
Financial Statements

Intro There are four main financial statements. They are: (1) balance sheets; (2) income statements; (3) cash flow statements; and (4) statements of shareholders' equity. Balance sheets show what a company owns and what it owes at a fixed point in time. Income statements show how much money a company made and spent over a period of time. Cash flow statements show the exchange of money between a company and the outside world also over a period of time. The fourth financial statement, called a "statement of shareholders' equity," shows changes in the interests of the company's shareholders over time.

Let's look at each of the first three financial statements in more detail.

Balance Sheets A balance sheet provides detailed information about a company's assets, liabilities and owners' equity. The "balance" comes in because:

Total Assets = Total Liabilities & Owners' Equity.

Usually balance sheets show assets at the top half, followed by liabilities and owners' equity on the bottom.

A balance sheet shows a snapshot of a company's assets, liabilities and owners' equity at the end of the reporting period. It does not show the flows into and out of the accounts during the period.

Assets Assets are things that a company owns that have value. This typically means they can either be sold or used by the company to make products or provide services that can be sold. Assets include physical property, such as plants, trucks, equipment and inventory. It also includes things that can't be touched but nevertheless exist and have value, such as trademarks and patents. And cash itself is an asset. So are investments a company makes.

Assets are generally listed based on how quickly they will be converted into cash. This is called liquidity. Current assets are things a company expects to convert to cash within one year. A good example is inventory. Most companies expect to sell their inventory for cash within one year. Noncurrent assets, i.e. long term assets, are things a company does not expect to convert to cash within one year or that would take longer than one year to sell. Noncurrent assets include fixed assets. Fixed assets are those assets used to

operate the business but that are not available for sale, such as trucks, office furniture and other property.

Liabilities

Liabilities are amounts of money that a company owes to others. This can include all kinds of obligations, like money borrowed from a bank to launch a new product, rent for use of a building, money owed to suppliers for materials, payroll a company owes to its employees, environmental cleanup costs, or taxes owed to the government. Liabilities also include obligations to provide goods or services to customers in the future.

Liabilities are generally listed based on their due dates. Liabilities are said to be either current or long-term. Current liabilities are obligations a company expects to pay off within the year. Long-term liabilities are obligations due more than one year away.

Owners' equity

Owners' equity is sometimes called capital or net worth. It's the money that would be left if a company sold all of its assets and paid off all of its liabilities. This leftover money belongs to the owners, of the company.

Owners' equity is the amount owners invested in the company plus or minus the company's earnings or losses since inception. Sometimes companies distribute earnings, instead of retaining them. These dispersals are called dividends if from a C-corporation, distributions if from an S-corp.

Sample Balance Sheet

The following sample Balance Sheet illustrates the key components of a correctly constructed statement including:

- The name of the company
- The date of the statement
- Assets listed in the order of Liquidity which is defined as the ease with which an asset can be converted into cash without much loss in value (I can sell my car for \$20 but that would be a substantial loss in value.)
- Accum Deprec is reported for each type of fixed asset and not the entire category of Fixed Assets
- Land is not depreciated as it does not lose value except in mining or similar activities
- Accum Amortization is reported for each type of intangible asset

and not the entire category of Intangibles

- Current Portion of L.T. Debt is reported in the Current Liability section.

Big Wig Company
Balance sheet as of 12-31-2009

Assets

Cash (Checking Account)	50	
Undeposited Funds	350	
Accounts Receivable	200	
Inventory	<u>300</u>	
Total Current Assets		900
Fixed Assets		
Office Equipment	1,700	
Accum. Deprec. - Office Equip.	<u>(400)</u>	
Net Office Equipment		1,300
Land	<u>10,000</u>	
Total Fixed Assets		11,300
Intangible & Other Assets		
Patents	500	
Accum. Amortization - Patents	<u>(200)</u>	
Net Patents		300
Prepaid Insurance	<u>125</u>	
Total Intangibles		<u>425</u>
TOTAL ASSETS		<u><u>425</u></u>

