

*Member Editorial***Has MPT Created a Stock Market Bubble?**

BY PAUL DONTIGNY, JR., CFA

Member Editorial is a forum for members to express their individual opinions. The opinions expressed in this submission are those of the author and do not necessarily represent the views of AIMR.



In my opinion, history will show that misinterpretation, misunderstanding, and misuse of Modern Portfolio Theory principles have created an investment-industry structure and culture that

promote and support the current stock market bubble...the same way that absent investment-industry regulation and poor investment knowledge supported the 1929 bubble.

IS IT REALLY A BUBBLE?

Of course we will only know for sure if it bursts. Yet all the signs of a bubble are present and all the ingredients for a disaster as well; we only need a trigger. Here is some evidence of a bubble:

We are paying record valuations on record levels of profitability on most of the capitalization of the U.S. stock market. This "perfect scenario anticipation" situation may extend for a short while, but is certainly not sustainable. The "new era" rationalization is widespread, especially among institutional investors.

Speculation is likewise widespread, although disguised or hidden by complex mathematical models (Barrings, Long

Term Capital, etc.). The public's participation in the stock market is at record levels and we are seeing obvious disguised leveraging of investments through mortgage, credit card, leasing of main assets, buy-now-pay-later deals, etc.

MISUSE OF MPT PRINCIPLES

"Relative performance" on a quarterly or annual basis is clearly the most important factor shaping our whole industry. Whether it is against a benchmark like stock indices or against the group of peers in the quarterly "quartile contest," it seems few professionals are free to invest for long-term absolute return (three to five years). To illustrate, at a conference in Montreal, Quebec, Canada, a few years ago, we asked managers what they felt was the most significant risk. They answered, jokingly, that it was to lose their job over the next six months.

I have a problem with risk being viewed solely as volatility of stock returns on a quarterly or annual basis. Volatility of stock returns was supposed to be used as a proxy (unbiased estimator) for the standard deviation of the distribution of expected earnings, because it was too complex to "probabilise" future earnings.

The switch from standard deviation of earnings (fundamental analysis) to stock returns (technical analysis) actually started in 1952 when the concepts of "yield" and "risk" appear frequently in financial writings. "Usually if the term 'yield' were replaced by 'expected yield' or 'expected return' and 'risk' by 'variance of return,' little change of apparent meaning would result." (Markowitz, 1952, *Journal of Finance*).

Yet today, we end up managing portfolios of popular stocks to try and beat some index or group of competitors over

the next three months, to keep our jobs. It is difficult to blame us. That is what the clients ask for, is it not? But we thereby do not do our real job, which is to allocate capital to the best long-term assets. This type of behavior always catches up to you...and to your clients.

SHOULD PROFESSIONALS BE DOING SOMETHING?

My answer is *yes*. Only because we are already part of the problem. Over the past 30 years, MPT has had a profound impact on the structure, culture, and legal framework of our industry. So we have helped create the problem. We should be more aware of the impact on our industry and our economy of misusing long-term investment principles mainly for the benefit of short-term marketing to clients.

The first thing to do is to review the concept of risk. Risk should be defined in an absolute framework as well as in a relative one. Should we recommend in our presentation standards the use of standard deviation adjusted realized returns, when we should know that standard deviation is only to be used with ex-ante data? That is not a theoretical question because it influences how money is invested and how bonuses are paid. Another example is that standard deviation of returns using monthly data is not an unbiased estimator of the standard deviation of seven-year compounded returns.

It seems like we are doing well, but we still have a lot of work ahead of us! So, is it a bubble or not? Well, based on fundamentals from an absolute value point of view, definitely *yes*. But based on relative valuation, who really cares? ●

Paul Dontigny, Jr., CFA, is President and CIO of Investissements PDJ in Boucherville, Quebec, Canada.