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Emotional Effects of Purchase Price-Reference Price Divergence

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This research investigates consumers' discrete emotional responses to discrepancies between the actual price paid versus their maximum willingness to pay or the price they expected to pay. We report evidence that divergence from these different reference prices trigger specific emotions, which in turn distinctively affect consumers' behavioral intentions.

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Beyond the “Pain of Paying:” The Role of Specific Emotions in Consumers’ Reactions to Prices and Payment Decisions

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Paper #1: Price Discounting for Emotional Impact

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Paper #2: Do Emotions Increase or Decrease Present Bias in Monetary Decisions?

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Paper #3: Emotional Effects of Purchase Price-Reference Price Divergence

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Paper #4: Beyond Clarity and Confusion: Affective Responses to Price Framing in the Airline Industry

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SESSION OVERVIEW

Apart from Prelec and Loewenstein’s (1998) “pain of paying,” research on the specific role that emotions play in consumer reactions to prices and to payment decisions has been sparse. The papers presented in this session aim to close this gap by examining how affect and emotions influence reactions to price promotions, the present value of money, discrepancies between reference prices and purchase prices, and price framing. Although pricing has received considerable attention from marketing researchers, the approach has been almost exclusively from a cognitive perspective. The goal of this proposed session is to expand our current understanding of the role that emotions play in pricing and payment situations. Each paper investigates this research objective from a unique theoretical perspective using different methodological approaches.

The first paper by Aydinli and Bertini examines the relationship between consumers’ emotional responses and price promotions. Applying a dual process account of decision making, the authors posit and show that price promotions reduce the motivation for thinking and pave the way for affective decision making. As a result, price discounting results in stronger preference for emotionally-laden products as well as valuations that are scope insensitive and more polarized. Results from five experiments support the authors’ hypotheses and shed new light on the emotional implications of price promotions.

The second paper by Thomas and Park shows that negative emotions can have a positive effect on consumer financial decision making. In contrast to the widely held view that emotions are detrimental to rational decision-making, the authors show that emotional decision making can reduce the present bias in consumers—especially for those who are predisposed to regret spending money (Tightwads). Three experiments show that when consumers are primed with feelings (vs. calculation), they exhibit reduced levels of present bias in financial decisions. Results from a third study using skin conductance to measure arousal provide further support.

The third paper by Engeler and Laesser posits that specific emotions arise from discrepancies between a consumer’s purchase price and various reference prices. Specifically, when a purchase price is lower than a consumer’s maximum WTP, consumers will experience pride in themselves about their positive consumer surplus. However,

when a purchase price is lower (higher) than their expected reference price, consumers will experience gratitude (anger) toward the seller. Three field studies widely support these predictions. Furthermore, these emotional states related to self- versus seller attributions predict post-purchase behavior such as positive WOM and repurchase intentions.

The fourth paper by Santana and Morwitz examines consumers’ emotional responses to different ways airlines present prices that include fees. This topic has received considerable attention in both the popular press and from government agencies in the wake of new regulatory requirements calling for more price clarity and transparency from airlines. Three laboratory studies show that some common ways that fees are framed (e.g., drip and a la carte fee listing) can result in high negative emotions and low positive post-purchase behavior. These negative emotional reactions stem from consumers’ reactions to the additional fees (versus higher total prices or base prices). However, the authors also show that these negative emotions can be reduced when fees are presented as a mixed bundle (where a la carte and equivalent package prices are shown concurrently).

Audience: The potential ACR audience for this session is quite broad. Apart from providing new theoretical insights for researchers interested in behavioral pricing, the session will attract a cross-section of ACR conference attendees who are interested in diverse areas of research such as general affect, specific emotions, mental accounting, and multi-method research.

Level of Completeness: For all four papers, the theorizing has been completed and multiple studies have already been conducted. Since all four papers are close to completion, we expect this to be an interesting and high quality session.

Plan for the Session: Our goal for the session is to give each presenter sufficient time to clearly present his or her findings, to encourage audience interaction with the presenters, and to facilitate a discussion about future research. We plan to allocate the session time in the following manner. Each paper will be presented for 15 minutes, followed by 2-3 minutes of question and answer.

Summary: In sum, while each of the papers examines the role that emotions play in consumers’ reactions to prices and payment decisions, each provides different conceptual and methodological contributions. We believe that examining the range of affective, attributional, and physiological responses that consumers experience in response to purchase and payment decisions will not only appeal to a broad cross-section of ACR members, but also make an important contribution to theory. By highlighting the synergy in our research questions, we hope to provide significant insight and lay the foundation for future research on emotions, price, and payment.

