Straight from the Source: William F. Sharpe

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Recently IndexUniverse.com Assistant Editor Heather Bell spoke with William Sharpe, the recipient of the 1990 Nobel Memorial Prize in Economics for the development of the Capital Asset Pricing Model (CAPM). Dr. Sharpe is the STANCO 25 Professor of Finance, Emeritus at Stanford University and the founder of Financial Engines, Inc., a provider of investment advice and managed accounts to defined contribution plans. He is also the creator of the Sharpe Ratio.

Index Universe (IU): Can you tell us a little bit about your recently published book *Investors and Markets: Portfolio Choices, Asset Prices, and Investment Advice*?

William F. Sharpe (Sharpe): I was invited to give some lectures at Princeton University and turn that into a book. I decided this would be a good opportunity to think about equilibrium and capital markets and what that means for investors and investment strategy and policy. What did I think I had learned, not only in the mean variance days of the capital asset pricing model and Markowitz, but also from all the things that people have done since then? I wanted to bring it all together. That seemed like a great undertaking; little did I realize where it was leading.

In the course of working on the lectures, I leaned more and more toward writing a simulator and just going back to first principles. The premise was that you had people coming together and trading with each other until they didn't want to trade anymore. What could you say about the outcome and prices and risk and return? I started writing this simulator, and it became a lot of fun but a lot of work.

In the old days, we made a lot of simplifying assumptions. Harry Markowitz decided to assume people care only about the mean and the variance of portfolio returns. And I thought if that were true, we should figure out what we could say about equilibrium, risk and return, and the CAPM.

In this setting, I asked if people care about something other than the mean and variance of portfolio returns, and what if return distributions could be anything? What's left? What can we say about how prices are determined? And more importantly, once you've got prices determined in a competitive market, what does that imply for what we ought to do with our money when we invest?

I also wanted to make it accessible, and I wanted to try to show academics in particular that this in many ways was a better way of teaching finance than the traditional way—in some ways simpler and certainly more general and potentially more fun—and push the notion of simulation as opposed to analytic closed-form mathematical models as an interesting way to look at things and make them seem more plausible.

IU: How should investors approach asset allocation?

Sharpe: The first thing you have to do is figure out what your objectives are. This isn't trivial: What are you trying to accomplish? What are your preferences for risk and return? What are your needs for things like liquidity?

Second, you have to figure out what your pre-existing sources of risk and return are. Do you own a house? If so, where is it and what risks are likely to impact its value? What about your job and other assets that are not in the portfolio?

One of my favorite diatribes is, "How can you possibly do your asset allocation without looking at the market values of the asset classes out there today?" That's probably the most valuable information you can get as to the future prospects of those asset classes, and what astounds me is the fact that many people—many of them very sophisticated—do asset allocation without even checking to see what the relative values of the outstanding shares in, say, European securities, U.S. securities, emerging markets, etc., are.

IU: Should investors index?

Sharpe: I think that indexing covers a multitude of sins, but I also think indexing is a good idea for a nontrivial part of your money. I'm not saying you have to index everything, but I'm a big proponent of indexing. It also has to be cheap indexing. There are index funds that egregiously charge 100-plus basis points, which is insanity.

IU: Are there asset classes where it makes sense to go with active management or is across-the-board indexing a good way to go?

Sharpe: Whenever you're doing active management, you have to think of it as you're betting your manager is enough smarter than the average active manager in that sector to overcome all the added costs. You could make the argument that if a sector is really well researched and there are a lot of people trying to find mispriced securities, the chance of finding an active manager that can cover costs and provide a net alpha is much smaller than in an area which is under-researched and under-examined. A number of consultants used to advise indexing the big markets and going active in the little ones or the obscure ones. Nowadays, however obscure the market is, there seem to be a lot of people studying it, so that game is a little harder to play, I think.

IU: Do you think fundamental indexes are a valid way to represent the market?

