

Is Human Behavior Inconsistent with Economic Theory and Misbehaving? Comment on Chapter 3 of Richard H. Thaler's Book, *Misbehaving: The Making of Behavioral Economics*

Tin-Chun Lin

School of Business and Economics, Indiana University-Northwest, Gary, IN, USA
Email: tinlin@iun.edu

How to cite this paper: Lin, T.-C. (2022). Is Human Behavior Inconsistent with Economic Theory and Misbehaving? Comment on Chapter 3 of Richard H. Thaler's Book, *Misbehaving: The Making of Behavioral Economics*. *Theoretical Economics Letters*, 12, 963-971.

<https://doi.org/10.4236/tel.2022.124052>

Received: May 11, 2022

Accepted: July 31, 2022

Published: August 3, 2022

Copyright © 2022 by author(s) and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Nobel Laureate Richard H. Thaler published the book, *Misbehaving: The Making of Behavioral Economics*, in 2015. In it, he discusses how human misbehavior and the impacts of misbehaviors on markets have been incorrectly calculated. After reading his book, and especially chapter 3, “The List”, I found that the five examples included in chapter 3 might not appropriately be used to explain human behavior's effect on economic theory and human misbehavior. These examples may mislead readers and make readers believe that human behavior is inconsistent with economic theory and human misbehavior. Here, I provide different views and analyses using fundamental economic theory—the theory of cost-benefit analysis—to clarify my argument that people's behavior (as listed in Thaler's chapter 3) is not inconsistent with economic theory and not examples of misbehavior.

Keywords

Misbehaving, Human Behavior, Theory of Cost-Benefit Analysis

JEL Classification Code

D00, D01

1. Introduction

Nobel Laureate Richard H. Thaler published the book, *Misbehaving: The Making of Behavioral Economics*, in 2015. In it, he discusses how the effects of human misbehavior on markets have been miscalculated. In addition, Thaler ac-

acquaints readers with how to make better and smarter decisions in our lives. More importantly, this book exposes the weaknesses of traditional economics, such as assuming that individuals are rational, and reveals new means and analyses that may be used to view everything in our daily lives.

In *Misbehaving*, Thaler provides readers with numerous fascinating examples to explain why human behavior is inconsistent with economic theory and how humans misbehave. However, after reading the book, and especially chapter 3, “The List”, I found that the five examples offered in chapter 3 may not adequately explain that human behavior is inconsistent with economic theory and human misbehavior. Thaler’s explanations of those five examples do not demonstrate that people’s behavior is inconsistent with economic theory and misbehavior. Here, I offer a clarification of my economic perspectives on these five examples, primarily because these examples may mislead readers and make readers believe that human behavior is inconsistent with economic theory and human misbehavior.

Accordingly, in this paper, I provide my different views and analyses by using the fundamental economic theory—the theory of cost-benefit analysis—to show how these people’s behavior (listed in chapter 3) is not inconsistent with economic theory and that they are not misbehaving. The theory of cost-benefit analysis has been broadly used by everyone. Drèze and Stern (1987) have provided a detailed investigation and discussion about this theory. Simply speaking, this theory is the study of cost-benefit analysis by comparing (expected) benefit and (expected) cost to predict consequences and to make better and smarter decisions. The analysis of cost-benefit is an analytic process that individuals, businesses, and governments use to analyze which decisions to make and/or to give up. Below, I describe my views and analyses in detail for those five examples.

