



Simplicity in Asset Valuation Models

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Illiquid assets such as rarely traded securities or whole businesses are notoriously hard to value. Yet, hedge funds and other money managers must do just that on at least a quarterly basis so their investors know how well their investments are doing. Money managers develop with models to make such valuations, then turn to valuation firms to go over their work and confirm that the range of values they've come up with is reasonable.

But given that these financial experts are math whizzes, they sometimes develop extraordinarily complex models. It is clear they feel that the more complex the model, the more accurate the price tag. But our long experience doing this kind of work makes clear that this isn't so. People mistake complexity for clarity. yet, the simple model is often more accurate than the ornate one.

What hedge fund managers and their investors should use is a model that captures the complexities of the investment, but isn't more complicated than needed. The model should let you to understand the asset's economics to price it appropriately. It should also be one you can use and maintain with a reasonable amount of effort.

There are several reasons people mistakenly believe a complex model will bring them more accurate answers.

Often, asset buyers will take a prospectus or other legal document related to the investment and try to input into the model every line, every wrinkle, every contingency related to it. But the fact is that an asset's true value is determined by very few contingencies. It's important to stay focused on the elements that are truly driving the asset's value.

We believe one reason managers do this is because it can be tough to admit that any investment entails risk. They don't want to focus on uncertainties, such as the fact that the asset could default a few years down the line.

Treasury Risk

For example, an investment will have several types of risk: Treasury risk, country risk, industry risk. In valuing the asset, the model could use multiple contingencies for each type of risk. We've seen models that used up to eight components to account for the interest-rate risk. The problem with this is, the the asset's value is unlikely to change much because the Treasury rate increases by 50 basis points (going from 100 to 500 basis points is another story). It's just not crucial to the asset's economics. That's getting far too granular.

Here's another example of simplicity. Say you are valuing an enterprise. An easy way to do that would be to look at last year's earnings and decide what multiple to use based on that. Another simple way would be to look at the values of similar companies that are publicly traded. Instead, people come up with complicated approaches, such as trying to project the next five or seven years of income and then going back to determine present value. It's very difficult to forecast revenues that far into the future. You're just making too many assumptions. Also, people don't bother to adjust those projections as time goes on, leading to further problems with the ultimate valuation range.

There's another way these models get too complex. Say an investment vehicle buys the subsidiary of a company. The model will be fairly simple. But what if it later buys the parent company? It will probably try to take that existing model and adapt it for the larger entity. The result can be an extremely complicated spreadsheet — at times, frankly, more complicated than the investment itself! The focus becomes maintaining the spreadsheet and not accurately valuing the company.

These complex models can also become brittle, in the sense that they will include outdated information and even links to sources such as databases and websites that are broken. Or, given personnel turnover, no one even remembers why a source is there in the first place. But once that ever-more-complicated model is established, institutionally it's hard to put it aside and build a new, cleaner one.

Of course, one issue in changing a model is that it sometimes means notifying regulators of that switch. Questions may arise as to the purpose. But we feel strongly that getting to the core of what drives an asset's value is so important, it's well worth the time and expense to deal with that slight annoyance.