

Understanding Income Statements

Financial Skills

Team FME

www.free-management-ebooks.com

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Preface

This eBook will give you a thorough understanding of the income statement, a powerful decision-making tool that every manager should be familiar with.

You will learn:

- How an income statement is prepared and what it can tell you
- The importance of transaction timing and how it influences the income statement totals
- How to use accounting standards to help you define operating and non-operating expenses
- How to use income statements to measure financial performance against expectations
- How to compare income statements for different sized organizations

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Introduction

As a manager, you may be asked to produce or contribute towards an income statement for your own business unit. This provides senior management with an indication of how your business unit is performing against its targets over a specific period, for example quarterly. This eBook you will give you a thorough understanding of the income statement and how it is made up.

The purpose of an income statement is to be able to measure an organization's financial performance over a specific accounting period. It provides a summary of how its revenues and expenses are incurred, as well as showing if it has made a net profit or loss.



The income statement is divided into two parts:

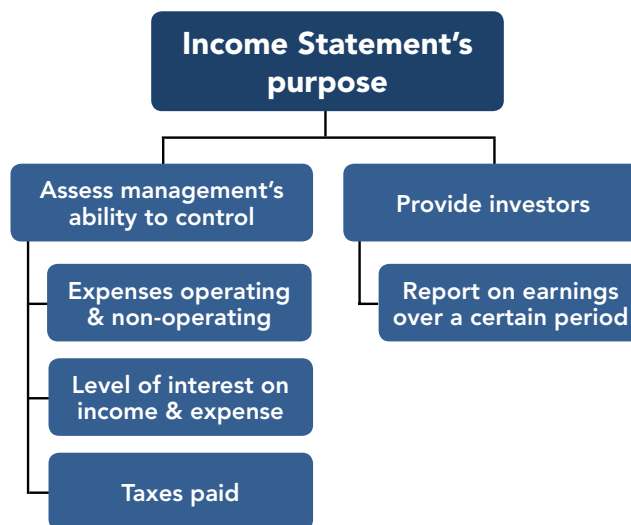
- **Operating items section**—provides information about revenues and expenses that are a *direct result* of regular organization operations.
 - For example, if an organization sells garden furniture, then the operating items section would detail the revenues and expenses involved with the manufacture, buying in, and retailing of garden furniture.
- **Non-operating items section**—details any revenue and expense information about activities that are *not tied directly* to these operations.
 - In the garden center example, if they purchased a warehouse or more land then this information would be detailed in the non-operating items section.

All the income statements in this eBook are produced based on the accrual method of accounting. You will need to have a basic understanding of this method and other commonly used financial terms to maximize the benefits you will obtain from studying this eBook.

If you are unfamiliar with or unsure of the exact meaning of 'accrual' or other commonly used financial terms, you can find a simple explanation for them in our free eBook 'Accounting Principles.' You can download this eBook by visiting www.free-management-ebooks.com.

Purpose of the Income Statement

The primary purpose of the income statement is to report an organization's earnings to investors over a specific period of time. It provides important insights into how effectively management is controlling expenses, the amount of interest on income and expense, and the taxes paid.



Income statements are used in a variety of ways both internally and externally to aid the decision-making process. For example:

- To show how well management is investing the money under its control.
- To enable comparisons to be made with an organization's competitors.
- To assess an organization's operating performance over a defined period.
- To determine the type of investment opportunity the organization represents.

An income statement can also be used to calculate financial ratios that will reveal how well the management is investing the money under their control. It can also be used to compare an organization's profits with those of its competitors by examining various profit margins.

Your role as a manager is likely to find you using an income statement to track revenues and expenses so that you can determine your operating performance for the organiza-

tion over a period of time. You can also use it to track increases in product returns or cost of goods sold as a percentage of sales.



An income statement also allows potential lenders, banks, or investors to assess what type of investment your organization would be for them. These people would also want to look at your organization's balance sheet.

Existing and potential suppliers are interested in reviewing income statements because this helps them to assess what type of credit terms they are prepared to offer your organization—for example, whether or not to ask for pre-payment before they will supply you, or whether to restrict your credit limit.

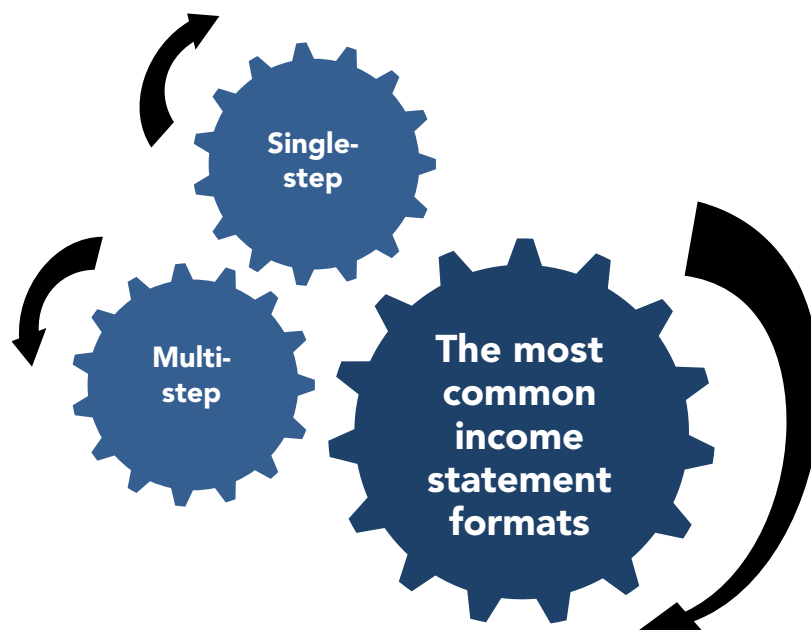
KEY POINTS

- ✓ The primary purpose of the income statement is to report an organization's earnings to investors over a specific period of time.
- ✓ It can also be used to judge how well the organization is managed financially; decide the type of investment opportunity it presents; make comparisons with its competitors; and assess its operating performance.

