

Understanding Waste Aversion

Imagine that you are looking for a new apartment. You have paid an online database \$36 for the opportunity to receive contact details for 20 apartments, when it was also possible to pay \$20 for 10 apartments. How would you feel about finding the apartment of your dreams among the first 10 you looked at? Spending time and effort to look at more apartments is wasteful, but it would save you the feeling that you have wasted the additional \$16. Such situations may arise whenever a consumer faces an option to pay a fixed price for an extended service of an ex-ante unknown duration.

Zultan, Bar-Hillel, and Guy (2010) showed that people may be happier with a more wasteful outcome (such as searching longer for an apartment) in order to avoid feeling wasteful (having unnecessarily paid for the more expensive subscription) across four different domains. This conclusion was based on projected feelings in hypothetical scenarios. Importantly, the scenarios depicted an agent (self or other) actively choosing a payment scheme that may turn out to be wasteful. Consequently, the effect may be due to aversion to having made a wrong decision rather than due to waste aversion.

In four studies, we extend the existing literature in three ways. One, we provide evidence for the WHEW (Wasting to Hold off Emotions of Waste) in real experiences, as opposed to projected emotions in hypothetical scenarios. Two, we show that the effect extends beyond higher satisfaction with a wasteful outcome to actual decisions that bring about a wasteful outcome. Three, we manipulate agency, allowing us to disentangle the desire to avoid waste (discovering that you spent more than needed) from the desire to avoid regret (discovering that your decision resulted in spending more than needed).

Study 1 emulates the choice depicted above by allowing participants to roll a die repeatedly, winning a prize on a roll of 6 (similar to finding “the apartment of your dreams”). Participants can “buy” either three or nine attempts. A participant who paid a high price for nine rolls and wins the prize on one of the first three rolls has wasted the price difference. Consistent with waste aversion, we find that being aware of the alternative cheaper option reduces outcome satisfaction only if the prize was won on the first three rolls. Interestingly, the effect is not apparent in participants’ projected satisfaction for the hypothetical scenarios of winning on the third or fourth rolls.

Study 2 extends this paradigm to examine the role of decision regret. We compare conditions in which participants are either assigned by the computer to buy nine attempts, or actively choose it. To avoid selection problems, we first ask participants for their preference, and consider only participants who state a preference for the expensive option. Thus, both conditions involve waste aversion, yet decision regret is only relevant in the condition where participants actively choose the

payment scheme. Consistent with waste aversion, outcome satisfaction is similar in the two conditions, and comparable to that observed in Study 1.

In Studies 3 and 4, we go beyond satisfaction to look at decisions. Study 3 establishes in a hypothetical scenario that people choose to expend more resources in order to avoid feeling wasteful. In Study 4, we look at actual incentivized decisions. Participants open boxes that contain monetary prizes sequentially. After observing each prize, the participant chooses whether to take the prize or forgo it and open the next box. We compare a fixed price for opening boxes to a per-box payment. The fixed price is lower than double the per-box payment. Therefore, opening more than one box implies that paying the fixed price was wasteful. Consistent with waste aversion, participants are more likely to forgo the first prize compared to a control condition in which the per-box payment scheme was not available.

Taken together, the four studies illuminate how and why waste aversion affects people choices and satisfaction when faced with a fixed-price payment scheme. The effects we identify reveal a distinct phenomenon, which, unlike related phenomena such as the sunk cost effect, crucially depend on the counterfactual alternatives. We show that waste aversion affects satisfaction following real experiences, waste aversion is a distinct phenomenon from decision regret aversion, and that the effects of waste aversion translate to actual consumption or search decisions. Under the assumption that the decisions made sans counterfactuals reflect true preferences, waste aversion leads to suboptimal choices