Introduction: Behavioral economics, business decision making and applied policy analysis

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Behavioral Economics, Business Decision-Making and

Applied Policy Analysis

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The emergence of behavioral economics has revealed a number of insights into economic and business phenomena by integrating elements of economic theory and experimental psychology. So far, the behavioral economics research agenda has concentrated on the empirical validity of foundational assumptions, producing new descriptive accounts of behavioral patterns that are difficult to explain using traditional neoclassical assumptions. This agenda has now developed sufficiently to begin exploring how to apply these descriptive findings from behavioral economics to improve human performance, business decision-making and economic policy.

Forging a new normative economics based on behavioral theory is an ambitious goal. There is not yet consensus, even among behavioral economists, that standard normative theories in economics, such as the Fundamental Welfare Theorems built on axiomatic assumptions of self-interest, self-consistent utility maximization and perfect information, are in need of revision. Starting from the observation that individual behavior systematically deviates from textbook prescriptions for rational decision making, a broad range of sometimes conflicting conclusions about normative economics can be drawn. For example, some argue that, when behavior deviates from textbook

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prescriptions, people's behavior should be revised rather than normative model, e.g., teaching MBA students to correctly apply Bayes Rule rather than abandoning Bayes Rule as a measure of rational decision making. Others argue that, because individuals fail to meet the idealized standard of perfect economic rationality, behavioral theory provides a new rationale for paternalistic intervention aiming to "de-bias" individual behavior, e.g., taxing potato chips and subsidizing carrots to correct for impulsive consumer decisions at the grocery store. Still others argue that normative benchmarks such as transitivity, expected utility axioms, the rules of set-theoretic logic, and probability theory, are largely irrelevant criteria for deciding whether a particular decision process works well in its respective environment.

Eagerly venturing into disputed terrain, the goal of this special issue is to help bridge the gap between behavioral economic theory and its normative application in business decision-making and applied economic policy analysis. The title of Matsumoto's lead article, "Seeking a Realistic Way of Individual Decision Making," could serve as a subtitle for any article in this volume. Indeed, the search for improved empirical realism provides an important unifying theme. Matsumoto introduces a new theoretical model which shows that self-consistency over an individual's life course is not a necessary condition for rationality. A critical problem with the standard model is its assumption that individuals make high-stakes life decisions by considering an exhaustive list of possible actions (and, when risk is involved, payoffs associated with the multiple possible outcomes that are associated with each action). Matsumoto's model deals explicitly with the fact that the individual cannot fully anticipate future choice sets, or the mapping from current action into future opportunity sets, in any meaningful way.

Serendipity indeed appears to play a large role in the lives of many of the leading voices in business, arts and letters.

Three articles in this volume draw on original data sources to investigate bounded self-interest and bounded information processing. Chakravarty, Haruvy and Wu use survey data to investigate discrepancies between standard models of innovation and the real-world facts surrounding open source software development. Interestingly, they find that bounded self-interest coexists alongside usual self-interested profit motives in spurring on different dimensions of product performance. Tisdell shows that policy makers intent on using survey methods to elicit voters' willingness to pay for environmental resources face formidable challenges because of the extreme sensitivity of stated willingness to pay with respect to minor variations in the information provided to survey respondents. Tisdell demonstrates cases, however, for which cost-benefit considerations reach the same conclusion over the entire range of willingnesses to pay, suggesting that the technique may provide useful output despite its imprecision. Li and Pingle report new experimental results on positional concern, asking whether it helps or hurts aggregate performance to provide individuals with information about their relative standing in the group. In contrast to the view that more feedback about relative position will reduce performance by discouraging low performers, these experimental results suggest that more information or, alternatively interpreted, better transparency, about relative standing can facilitate bargaining and deal-making, resulting in aggregate gains.

The next four articles focus on accurately describing the thought processes that go into high-stakes financial decisions, and accounting for their practical consequences. Schwartz boldly proposes two tax policy modifications that take explicit account of anomalous risk preferences and choice patterns discovered in the psychology and economics literature. Schwartz's proposals attempt to redirect investment capital into the hands of entrepreneurs who are more likely to take risk, thereby achieving improved aggregate returns on investment capital. Wennberg and Nykvist describe the decision processes and performance of professional financial forecasters in Sweden, finding much divergence between their empirical findings and standard economic models, but little evidence of economic harm. Like Schwartz, Wennberg and Nykvist use an innovative in-depth interview methodology, which is unusual in economics. Otto, Davies and Chater introduce a new tool for improving individual savings decisions, using survey data to take account of a variety of savings strategies and decision processes underlying financial decisions. Finally, Yu explains Austrian-school psychological theory of entrepreneurial decision making, drawing on Hayek and Shutz to argue that subjective pattern recognition, once codified into rules of thumb, results in performance-enhancing simplifications that create socially beneficial order out of otherwise randomly distributed fields of information.

The final four articles in this volume engage traditional themes in political economy with the question of what behavioral economics adds in the way of new insights about macroeconomic policy as a result of revised assumptions about individual behavior. Austin and Wilcox report experimental evidence about the statistical determinants of subjects' policy views and the malleability of these views in the face of new evidence. Kokinov argues that cognitive psychologists now know enough about the determinants of risk attitudes that they can be applied to transition economies to encourage greater risk taking and cultivate entrepreneurial attitudes. Altman weds contemporary behavioral theory about workers' levels of effort with new interpretations of the writings of Adam Smith finding in behavioral theory more, not less, reason for optimism concerning globalization. Finally, Berg and Maital argue that globalization is better described as a collection of discrete phenomena with multiple, nation-specific causes rather than a singular, inevitable phenomenon; behavioral economics suggests new reasons why heterogeneous policy approaches rather than one-size-fits-all institutions are necessary for improving wellbeing.

The articles in this volume reveal an exciting research field that will remain active for years to come. Rather than achieving a unified consensus, there clearly are multiple priorities for brining the descriptive findings of behavioral economics' early years to bear on normative economics. The contributors to this volume collectively prove that behavioral economics' goal of improved empirical realism will necessitate more attention among researchers to the problem of connecting theory to applied problems and contemporary debates in business, economics and political economy.