Income Statement Formats

There are a variety of different types of income statements that organizations use, but the most common are:

- Single-step format
- Multi-step format



The following sections take you through how each of these formats is produced and what is included in each one.

The Single-Step Format

This format for the income statement uses only one subtraction to arrive at net income. Taking away the sum of expenses and losses from the sum of revenues and gains gives a figure for net income.



The table below shows you what an income statement created in this way would look like. Then there is an explanation for each of the main sections.

Gary's Garden Furniture Income Statement January 1—December 13, 2013		
	\$	\$
REVENUES		
Sales	350,000	
Interest Revenues	1,000	
Gains	<u>2,000</u>	
Total Revenues		353,000
EXPENSES & LOSSES		
Cost of Goods Sold	125,000	
Salaries	110,000	
Rent	7,000	
Utilities	2,000	
Interest Expense	1,000	
Losses	1,000	
Bad Debt Provision	4,000	
Depreciation	<u>8,000</u>	
Total Expenses & Losses		(258,000)
NET INCOME		95,000

Within the heading of an income statement the name of the company, followed by the title 'Income Statement' must appear. On the third line you must specify the exact time period covered by the statement. For example:

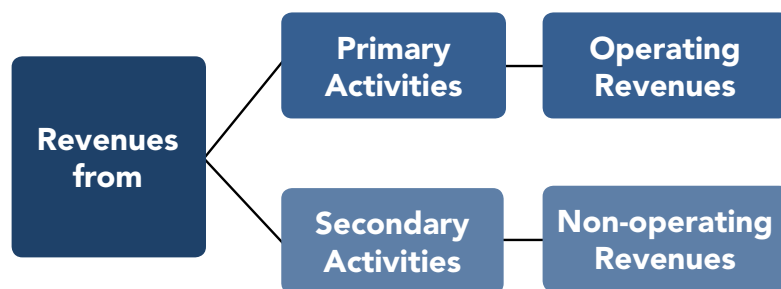
- January 1—December 31, 2013
- Year Ended April 5, 2013
- Quarter Ended March 31, 2013
- Month Ended June 30, 2013

It is extremely important that anyone reading the income statement is aware of the time period that it covers, as the statement can cover whatever period you wish to select or best suits your decision-making process.

Revenues

This is the income that flows into your organization and is used almost synonymously with sales. In government and nonprofit organizations it includes taxes and grants.

Remember not to confuse revenues with receipts. Under the accrual basis of accounting, revenues are shown in the period they are earned, not in the period when the cash is collected. Revenues occur when money is earned; receipts occur when cash is received.



These revenues include all of the payments that are made to your organization during a specified period. This may include payments made for things other than sales or whatever constitutes the primary activity of your organization. The revenues from 'non-primary' activities are itemized separately.

Revenues From Primary Activities

These are often referred to as operating revenues and are only those revenues derived from the provision of sales or services depending on the nature of your organization.

Revenues From Secondary Activities

These are often referred to as non-operating revenues and are those that an organization earns outside of selling goods and services. For example:

- Interest paid to the company by the bank for cash on deposit.
- Payments received for the lease of spare office space.

Gains

These are derived from the sale of long-term assets and are 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.

For example, if Gary's Garden Furniture sells one of its vans for \$7,000, because it is not an organization that deals in the buying and selling of vehicles, the sale of the van is outside of its primary activities.



- Gary's Garden Furniture sells one of its delivery vans for \$7,000. Over the years, the cost of the van was being depreciated on the company's accounting records (\$5,000).
- As a result, the money received for the van (\$7,000) was greater than the net amount shown for the vehicle on the accounting records (\$5,000).
- Resulting in a gain of \$2,000 from the van's sale.

This means that the company must report a gain equal to the amount of the difference—in this case, the gain is reported as \$2,000.

Expenses

These are all of the costs incurred during the period. Costs associated with the main activity of your organization are referred to as operating expenses, whereas those associated with a peripheral activity are non-operating expenses.

Expenses Involved in Primary Activities

These are the costs that are incurred in order to earn normal operating revenues. In the example of Gary's Garden Furniture, the cost of goods sold, salaries, rent, and utility costs are all considered normal operating expenses.

The cost of goods sold (COGS) is the costs that go into creating the products that an organization sells. In the case of Gary's, they buy in finished stock and then sell it on. Therefore, the cost of goods sold is the cost of the stock that was sold during the period.

This is calculated by taking the beginning inventory for the period, adding the total amount of purchases made during the period then deducting the inventory remaining at

the end. This calculation gives the total cost of the inventory sold by the company during the period.

Rent and Utilities are calculated according to the matching principle. Gary's have not yet received an electricity bill for the final quarter. Since the purpose of the income statement is to present an accurate picture of the finances for the period it needs to recognize this liability even though no invoice has been received. They know that last year's bill for the same period was \$450 and so they enter a figure of \$500 as a realistic estimate for this quarter.

Expenses from Secondary Activities

These are referred to as non-operating expenses. For example, interest expense is a non-operating expense because it involves the finance function of the organization, rather than the primary activities of buying and selling garden furniture.

Losses

These include things like the loss from the sale of long-term assets or a transaction that is outside of an organization'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.



As in the previous example of selling the van, Gary's is not a vehicle dealer, so the sale of the forklift is outside of the retailer's primary activities. Over the years, the cost of the forklift was being depreciated in the accounting records and as a result, the money received for it (\$2,000) was less than the net amount shown for it on the accounting records (\$3,000).

This means that Gary's made a loss (\$1,000) in this sale and it will be shown as such in the income statement.

Bad Debt Reserve

Even though Gary's is careful about extending credit it does sometimes sell its furniture to buyers who become insolvent or bankrupt before the invoice is paid. This creates a 'bad debt,' which means that payment will never be collected.

Technically, a bad debt becomes a bad debt when the chances of payment become so small as to be nonexistent. From experience Gary's know that around 1% of their total sales will never be paid for and can *assume* that the 1% bad debt expense has happened when the sale is made.

Even though no check is actually written to cover this percentage, it exists as a total against which actual bad debt can be subtracted.