12,625

Liabilities and Owner's Equity

Current Liabilities

Accounts Payable	100
Unearned Revenue	700
Wages Payable	500
Curr. Portion of L.T. Debt	<u>250</u>

Total Current Liabilities 1,550

L.T. Liabilities

Note Payable	<u>1,250</u>
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TOTAL LIABILITIES 2,800

Owner's Equity

Capital Stock	600
Additional Paid-In Capital	1,000

Distributions (400)

Net Income 8,625

TOTAL OWNERS' EQUITY 9,825

TOTAL LIABILITIES & OWNERS'
EQUITY 12,625

Income Statements

An income statement is a report that shows how much revenue a company earned over a specific time period (usually for a year or some portion of a year). An income statement also shows the costs and expenses associated with earning that revenue. The literal “bottom line” of the statement usually shows the company’s net earnings or losses. This tells you how much the company earned or lost over the period.

Income statements also report earnings. This calculation tells you how much money owners would receive if the company decided to distribute all of the net earnings for the period. (Companies almost never distribute all of their earnings. Usually they reinvest them in the business.)

To understand how income statements are set up, think of them as a set of stairs. You start at the top with the total amount of sales made during the accounting period. Then you go down, one step at a time. At each step, you make a deduction for certain costs or other operating expenses associated with earning the revenue. At the bottom of the stairs, after deducting all of the expenses, you learn how much the company actually earned or lost during the period. This is called “the bottom line.”

A review of the following Income Statement should reveal the primary features of a correctly constructed statement including:

- The name of the company
- The period covered, i.e.”the year ending 12-31-2007”
- “Receipts” minus “Sales Tax” = “Revenue”
- “Revenue” minus “Returns & Allowances” + “Discounts” = “Sales”
- Sales is the benchmark of the percentage comparisons, rt. Clmn 100%
- COGS (Cost of Goods Sold) comprises ALL of the direct expenses which are those costs which vary directly with Sales.
- General & Admin Expenses are listed in order of size to derive EBITDA

EBITDA stands for “Earnings Before Interest, Taxes, Depreciation and Amortization” and is the most relevant “bottom line” number. Depreciation and Amortization are non cash deductions for the write off of long term assets primarily from prior periods. Interest reflects how the operations were financed but has nothing to do with operations per se and taxes vary depending on organizational structure. Hence EBITDA is a good

measurement of the results of operations.

Widget Sales Company Income Statement for the year ending 12-31-2007		
Receipts	7,424,552	100.1%
Sales tax	4,005	0.1%
Revenue	7,420,547	100.1%
Returns & Allowances	1,010	0.0%
Discounts	3,556	0.0%
Sales	7,415,981	100.0%
COGS	458,999	
Direct Labor	0	
Subcontract Service	32,560	
Delivery	985	
Sales commissions	742,455	
Total COGS	1,894,879	25.6%
Gross Profit	5,521,102	
General & Admin Expenses	1,200,000	16.2%
Rent	00	%
Admin Payroll Expense	845,000	
Admin Wages	126,700	
Admin Payroll Taxes	25	
Admin Benefits	75,640	

	0	
	1,047,3	14.1
Total Admin Payroll	65	%
	575,00	7.8
Advertising Expense	0	%
Professional Fees		
	52,00	
Accounting	0	
	48,00	
Legal	0	
Total Professional Fees	100,00	1.3
	0	%
		1.1
Repairs & Maintenance	84,565	%
		1.0
Utilities Expense	73,655	%
		1.0
Telephone Expense	72,000	%
Insurance		
	10,20	
Gen. Liability	0	
	14,00	
Errors & Omissions	9	
	35,02	
Key Man Insurance	5	
Total Insurance	59,234	0.8
		%
Training & Continuing Education		0.7
	54,095	%
		0.5
Internet Expense	40,500	%
		0.1
Permits & Licenses	10,500	%
Total General & Admin Expenses	3,316,914	44.7
		%
EBITD		
A	2,204,188	
		6.1
Depreciation & Amortization	450,000	%

EBIT, Income from Operations	1,754,188	4.9
Interest Expense	360,085	%
EBT, Earnings before Tax	1,394,103	
Income Tax	642,890	8.7
Net		10.1
Income	751,213	%

You may not have all of the accounts that you see in the sample. For example, you may not need to collect or pay sales tax. Nonetheless, IF you have the accounts listed, this should be how you would present them. Other accounts, not shown, can be included by inference.

