

Preference Construction under Budget Contraction

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Abstract

Consumers often face constraint budgets, which can be both long-term and short-term. For example, the sudden COVID-19 pandemic reduces people's income, which in turn affects their consumption behavior. In this paper, we comb through and review the literature on budget tightening and consumer preference construction under budget tightening, trying to find out the influencing factors of consumer preference construction under budget contraction.

Keywords

Budget Contraction; Preference Contraction; Regulatory Focus; Desirability-Feasibility Tradeoff.

1. Introduction

Consumers encounter economic constraints on a daily basis, which impose limits on their behaviour and limit their expectations of consumption (Tully et al., 2015). Basu (2014) points out that millions of people live in chronic poverty or experience financial hardship. The squeeze on resources may be short-term, caused by loss of income due to unemployment, or by product shortages, or it may be a prolonged period of lower social status leading to a sustained squeeze on budgetary resources. Consumers' vision of achieving their consumption goals may encounter budgetary constraints in terms of money or time, as well as product shortages (Goldsmith et al., 2020). China's gross domestic product contracted 6.8 per cent in the first quarter of 2020 amid the coronavirus pandemic, with retail sales of consumer goods and services falling 19 per cent year on year, according to the National Bureau of Statistics.

In the context of consumer decision making with tight budget, previous studies mainly focused on the total amount of consumer purchase or how consumers allocate their budget. Dargay (2001) found that economic contraction or personal budget contraction would lead consumers to cut back on unnecessary items and reduce the total number of items purchased (Carlson et al., 2015). Cannon (2021) found that scarcity of resources would lead to consumers' attachment to materials and affect their self-discipline. Hamilton et al. (2019) review the impact of financial constraints on consumer decision making and integrate work on product and resource scarcity to better understand consumer decision making processes. In the study on the impact of budget tightening on consumer preferences, Gretchen (2020) divided budget resources into money, time and space. Faced with a tight budget, people often reported Preference Refinement, offering fewer items to select, but there was no significant change in the amount of budget allocated to each category. In the study on the impact of resource constraints on consumer preferences, Meng (2013) argued that significant resource constraints would widen the difference between the most popular and less popular items and increase the selection share of the most favored option, that is, resources are invested in the most favored option.

2. Organization of the Text

2.1. Budget Contraction

2.1.1. The Definition of Budget Contraction

Economic theory suggests that consumers should view all resources as finite and therefore should always plan their spending (Kopalle et al., 2012, Pareto 2014). A tight budget means a lack of resources, and the capability of the target may be affected by a shortage of resources (such as money or time) or a shortage of products.

Resource scarcity in a broad sense reflects the actual or perceived lack of capital (i.e., financial, social, cultural) or other productive inputs (i.e., time) that consumers must invest in order to acquire and use goods and services (Cannon et al., 2018; Hamilton et al., 2018). When consumers encounter resource constraints, their attention will be drawn to scarce resources (Shafir&Mullainathan, 2013). The lack of money is more pronounced when people have a limited budget to achieve a goal, or when they live with a limited income for a long time. Since the most typical resource constraint experience of consumers involves the lack of perception of monetary resources, the literature on resource constraint often studies economic constraint, that is, the lack of monetary resources required by consumers to meet their consumption needs (Sharma&Alter, 2012).

In addition to the lack of money, the lack of time is often a constraint on daily decision-making, and consumers are also affected by this limitation (Javed et al., 2015; Madan et al. 2015 -- Reference 2019-purchase·). Time pressure describes an individual's subjective perception of insufficient or even lack of time resources. It refers to the subjective experience of individuals who do not have enough time to do the activities they want to do or need to do (Szollos, 2009). Time pressure includes two factors: (1) Time limit when making decisions; (2) subjective feelings brought by time limit, such as a sense of time shortage and haste (Young et al., 2011). Time pressures affect the quality of consumers' decisions because they limit the ability to handle information (Vla? i, Jankovi, and Kramo-? aluk, 2011) (reference -2019-purchase 'is not added). time affluence, on the other hand, means that individuals have enough time to do things, and the pace of life is leisurely and unhurried (Kasser & Sheldon, 2009). From the perspective of social roles, Drach-Zahavy (2007) defined time pressure as the degree to which an individual realizes that the obligations and responsibilities of a certain role are beyond his ability and time range, which is manifested as a kind of "role overload". Time stress is not only an individual's cognitive experience of not having enough time to do things (work, interpersonal relationship, leisure, etc.), but also an individual's emotional experience of urgency and anxiety brought by busy and fast-paced activities. This cognitive and emotional experience can be long-term or temporary.

