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A Market of Lemmings

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Value is in the eye of the beholder. A market consisting of a collection of beholders is presumed by many authoritative sources to be the best determinant of how valuable something truly is. The first premise of that presumption is that at least two of the market participants have made the correct determination and the correct value is observable as the price at which they agreed to transact. The second premise is that of those who have access to all available information about the asset, and have the capability to analyze and arrive at the correct conclusion, at least two of them are also sufficiently motivated by economic incentive to realize the value of their information and analytical effort by actually engaging in a transaction at a price that can be observed by others. The third premise is that if only one buyer knows what the correct value is, he or she has the confidence and motivation to be willing and the resources to be able to transact with all sellers asking for less than the correct value until only sellers asking for more than the correct value remain.

For Sale: Perfect Information, Used Once

These are some of the many conditions that must exist if one is to accept the theory that observed market prices reflect "perfect information", and therefore the correct conclusion of value. Used only as a label, the term perfect in this context is a misnomer, as it really only refers to "all available" information, and not necessarily its accuracy, precision, or volatility. Perhaps the most important premise to accept is that the market approach to valuation rests on many theoretical and hypothetical assumptions, and is itself just a theory. Yet, authoritative sources such as the IRS, SEC, FASB and professional appraisal associations consistently advocate market prices to be the best indications of value. To avoid committing to its validity in all conditions, the SEC and FASB have recently modified their version of the theory to include some consideration of how active the market is, and where to draw the line in order to determine whether a market even exists.

If one assumes that a market of sufficient size and with all of the above requisite conditions does exist, and it generates correct valuation conclusions that can be observed, the question arises: Is the "perfect" information that is used to determine the observed market price itself reliable? That is, do any of the market participants have information that is accurate and precise enough to actually arrive at the correct value—or do they only believe that they do?

It's generally a bad idea to assume that the guy at the head of the line knows what he's doing.
—George Carlin

The market approach to valuation is, in many ways, an incomplete thought. To have confidence in its validity, one must agree that the market participants are doing the analytical work required in order to arrive at a correct conclusion in a logical manner. Repeated episodes of extreme price changes and reversals in various markets within hours or days are evidence that there are other, perhaps illogical, determinants of observed market prices. This view has become especially popular with public companies that have recently become subject to various fair value accounting rules to the detriment of their reported financial condition.

In order to complete the thought that market participants are logically determining and transacting at the correct price, a market approach to valuation would have to specify which methods are used by the market participants to convert the perfect information to a value conclusion. Not doing so necessarily implies that the valuation estimates of market participants are either illogical or consist of uninformed guesses. In some financial markets, there is repeated evidence that this may be true at various times. Just as lemmings have been observed to follow each other off a cliff, some investors, investment bankers, and appraisers have paid a high price for relying on the market's assessment of value instead of their own intellect.[1]

For every complicated problem, there is a solution that is simple, elegant, and wrong.
—H.L. Mencken

As an example, consider the process of assigning a value to intellectual property ("IP"). Those familiar with the relief from royalty method recognize that using observed royalty rates negotiated by others for the use of similar property under widely differing conditions and limitations is merely the result, and not the true determinant of value. The true determinant is how much the end user of the intellectual property can benefit from its use, and what portion of that benefit the end user is willing and able to pay to the owner of the intellectual property.

Even a rudimentary analysis that reflects actual conditions is preferable to relying on royalty rates. Since income taxes at the highest marginal rate must first be paid on any incremental profit generated by the IP, the annual royalty payment must be something less than the after-tax income it generates, or there will be no incentive for the licensee to pay the royalty. An equitable split of the after tax incremental profit generated by the IP is widely regarded as a fair and economically feasible arrangement, and is in reality the primary driver of negotiated royalty rates. However, this income approach is often derided as a "rule of thumb" in favor of accepting royalty rates negotiated long ago, for different intellectual property, used in different industries by companies having different profit margins. The presumption that observed IP royalty rates are superior indicators of value implies that they represent a complete and well-reasoned analysis on the part of the buyers and sellers. If this is true, they must have determined the correct royalty rate by either calculating the avoided reproduction costs amortized over some useful life, or by using an income approach, with a negotiated split of the incremental income.