Gross Receipts At the top of the income statement is the total amount of money received. This top line is referred to as “Receipts” or “Gross Receipts.” It’s called “gross” because expenses have not been deducted from it yet. So the number is “gross” or unrefined.

Gross Revenue From this number we’re going to subtract Sales Tax which we collect on behalf of the state. Those dollars are never ours and therefore should never be included in the company’s “Revenue.” Accordingly, it is included in “Receipts” and then subtracted to derive the company’s Revenue or even “Gross Revenue.”.

Net Revenues or Sales The next lines represent the money the company doesn’t expect to collect on some sales. This could be due, for example, to sales discounts or merchandise returns. When you subtract “Discounts, Returns and Allowances from “Revenue,” you arrive at the company’s “Net Revenues” or “Sales.” Sales are *the* primary measurement of a company’s size. It also represents the number from which all other accounts are measured. Accordingly, in the % column, “Sales” will always be 100%.

Cost of Goods Sold (COGS) Moving down the report from the Sales line, there are several lines that represent various kinds of direct expenses. These next lines after Sales show

the costs of the sales, otherwise known as the “Cost of Goods Sold.” Each line represents a different component of the total direct costs. The total COGS number tells you the amount of money the company spent to produce the goods or services it sold during the accounting period.

Gross Profit Margin

The next line subtracts the costs of sales, COGS, from “Sales” to arrive at a subtotal called by various names including “gross profit,” “gross margin,” “gross profit margin” and internally “contribution” because this represents the money available to cover or contribute to Overhead. It’s considered “gross” because there are many expenses that haven’t been deducted from it yet and it’s the first profit number. In the example above we can see that total COGS is 25.6% meaning that our gross profit margin is 1 minus that, or 74.4%. Expressed another way, this means that for every \$100 of sales \$74.40 of it goes to cover overhead.

General & Administrative Expenses

The next section, the “overhead” section, deals with the operating expenses that do NOT vary much with additional sales. Therefore, they are not direct expenses. They are “Overhead.” These are expenses that go toward supporting a company’s operations for a given period – for example, rent, insurance, salaries of administrative personnel and costs of researching new products. Many marketing expenses are another example. Operating expenses are different from “COGS,” which were deducted above, because these operating expenses cannot be linked directly to the production of the products or services being sold.

Earnings Before Interest, Taxes, Depreciation & Amortization (EBITDA)

Once the General & Administrative expenses have been deducted we arrive at another very important number called simply “EBITDA” which stands for “Earnings Before Interest, Taxes, Depreciation & Amortization.” Whew! Did you get all that? Depreciation and amortization haven’t been deducted yet partly because they represent non cash transactions and they’re mostly from prior years. Depreciation takes into account the wear and tear on some assets, such as machinery, tools and furniture, which are used over the long term. Companies spread the cost of these assets over the periods they are used. The “charge” for using these assets during the period is a fraction of the original cost of the assets.

Earnings Before Interest, & Taxes (EBIT) After all operating expenses are deducted, we arrive at operating profit (earnings) before interest and income tax expenses, also known as EBIT. This is often inappropriately called “income from operations.” It is inappropriate because it includes Interest which is a function of how the business was financed and should therefore not be included in “income from operations.”

Earnings Before Taxes (EBT) Next, companies must account for interest income and interest expense. Interest income is the money companies make from keeping their cash in interest-bearing savings accounts, money market funds and the like. On the other hand, interest expense is the money companies paid in interest for money they borrow. In either case, interest has nothing to do with operations. It has all to do with how the business was financed or how the business invested its excess cash.