The consumption scenario under budget contraction often involves multiple categories of consumption budget. Economists divide the categories of budget allocation into: 1. Commodity categories across industries, such as food, clothing, and housing (Deaton and Muellbauer, 1980), A narrow group of goods, such as different types of entertainment (Phaneuf et al., 2000), modes of transport (Kockelman 2001), food consumed at home (Kao, Lee and Pitt 2001), energy (Bousquet, Chakir and Ladoux 2004), and print/electronic newspapers (Gentzkow 2007).

In this study, the lack of money and time resources is included in the budget tightening situation, and the consumption situation under the budget tightening is defined as that consumers lack the money or time resources to meet their consumption needs when a group of narrow choices of similar goods are concentrated for budget allocation.

2.1.2. The Impact of Budget Contraction on Consumer Behaviour

The scarcity of any resource diverts consumers' attention (Mullainathan and Shafir, 2013) and alters the way they allocate scarce resources (Shah et al. 2019). Lack of money in budget

allocation limits consumers' ability to choose from the myriad products and services they want (Botti et al., 2008). Individual money constraints affect their happiness and preference for products (Diener et al., 1999). They encourage consumers to focus on and prefer real goods over experiences (Tully et al., 2015), necessities over non-necessities (Durante and Laran 2016), and scarce goods over well-stocked goods (Sharma and Alter 2012). Consumers adapt to resource constraints by devoting a greater proportion of their financial resources to necessities. (Cole, et al., 2008). Carlson et al. (2015) show that when budget size is in descending order (vs. Ascending) when the way changes, people tend to choose less variety. Studies on resource constraints also show that consumers increase their consumption of status or location goods under economic hardship (Griskevicius et al., 2013; Walasek and Brown, 2015) and the consumption of high-calorie foods (Briers and Laporte, 2013, Laran and Salerno, 2013).

2.1.3. The Impact of Budget Contraction on Cognition

The uncertainty brought about by constraints will bring pressure and threat to consumers (De Witte et al. 2016; Grupe and Nitschke, 2013). Having a sufficient sense of control means that people have sufficient resources to achieve their goals and are rarely limited (Anderson and Berdahl 2002; Keltner, Gruenfeld and Anderson 2003). Environmental uncertainty means that consumers have no control over the environment, which leads to people feeling that they have lost the ability to respond effectively. Uncontrollable constraints also produce negative effects such as stress (Haushofer and Fehr 2014). Mani et al (2013) found that economic constraints negatively affect cognitive function and lead to distraction (Shah, Mullainathan and Shafir 2012). And the restriction of consumption choices makes consumers more excited, frustrated and aggressive (Zhu and Ratner, 2015). In addition, scarcity of resources changes consumers' expectations of and interactions with the environment (Mittal and Griskevicius, 2016). In order to solve the problem of financial stress, consumers focus on their financial constraints and adopt a scarcity mentality. In order to make decisions, consumers will put in more cognitive effort and thus become more aware of financial constraints.

The squeeze on time also impairs an individual's cognitive function. Zakay (1993) proposed that the decision under time pressure is actually the decision made by the consumer under the lack of cognitive resources, and the influence of time pressure on the decision is mainly realized through the occupation of cognitive resources. Shah et al. (2012) proved through a series of experiments that lack of resources leads to excessive focus of cognitive resources and damages cognitive function, that is, time pressure leads to attention focus and cognitive load, resulting in impaired cognitive function of individuals and inability to make correct decisions. In addition, Young et al. (2012) found that time pressure affects individuals' choice of decision-making strategies. Individuals under time pressure are more inclined to use heuristic strategies rather than analytical ones in cognitive tasks. . Individuals under time pressure are more conservative in their risk decisions (Huber and Kunz, 2007; Kocher et al., 2019; Xin Zhao and Xiangdong Qin, 2021)

2.1.4. Coping with Budget Contraction

In many cases resource constraints are unavoidable, and many consumers have not only learned to manage the constraints they face, but have also developed adaptive strategies to cope with them (Payne et al., 1993). Although resource constraints may have negative effects, such as increasing the cognitive effort required by consumers to make decisions, they may also motivate consumers to improve the efficiency of resource utilization (Mullainathan and Shafir, 2013). In addition, consumers respond to choice constraints by increasing their creativity (Mehta and Zhu, 2016) Consumers show less immunity to new choice constraints (Snibbe&Markus, 2005) and greater resilience (Thompson, Hamilton and Banerji, 2018) to accommodate selection constraints. By becoming more sensitive to situational cues (Mittal et al., 2015; Young et al., 2018) and maximizing current opportunities (Ozanne, Hill, and Wright,

1998) to adapt to environmental uncertainties and reduce their impact on framing effects (Shah, Mullainathan, and Shafir, 2015).

