

Starting a Business: Basic Accounting – Income Statement and Balance Sheet

SUBMITTED BY: Nina Hoe, University of Pennsylvania

SUBJECT(S): Accounting, Computation

GRADE LEVEL(S): 9, 10, 11, 12

≡ OVERVIEW:

In this lesson, students are introduced to the basic accounting procedures and financial statements — income statements and balance sheets. The class starts with a brief discussion of the types of things a business owner might want keep track of in terms of accounting and measuring the well-being of a company. The class splits into two groups, one covering each of the financial statements. Each group learns about its respective statement, creates a fictitious business along with a sample of the statement, and prepares a presentation on the financial statement and its application for the rest of the class.

≡ NBEA STANDARD(S):

- Computation, I. Mathematical Foundations
- Accounting, II. Financial Reports
- Computation, II. Number Relationships and Operations

≡ RELATED ARTICLES:

- [“Meet the Brightest Young Entrepreneurs: ‘Be Open-minded and Jump at New Opportunities’”](#)
- [“Inside Accounting: ‘There’s Room among the Pencil Pushers for Creative Types Like Me’”](#)

Common Core Standard(s): High School Mathematics: Modeling**Objectives/Purposes:**

- Students learn the purpose and function of an income statement and balance sheet.
- Students prepare a sample income statement and balance sheet for a fictitious business.
- Students work in teams and prepare and execute presentations.

Knowledge@Wharton Articles:

- [“Historical Cost vs. Current Cost: Accountants Wrestle with Reporting Question”](#)
- [“Financial Assets and Liabilities – Fair Value or Historical Cost?”](#)

Other Resources/Materials: [Handout](#)**Activity**Small Group/Pair Discussion (5 mins)

1. How do you think businesses keep track of how well they are doing?
2. If you owned a business, what types of things would you want to keep track of? Make a list.

Whole Class Discussion (5 mins)

Have students report back on their pair discussion. Make a list on the board of all the elements that a business might want to keep track of. (**Gross revenues, fixed expenses, variable expenses – specifically mortgage payments – business loan debt, employee salaries, etc.**)

Play Wharton Global Youth Program Glossary: [Financial Accounting](#)

“A bookkeeping system that collects and processes financial information about a company and reports that information to investors. Investors rely on the financial accounting system to keep track of how profitable a company is and to determine whether it might be a good company in which to invest.”

Introduce students to the basic accounting concepts of an **Income Statement** and a **Balance Sheet**. (all information is from Investopedia.com and Wikipedia)

Team Exercise/Activity – Presentations and Computations (15 mins)

Break the class into two groups. Each group will have one of the following financial statements. Each group should:

1. **Read and discuss the purpose and use of the financial statement.**
2. **Understand the example provided.**
3. **Prepare a short presentation (3-5 minutes) to explain to the rest of the class about the financial instrument.**
4. **Create a fictitious business and prepare the corresponding financial statement for this business. (i.e. if you are in the income statement group, you might chose to operate a bike shop and so you would prepare and income statement for that shop.)**

Income Statement (aka. “profit and loss statement” or “statement of revenue and expense”)

An income statement is a financial statement that lets managers and investors know if a company made or lost money during a specific period of time. Essentially, it measures a company’s financial performance over a specific accounting period by giving a summary of how the business incurs its revenues and expenses through both operating and non-operating activities. It shows the net profit or loss incurred over a specific accounting period, typically over a fiscal quarter or year.

There are two parts to an income statement: the operating and non-operating activities.

- **Operating Section**

- **Revenues** – from WGYG Glossary: “Revenues are the sales of products, merchandise and services that a company makes to customers due to the normal business activities. The Philadelphia Phillies, the 2008 World Series Champions, generated a record-breaking \$216 million in revenues from ticket sales, merchandise and refreshments last year.”
- **Expenses** – Play WGYG Glossary: **Fixed/Variable Cost** – “A *fixed cost* is a cost that remains unchanged in total, regardless of changes in the level of total activity or volume. *Earthquake insurance for a table factory is a fixed cost,*

because regardless of whether 200 or 2000 tables are made, the cost for earthquake insurance will be the same. A variable cost is a cost that changes directly in proportion to changes in the level of total activity, or volume. The wood used to make a table is a variable cost, because each additional table requires additional wood for the tables to be made”

- Research & Development
- Depreciation/Amortization

- **Non-Operating Section**

- Other revenues or gains (not from business operations)
- Other expenses or losses (not from business operations)
- Financial costs (i.e. interest, bank charges)
- Income tax expense (sum of the amount of tax payable to tax authorities in the current reporting period (current tax liabilities/ tax payable) and the amount of deferred tax liabilities (or assets))

The income statement always begins with **gross revenues** (or **gross income**), which is the total amount of money a company actually receives during a specific period of time. It is also called the “top line,” as all other costs are subtracted from this to get the **net income**, or the “bottom line.”

