# Hit the Ground RunningValuation Basies 

# Value-More Than a Number! 

## Understanding the Terrain

Oscar Wilde defined a cynic as one who "knows the price of everything and the value of nothing." The same can be said of many investors who regard investing as a game and define winning as staying ahead of the pack.

A postulate of sound investing is that an investor does not pay more for an asset than it is worth. If you accept this proposition, it follows that you have to at least try to value whatever you are buying before buying it. I know
there are those who argue that value is in the eyes of the beholder, and that any price can be justified if there are other investors who perceive an investment to be worth that amount. That is patently absurd. Perceptions may be all that matter when the asset is a painting or a sculpture, but you buy financial assets for the cash flows that you expect to receive. The price of a stock cannot be justified by merely using the argument that there will be other investors around who will pay a higher price in the future. That is the equivalent of playing an expensive game of musical chairs, and the question becomes: Where will you be when the music stops?

Two Approaches to Valuation
Ultimately, there are dozens of valuation models but only two valuation approaches: intrinsic and relative. In intrinsic valuation, we begin with a simple proposition: The intrinsic value of an asset is determined by the cash flows you expect that asset to generate over its life and how uncertain you feel about these cash flows. Assets with high and stable cash flows should be worth more than assets with low and volatile cash flows. You should pay more for a property that has long-term renters paying a high rent than for a more speculative property with not only lower rental income, but more variable vacancy rates from period to period.

While the focus in principle should be on intrinsic valuation, most assets are valued on a relative basis. In relative valuation, assets are valued by looking at how the market prices similar assets. Thus, when determining what to pay for a house, you would look at what similar houses in the neighborhood sold for. With a stock, that means comparing its pricing to similar stocks, usually in its "peer group." Thus, Exxon Mobil will be viewed as a stock to buy if it is trading at 8 times earnings while other oil companies trade at 12 times earnings.

While there are purists in each camp who argue that the other approach is useless, there is a middle ground. Intrinsic valuation provides a fuller picture of what drives the value of a business or stock, but there are times when relative valuation will yield a more realistic estimate of value. In general, there is no reason to choose one over the other, since nothing stops you from using both approaches on the same investment. In truth, you can improve your odds by investing in stocks that are undervalued not only on an intrinsic basis but also on a relative one.

Why Should You Care?
Investors come to the market with a wide range of investment philosophies. Some are market timers looking to buy before market upturns, while others believe in picking stocks based on growth and future earnings potential.

Some pore over price charts and classify themselves as technicians, whereas others compute financial ratios and swear by fundamental analysis, in which they drill down on the specific cash flows that a company can generate and derive a value based on these cash flows. Some invest for short-term profits and others for long-term gains. Knowing how to value assets is useful to all of these investors, though its place in the process will vary. Market timers can use valuation tools at the start of the process to determine whether a group or class of assets (stocks, bonds, or real estate) is under- or overvalued, while stock pickers can draw on valuations of individual companies to decide which stocks are cheap and which ones are expensive. Even technical analysts can use valuations to detect shifts in momentum, when a stock on an upward path changes course and starts going down or vice versa.

Increasingly, though, the need to assess value has moved beyond investments and portfolio management. There is a role for valuation at every stage of a firm's life cycle. For small private businesses thinking about expanding, valuation plays a key role when they approach venture capital and private equity investors for more capital. The share of a firm that venture capitalists will demand in exchange for a capital infusion will depend upon the value they estimate for the firm. As the companies get larger
and decide to go public, valuations determine the prices at which they are offered to the market in the public offering. Once established, decisions on where to invest, how much to borrow, and how much to return to the owners will all be decisions that are affected by perceptions of their impact on value. Even accounting is not immune. The most significant global trend in accounting standards is a shift toward fair value accounting, where assets are valued on balance sheets at their fair values rather than at their original cost. Thus, even a casual perusal of financial statements requires an understanding of valuation fundamentals.

Some Truths about Valuation
Before delving into the details of valuation, it is worth noting some general truths about valuation that will provide you not only with perspective when looking at valuations done by others, but also with some comfort when doing your own.

## All Valuations Are Biased

You almost never start valuing a company or stock with a blank slate. All too often, your views on a company or stock are formed before you start inputting the numbers into the models and metrics that you use and, not surprisingly, your conclusions tend to reflect your biases.

