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Mental accounting posits that people track their expenditures using cognitive categories or “mental accounts.” The authors propose that this cognitive process can be complemented by an approach that examines how feelings about a sum of money, or the money’s “affective tag,” influence its consumption. When people receive money under negative circumstances, this tag can include a negative affect component, which people aim to reduce by engaging in strategic consumption. The authors investigate two such strategies, laundering and hedonic avoidance, and demonstrate their effect on consumption of windfalls. The authors find that people avoid spending their negatively tagged money on hedonic expenditures and prefer to make utilitarian or virtuous expenditures to reduce, or “launder,” their negative feelings about the windfall. The authors call this tagging process and strategic consumption “emotional accounting.”

Keywords: emotional accounting, mental accounting, consumer spending, windfalls, behavioral decision theory

Emotional Accounting: How Feelings About Money Influence Consumer Choice

Although mental accounting research suggests that financial windfalls are spent more readily and frivolously than ordinary income, windfalls are sometimes spent reluctantly or virtuously—a consumption pattern that mental accounting does not predict. We introduce and test the related concept of “emotional accounting,” in which money is labeled by the feeling it evokes; in turn, this emotional label influences how the money is spent. We show that when the feelings evoked by a windfall are negative, consumers engage in strategic consumption to cope with the negativity. In particular, they avoid hedonic purchases so as not to exacerbate their negative feelings, and when possible, they attempt to use the money for relatively virtuous or utilitarian expenditures to alleviate or “launder” their negative

feelings about the money. By incorporating consumers’ feelings about a sum of money into mental accounting, we explain behaviors that deviate from previously documented purchase patterns.

MENTAL ACCOUNTING

Mental accounting proposes that consumers track and evaluate their financial activities using a set of cognitive labels or “mental accounts,” each of which is associated with a different marginal propensity to consume (Heath and Soll 1996; Henderson and Peterson 1992; Kahneman and Tversky 1984; Thaler 1985, 1990). Mental accounting has been invoked as an explanation for a wide range of consumption and spending behaviors, including savings (Shefrin and Thaler 1992), borrowing and debt (Hirst, Joyce, and Schaedewald 1994; Prelec and Loewenstein 1998), spending of tax rebates (Epley, Mak, and Idson 2006), the effects of payment on consumption over time (Gourville and Soman 1998), windfall spending (Arkes et al. 1994), and many others (for a comprehensive discussion, see Thaler 1999).

Consumers typically track their financial activities by labeling their money according to the context in which it was obtained. In a variant of mental accounting called “income accounting,” labels are determined by the money’s source, and the money is spent in a way that “matches” that source (McGraw, Tetlock, and Kristel 2003; O’Curry 1997; Thaler 1999; see also Belk and Wallendorf 1990). For

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example, money won in a football betting pool might be used for dining at a restaurant, but a tax refund is more likely to be used for paying bills (O'Curry 1997).

Mental accounting research has also investigated some of the ways that feelings influence consumer spending. In particular, the explicit treatment of feelings in mental accounting focuses on people's preference to mentally couple gains and losses or payment and consumption. For example, Linville and Fischer (1991) find that people prefer to experience financial losses on different days of the week because simultaneously occurring losses can overwhelm their capacity to cope. Prelec and Loewenstein (1998) show that consumers manage their feelings by temporally decoupling payment from consumption because the pain of paying for a product dampens the pleasure they derive from its consumption.

EMOTIONAL ACCOUNTING

In this article, we discuss an aspect of feelings in mental accounting that previous research has not yet considered. We present "emotional accounting," a variant of mental accounting that categorizes money on the basis of the feeling it evokes, and we posit that the valence and intensity of these feelings may exert a substantial influence on recipients' spending behaviors. Specifically, we argue that the emotional response to the receipt of a sum of money can become associated with the money itself in the form of an "affective tag." In effect, we suggest that in the same way that money is categorized by its source in mental accounting, it can also be categorized by the feeling it evokes (just as feelings are evoked by categories in schema-triggered affect; see Fiske 1982; Smith and Ellsworth 1985). For example, consider a sum of money obtained in a contentious life insurance settlement. It is easy to imagine that the money itself would be negatively tagged as "unhappy money" because of its association with the passing of someone and the pain of battling the insurance company. We argue that these negative feelings about the money will influence its use.

Why should feelings about money play a role in how it is spent? The answer lies in the general property of emotions as states of arousal that lead to regulatory or coping behaviors. People strive to maintain positive feeling states and to improve negative feeling states (Lazarus and Folkman 1984). Likewise, we suggest that affective tags impel coping behavior. Our research focuses on the strategies consumers engage in as a way to cope with negative affective tags. We concentrate on negative tags because previous research has shown that negative emotions are more powerful than positive emotions as an impetus for mood regulation or coping (as the title of Baumeister and colleagues' [2001] article suggests, "Bad is stronger than good"). Indeed, Schaller and Cialdini (1990, pp. 281–82) report that negative emotions induce "a focused motivational drive to restore one's mood" but that positive emotions yield "no corresponding drive to focus attention and motivational energy upon the affective state."

COPING WITH NEGATIVE TAGS

Imagine a person who receives money in a circumstance that evokes a negative affective tag on the money. How might this person cope with the negativity? Although there are a host of regulatory strategies that a consumer might

engage in (see Duhachek 2005), we highlight two that are focused on spending affectively tagged money: hedonic avoidance and laundering. First, we argue that the recipient will avoid purchasing products whose consumption may intensify his or her negative feelings (Luce 1998). Because consuming hedonic products can arouse guilty feelings (Kivetz and Simonson 2002; Strahilevitz and Myers 1998), we reason that such products are unlikely to be viewed as an effective means to cope. Thus, when offered the possibility of spending negatively tagged windfalls on hedonic products, consumers will engage in hedonic avoidance. Hedonic avoidance is a passive coping strategy that consists of consumers creating "physical or psychic distance" (Duhachek 2005, p. 46) between themselves and the negatively tagged windfall by engaging in decision deferral and rejecting a hedonic consumption opportunity.

Second, in addition to passive coping strategies, there are active coping strategies by which consumers seek products that can become an effective means to mitigate an affective tag's negativity.¹ We argue that consumers will cope by spending their negatively tagged money on virtuous products. This prediction is drawn from psychological research linking virtuous behaviors, such as altruistic helping, to people's desire to improve their negative moods (Baumann, Cialdini, and Kenrick 1981; Cialdini and Kenrick 1976; Cialdini et al. 1987; Schaller and Cialdini 1990) and from sociological research about how "blood money" obtained in child wrongful death suits is often donated to charity, scholarships, or safety organizations (Zelizer 1994). Utilitarian products—products that provide functional benefits—may also serve as effective coping means because their benefits can be long-lasting and therefore can represent virtuous "investments" (Wertenbroch 1998). Thus, we suggest that consumers choose virtuous or utilitarian purchases to launder or cleanse the money's affective tag of its negativity.

Conceptually, laundering is related to Tetlock's (2002) notion of moral cleansing, in which people are drawn to virtuous behaviors that enable them to reduce the negative feelings that arise from exposure to morally corrosive trade-offs. Such a desire to morally cleanse appears to guide Kenyan Luo tribesmen, who hold ceremonies to "purify" money earned from certain taboo transactions (e.g., from the sale of tobacco), or "bitter" money, before its consumption (Shipton 1989). Building on the notion of laundering, Ramanathan and Williams (2007) show that prudent consumers (as opposed to impulsive consumers) who experience conflicted feelings are more likely to subsequently consume a utilitarian option to improve these feelings.

