Investment Adviser: Several trends seem to be taking shape in terms of asset allocation. On the one hand, there is an increased focus on risk and capital preservation rather than return, and on the other there is a rising demand for absolute return investing and high alpha products or hedge funds. But in the world of the capital asset pricing model (CAPM), only beta risk is rewarded. Is beta alive and kicking?

William Sharpe: Let me take that in pieces. About your first question, there is a point in this observation, which sometimes gets lost, that collectively we hold what is available. At the end of the day, if you add up all the portfolios no matter how exotic they may be, and add up the longs and the shorts, you end up with the market. That is just arithmetic, so in a sense the aggregate of all the portfolios will equal what is available. For example, if 3% of the market is made up of hedge funds, the short positions, which is what I am thinking of, position taking, netting out the negatives to what is available, so that has not changed and nor can that ever change.

IA: What about price charges?

WS: For as long as there is a dollar, or a dollar price, there will be price charges. This is not to demean price changes of course – but it is important to differentiate what proportionately lowers expected nominal returns, which is the price of assets, thereby true risks and changes in prices which affect the expected returns predominantly. So you have to keep all that in mind.

1A: And absolute returns?

WS: One issue is that there are absolute returns, what proportionately lowers expected nominal returns is probably associated with lower inflation and may be the same expected real return, which for most people matters a lot more. If you think you have someone who is a better decision maker, then you either have to manage money in a traditional active manner or in a hedge fund format and take long and short positions.

There is an argument that if you do not charge you too much it is better to do the latter because it gives you more ability to use their superior information. So, there is an argument that managers should do this and managers who are doing so are doing better. But how do you define this? In a practical way at the end of the day, you have to look at how the markets, my term not yours, are doing badly in bad times, I am sceptical about it because there are so many aspects of behavioural finance, behavioural economics and behavioural research, cognitive psychology that you can justify almost any investment decision by using one of them. There is not a body of agreed upon behavioural finance principles which tells you “Buy this stock and sell that one”. So people who use this say “There is evidence of excessive extrapolation, okay so we will do something to avoid growth stocks and buy fallen angels”. But there are other behavioural principles that would tell you to do just the opposite. So the idea that we are going to decide that expected returns are related to all kinds of things other than beta or, more broadly, the risk of doing badly in bad times, I am sceptical.

We are learning a lot still and I have ongoing research with a couple of behaviouralists myself, experimental work, where we are finding out quite a bit about people’s decisions under uncertainty in a portfolio context. So, yes, behavioural finance is fascinating and it is an active and promising and already crucial area of research.

IA: The CAPM has evolved a lot since the 1960s, but also it seems after an extended period of “irrational exuberance” we may now have a sense of pervasive pessimism. Do you not feel the concern with risk has gone far too in any area, considering the fact that risk aversion is not only a phenomenon in financial markets, but is also widely emphasised in the area of politics and sociology, as in the so-called risk society or the culture of fear?

WS: The whole culture of fear thing is pretty close to American politics...
ne is skilled they will be dead

IA: Well it is quite similar in the UK, but I am referring to a more general phenomenon.
WS: I guess there are two issues about risk aversion. One is being averse to a good assessment of what the risk really is and the other is wildly overstating the risk. I think I will stay away from the political sphere, you can guess which side I am on, but with fear-mongering, trying to convince people there is more risk than perhaps a rational assessment might indicate there is, obviously people will make wrong decisions if they do not estimate correctly the amount of risk.
IA: In your paper, The Arithmetic of Active Management, you said: “Properly measured, the average actively managed dollar must underperform on an average passively managed dollar, net of costs. Empirical analyses that appear to refute this principle are guilty of improper measurement. This need not be taken as a counsel of despair. It is perfectly possible for some active managers to beat their passive brethren, even after costs.”

But how much potential do active fund managers really have to beat their passive counterparts?
WS: The honest answer is we do not know and we probably never will know because the element of luck provides enough noise in the data. We know what the averages have to be, because it is all arithmetic, but we will never know how many truly skilled fund managers there are because by the time we have enough data to say “There is a truly skilled fund manager for sure”, no chance of any sides that will flock – she will be dead.

