Keeping Doors Open: The Effect of Unavailability on Incentives to Keep Options Viable

1. Primární zdroje

Sekundární zdroje

Terciární zdroje

Introduction

Imagine a student who is uncertain about whether he wants to become a computer programmer or a poet. If he wants to keep both options available, he has to keep taking classes in both majors. On the other hand, keeping both options open has its own cost. Double majoring implies that the student has to divide his time and effort and take classes in both fields-leading him to become proficient in both, but an expert in neither. Along similar lines, consider a person pursuing two potential relationships. As long as this romantic decision maker spends sufficient time with each of her potential romantic partners, she can keep them both as viable future relationships. However, once she starts spending more time with one and neglecting the other, the neglected party is likely to move on and become unavailable. Given the possible loss of the second romantic option, our enthusiastic dater might try to spend at least some of her time with her less-preferred partner, largely to maintain the viability of the relationship. However, much like the student with the double major, "keeping doors open" has its costs, drawing valuable time and energy away from the more promising relationship.

Double majoring and dating are just two examples of cases where one must invest extra time and effort to keep options available. The main questions asked here are whether the threat of future unavailability makes less-desirable options seem more appealing and whether this causes individuals to overinvest in these options. In other words, do doors that threaten to close appear more attractive than doors that remain open? And if so, will individuals overinvest just to keep them open?

From a naive, rational perspective, one could expect that the value of an option (having the ability to make a choice) would be based solely on the expected utility of the outcomes it represents. From a psychological perspective, however, there are two primary reasons why the subjective value of an option can exceed its expected value: a desire for flexibility and aversion to loss.

Initial evidence for the value of flexibility was proposed by Brehm (1956), who showed that people are willing to sacrifice consumption pleasure to increase freedom of choice (see also Simonson 1990, Gilbert and Ebert 2002). The desire for flexibility is not limited to humans; even pigeons exhibit it (Catania 1975). Such preference for flexibility implies that individuals can get utility (pleasure) from simply "having the right to choose" (keeping options open) prior to making a final choice.

Evidence for aversion to loss dates back to Kahneman and Tversky (1979). The most relevant application of this aversion to loss is the case of endowment effect (Kahneman et al. 1990, 1991; Bar-Hillel and Neter 1996; Carmon and Ariely 2000), showing that ownership, or even deliberation (Carmon et al. 2003), can increase attachment and hence valuations. Support for aversion to loss was also provided in the context of risky choice, in particular the rejection of a pair of mixed gambles (Markowitz 1952, Williams **1966).** Although options for items are very different from the items themselves-for example, the possibility of dating a person is a very different experience from actually dating that person-and although it is not possible to own an option in the same way it is to own an item, losing an option (opportunity loss) is closely related to the loss of an item. Namely, the loss of an option also implies the loss of the item. Based on this similarity in terms of loss and the large influence of loss on decision making (Tversky and Kahneman 1991), it can be argued that individuals will also experience the general aversion to loss and a pseudoendowment effect for options. The general aversion to loss implies that the utility that individuals get from simply having the "right to choose" (keeping options open) is not a utility, but rather disutility or pain that can accompany the loss of options.

In summary, the current work asks two questions: First, whether the threat of unavailability increases the perceived value of an option; and second, if so, whether the higher valuation comes from a desire for flexibility or from aversion to loss. Four experiments were designed to provide initial answers to these questions.

General Discussion

The current work examines a basic aspect of human behavior that extends from interpersonal relationships to abstract monetary options-valuations of options. The experiments attempted to shed some light on how individual decision makers evaluate options by examining how the threat of option unavailability influences the value of the options. Experiment 1 demonstrated that the possibility that the options will become unavailable in the future increases investments in them to keep them from disappearing. Experiment 2 tested whether this effect can be due to information, and, in addition, added three more fine-grained measures (pecking, click investment, and elimination point) to test whether the effort respondents expanded to maintain options open can be rationally explained; it cannot. Experiment 3

tested whether the distinction between implicit and explicit cost is the reason that our respondents overinvested in keeping doors open; it was not. Finally, Experiment 4 contrasted two psychological theories-flexibility and aversion to loss-as possible mechanisms for the overinvestment in keeping options open. The results from this experiment point to aversion to loss as being the more powerful of the two (at least in our set-up).