Laundering and avoidance are related in the sense that they both entail avoiding hedonic alternatives. As we show subsequently, they are also related in the sense that people have a tendency to launder rather than to avoid if both options are available. As we elaborate in the general discus-

¹The active-passive distinction is different from the typical distinction in the coping literature of problem- versus emotion-focused coping. Indeed, the type of coping we study is not exactly of either form; instead, our behavioral strategies are examples of "displaced coping" (Raghunathan, Pham, and Corfman 2006). Displaced coping is "akin to coping in the sense that the affective state motivates a decision or behavior that seems to address the source of this affective state;... however, it is different from standard coping because the decision/behavior takes place in a domain that is only somewhat but not completely related to the source of the feelings" (Raghunathan, Pham, and Corfman 2006, p. 598).

sion, however, the (in)appropriateness of a laundering opportunity can lead to avoidance in some consumer contexts. Despite their relationship, we have elected to distinguish between laundering and avoidance here for theoretical and empirical reasons. First, active strategies, such as laundering, and passive strategies, such as hedonic avoidance, are treated as conceptually distinct in the coping literature (see Duhachek 2005; Folkman et al. 1986). Second, as our studies attest, respondents treat avoidance and laundering as two distinct strategies that appear to have different effects on feelings; while laundering leads to a decrease in negative feelings about the money, hedonic avoidance results in little short-term change in feelings. The apparently rapid effect of laundering on people's feelings may contribute to the tendency to favor laundering over avoidance in many situations.

WINDFALL SPENDING

We use windfalls—unexpected monetary gains—as a case study for emotional accounting. Windfalls are attractive for two reasons. First, mental accounting research clearly predicts that windfalls are more likely to be assigned to a “pocket money” account and, as a result, are spent more readily and frivolously than ordinary income (Arkes et al. 1994; Bodkin 1959; Epley and Gneezy 2007; but see Kreinin 1961). For example, in one experiment by Arkes and colleagues (1994), students who received an unanticipated payment for participating in a research study were more likely to use the money for snacks at a stadium concession stand than students who received an anticipated payment. Similarly, O'Curry and Strahilevitz (2001) show that people are more likely to purchase hedonic products (e.g., a professional massage, tickets to a pop music concert) with lottery prize money than with ordinary income. In other words, mental accounting research indicates that windfalls are often spent frivolously and therefore are unlikely to be laundered or avoided. Second, windfalls are particularly attractive for our test of emotional accounting because their receipt rarely evokes a neutral feeling; receiving a windfall is typically a positive experience. O'Curry and Strahilevitz note that the positive feeling people associate with windfalls might help mitigate the guilt that arises from the frivolous ways windfalls are spent.

In this article, we propose that when windfalls are received under negative circumstances, negative feelings are associated with the money. In turn, the resultant negative affective tags motivate consumers to cope by engaging in hedonic avoidance or laundering, depending on the choice set offered to them and the appropriateness of each option as a coping means. Thus, we show that consumption of negatively tagged windfalls deviates from the typical frivolous spending of “ordinary” windfalls.

OVERVIEW

Our empirical section is constructed as follows: We test the hedonic avoidance effect in Study 1. We show that respondents are more likely to defer their choice than to make a hedonic purchase when the circumstance in which a windfall was obtained evokes relatively strong negative feelings about the money. In Study 2, we rule out an incidental affect explanation for the avoidance effect and show that for avoidance to occur, the feeling must be integral to the money. We test the laundering effect and its implica-

tions in Study 3. We show that respondents are more likely to make virtuous or utilitarian choices when windfalls are associated with negative feelings about the money than when they are associated with positive feelings. Studies 4a and 4b replicate the laundering effect using a windfall of real money. Study 5 presents evidence that participants view hedonic avoidance and laundering as distinct strategies. Study 6 holds the choice options constant but influences their appropriateness as coping means by manipulating the salience of their hedonic or utilitarian characteristics. Finally, Study 7 shows that when people are provided with other means to cope with a negative affective tag, they no longer attempt to launder their money. We close with a discussion of emotional accounting in the marketplace and offer suggestions for further research.

STUDY 1: HEDONIC AVOIDANCE

Method

Study 1 tests the hypothesis that people tend to avoid spending a negatively tagged windfall on a hedonic purchase. We demonstrate this avoidance effect using a between-subjects design in multiple scenario studies that share a common structure: a condition in which a financial windfall is received under circumstances that evoke positive feelings about the money (positive circumstance) and a condition in which a financial windfall is received under circumstances that evoke negative feelings about the money (negative circumstance). After being presented with the scenario, participants in each condition are asked to complete a pair of unipolar emotion measures designed to assess the presence of a valenced feeling about the money and, if present, its intensity (for a discussion of such unipolar emotion measures, see Russell and Carroll 1999):

When you think about the money, do you feel *good*?

_____ Yes _____ No

If you checked “Yes,” how *good* do you feel?

1 2 3 4 5 6 7
Slightly Moderately Extremely

When you think about the money, do you feel *bad*?

_____ Yes _____ No

If you checked “Yes,” how *bad* do you feel?

1 2 3 4 5 6 7
Slightly Moderately Extremely

We expect less positive and greater negative feelings about the windfall in the negative-circumstance condition than in the positive-circumstance condition.

Following the emotions measures, participants are asked whether they would spend their windfall on a hedonic item. We expect that respondents in the negative-circumstance conditions will be less likely to purchase the hedonic item because such an expenditure would exacerbate their negative feelings about the windfall; avoiding the hedonic item will at least not make things worse.

Participants were undergraduate students ($N = 648$) who were randomly assigned to one of two conditions: positive circumstance or negative circumstance. Each vignette was run on separate occasions using different populations; because the three vignettes are conceptual replicates, we present them together. In the Found Money scenario, the windfall is found either in a jacket pocket (positive circumstance) or on the ground and ostensibly belonged to some-

one else (negative circumstance); in the Brother's Gift scenario, the money is received either from a wealthy brother (positive circumstance) or from a presumably financially strapped brother (negative circumstance); in the Uncle's Gift scenario, the money coincides either with an uncle's visit (positive circumstance) or with his illness (negative circumstance). After reading the scenario, participants completed the emotions measures and were then presented with the option to purchase a hedonic item (ice-cream sundae, designer sunglasses, and stereo system for each scenario, respectively). Participants who had indicated a preference for the hedonic item were also asked their willingness to pay (WTP) for the option. The Appendix presents the text of the scenario for each condition.

Results

Because the three vignettes served as stimulus replicates, we combined their data into one analysis (the results of each test are also significant for each vignette separately). We begin by confirming that the negative-circumstance participants felt more negatively about their windfall than their positive-circumstance counterparts. For each participant, we subtract the negative affect rating (N) from the positive affect rating (P), producing a scale that ranges from 7 to -7 (participants indicating "no" to the presence question were assigned a zero). This yields a summary measure of affect, $P - N$, which mirrors a bipolar affective continuum (Ito, Cacioppo, and Lang 1998)²; higher numbers indicate greater positive feelings than negative feelings. As an additional manipulation check, we examine the proportion of participants in each condition who endorse any degree of negative feelings (i.e., the proportion of people who check "Yes" to the "feel bad about the money" question).

Our experimental manipulation was effective. Respondents reported feeling better about the money in the positive-circumstance condition than in the negative-circumstance condition. The summary measure of affect, $P - N$, was indeed greater in the positive-circumstance condition ($M = 4.92$) than in the negative-circumstance condition ($M = .63$) for all three vignettes ($t_{646} = 16.0, p < .0001$). Moreover, the proportion of participants endorsing negative feelings was significantly lower in the positive-circumstance condition (16%) than in the negative-circumstance condition, in which the majority reported feeling negative (58%; $\chi^2(1) = 104.4, p < .0001$).

The circumstance in which the money was received influenced how it was spent in all three vignettes. Negative-circumstance participants were more likely to avoid purchasing the hedonic item than positive-circumstance participants (44% versus 27%; $\chi^2(1) = 19.65, p < .0001$). The reported WTP responses mirrored this pattern: Negative-circumstance respondents spent less than positive-circumstance respondents ($M = \$47.92$ versus $\$69.26$; $t_{646} = 3.0, p < .01$). (Note that participants who elected to

avoid were assigned a zero for their WTP, so it should follow from the choice results that the WTP amounts are significantly different.) Finally, a Goodman (1) version of the Sobel test (Goodman 1960) established the affective tag as a significant partial mediator of the relationship between circumstance and WTP ($z = 2.99, p < .01$).³ That is, the circumstance affected WTP through its effect on people's feeling about the money.

