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Book Review

Advanced Introduction to Behavioral Economics

by John F. Tomer
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reviewed by Edward Cartwright*

The rapid growth of behavioural economics over the last few decades has been quite extraordinary. From somewhat humble beginnings, behavioural and experimental economics have grown into core areas of economic research. They have also become instrumental in the application of economics, as evidenced by the success of the Behavioural Insights Team in the UK and similar offshoots elsewhere (Halpern 2016). Richard Thaler's recent Nobel Prize is the latest recognition of how far behavioural economics has come. Textbooks and scholarly introductions to the field have been much slower to emerge. Indeed, the book by Nick Wilkinson (2007) is arguably the first textbook on the market dedicated to this subject. Recent years, however, have seen a host of new books launched in the market, ranging from beginner introductions (Baddeley 2017) to advanced level texts (Dhami 2016), and everything in-between (e.g. Angner 2016, Baddeley 2013, Cartwright 2014, Just 2013).

The book *Advanced Introduction to Behavioral Economics*, by John Tomer, is a new addition. It is part of the Elgar Advanced Introductions series, the aims of which are 'to pinpoint essential principles of a particular field, and to offer insights that stimulate critical thinking'. In the introductory chapter, Tomer (p.2) clarifies his intended aims and audience: 'This book is designed to explain carefully and simply the most important BE [behavioral economics] theories and perspectives. It is also designed to explain important BE trends and recent developments. … [T]his book should be particularly useful for advanced undergraduate students, graduate students, government policymakers, and other professionals who participate in discussions about economics-related matters.'

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The book is short, at 161 pages, but clearly aimed at a relatively informed audience. In this sense, the book distinguishes itself from others on the market, where book length seems to be highly correlated with presumed knowledge of the target audience! So, it lives up to the billing of an 'advanced introduction'. The book also covers a wide range of topics including neuroeconomics, nudging and behavioural macroeconomics, as well as more standard fare, such as heuristics and biases. One theme that particularly makes the book stand out is its focus on methods and applications, rather than just theory. To further elaborate on this point we need look no further than Chapter 2, which is worth discussing in some detail, as it sets out themes that run throughout the book.

Chapter 2 essentially provides an overview of the history and objectives of behavioural economics. Mainstream economics, under the umbrella of neo-classical economics, is depicted as too narrow in rejecting inter-disciplinary and non-quantitative insight in a push for mechanical, mathematical formalization. 'The problem with NE [neo-classical economics] is its very strong commitment to a particular form of positivism' (p. 10). Behavioural economics is seen as a way to potentially break the shackles and move towards a different kind of economics, one that is more outward looking and willing to embrace ideas from other social sciences.

Interestingly, though, the book breaks from the relatively common approach of portraying behavioural economics as a coherent body of work taking economics to a better place. Instead, behavioural economics is portrayed as a broad field with multiple strands and internal tensions. Particularly telling is the discussion of what Tomer calls psychological economics. This strand of behavioural economics encompasses the work of Daniel Kahneman, Amos Tversky and Richard Thaler and for many would be seen as behavioural economics. Tomer, however, highlights other strands of behavioural economics including the work pioneered by Herbert Simon on bounded rationality, that of Herbert Leibenstein on X-inefficiency, Goerge Akerlof on behavioural macroeconomics, Richard Nelson and Sidney Winter on evolutionary theory, as well as the work of George Kantona.

Psychological economics also comes in for some indirect criticism for being too much like mainstream economics. For instance, (p 19.) 'As part of this PE [psychological economics] process, the core NE assumptions of self-interest, rationality, and self-control are challenged. Nevertheless, PE's basic methods do not represent a radical departure from NE. … It follows that PE shares much of the positivism of NE.' In exploring the distinction between 'new' behavioural economics, which is essentially psychological economics, and old behavioural economics, which includes the work of Herbert Simon and others, Tomer (p. 21) writes: 'Whereas new BE has considerable ties to the economic mainstream and new BEs have a greater comfort level with mainstream economics, old BEs are more dissatisfied with NE and have a strong desire to develop an alternative to mainstream economics. Furthermore, it is noteworthy that leading new BE researchers have not been particularly tolerant of old BEs and have typically had dismissive attitudes toward economists in the old BE camp.'