Depreciation

Fixed assets are those that have a useful and productive life longer than the period of the income statement. Gary's own several items of office equipment, all of which have a useful life of several years. It would be unreasonable to apportion the costs of these to the quarter in which they were purchased.

This problem is overcome by charging only a portion of the cost of these assets to each quarter of their expected useful life. In the case of Gary's Garden Furniture, these fixed assets include company cars, warehouse equipment, personal computers, and office furniture.

Net Income

Gary's Garden Furniture's income statement shows a net income of \$103,000.

However, there are some things that should be borne in mind before taking this figure too literally. When preparing this income statement the accountant may have had to estimate certain expenses in order to recognize revenues when they are earned, recognize expenses when they are incurred, or match expenses with revenues.

KEY POINTS

- ✓ The single-step format income statement uses only one subtraction to arrive at net income.
- ✓ The time period covered by the income statement must always be clear.
- ✓ Operating revenues are those revenues derived from the provision of sales or services.
- ✓ Non-operating revenues are those that an organization earns outside of selling goods and services.
- ✓ Gains and losses are derived from the sale of long-term assets.
- ✓ Expenses involved in primary activities are the costs that are incurred in order to earn normal operating revenues. They include the cost of goods sold, salaries, utility bills, rents, etc.
- ✓ Expenses from secondary activities include things like interest payments, losses from the sale of long-term assets, or a transaction that is outside of an organization's primary activities.
- ✓ The bad debt figure exists as a total against which actual unpaid invoice amounts can be subtracted when the chances of payment becomes non-existent, although no check is actually written to cover these amounts.
- ✓ The depreciation figure represents the relevant proportion of the cost of fixed assets like company cars, warehouse equipment, personal computers, and office furniture.

Multiple-Step Income Statement

An alternative to the single-step income statement is the multiple-step income statement. This format explicitly segregates the operating revenues and operating expenses from the non-operating revenues, non-operating expenses, gains, and losses. It also shows the gross profit (net sales minus the cost of goods sold).

An income statement for Gary's Garden Furniture prepared using the multiple-step format would look like the table below. A description of what is occurring at each step follows the table.

Gary's Garden Furniture Income Statement January 1—December 31, 2013		
	\$	\$
Sales		350,000
Cost of Goods Sold		<u>125,000</u>
Gross Profit		225,000
OPERATING EXPENSES		
Salaries	110,000	
Rent	7,000	
Utilities	2,000	
Bad Debt Provision	4,000	
Depreciation	<u>8,000</u>	
Total Operating Expenses		(131,000)
OPERATING INCOME		94,000
NON-OPERATING OR OTHER		
Interest Revenues	1,000	
Gains	2,000	
Interest Expense	(1,000)	
Losses	<u>(1,000)</u>	
Total Non-Operating		1,000
NET INCOME		95,000

Using the above multiple-step income statement as an example, we see that there are three steps needed to arrive at the bottom line net income.

Step 1—Cost of goods sold is subtracted from net sales to arrive at the gross profit.

$$\begin{aligned}\text{Gross Profit} &= \text{Net Sales} - \text{Cost of Goods Sold} \\ &= \$350,000 - \$125,000 = \$225,000\end{aligned}$$

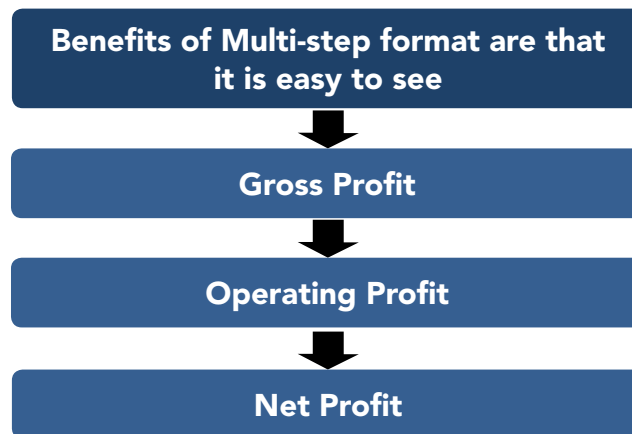
Step 2—Operating expenses are subtracted from gross profit to arrive at operating income.

$$\begin{aligned}\text{Operating Income} &= \text{Gross Profit} - \text{Operating Expenses} \\ &= \$225,000 - \$131,000 = \$94,000\end{aligned}$$

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

$$\begin{aligned}\text{Net Income} &= \text{Operating Income} + \text{Non-Operating Items} \\ &= \$94,000 + \$1,000 = \$95,000\end{aligned}$$

There are three benefits in using a multiple-step income statement instead of a single-step income statement.



1. It is easy to see the Gross Profit

The multiple-step income statement clearly states the gross profit amount. Many readers of financial statements monitor an organization's gross margin (gross profit as a percentage of net sales) and compare it with those of past years and with those of other organizations within the industry.

2. It is easy to see the Operating Profit

The multiple-step income statement presents the subtotal operating income, which indicates the profit earned from the company's primary activities of buying and selling merchandise.

Operating income is the profit that comes from doing what the organization was created to do. This is not the bottom line but it is quite close. It is the final result of its normal activities before unusual non-recurring or financially related items that are often considered incidental to its main purpose.

3. It is easy to see the Net Profit

The bottom line of a multiple-step income statement reports the net amount for all the items on the income statement. If the net amount is positive, it is labeled as 'net income.' If the net amount is negative, it is labeled as 'net loss.'

KEY POINTS

- ✓ The multiple-step income statement explicitly segregates the operating revenues and operating expenses from the non-operating revenues, non-operating expenses, gains, and losses.
- ✓ This makes it easy to see the gross profit, operating profit, and the net profit.

