1-4: Interpretation of Accounting Statements

To prepare for this lecture, read any introduction to accounting statements, such as the one publicly available at http://www.quickmba.com/accounting/fin/statements/. You should also read Hirschey, pages 432 – 434.

While this is an economics course, not an accounting course, accounting statements do contain information that is useful in evaluating a business firm's economic performance. Therefore in this lecture we will review the format and content of three different accounting statements:

1. **Income Statement** (also known as **Earnings Statement**) summarizes revenues, expenses, net income or earnings during a specific accounting period.
2. **Cash Flow Statement** (replaced the older **Statement of Changes in Financial Position**) provides information about cash inflows and outflows during a specific accounting period.
3. **Balance Sheet** shows the financial condition of a firm on a particular date, by summarizing its assets and liabilities.

A fourth accounting statement is sometimes useful, but we will not examine it in detail:

4. **Statement of Owners' Equity** provides additional information about balance sheet equity.

In each case, a fictional statement is provided to facilitate discussion.

**Income Statement**

Note that **Net Income** is not economic profit – we've previously discussed approaches to measuring that. To link back to the textbook distinction, remember that the Operating Expenses listed on an income statement are accounting expenses – they don’t incorporate the notion of opportunity cost.

Also note that Net Income is not the same as cash generated (cash flow). This is because some of the expenses (notably depreciation expense) are “non-cash” expenses. This opens up a distinction between cash generated and income reported.

At the bottom of the income statement, net income will be shown on a per-share basis – **earnings per share** (EPS). This leads to a very common comparative metric, the price-earnings ratio (p/e ratio). Some investors have long considered the price earnings ratio (p/e ratio for short) a useful metric for evaluating the relative attractiveness of a company's stock price.

From information contained in the Income Statement, we can calculate **operating ratios** (%s) that facilitate comparative analysis (comparisons between / among similar firms):

- **Gross Margin** = Gross Income / Net Revenue
- **Operating Margin** = Operating Income / Net Revenue
- **Profit Margin** = Net Income / Net Revenue
Cash Flow Statement
Companies produce and consume cash in different ways, so the cash flow statement is divided into three sections: cash flows from operations, financing and investing. Basically, the sections on operations and financing show how the company gets its cash, while the investing section shows how the company spends its cash.

Balance Sheet
The balance sheet summarizes what the firm owns (assets) and what the firm owes others (liabilities). While all these data are accounting data, we can observe some important economic implications about how the firm is financing itself in the form of three ratios or indicators.

- **Current Ratio** – A liquidity ratio that measures a company's ability to pay short-term obligations.

- **Return on Equity** – A rate of return on the ownership stake in the firm. (See Hirschey, 432 -- 434.)

- **Leverage** = Assets / Shareholder Equity = 150,000 / 75,000 = 2. Analogously, the Debt – Equity ratio = Debt / Equity = 75,000 / 75,000 = 1. Debt-Equity Ratio = Leverage – 1.

Financial leverage is measured in a variety of ways, but generally these all amount to comparing assets to equity – how big is the owners’ stake relative to the full amount of income-generating assets? Financial leverage is analogous to mechanical leverage, which is the mechanical advantage or power gained by using a lever. The concept of financial leverage seeks to measure the economic advantage or power gained by using other people’s money.

Exercise: Select a business firm and review its key accounting statements for a specific year. Try to calculate some of the rates and ratios discussed here. Think about how these rates and ratios improve your understanding of the firm and its financial performance.