Cog-nomics and B-Finance: What’s the Dif?

By Leigh Caldwell *Mon, Sep 27, 2010*

Behavioral finance is to cognitive economics as engineering is to physics, says the founder and CEO of inon.com, a UK pricing consultant.

Cognitive economics is not yet a widely used phrase, though Italian economist Marco Novarese and I have been using it as a name for a more *microfounded* version of what’s typically called behavioral economics. So I’ll explain how I use the term.

The first difference is between “economics” and “finance.” The more fundamental distinction is between “cognitive” and “behavioral.” Cognitive is about how we *think*, while behavioral is about what we *do*.

Economics, very broadly, is the study of how resources are allocated (by individuals, and across society). Cognitive economics, on the other hand, looks at what is actually going on within an individual’s mind when he or she makes that choice.

A cognitive economist asks, for instance: What is the internal structure of their decision-making? What are the influences on it? How does information enter the mind and how is it processed? What form do preferences take internally, and how are all those processes expressed in our behavior?

Finance, by contrast, specifically focuses on investment and the value of financial instruments. Behavioral finance focuses on the phenomena of how people behave. For example, what will they do (on average) when faced with a given choice between two ways of paying for something?

I would also distinguish between the way that behavioral finance is practiced, and what cognitive economists do. Behavioral finance is an experiment-driven field. BF people mostly start from the framework of classical economics and do experiments to find out where real behavior differs from the classical assumptions of rationality.

BF is quite practical in one sense. It helps us imagine the ways that people *might* behave when confronted with a given situation. However it does not make good predictions about how they *will* behave. Generally it will rely on experiments to distinguish among the different possible behavior modes.

Cognitive economists start at a lower level, from a microfounded model of how people make decisions, and work upwards theoretically, to develop a self-consistent model of large-scale economic behavior. It should ultimately be able to explain or predict behavior from a minimal set of base data.

In some ways this is the same goal as classical economics, but cognitive economics offers a richer and more accurate microfoundation leading to more powerful and better micro and macroeconomic predictions.

The difference between the two disciplines is like the difference between engineering and physics. Behavioral finance is like engineering: Engineers know some of the rules about how objects behave, and they can use those rules to design and test new implementations of existing inventions, and fix things that have already been built.

Cognitive economics is like physics: Physicists know the underlying theory of how things work, and they can use that to explain how existing inventions operate, and to work out how to create new ones.

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