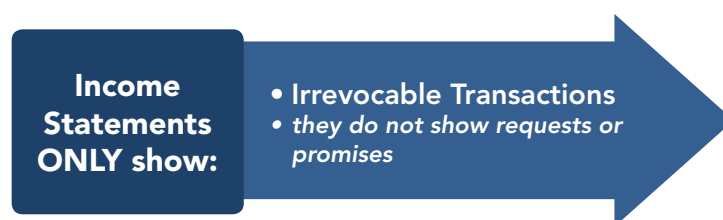
Importance of Transaction Timing

Providing data for, and using information gained from, an income statement is a necessary skill for an effective manager. One of the most important concepts you need to understand is how the timing of a transaction affects the figures in any given period.

Those unfamiliar with financial processes and procedures are often surprised when a monthly income statement does not show the effects of individual transactions that they expected to see. This includes both the revenue generated by a sale and the expenses and costs incurred in making that sale happen.

There are two reasons why this occurs:

1. There may be a long delay between the date a transaction was agreed with a customer or supplier and the date of the payment was made or received.
2. There may be confusion over when a transaction should properly be recorded.



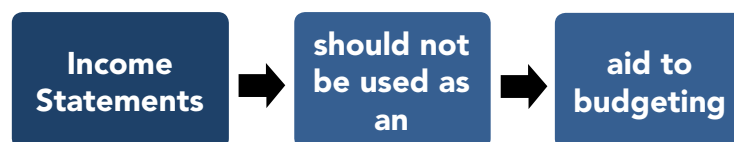
Until a sale or an expense becomes an irrevocable transaction it cannot be recorded in your income statement. Only when an organization, either yours or one of your suppliers, acts on the promise to deliver do we have an accounting event that should be recorded.

Any event that is simply a request or promise, which can be rescinded without penalty, does not represent an irrevocable transaction that you can record on your income statement. Events that are not recorded at the time they occur are shown in the example below.

One of Gary's Garden Furniture salesmen sells a \$7,500 suite of furniture. This particular suite is not in stock and must be ordered in. The customer pays a deposit of \$500 for the suite. The \$7,500 sale will not be recorded in the income statement as a sale. This is because the customer has not received the suite.

- The order placed by the salesman to the supplier will not appear. This is because the supplier has not shipped the suite to Gary's.
- The raising of a purchase order will not be reflected in the income statement because Gary's has not actually received any goods from the supplier at this point.
- Even when the supplier confirms receipt of the purchase order this will not appear in the statement. This is because Gary's have not yet taken possession of the suite.

The \$500 deposit will be recorded as a receipt because the company has received this cash, but the sale will only be itemized in the income statement when it has actually been delivered to the customer. This could be several weeks later and is likely to appear in the next quarterly statement. Similarly, the cost of buying in this suite would be itemized in the statement as a cost in the month that Gary's took possession of it at their warehouse.



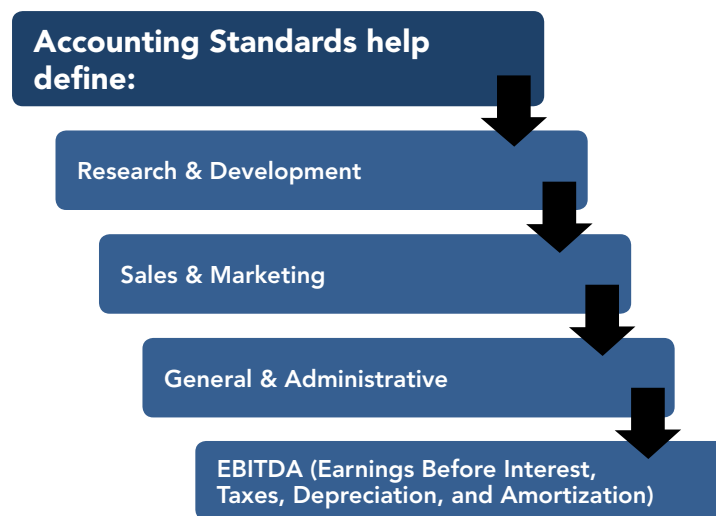
Much of this confusion arises because managers try to use the income statements to assist them in managing and monitoring the divisional or departmental budget. Income statements are not designed to be used this way. If you do want to use them to help with budgeting then they must be used in conjunction with an integrated enterprise accounting system that can keep track of sales made and purchase orders received but not yet fulfilled.

KEY POINTS

- ✓ Do not be surprised if a monthly income statement does not show the effects of individual transactions that you might expect to see.
- ✓ Income statements ONLY show irrevocable transactions; they do not show requests or promises.

Other Operating Expenses

When using an income statement solely within your organization there are accounting standards to help you define which of your expenses should be classified as 'operating' ones. There is some latitude as to exactly where such items should be placed, allowing you to represent your organization's expenses in a way that best reflects its primary activity.



The following are considered as an accounting standard and are described in greater detail in this section.

- Research and Development Costs
- Sales and Marketing Costs
- General and Administrative Costs
- EBITDA—Earnings Before Interest, Taxes, Depreciation, and Amortization.

Research and Development Costs

The money your organization spends to create new products or improve existing products is usually referred to as research and development costs, engineering expenses, or product development costs. All the costs incurred in activities to find something new to sell must be financed out of the gross profits and is usually considered to be an operating cost.

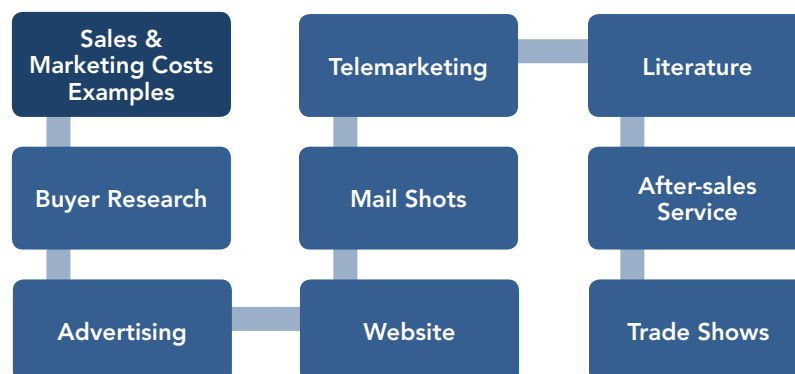
Sales and Marketing Costs

The direct costs of making a sale (for example on commissions) are often reported as part of the cost of sales. Beyond those costs directly related to making a sale, your organization invests substantial effort and money in creating and maintaining a sales and marketing presence.