Some income statements show interest income and interest expense separately. Some income statements combine the two numbers. The interest income and expense are then added or subtracted from the operating profits (EBIT) to arrive at operating profit *before* income tax (EBT).

Net Profit or Net Income Finally, income tax is deducted and you arrive at the bottom line: net profit or net losses. (Net profit is also called net income or net earnings.) This tells you how much the company actually earned or lost during the accounting period. Did the company make a profit or did it lose money?

Earnings Per Share or EPS Some income statements include a calculation of earnings per share or EPS. This calculation tells you how much money owners would receive for each share of stock (or ownership interest, if LLC) they own if the company distributed all of its net income for the period. To calculate EPS, you take the total net income and divide it by the number of outstanding shares of the company.

Cash Flow Statements

Cash flow statements report a company's inflows and outflows of cash. This is important because a company needs to have enough cash on hand to pay its expenses and purchase assets. While an income statement can tell you whether a company made a profit, a cash flow statement can tell you whether the company generated cash.

A cash flow statement shows changes over time rather than absolute dollar amounts at a point in time. It uses and re-configures the information from a company's balance sheet and income statement.

The bottom line of the cash flow statement shows the net increase or decrease in cash for the period. Generally, cash flow statements are divided into three main parts. Each part reviews the cash flow from one of three types of activities: (1) operating activities; (2) investing activities; and (3) financing activities.

**Operating
Activities**

The first part of a cash flow statement analyzes a company's cash flow from net income or losses. For most companies, this section of the cash flow statement reconciles the net income (as shown on the income statement) to the actual cash the company received from or used in its operating activities. To do this, it adjusts net income for any non-cash items (such as adding back depreciation expenses) and adjusts for any cash that was used or provided by other operating assets and liabilities.

**Investing
Activities**

The second part of a cash flow statement shows the cash flow from all investing activities, which generally include purchases or sales of long-term assets, such as property, plant and equipment, as well as investment securities. If a company buys a piece of machinery, the cash flow statement would reflect this activity as a cash outflow from investing activities because it used cash. If the company decided to sell off some investments from an investment portfolio, the proceeds from the sales would show up as a cash inflow from investing activities because it provided cash.

**Financing
Activities**

The third part of a cash flow statement shows the cash flow from all financing activities. Typical sources of cash flow include cash raised by selling stocks and bonds or borrowing from banks. Likewise, paying back a bank loan

would show up as a use of cash flow.

**Read the
Footnotes**

It's so important to *read the footnotes*. The footnotes to financial statements are packed with information. Here are some of the highlights:

- **Significant accounting policies and practices** – Companies are required to disclose the accounting policies that are most important to the portrayal of the company's financial condition and results. These often require management's most difficult, subjective or complex judgments.
 - **Income taxes** – The footnotes provide detailed information about the company's current and deferred income taxes. The information is broken down by level – federal, state, local and/or foreign, and the main items that affect the company's effective tax rate are described.
 - **Pension plans and other retirement programs** – The footnotes discuss the company's pension plans and other retirement or post-employment benefit programs. The notes contain specific information about the assets and costs of these programs, and indicate whether and by how much the plans are over- or under-funded.
 - **Stock options** – The notes also contain information about stock options granted to officers and employees, including the method of accounting for stock-based compensation and the effect of the method on reported results.
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**Read the
Management's
Discussion and
Analysis**

You can find a narrative explanation of a company's financial performance in a section of the quarterly or annual report entitled, "Management's Discussion and Analysis of Financial Condition and Results of Operations." MD&A is *management's* opportunity to provide investors with its view of the financial performance and condition of the company. It's management's opportunity to tell investors what the financial statements show and do not show, as well as important trends and risks that have shaped the past or are reasonably likely to shape the company's future.

