When assessing *Capital Ideas*, it is critical to distinguish between the messenger and the message. Through the *Journal of Portfolio Management* (starting in 1974), and then in *Capital Ideas* (1992), Peter Bernstein clearly succeeded in achieving his goal of bringing gown to town, as well as explaining to a broader audience in *Capital Ideas* what the complex and rather dry *Journal of Finance* articles actually meant. His enthusiasm and wit and wisdom emerge on almost every page. He is one of the very good guys in a popular Wall Street narrative that is too often populated by villains, or at least excessively self-interested characters. His *JPM* columns are, simply put, gems of succinct writing and clear thought.

My issue is with the message. The MPT and the EMH that were being promulgated at this time need to be seen in their proper historical context and judged as to their utility today. That is what *Getting Back to Business* purports to do. What Markowitz produced in the 1950s (defining and managing risk and return via diversification) and what Sharpe et al came up with in the mid 1960s (a practical way of creating Markowitz portfolios/expected returns) was certainly innovative and very clever. Those breakthroughs were to be applauded, which Bernstein does enthusiastically in *Capital Ideas*. The Royal Swedish Academy of Sciences agreed.

Here are the problems from a practitioner's perspective a half century later. First, the academic answers had and still have nothing remotely to do with actual business ownership. By their own admissions, Markowitz, Sharpe et al were not businesspeople, at least not initially. MPT is a theory of numbers (covariances and so on) for people interested in numbers, not a theory of business ownership for people interested in businesses. When you read the original articles, you sense that the authors were approaching their tasks as mathematical puzzles to be figured out, consistent with the quantify-all-human-behavior spirit of the times. But as MPT and the EMH emerged to the foreground, the companies, the products, the employees, the cashflows, etc all fell into the background. That was an almost funny problem during the late 1990s when many investors did not know what their favorite internet stocks actually did; it is a problem now through overdiversification/passive investment structures where a typical retail investor can own thousands of meaningless stakes. A prominent finance professor reacted to my narrative by saying that he had no interest in owning companies at all. He was just interested in stocks, and to that end he owned only the broadest market indices. That's his choice, and, evidently, the choice of many others, but let's not confuse that with business ownership.

Second, although most stocks at the time (1950s, 1960s, 1970s) had robust dividends, and the total return calculations necessarily include the dividend payment, MPT largely ignores them. (It goes without saying that I disagree with the M&M propositions!) As a practical matter, mean variance optimization of near-term total returns means everyone's focus is on share price change, not the long-term cashflows from the underlying businesses. Yes, prices convey information. That is what markets are about. And some price changes can signal the direction of future cashflows. But we have put the cart before the horse by having a theory of prices that has overshadowed the business essentials that are supposed to guide those prices. In contrast, in mature public equity markets outside the United States and in private business investment everywhere, cash is king. In the US stock market, it is at best a pawn.

Third, a lot of *Capital Ideas* is about defining and conquering risk, as is *Against the Gods* a few years later. But the near-term, share-price-based definition of risk in MPT is not mine. It's not Warren Buffett's. It's not Benjamin Graham's. And it is not the definition of most people in business. Distributable cashflow is my preferred "real-world" measure of risk. Given that dividends have been out of favor from the US stock market for decades (2% yield/35% or so payout), perhaps it is not surprising that the dominant investment paradigm has little if anything to say about them. This disagreement in the understanding of risk is a really big deal. Rational actor theory, lurking in the background of both MPT and EMH, generally requires everyone to have similar definitions of risk (and many other variables). As the behavioral finance folks have proven in recent decades, that is not very realistic. And without those shared definitions, much of the math behind MPT/EMH begins to crumble.

Fourth, the EMH emerged simultaneously with MPT, and ended up being linked with it through the most robust understanding of the CAPM in the mid 1960s. Your colleague Justin Fox has dealt ably with the shortcomings of the EMH in his 2009 book, but a decade later, passive investing (the practical outcome of EMH) still dominates, now with the twist of factor investing. But it is still not business investment, and it is still focused on near-term asset prices, not their genuine utility.

Finally, specific to *Capital Ideas*, Bernstein hails the developments coming from the academy in the 1950s, 1960s, and 1970s as definitive and timeless solutions to the profoundly human problem of decision making under conditions of uncertainty. Mission accomplished. His tone is not dissimilar from that of Francis Fukuyama's famous *End of History* which came out the same year as *Capital Ideas*. (The short 1989 *National Interest* article upon which the book is based is available on line; it makes for great but dated reading….) It turns out, however, that risk was not tamed. Market booms and busts continued. The formulas have gotten refined over the years, but the experience of many investors has fallen well short of the implied promises in *Capital Ideas*. Ask any pension trustee….

The problem of MPT is not what it was at the point of creation, or even via the transmission mechanism of a wonderful Peter Bernstein, but what it has become in the hands of the investment industry today, a myopic obsession with near-term relative total return, and an equally dangerous disinterest in the underlying cashflows which, in all basic investment theory, should be the major driver of those asset prices. My two cents, and not necessarily the views of my employer.

Casting doubt on anything Peter Bernstein did is a risky proposition itself. I am in danger of being stoned in the internet agora. I hope I've made it clear that I am a great admirer. Let me end by quoting him on uncertainty, the core challenge of our collective enterprise. MPT and its related acronyms offered the prospect, if not the explicit promise, of quashing uncertainty, of channeling it, of making it, if I may, certain. Bernstein, in contrast, welcomed "the great gift of uncertainty". He derided a fully mathematized world, writing, "What a bore! In that system, innovation and change are impossible, creative destruction unknown, risk-taking nothing more than a numbers game. Thank goodness the world of pure probability exists only on paper and has little to do with breathing, … creative human beings struggling to find their way out of the darkness… Our decisions do matter… The rules that determine the next throw of the dice have nothing to do with it." (*JPM*, 22/4, 1996) Bravo and thank you, Peter Bernstein.