It bears mentioning that when we conducted a study using the Uncle's Gift scenario in which hedonic versus avoidant choices were measured *before* emotions, we replicated the avoidance effect (47% chose to avoid the hedonic option in the negative-circumstance condition versus 29% in the positive-circumstance condition, nearly identical to the version in which emotions were asked first), but we did not find that avoidance improved people's feelings about the money ($P - N$ was identical to the emotions in the first version). In other words, it appears that hedonic avoidance, though it does not exacerbate negative feelings, does not necessarily improve them (at least in the short run). Furthermore, it appears that measuring emotions before making a choice has no effect on participants' choices.

STUDY 2: AFFECTIVE TAGS VERSUS INCIDENTAL AFFECT

Method

An objection to the conclusions we offer in Study 1 is that though our scenarios create negative affect successfully, these feelings may not be specific to the windfall. In particular, although participants were instructed to report how they felt "about the money," it is possible that they simply imputed their feeling about the windfall from their overall feelings about the situation. Therefore, purchase intentions could be a result of incidental emotion rather than a tag placed on the money, as we hypothesize. To address this alternative explanation, we add a third condition—which we call "positive money"—to our experimental design. For this condition, the circumstance that gives rise to negative affect is unrelated to the windfall directly and, instead, is designed to induce negative feelings about a situation while maintaining a positive affective tag on the windfall. We used the following scenarios in this study (emphasis added); all participants were undergraduate students ($N = 121$):

- Positive circumstance ($n = 39$): Imagine that you check the mail and find a card from your *uncle* that contains a \$200 cash gift for your high school graduation.
- Negative circumstance ($n = 41$): Imagine that you check the mail and find a card from your *uncle* that contains a \$200 cash gift for your high school graduation. As you finish reading the card, you receive a phone call from your mother, and she informs you that your *uncle has just been diagnosed with a very serious illness*.
- Positive money ($n = 41$): Imagine that you check the mail and find a card from your *uncle* that contains a \$200 cash gift for your high school graduation. As you finish reading the card, you receive a phone call from your mother, and she informs you that a *very close family friend has just been diagnosed with a very serious illness*.

²Ito, Cacioppo, and Lang (1998) and Larsen and colleagues (2009) show that correlations between derived measures of valence, such as $P - N$, and standard bipolar measures of valence approach unity. However, the advantage of using unipolar scales is that they take into account two important aspects of emotions: (1) They enable positive and negative affect to be measured independently (Russell and Carroll 1999), and (2) they allow for a distinction between ambivalence and neutrality, an ambiguity that clouds the interpretation of "0" ratings in bipolar scales (Kaplan 1972).

³We use WTP in our analysis because it is interchangeable with choice in our experiment and because it is a continuous variable that lends itself to a mediation analysis.

Following the scenario, respondents were presented with the unipolar emotion measures from Study 1 and, subsequently, the option to spend (or not to spend) the money on a stereo. In addition, we assessed their maximal WTP for the stereo, in the event that they chose to buy it.

One of the hallmarks of coping is that it is context specific and must be directed toward the circumstance that gave rise to the negative emotion (Lazarus and Folkman 1984). Thus, if our account of tagging windfalls is correct, the propensity to avoid should be greater in the negative-circumstance condition than in either the positive-money or the positive-circumstance conditions.

Results

We begin by confirming the effectiveness of our manipulation. An analysis of the composite measure of affect ($P - N$) reveals that participants in the negative-circumstance condition reported the greatest degree of negative feelings about the windfall ($M = -.4$), followed by participants in the positive-money condition ($M = 1.7$; $t = 2.1$, $p < .05$), who in turn reported greater negative feelings than participants in the positive-circumstance condition ($M = 5.2$; $t = 3.5$, $p < .01$). Participants in the negative-circumstance condition were significantly more likely to endorse negative feelings about the windfall (71%) than either participants in the positive-circumstance condition (18%; $\chi^2(1) = 22.5$, $p < .01$) or participants in the positive-money condition (32%; $\chi^2(1) = 12.5$, $p < .01$). Despite the spillover of the negativity of the situation on the emotion measure in the positive-money condition, the difference between endorsement of the negative affect in the positive-circumstance and the positive-money conditions was not significant ($\chi^2(1) = 2.0$, $p > .15$).

As expected, we replicate the avoidance effect (for the results of this study, see Table 1). Participants in the negative-circumstance condition were significantly more likely to avoid the stereo purchase (66%) than participants in the positive-circumstance condition (36%; $\chi^2(1) = 7.2$, $p < .01$). More important, we can reject the criticism that people's purchase intentions are simply a result of feelings about the situation rather than about the windfall: Negative-circumstance participants were also more likely to avoid the stereo purchase (66%) than participants in the positive-money condition (44%; $\chi^2(1) = 4.0$, $p < .05$), and there was a nonsignificant difference in avoidance rates between the positive-circumstance and the positive-money conditions (36% versus 44%; $\chi^2(1) = .6$, $p > .45$). As we expected, the WTPs replicated this pattern, with nearly identical WTPs in the positive-circumstance and positive-money conditions

($M_s = \$115.51$ and $\$118.76$), which are both significantly greater than in the negative-circumstance condition ($M = \$65.12$; $F(1, 120) = 4.1$, $p < .05$). In summary, the data suggest that for avoidance to occur, people's negative affect must be tied to the windfall; simply experiencing an unrelated negative event does not give rise to the same pattern of behavior.

However, it remains possible that the illness to the close family friend in the positive-money condition was not sufficiently negative to trigger avoidance. As a manipulation check, we added a version of the positive-money condition in which participants were asked to indicate their feelings about the situation rather than the gift money ($n = 48$). Participants overwhelmingly (79%) endorsed having only negative feelings about the situation—clearly, their incidental emotion was negative ($P - N$: $M = -4.5$). Nevertheless, the choice results support our contention that a negative affective tag is necessary to influence choice in this context: 40% of these participants avoided the stereo, a nonsignificant difference from the positive-circumstance condition (36%; $\chi^2(1) = .1$, n.s.) or the original positive-money condition (44%; $\chi^2(1) = .2$, n.s.) but significantly less than the negative-circumstance condition (66%; $\chi^2(1) = 5.0$, $p < .05$).

STUDY 3: MONEY LAUNDERING

Method

In Studies 1 and 2, we present evidence that supports a hedonic avoidance strategy, but we never provide participants with an alternative that might help them actually reduce the negativity of the windfall's tag. In Study 3, participants again receive money in a positive circumstance or negative circumstance, but this time they are given the choice between purchasing one of two options: either a hedonic item or a virtuous or utilitarian item. We predict that people will be more likely to launder—that is, to choose the virtuous or utilitarian item—when the money is received in a negative circumstance than when it is received in a positive circumstance because such a choice is more likely to reduce their negative feelings about the money.

If laundering is a strategy aimed at reducing the negative affect component of a windfall's tag, negative affect should decrease following a laundering opportunity, leading to a concomitant improvement in reported emotions (i.e., $P - N$ should increase). To test this hypothesis, we crossed an order factor with our standard positive and negative scenario manipulation and created a 2×2 design: Participants were asked to complete the unipolar emotion measures (as in Studies 1 and 2) either before making the choice (before-choice condition) or after making the choice (after-choice condition). In addition to their choice, participants were asked to indicate their WTP for each option in the event that they were permitted to split their windfall between the two. We predicted a main effect of condition such that, regardless of order, participants in the negative-circumstance conditions would choose the virtuous alternative more often than participants in the positive-circumstance conditions. With respect to reported emotions, however, we expected an interaction effect such that the after-choice respondents in the negative-circumstance condition would show a lower propensity to endorse feeling negative affect than their before-choice counterparts. We

Table 1
RESULTS OF STUDY 2

Condition	Hedonic Avoidance	WTP	$P - N$	Negative Affect
Negative circumstance	66% ^a	\$65.12 ^a	-.4 ^a	71% ^a
Positive circumstance	36% ^b	\$115.51 ^b	5.2 ^b	18% ^b
Positive money	44% ^b	\$118.76 ^b	1.7 ^c	32% ^b

Notes: Different superscripts represent significant differences. $P - N$ is the positive affect rating less the negative affect rating. The "Negative Affect" column refers to the percentage of participants in each condition who endorse any negative affect.

expected no such difference in the positive-circumstance conditions. The rationale for this prediction is that having made a laundering choice, respondents in the negative-circumstance/after-choice condition would have some of the negative feelings cleansed from the money.

