	<b>\$ 448,000</b>
<b>Net Income</b>	<b>\$ (93,650)</b>	<b>\$ (53,900)</b>	<b>\$ (73,975)</b>	<b>\$ (65,850)</b>	<b>\$ (97,425)</b>

*The following are extracts from an income statement for the year ended 31*

<b><i>December 2009</i></b>	<b><i>£000</i></b>
<i>Sales revenue</i>	<i>10,000</i>
<i>Cost of sales</i>	<i>(8,500)</i>
<i>Distribution costs</i>	<i>(300)</i>
<i>Administrative expenses</i>	<i>(200)</i>
<i>Net interest paid</i>	<i>(150)</i>
<i>Taxation</i>	<i>(500)</i>

