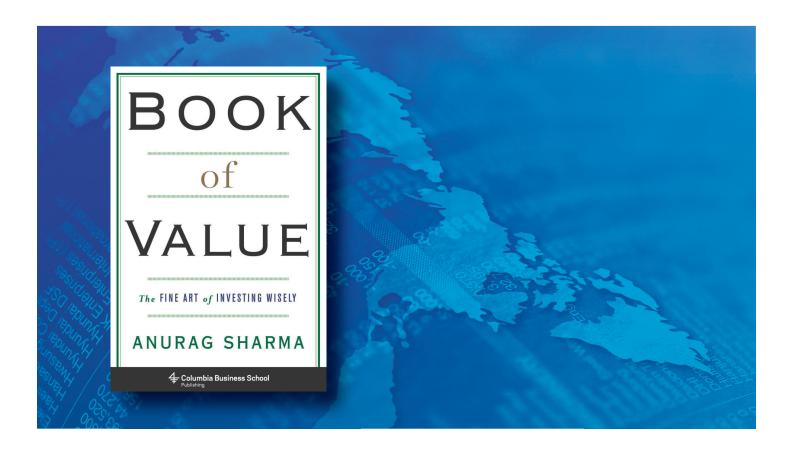
## Featured Interview



# Interview with Anurag Sharma

**Barbara J. Mack**Content Director
CAIA Association

#### Interview

BM: Let's talk a little bit about your history and how you wound up in finance.

AS: I'm mainly a strategy guy and my PhD is in strategic management. Strategy is essentially an integrative discipline, originally conceived in the late 1970s to bring together all of the other functional courses taught in business schools. It sought to break down the disciplinary insularity of the different departments and academic journals. This meant trying to cut across the silos of finance, marketing, operations, and accounting, to try to understand organizations holistically.

A fundamental question in strategy is "Why is one firm more profitable than another?" This is a seemingly simple question, but there can be many answers, both qualitative and quantitative. I took a number of finance classes during my MBA and PhD programs

and what struck me most was that finance had become highly mathematical, so much so that it was hard for me to understand what the intuition was in that discipline about organizations. I was curious about how this was the case and why the qualitative factors that really drive the performance of organizations were not incorporated into investment and financial education.

BM: This intersects with fields like venture capital and private equity where the qualitative side plays an important role...

AS: Yes, in those cases, it is all about potential of the business and quality of people in leadership roles. You can have a great business idea but if you don't have the right people, the idea will not go anywhere. So I was studying these issues – the intuitions about people and how organizations function and evaluating how to include qualitative factors in stock analysis and portfolio construction.

BM: If you look out over the history of your research interests in academia, what has the path been to your work today?

AS: My interests are pretty broad, but I became interested in value investing many years ago, when a friend of mine introduced me to how Warren Buffett invested in companies. So I developed a course on value investing around 2000-2001. It was clear to me that pure mathematical valuation techniques were not really enough for investing because markets behave in many strange ways and price dynamics are sometimes driven by psychological and other factors altogether.

So I went on a long detour – I have been reading about crowd psychology for a long time and as a discipline, it was in vogue about 100 years ago during the late 19th and early 20ths centuries. Much of that thinking is about how people behave in large numbers and clearly there are parallels with the behavior in the financial markets, so I wanted to get some insights on that.

BM: In a way this is old wine in new bottles - if everyone is thinking how the Wisdom of Crowds is brand new, but it's not – it's 100 years old!

AS: Yes, exactly. While that book is essentially arguing that large numbers of people can produce good estimates, other studies of crowd psychology suggest that the opposite is also true, that large numbers of people develop a tendency towards herding; therefore, as we have seen a number of times over the course of financial history, large numbers or people and their opinions can distort valuations significantly to create bubbles and panics.

These days, in finance and economics, the mathematical framework of analysis have roots in physics, a natural science; the tools of hard sciences are incorrectly imposed on understanding financial markets which are largely human constructions. So this inevitably leads to a disconnect between what is happening out there and what our models tell us. Physicists view the natural world as something that can be revealed through mathematical tools because there mathematics is the language with which to reconstruct the physical world. So, physicists use the notions of equilibrium, efficiency, and symmetry, for example, to formulate their models. Unfortunately, these concepts from physics, a natural science, have all entered into finance theory and practice. However, in the financial markets, there are so many feedback loops and additional influences that by leaning too much on a purely scientific approach, there is a potential for gross misunderstandings and misallocation of capital.