Fernbach (2015) proposed that when consumers realize that resources are limited and may not be enough to achieve their goals, two common strategies would be adopted: Efficiency planning achieves savings by expanding resources. Priority planning, on the other hand, achieves savings by sacrificing less important goals.

Efficiency planning involves the concept of a Pareto efficiency transaction (Pareto 2014) between two parties, even if one is richer without impoverishing the other. Efficiency planning aims to avoid opportunity costs and avoid waste by promoting efficiency through individual efforts within the selection set (Brooks, Kaufman, and Lichtenstein 2004). For example, visiting multiple stores in one trip is a more efficient use of time than visiting each store on separate occasions. In contrast, priority programming achieves savings by balancing goals under resource constraints against opportunity costs. For example, a consumer may decide on an item within an original category, and if time is short, a person may decide to forgo a trip to the hardware store and prioritize grocery shopping instead of connecting the trip.

2.2. Preference Construction under Budget Contraction

Meng(2015) proposed that in the face of resource shortage, consumers would have Preference Polarization. Scarcity of resources polarizes consumers' judgment of options by triggering arousal, thus making judgment of positive objects more positive and judgment of negative objects more negative. Recatance Hypothesis also suggests that when faced with resource scarcity, consumers trapped in a scarcity mentality may concentrate resources on one option. When it comes to budget allocation, unaffordable items become more attractive to consumers who experience a tight budget than those who do not. Perception of scarcity can increase an individual's preference for scarce goods (Van Herpen, Pieters and Zeelenberg, 2009; Verhallen, 1982). Parker and Lehmann (2011) extend these findings and find that perceived popularity drives an increase in choice share more than perceived quality. Zhu&Ratner, 2015) studied how consumers react when they encounter a large or small number of goods in a specific product category. When consumers encounter a limited number of products available for consumption, their excitement tends to increase, thus polarizing their preferences. As a result, restricting choice in a range of alternatives tends to increase consumers' desire for their favorite items and decrease their desire for their least favorite items. Gretchen (2020) proposed Preference refinement. While consumers often construct preferences among the options available at the time (Bettman, Lucy et al. 1998; Russo et al., 2006), but they also often have stable preferences for products that are considered frequently (Hoefler, Ariely and West, 2006).

Gretchen, through six experiments, showed that consumers experiencing budget contraction and budget recovery should choose fewer unique items concentrated after the contract than those concentrated before the contract, but there was no over-concentration of resources into one option. Consumers who are "struggling" financially often look for variety in their product mix (Yoon and Kim, 2018).

Furthermore, it may support the bidirectional nature of the relationship between scarcity and maximization mentality. A maximization (vs. satisfaction) mindset has been shown to activate a sense of scarcity (Goldsmith, Roux, and Ma 2018) and is characterized by a preference for a larger set of choices (Check and Schwartz 2016). In the study of strategies for coping with budget contraction, Fernbach(2015) pointed out that in the strategies for coping with budget contraction, efficiency plans feel like "gains for nothing", while priority plans are losses. While priority plans need to explicitly weigh one goal against another, efficiency plans may require less explicit trade-offs. Combined with the studies of Gretchen (2020) and Meng (2015), as well as the coping strategies (efficiency vs. priority) under budget tightening, this study divides the preference reconstruction tendency under budget tightening into: Preference polarization and

preference refinement tendency. Preference polarization is manifested in that consumers tend to concentrate scarce resources into a certain category in a group of choice concentration under a tight budget situation. Preference refinement means that consumers allocate resources to multiple categories.