Price Discounting For Emotional Impact

EXTENDED ABSTRACT

The process by which consumers respond to price promotions is generally thought to be a cognitive process (Inman, McAlister, and Hoyer 1990). Emotions are seldom considered, unless they are the outcome of a process that is still deliberate (Chandon, Wansink, and Laurent 2000) or evoked spontaneously without the mediation by cognitive processes (Naylor, Raghunathan, and Ramanathan 2006). We propose a more parsimonious view of consumer response to price promotions, acknowledging that consumer decisions are guided by

a combination of affective and deliberative processes (Loewenstein and O'Donoghue 2007).

We suggest that a price promotion is likely to influence the relative dominance of the two processes by lowering the stakes in the decision environment and therefore reducing the motivation of consumers to engage in effortful deliberation. As the relative influence of cognitions diminishes, affect takes control of behavior, and feelings are more relied on as inputs in judgments and decisions. This process produces a series of related effects, including shift in preferences towards goods with higher emotional content and valuations that are scope insensitive and more polarized.

In Experiment 1, participants were asked to purchase an affectively superior or a cognitively superior snack. These snacks were sold at full price or at a 50% discount. As predicted, the presence of a price discount shifted preference toward the former option. Importantly, participants in the discount condition performed worse on a recall task and reported relying more on their feelings when deciding. We tested for two plausible confounds, a mood and a justification mechanism, but found no evidence of these accounts.

In Experiment 2, we tested a promotional setting in which only one brand was discounted at a time. Participants were asked to indicate their preference between two brands, one that was affectively superior compared to the other brand, in three different product categories: cars, mobile phones and watches. The experiment manipulated a single between-subjects factor, price promotion, across three levels: baseline (no promotion), promotion on more emotional brand vs. promotion on less emotional brand. Participants' relative preferences were analyzed in a 3 X 3 mixed factorial ANOVA with price promotion as the between-subjects factor and product category as the repeated measure. Consistent with our prediction, we found that a price discount offered on the more emotional brand increased participants' preferences for it ($p < .000$), whereas the same promotion offered on the less emotional brand did not change participants' relative preferences ($p = .531$).

Experiment 3 expanded our investigation to consumer valuations by capitalizing on a judgmental correlate of feeling-based evaluations. Based on prior research that suggests that feeling-based evaluations are relatively insensitive to the scope of the target stimulus (Hsee and Rottenstreich 2004), we predicted that the scope insensitivity should be more pronounced in the presence of a price promotion than in its absence. Consistent with this prediction, we found that in their willingness to pay for a bundle of music CDs, participants were significantly less sensitive to the number of CDs in the box set when the box set was on promotion than when it was not on promotion.

In order to garner further process evidence, Experiment 4 examined whether an individual's need for cognition (NFC) moderates the proposed impact of a price promotion. Based on prior research suggesting that the NFC is a determinant of processing motivation and that reliance on feelings is greater when NFC is low, we proposed that a price promotion is likely to increase preference for the affectively superior option for low NFC individuals who are less motivated to think, while high NFC individuals' preferences are likely to be unaffected by the promotion. The experiment utilized a 2 (promotion) x 2 (NFC) mixed design. Participants were asked to indicate their preference between an affectively superior resort room and a cognitively superior resort room which were similar in price. The rooms were offered at full price or at a 30% discount. As predicted, the price promotion increased preference for the affectively superior room only for low NFC individuals ($p < .001$), while high NFC individuals' preferences were unaffected by the promotion ($p = .737$). A second objective of this experiment was to document another facet

of reliance on feelings (Ratner and Herbst 2005), testing the prediction that a price promotion would lead to more extreme and polarized evaluations of the target object. We found support for our prediction.

Finally, Experiment 5 manipulated the weight attached to feelings vs. cognitions. We examined whether our effect would be mitigated by instructing participants to use their cognitions as the basis for their decisions. Participants were instructed to use either feeling-based processing or reason-based processing as they were creating a list of DVDs from a sample of 'highbrow' and 'lowbrow' movies belonging to an online DVD rental service that either did or did not offer a price promotion. The experiment thus employed a 2 (price promotion) x 2 (judgment process) between-subjects factorial design. As expected, analyses revealed a 2-way interaction ($p < .03$). When instructed to rely on their feelings, participants preferred the affectively superior movies more strongly in the presence of a price promotion than in its absence ($p = .032$). However, when instructed to rely on their reason and logic, participants' relative preferences were not affected by the price promotion ($p = .260$).