Marketing costs are different from sales costs in that they represent all of those expenditures your organization makes to find out:

- What people want to buy
- How to interest people in its products, and
- How to create prospects for the company's sales force.

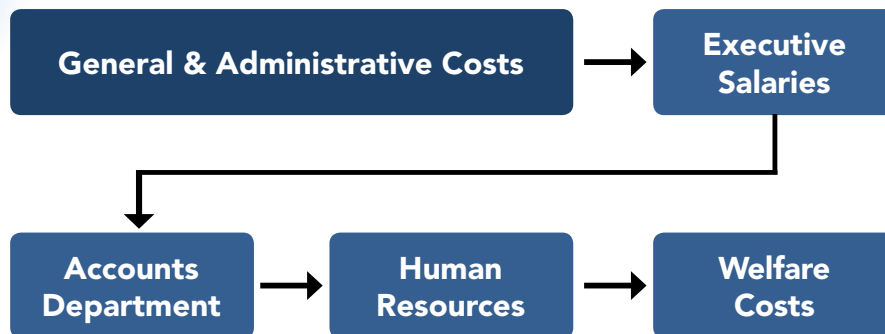
Usually none of these costs are directly related to making a sale, yet they are all necessary to create a sales pipeline from prospects through to buyers or customers.



Selling expenses represent the cost of actually selling the company's products and services, including putting salespeople into the field, running a telesales operation, distributing brochures, placing advertising, attending trade shows, etc.

General and Administrative Costs

The third common category of expense is general and administrative costs. These are costs that are needed to ensure the efficient running of your organization. This includes everything not grouped under some other heading. If it is not production, research and development, or marketing and sales then it must be general and administrative.



The types of costs to include under this heading are executive salaries, accounting, human resources, welfare costs, and all the costs of supporting the company's administrative organization.

EBITDA

This stands for Earnings Before Interest, Taxes, Depreciation, and Amortization. Amortization can be defined as spreading payments over multiple periods for loans and intangible assets, such as patents and intellectual property.

It is a modified way of presenting operating income for organizations that are not concerned about the financially based charges that it excludes.

A profit center within an organization does not normally concern itself with how the organization is financed, how it depreciates its assets, and how payments are made.



Removing all of these from the calculation gives an operating income at the business unit level. However, EBITDA sometimes appears on published income statements of companies with heavy investments in equipment and a heavy debt load as a way to show the earnings without the burden of these financial charges.

KEY POINTS

- ✓ There are accounting standards to help you define operating and non-operating expenses.
- ✓ These cover research and development costs, sales and marketing costs, general and administrative costs, and EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization).

Other Generic Terms

There are some more general items that you need to have a clear understanding of when using an income statement. These are:

- Non-operating Income and Expenses
- Income Before Taxes and Income Taxes
- Net Income

Non-operating Income and Expenses

These items are shown near the bottom of the income statement so that they do not detract from the conclusions a reader may make about how efficiently an organization is run.

The total of these items, whilst typically small in relation to an organization's operation, is not necessarily insignificant. It can become very large in relation to net income where an organization is operating a low profit margin: for example interest income and interest expenses. These are considered financial costs unless the company is in the financial sector (for example selling insurance or banking), in which case they will be operating costs.

Income Before Taxes and Income Taxes

Pretax income or income before taxes is the income that an organization expects to pay tax on and is the amount upon which its income tax estimate is based. Immediately following this item is an income tax estimate usually referred to as a 'Provision for Income Taxes.'

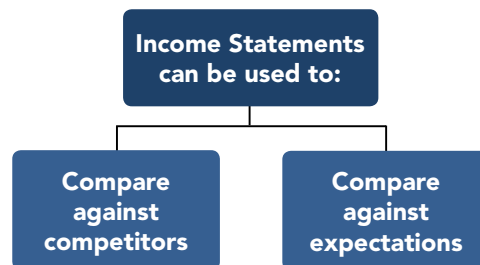
Net Income

This is the bottom line. It is the final financial results of everything the company has done for the period being reported.

Using Income Statements Effectively

Internal income statements used by managers are typically more useful than those generated for investors and third parties, because they contain greater detail than the highly summarized published versions.

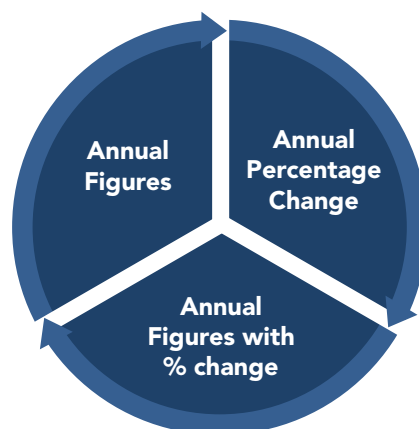
The best way to use an income statement is to compare a recent one with earlier ones for a similar period. You can also compare them to the expectations set out by the organization in their long-term plan. This is often discussed in the Chair's or CEO's section of an annual report.



They are also very useful for comparing your organization's performance with that of its main competitors. It is by comparison against some benchmark that the income statement has its greatest value, something that can not be done when you look at a single income statement in isolation.

Income Statements in Comparative Formats

You may have seen income statements presented in several comparative formats when they are used internally. These formats present two or more years of data side-by-side to make it easy to compare the figures.



The most common formats for comparison are:

- Annual figures
- Annual figures with percentage change
- Annual percentage

When you are making such comparisons within your organization you will normally use actual dollar amounts. This format makes it easy to see any increases or decreases in sales, expenses, profits, and any of the detailed amounts when making decisions.

Comparison of Annual Figures

The following table shows the dollar amounts for Gary's Garden Furniture for this year and the previous one. All amounts are in US dollars.

