The AMBACHTSHEER Letter
Sustainable Pension Design • Effective Pension Management

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RISK MANAGEMENT REVISITED

"Few really believe that the Global Financial Crisis rewrote the book on Modern Portfolio Theory. But perhaps some editing is needed…"

From Commonfund's
"Forum 2011" Agenda

Does MPT Need Editing…Or How We Apply It?

There is nothing like an invitation to "do some editing" on Modern Portfolio Theory (MPT) in front of 600 people attending Commonfund's *Forum 2011* to get the creative juices flowing. What started out as a few speaking notes in preparation for this event has morphed into this full-blown *Letter*. The more we became engaged in the topic, the stronger became the conviction that it is not so much Modern Portfolio Theory that needs editing, but our interpretation and application of it. That is the theme we develop below.

We start with a brief review of MPT's basic insights, and ask if they are still relevant today in light of the Global Financial Crisis, and the lessons it taught us about risk and risk management. Through this examination, we uncover a growing disconnect between MPT's strictures and the practices of many 'leading' endowment and pension funds. We describe this disconnect in some detail, and conclude by identifying three steps many endowment and pension funds should take to reconnect their practices with MPT's timeless principles.

MPT's Insights

Harry Markowitz's 1952 article "Portfolio Selection" kicked off a wave of ferment and innovation in investment and finance theory that continues to this day. His fundamental insight was that if investors could specify their reward/risk expectations for an investment universe, as well as their tolerance for risk-taking, a unique 'optimal' portfolio could be calculated. A key element of this radically new way of thinking about portfolio construction was the idea that how investments co-varied with each other determined their diversification power.

Other thought-leaders (e.g., Black, Merton, Sharpe, Scholes, Tobin, Treynor) took Markowitz's basic idea, and expanded it in a number of important dimensions. One such expansion was 'the separation theorem', which combined Markowitz's efficient frontier of risky assets with a risk-free asset. The investment opportunity set expands as a result, allowing aggressive investors to use leverage (i.e., borrow and invest the proceeds in the risky portfolio), and more risk-averse investors to split their wealth between the risky and risk-free investment alternatives. And so the all-important asset mix decision was placed into a structured reward/risk decision framework.

The next expansion followed from the question "what if all investors do investment analysis the same way using the same information?" Now the 'optimal' risky portfolio becomes the market portfolio, with all investors holding a piece of it, while they are short or long the risk-free asset, depending on their tolerance for investment risk. And so the Efficient Market Hypothesis (EMH) was born,

