



# Equity

## What is 'Equity '

Generally speaking, equity is the value of an asset less the amount of all liabilities on that asset. It can be represented with the accounting equation:  $\text{Assets} - \text{Liabilities} = \text{Equity}$ .

Equity can have somewhat different meanings, depending on the context and the type of asset. In finance in general, you can think of equity as one's degree ownership in any asset after all debts associated with that asset are paid off. For example, a car or house with no outstanding debt is considered entirely the owner's equity because he or she can readily sell the item for cash, and pocket the resultant sum. Stocks are equity because they represent ownership in a firm, though ownership of shares in a public company generally does not come with accompanying liabilities.

The following are more specific definitions for the various forms of equity:

1. A stock or any other security representing an ownership interest. This may be in a private company (not publicly traded), in which case it is called private equity.
2. On a company's balance sheet, the amount of the funds contributed by the owners (the shareholders) plus the retained earnings (or losses). Also referred to as stockholders' equity or shareholders' equity (see below).
3. In the context of margin trading, the value of securities in a margin account minus what has been borrowed from the brokerage.
4. In the context of real estate, the difference between the current fair market value of the property and the amount the owner still owes on the mortgage. It is the amount that the owner would receive after selling a property and paying off the mortgage. Also referred to as "real property value."
5. In terms of investment strategies, equities are one of the principal asset classes. The other two are fixed-income (bonds) and cash/cash-equivalents. These are used in asset allocation planning to structure a desired risk and return profile for an investor's portfolio.
6. When a business goes bankrupt and has to liquidate, the amount of money remaining (if any) after the business repays its creditors. This is most often called "ownership equity" but is also referred to as risk capital or "liable capital."



# Equity

## Calculating Equity

One could determine the equity of a business by determining its value (factoring in any owned land, buildings, capital goods, inventory and earnings) and deducting liabilities (including debts and overhead).

For example, suppose that Jeff owns and operates a factory that manufactures car parts and that he wants to determine the equity of his business. He estimates that the value of the property itself is \$4 million, the total value of his factory equipment is \$2 million, the current value of his inventory and supplies (processed and unprocessed) is \$1 million and the value of his accounts receivable is \$1 million. He also knows that he owes \$1 million for loans he took out to finance the factory, that he owes his workers \$500,000 in wages and that he owes his parts supplier \$500,000 for goods he has already received. To calculate his business's equity, Jeff would subtract his total liabilities from the total value of his business in the following way:

Total value – total liability = (\$4M + \$2M + \$1M + \$1M) - (\$1M + \$0.5M + \$0.5M) = \$8M - \$2M = \$6 million.

Jeff's manufacturing company, then, is worth \$6 million. It is also possible for equity to be negative, which occurs when the value of an asset is less than the value of liabilities on that asset. A company's equity may often change, and for a variety of reasons. Causes of change in equity include a shift in the value of assets relative to the value of liabilities, depreciation and share repurchasing.

Equity is important because it represents the real value of one's stake in an investment. Investors who hold stock in a company are usually interested in their own personal equity in the company, represented by their shares. Yet, this kind of personal equity is a function of the total equity of the company itself, so a shareholder concerned for his or her own earnings will necessarily be concerned for the company itself. Owning stock in a company over time will ideally yield capital gains for the shareholder, and potentially dividends as well. It also often bestows upon the shareholder the right to vote in Board of Directors elections. All of these benefits further promote a shareholder's ongoing interest in the company.

## Stockholders' Equity

Stockholders' equity is synonymous with shareholders' equity: It represents the equity stake currently held on the books by a firm's investors and shareholders. It is calculated either as a firm's total assets minus its total liabilities, or (less commonly) as share capital plus retained



# Equity

earnings minus treasury shares. The result is listed on their balance sheets, and is often referred to as the book value of a company.