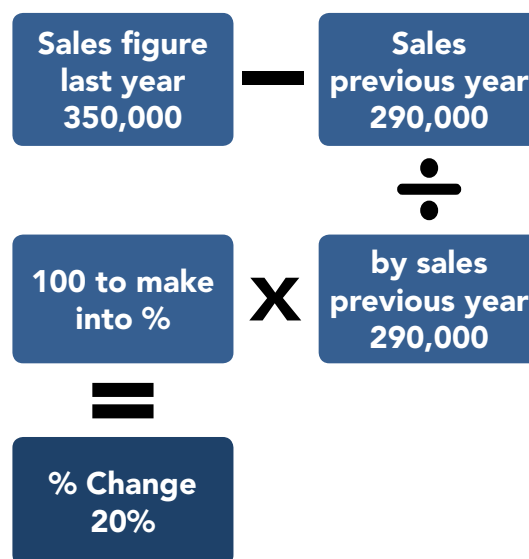
Gary's Garden Furniture Income Statement Year to December 31		
	Last Year	Previous Year
Sales	350,000	290,000
Cost of Goods Sold	(125,000)	(110,000)
Gross Profit	225,000	180,000
OPERATING EXPENSES		
Salaries	110,000	105,000
Rent	7,000	7,000
Utilities	2,000	1,500
Bad Debt Provision	4,000	3,000
Depreciation	(8,000)	(7,000)
Total Operating Expenses	131,000	123,500
OPERATING INCOME	94,000	56,500
NON-OPERATING OR OTHER EXPENSES		
Interest Revenues	1,000	2,000
Gains	2,000	0
Interest Expense	(1,000)	(1,000)
Losses	(1,000)	(1,000)
Total Non-Operating	1,000	0
NET INCOME	95,000	56,500

This comparison shows you that Gary's has managed to increase sales from \$290,000 to \$350,000 dollars and the company made an additional \$39,000 in profit.

Comparison of Annual Figures with Percentage Change

You can find comparing your organization's figures in this way really useful as the addition of percentage changes makes it easier to make comparisons and to draw meaningful conclusions.

To work out the percentage change between years is a simple calculation. First you take the previous year's sales figure from last year's sales figure. Then you divide this answer by the previous year's sales and then multiple by 100 to turn it into a percentage.



The resulting percentage change figures are then added to the income statement. Using the comparison method, the following table shows that all of the changes in operating costs between last year and the previous year have been shown as percentages.

Gary's Garden Furniture Income Statement Year to December 31			
	Last Year	Previous Year	% Change
Sales	350,000	290,000	21%
Cost of Goods Sold	(125,000)	(110,000)	14%
Gross Profit	225,000	180,000	25%
OPERATING EXPENSES			
Salaries	110,000	105,000	5%
Rent	7,000	7,000	0
Utilities	2,000	1,500	33%
Bad Debt Provision	4,000	3,000	33%
Depreciation	(8,000)	(7,000)	15%
Total Operating Expenses	131,000	123,500	6%
OPERATING INCOME	94,000	56,500	67%
NON-OPERATING OR OTHER EXPENSES			
Interest Revenues	1,000	2,000	NA
Gains	2,000	0	NA
Interest Expense	(1,000)	(1,000)	NA
Losses	(1,000)	(1,000)	NA
Total Non-Operating	1,000	0	NA
NET INCOME	95,000	56,500	69%

The questions you might ask when analyzing this income statement are:

- Sales have increased by 21%—*how did this impact operating expenses? Have they increased by more or less than 21%?*
- Operating expenses have increased by only 6%. *You would hope to see some of the value of the increased sales reflected by an increase in operating income. Operating income increased by a massive 67%.*

In this example, the figures have vindicated the decision by Gary's management to stock more exclusive ranges of garden furniture as the increased value of sales has had little appreciable effect on operating costs.

This example illustrates that using income statements in this way is an extremely useful management decision-making tool.

Annual Percentage Comparison

It is also possible to convert all of the figures on the income statement to percentages of net sales as shown in the example below.

Gary's Garden Furniture Income Statement Year to December 31		
	Last Year	Previous Year
Sales	100%	100%
Cost of Goods Sold	36%	38%
Gross Profit	64%	62%
OPERATING EXPENSES		
Salaries	31%	36%
Rent	2%	2%
Utilities	<1%	<1%
Bad Debt Provision	1%	1%
Depreciation	2%	2%
Total Operating Expenses	37%	42%
OPERATING INCOME	27%	19%
Total Non-Operating	<1%	0%
NET INCOME	27%	20%

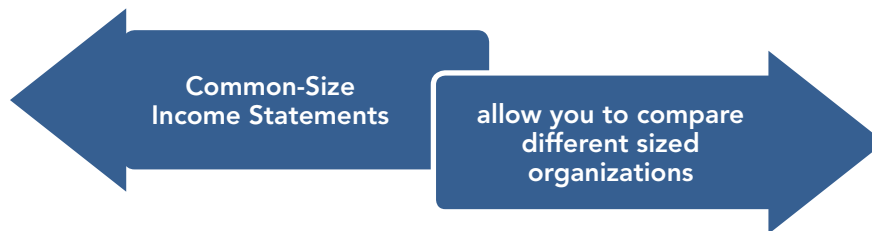
Using this format you can see that the percentage of gross profit is only up by 2%. Gary's are not making an appreciably higher percentage margin on the furniture they sell, but their operating expenses (as a percentage of sales) have fallen by 5%. This means that more of the sales revenue is finding its way to the bottom line. In fact the organization has increased its percentage net income from 20% to 27%.

KEY POINTS

- ✓ The best way to use an income statement is to compare a recent one with earlier ones for a similar period.
- ✓ Income statements used for comparison can use dollar amounts, percentages, or a combination.
- ✓ Using income statements to make comparisons is an extremely useful management decision-making tool.

Common-Size Statements

It is also possible to express the income statement in percentages only and this is known as a common-size financial statement. You will find that this is frequently used to compare organizations of differing sizes.