I have been involved with a couple of actively managed mutual fund families on boards over the years, so it is not as if I do not think that there are people who cannot be skillful and it is worth putting some money with them if you are convinced that they may be skillful. But again you will never know for sure whether your performance has been good or bad, and I would be cautious about recommending people put too much money with a concentrated active strategy.

IA: You have covered a great deal of ground in the first lecture of the Princeton Finance Lectures, which will be published as a book, and concluded that the market risk theorem – in that only market risk, the performance of the market as a whole, is rewarded with higher expected return – is not a linear function of overall large returns.

IA: But why do investors take non-market risk, is it not the case in the real world?
WS: If that is the case in the real world, and that is what behaviourists tell us hope springs eternal or people do not understand the adding up process. Again, it is the wisdom of crowds argument that everybody is doing the same but selectively can be very rational.

Another story in the book, which I have used in one of my recent presentations, is that back in 1906 scientist Francis Galton was at the annual West of England Fat Stock and Poultry Exhibition – I am not making this up – and came upon a weight-judging competition. There was a fat ox placed on display and people could place wagers on what the weight of the ox would be after it had been slaughtered and dressed. Some 800 people tried their luck and the person whose guess was closest to the real figure got the prize. Mr Galton believed it was a great chance to prove how stupid people were. So he added all the contestants’ guesses and calculated the mean. He found that the crowd had guessed that the ox, after it had been slaughtered and dressed, would weigh 1597 pounds – too close to the real figure of 1106 pounds.

He had realised that a bunch of ill-informed and maybe not intelligent people making independent guesses based on possibly independent experiences could on average come up with something close to what the best scientists would come up with. And, of course, efficient and competitive capital markets are close to that kind of experiment where the price is really an average of people’s opinions.

IA: You were among the several economists who have criticised the Bush administration’s policies in relation to the budget deficit and argued against cutting taxes, in an open letter to the president. How important is the crowding out effect in this context?
WS: You are pushing beyond my expertise in terms of the extent to which there is crowding out and there are people who could better answer that. But I do believe, as I said in the letter – which was proposed by others but I agreed with – that this is not the time to be running these huge budget deficits, whether you deal with it on the tax front or spending front, or both. Personally, from a value viewpoint I have problems with the particular nature of the tax cuts that have been in place in terms of redistribution issues in that they do by far favour my friends and I do not think that is good social policy.

IA: Looking back at your career, what do you think is your greatest achievement?
WS: It is easy to say the CAPM, because, after all, the Nobel Committee decided that was my major accomplishment and they are pretty good judges of these things. But I would rather broaden it to the more general conclusions, which I tried to encapsulate in the Princeton Finance lectures, that there is very good reason to believe that only market risk is rewarded with higher expected return. An even better way to say it is: you get rewarded for taking the risk of doing badly in bad times – or to make it a little grander, for bearing societal risk with the corollary of that being not to take a lot of non-market risk or the lawyers would term as “uncompensated.”

So those two basic ideas boil down to you will get high expected return if you take more market or societal risk, and you will not get more expected return if you take other kinds of risk and so, from a pragmatic standpoint, do not take much of that other kind of risk unless you need to offset your job risk or if you think you really have found the next Warren Buffett. The extent to which I played a role in bringing these ideas to the fore – and I am not the only one by all means – is the most important thing I have done.

I am sort of proud of the binomial option pricing approach, as well which I had a role in. That certainly has had huge amount of practical application and, according to people such as Mark Rubinstein, that kind of option pricing is used more frequently than Black-Scholes. I do not know if that is true or not but I know it is used a lot and I am kind of proud of that as well but I would say the other transgressions that

William Sharpe is 1990 Nobel Laureate in Economics and STANCO 25 Professor of Finance, Emeritus at Stanford University’s Graduate School of Business.