In a further test of aversion to loss, we created a new measure aiming at examining whether the room that respondents "gave up on" first (elimination point) was one for which they had more or less information about compared with the one they "gave up on" second (second elimination point). We argue that from an informational point of view, subjects should abandon a room they have more information about, because the amount of information indicates their certainty in the quality of the room. On the other hand, from an aversion to loss perspective, a room that had attracted more clicks might also have a higher attachment associated with it, thus leading to a lower tendency to abandon such a room. Analyzing this measure in Experiment 2 revealed that the respondents were four times more likely to first abandon rooms they have less information about, thus supporting the attachment and aversion to loss ideas. Moreover, the increased impact of availability on the practiceinformation condition in Experiment 2 strongly supported the aversion to loss explanation (Figure 3). The experience of actual feeling of the losses of the options during the practice trials seemed to cause respondents to be even more resistant to experiencing more losses during the actual trial.

In summary, the experimental evidence presented suggests that individuals value options in a way that is different from the expected value of these options, and, in particular, that decision makers overvalue their options and are willing to overinvest to keep these options from disappearing. Based on the results of Experiment 4, we believe that the desirability of keeping options open is a kind of disutility from loss rather than utility from "having more options to choose from."

In a world where maintaining options has no cost, such a tendency would have been nonconsequential. However, we believe that in most day-to-day cases, there is substantial cost to keeping options open, which would lead to erroneous behavior. There are many situations in which decision makers encounter trade-offs between the future availability of options and their maintenance costs. We have already mentioned dating and choosing a major in college. Other examples include trade-offs between focusing on one's current work and looking for new employment elsewhere; whether to specialize in a way that suits one's current employer or instead to invest in skills that are valued by other potential employers. These results might also shed light on one of life's greater mysteries: Why do some people channel surf rather than, for example, enjoy a single movie? The answer might be the fear of losing other options. These results might also be generalized to one-shot cases. For example, when buying a new

computer, consumers face the dilemma of deciding whether to buy a system that suits their

current needs or purchase an expandable system (e.g., more slots for cards, and more memory) that is more expensive but could better fit their uncertain future needs. In this case, the main source of the dilemma is the uncertainty as to whether future expansion will be needed, compared with the current additional cost. Our computer buyer is faced with a situation that is analogous to the door game one click before a door disappears. She can take a costly action at purchasing time to ensure that the expansion option remains available to her whether she subsequently decides to expand or not.

Other examples in which consumers face "disappearing" options are deciding whether to purchase an extended warranty when buying a new electronic product and deciding whether to buy pictures of one-self on whitewater rafting trips. In such cases, consumers are given the opportunity to act on the options (the warranty or the pictures), while realizing this is their only opportunity to take this action, and that not acting on the options is irreversible and may cause the "pain" of losing these options. We suspect that the effectiveness of such tactics is based on the option's nonavailability in the future, which would cause these options to be perceived more favorably and to be acted on more frequently.

There remain numerous unanswered questions. For example, what are the mechanisms that underlie the fear of losing options? What is the relationship between keeping options open and indecision, particularly when deciding means committing to one out of a multitude of other possibilities (see also Amir 2004)? What is the impact of options' prospective lifetime and unavailability on their subjective value? Faced with a large number of options, would decision makers still value options (Iyengar and Lepper 2000)? What is the number of options people would like to keep? Finally, under what conditions will individuals want to actively eliminate options? We keep these research opportunities open for the future.

2. Catania, A. C. 1975. Freedom and knowledge: An experimental analysis of preference in pigeons. J. Experiment. Anal. Behavior 24 89-106.

"But this implies that the preference for freedom and knowledge can arise phylogenetically. If such preferences are part of the phylogenetic endowment even of the pigeon, then corresponding human preferences take on a special significance, because they need no longer to be attributed merely to the practices of particular cultures. Freedom and knowledge may or may not be biologically fundamental; in either case, they have a place in the analysis of behavior."