For example, as a manager at Gary's Garden Furniture (GGF) you may want to compare its operation with that of the market leader Garden Warehouse (GW). You can do this despite the difference in size of the two companies by looking at common-size statements of income. In such circumstances comparing actual dollar figures would be meaningless.

Gary's Garden Furniture (GGF) / Garden Warehouse (GW) Income Statement Year to December 31		
	GGF	GW
Sales	100%	100%
Cost of Goods Sold	36%	30%
Gross Profit	64%	70%
OPERATING EXPENSES		
Salaries	31%	27%
Rent	2%	4%
Utilities	<1%	1%
Bad Debt Provision	1%	1%
Depreciation	2%	2%
Total Operating Expenses	37%	35%
OPERATING INCOME	27%	35%
Total Non-Operating	<1%	2%
NET INCOME	27%	37%

From the table you can establish some key factors that come to light when using this style of income statement. These are:

- **Gross Profit**—there is a significant difference between the two organizations: GW's is 70% compared to GGF's 64%.
 - This is most likely due to GW's ability to negotiate better prices and delivery terms with manufacturers and wholesalers. They may even produce their own range in a low-wage economy, giving them better sales margins.
 - Because of its buying power, GW may be able to deal directly with certain manufacturers, whereas Gary's has to purchase through a wholesaler because their order is so much smaller.
- **Salaries**—Gary's salary costs are significantly greater when you take into account their difference in size: GW's 27% compared to GGF's 31%.
 - Salaries make up over a quarter of the operating costs of GW and nearly a third for GGF. The most likely explanations are:
 - GW has fewer staff per square foot of their shops.
 - GW pays the majority of their staff minimum wage.
 - GGF is a family-run organization, so chooses to pay themselves more or offer better benefits to staff.
- **Rent**—GW's rent bill is double (at 4%) that of GGF's.
 - This is because their stores are generally in more prestigious locations and proportionately larger than Gary's.
- **Operating Income**—GW's is 35% compared to GGF's 27%
 - This 8% is a significant difference and is mainly due to the differences in Gross Profit, Salaries and Rent discussed above.

As a manager at Gary's you would bring this information to discussions on the best growth strategy your organization should adopt. Areas to be discussed could include the following:

- Avoiding competing directly on price with GW by:
 - Not stocking the same ranges of furniture.
 - Offering free additional covers or cushions.

- Specializing in selling luxury garden furniture where price is less of an issue.
- Promoting the knowledge and experience of your sales people in order to enable you to offer a better service to customers.
- Because Gary's locations are not in such prestigious areas you need to promote other benefits to your customers. For example:
 - Better parking facilities
 - Avoid congested roads
 - Open later in the evenings
 - Sub-let part of your shop and offer café facilities
 - Offer free or low-cost delivery to a wider area than GW

Each of these potential strategies would need to be researched further before any final decision is made. Information from an income statement serves as a guide, helping you decide on the best areas to research in greater depth. It helps to identify those areas that offer your organization the most effective way to improve your profitability and remain competitive.

When you use common-size income statements you can also compare your organization's figures to the average percentage figures for your industry. Publishers and trade associations compile such figures, which you can obtain if you subscribe to their publications or if you are a member of their association.

KEY POINTS

- ✓ Common-size income statements using percentages can only be used to compare organizations of differing sizes.
 - ✓ These can provide valuable input into the management decision-making process.
 - ✓ Common-size income statements can also be used to compare your organization's figures to the average for your industry.
-

Performing a Common-Size Analysis

Your role may require you to perform an analysis using common-size income statement data and to do this you have to follow a simple process.

- Take your oldest year and make the revenue or sales figure your baseline.
- Then show following years as a percentage gain or loss of this baseline.
- Next, for each of the years under consideration express operating expenses and income as a percentage of revenue.
- You can then look for trends in the resulting data.

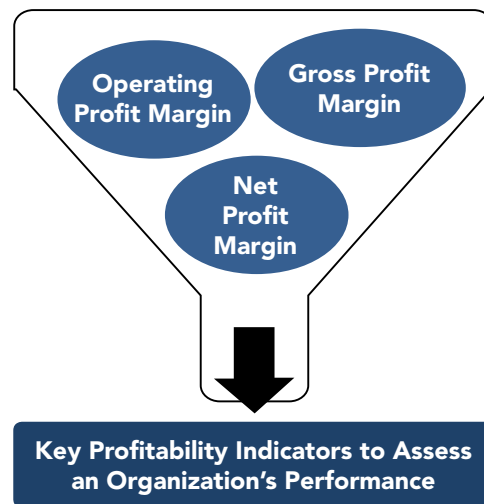
When looking for trends you are hoping to see that revenue growth exceeds or at least keeps pace with the growth of expenses. If you look at the table below you can see that operating income or revenue is declining, but still acceptable.

Common-size Analysis 2011-2013			
Year	Revenue	Operating Expenses	Operating Income
2011	Baseline	20%	80%
2012	Plus 5%	27%	73%
2013	Plus 10%	34%	66%

The figures in the table show that you need to address the growth of operating expenses if your organization wishes to remain within a reasonable range of profitability. Otherwise the decline in profits will continue and could eventually affect the viability of your organization.

The growth of expenses is outpacing revenue growth and by using the common-size analysis you are able to easily identify discrepancies that require further exploration.

You may need to refer to good sources of data such as Dun & Bradstreet and the Risk Management Association to assist your analysis. Both these organizations release an annual study of financial statements for small- and medium-sized organizations (SMEs).



Once you've obtained this data, you can break down the information provided by the income statements. Three of the big profitability indicators you should look at are:

- **Gross Profit Margin**—measures how well an organization is performing at its most base level of activity. Is it making a profit on the product or service that it is selling?
- **Operating Profit Margin**—is calculated by taking the revenue and subtracting all the expenses related to the day-to-day operations of the organization, such as cost of goods sold and labor. This will exclude things like interest expense and one-time charges that are not a core part of the organization's operations.

This gives the operating earnings, which are then divided by revenue to get the operating profit margin. The resulting figure provides a good indication of how efficiently the company is operating.