The picture that emerges in this chapter, reinforced throughout the remainder of the book, is one in which psychological economics is seen as too close to mainstream economics to be the kind of radical departure from the mainstream that Tomer considers necessary. For some readers this may come as a surprise, given the rhetoric that usually comes along with much of psychological economics. However, the views expressed by Tomer are shared by many (e.g. Berg and Gigerenzer 2010). And it is hard to deny that most of psychological economics, irrespective of its aims, ends up looking like mainstream economics plus an extra parameter to capture some psychological effect, such as loss aversion or inequity aversion. This approach also brings with it the potential for ad-hoc, unscientific reasoning (Binmore and Shaked 2010).

Is it a problem that new behavioural economics is so close to the mainstream? Tomer clearly thinks it is; I am not so sure. I do, though, welcome the portrayal of behavioural economics as a broad field. I also welcome the recognition that modern behavioural economics is not quite as radical as some suggest. One thing I would criticise about the chapter, however, is that it focuses too much on methods rather than outcomes. Whether or not the field of a subject is broad or narrow would seem somewhat irrelevant if it delivers the goods. And it is arguably on this front that the need for change is most pressing. The section on George Akerlof and behavioural macroeconomics speaks more to this by highlighting six important phenomena that neo-classical economics is not able to explain, such as involuntary unemployment, and under-saving for retirement. It is also worth noting that psychological economics really came to the fore when its relevance for policy became clearer.

After the rollercoaster of Chapter 2, we get some more routine chapters covering basic theory. Chapter 3 picks up the work of Herbert Simon on satisficing and Gerg Gigerenzer and colleagues on fast-and-frugal heuristics. Particular emphasis is put on the role of ecological rationality wherein heuristics are matched well to the environment and the task. It would have been nice if the work of Vernon Smith had also been acknowledged here (e.g. Smith 2007). On a related note, I would have also liked more discussion on the implications of ecological rationality. More specifically, reading through the chapter, I got the impression that people are very good at making decisions. They have good intuition and judgement, 'aha' moments (p. 28), and can make *more* accurate decisions than an optimising strategy (p. 30). If people are so clever, then they may well be modelled using the neo-classical assumption of 'as if' rationality? Clearly this is not the conclusion we are supposed to draw.

Chapter 4 provides a brief overview of key-ideas emerging from the work of Kahneman, Tversky and Thaler within the heuristics and biases framework. The chapter covers biases due to availability, anchoring and representativeness before covering prospect theory and mental accounting. Again, what is emphasised is how the work of Kahneman and Tversky takes the neo-classical mainstream as its starting point but has become the core part of behavioural economics. Chapter 5 elaborates on the discussion by bringing in the role of emotions, social preferences and self-control, including the notion of time-inconsistency and quasi-hyperbolic discounting. Therefore, these two chapters cover much of the core material of modern behavioural economics.

This is why I found it concerning for an 'advanced introduction' that little insight is given as to how the research has developed over time. For instance, the section on prospect theory stops with Kahneman and Tversky's (1979) article. Arguably, it is the article published in 1992 that set out prospect theory as it is now practised (Tversky and Kahneman 1992). What is more crucial is that recent developments in reference dependent utility (Koszegi and Rabin 2006, 2007; Schmidt, Starmer and Sugden 2008), as well as probability weighting (Fehr-Duda and Epper 2012), will be critical going forward. A brief mention of these developments would have been welcome. Similarly, the section on social preferences in Chapter 5 hardly touches on the huge volume of literature that has emerged relating to the modelling of social preferences, whether that be around inequality aversion (e.g. Fehr and Schmidt 1999, Bolton and Ockenfels 2000) or psychological game theory (e.g. Dufwenberg and Kirchsteiger 2004), and so on. Again, some guidance to key-ideas would have been welcome.