Tversky, A., D. Kahneman. 1991. Loss aversion in riskless choice: A referencedependent model. Quart. J. Econom. 106 1039-1061.

"Loss aversion implies that the impact of a difference on a dimension is generally greater when that difference is evaluated as a loss than when the same difference is evaluated as a gain. Diminishing sensitivity implies that the impact of a diference is attenuated when both options are remote from the reference point for the relevant dimension. This simple scheme serves to organize a large set of observations. Although isolated findings may be subjekt to alternative interpretations, the entire body of evidence provils strong support for the phenomenon of loss aversion."

Gilbert, D. T., J. E. J. Ebert. 2002. Decisions and revisions: The affective forecasting of changeable outcomes. J. Personality Soc. Psych. 82(4) 503-514.

"Because unchangeability is such a potent trigger for the psychological immune system and, hence, an impetus for the self-generation of satisfaction, we might expect people to seek and Despite the power and, ubiquity of the psychological immune value it. In fact, just the opposite seems to be the case. People generally react with anger, disappointment, and regret to that which they perceive as a threat to their decision freedom (Brehm, 1966) and consider unchangeability so undesirable that they may willingly pay to avoid it."

- 3. Přečtení původní informace mi v tomto případě obzvlášť nepomohlo. Ale to je pravděpodobně především tím, že jsem si schválně vybírala takové části, kterým jsem rozuměla více než jiným. Nepřišlo mi, že by autor jakkoli zkreslil původní informaci. Problém mi spíš činilo najít původní informaci. Z článků jsem několikrát chtěla zkopírovat více informací, které by podle mého mohly být využity v článku.
- 4. Tato studie, jejíž autory jsou Jiwoong Shin a Dan Ariely, se zabývá tzv. ponecháváním zadních vrátek. Pokud si při výběru necháváme otevřenou druhou možnost (ať už se jedná o naše studium, nebo našeho životního partnera), musíme počítat se značnými ztrátami. Dalo by se očekávat, že hodnota toho, že člověk má možnost učinit volbu, bude založena na očekávaném užitku z výsledků. Z psychologického hlediska ovšem existují dva hlavní důvody, proč subjektivní hodnota může přesáhnout očekávanou hodnotu. Jde o touhu po flexibilitě a averzi ke ztrátě. Studie se snaží nalézt odpovědi na dvě otázky. Zda hrozba nedostupnosti nezvyšuje vnímanou hodnotu a pokud ano, a zda vyšší ocenění pramení z touhy po flexibilitě či averzi ke ztrátě. K nalezení odpovědí slouží čtyři experimenty. Všechny experimenty mají stejný design. Podstata těchto výzkumů spočívá v sekvenčních úkolech. Respondenti v nich čelí několika alternativám, z nichž je každá spojená s různě velkou odměnou. Respondenti se snaží maximalizovat svoje zisky tím, že najdou nejlepší možnost, ale vyhledávání samotné je něco stojí. V rámci experimentu byla vytvořena počítačová hra se třemi dveřmi. Jedny dveře byly červené, druhé modré a třetí zelené. Kliknutím myši na dveře, se vchází do dané místnosti. V místnosti má respondent dvě možnosti. Může kliknout v té samé místnosti nebo kliknout na dveře vedoucí do vedlejší místnosti. Klik v místnosti znamenal náhodně přidělený zisk dle možností místnosti. Klik do vedlejší místnosti byl bez odměny. Dostupnost se ovšem ještě každým klikem snížila tím, že se dveře do dalších dvou pokojů zmenšily. Po kliknutí na zmenšující se dveře se ale ovšem opět vrátily na původní velikost. Všichni respondenti dostali k dispozici stejný počet kliknutí. Po vypotřebování kliků se vyhodnotil jejich celkový zisk. V každém bodě experimentu se tedy respondenti museli rozhodovat, zda zůstat u jejich volbv nebo pokračovat ve hledání. A zda riskovat spíše ztrátu dveří nebo zachování životaschopnosti. Stejně jako u výběru studia či životního partnera. I když studie

nezodpověděla všechny otázky, vychází z ní několik zajímavých faktů. A nejen proto stojí za přečtení.