Overall, these experiments demonstrate the impact of price promotions on consumers' reliance on affective vs. deliberative processes and how this would influence their preferences and valuations. Our findings highlight the importance of understanding the guts of consumers' reactions to price promotions.

Do Emotions Decrease or Increase Present Bias in Monetary Decisions?

EXTENDED ABSTRACT

For a long time, it has been argued that emotions are detrimental to rational decisions. However, the past few decades of research has provided support for the proponents of the other side of the debate. For example, patients with damage in the ventromedial prefrontal cortex (vmPFC) of the brain, who are not able to use emotions to aid in decision making, often engaged in behaviors that were detrimental to their well-being even though their reasoning and problem-solving abilities were unaffected by the brain damage (Damasio 1994). Furthermore, recent findings suggest that it is not only the excess of emotions but also the lack of emotions that is causing some of the most serious problems that mankind is facing.

The present research extends this debate in the context of the present bias – the propensity to focus on the present value of money rather than its future value. A typical study on the present bias employs a delay of gratification paradigm, wherein an individual has to choose between a smaller but immediate reward and larger but delayed reward. For example, a person might be asked to choose between \$1000 a year later and \$750 now. Generally, it has been found that most people tend to exhibit a preference for smaller present rewards than larger future rewards. Several scholars have argued that relying on emotions exacerbates the present bias (e.g., Van den Bergh, Dewitte, and Warlop 2008).

We challenge this view and argue that certain types of emotions – namely anticipated regret – can reduce the present bias. Therefore, people who are prone to anticipate regret are likely to benefit from relying on emotions when making financial decisions. Our conceptualization posits that the delay of gratification paradigm can be reframed as a battle between two different emotions: a positive visceral reaction to the immediate reward versus the anticipated regret from foregoing the larger delayed reward. Following other researchers, we assume that in terms of consequentiality and neurophysiological substrates, anticipation of regret is akin to the experience of regret (Camille, Coricelli, Sallet, Pradat-Diehl, Duhamel, and Sirigu 2004; Zeelenberg and Pieters 2007). Three studies demonstrate how dis-

positional traits and situational primes can interact to increase the anticipated regret that reduces the present bias. Across the studies, we find that when primed to rely on emotions, tightwads – who are predisposed to anticipate regret from spending money – become less present biased. This effect did not manifest for spendthrifts who are predisposed to experience less regret.

Study 1 tests the hypothesis that relying on emotions/feelings helps people to make loan prepayment decisions. Loan prepayment decision can be framed as a decision between keeping money to spend now versus prepaying money to save on interest payments and spend more in the future. 299 participants were randomly assigned to one of the three different priming conditions: feeling prime, calculation prime, or control. The priming task was adopted from Hsee and Rottenstreich (2004). After the priming task, participants were told to imagine that they had a loan and that the bank is considering giving them the option to prepay. All participants saw six different loan prepayment scenarios that varied in the prepayment amount and future interest. For each scenario, they indicated whether they want to prepay the amount given in the scenario to reduce their monthly payment amount or not to prepay and stay with the current monthly payment amount. After that, participants were administered a scale that captures dispositional propensity to be a tightwad or a spendthrift (Rick, Cryder, & Loewenstein 2008). Results show that priming participants to rely on their emotions reduced the present bias for tightwads but not for spendthrifts. Tightwads were most likely to prepay their loans when they were primed to rely on their emotions.

Study 2 tests the hypothesis using the standard present bias paradigm (Rachlin, Raineri, and Cross 1991). 131 participants went through the same priming procedure as in Study 1. Then they were asked to make a series of choices between smaller money delivered in the present and larger money delivered in the future. In line with the Study 1 results, priming participants to rely on their emotions reduced the present bias for tightwads but not for spendthrifts. Additionally, the effect was mediated by participants' anticipated regret such that when primed to rely on their emotions, tightwads anticipated strong regret but spendthrifts did not.

Study 3 was designed to provide additional support for the hypothesized role of emotions by using skin conductance response data, which have often been used as a measure of physiological arousal. 87 participants went through the same priming and choice tasks as in study 2 while wearing a sensor on their palm that measures their skin conductance responses. Results replicate the effects found in previous studies such that tightwads were less present biased and experienced greater arousal when primed to rely on emotions.