Another concern is that these two chapters (and the book in general) often draw on secondary sources. For an advanced textbook I would like to see original references, particularly as these references were typically written in an accessible manner. For example, the text somewhat bizarrely (p. 40) draws on Heukelom (2014) to describe prospect theory, rather than using the original articles (Kahneman and Tversky 1979, Tversky and Kahneman 1992). Other examples from Chapter 4 include page 37, which picks up the famous anchoring experiment of Ariely, Loewenstein and Prelec (2003), page 43, which draws on results about golf professionals by Pope and Schweitzer (2011), and page 49, which picks up the disposition effect (the tendency to sell stocks that are up on their original price than stocks below original price) without presenting any references to the wealth of literature on this topic (e.g. Hens and Vcek 2011, Dacey and Zielonka 2008).

Chapters 6 to 9 turn to applications with a focus on behavioural finance, behavioural policy, law and behavioural macroeconomics. I think it is great that so much space is dedicated to applications and I particularly enjoyed reading this section. Chapter 6 primarily focusses on excess volatility in stock prices, Chapter 7 focuses on nudge, and Chapter 9 on efficiency wages. The explanations of key-ideas are well written and the role that behavioural economics can play is clearly brought out. The only disappointment is Chapter 8, on law and economics, which focuses almost exclusively on methods. Indeed, only in the penultimate paragraph (p. 99) do we actually get any applications. This would seem a missed opportunity to discuss some of the interesting work being done on, say, social norms and how legal deterrence can have unintended consequences (e.g. Frey and Jegen 2001), or on a specific issue like tax evasion.

Chapters 10 to 14 cover various aspects of economic methods and indicate the future development of behavioural economics. Chapter 10 looks into lab experiments and explores the distinction between behavioural economics and experimental economics. The chapter follows the lead of Heukelom (2014) in claiming a strict separation between behavioural and experimental economics. However, I think this is a difficult viewpoint to justify given that behavioural and experimental economics have always been very closely inter-twined. On a relevant note, Chapter 12 covers neuroeconomics and, while the chapter gives a good overview of the subject, the relationship between behavioural economics and neuroeconomics is not particularly clear. If behavioural and experimental economics are distinct, then where does neuroeconomics fit into the mix?

Chapter 11 asks the question 'Are mainstream economists open-minded toward behavioural economics or do they resist it?' In addressing this question the chapter primarily focuses on some of the ways mainstream economics criticised a behavioural approach, and the way behavioural economists have reacted. The final conclusion seems to be that a long period of hostility has given way to general acceptance of behavioural economics. Personally, though, I think it is difficult to address these issues without distinguishing sub-fields within economics. In some fields, like public economics and development economics, behavioural and experimental methods of top level research are now expected. In other fields, however, particularly areas of macroeconomics, one can still find many researchers who are highly hostile to behavioural and experimental methods (and particularly hostile to the idea that these methods could contribute to their own research). Consequently, economics is still in something of a flux.

The three final chapters are more forward looking in presenting a picture of how behavioural economics may evolve in the future. Chapter 13, on a more humanistic behavioural economics, essentially suggests we need to encourage people's willingness to cooperate and discourage their tendency to be selfish. In making this point Tomer refers to the many instances when humans are selfish (e.g. p. 139-40). It may have been useful to balance that out with examples of cooperative behaviour being the norm. Another criticism would be that Tomer draws on work that he acknowledges as not widely recognised. Thatis no bad thing, in itself, but given the huge amount of work now going on in related topics, such as happiness, and on institutions that encourage cooperation, that it seems like a missed opportunity.

Chapter 14 looks at recent trends in behavioural economics, including the work of Raj Chetty on nudge and online experiments.

