Stock Market Perspective: Peter Bernstein, 1919 - 2009

On June 5 the investment world lost one of its true sages, a thinker with often unique and always perceptive insights. Peter L. Bernstein's 1996 Against the Gods: The Remarkable Story of Risk is one of the most important books about investing and our attitudes towards money ever written. Bernstein was an economic analyst, consultant, and founder of the Journal of Portfolio Management. He was also the author of the highly acclaimed 1992 book Capital Ideas: The Improbable Origins of Modern Wall Street. Both of those books are highly worthwhile.

As an example of the type of insight he provided, consider what he wrote last year about the shape of the economic future. As a prelude he said that economic environments "tend to persist as long as people are still trying to figure out what is actually going on." Consequently, change "is unlikely until people finally arrive at the belief they understand what it is all about." This is true for "all environments, both prosperous and depressed, to the 1920s as well as to the 1930s, to the years from 1949 to 1969 as well as to the devastating decade that followed."

Accordingly, "the 1920s were doomed at the moment when the New Era became a common phrase and Irving Fisher explained that prosperity would last forever." "The postwar prosperity of 1949-1969 lasted for over twenty years because it was grounded in doubt as everybody kept waiting for an inflation that never showed up."

I may revisit his article in a future Perspective to look at what he said about the shape of the future over a year ago, well before the current financial "crisis" had become full blown. It will be interesting to see how prescient his insights have been and see what they may tell us about what we can expect. However, in his honor and memory, I am going to "replay" what I wrote in the 1997 first quarter Perspective after reading

Against the Gods: The Remarkable Story of Risk. If you haven't read it, I urge you to do so. Some parts of it are quantitative, but they can be skipped without losing the main thrusts of his exposition.

In his new [in 1996] book, he focuses on the historical development of the methods we use to deal with uncertainty. The essential idea is that by measuring their chances of success and failure and the consequences of such outcomes, people are empowered to take risks rather than just facing them. However, dealing with uncertainty and risk can be quite complex.

The book is a well written history of mankind's development of tools for dealing with and attitudes toward uncertainty from the Greeks to the present. As such it contains a history of the development of probability and statistics that is easy to read and contains very little mathematical content. More importantly, he emphasizes how these subjects relate to conceptual advances in dealing with uncertainty, including insurance. If you are interested in learning about these topics, but do not want to take a math course, this book will fill the bill.

Not surprisingly, Bernstein pays considerable attention to twentieth century advances that often go beyond strictly quantitative methods and consider psychological aspects, some of which may seem contradictory. He also delves into some of the subtle or possibly unidentified risks associated with dealing with uncertainty. I will focus on the modern topics. In general, I am summarizing from Bernstein's book and interviews he has given in various magazines such as the March/April 1997 issue of *Bloomberg Personal*.

Prior to World War I, the path of development of dealing with uncertain future events had focused on measurement and determining of the laws of probability, quantification of past and future events, and methods for determining the relationships among the quantities. Most mathematicians and philosophers prior to this century believed that they had the tools to determine what the future held provided they could get the necessary facts. Perhaps due to the upheaval resulting from that war, attitudes changed radically in the subsequent years.

In the post World War I period, the idea of being able to build valid, predictive, models of economic activities based on known probability

distributions and nineteenth century economic assumptions came under attack by the

Bernstein said that it was very important not to think you know what the future would bring, although possibly he did.

likes of Frank Knight of the University of Chicago and John Maynard Keynes. In particular, the distinction between *information* and *data* becomes important. We often have too much of the latter but not enough of the former. Past events are a guide, but the future may be sufficiently different. (I like to say that history repeats itself in a different way.) This is in effect an additional, often not explicitly stated risk. In short, we may not know as much as we think we do, which in turn leads to a demand for methods of dealing with the uncertainty, *i.e.* risk management.

One reaction is John von Neumann's development of game theory. The seminal book, which he co-authored with economist Oskar Morgenstern, is called *Theory of Games and Economic Behavior*. This theory, which models how competing parties will react, has proved to be useful in a variety of applications such as devising auction methods and understanding the interaction between the Federal Reserve and politicians with regard to fiscal and monetary policy.

Another reaction is the development of Modern Portfolio Theory (MPT) by Harry Markowitz. This is a brilliant model to deal with uncertainties assuming we know enough about the likely future behavior of various investment classes. Fortunately, the past is often a good

enough guide to the future so that these approaches work well most of the time. However, until the past 30 years or so, all of the theory and techniques were in effect based on the underlying assumption that investors and others always behaved rationally and more or less consistently. In a sense, game theory and MPT tell us how people *should* make decisions in the face of risk and what the world be like if they behaved this way.

However, research by psychologists such as

Daniel Kahneman and Amos Twersky has shown that people often do not behave "rationally" or

consistently. The usual belief is that most people are risk adverse, and as early as the seventeenth century the idea of decreasing marginal utility (the pain from losing a certain meaningful amount is greater than the pleasure from gaining that same amount) was known. Kahneman and Twersky demonstrated that given exactly the same choice phrased in different manners, people will make different decisions. As a rule, we are more willing to take a gamble to avoid (larger) losses, which is "risk seeking," but are less willing to gamble in search of larger profits at the risk of certain smaller profits, which is "risk adverse." How one views the situation, how the question is asked, or one's point of reference can well determine the nature of the perceived choices. Due to such "non-invariant" behavior, it is often not possible to identify what the real risks are (e.g. no theory would have said something like October 19, 1987 was possible), which is in effect another form of risk.

On the other hand, the development of risk management techniques based on quantitative analysis as exemplified by elaborate graphs, numerical tables, and computer screens, probably generates a faith that encourages us to take risks that we might not take otherwise. Are we in effect waiting for wildness and total chaos, and what is a typical investor supposed to do? Bernstein is somewhat optimistic that

the continuing increase of the understanding of human behavior and the development of risk management methods, which are used by the major participants in the financial markets, will prevent chaos. [The events leading up to the 2008 near collapse of the global financial system show that optimism was misplaced.] He has some suggestions for typical investors, those who are not in a position to establish complex risk reducing hedges involving options and other derivatives, which entail their own risks due to some of the factors discussed above.

Bernstein points out that some losses are inevitable and that diversification can soften the blows. However, this approach "is not a guarantee against loss, only against losing everything at once." [The events of the second half of 2008 show that so-called diversification may not be effective at controlling risks during financial turmoil.] Also, being diversified may be costly in the short run since not everything

will be in the best performer, but not everything will be in the worst performer either. He also advocates rebalancing among asset classes periodically, probably once a year, since it his hard to forecast short-term performance. He says that stocks should probably be the largest asset class. By advocating rebalancing, in effect he is saying that it is wise to move from the recently strong performers to those that have done worse. This is an often recommended approach that should work well if followed over a long period of time. However, when this approach does not work well in the short-term, it leads to what Bernstein calls the "biggest risk of all" that "you lose your objectivity" and "chicken out in the terrifying moments when the opportunities are the greatest." He likes to begin every day with the mantra "I don't know." I think this is a good idea since another real risk is overconfidence.