



Rob Arnott's Rebuttal to Michael Edesess

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February 17, 2009

The following is in response to last week's article by Michael Edesess, [Response to Rob Arnott's Defense of Fundamental Indexing](#). Edesess' article was in response to our [interview](#) with Rob Arnott, which appeared on February 3, 2009.

In reading Dr. Edesess's critique of my interview, I'm struck by three things.

First, he can't break free from the classical finance world-view of efficient markets, in which we're investing in stocks, not companies. What's the difference?

- In a classical finance world, price and value are essentially equal. If there are errors, value is normally distributed around price.
- In a Graham & Dodd world of investing in companies, there's a fair value. We can't see it, though we can try to estimate it. And, the market will try to estimate it, which results in a price which may be too high or too low.
- In a Graham & Dodd world, we should get long-term mean reversion in prices and valuation levels, as the market seeks out this invisible fair value. Which we do.
- Because companies can get to a high valuation multiple or a large market cap, either because they deserve it *or because they're overpriced* or both, there's a slight tendency for the average large-cap or growth stock to be overvalued. The converse holds true for the low-multiple and small-cap end of the spectrum. So, in a Graham & Dodd world, we would expect to see a value effect and a size effect. And we do.
- In a Graham & Dodd world, whenever the price is too high, the cap-weighted allocation will be above its fair value weight, and whenever the price is too low, the cap-weighted allocation will be below its fair value weight. This creates a return drag for cap-weighting ... not relative to the market (which is, after all, cap weighted) but relative to our opportunity set. It's common sense.
- In a Graham & Dodd world, emotions can play a major role leading to market inefficiencies and potentially large mispricing. In a classical finance world, it would be difficult to construct a many-sigma outlier in returns, volatility and correlations, all soaring in parallel, like we saw in 2008. While it's gratifying to know that 2008 shouldn't happen, it's discouraging to note that it did.



Secondly, our mathematics – which Dr. Edesess dismisses – was done jointly with Harry Markowitz and Jun Liu, as well as my colleague Jason Hsu. None of these is a slouch at math. Basically, we simply try to formalize the mathematics of a world in which there's an invisible and unknown fair value, and price follows a mean-reverting random walk, always tending towards that fair value but with new shocks that keep the errors in price from disappearing. This sounds more like the “real world” to me – and to Harry Markowitz! – than the EMH world, in which price and fair value are the same, and shocks move both price and value identically.

- Our model predicts a size effect, a value effect, and long-horizon mean reversion in prices and valuation multiples. With pretty reasonable parameters, it actually predicts closely conforming to the evidence of the real world.
- Our model also predicts that the cap-weighted market will underperform a price-indifferent portfolio – a portfolio where our investment won't be twice as large just because the price doubled – almost exactly in line with the observed performance drag.
- For what it's worth, our model also says that 2008 shouldn't have happened. But, it's just a model. Like most models, it's only an approximation of the real world. But, it's a better model, in my view.

Finally, I noticed six instances in which Dr. Edesess changed my core assumptions or otherwise materially altered my arguments. There may be more. I will offer a bottle of excellent 1980s vintage Bordeaux to the each reader – including Dr. Edesess – who identifies each of these ... or any that I missed. To protect my wine cellar, I'll limit this offer to twelve bottles of wine. Have at it, folks!! [Ed. Note: Advisor Perspectives will, at your option, publish your winning entry.]

'Nuff said. Dr. Edesess, over to you. If the mathematics of efficient markets are compelling to you, I'll look forward to times when you're on the other side of my trades! If you're moved to offer a rebuttal to this rebuttal to your rebuttal to my first rebuttal, the gentle readers can rest assured that I will spare them any additional rounds. You may have the “last word,” if the inspiration moves you. All the best!

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