Stockholders' equity functions as equity capital for a firm, which uses it to buy assets. Stockholders' equity has two main sources. The first is from the money initially invested in a company, along with additional investments made later. A second source is retained earnings that the company is able to build over time through its businesses: These earnings, net income from operations and other business activities, are actually returns on total stockholders' equity that are reinvested back to the company (instead of being distributed as stock dividends, say). Retained earnings grow larger over time, as the company continues to reinvest a portion of its income. At some point, the amount of accumulated retained earnings often exceeds the amount of equity capital contributed by stockholders, and can eventually grow to be the main source of stockholders' equity. In fact, retained earnings tend to comprise the largest component of stockholders' equity for companies that have been operating for many years.

Treasury shares or stock (not to be confused with U.S. Treasury bills) represent stock that the company has bought back from shareholders. Companies may do this from time to time when management is not able to deploy all the available equity capital in ways that can potentially deliver the best returns. Shares bought back by companies become treasury shares, and their dollar value is noted in an account called treasury stock, a contra account to the accounts of investor capital and retained earnings. Treasury shares can be reissued back to stockholders (for a price) when companies need to raise money.

Stockholders' equity is often seen as representing a company's net assets – its net value, so to speak, the amount that would be returned to shareholders if all the company's assets were liquidated and all its debts repaid. It is one of the most common financial metrics employed by analysts to determine the financial health of a company.

For example, PepsiCo Inc.'s total stockholders' equity has declined in the past two years, from \$17.4 billion in 2014 to \$11.1 billion in 2016, which – depending on the reasons – might give analysts concern for the soda and snack food giant's health. In the same period, arch-rival Coca-Cola Corporation's total shareholders' equity has fallen as well, from \$30.3 billion to \$23.01 billion. But the percentage drop isn't as great, because Coke's liabilities and accounts payable have (unlike Pepsi's) consistently decreased, suggesting Coke has a better handle on its debt.



# Equity

## Private Equity

In a sense, private equity is the opposite of shareholders' equity. It involves funding that is not noted on a public exchange. Private equity comes from funds and investors that directly invest in private companies, or that engage in leveraged buyouts (LBOs) of public companies.

Private investors can include institutions (pension funds, university endowments, insurance companies, etc.) or individuals (high net worth families, friends and relatives). Private equity also refers to mezzanine debt, private placement loans, distressed debt and funds of funds. Private equity comes into play at different points along a company's life cycle. Typically, a very young company with no revenue and no earnings can't afford to borrow, so capital must be obtained from friends and family, or individual "angel investors." Venture capitalists enter the picture when the company has finally created its product or service, and is ready to bring it to market. (Some of the largest, most successful corporations in the tech sector, like Dell Technologies and Apple Inc. – began as venture-funded operations.)

Venture capitalists generally provide all equity financing, in return for a minority stake; sometimes a venture capitalist will take a seat on the board of directors for its portfolio companies, ensuring an active role in guiding the company along. Venture capitalists look to hit big early on, and exit investments within five to seven years. An LBO is one of the most common types of private equity financing, and might occur as a company matures.

In an LBO transaction, a company receives a loan from a private equity firm to fund the acquisition of a division or another company. The loan is usually secured by the cash flows or the assets of the company being acquired. Mezzanine debt is a private loan, usually provided by a commercial bank or a mezzanine venture capital firm. Mezzanine transactions often involve a mix of debt and equity in the form of a subordinated loan or warrants, common stock or preferred stock.

Unlike shareholders' equity, private equity is not a thing for the average individual. To participate in private equity or venture capital partnerships, an investor must be "accredited" (have a net worth of at least \$1 million). For investors who are less well-off, there is the option of exchange-traded funds (ETFs) that focus on investing in private companies.



# Equity

## Equity Begins at Home

Home equity is roughly comparable to home ownership: The amount of equity one has in his or her residence represents how much of it he or she actually owns outright. Equity on a property or home stems from payments made against a mortgage (including a down payment) and from increases in the value of the property.