In sum, we argue that emotions can help in the financial decision and failure to anticipate regret can result in suboptimal financial decisions.

Emotional Effects of Purchase Price-Reference Price Divergence

EXTENDED ABSTRACT

Although the ability of price outcomes to elicit (un)happiness has long been postulated (Thaler 1985), empirical research on price affect (O'Neill and Lambert 2001) and particularly on the formation and impact of qualitatively different price-related emotions is relatively young (e.g., Gelbrich 2011). This research investigates consumers' discrete emotional responses to discrepancies between the actual market price of a product and (i) consumers' internal reference price (i.e., transaction utility), or (ii) their maximum willingness to pay (i.e., consumer surplus). Our results provide insight into how the

general happiness or pleasure of relative gains and the pain of losses (Thaler 1985) relates to specific emotional reactions to prices, which can have implications for long-term customer-seller relationships.

Consumer surplus has been defined as the difference between the actual market price and consumers' maximum willingness to pay (Frank and Bernanke 2001). Transaction utility incorporates a more psychological perspective. It depends on the difference between the actual market price and a consumer's reference price, that is, a consumer's conception of a fair or normal price the seller is expected to charge (Thaler 1985). The different standards considered (i.e., self-related vs. social norm-based) are expected to induce distinct evaluations in a purchasing context. Appraisal theories of emotion assume that such distinct appraisals about an event can elicit different discrete emotions (Lazarus 1991). Specifically, we expect that a consumer's surplus is evaluated in a self-attributional way ("I could beat the market!"), while a given transaction (dis)utility is appraised as related to the seller ("That was a really (un)fair price the seller charged me!"). This project focuses on consumers' emotional responses after having purchased a product (i.e., actual price \leq maximum willingness to pay). Hence, we hypothesize that a positive consumer surplus will generate feelings of personal pride, while transaction (dis)utility is expected to trigger feelings of gratitude toward (anger about) the seller (Roseman, Spindel, and Jose 1990; Weiner 2000). Further, consumers are expected to cope with these emotions in specific ways (Lazarus 1991). Seller-related feelings of gratitude and anger are hypothesized to more strongly influence consumers' post-purchase behavioral intentions toward that seller than self-related feelings of pride about one's personal achievement (Soscia 2007; Nyer 1997).

We conducted three field surveys to test the hypotheses with consumers who had purchased a public transportation product (fare ticket, leisure product, etc.). In Study 1, a short online questionnaire was part of a diary study yielding 717 purchase observations. Maximum willingness to pay was measured by asking the respondents to indicate the highest price they would be willing to pay (Suri and Monroe 2001). The internal reference price was calculated based on the respondents' estimate of a fair price, normal market price, past price paid, as well as their highest and lowest price willing to pay (Chandrashekar and Grewal 2003; Klein and Oglethorpe 1987; Suri and Monroe 2001). Multiple linear regression results indicate that transaction utility significantly triggers a consumer's attitude toward the price paid ($p < .001$) while consumer surplus does not ($p = .402$).

To further examine the role of discrete emotions, Study 2 was conducted online with 415 customers who were asked about their latest purchase of a public transportation product. As expected, multiple linear regressions revealed that a consumer's surplus triggers pride ($p = .013$), while gratitude (anger) toward the seller increases, the higher (lower) a consumer's transaction utility ($ps < .01$). 95% bootstrap confidence intervals on the significance of the specific indirect effects (Preacher and Hayes 2008) indicate that the effect of transaction utility on price attitude is mediated by gratitude and anger, while pride was not found to provide a significant indirect path from consumer surplus to price attitude.

Study 3 investigates the distinct behavioral coping responses associated with each discrete emotion. The sample included 803 consumers who just purchased a discounted ticket that was only available online and for specific fares. Again, transaction utility was found to trigger seller-related feelings of gratitude ($p < .001$) and anger ($p = .028$). However, it also had a positive effect on pride ($p = .001$), while the partial effect of consumer surplus on pride could not be replicated ($p = .309$). The latter may be due to using a newly in-

roduced product category for which consumers' might not yet have constructed a concise idea about the value. Nonetheless, 95% bootstrap confidence intervals indicate that anger, gratitude, and pride significantly mediate the effect from transaction utility on positive word-of-mouth and gratitude also explains repurchase intentions.