The Appendix presents the two scenarios we used to demonstrate laundering. In the Aunt's Inheritance scenario, participants were told either that they had received a cash gift from their aunt (positive circumstance) or that the money had been left to them by the aunt as an inheritance (negative circumstance); in the Disappointing Win scenario, participants were told either that they had won a lottery outright (positive circumstance) or that they had won a lottery but could have won substantially more money (negative circumstance), thus evoking negative affect due to counterfactual thoughts that give rise to disappointment (we adopted this manipulation from Larsen et al. 2004). In both scenarios, participants could choose between paying for educational expenses and paying for a spring break beach trip.

Participants were undergraduate students ($N = 365$); because the studies were conceptual replicates and there were no interactions between the vignettes and any of the manipulations, we present their results simultaneously (the results are also significant for each vignette separately).

Results

Our emotions manipulation proved effective (see Table 2). Reported emotions were higher in the positive-circumstance/before-choice condition ($M = 4.88$) than in the negative-circumstance/before-choice condition ($M = 1.36$; $t_{182} = 8.30$, $p < .01$), as we expected (note that in the after-choice conditions, reported emotions serve as an additional dependent variable; we analyze them subsequently). In other words, before making their choice, participants in the negative-circumstance condition reported a greater degree of negative feelings about the windfall. We find a similar pattern for the proportion of participants endorsing negative affect in each condition (54% for negative circumstance versus 14% for positive circumstance; $\chi^2(1) = 33.95$, $p < .01$).

The choice results reflect a laundering effect: Participants in the negative-circumstance conditions were more likely to choose the virtuous option (59% versus 39% for positive circumstance; $\chi^2(1) = 15.39$, $p < .01$).⁴ The WTP values reflected this trend; participants who received the windfall under a negative circumstance allocated signifi-

cantly more money to the virtuous option ($M = \$143.29$ versus $\$114.39$ for positive circumstance; $t_{363} = 3.78$, $p < .01$).

To test for evidence of a laundering effect on reported emotions, we conducted an analysis of variance with participants' emotional reaction scores as the dependent variable and condition, order, and a condition \times order interaction as the independent variables. The condition and order simple effects were significant ($F(1, 361) = 71.65$, $p < .01$, and $F(1, 361) = 4.58$, $p < .05$, respectively). However, these effects were qualified by the predicted condition by order interaction ($F(1, 361) = 5.09$, $p < .05$). Although there was no significant change in emotions for the positive-circumstance conditions ($M_{\text{After Choice}} = 4.88$ versus $M_{\text{Before Choice}} = 4.84$; see Table 2), there was a significant improvement in reported emotion after participants made their choice in the negative-circumstance conditions ($M_{\text{After Choice}} = 2.80$ versus $M_{\text{Before Choice}} = 1.36$; $t_{179} = 2.5$, $p < .05$). This analysis suggests that the laundering option was an effective means to reduce respondents' negative feelings about the windfall because after making the laundering choice, participants indicated feeling less negative about the money.

We conducted an equivalent analysis on the proportion of participants endorsing any form of negative affect using a logistic regression (see Table 2). Again, both condition and order were significant ($\chi^2(1) = 14.2$ and $\chi^2(1) = 17.8$, $p < .01$, respectively), but they were qualified by the hypothesized condition \times order interaction ($\chi^2(1) = 3.9$, $p < .05$). Simple effects tests showed that participants in the negative-circumstance conditions exhibited a significant reduction in the endorsement of negative affect after they had an opportunity to launder their windfall (54% to 27%, for before choice versus after choice; $\chi^2(1) = 13.6$, $p < .01$). The change in the endorsement of negative affect in the positive-circumstance conditions (14% to 12%) was not significant.

Finally, the Goodman (1) version of the Sobel test established affect ($P - N$) as a significant and partial mediator of WTP in our studies ($z = 2.41$, $p < .01$; note that we conducted this analysis only on the before-choice conditions). The extent to which participants assigned their windfall to the virtuous or hedonic alternative depended on the intensity of their feelings—in particular, their negative feelings—about the money.

STUDY 4A: LAUNDERING WINDFALLS OF REAL MONEY

Method

Thus far, our studies have presented evidence for avoidance or laundering using hypothetical vignettes. To enhance the ecological validity of our findings, we conducted two conceptual replications (Studies 4a and 4b) of the laundering studies using real windfalls.

Eighty-one undergraduate students were asked to complete a one-page "market research questionnaire" as an unexpected addendum to an unrelated experiment in which they had participated for partial course credit. The survey included questions about participants' demographics, purchase habits for toiletries and cosmetics, and preference for certain stores. Having completed the survey, participants received a sheet titled "Explanation," which informed them

⁴Note that as we expected, there was no significant effect of question order on choices, so we pooled the choice data across the order factor.

Table 2

RESULTS OF STUDY 3: SUMMARY MEASURE OF EMOTION ($P - N$) AND THE PERCENTAGE ENDORSING ANY NEGATIVE AFFECT

Emotions Measured	Positive Circumstance	Negative Circumstance	Positive Circumstance	Negative Circumstance
Before choice	4.84 ^a	1.36 ^b	14% ^a	54% ^b
After choice	4.88 ^a	2.80 ^c	12% ^a	27% ^c

Notes: Different superscripts represent statistically significant differences. Columns 2 and 3 list the $P - N$ results, and Columns 4 and 5 list the percentage endorsing negative affect.

that the questionnaire they had completed was designed to compare how consumers judge their experiences when they are actually shopping with their judgments when they are not at the store. The form then stated that the project had been funded either by a grant from a leading personal computer manufacturer (positive circumstance; $n = 40$) or by a grant from a leading cigarette manufacturer (negative circumstance; $n = 41$); for realism, it included each company's logo and company description (the actual form mentioned the companies by their real names).⁵ Two \$1 bills were clipped to the bottom of the form. Right above the money, participants were instructed to use the \$2 to purchase either a coupon for \$2 off any textbook at the university bookstore (virtuous option) or a coupon for \$2 off any purchase at a local ice-cream parlor (hedonic option). Participants then checked off their choice and handed the \$2 to the experimenter in exchange for the coupon (the experimenter was blind to the condition). After receiving the money, the experimenter debriefed the participants and returned the money to them. On the basis of a pretest survey, we expected people in the negative-circumstance condition (cigarette company) to have more negative feelings about the money and, therefore, to be more likely to engage in laundering by choosing the textbook coupon.⁶

Results

As we predicted, the results reveal a laundering effect. Whereas 22% of participants in the positive-circumstance condition elected to use their money on the virtuous option (textbook coupon), double that proportion (44%) chose this option in the negative-circumstance condition ($\chi^2(1) = 4.2$, $p < .05$).

STUDY 4B

Method

We conducted an additional replication using different companies and an undergraduate population at a different university. In addition to generalizing our result to another population and set of windfall sources, we wanted to demonstrate the effect when the windfall covered the entire cost of the purchase of the items acquired immediately rather than as a discount to be applied at another time.

The study was embedded in an unrelated set of experiments conducted at the student union, for which participants were paid. At the beginning of the set of experiments, respondents were asked to complete a consumer survey filler task. On the following page, they received a \$1 unanticipated payment that was attached to an explanation sheet, as in Study 4a. Participants were told that the money had come from a grant either by an Internet search engine company (positive circumstance; $n = 49$) or by a tobacco com-

pany (negative circumstance; $n = 49$), and they were asked to write a few sentences describing their feelings about the windfall. (The actual form that participants read mentioned the companies by their real names.) We included the writing exercise to heighten participants' attention to the task. Next, participants were asked to spend their \$1 either on a milk chocolate candy bar (hedonic option) or on a black ink pen (utilitarian option; both were valued at \$1), and they were told that they would be given their purchase at the end of the experiment. After making their decision and payment, all participants were debriefed and returned the \$1 bill. We expected to replicate our laundering effect, such that participants in the negative-circumstance condition would be more likely to select the pen than participants in the positive-circumstance condition.