2.2.1. Regulatory Focus and Preference Construction under Budget Contraction

According to the theory of regulatory orientation (Higgins, 1997), individuals differ in their sensitivity and response to risk. Individuals centered on promoting orientation focus on growth needs, aim at ideals and achievements, and are particularly sensitive to differences between benefits and non-benefits; In contrast, individuals centered on prevention orientation focus on safety needs, with the desired end state as their duty and responsibility, and are particularly sensitive to the difference between non-loss and loss (Galinsky, Leonardelli, Okhuysen Mussweiler, 2005; Gino & Margolis, 2011; Halamish, Liberman, Higgins & Idson, 2008; Kao, Zhang & Wu 2017). Heuristic strategies that promote directed prioritization to make progress and maximize returns (Kruglanski et al., 2000; Zou et al., 2014), focusing on achieving positive outcomes (Manczak et al., 2014)

Promoted directed divergent thinking has a higher level, produces more ideas in a short period of time, and is more open and inclusive to information. Promoted directed is more likely to describe positive titer information as a benefit, while preventive directed is more likely to describe negative information as a loss (Liberman, Molden, Idson & Higgins, 2001; Lee, Keller & Sternhal, 2010); Moreover, individuals who promote orientation are more likely to overestimate the positive emotions after the realization of the goal, thus enhancing individual behavioral motivation (Buehler (2007). Individuals who prevent goals are more likely to overestimate the negative emotions after the failure to achieve goals, thus weakening the motivation of individuals to achieve goals. In the cognitive process, prevention orientation plays a dominant role in the individual's opportunity-threat cognition. Subjects with high prevention orientation have lower opportunity cognition and higher threat cognition. When choosing options, prevention-oriented consumers tend to compare the most important attributes of each option to the criteria and repeat the process until one option is left, because "the focus of prevention tends to ensure correct rejection, and to prevent errors" (i.e., false alarms; Crowe & Higgins, 1997, p. 117)

Preference refinement tends to gain gains by allocating resources to multiple categories, while preference polarization requires explicit weighing of options in a set of choices. Given the opportunity cost, sacrificing some desired items is more likely to be a loss. For those dealing with tighter budgets, the polarisation of consumer preferences caused by prevention targeting can be even stronger. The individuals who promote orientation focus on growth needs, aim at ideals and achievements, and are particularly sensitive to the difference between income and non-income. Preference refinement focuses more on overall benefits and takes less consideration of opportunity costs, so those who promote orientation should be more inclined to prefer refinement.

2.2.2. Desirability-Feasibility Trade-Off and Preference Construction under Budget Contraction

Action recognition theory suggests that actions can be described in two ways: feasibility or desirability (Vallacher & Wegner, 1988, 1989). Desirability refers to the value of the end state of an action, while feasibility refers to the ease or likelihood of an action achieving the desired result. Therefore, in the theory of action recognition (Vallacher, 1987), desirability corresponds to the "why" of action, that is, the return of the behavior that motivates people to pursue, while feasibility refers to the "how" of action, including relevant costs and constraints. Feasibility refers to the degree of ease or difficulty involved in an action, as well as "the amount of time and effort one must devote to the option" (Castano, Sujan, Kacker, & Sujan, 2008, p. 321). For

example, a hiker may think mountain backpacking is ideal and fun, but if he or she lacks the physical ability to hike, it may not be feasible (Liu, 2008). Conversely, a trip to a nearby park might be very doable, but not very fun.

Lee, Keller, and Sternthal (2010) found that people who focus on promotion respond more positively to messages that emphasize desirability related features of products, while people who focus on prevention respond more positively to messages that focus on feasibility related features. Dholakia et al. (2006) indicate that individuals who focus on facilitation are more willing to engage in efforts than individuals who focus on prevention. This effect can be explained by the proposition of the present study that the facilitation focus, in contrast to the prevention focus, directs attention to the desirability of action rather than the feasibility of action. Because desire brings more motivational impulses to people (Bagozzi&Dholakia, 2006), people who focus on promotion are more motivated to take action than those who focus on prevention.

In addition, when people conduct goal-oriented actions, the interpretation of higher-level and core attributes of things tends to emphasize desirability, while the interpretation of lower-level and peripheral attributes focuses more on availability (Pankaj et al. , 2015). People who promote orientation are more sensitive to benefits and non-benefits, and people who promote orientation tend to use high levels of interpretive constructed information, while people who prevent orientation tend to use low levels of interpretive constructed information (Lee, Keller and Sternthal, 2009). Promoting orientation is more likely to describe positive titer information as a benefit, whereas preventive orientation is more likely to describe negative information as a loss (Liberman, Molden, Idson&Higgins,2001; Lee, Keller &Sternthal,2010).

In the consumption context of tight budget, consumers who promote orientation may pay more attention to desirability and be more sensitive to the overall income after the goal is achieved, thus tending to prefer refinement. On the other hand, prevention-oriented consumers pay more attention to loss and non-loss, and are more sensitive to choosing concentrated losses and the cost of adopting the program. Therefore, they pay more attention to the feasibility of the program, and thus have the tendency of preference polarization.

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