The government's rules concerning MD&A require disclosure about trends, events or uncertainties known to management that would have a material impact on reported financial information. The purpose of MD&A is to provide investors with information that the company's management believes to be necessary to an complete understanding of its financial condition, changes in financial condition and results of operations. It is intended to help investors to see the company through the eyes of management. It is also intended to provide context for the financial statements and information about the company's earnings and cash flows.

Financial Statement Ratios and Calculations

You've probably heard people banter around phrases like "P/E ratio," "current ratio" and "operating margin." But what do these terms mean and why don't they show up on financial statements? Listed below are just some of the many ratios that investors calculate from information on financial statements and then use to evaluate a company. As a general rule, desirable ratios vary by industry.

Debt-to-equity ratio

Debt-to-equity ratio compares a company's total debt to owners' equity. Both of these numbers can be found on a company's balance sheet. To calculate debt-to-equity ratio, you divide a company's total liabilities by its owners' equity, or

$$\text{Debt-to-Equity Ratio} = \text{Total Liabilities} / \text{Owners' Equity}$$

If a company has a debt-to-equity ratio of 2 to 1, it means that the company has two dollars of debt to every one dollar owners' invest in the company. In other words, the company is taking on debt at twice the rate that its owners are investing in the company.

Inventory turnover ratio

Inventory turnover ratio compares a company's cost of sales on its income statement with its average inventory balance for the period. To calculate the average inventory balance for the period, look at the inventory numbers listed on the balance sheet. Take the balance listed for the period of the report and add it to the balance listed for the previous comparable period, and then divide by two. (Remember that balance sheets are snapshots in time. So the inventory balance for the previous period is the beginning balance for the current period, and the inventory balance for the current period is the ending balance.) To calculate the inventory turnover ratio, you divide a company's cost of sales (just below the net revenues on the income statement) by the average inventory for the period, or

$$\text{Inventory Turnover Ratio} = \text{Cost of Sales} / \text{Average Inventory for the Period}$$

If a company has an inventory turnover ratio of 2 to 1, it means that the company's inventory turned over twice in the reporting period.

Operating margin

Operating margin compares a company's operating income to net revenues. Both of these numbers can be found on a company's income statement. To calculate operating margin, you divide a company's income from operations (before interest and income tax expenses) by its net revenues, or

$$\text{Operating Margin} = \text{Income from Operations} / \text{Net Revenues}$$

Operating margin is usually expressed as a percentage. It shows, for each dollar of sales, what percentage was profit.

P/E ratio

P/E ratio compares a company's common stock price with its earnings per share. To calculate a company's P/E ratio, you divide a company's stock price by its earnings per share, or

$$\text{P/E Ratio} = \text{Price per share} / \text{Earnings per share}$$

If a company's stock is selling at \$20 per share and the company is earning \$2 per share, then the company's P/E Ratio is 10 to 1. The company's stock is selling at 10 times its earnings.

Working capital

Working capital is the money leftover if a company paid its current liabilities (that is, its debts due within one-year of the date of the balance sheet) from its current assets.

$$\text{Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

Current Ratio

Current Ratio is the ratio of the 'Currents' or Current Assets divided by Current Liabilities. If the ratio is < 1 then the company is "Insolvent." Since Current Liabilities is by definition, those debts which come due within the year and Current Assets are the resources to pay those debts, for the ratio to be < 1 means $CA < CL$.

Insolvency

Insolvency does not mean a business is doing poorly. In fact, successful companies tend toward insolvency because as a business grows its liabilities grow faster and quicker than its assets. After all, you generally have to build the product or provide the service *before* you get paid.

Strategies to overcome insolvency include:

- Sell or borrow against fixed assets (or other long term assets)
- Reduce CL through refinancing, extending the term lowers current payments

- Infuse cash by increased debt (LT) or equity
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Bringing It All Together

Although we discuss three financial statements separately, keep in mind that they are all related. Net Income from the Income Statement is transferred into the Equity section of the Balance Sheet via the Statement of Retained Earnings (aka the Shareholder Equity Statement), the fourth relevant financial statement. It is so simple in nature that it is often bypassed and accordingly, we excluded it from our discussion.