Home equity is often an individual's greatest source of collateral, and thus can be used in financing for a home-equity loan (often called a "second mortgage") or a home equity line of credit. Taking money out of a property, or borrowing money against it, is known as equity takeout.

## Brand Equity

When attempting to determine the value of assets in calculating equity, particularly for larger corporations, it is important to note that these assets may include both tangible assets like property, as well as intangible assets, like the company's reputation and brand identity. Through years of advertising and development of a customer base, a company's brand itself can come to have an inherent value. This concept is often referred to as "brand equity," which measures the value of a brand relative to a generic or store brand version of a product.

For example, many soft-drink lovers will reach for a Coca-Cola before buying a store brand cola, because they prefer, or are more familiar with, the flavor. If a two-liter bottle of store brand cola costs \$1 and a two-liter bottle of Coca-Cola costs \$2, then the Coke has a brand equity of \$1.

There is also such a thing as negative brand equity, if people are willing to pay more for a generic or store product than for that of a particular company. Negative brand equity is rare, and generally only occurs because of bad publicity, such as in the event of a product recall or disaster.

## The Bottom Line

Equity has several meanings that vary by their context. But in general, each meaning refers to ownership in an asset. The equity of an individual – let's call her Sally – can be seen in different examples.



# Equity

- She owns 100 shares of stock in ABC Corporation. That stock is her equity in, or ownership of, ABC.
- She has a house, whose current market value is \$175,000, with a \$100,000 outstanding mortgage. So she has \$75,000 worth of equity in her home.
- She also owns a business – Sally’s Signs. Her balance sheet shows the amount she’s contributed to it, which is \$25,000, and its retained earnings, which is another \$25,000. That’s \$50,000 of equity in her business.

Equity also applies to the value of securities in a margin account, minus what an investor borrowed from her broker. And equity is one of the three principal asset classes. But in most of its meanings, equity equals the value of an asset, business or property, minus its outstanding debts, liabilities and other obligations.

## Market Value Of Equity

Market value of equity is the total dollar market value of all of a company's outstanding shares. Market value of equity is calculated by multiplying the company's current stock price by its number of outstanding shares. A company's market value of equity is therefore always changing as these two input variables change. A company's market value of equity differs from its book value of equity, because the market value of equity does not consider the company's growth potential.

Market value of equity is a synonym for market capitalization. It is used to measure a company's size and helps investors diversify their investments across companies of different sizes and different levels of risk.

## The Calculation

Market value of equity is calculated by multiplying the number of shares outstanding by the current share price. For example, if the share price is \$10 and the total number of shares outstanding is 1 billion, the market value of equity is \$10 multiplied by 1 billion, or \$10 billion.

## Market Value Vs. Book Value

The market value of equity is different from the book value of equity. The book value of equity is based on stockholders' equity, which is a line item on the company's balance sheet. It is the difference between a company's assets and liabilities. By contrast, market value is based on stock price. Banks generally don't lend money based on stock price. The market value of equity does not describe a company's capital resources, but it does help to describe the company's



# Equity

size and evolution. Each level of capitalization provides insights about the company's market profile.

## Market Profile

In general, there are three different levels of market capitalization, and each level has its own profile. Companies with a market capitalization of less than \$2 billion are considered small capitalization, or small caps. Companies with a market capitalization of between \$2 billion and \$10 billion are considered medium capitalization stocks, also referred to as mid-caps. Companies with a market capitalization over \$10 billion are considered large capitalization, or large caps.

Each level has a profile that can help investors gain insights about the behavior of the company. Small caps are generally young companies in the growth stage of development. They are risky, but have higher growth potential. Large caps are mature companies; they may not offer the same growth potential, but they can offer stability. Mid-caps offer a hybrid of the two. By owning stocks in each category, investors ensure a certain amount of diversification in assets, sales, maturity, management, growth rate, growth prospects and market depth.