- **Net Profit Margin**—is derived by dividing net income by revenue, measuring the amount of income an organization generated for each dollar of revenue.

Once you have these three figures you will be able to make a judgment on how profitable an organization's growth strategy has been.

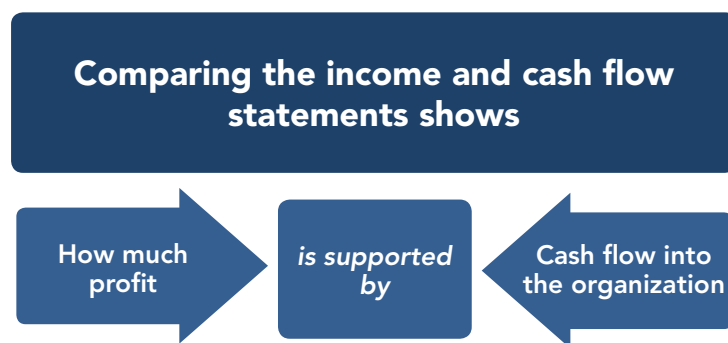
KEY POINT

- ✓ When performing a common-size analysis the profitability indicators you should look at are gross profit margin, operating profit margin, and net profit margin.

Comparison with Cash Flow Statements

By comparing income statements with the relevant cash flow statement, you can see how much of the profit being shown is supported by cash actually coming into the company.

A cash flow statement shows the amount of cash an organization has coming in and going out over a certain period. If you need further details and explanation of a cash flow statement then you can download for free our eBook 'Understanding Cash Flow,' which describes this statement in detail. Visit our website www.free-management-eBooks.com and select this eBook from the Financial Skills set.



Booming profits on the income statement and weak, or even negative, cash flow means that the *quality* of the earnings being shown is poor.

There are certain circumstances, for example a start-up, where it may be acceptable to have positive, growing net income and negative cash flow. This is because the new organization has to make substantial investments and may not be collecting from its customers yet.

In the case of a more established company, cash flow and net income should be highly correlated. Once an organization has matured, it should be receiving cash from existing customers as well as selling to new customers, so the cash flow should have caught up.

As previously described, the revenue on the income statement does not necessarily represent the cash that is actually coming into the organization. So it is important that you know how that revenue is being determined because accounting rules allow for some discretion under the accrual method.

What this means in terms of your analysis is that you have to watch out for instances where an organization is trying too hard to make the numbers look better by recognizing sales too early. At what point during the sales process does it reflect revenue on its income statement?

- Is it when they take an order or when they deliver the goods or services?
- How do they record revenue for sales completed over a long period of time?
- Do they have problems with revenue collection or bad debt?

Understanding how aggressive an organization is in their revenue recognition helps you determine the quality of the data that is shown on the income statement.

This also applies to expenses such as depreciation and amortization. For example:

- An industry standard for depreciating an asset is 10 years, but the organization spreads it out over 20.

By altering the way it allocates its depreciation in this way the organization will appear more profitable than their competitors who are using the industry standard, which is a less aggressive accounting practice.

In short, you need to identify the areas where an organization has a lot of accounting discretion and figure out how aggressively or conservatively it's being done.

KEY POINTS

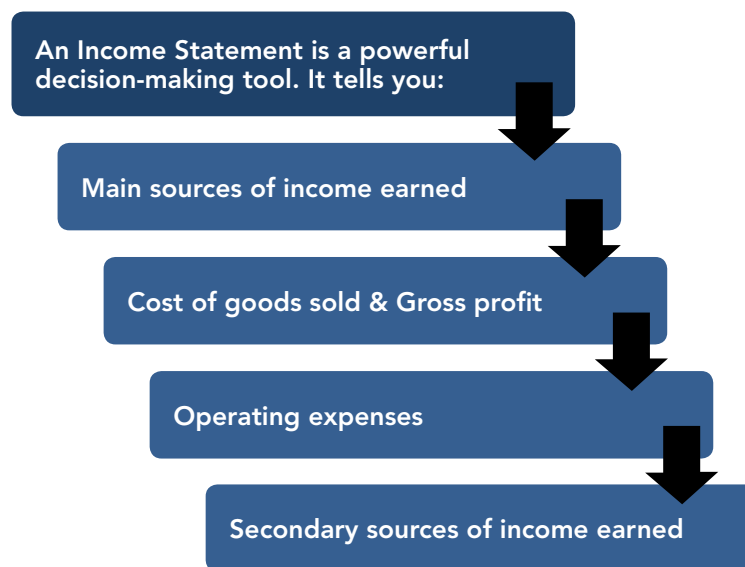
- ✓ Comparing an income statement with the relevant cash flow statement shows how much of the profit is supported by cash actually coming into the company.
 - ✓ Understanding how aggressive an organization is in their revenue recognition helps you determine the quality of the data that is shown on the income statement.
-

Summary

The income statement is a very powerful decision-making tool that you need to be familiar with. It tells you the:

- Main sources of income earned
- Cost of goods sold and the gross profit
- Operating expenses including salaries, rent, utility costs, etc.
- Secondary sources of income earned

The Income Statement is a historical document in the sense that it tells you what has already happened. It cannot be relied on as a predictor of what will happen in the future.



Even if the statement is well prepared using reliable data and conservative accounting decisions, it is impossible to accurately account for everything and you must take this into consideration when using it as part of your decision making process. For example,

- if the company spends \$500,000 on a television advertising campaign it is impossible to say when the additional revenues attributable to it will be collected as it could be many months later.

Since revenues cannot be fully and accurately reported in the accounting period, neither can the profit be calculated with one hundred percent accuracy. As we mentioned before, net income does not mean cash. It only means the excess revenue over expenses in a specific period. Remember that incoming cash could be used for more investments or to buy more assets, or it could actually be received in a month other than when it was generated.

As your role in management expands you will likely find the need to gain a greater appreciation of financial terminology and how it is presented and used in the decision-making process. If you wish to learn more in the area of Financial Skills look at the other eBooks in this set, which are available as free downloads from www.free-management-ebooks.com.

The other titles in the Financial Skills set are:

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