

ESSAYS ON CONSUMER DECISION MAKING IN DURABLE GOODS REPLACEMENT AND MAINTENANCE

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Abstract

Individuals typically face a series of complex decisions in the context of durable goods. These decisions span the spectrum of pre-purchase, purchase, maintenance and subsequently replacement or disposal activities. Manufacturers, retailers and third-party players such as insurance/warranty providers and recyclers would benefit by understanding how individuals make decisions related to durable goods. In this thesis I attempt to uncover the decision making process by focusing on two specific decision contexts – replacement and maintenance of durable goods. Structured in the form of three distinct essays, I look at the factors that systematically influence individual's decisions and the psychological mechanisms underlying the effects. Durable goods retailers are incentivizing their consumers by offering new and more convenient modes of payment method. While the effect of these offers on pre-purchase evaluation and purchase likelihood is intuitive, little is known about the effect on long-run aspects of consumer behavior. **In Essay I**, I look at how payment method chosen for purchasing a durable good systematically impacts post-purchase consumption experiences and subsequently replacement intentions. With theoretical support from mental accounting and effort justification paradigm of cognitive dissonance literature, I argue that individuals rate their durable good consumption experiences more (less) positively and intend to replace them slowly (quickly) when they purchase the durable with a more (less) salient payment method. I test my propositions with experiments set in laboratory and field setting and develop a path model to explain the psychological mechanisms underlying the proposed effect. Durable goods undergo physical depreciation with time age and use. Individuals follow some simple thumb rules to come up with a mental or psychological depreciation schedule for their durables. Past studies on mental depreciation pointed that individuals use information about usage frequency, usage quality among other factors in their durable goods mental depreciation process. In reality, individuals also encounter information pertaining to others' usage behavior. In that case, how do individuals assign a mental valuation to their durable? **In Essay II**, I attempt to answer this question by broadly looking at how information about usage frequency is evaluated in the mental depreciation process of durable goods. Building on insights from stimulus evaluation, I propose that individuals' depreciate their durables based on both absolute and relative usage frequency. In a series of laboratory and field studies including both hypothetical and real usage contexts, I identify conditions when individuals assign more importance of absolute vs. relative usage frequency in mental depreciation process. As manufacturers are increasingly offering minimal warranties on durables the idea of considering an extended warranty is gaining prominence. Scholars have pointed that factors such as risk-aversion, loss-aversion and non-linear probability explain individual's likely hood to purchase and pay a high premia for extended warranties. **In my**

Essay III, I propose another perspective to understand why individuals purchase extended warranties. Broadly, I propose that ownership horizons and anticipated repair-free time form endogenous reference points that influence the purchase decisions. I calibrate the risk preferences over the ownership horizon to support the propositions made and suggest possibilities for optimally designing and pricing menu of extended warranties.