## Negative Equity

Negative equity is when the value of an asset falls below the outstanding balance on the loan used to purchase that asset. Negative equity is calculated simply by taking the value of the asset less the balance on the outstanding loan.

Negative equity often occurs when a homeowner purchases a house using a mortgage and then the economy starts to slow or home prices start to drop. After the house purchase, the value of the home decreases below the value of the amount owed on the mortgage, causing negative equity.

## Shareholder Equity Ratio

The shareholder equity ratio determines how much shareholders would receive in the event of a company-wide liquidation. The ratio, expressed as a percentage, is calculated by dividing total shareholders' equity by total assets of the firm, and it represents the amount of assets on which shareholders have a residual claim. The figures used to calculate the ratio are taken from the company balance sheet.



# Equity

$$\text{Shareholder Equity Ratio} = \frac{\text{Total Shareholder Equity}}{\text{Total Assets}}$$

The balance sheet is based on a formula: assets less liabilities equals equity. If, for example, a company sold all of its assets for cash and used the cash to pay off all liabilities, any remaining cash equals the firm's equity. A company's shareholders' equity is the sum of common stock, additional paid in capital and retained earnings, and the balance is considered to be the true value of a business.

## The Differences Between Additional Paid in Capital and Retained Earnings

Shareholders' equity can increase when a firm issues more common stock, because that affects both the common stock and the additional paid in capital accounts. Assume, for example, that XYZ firm issues 1,000 shares of \$10 par value common stock for \$30 a share. Common stock is increased based on the par value of each share, or \$10,000, and additional paid in capital is increased by the remaining \$20 per share (\$20,000).

When a company generates net income, those profits increase the retained earnings in the shareholders' equity section of the balance sheet. At the end of each month, the net income in the income statement is adjusted to zero, and the total is posted to retained earnings. The retained earnings balance is the sum of all net income since inception less all cash dividends paid since the firm started.

## How a Company Liquidation Takes Place

When a business chooses to liquidate, all of the company assets are sold, and the creditors and the shareholders have claims on assets. Secured creditors have the first priority, based on the specific assets that serve as collateral for a debt. Other creditors, such as bondholders, are next in line to claim assets, followed by the shareholders. Preferred shareholders have priority over common shareholders when a company chooses to liquidate. A larger asset balance means that shareholders are more likely to receive some assets during the liquidation. However, there are many cases in which shareholders don't receive any value, such as a bankruptcy situation when a company is forced into liquidation.



# Equity

## Return on Market Value of Equity – ROME

Return on market value of equity (ROME) is a comparative measure typically used by analysts to identify companies that generate positive returns on book value and trade at otherwise low valuations. The market value of equity is generally accepted to be synonymous with a company's market capitalization, and the return on market value of equity is effectively the profit yield on a company's stock price.

Return on market value of equity measures the profit yield on a company's market capitalization, which is a function of its share price and the number of its shares outstanding. Some hedge funds employ a return on market value of equity strategy to identify undervalued shares to purchase. This strategy tries to evaluate a firm's intrinsic value and compare that value to the current observed market price of its shares. In general, a return on market value of equity based strategy is considered to be a tool used by value investors, but it also allows for the fact that future growth is an important component of assessing a stock's intrinsic value.

Market value of equity, also known as market capitalization or market cap, is calculated by multiplying a company's current share price by the number of available shares outstanding. A company's market value of equity is thus constantly changing as its share price fluctuates and as the number of shares it has changes. The number of shares outstanding changes as companies issue more shares or if there is, for example, a share buyback. A company's market value of equity is crucially different from its book value of equity because the book value does not take into account the company's potential for growth, which is theoretically incorporated into the share price.

## What ROME Says About a Company

A company with a high return on market value of equity suggests that a company may be undervalued and worth purchasing because its profitability is large relative to its share price. On the other hand, if a company has a higher share price given similar profits, it may not be as attractive as a value buy. Return on market value of equity is also a useful measure in comparing value across companies of different sizes that have varying market caps, since it is a yield and not an absolute measure.