Results

The results again reveal a laundering effect. Participants in the negative-circumstance condition displayed nearly double the tendency to purchase the pen compared with their positive-circumstance counterparts (51% versus 27%; $\chi^2(1) = 6.2$, $p < .05$). The results of Studies 4a and 4b demonstrate that people's inclination to launder windfalls holds even when the options in question involve real monetary consequences.

STUDY 5: FURTHER DISTINGUISHING LAUNDERING FROM AVOIDANCE

Method

We have argued that from a theoretical perspective, avoidance and laundering are distinct (Duhachek 2005), and we find that each strategy appears to have a different effect on emotions. Whereas laundering makes people feel better about their money, avoidance (at least in the short run) does not make them feel worse. In this study, we ask whether people approach these strategies as distinct when making their purchase decision. Our previous studies constrained participants' choices to a hedonic option coupled with deferral (Studies 1 and 2) or a hedonic option coupled with a virtuous option (Studies 3 and 4a and b), which precludes an answer to this question. To test whether participants distinguish between hedonic avoidance and laundering before selecting an option, in this study, we remove the constraints on their choices by including a trinary choice condition that offers a hedonic option, a virtuous option, and a deferral option.

We presented undergraduate student participants with the following scenario (alternate wording is in brackets):

Imagine that you participate in a consulting project for a class, and you unexpectedly receive a \$500 bonus for helping increase the sales of [positive circumstance: an organic dairy food manufacturer; negative circumstance: a cigarette manufacturer].

The emotions manipulation was crossed with a set size factor: Participants chose from either a binary choice set, which included a beach vacation option or a decide-later (avoidant) option, or a trinary choice set, which included a beach vacation option, an option to defray educational expenses, or a deferral option. Adding the educational expense option offered participants in the trinary conditions the opportunity to launder their windfall and to avoid

⁵We are precluded from publishing the name of the manufacturers for Institutional Review Board-related reasons.

⁶We presented undergraduate students ($N = 56$) with a scenario that described the study we were going to conduct. They were asked to name a kind of company whose money they would feel bad receiving in exchange for completing a market research survey. The most frequently mentioned company was a tobacco company. We also presented respondents with a list of 15 kinds of companies and asked them to rate on a seven-point scale how objectionable receiving the money would be. Cigarette company received the highest rating ($M = 6.16$), which was significantly greater than the next two companies on the list (telemarketing company, $M = 4.71$; petroleum company, $M = 3.45$; t 's = 7.2 and 10.3, $p < .05$, respectively).

spending the money altogether. No WTP judgments were elicited.

We expected to replicate our avoidance effect from Study 1 in the binary conditions, such that participants in the negative-circumstance binary condition ($n = 77$) would be more likely to avoid than their positive-circumstance binary counterparts ($n = 77$). In the trinary conditions, we expected the same proportion of avoidance as in each respective binary condition. However, if hedonic avoidance and laundering are psychologically distinct, as we have claimed, the propensity to choose the educational expense should be greater in the negative-circumstance trinary condition ($n = 79$) than in the positive-circumstance trinary condition ($n = 73$). In other words, laundering should be more attractive when the windfall is tagged negatively than when it is tagged positively, even when a deferral option is present.

Unlike in our previous studies, in which we measured emotions using a continuous variable, in this study, participants were provided a list of possible emotions about the money and were asked to check any that they had felt when they read the scenario. We elected to use a checklist to test the robustness of our manipulation to different measurement approaches. The list included a subset of emotions from Russell and Carroll's (1999) circumplex model (happy, displeased, relaxed, angry, calm, tense, elated, sad, pleased, depressed, regretful, stressed, disappointed, relieved, surprised, excited, and guilty). We expected that, on balance, participants in the negative-circumstance conditions would select fewer positive emotions and more negative emotions than participants in the positive-circumstance conditions.

Results

The results from the emotions checklist indicate that our manipulation was effective. Participants in the positive-circumstance conditions checked off more positive emotions ($M = 3.4$) than their negative-circumstance counterparts ($M = 2.7$; $t_{303} = 4.5$, $p < .0001$). Conversely, participants in the negative-circumstance condition checked off more negative emotions ($M = .9$) than their positive-circumstance counterparts ($M = .1$; $t_{303} = 5.7$, $p < .0001$). Note that the total number of emotions endorsed per participant was equal in both conditions, suggesting that both scenarios were equally affectively rich ($M = 3.5$ versus 3.6 , respectively).

The choice results suggest that participants viewed avoidance and laundering as psychologically distinct. As Table 3 shows, we replicate the avoidance effect in the binary-choice conditions. Participants in the negative-circumstance binary condition were less likely to select the

hedonic beach vacation option than their positive-condition binary counterparts (9% versus 30% chose the beach option; $\chi^2(1) = 10.58$, $p < .01$). We found a nearly identical difference between the negative- and the positive-circumstance conditions in hedonic choice in the trinary choice conditions (9% for negative circumstance versus 27% for positive circumstance; $\chi^2(1) = 8.92$, $p < .01$).

Next, we conducted an omnibus chi-square test on the trinary conditions, which revealed a significant difference in the distribution of choices ($\chi^2(2) = 12.42$, $p < .01$). Most critical to our inquiry is the contrast between the proportion of participants choosing the laundering option and those choosing the other options. Negative-circumstance trinary respondents gravitated to the laundering option at significantly greater rates than those in the corresponding positive-circumstance trinary condition (41% versus 21%; $\chi^2(1) = 7.07$, $p < .01$; see Table 3), and the proportion choosing the avoidant option was nearly identical between conditions (50% for negative circumstance versus 52% for positive circumstance; see Table 3). In other words, the laundering option in the trinary conditions was more attractive when the money was associated with a negative circumstance than when it was associated with a positive circumstance, even when an avoidant option was present. This result hints that a significant proportion of our participants viewed hedonic avoidance and laundering as distinct coping strategies.

STUDY 6: HEDONIC VERSUS UTILITARIAN FOCUS

Method

We have argued that utilitarian products are viewed as appropriate means to cope with negative affective tags, while hedonic products are inappropriate means to do so. In our previous studies, we designated one option as the hedonic alternative and the other as the utilitarian alternative. Although the data we report suggest that our designation is in concord with participants' categorization of the products we present, we elected to conduct a study that holds the choice options constant across conditions. We do this to test whether highlighting the hedonic versus utilitarian aspects of an option influences its appropriateness as a means to cope with a negative affective tag. For example, when an option's utilitarian aspects are made salient, it should be viewed as a more appropriate coping means if an affective tag is negative than when its hedonic aspects are made salient.

Four hundred ninety participants were recruited through an online panel that includes students and community members. Our design was a 2×2 between-subjects factorial, with our usual circumstance manipulation as one factor

Table 3
RESULTS OF STUDY 5

Option	Binary Condition		Option	Trinary Condition	
	Positive Circumstance	Negative Circumstance		Positive Circumstance	Negative Circumstance
Hedonic	30%	9%	Hedonic	27%	9%
Avoid	70%	91%	Avoid	52%	50%
			Launder	21%	41%

and product aspect focus (hedonic or utilitarian) as another factor. All participants were first presented with the following text:

Imagine that you are contemplating a weekend beach vacation. As you think about the beach vacation, we would like you to express your agreement or disagreement with the following statements by placing a check mark where appropriate.

Next, participants were asked to indicate their agreement (yes/no) either with four statements that were intended to make salient the hedonic aspects of a beach vacation (hedonic focus) or with four statements that were intended to make salient the utilitarian aspects of a beach vacation (utilitarian focus). The statements were written such that they would evoke agreement among the participants (97.7% of participants agreed with at least three of the statements). For the statements used, see Table 4.