I would like to finish with some final overall reflections on the book. In Chapter 2 (p. 22) Tomer questions whether behavioural economics will 'become the superior paradigm with the potential to replace the NE paradigm?' While he leaves the answer to this question open, it seems fairly clear that Tomer believes a revolution is needed in economics but behavioural economics, as it currently stands (dominated by psychological economics), is not going to provide that revolution. This sense of frustration runs through the book and in many ways defines it, which, ultimately, determines what the reader is going to get from the book. I think the book, is wanting as a guide to current behavioural economics, for the simple reason that it does not sufficiently cover the main developments in modern behavioural economics (as it has evolved). However, as a book on the history and development of behavioural economics, it scores highly in the opinions it expresses and it is an entertaining and thought provoking read.

Angner, E. (2016). *A Course in Behavioral Economics 2e*. Palgrave Macmillan.

Ariely, D., Loewenstein, G., & Prelec, D. (2003). "Coherent arbitrariness": Stable demand curves without stable preferences. *The Quarterly Journal of Economics*, *118*(1), 73-106.

Baddeley, M. (2013). *Behavioural Economics and Finance*. Routledge.

Baddeley, M. (2017). *Behavioral Economics: A Very Short Introduction*. Oxford University Press.

Berg, N., & Gigerenzer, G. (2010). As-if behavioral economics: Neoclassical economics in disguise?. *History of Economic Ideas*, 133-165.

Binmore, K., & Shaked, A. (2010). Experimental economics: Where next?. *Journal of Economic Behavior & Organization*, *73*(1), 87-100.

Bolton, G. E., & Ockenfels, A. (2000). ERC: A theory of equity, reciprocity, and competition. *American Economic Review*, 166-193.

Cartwright, E. (2014). *Behavioral Economics 3e*. Routledge.

Dacey, R., & Zielonka, P. (2008). A detailed prospect theory explanation of the disposition effect. *The Journal of Behavioral Finance*, *9*(1), 43-50.

Dhami, S. (2016). *The Foundations of Behavioral Economic Analysis*. Oxford University Press.

Dufwenberg, M., & Kirchsteiger, G. (2004). A theory of sequential reciprocity. *Games and Economic Behavior*, *47*(2), 268-298.

Fehr, E., & Schmidt, K. M. (1999). A theory of fairness, competition, and cooperation. *The Quarterly Journal of Economics*, *114*(3), 817-868.

Fehr-Duda, H., & Epper, T. (2012). Probability and risk: Foundations and economic implications of probability-dependent risk preferences. *Annu. Rev. Econ.*, *4*(1), 567-593.

Frey, B. S., & Jegen, R. (2001). Motivation crowding theory. *Journal of Economic Surveys*, *15*(5), 589-611.

Hens, T., & Vlcek, M. (2011). Does prospect theory explain the disposition effect?. *Journal of Behavioral Finance*, *12*(3), 141-157.

Heukelom, F. (2014). *Behavioral economics: A history*. Cambridge University Press.

Halpern, D. (2016). *Inside the nudge unit: How small changes can make a big difference*. Random House.

Just, D. R. (2013). *Introduction to Behavioral Economics*. Wiley Global Education.

Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decisions under Risk, Econometrica. *March*, *47*(2), 2635291.

Kőszegi, B., & Rabin, M. (2006). A model of reference-dependent preferences. *The Quarterly Journal of Economics*, *121*(4), 1133-1165.

Kőszegi, B., & Rabin, M. (2007). Reference-dependent risk attitudes. *American Economic Review*, *97*(4), 1047-1073.

Pope, D. G., & Schweitzer, M. E. (2011). Is Tiger Woods loss averse? Persistent bias in the face of experience, competition, and high stakes. *The American Economic Review*, *101*(1), 129-157.

Schmidt, U., Starmer, C., & Sugden, R. (2008). Third-generation prospect theory. *Journal of Risk and Uncertainty*, *36*(3), 203.

Smith, V. L. (2007). *Rationality in economics: Constructivist and ecological forms*. Cambridge University Press.

Tversky, A., & Kahneman, D. (1992). Advances in prospect theory: Cumulative representation of uncertainty. *Journal of Risk and uncertainty*, *5*(4), 297-323.

Wilkinson, N (2007). *An introduction to Behavioral Economics*. Palgrave Macmillan.