2. Thaler’s Five Examples in Chapter 3 of *Misbehaving*

Example 1

“Jeffrey and I somehow get two free tickets to a professional basketball game in Buffalo, normally an hour and a half drive from where we live in Rochester. The day of the game there is a big snowstorm. We decide not to go, but Jeffrey remarks that, had we bought the (expensive) tickets, we would have braved the blizzard and attempted to drive to the game.” (Thaler, 2015: p. 20)

Thaler’s Explanation:

“Jeffrey is ignoring the economists’ dictum to “ignore sunk costs”, meaning money that has already been spent. The price we paid for the tickets should not affect our choice about whether to go to the game.” (Thaler, 2015: p. 21)

My Explanation:

Jeffrey and Thaler must have an expected utility (or expected benefit/expected satisfaction/expected well-being) for going to watch a professional basketball game. Given free tickets, their expected costs may only include travel cost, time cost, and opportunity cost. If there is no big snowstorm, they will go to watch

the game because their expected profit (=expected benefit – expected costs) will be positive. However, there is a big snowstorm, so their expected costs (travel, time, and opportunity) increase due to greater risk. For that reason, their expected profit (=expected benefit – expected costs) may be negative. Therefore, they decide not to go.

Nevertheless, if they purchase the tickets, which are very expensive, then their expected benefit will become much greater than their initial expected benefit when the tickets are free. This is because the higher the price you pay, the higher the benefit you will expect. An example that can be used to explain this circumstance is tuition. When parents send their children to private school and pay high tuition, parents expect a high quality of teaching and service from the private school, and thus will expect a higher benefit from choosing private education. On the other hand, when parents send their children to public school, which has free tuition, parents will not expect a high quality of teaching and service from the public school, and hence will not expect a higher benefit from choosing public education.

Since they have paid a high price to buy tickets (tickets are not free now), Jeffrey may estimate that his expected benefit will outweigh his expected costs despite the big snowstorm. That is, Jeffrey may think that his expected profit (= expected benefit – expected costs) is positive. For that reason, he may attempt to drive to the game even though there is a big snowstorm.

In collusion, it is true that sunk costs should not affect the decision whether to attend the game. However, more than sunk costs are at stake. Expected benefit and expected costs will affect our choice whether to go to the game. Based upon the theory of cost-benefit analysis, I do not think that Jeffrey's behavior is inconsistent with economic theory. He is not misbehaving.

Example 2

“Stanley mows his lawn every weekend and it gives him terrible hay fever. I ask Stan why he doesn't hire a kid to mow his lawn. Stan says he doesn't want to pay the \$10. I ask Stan whether he would mow his neighbor's lawn for \$20 and Stan says no, of course not.” (Thaler, 2015: p. 20)

Thaler's Explanation:

“Stanley is violating the precept that buying and selling prices should be about the same.” (Thaler, 2015: p. 21)

My Explanation:

It looks like Stanley may be a stingy person. Stingy people are reluctant to spend money, but it does not necessarily follow that stingy people love to make more money.

Stanley mows his lawn, but it always gives him terrible hay fever. Obviously, his costs may be higher than his benefit, so he may have a negative profit. However, Stanley is a stingy person who is reluctant to spend money and is not like other normal people. So, for him, spending \$10 is like spending, say \$100. Hiring a kid to mow his lawn can increase his expected benefit but spending \$10 will

increase Stanley's expected cost, which may be higher than his expected benefit. And the negative profit may be even greater than his initial negative profit due to not hiring a kid to mow his lawn. For that reason, Stanley would not be willing to hire a kid to mow his lawn.

Stanly is also not willing to mow his neighbor's lawn to earn \$20. Although the \$20 may increase his expected benefit, his expected costs (e.g., fuel, time, labor, opportunity, hay fever, etc.) will significantly increase because he must mow his lawn and his neighbor's lawn, and more importantly doing so will give him even more terrible hay fever. Therefore, his expected costs will outweigh his expected benefit, and thus his expected profit is still negative.

This example is not about "*the precept that buying and selling prices should be about the same*". Instead, using the theory of cost-benefit analysis to explain Stanley's behavior, his behavior is not inconsistent with economic theory, and he is not misbehaving.

Example 3

"Linnea is shopping for a clock radio. She finds a model she likes at what her research has suggested is a good price, \$45. As she is about to buy it, the clerk at the store mentions that the same radio is on sale for \$35 at new branch of the store, ten minutes away, that is holding a grand opening sale. Does she drive to the other store to make the purchase?"