As a result, mathematical formulations now so dominate investment research and education that human side of the equation goes missing. As Thomas Kuhn eloquently argued in The Structure of Scientific Revolution, a great deal of social and institutional pressures develop to push researchers to continue with what they are already doing – what he calls "normal science." It then becomes very difficult for outside views to gain any traction.

Because of all this, I'd say that there has been a narrowing of intellectual content in finance and that is unfortunate. The discipline does not allow for voices that could be insightful, but are using a different language and propose an alternative

perspective/approach. As a counterpoint to the current mathematical view though, value investing provides insight into aspects that are not visible from the mathematical or quantitative approaches to investment analysis. This alternate approach to investment analysis is of central interest to me and I explain and develop this view in the Book of Value.

When we look back to Markowitz and the Chicago University of the late 1940s and early 1950s, that was a time and place in history where mathematical tools were creating advances in various fields, so people such as Markowitz wanted to extend them to investing as well. In a way, this was a historical accident that turned investment education and practice away from intuition and subjectivity and towards presumed objectivity of price data and, accordingly, to mathematics. They were, in effect, forcing the tools of the hard sciences to a largely human endeavor, viz., buying and selling financial products. And then Markowitz made the fateful decision to define risk as the standard deviation of returns and from there to variance-covariance matrices. By defining risk in a strictly quantitative fashion, he enabled the application and development of mathematical approaches that have since dominated investment theory and practice. In practice, combined with computing power, mathematical allowed investment theory to be delivered on an industrial scale, because there was so much money coming into the financial markets after the Second World War.

However, risk is a much more complex construct; if you assume that the markets are efficient, then then perhaps standard deviation of returns correctly reflects true investment risk. But this is a significant assumption. And if you think about risk in broader terms – the quality of the management, strategic clarity, competitive positioning, the rate of innovation in the company, or the culture of the firm ... once you begin to incorporate those softer qualitative factors into your understanding of investment risk, it changes the picture dramatically. The quality of your investment decisions will be better from incorporating subjective into your analysis; math alone will not do the trick.

BM: Speaking to our CAIA members some of whom are quite engaged in this type of debate, what are some of the key takeaways of your book and what is your advice to them in their continuing financial endeavors?

AS: I want to emphasize that investors should focus on the qualitative factors that make businesses great. In the investment valuation process, when you are assessing the potential of individual stocks and other securities issued by a company, you need to understand these qualitative factors very well. Doing so systematically will considerably strengthen your investment process and capital allocations.

There is an important related issue to this discussion: Mathematicians have been interested in the problems of gamble for hundreds of years, so when they came to investing, they cast investing as a problem of gamble, defined price as a random variable and then went about essentially optimizing random variables. Reducing complex subjective information to seemingly objective numbers allowed them to turn investing into a mathematical problem of gamble. While this is certainly

an approach, it is based on ignoring important qualitative information necessary for a subjective understanding of the investment thesis.

To right this wrong, I recast investing as a problem of choice, one that requires incorporating qualitative information into the analysis. No doubt there is a gamble in every choice and a choice in every gamble, but a strictly quantitative point of view very likely leads investors to ignore important information and derive wrong conclusions from focusing too much on randomness in the markets.

In Book of Value, I show how investors can recast investing as a problem of choice and then improving the quality of choice by following a systematic process of disconfirmation – by systematically trying to refute the investment thesis. Work in cognitive neuroscience has shown how difficult it is to make good choices on a consistent basis, so what investors need is a systematic process in which they play their own Devil's Advocate and evaluate their investment thesis using calibrated skepticism. Applying this process repeatedly across securities can help build powerful but manageable portfolios.

The bottom line for value investors is to pay attention to the qualitative factors that create economic value for firms, and this certainly includes the people at the helm of these companies. Investors can build very good investment portfolios that don't have to be too large; if investors are careful and selective, and focus on quality not quantity, they can attain very good diversification with only a handful 10-15 securities in the portfolio.

### **Author's Bio**



#### **Anurag Sharma**

Professor Anurag Sharma teaches strategy at the Isenberg School of Management, University of Massachusetts Amherst. He has published in California Management Review, Harvard Business Review, Academy of Management Review, Academy of Management Journal, Strategic Management Journal, and Journal of Applied Corporate Finance. He has also published well over

20 business cases. In his current work, Professor Sharma seeks to incorporate qualitative factors in investment analysis and portfolio construction.