InvestmentNews
The Leading News Source for Financial Advisers

Modern portfolio theory may face more skepticism

Weak market could raise new questions about the concept

By **Dan Jamieson**
March 10, 2008

If, as some think, the financial markets are in a secular-bear- market period, clients could be hurt with buy-and-hold portfolios based on the concepts of modern portfolio theory, according to some financial advisers.

While generally considered an important portfolio-building tool, MPT has been criticized over the years and is under attack again.

The theory has been the backbone of portfolio construction for more than 50 years.

Advisers "are going to get sued," said John Mauldin, president of Millennium Wave Investments of Arlington, Texas, who matches investors up with hedge funds.

After a prolonged weak period for stocks, investors "are going to drag out the [portfolio optimization] presentation material" as evidence of being misled about returns, he said.

"Financial advisers have to be really careful about the numbers they plug in" to asset allocation programs, Mr. Mauldin said.

Advisers and consulting firms typically use historical data from Ibbotson Associates Inc., a subsidiary of Morningstar Inc. of Chicago, going back through 1926. The data show average nominal returns from stocks at about 10.2%, said Todd Ganos, partner at Doolittle & Ganos Investment Counsel LLC in Carmel, Calif., which manages about $200 million.

But that period began when price-earnings ratios were low, which produces a higher return, he said.

P-E EXPANSION

Going back to 1849, average returns fall to 8.9%, Mr. Ganos said. "The difference between 8.9% and 10.2% was [price-earnings] expansion," he said.

Mr. Ganos is "absolutely" being more conservative with his clients' portfolios at this point.

Secular bear markets last on average about 13 years, he said, "and we're coming up on the eighth anniversary of March 2000."

The concepts of MPT underlie asset allocation programs used widely by advisers. MPT uses historical data to estimate future returns, risk and correlations of different asset classes in order to maximize a portfolio's return for a given level of risk.

But critics say investment returns don't follow normal distribution curves as MPT assumes, and that risk, as measured by the mean variance of returns, is understated.

MPT makes assumptions based on "historical information that doesn't take into account significant rises or dips," said Douglas Schriner, president of Harrison Douglas Inc. of Aurora, Colo., a financial planning and investment banking firm.

"The math [behind MPT] is wrong," said Bryce James, chief executive and founder of Smart Portfolios LLC of Seattle. "It's all bunk."

For example, in theory, the chances of a "five-sigma event" — that is, a data point falling five standard deviations away from the norm — is one in 7,000 years, he said. In fact, a five-sigma event in the market happens once every three or four years, Mr. James said.

"So why do we use normal distributions" with portfolio optimizers? he asked.

Newer variations of MPT are in use, "but they're all built on normal distributions," Mr. James added. The concept is so ingrained that "if you say something against modern portfolio theory, you're considered a heretic," he said.

Bryce James: *"The math [behind MPT] is wrong. it's all bunk."*

MARKOWITZ DISAGREES

"From a math standpoint, there's absolutely no problem" with using normal distributions and mean variance, said Thomas Becker, senior software engineer at Zephyr Associates Inc., a Zephyr Cove, Nev.-based financial-software developer.

"Historically, it's quite clear you do get unusual events, but by and large, there is a tendency for returns to be distributed not too abnormally," he said.

Those who say a normal distribution shouldn't be used "don't know what they're talking about," said Harry Markowitz, the developer of MPT, who now runs an eponymous San Diego consulting firm.

"If the probability of distributions [on a portfolio] is not too spread out, from a 30% [loss] to a 40% gain," it's OK to use a normal curve, he said.

The bubble market of the 1990s and the crash from 2000 to 2002 "were all within two standard deviations," Mr. Markowitz added.

Mr. James said the reliance on average historical data came about because MPT was developed in the 1950s, when computer processing power was lacking.

"The bottom line is how you weight the data," he said.

Mr. James said a model he has developed uses different math to "focus on the clustering of data so we can [better] see what's been going on lately" in the market and adjust allocations accordingly.

"Markets tend to stay in [their current] trends for a while," he said.

INDEXED PORTFOLIOS

MPT-based portfolios are also too diversified, Mr. Schriner said.

What advisers end up with are indexed portfolios, he said.

"Indexing creates relative risks and relative-comparison models, but it doesn't help grow a portfolio. It's job protection, " Mr. Schriner said.

"The public [investor] doesn't care about relative performance" to an index, he added.

Mr. Schriner uses an outside adviser who provides an asset allocation overlay for mutual fund portfolios in an attempt to reduce volatility. He also uses direct investments in hard assets, mortgages and short-term notes to provide stability and cash flow.

In a long-term bear market, though, it's difficult to find opportunities that will produce absolute returns, Mr. Schriner said.

"Very few of us [retail] advisers are going to be able to do that," he said.

Furthermore, advisers often end up with asset allocation recommendations that are too highly concentrated in one asset class or impossible to implement, said Aaron Moore, chief technology officer at Zephyr. That's led advisers to "put in all kinds of constraints on their optimizers," he said, which doesn't always produce a workable solution.

Zephyr offers an optimizer based on a mathematical model known as Black-Litterman, which solves some of the drawbacks of other asset allocation models, Mr. Moore said.

Taxable investors can't continually re-balance the way an optimizer might indicate, Mr. Ganos said. Nor do the recommended allocations always make sense. So Mr. Ganos optimizes a portfolio's asset classes but then modifies that mix with individual securities selection.

Mr. James, who sells his asset allocation model to institutional investors and separately managed account providers, said his model reacts relatively quickly to changes in the market. He said his risk models sparked a move into cash beginning last summer, producing a 13.5% return in his composite accounts last year.

Mr. James' allocator is also used in the Aston/Smart Allocation ETF Fund, a fund of ETFs rolled out last month by Aston Asset Management LLC of Chicago.

Portfolios derived from MPT don't work for investors who take distributions from their portfolios, said Jim Otar, an adviser and founder of retirementoptimizer.com, a calculator by Otar & Associates of Thornhill, Ontario.

MPT works for the accumulation stage, he said, "but once you take money out, the dynamics change." Cash flow out of a portfolio can turn MPT into a market-timing system, Mr. Otar said.

He said that in cases where a client risks running out of money, the only solution may be an annuity that guarantees a lifetime income.

E-mail Dan Jamieson at djamieson@investmentnews.com.