On a seperate shopping trip, Linnea is shopping for a television set and finds one at the good price of \$495. Again, the clerk informs her that the same model is on sale at another store ten minutes away for \$485. Same question...but likely different answer." (Thaler, 2015: p. 20)

Thaler's Explanation:

"If Linnea spends ten minutes to save \$10 on a small purchase but not a large one, she is not valuing time consistently." (Thaler, 2015: p. 21)

My Explanation:

Before I explain my view of this example, let me give you another example. A couple of months ago, my 12-year-old son asked me whether an SAT score of 1540 is good because he has not taken the SAT test. A Google search of the percentile for 1540 indicated that the score places you in the top 99th percentile nationally out of the 1.7 million test takers of the SAT entrance exam. After I showed him the percentile result, my son immediately realized that a 1540 is excellent. A person who never took the SAT test, like my son, would not know the meaning of "1540", but he would understand the percentage of "99".

Similarly, looking at Thaler's example, prices are from \$45 to \$35 and from \$495 to \$485, which all reflect savings of \$10. But the saving rates (or discount rates) for both are different. The discount rate for the clock radio is 22.22% ($=\$10/\45), while the discount rate for the television set is only 2% ($=\$10/\495).

If Linnea spends ten minutes to save \$10 on a small purchase but not a large one, she is focusing on the discount rate rather than the discount amount because she thinks that she can save 22.22%, which is significantly more than 2%.

Therefore, given the same expected cost (a 10-minute drive), Linnea thinks that her expected benefit from saving 22.22% of the money is obviously greater than her expected benefit from saving 2%. For that reason, her expected profit on a small purchase is definitely greater than her expected profit on a large one.

This example also explains why many retail stores and restaurants emphasize a discount rate rather than a discounted amount when they offer customers promotions (such as coupons and rebates), because many customers focus more on a discount rate than on the discounted amount.

In conclusion, according to the theory of cost-benefit analysis, if Linnea spends ten minutes to save \$10 on a small purchase but not a large one, is she not valuing time consistently? To the contrary, she is valuing time consistently and her behavior is not inconsistent with economic theory. She is not misbehaving.

Example 4

“Lee’s wife gives him an expensive cashmere sweater for Christmas. He had seen the sweater in the store and decided that it was too big of an indulgence to feel good about buying it. He is nevertheless delighted with the gift. Lee and his wife pool all their financial assets; neither has any separate source of money.” (Thaler, 2015: pp. 20-21)

Thaler’s Explanation:

“Lee feels better about spending family resources on an expensive sweater if his wife made the decision, though the sweater was no cheaper.” (Thaler, 2015: p. 21)

My Explanation:

Lee feels better about spending family resources on an expensive sweater, but he does not feel good if he is spending his own money. This is because his expected cost decreases when he is spending family resources since other family members are sharing the cost with him. Given the same expected benefit from buying the expensive sweater, Lee’s expected profit is higher when he is spending family resources than when he is spending his own money.

As a result, according to the theory of cost-benefit analysis, I do not think that Lee’s behavior is inconsistent with economic theory. He is not misbehaving.

Example 5

“Some friends come over for dinner. We are having drinks and waiting for something roasting in the oven to be finished so we can sit down to eat. I bring out a large bowl of cashew nuts for us to nibble on. We eat half the bowl in five minutes, and our appetite is in danger. I remove the bowl and hide it in the kitchen. Everyone is happy.” (Thaler, 2015: p. 21)

Thaler’s Explanation:

“Removing the cashews takes away the option to eat some more; to Econs, more choices are always preferred to fewer.” (Thaler, 2015: p. 21)

My Explanation:

The more cashew nuts you eat, the fuller you will feel, and thus the less will be your appetite for your dinner. This means that your expected benefit from your

dinner will decline if you keep eating cashews. Therefore, given the same expected cost, in order not to reduce the greater expected benefit from dinner (which is the main purpose of coming over), removing the large bowl of cashew nuts and hiding it in the kitchen will make everyone happy. That is, everyone is happy because their expected profit from their dinner will not continue decreasing if the bowl of cashew nuts is removed and hidden in the kitchen. Although eating cashews is an option, the guests' main purpose in coming over is to have dinner rather than to eat cashews.