Net income is a company’s total earnings or profit over a specific period of time. This is calculated by taking the gross income and subtracting all expenses, costs, taxes, etc. If the net income is negative, the company lost money during the specific period of time.

Income Statement for Sunshine Landscapers LLC

For the Year Ended 2010

	Debit (\$)	Credit (\$)
Revenues		
GROSS REVENUES		289,397
Expenses		
ADVERTISING	6,300	

BANK & CREDIT CARD FEES	144	
BOOKKEEPING	2,350	
SUBCONTRACTORS/EMPLOYEES	88,000	
INSURANCE	750	
LEGAL & PROFESSIONAL SERVICES	1,575	
LICENSES	632	
INVOICING: PRINTING, POSTAGE & STATIONARY	320	
PAYMENT ON EQUIPMENT LOAN	13,000	
MATERIALS	74,400	
TELEPHONE	1,000	
VEHICLES	6,991	
Total Expenses		(195,512)
NET INCOME		100,885

Balance Sheet (or “statement of financial position”)

The balance sheet is a summary of the financial balances of a sole proprietorship, a business partnership or a company. It’s a summary of what the company owns and owes, as well as the amount invested by the shareholders. Assets, liabilities and ownership equity are listed as of a specific date, such as the end of its financial year. A balance sheet is often described as a “snapshot of a company’s financial condition” and applies only to a single point in time of a business’ calendar year.

There are three parts to a balance sheet: assets, liabilities, shareholders’ equity

The formula for the balance sheet is:

Assets = Liabilities + Shareholders' Equity

- **Assets** – Play WGYP Glossary – “Resources such as merchandise, land, buildings and equipment, that are owned by a company and that will provide future economic benefits to the company. Maybe somewhat surprisingly, the Phillies stadium, Citizens Bank Park, is not one of the team’s assets. Rather, the stadium is owned by the city of Philadelphia, and is just rented by the baseball team.”
- **Liabilities** – debts or obligations of a business
- **Shareholders' Equity** – net worth of company, after taking into account all liabilities, it is the remaining interest in assets of a company spread amount shareholders

It’s called a balance sheet because the two sides balance out. This makes sense: a company has to pay for all the things it has (assets) by either borrowing money (liabilities) or getting it from shareholders (shareholders’ equity).

The difference between the assets and the liabilities is known as equity or the **net assets** or the **net worth** or capital of the company and according to the accounting equation, net worth must equal assets minus liabilities.

Balance Sheet for Fine Furniture Makers

For December 31, 2010

Assets		Liabilities and Shareholders' Equity	
Cash	\$7,000	Liabilities	
Accounts Receivable	\$10,000	Notes Payable	\$15,000
Tools and Equipment	\$20,000	Accounts Payable	\$8,000
Building	\$100,000	Mortgage	\$72,000
		<i>Total Liabilities</i>	\$95,00
		Shareholders' Equity	
		Capital Stock	\$10,000
		Retained Earnings	\$32,000

		<i>Total Shareholders' Equity</i>	\$42,000
Total	\$137,000	Total	\$137,000

- Cash – total cash on hand
- Accounts Receivable – contracts where payment to the business is guaranteed (i.e. you have an order to make three desks for a client – they have promised to pay you for that)
- Tools and Equipment – tools and equipment owned by the business
- Building – building owned by the business
- Notes Payable – unsecured loans from bank
- Account Payable – contracts where payment to another enterprise is guaranteed (i.e. you have put in an order for wood – you have an invoice you need to pay)
- Mortgage – for building
- Capital Stock – amount initially invested by shareholders
- Retained earnings – accumulated profits and losses of the business since it started

Presentations (6-10 mins)

Have each group present on the financial instruments.

Team Extension (5 mins)

Each team should go back and prepare the OTHER financial instrument for the business they created.

Guided Reading (10-15 mins, if time allows)

Have students read the Knowledge@Wharton article: [“Historical Cost vs. Current Cost: Accountants Wrestle with Reporting Question”](#)

- What are current accounting challenges?

Tying It all Together:

Whole Class Discussion: (5 mins)

1. Any questions about the financial statements?

Review:

2. What are the functions for financial statements?
3. Why are they important?
4. What are the differences and similarities between the two statements?

Practice Outside of the Classroom:

If you work or get an allowance, prepare a monthly personal income statement with your revenues/gross income and your monthly expenses.

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