**explain the different components of a company's capital structure**

* What is capital?
* What are the major sources of a firm's capital?

If you recall, firms only have two sources of [capital](https://learn.saylor.org/mod/page/view.php?id=7943) (debt and equity) or some variation of those two. Firms finance all of their activities with capital. Capital is not free. There is a cost to obtain it and to use it, and that cost is represented normally by the interest rate charged. An interest rate, if you recall, is nothing more than a price paid for money. The [Weighted Average Cost of Capital (WACC)](https://learn.saylor.org/mod/page/view.php?id=7943) is a concept and formula designed to identify a firm's sources of capital and its cost for each form of capital in order to determine the overall average cost of capital a firm pays across all sources. The major components of a company's [capital structure](https://learn.saylor.org/mod/page/view.php?id=7944) are: common stock, preferred stock, long-term debt, and short-term debt. Common and preferred stock are equity. Long-term and short-term debts are liabilities. There are different costs to each form of capital. Each firm also has different percentages of its capital financed by each of these sources. It is possible that a firm is all-equity and has no cost for liability financing. The WACC aims to match the capital source with the cost.

**explain the Modigliani-Miller theorem in finance**

* What does the term "capital structure" mean?
* What is the Modigliani- Miller theorem?

Even with the use of the [WACC computation](https://learn.saylor.org/mod/url/view.php?id=7945) within finance, capital structure is not the primary determinant of a firm's value. In fact, the Modigliani-Miller theorem states that [capital structure](https://learn.saylor.org/mod/page/view.php?id=7944) is not a determinant at all in a firm's value. The MM Theorem states that the value of a firm is based on its earning power and that that value is not affected by how a firm chooses to finance itself with debt or equity. Essentially, financing decisions are irrelevant to firm value. An addition to the theorem also states that a firm's cost of equity increases with its debt-equity ratio. The MM Theorem holds this as true given the following assumptions: no transactions costs for financial transactions, equal borrowing costs for companies and investors, the firm responsibly invests excess cash, debt financing does not affect EBIT, and firms and investors have access to the same information (there is no asymmetric information).

**compute the market value and book value of a company**

* What is market value?
* What is book value?
* What are the pros and cons of each valuation method?

There are many ways to assess the value of a company. The most common methods are market value and book value. Market value is the value that is communicated by information available in financial markets such as stock price, number of shares of stock a firm has in the market and investor sentiment. Market value of a publicly-traded company = the price of one share of the company's stock × total number of shares of stock the company currently has in the stock market. It is presumed that market value can be less stable and more reactionary, depending on economic conditions and investor expectations; however, it is a more immediate and readily-available indicator of the value of a firm. There is also an alternate way to [compute a firm's market value, using the firm's assets](https://learn.saylor.org/mod/page/view.php?id=4897) as the basis.

In contrast, the book value of a company is a value that is primarily derived from an analysis of a company's financial statements. The balance sheet is the guiding financial statement used to assess book value. The value of the assets are used as the book value of the company.

The biggest criticism of a company's book value is that it is said to represent the historical value of a company, because balance sheet assets are recorded at the prices paid at the time the asset is acquired. Over time, the value of an asset can increase or decrease, and this change in value is not always captured on the balance sheet unless the asset is sold for a gain or loss. For example, if a firm owns land – which is an asset that normally appreciates in value – the purchase price of the land appears on the balance sheet not any gains in that land's value unless the land is sold and the cash from the sale of the land is recorded. Fixed assets, such as plant, property, and equipment, will age. Even though depreciation is recorded on the balance sheet, the value attributed to depreciation might not be sufficient to cover the replacement cost of acquiring a new asset to replace one that has aged beyond use. It is also possible that the book value of the equipment underestimates the true value of the equipment because it doesn't account for the salvage value. An asset's salvage value is the amount realized from the sale of the used equipment when the firm has no further use for the equipment. To attempt to account for the intricacies of interpreting book value, some assets may be valued using a separate analysis and then added back to the firm's book value or a premium on the existing book value can be added to or subtracted from the firm's total asset value on the balance sheet.

**apply the WACC formula for estimating a company's cost of capital**

* What is capital?
* What is the Weighted Average Cost of Capital?

Use the problem below to practice [computing the WACC](https://learn.saylor.org/mod/url/view.php?id=7945).

WACC = (% of debt)(Before-tax cost of debt)(1−T) + (% of preferred stock)(cost of preferred stock) + (% of common stock)(cost of common stock)

**WACC = wdrd(1 − T) + wpsrps + wsrs**

A firm has $1,500,000 in debt and $1,000,000 in equity, for a total value of $2,500,000. Its cost of debt is 10% and its cost of equity is 2%. Its tax rate is 35%. What is this firm's Weighted Average Cost of Capital (WACC)? Keep in mind, in this problem the firm has no preferred stock.

wdrd(1 − T): (1,500,000/2,500,000)(.10)(1 - .35) = 0.039

wpsrps:(0/2,500,000)(0) = 0

wsrs: (1,000,000/2,500,000) (.02) = 0.008

WACC = .039 + 0 + .008 = 0.055 or 5.5%