It is true that we often prefer to have more choices than fewer. However, when the main purpose is coming over for dinner rather than eating cashews, "more choices are always preferred to fewer" is not an appropriate reason for this example. Nevertheless, if the main purpose is to come over and eat various nuts, then "more choices are always preferred to fewer" may be an appropriate explanation of this example.

Consequently, according to the theory of cost-benefit analysis, I do not think that these people's behavior is inconsistent with economic theory. They are not misbehaving.

3. One More Example

Thaler's five examples point to another misbehavior example – restaurant tipping behavior. As Thaler indicated in the Talks at Google in San Francisco, California on May 27, 2015, "*Econs don't leave tips at restaurants. They don't plan to go back to, because why would you?*"

(<https://www.youtube.com/watch?v=42qbHeFxdzE>).

Since restaurant tipping is voluntary, why would diners leave tips at restaurants? Rational *Econs* would not do that, because leaving tips at restaurants is inconsistent with economic theory and is misbehaving. What Thaler indicated was true. However, I have a different explanation for why *Econs* leave tips at restaurants—one that shows why leaving tips is not inconsistent with economic theory and is not a misbehavior.

As studied by numerous psychologists, such as Lynn and Grassman (1990), the main reason that diners leave tips at restaurants is social norms (a worldwide custom). As indicated by Lynn and Grassman (1990), diners' behavior is guided by social norms; tips are used to purchase social approval and equitable relationship. As an economist, my explanation for this human behavior is that the social norms create a cost, which can be called a "guilt cost" because these social norms can make diners feel guilty if they do not follow social norms. The "guilt cost" can be very large or very small (or close to zero) depending on the diner's level of generosity, sympathy, and ethics. The higher their level of generosity, sympathy, and ethics, the higher the guilt cost will be, *vice versa*. The "guilt cost" will lower a diner's benefit (or utility/satisfaction/well-being) in dining at restaurants. To not diminish benefits (utility/satisfaction/well-being), the diner uses tips to remove the "guilt cost" so that his/her initial satisfaction can be compen-

sated, leaving them feeling peaceful and not guilty.

Nevertheless, not every society has these social norms. For example, Australia, China, Denmark, Japan, and Iceland do not have them, such that diners in these societies do not leave tips at restaurants. For that reason, if these social norms do not exist in our society, but diners still leave tips at restaurants, then leaving tips at restaurants would be inconsistent with economic theory and is a misbehavior. On the other hand, when these social norms exist in our society, leaving tips at restaurants is not inconsistent with economic theory and is not a misbehavior.

Certainly, if we no longer leave tips at restaurants, restaurant owners will have to raise prices because they must pay their servers more and thus must increase their costs. In addition, while I do not think that restaurant tipping behavior is inconsistent with economic theory and is a misbehavior (given the existence of social norms), it does not mean that restaurant tipping will not negatively impact consumer behavior and market efficiency. Lin (2020) has offered a detailed and thoughtful investigation of restaurant tipping, concluding that this practice will discourage consumer demand for restaurant meals and create an economic inefficiency in the restaurant market because the final price (which includes the initial meal price, sales tax, and tips) eventually paid by diners is no longer equal to the marginal cost.

4. Conclusion

Both psychologists and economists study human behavior but focus on different analytical perspectives. Psychologists concentrate on an individual's perception, cognition, emotion, motivation, etc., while economists examine how costs and benefits influence an individual behavior. Thus, both psychologists and economists use different analytical perspectives to explain the same example, but both still end up with the same conclusion. For example, from the psychological viewpoint, quizzes raise students' motivation to attend classes. Hence, students attend classes more frequently. On the other hand, from the economic view, quizzes lift the opportunity cost of missing classes. To lower the opportunity cost, students attend classes more frequently.