# Equity

## Expanded Accounting Equation

The expanded accounting equation is derived from the common accounting equation and illustrates in detail the different components of stockholders' equity of a company. It expands the equity role in the basic accounting equation from:

**Assets = Liabilities + Stockholders' Equity**

to

**Assets = Liabilities + Contributed capital + Beginning retained earnings + Revenue - Expenses - Dividends**

Where Stockholders' Equity in the accounting equation is substituted by Contributed capital + Beginning retained earnings + Revenue - Expenses - Dividends in the expanded accounting equation.

Besides assets and liabilities, which are part of the general accounting equation, stockholders' equity is expanded into the following elements:

- *Contributed capital* is the capital provided by the original stockholders (also known as Paid-In Capital).
- *Beginning retained earnings* are the earnings not distributed to the stockholders from the previous period.
- *Revenue* is what's generated from the ongoing operation of the company.
- *Expenses* are those costs incurred to run operations of the business.
- *Dividends* are subtracted since they are the earnings distributed to the stockholders of the company.

Contributed capital and dividends show the effect of transactions with the stockholders. The difference between the revenue and profit generated and expenses and losses incurred reflects the effect of net income for stockholders' equity.

## Equity Multiplier

The equity multiplier is calculated by dividing a company's total asset value by total net equity, and it measures financial leverage. Companies finance their operations with equity or debt, so a high equity multiplier indicates that a larger portion of asset financing is attributed to debt.



# Equity

The equity multiplier is a variation of the debt ratio, and its definition of debt financing includes all liabilities.

Calculation of the equity multiplier is relatively simple and straightforward. Consider the balance sheet of Apple Inc. as of March 2016. The company's total assets were \$305 billion, and the book value of shareholder equity was \$130 billion. The company's equity multiplier was therefore 2.34. Verizon Communications Inc. operates a very different business model with more financial leverage. The company's total assets were \$245 billion as of March 2016, with \$19 billion of shareholder equity. The equity multiplier was 13.1, based on these values.

## Leverage Analysis

Verizon's much lower proportionate shareholder equity value indicates that the business relies more heavily on financing from debt and other liabilities. The company's telecommunications business model is reminiscent of utilities firms, which have stable, predictable cash flows and typically carry high debt levels. Verizon's closest peer, AT&T Inc. also has one of the highest equity multipliers among the largest companies traded on U.S. exchanges, though it is much lower at 3.3 than Verizon's ratio of 13.1.

Apple is an established, mature business that can comfortably service debt, and it has issued notes to gain access to capital at relatively attractive costs. However, the company is more susceptible to changing economic conditions or evolving industry standards than utilities or large telecommunications firms. As a result, Apple has less financial leverage. These differences in business models mean that higher financial leverage does not necessarily indicate superior financial health.

## DuPont Analysis

The equity multiplier is an important factor in DuPont analysis, which is a method of financial assessment devised by the DuPont Corporation for the purpose of internal review. The DuPont model breaks return on equity (ROE) into its constituent pieces, which are popular financial ratios and metrics. Net profit margin, asset turnover and the equity multiplier are combined to calculate ROE, which allows analysts to consider the relative of each impact separately. If ROE changes over time or diverges from normal levels for the peer group, DuPont analysis indicates how much of this is attributable to financial leverage. If the equity multiplier fluctuates, it can significantly impact ROE. Higher financial leverage drives ROE upward, all other factors remaining equal.



# Equity

## Capital Structure

The capital structure is how a firm finances its overall operations and growth by using different sources of funds. Debt comes in the form of bond issues or long-term notes payable, while equity is classified as common stock, preferred stock or retained earnings. Short-term debt such as working capital requirements is also considered to be part of the capital structure.