So, one's belief in the validity of market prices rests on the presumption that the market price is determined by at least one market participant having sufficient knowledge, information and capabilities to arrive at a correct conclusion of value, by applying some logical method of valuation that does not rely on market prices. The question arises then, what do they have that you don't? It could be superior knowledge of the industry or information about what others are willing to pay. Some of them might have superior analytical capabilities. The existence of investment advisory firms is evidence that certain market participants have superior knowledge and capabilities, and that those who don't are willing to pay for it. Equal access to public company information has recently become a reality, since complete historical financial information is now easily accessible for free by anyone with access to the internet.

What is not equally available, however, is a reliable forecast of income and cash expenditures. This also happens to be one of the prerequisites to arriving at a correct conclusion of value when using the income approach. Forecasts are constructed by either management or outside analysts who, in addition to having access to superior information and knowledge, don't usually disclose them. Even if they do make the forecast available to others, it is usually not sufficiently detailed or accurate enough to use as a basis for a correct conclusion of value. One reason for this is obvious: the forecast does not reflect unforeseen conditions in the future, and represents only what was expected at the time it was created.

The less obvious reason why the financial "forecast" is unreliable could be that it is not a forecast at all, and is in truth, a projection. A financial forecast is based on the assumptions reflecting the conditions expected to exist and the expected course of action. A financial projection is based on the responsible party's assumptions reflecting conditions it expects would exist and the course of action it expects would be taken, given one or more hypothetical assumptions.[2] The key difference is that a projection reflects assumptions that certain conditions and events will materialize in the future that are necessary for the projected financial results to materialize. The most common of these is an assumption that the company will be successful in convincing a lender or investor to provide additional or replacement financing in the future. A related assumption is that the cost of that financing will be economically feasible for the company to pay. In the current credit environment, it is increasingly more difficult to support the position that these assumptions are reasonable. In the current economic environment, there is an abundance of evidence that could controvert the common assumption that future financing will be available at any price, thereby reducing many of management's well-informed expectations to impossible dreams of what might have been.

Anyone relying on a market to determine values in a professional setting must be able to explain with credibility what is at the root of market prices. Is it a forecast or a projection? If it is a projection, how likely is it that the required conditions will materialize in the future, and within the time period projected? Many analysts employ methods that attempt to estimate the various probabilities of success in an effort to arrive at a lower, apparently more conservative conclusion of value. However, these probabilities become irrelevant if a highlyleveraged company cannot secure additional or replacement financing before a fast-approaching cash deficit, loan maturity, or redemption date. When a source of financing is too expensive, or does not exist at any price, and the maturity of a large liability is imminent, the value of equity is often zero.

Some will argue that equity always retains some claim on the residual value of assets and should therefore be valued as an option on the value of the company's assets. However, the high failure rate of Chapter 11 bankruptcy filings provides convincing evidence that equity under such circumstances is much more likely to be worthless. When there is no support for assuming that the required equity or debt financing will be available at a cost that the company can sustain, and liabilities exceed the realizable value of assets, the correct value of equity is probably zero unless there is a profitable core business that can be self-sustaining, growing at the rate that earnings can be retained, and with no need for external financing. The market is not always correct, however, and has regularly attributed value to thousands of equity and debt securities that are now worthless.

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[1] On occasion, and particularly in the case of the Norway lemmings in Scandinavia, large migrating groups of lemmings will reach a cliff overlooking the ocean. They will stop until the urge to press on causes them to jump off the cliff and start swimming, sometimes to exhaustion and death. Many die because they cannot locate a suitable habitat, and others drown when they are pushed into the sea by the pressing momentum of the masses behind them. Due to their association with this odd behavior, lemming suicide is a frequently-used metaphor in reference to people who go along unquestioningly with popular opinion, with potentially dangerous or fatal consequences. Source: Encyclopedia Britannica, 2009.

[2] Public Company Accounting Oversight Board;<<http://www.pcaobus.org/Standards/Interim_Standards/Attestation_Standards/index_at.asp?series=301&section=301>>