The bias in the process starts with the companies you choose to value. These choices are not random. It may be that you have read something in the press (good or bad) about the company or heard from a talking head that a particular company was under- or overvalued. It continues when you collect the information you need to value the firm. The annual report and other financial statements include not only the accounting numbers but also management discussions of performance, often putting the best possible spin on the numbers.

With professional analysts, there are institutional factors that add to this already substantial bias. Equity research analysts, for instance, issue more buy than sell recommendations because they need to maintain good relations with the companies they follow and also because of the pressures that they face from their own employers, who generate other business from these companies. To these institutional factors, add the reward and punishment structure associated with finding companies to be under- and overvalued. Analysts whose compensation is dependent upon whether they find a firm to be cheap or expensive will be biased in that direction.

The inputs that you use in the valuation will reflect your optimistic or pessimistic bent; thus, you are more likely to use higher growth rates and see less risk in companies that you are predisposed to like. There is also
post-valuation garnishing, where you increase your estimated value by adding premiums for the good stuff (synergy, control, and management quality) or reduce your estimated value by netting out discounts for the bad stuff (illiquidity and risk).

Always be honest about your biases: Why did you pick this company to value? Do you like or dislike the company's management? Do you already own stock in the company? Put these biases down on paper, if possible, before you start. In addition, confine your background research on the company to information sources rather than opinion sources; in other words, spend more time looking at a company's financial statements than reading equity research reports about the company. If you are looking at someone else's valuation of a company, always consider the reasons for the valuation and the potential biases that may affect the analyst's judgments. As a general rule, the more bias there is in the process, the less weight you should attach to the valuation judgment.

## Most Valuations (even good ones) Are Wrong

Starting early in life, you are taught that if you follow the right steps, you will get the correct answer, and that if the answer is imprecise, you must have done something wrong. While precision is a good measure of process in mathematics or physics, it is a poor measure of quality
in valuation. Your best estimates for the future will not match up to the actual numbers for several reasons. First, even if your information sources are impeccable, you have to convert raw information into forecasts, and any mistakes that you make at this stage will cause estimation error. Next, the path that you envision for a firm can prove to be hopelessly off. The firm may do much better or much worse than you expected it to perform, and the resulting earnings and cash flows will be different from your estimates; consider this firm-specific uncertainty. When valuing Cisco in 2001, for instance, I seriously underestimated how difficult it would be for the company to maintain its acquisition-driven growth in the future, and I overvalued the company as a consequence. Finally, even if a firm evolves exactly the way you expected it to, the macroeconomic environment can change in unpredictable ways. Interest rates can go up or down and the economy can do much better or worse than expected. My valuation of Goldman Sachs from August 2008 looks hopelessly optimistic, in hindsight, because I did not foresee the damage wrought by the banking crisis of 2008.

The amount and type of uncertainty you face can vary across companies, with consequences for investors. One implication is that you cannot judge a valuation by its precision, since you will face more uncertainty when you value a young growth company than when you value a
mature company. Another is that avoiding dealing with uncertainty will not make it go away. Refusing to value a business because you are too uncertain about its future prospects makes no sense, since everyone else looking at the business faces the same uncertainty. Finally, collecting more information and doing more analysis will not necessarily translate into less uncertainty. In some cases, ironically, it can generate more uncertainty.

## Simpler Can Be Better

Valuations have become more and more complex over the last two decades, as a consequence of two developments. On the one side, computers and calculators are more powerful and accessible than they used to be, making it easier to analyze data. On the other side, information is both more plentiful and easier to access and use.

A fundamental question in valuation is how much detail to bring into the process, and the trade-off is straightforward. More detail gives you a chance to use specific information to make better forecasts, but it also creates the need for more inputs, with the potential for error on each one, and it generates more complicated and opaque models. Drawing from the principle of parsimony, common in the physical sciences, here is a simple rule: When valuing an asset, use the simplest model that you can. If you can value an asset with three inputs, don't use
five. If you can value a company with three years of forecasts, forecasting 10 years of cash flows is asking for trouble. Less is more.

Start Your Engines!
Most investors choose not to value companies and offer a variety of excuses: valuation models are too complex, there is insufficient information, or there is too much uncertainty. While all of these reasons have a kernel of truth to them, there is no reason why they should stop you from trying. Valuation models can be simplified and you can make do with the information you have and-yes-the future will always be uncertain. Will you be wrong sometimes? Of course, but so will everyone else. Success in investing comes not from being right but from being wrong less often than everyone else.