In sum, the results demonstrate that existing discrepancies in the actual price paid and various reference prices can elicit a portfolio of different emotional responses. Our findings emphasize the importance of investigating specific discrete price-related emotions beyond consumers' general (un)happiness as they distinctively impact consumers' behavioral responses to prices.

Beyond Clarity and Confusion: Affective Responses to Price Framing in the Airline Industry

EXTENDED ABSTRACT

Price framing ranges from the clear and simple (penny candy) to the opaque and confusing (many wireless service plans), with a wide range of effects on consumer judgment and decision-making. Prior research shows that price presentation affects price recall (Morwitz, Greenleaf, and Johnson 1998), purchase intention (Gilbride, Gultinan, and Urbany 2008; Morwitz, Greenleaf and Johnson 1998), perceived deal value (Bertini and Wathieu 2008), perceived fairness (Sheng, Bao, and Pan 2007), and perceived savings (Krishna, Briesch, Lehmann, and Yuan 2002), just to name a few.

Our paper examines the effect of price presentation on consumers from a new perspective. We explore how consumers respond emotionally to different price presentation formats in the airline industry, and then predict post-purchase behavior based on the experienced emotion. This is a question of considerable public policy importance, as new regulations in both the U.S. and the UK require airlines to change how they display their prices to consumers. These price presentation requirements were imposed, in part, to increase clarity and transparency of pricing. However, our results show that they can also trigger emotional responses from consumers—an unforeseen consequence of this protective legislation.

We include three common pricing formats in our analysis—a la carte pricing, where sellers present a price for a basic product as well as a listing of fees or charges for optional add-ons; mixed bundle pricing, where an a la carte listing of prices for optional add-ons is presented alongside a bundle that includes some of the optional add-ons priced as a unit; and drip pricing, a pricing tactic related to partitioned pricing that has not been researched before. In drip pricing, consumers only see a portion of the total price up-front, with optional or mandatory fees revealed only as a consumer progresses through the buying process.

Our first study examined how consumers shopping for an airline ticket respond to a la carte pricing of optional fees relative to an all-inclusive combined price (control) and a partitioned price where the additional fees were for mandatory taxes and surcharges. The base price in the a la carte and partitioned conditions were the same, and the total price was kept constant across all conditions. We included the partitioned price condition to rule out the alternative explanation that consumers simply respond negatively to multiple fees versus one fee. A strict "pain of paying" view of consumer response would predict that, assuming each fee was mentally processed as a separate payment, negative affect in the a la carte and partitioned conditions should be comparable, and that both should be higher than that in the combined condition. However, our results did not confirm this prediction. A self-reported measure of anger with the total price and with surcharges (recorded post-purchase) was significantly higher in the a la carte condition than in either the partitioned or control con-

ditions ($p < .001$). Participants in the a la carte condition were also marginally more likely to complain after a mild service failure ($p < .10$) and were least likely to recommend the airline again ($p < .01$). Mediation analysis showed that these differences in post-purchase behavior across price presentation conditions were completely mediated by feelings of anger.

Our second study was designed to examine whether anger could be alleviated if the optional fees were offered in a mixed bundle. Thirty subjects shopping for an airline ticket were randomly assigned to either a mixed bundle fee condition or to an a la carte fee condition. The mixed bundle condition showed an a la carte listing of several optional fees as well as a bundle which included a subset of the same options. The bundle price was simply the sum of the a la carte fees for the included items (i.e., not discounted). As in Study 1, consumer anger about additional fees was significantly higher in the a la carte condition, but was reduced in the mixed bundle condition, even though the bundle price offered no discount ($p < .05$). Additionally, the additional fees were perceived to be fairer in the mixed bundle condition versus the a la carte condition ($p < .05$).

Our third study (in progress) examines consumers' emotional responses to drip pricing—an understudied pricing format, that is currently of much interest to government regulators in the U.S. and the UK. In this experiment we manipulate the timing (early versus late) and manner (drip versus combined) in which consumers are informed about additional fees during their purchase process. Preliminary results suggest that consumers exposed to drip pricing are more likely to purchase an airline ticket, are less accurate in price estimation and price recall tasks, and they experience higher negative emotional reactions than their combined price counterparts.

In summary, we show that the manner in which a price is presented affects consumers' emotions and their subsequent post-purchase behavior. Our findings also highlight how protective actions taken by government agencies should consider the affective as well as the cognitive impacts on consumers.

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