Having completed the focus manipulation, participants were randomly assigned to one of our usual affect scenarios (emphasis added):

- Positive circumstance: Now imagine that the manager at your company surprises you with a \$500 bonus for your hard work on a project. Your colleague, who has been with the company just as long as you and who works just as hard, *understandably also receives the \$500 bonus.*
- Negative circumstance: Now imagine that the manager at your company surprises you with a \$500 bonus for your hard work on a project. Your colleague, despite having been with the company just as long as you and who works just as hard, *inexplicably receives a \$100 bonus.*

A pretest of a nearly identical scenario found that negative feelings were associated with the bonus when a deserving colleague had been slighted.⁷ All participants then read the following:

You are pondering how to use your bonus money. One option is to use it on the weekend vacation to the beach that you have been considering. Another is to wait and decide later what you will do with the money.

Participants were then asked to choose between the beach vacation and an avoidant option (decide at a later time).

⁷Using the emotion check list from Study 5, in our pretest we found that respondents in the positive-circumstance conditions checked off more positive emotions ($M = 4.0$) than their negative-circumstance counterparts ($M = 2.9$; $t_{127} = 5.3$, $p < .0001$). Conversely, negative-circumstance condition participants checked off more negative emotions ($M = .9$) than their positive-circumstance counterparts ($M = .1$; $t_{127} = 7.6$, $p < .0001$).

Table 4

STATEMENTS USED IN FOCUSING MANIPULATION IN STUDY 6

Focus Condition	Statement
Hedonic	The beach is a good place to have fun.
	When I return from vacation I have pleasant memories.
	Vacations are a pleasurable experience.
	Sometimes I like to have some time away to indulge myself.
Utilitarian	The beach is a good place to decompress.
	When I return from vacation I am often more efficient at work.
	Vacations are good for one's health.
	Sometimes I need some time away to clear my head.

We predicted an interaction in which the hedonic focus manipulation would have a greater effect in the negative-circumstance conditions than in the positive-circumstance conditions. In particular, when the hedonic aspects of a beach vacation are highlighted, we expected to replicate the avoidance effect (positive circumstance/hedonic focus $n = 120$; negative circumstance/hedonic focus $n = 122$). However, when the utilitarian aspects are highlighted, we expected the avoidance effect to be attenuated; specifically, people in the negative condition should no longer view the option as something to avoid and might even be drawn to it because of its potential coping benefits (negative circumstance/utilitarian focus $n = 123$; positive circumstance/utilitarian focus $n = 125$).

Results

The data reveal the predicted interaction and simple effects. Table 5 presents the choice proportions in this study. First, we replicate our basic avoidance effect in the hedonic-focus conditions (74.6% of participants chose to avoid in the negative-circumstance condition versus 61.6% in the positive-circumstance condition; $\chi^2(1) = 4.35$, $p < .05$). However, when the utilitarian aspects of the beach vacation were highlighted (utilitarian focus), there was no difference in the rates of avoidance between the negative-circumstance and positive-circumstance conditions (63.4% versus 66.6%, respectively; $\chi^2(1) = .24$, n.s.). A binary logistic regression revealed that this interaction was statistically significant ($\chi^2(1) = 3.7$, $p = .05$). Finally, within the negative-circumstance conditions, the rates of avoidance dropped from 74.6% when the hedonic aspects of the option were made salient (hedonic focus) to 63.4% when the utilitarian aspects were made salient (utilitarian focus; $\chi^2(1) = 3.58$, $p = .058$). Thus, we are able to influence participants' ability to cope with a negative tag by highlighting the utilitarian aspects of an otherwise hedonic option. In the next study, we influence participants' motivations to cope by highlighting alternative appraisals of the negative circumstance.

STUDY 7: REAPPRAISAL OF AN EMOTIONAL ACCOUNT

Method

Coping arises when people appraise a situation as emotionally stressful (Lazarus and Folkman 1984). In our studies, this appraisal occurs when people consider the circumstance in which they received their windfall. They respond by engaging in laundering and hedonic avoidance, both of which are "response-focused" regulatory strategies that consumers undertake when their emotional response is underway (Gross 1998, 2002). Another class of coping strategies, called "antecedent-focused" regulatory strate-

Table 5
PARTICIPANTS CHOOSING TO AVOID IN STUDY 6

Focus	Positive Circumstance	Negative Circumstance
Hedonic	61.6% ^a	74.6% ^b
Utilitarian	66.6% ^a	63.4% ^a

Notes: Different superscripts represent statistically significant differences.

gies, can be invoked before the “full [activation]” of an emotional response (Gross 2002, p. 282). In particular, people’s motivation to engage in full-blown coping behaviors diminishes if they are able to reappraise the situation that evoked the emotion in nonemotional terms (Gross 2002). For example, if windfall recipients reassess the negative circumstance in which they received the windfall, their motivation to engage in laundering or avoidance coping strategies should diminish. To test this prediction, we conducted an experiment in which participants made a choice either before being encouraged to reappraise the situation or after being encouraged to reappraise the situation.

We conducted the experiment using participants recruited from the same online panel as in Study 6 (N = 456). We used positive- and negative-circumstance scenarios that were practically identical to those in Study 6,⁸ and we asked participants to choose between using the bonus for “something extravagant” or for “something practical.” We crossed the circumstance factor with a reappraisal order factor, asking participants to indicate their agreement with the following set of four statements either before making their choice (after reappraisal) or after making their choice (before reappraisal):

	<i>Agree</i>	<i>Disagree</i>
1. The decision about the bonuses is beyond my control.	_____	_____
2. Many factors are taken into account when allocating bonuses.	_____	_____
3. There will be other bonuses in the future.	_____	_____
4. Receiving any kind of bonus is nice.	_____	_____

The statements were intended to spur participants to reappraise the circumstance by providing them with rationales to dissipate the negativity associated with the bonus (after-reappraisal conditions) and were designed to elicit agreement from the vast majority of participants (indeed, 94% expressed agreement with at least three of the statements).

We expected to replicate our laundering effect when people made their choice before being exposed to the reappraisal statements (negative circumstance/before reappraisal n = 116; positive circumstance/before reappraisal n = 112). However, after participants were exposed to the reappraisal statements, we expected the laundering effect to be attenuated because negative-circumstance/after-reappraisal participants (n = 113) would be able to cope with the negative affective tag by reappraising the negative circumstance without needing to engage in strategic consumption (positive-circumstance/after-reappraisal n = 115).

Results

The predicted interaction and pattern of simple effects emerged as we expected. Table 6 presents the choice proportions of the hedonic and utilitarian alternatives in each condition. First, we replicate our laundering effect. Negative-circumstance/before-reappraisal participants were more likely to choose the utilitarian alternative than their positive-circumstance/before-reappraisal counterparts (90.5% versus 77.7%; $\chi^2(1) = 7.06, p < .01$). This difference disappeared in the after-reappraisal conditions (77%

Table 6
PARTICIPANTS CHOOSING TO LAUNDER IN STUDY 7

<i>Choice</i>	<i>Positive Circumstance</i>	<i>Negative Circumstance</i>
Before reappraisal	77.7% ^a	90.5 ^b
After reappraisal	76.5% ^a	77% ^a

Notes: Different superscripts represent statistically significant differences.

for negative circumstance versus 76.5% for positive circumstance; $\chi^2(1) = .04, n.s.$). A binary logistic regression revealed that this interaction was significant, as predicted ($\chi^2(1) = 3.86, p < .05$). Finally, the percentage of respondents choosing the laundering option dropped significantly in the negative-circumstance condition from 90.5% when choice occurred before reappraisal to 77% when the reappraisal occurred before choice ($\chi^2(1) = 7.73, p < .01$). It appears that reappraising the negative circumstance reduced negative-circumstance participants’ motivation to cope by making a utilitarian choice.

GENERAL DISCUSSION

We have addressed the role of feelings in the labeling of windfalls and have presented evidence that windfall consumption can be motivated by affective evaluations of the money, or “affective tags.” More specifically, when people have negative feelings about a windfall, the money is less likely to be spent on hedonic goods than windfalls associated with purely positive feelings. For example, people preferred to avoid purchasing a stereo with money they received from an uncle just diagnosed with an illness, particularly when the money was tagged with strong negative feelings. When provided the opportunity, people preferred to spend such windfalls on virtuous or utilitarian products. For example, participants who experienced a disappointing lottery win preferred to spend their money on educational expenses rather than on a beach vacation. We present results suggesting that the choice of a virtuous or utilitarian product enables people to reduce the negative affect component of the windfall’s tag.