Sharpe: No. I love the way you stated it because I can answer it unambiguously. There are so many shares of IBM and so many shares of General Motors and so many shares of Little Widget Manufacturing, and to represent the market you buy 1% of the shares of IBM and 1% of the shares of General Motors and 1% of the shares of Little Widget Manufacturing—and then you've represented the market. Anything else can't represent the market, because when you add it up, you don't get the market. If you want to represent the market and if you want a return equal to the return on all the money invested in that market, you're going to own the same proportion of the shares outstanding of every security in the market period. A fundamental index is going to get a different return: If it is value-tilted, as most of them are, you're going to win when value stocks do better than growth stocks, and the index fund people will get the market's performance.

If you beat the market, some dummy somewhere who has taken the other side of your trades is going to be beaten by the market before it balances out. There's no magic in it: Basically, for everybody who overweights small cap or value, somebody else is going to be underweighting those relative to the market cap, and the index fund people are going to be fat and happy in the middle. You can call it whatever you want to call it, but it is a deviant position from the market, and if it beats the market, somebody else is going to get beaten by the market. It's that simple. But this sophistry that it's more representative of the market makes no sense at all, unless you suspend all the rules of logic.

IU: How important is international diversification?

Sharpe: I'd have to say probably less than it used to be. I think what we're seeing is a lot more correlation of markets around the world, and it makes a lot of sense. We've got much more integration of trade, and we've got much more integration of financial markets. In some ways, if you buy shares in all the companies that are headquartered in the U.S., then you've got probably a more global portfolio than if you'd done that 25 or 50 years ago. The benefit of having companies headquartered in different countries in your portfolio is probably less than it used to be, but that is not to say that it isn't there and it isn't worth doing.

IU: Do you think commodities have a place in the average portfolio?

Sharpe: Probably, but there are a couple of caveats. When you buy publicly traded equities, you're getting commodity exposure. Sometimes it's as an input, sometimes as an output. When you buy some of the energy companies, you're getting exposure to oil. Sometimes the companies are hurt more when oil goes up; sometimes the companies are helped when oil goes up. But it's not as if you don't have commodity exposure in a traditional equity portfolio

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Also, if you look at the value of the commodity exposure that maybe you don't have in your portfolio, that may not be a huge amount of market value. Things that don't have much market value—if they have low correlation with other assets and are therefore desirable on the risk front—in an efficient market would also not have particularly high expected returns.

IU: What do you think of ETFs?

Sharpe: In general, I think they're a great idea to the extent that they can provide a real index fund that makes sense and do it at least as cheaply as a traditional open-end mutual fund. I have nothing against them.

But I'm with Jack Bogle on the fact that people use them as trading vehicles. It's just obscene what the turnover is of ETFs. Of course, it's also these wildly narrow ETFs, short funds and tiny little sectors. What's that all about? You could say that they allow you to customize your funds so they complement your job, your house, your mortgage, etc., and maybe there's some of that. But I think, as with anything else, here's a good instrument for "investing" that a lot of people are using to make bets.

IU: Are people saving enough for retirement?

Sharpe: Many people are not saving enough. You have to start with what you think you are going to get from public programs like Social Security and Medicare. Then you have to work your way back to what you've got to provide on your own. Everyone who looks at the financial situation of the entitlement programs in this country realizes that somebody is going to have to put more money into this system or somebody is going to have to get less money out of the system.

You start with the publicly financed part of your lifestyle in retirement, and then you have to look at what you have to provide to complement that to provide for a sensible lifestyle after you retire. If people continue to put aside as little in their individual savings and in their 401(k) plans as they are now doing, then you come to the conclusion that they're either going to have a miserable retirement or they're going to work a lot longer than previous generations worked—or they're going to have to figure out a way to die sooner.

At Financial Engines, when we see what people are doing in terms of their investment strategy and their current savings or 401(k) plan, we sometimes show them if they keep doing what they're doing, the chances that they'll have a retirement with, say, more than 50% of their pre-retirement real income are 31%.

Once they see the implications of what their current course is, many will choose to save more. That's a pretty direct indication that many people are not being counseled or given good projections of the range of outcomes.