Attorneys Facing An Uphill Battle In Litigation Should Consider Option Value When Arguing Valuation

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Let me tell you a sad story; Joe owned a marketing company and earned a prosperous living for several years. Joe's business was growing rapidly and all seemed right with the world. Then a trusted employee left Joe's firm, taking with him half of Joe's customers in violation of his non-compete agreement. Joe's business slowly suffered and lost customers until eventually his firm declared bankruptcy.

Joe sued his former employee and asked for damages related to the value of his firm. Joe's attorney argued to the court for compensation based on the value of Joe's firm that was destroyed by the employee. Yet the attorney left out one critical question when arguing the case; how should the law account for the fact that Joe's business was growing rapidly until the employee left?

Perhaps Joe had several big accounts that he might have been able to sign had the employee not engaged in unfair trade practices. Without taking these factors into account, Joe's attorney is under-representing the value of Joe's claim and leaving compensation on the table for no reason.

In finance, this idea of the possibilities that could plausibly occur in the future is called an embedded option or a real option and it is extremely useful in a variety of cases from divorce proceedings and business bankruptcies to merger disputes and matters of economic harm. In the scenario above, Joe's firm had the ability to potentially continue to grow and become even more successful than it was at the time before Joe's employee left. Hence the damage done to Joe is greater than simply the lost historical value of the firm. He has also lost the possibility of much more value in the future.

The crux of modern asset valuation is based on a concept called the time value of money. Essentially the idea is that because money received in the future is worth less than money received today, we can value assets or a business based on their associated cash flows and an appropriate discount rate. This approach forms the basis of everything from stock valuation on Wall Street to proper methods for computing interest rates in bankruptcy. This facet of valuation is well understood. But what about the future opportunities or chances of cash flows that are uncertain? That's what embedded options address.

The concept of embedded options might seem abstract or even too nebulous for many judges to buy into in a court case, but the reality is that real options have significant value and are often a subject of serious financial negotiations. Particularly for small firms, real options are often important and serve as the basis for various types of convertible debt and warrant grants.

As a finance professor and frequent consultant to companies on matters of asset valuation and financial forecasting, I have long taken it for granted that the techniques used in the finance profession were well understood and universally applied across many other industries including the law. I was very surprised to learn when I started doing expert consulting work, this is not the case. Lawyers often neglect to ask for damages based on real options in their cases. This leaves an important tool out of the litigation toolbox.

In discussing real options thus far, it might seem like they are primarily useful for parties alleging damages, yet they can also be useful for defendants as well. In particular, defendants need to understand how real options are valued and also understand the four appropriate metrics for calculating economic harm as it relates to options (compensating variation, equivalent variation, Paasche indices, and Laspeyres indices). I'll talk more about these in a future column though.

When valuing real options, there are various statistical techniques that can be used. The math is not necessarily important here, but the concepts are. Essentially, real options increase in value in situations where there is greater uncertainty, and when interest rates in the broader economy rise. Those conditions make real options an exciting tool in today's courts. With the Fed finally starting to raise interest rates, real options should become marginally more valuable. More importantly, situations with significant amounts of uncertainty lead to greater volatility in intrinsic asset prices.

These volatile situations are often the very situations that lead to court cases for attorneys – a business deal that went wrong leads to a bankruptcy but could have led to a hugely successful company, a merger agreement could result in substantial cost savings for both firms or substantial value destruction for investors and is being challenged by shareholders, a wrongful death case for an individual in the prime of their lives leaves so many possible futures unexplored. Thanks to new statistical techniques and greater computing power, these situations and others can be effectively modeled through computer simulations and valued by economists in ways that would have been unimaginable a decade ago.

Representing clients fairly and to the best of one's ability in court is the foremost duty of an attorney. To do that, attorneys need to understand the tools of business and the cutting-edge techniques being used in asset valuation. Failing to use these tools is not only a disservice to clients, but a severe hindrance to the attorney as well. In a competitive legal market, the Joes of the world will flock to those attorneys that free themselves to position their clients for maximum success in court.