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Behavioral finance and asset prices: Where do we stand? ☆

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Abstract

This paper contains a survey of the anomalies identified in the behavioral finance literature, with a particular focus on those which might affect market prices. The anomalies are grouped in five categories, namely (i) decision heuristics, (ii) emotional and visceral factors, (iii) choice bracketing, (iv) unknown preferences, and (v) reference dependence. These anomalies are discussed against the background of the assumptions normally maintained in the standard approach based on expected utility maximization, in order to highlight the difference between the mainstream and the behavioral finance approaches.

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> A conventional valuation which is established as the outcome of the mass psychology of a large number of ignorant individuals is liable to change violently as a result of the sudden fluctuation of opinion due to factors which do not really make much difference to the prospective yield; since there will be no strong roots of conviction to hold it steady.
>
> Keynes (1936, Chapter 12, p. 154)

☆ The views expressed in this paper are only those of the author and are not necessarily shared by the European Central Bank.

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> Speculative excesses, referred to concisely as a mania, and revulsion from such excess in the form of a crisis, crash, or panic can be shown to be, if not inevitable, at least historically common.
>
> Kindleberger (1978, p. 2)

> A drunk walking through a field can create a random walk, despite the fact that no one would call his choice of direction rational.
>
> Thaler (1999, p. 14)

1. Introduction

Behavioral economics and finance is one of the most dynamic and promising fields of economic research by its scope and size. There is an increasingly long list of phenomena which, while inexplicable with the standard tools and approaches of mainstream economics, have found a satisfactory explanation in behavioral economics and finance. [1] Nonetheless, it is far from being a foregone conclusion that the behavioral methodology will come to dominate economic research and completely supplant the mainstream approach based on expected utility maximization and rationality, and opposing views have been expressed in this respect (in the behavioral camp, see Thaler, 2000, and Colisk, 1996; on the mainstream side, see for example Fama, 1998, and Rubinstein, 2000).

This paper selectively touches upon recent contributions in the behavioral finance literature. The objective of this review is to provide an answer to two key issues, namely:

- What are the most important and systematic behavioral biases which characterize economic agents that we know of?
- Are they relevant to explain *aggregate* market behavior, namely do they affect aggregate prices and competitive markets?

Behavioral finance rejects a vision of economic agents' behavior based on the maximization of expected utility. At the root of this rejection is the overwhelming evidence available that agents, both in controlled experiments and in real life situations, behave in a way so as to violate the axioms of expected utility (Starmer, 2000). It should be emphasized that the focus of behavioral finance is on a *positive* description of human behavior especially under risk and uncertainty, rather than on a *normative* analysis of behavior which is more typical of the mainstream approach.

One of the key objectives of behavioral finance is to understand systematic market implications of agents' psychological traits. The stress on the market implications is very important because the analysis of large, competitive markets with a low level of strategic interaction is at the heart of economics (Mas-Colell, 1999). So far, the behavioral finance literature has not reached a level of maturity which would allow it to

[1] The increasing popularity of behavioral economics and finance is confirmed by the award of the 2002 Nobel prize to Daniel Kahneman.