In addition, the changes in assets and liabilities that you see on the balance sheet are also reflected in the revenues and expenses that you see on the income statement, which result in the company's gains or losses. Cash flows provide more information about cash assets listed on a balance sheet and are related, but not equivalent, to net income shown on the income statement. And so on. No one financial statement tells the complete story. But combined, they provide very powerful information for investors and managers / owners. And information is the owners' best tool when it comes to managing wisely.

Breakeven

Breakeven

Breakeven is the point in the growth (or demise) of a company where the business is neither making money nor losing it. It's breaking even. To understand breakeven we must first recognize that there are two types of expenses that businesses incur. One type is called direct expenses and they follow sales. That is, when sales go up so do these expenses. These would include: sales commissions, costs of materials, freight and delivery charges, a portion of merchant service charges (credit card processing) and "direct" labor which would include installation charges.

The other type of expenses do NOT change as sales change. These are called fixed, indirect or overhead expenses. These include rent, insurance, administrative & office expenses, interest, administrative & management

staff costs, advertising and the like.

Note that each business is different so your business might have some expenses that others do not. Also note that some expenses may be difficult to classify or to track. For example, I mentioned that a *portion* of credit card charges are direct while the remainder are fixed. If the bulk of the charges *in your business* are direct then they should probably be listed with the direct expenses but if you don't process many credit cards and the dollar amounts are low perhaps it would be better to leave them as indirect. You will need to make that decision as you set up (or re-organize) your books because, to make it easy to calculate breakeven and for other ease of understanding issues, we want you to aggregate all of your direct expenses in the COGS section of your Income Statement before the Gross Profit Margin calculation. For example, let's say you sell a product (or service) worth about \$500 and the cost of each unit is comprised of materials worth \$200, installation labor of \$100, a sales commission of \$75 and supplies of \$35 for a total of \$410. This means our Gross Profit Margin (aka Gross Margin, Gross Profit or Contribution) is \$90, the difference between our sales price and total direct costs.

Now let's say our monthly fixed costs are \$900, how many of these things do we need to sell each month to cover our overhead? Ten, right? (I made the math easy so you could follow the logic but your math won't be so convenient that's why we want you to organize your books in a particular way.) That's the *monthly* breakeven...in units. In dollars, it's 10 (our unit breakeven) times our product's selling price of \$500 for a total of \$5000. But you say, I don't have a single product. I have various products & services. So how do I calculate breakeven? Actually you will skip a couple steps. That is, once you have organized your accounts so that the direct expenses are listed in the Cost of Goods Sold (COGS) section, the hard work is done. For example, let's say your books look like this:

Income Statement
for the year ending 12/31/13

Sales		\$251,489
	COGS	
	Materials	\$126,875
	Direct Labor	\$32,655
	Commission	\$20,500

	TOTAL COGS	\$180,030
Gross Profit Margin		\$71,459
Fixed Costs		
	Rent	\$12,000
	Insurance	\$2,350
	Advertising	\$1,862
	Admin Wages	\$14,588
	Professional Fees	\$1,800
TOTAL FIXED COSTS		\$32,600
Net Profit		\$38,859

Just like the previous examples, we take the Gross Profit Margin number and divide it into the Fixed Costs. \$32,600 divided by \$71,459 yields .4562 or 45.62%. We then multiply that percentage times our sales figure of \$251,489 which yields \$114,729, our tentative breakeven.

Let's check for common sense. Are we now making money? Yes, we have a positive Net Profit. Therefore, is our breakeven point less than our current Sales? Yes, \$114,729 is less than half. Therefore, we have not transposed a decimal point or divided the wrong numbers. This IS our breakeven.

Note that not only are we past our breakeven point but we are substantially past it. This means that in the short run a minor change in costs will NOT create a crisis. We can focus on marketing or some other thing(s).