We explore emotional accounting in seven studies. Study 1 demonstrates a hedonic avoidance effect; participants who received a windfall linked to a negative circumstance preferred to avoid using the money rather than purchase a hedonic good. In Study 2, we rule out an incidental emotion explanation of our effect. The data indicate that simply feeling bad about a situation, rather than specifically about the windfall, does not give rise to hedonic avoidance. In Study 3, we show that when people receive a windfall under negative circumstances, they are more likely to use it on virtuous or utilitarian items than on hedonic items compared with people who receive a windfall under positive circumstances. We label this phenomenon the laundering effect and buttress the choice data using an order manipulation in which we demonstrate that following a laundering opportunity, people indicate feeling significantly less negative about their windfall. In Studies 4a and 4b, we replicate the laundering effect using windfalls of real money. In Study 5, we offer empirical evidence indicating that participants considered hedonic avoidance and laundering psychologically distinct coping strategies. In Study 6, we manipulate

⁸The only difference was that in the negative-circumstance condition, the colleague was to have received \$150 rather than \$100.

the appropriateness of an option as a coping means by highlighting its hedonic or utilitarian aspects. Finally, in Study 7, we show that when participants are encouraged to engage in a reappraisal of the negative situation, they are less likely to engage in a laundering strategy.

Emotional Accounting in the Marketplace

Several real-world phenomena take on similar characteristics to the scenarios reported herein. Although the following discussion is admittedly speculative, the examples below represent behaviors that are consistent with the hypotheses we present in this article. For each sample behavior there may be other, unrelated alternative explanations.

The notion that negative feelings about money can influence its consumption may shed light on a puzzle that arose in early tests of Milton Friedman's permanent income hypothesis. On the one hand, Bodkin (1959) uses a sample of American World War II veterans to show that windfalls are spent at a rate higher than ordinary income. The veterans had unexpectedly received National Service Life Insurance dividends made possible because premiums had been computed on the basis of too high an expected casualty rate. On the other hand, Kreinin (1961) and Landsberger (1966) present evidence that Israeli Jewish Holocaust survivors who received reparations from the German government spent this windfall at lower marginal rates than their regular income (except when reparations represented less than 10% of their salary). Many reasons that are beyond the scope of this discussion have been proposed for these contradictory findings (see the exchange between Bodkin [1959, 1963, 1966] and Kreinin [1961, 1963]). We offer one more speculation. Although these examples are far more serious and emotionally charged than those presented in our studies, it is easy to imagine the Holocaust survivors having negative feelings about their windfall and, consequently, avoiding its use. In contrast, the World War II veterans' windfall could be considered a classic windfall of "happy money"—it had been distributed because casualty rates had been lower than expected. Indeed, the happiness associated with the veterans' windfall—and happiness with windfalls in general—may have contributed to its increased propensity to be spent.

More recently, the 2001 Bush tax rebate distributed a budgetary surplus to eligible taxpayers in a purported attempt to stimulate the economy, spurring a lively debate about how the money could be used to fund social programs. Consider the following reactions culled from postings at *Rejecttherebate.com*, a now defunct Web site dedicated to "protesting the Bush cut": "I have been both saddened and disgusted," "[we are] upset," and "[I find it] disturbing." Although the authors of these postings might be unrepresentative beneficiaries of the Bush rebate, we believe that their reactions reflect a strong negative affective tag on something generally considered positive. Indeed, the negative component of this tag may have prompted the rebate recipients to launder the money; most indicated that they would donate the money to charity, and some revealed that they would send the money back to the U.S. Department of the Treasury.

Another example is related to performance bonuses. In recent years, teachers at East Chapel Hill High School in affluent Chapel Hill, N.C., have been awarded bonuses on

the basis of their students' standardized test performance (Jackson 2000). A group of teachers opposed this form of incentive because their students were already likely to test well by virtue of their social class and instead chose to donate their bonuses to a school in rural North Carolina, whose students come from a lower socioeconomic background. We surmise that the teachers' donation was a way to launder the negative feelings they had about their bonus.

Finally, recent research has shown that people prefer public goods (e.g., parks) rather than money in compensation for public harms, such as pollution of a local stream by a factory (Mansfield, Van Houtven, and Huber 2002). Mansfield, Van Houtven, and Huber's (2002) preferred explanation for this finding dovetails with our laundering strategy. They maintain that public goods "psychologically mitigate" public harms and that, in some situations, accepting money for a public harm simply makes people feel guilty. We suggest that monetary compensation will carry a negative affective tag and, as a result, will be avoided. However, a public good can provide a laundering function.

Relationship with Source Effects in Mental Accounting

Our findings might provide an additional explanation for O'Curry's (1997) income accounting source effects (see also Thaler 1999). O'Curry reports that people prefer to spend "frivolous money" (e.g., money from a nice tip) on frivolous items and "serious money" (e.g., a person's hourly wage) on a serious item. It is possible that the reason underlying people's desire to match source with item is because of their desire to manage the affective tags affixed to the money. For example, a nice tip might make a waiter feel good about the money, a feeling that he or she might try to maintain by making an indulgent purchase. A critical difference between our treatment and income accounting is that in our experiments, the money comes from an identical source, which enables us to isolate the effect of affective tags and to distinguish emotional accounting from income accounting. The manipulations we introduce in Studies 6 and 7—hedonic/utilitarian focus and reappraisal, respectively—influence the propensity to avoid or launder even when the scenario (and source) remains identical. In the Disappointing Win scenario, the money originates from the same lottery, and our mediation analysis shows that greater negative feelings are associated with a greater desire to launder. A strict mental or income accounting view would predict no difference between a disappointing windfall and an outright windfall because both are unexpected and therefore should be spent equally frivolously. Indeed, the different behaviors we document in our experiments highlight the value of considering emotional labeling of money in addition to the cognitive labels that serve as the basis for mental accounting.

Mixed Feelings in Emotional Accounts

Previously, we argued that windfalls are inherently positive, giving rise to positive feelings about the money. When negative affect is added to a person's positive feelings about a windfall as in our negative-circumstance conditions, do the feelings cancel each other out, leading to a neutral affective tag and a pallid emotional experience? Or do the feelings occur simultaneously, leading to a mixed emotional experience? We expected the latter to be the case.

Investigations of reactions to emotionally complex experiences, such as college graduation (Larsen, McGraw, and Cacioppo 2001), and reactions to “disappointing” monetary gains or “relieving” monetary losses (Larsen et al. 2004) indicate that positive and negative feelings can coexist (see also Cacioppo and Berntson 1994). Further evidence for this comes from studies of mixed emotions in the context of persuasive appeals (Williams and Aaker 2002), consumption (Andrade and Cohen 2007; Lau-Gesk 2005), and the presence or absence of no-choice, or fence-sitting, options (Nowlis, Kahn, and Dhar 2002). An analysis of our participants’ concurrent endorsement of positive and negative affect shows that mixed feelings about the windfall were significantly more likely for negative-circumstance participants than for positive-circumstance participants (see Table 7). To examine the role of mixed feelings in predicting coping (i.e., choice), we computed the minimum of each participant’s positive and negative ratings (i.e., MIN [P, N]). These scores provide a graded index of mixed feelings by taking on values of 0 when participants rate their feelings as neutral, exclusively positive, or exclusively negative but higher values when participants rate their experience as both positive and negative (see Kaplan 1972). Consistent with previous research about how affect guides behavior (e.g., Cacioppo and Berntson 1994), we found that the best predictor of choice behavior was the balance of positive and negative feelings ($P - N$) and that the MIN scores (i.e., mixed feelings) did not add significant explanatory power to our regression model. This suggests that the primary impulse for laundering and avoidance is the need to reduce negative affect and that mixed feelings alone do not explain participants’ behavior in our studies.