A firm's capital structure can be a mixture of long-term debt, short-term debt, common equity and preferred equity. A company's proportion of short- and long-term debt is considered when analyzing capital structure. When analysts refer to capital structure, they are most likely referring to a firm's debt-to-equity (D/E) ratio, which provides insight into how risky a company is. Usually, a company that is heavily financed by debt has a more aggressive capital structure and therefore poses greater risk to investors. This risk, however, may be the primary source of the firm's growth.

## Debt vs. Equity

Debt is one of the two main ways companies can raise capital in the capital markets. Companies like to issue debt because of the tax advantages. Interest payments are tax-deductible. Debt also allows a company or business to retain ownership, unlike equity. Additionally, in times of low interest rates, debt is abundant and easy to access.

Equity is more expensive than debt, especially when interest rates are low. However, unlike debt, equity does not need to be paid back if earnings decline. On the other hand, equity represents a claim on the future earnings of the company as a part owner.

## Debt-to-Equity Ratio as a Measure of Capital Structure

Both debt and equity can be found on the balance sheet. The assets listed on the balance sheet are purchased with this debt and equity. Companies that use more debt than equity to finance assets have a high leverage ratio and an aggressive capital structure. A company that pays for assets with more equity than debt has a low leverage ratio and a conservative capital structure. That said, a high leverage ratio and/or an aggressive capital structure can also lead to higher growth rates, whereas a conservative capital structure can lead to lower growth rates. It is the goal of company management to find the optimal mix of debt and equity, also referred to as the optimal capital structure.



# Equity

Analysts use the D/E ratio to compare capital structure. It is calculated by dividing debt by equity. Savvy companies have learned to incorporate both debt and equity into their corporate strategies. At times, however, companies may rely too heavily on external funding, and debt in particular. Investors can monitor a firm's capital structure by tracking the D/E ratio and comparing it against the company's peers.

## Equity Fund

An equity fund is a mutual fund that invests principally in stocks. It can be actively or passively (index fund) managed. Equity funds are also known as stock funds.

Stock mutual funds are principally categorized according to company size, the investment style of the holdings in the portfolio and geography.

The size of an equity fund is determined by a market capitalization, while the investment style, reflected in the fund's stock holdings, is also used to categorize equity mutual funds.

Equity funds are also categorized by whether they are domestic (U.S.) or international. These can be broad market, regional or single-country funds.

Some specialty equity funds target business sectors, such as health care, commodities and real estate.

## Ideal Investment Vehicle

In many ways, equity funds are ideal investment vehicles for investors that are not as well-versed in financial investing or do not possess a large amount of capital with which to invest. Equity funds are practical investments for most people.

The attributes that make equity funds most suitable for small individual investors are the reduction of risk resulting from a fund's portfolio diversification and the relatively small amount of capital required to acquire shares of an equity fund. A large amount of investment capital would be required for an individual investor to achieve a similar degree of risk reduction through diversification of a portfolio of direct stock holdings. Pooling small investors' capital allows an equity fund to diversify effectively without burdening each investor with large capital requirements.



# Equity

The price of the equity fund is based on the fund's net asset value (NAV) less its liabilities. A more diversified fund means that there is less negative effect of an individual stock's adverse price movement on the overall portfolio and on the share price of the equity fund.

Equity funds are managed by experienced professional portfolio managers, and their past performance is a matter of public record. Transparency and reporting requirements for equity funds are heavily regulated by the federal government.

## A Fund for Everyone

Another great feature of equity funds is the sheer number of funds available. In the mutual fund arena as a whole, equity funds are the most popular type of mutual funds, and as of 2015, there were more than 4,500 equity funds available in the market. Whether it's a particular market sector (technology, financial, pharmaceutical), a specific stock exchange (such as the New York Stock Exchange or Nasdaq), foreign or domestic markets, income or growth stocks, high or low risk, or a specific interest group (political, religious, brand), there are equity funds of every type and characteristic available to match every risk profile and investment objective that investors may have.