The theory of cost-benefit analysis is the fundamental economic theory and principle. This theory is very easy to understand. Economic theories and models (e.g., theory of consumer choice, theory of producer choice, etc.) are based upon the foundations of the theory of cost-benefit analysis, because economics is the study of choices made by people who face scarcity. Hence, to make a choice, individuals must estimate their costs and benefits, and determine whether their profit would be positive or negative. Most people never study economic theories and models, but everyone has a fundamental cost-benefit concept in mind, which affects decisions and guides behavior.

Everyone values their benefits and costs differently based upon their experience, background, etc. For example, you may give the same lecture to your students at the same time in the same classroom. Some students may believe the

lecture is great and that they learn a lot from you. However, some students may view your lecture as terrible and believe that they learn nothing from you. Students who view the lecture as a great one must believe that they have received a positive profit, while those who viewed the lecture as terrible must believe that they have received a negative profit. Different valuations in benefits and costs can result in different student learning behaviors and choices, such as whether to attend lectures more or less frequently.

Of course, we may sometimes over-estimate or under-estimate our expected benefits and costs, which would lead us to make the wrong choice/decision, and thus we may regret our initial choice/decision. Nevertheless, this still does not mean that our behavior is inconsistent with economic theory and misbehavior. Let me use the first example provided above to explain my argument. Suppose that Jeffrey really braved the blizzard and drove to the game because he had purchased the expensive ticket. As a result, he may regret his initial decision because he had great difficulty driving to the game and the game was not as good as he initially expected. His regret about his initial decision still does not demonstrate that Jeffrey's behavior is inconsistent with economic theory and that he is misbehaving. It only demonstrates that Jeffrey over-estimated his expected benefit and under-estimated his expected cost, leading him to make the wrong decision. More clearly, when Jeffrey under-estimated his expected costs, it means that he ignored some relevant costs that should be considered in his expected costs, leading him to make an improper decision and behaving irrationally. For that reason, Jeffrey's regret due to under-estimating his expected costs may be explained as a case of "hidden cost fallacy" rather than a case of "sunk cost fallacy". The difference between "sunk cost fallacy" and "hidden cost fallacy" is that "sunk cost fallacy" is mistakenly considering irrelevant cost, while "hidden cost fallacy" is mistakenly ignoring relevant cost.

In conclusion, the main purpose of this paper is to provide different views and analyses from the author of the book rather than criticizing behavioral economists. That is, I offered complementary explanations on people's behavior in these discussed examples instead of rebutting Thaler's explanations. In most cases, people think that they are behaving rationally but make misjudgments on their (expected) costs/benefits. Thus, is human behavior inconsistent with economic theory and misbehavior? In my opinion, I believe that the answer depends on the examples and appropriate economic theory used to explain behavior. The use of an inappropriate economic theory would lead to an improper conclusion, such as using "ignore sunk costs" to explain Jeffrey's "misbehavior". Therefore, using the theory of cost-benefit analysis to explain Thaler's five examples in chapter 3 of his book, I conclude that those people's human behavior is not inconsistent with economic theory, and they are not misbehaving.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- Drèze, J., & Stern, N. (1987). Chapter 14: The Theory of Cost-Benefit Analysis. *Handbook of Public Economics*, 2, 909-989. [https://doi.org/10.1016/S1573-4420\(87\)80009-5](https://doi.org/10.1016/S1573-4420(87)80009-5)
- Lin, T.-C. (2020). Restaurant Tipping and Economic Efficiency in the Restaurant Market: An Economic Theoretical Analysis. *Theoretical Economics Letters*, 10, 1136-1145. <https://doi.org/10.4236/tel.2020.105067>
- Lynn, M., & Grassman, A. (1990). Restaurant Tipping: An Examination of Three Rational Explanations. *Journal of Economic Psychology*, 11, 169-181. [https://doi.org/10.1016/0167-4870\(90\)90002-Q](https://doi.org/10.1016/0167-4870(90)90002-Q)
- Thaler, R. H. (2015). *Misbehaving: The Making of Behavioral Economics*. W. W. Norton and Company.