Future Directions

In this article, we take a valenced approach that treats different types of negative feelings alike. We do so because all negative emotions should theoretically prompt some kind of coping behavior. However, in the context of money and spending, there may be situations in which a sum of money evokes specific negative emotions, such as anger, guilt, or disappointment. For example, a person who receives a bonus at work (as in Studies 6 and 7) might affix an angry or disappointed tag on the money if he or she discovers that a similarly hard-working colleague received a larger bonus. Would the recipient cope with the angry tag by laundering the money? Not necessarily. It is possible that different specific negative emotions will motivate different consumption strategies. Indeed, a growing body of research shows that negatively valenced emotions, such as

fear, sadness, disgust, or anger, impel different motivational states (Lerner and Keltner 2001; Raghunathan and Pham 1999). For example, laundering might be more appropriate as a coping means for some negative emotions, while hedonic avoidance might be more appropriate for others.

In the “angry-money” example, we speculated that people would choose to avoid rather than launder. Pillutla and Murnighan (1996) show that ultimatum game offers that are perceived as unfair lead to anger and wounded pride and, consequently, are rejected (often spitefully). Although in our scenarios participants are not quite afforded the chance to reject a windfall outright, they are provided with an opportunity to avoid its use. Thus, we conjecture that an angry tag will lead to avoidance. In contrast, negative affect that arises from guilt may be more likely to evoke laundering, as suggested by Strahilevitz and Myers’s (1998) work on the complementarity between guilt and charitable giving. A sad affective tag might create a similar motivation to launder because sadness evokes a person’s implicit goal to change his or her circumstances (Lerner, Small, and Loewenstein 2004). We believe that the emotional accounting of specific emotions is a worthwhile question for further research. In particular, it would shed greater light on the relationship between avoidance and laundering and when one strategy takes precedence over another.

Another research direction is related to the connection of our work with research on mood regulation. Our results appear to contradict the finding that people make hedonic choices to repair their negative mood (e.g., Tice, Bratslavsky, and Baumeister 2001). Tice, Bratslavsky, and Baumeister (2001) find that people who are distressed are more likely to lose their self-control and engage in hedonic consumption. In contrast, in our experiments, people who had negative feelings about the money they received were less likely to make a hedonic purchase. We surmise that this discrepancy arises because in our studies, there is a specific tag on a target object (the windfall) rather than incidental affect that arises due to reasons unrelated to the object itself. The tag on the object prompts behaviors that are specific to managing affect in relation to the object rather than general affect. We offer the term “target-specific affect management” to describe this phenomenon. Study 2’s contrast between the negative-circumstance condition, in which the negative event was linked to the money’s receipt, and the positive-money condition, in which the negative event simply coincided with the money’s receipt, supports this suggestion. In the former condition, people choose to manage their feelings about the object. In the latter condition, people’s hedonic choices might be viewed as mood regulation; the key is that the money and the negative circumstance are unrelated, and thus spending the money on something hedonic appears to be a perfectly reasonable way for a person to improve his or her mood. More broadly, we believe that windfalls may be a potential case study for target-specific affect management and that the notion that people manage their emotions in relation to an object is an understudied topic that is worth exploring further (see Russell 2003).

CONCLUSION

Mental accounting research proposes a cognitive categorization process to explain consumer spending decisions.

Table 7

PROPORTION OF PARTICIPANTS ENDORSING MIXED FEELINGS ABOUT THEIR WINDFALL IN THE POSITIVE- AND NEGATIVE-CIRCUMSTANCE CONDITIONS FOR STUDIES 1–3

Scenario (Study)	Positive Circumstance	Negative Circumstance
Found money (1)	.15	.31
Brother’s gift (1)	.08	.31
Uncle’s gift (1)	.18	.29
Uncle’s gift (2)	.15	.37
Aunt’s gift (3)	.22	.50
Disappointing win (3)	.07	.26

We suggest that an additional factor underlies people's choice of expenditures: the feelings associated with a sum of money. In particular, we investigate cases in which people receive unanticipated sums of money, or windfalls, under negative circumstances. Our findings indicate that the negative component of these windfalls' affective tag augments the preference for virtuous or utilitarian goods over hedonic goods because the former are perceived as effective means to reduce the negative feelings associated with the money.

APPENDIX

Study 1

Found Money (positive circumstance n = 87; negative circumstance n = 87)

Imagine you go out to dinner (cost \$41.50) with your significant other at a recently opened, hip restaurant in a nearby neighborhood in your city. As you walk down the street to your car after dinner, you unexpectedly find a \$10 bill [**in your jacket pocket/on the ground**]. You place the bill [**back**] in your pocket and continue your trip home.

On your way back home you see the new gourmet ice-cream parlor that you have been meaning to check out. Would you stop at the parlor and use the money you found to treat you and your significant other to ice cream for dessert?

Brother's Gift (positive circumstance n = 114; negative circumstance n = 115)

Imagine that your brother, [**who is a wealthy banker/who is a struggling artist**], gives you \$75 as a gift for your high school graduation.

You are shopping soon after graduation and see fancy designer sunglasses that you like. Would you use the gift money to purchase the sunglasses?

Uncle's Gift (positive circumstance n = 123; negative circumstance n = 122)

Imagine that your uncle, [**who has just come for a visit/who has just been diagnosed with a very serious illness**], unexpectedly gives you a cash gift of \$200 for your high school graduation.

You have been considering purchasing a stereo system, but until now you could not afford it. Would you use your uncle's gift to purchase the stereo?

Study 3

Aunt's Inheritance (positive circumstance n = 74; negative circumstance n = 73)

Imagine that right before the holidays your aunt [**comes to visit/passes away**] and [**gives/leaves**] you a \$200 cash gift.

You are considering two possible uses for your aunt's money: Pay for educational expenses or a spring break beach vacation.

Disappointing Win (positive circumstance n = 110; negative circumstance n = 108)

Imagine that you pick the four winning numbers in a local lottery sweepstakes and win a \$300 cash prize. [**You missed the fifth winning number by one digit. Had you**

picked all five numbers correctly, you would have won \$30,000.]

You are considering two possible uses for your prize money: Pay for educational expenses or a spring break beach vacation.

REFERENCES

- Andrade, Eduardo B. and Joel B. Cohen (2007), "On the Consumption of Negative Feelings," *Journal of Consumer Research*, 34 (October), 283–300.
- Arkes, Hal R., Cynthia A. Joyner, Mark V. Pezzo, Jane-Gradwohl Nash, Karen Siegel-Jacobs, and Eric Stone (1994), "The Psychology of Windfall Gains," *Organizational Behavior and Human Decision Processes*, 59 (September), 331–47.
- Baumann, D.J., R.B. Cialdini, and D.T. Kenrick (1981), "Altruism as Hedonism: Helping and Self-Gratification as Equivalent Responses," *Journal of Personality and Social Psychology*, 40 (6), 1039–1046.
- Baumeister, Roy F., Ellen Bratslavsky, Catrin Finkenauer, and Kathleen D. Vohs (2001), "Bad Is Stronger Than Good," *Review of General Psychology*, 5 (4), 323–70.
- Belk, Russell and Melanie Wallendorf (1990), "The Sacred Meanings of Money," *Journal of Economic Psychology*, 11 (March), 35–67.
- Bodkin, Ronald G. (1959), "Windfall Income and Consumption," *American Economic Review*, 49 (4), 602–614.
- (1963), "Windfall Income and Consumption: Comment," *American Economic Review*, 53 (3), 445–47.
- (1966), "Windfall Income and Consumption: Reply," *American Economic Review*, 56 (June), 540–46.
- Cacioppo, John T. and Gary G. Berntson (1994), "Relationship Between Attitudes and Evaluative Space: A Critical Review with Emphasis on the Separability of Positive and Negative Substrates," *Psychological Bulletin*, 115 (May), 401–423.
- Cialdini, R.B. and D.T. Kenrick (1976), "Altruism as Hedonism: A Social Development Perspective on the Relationship of Negative Mood State and Helping," *Journal of Personality and Social Psychology*, 34 (November), 907–914.
- , Mark Schaller, Donald Houlihan, Kevin Aips, Jim Fultz, and Arthur L. Beaman (1987), "Empathy-Based Helping: Is It Selflessly or Selfishly Motivated?" *Journal of Personality and Social Psychology*, 54 (4), 749–58.
- Duhachek, Adam (2005), "Coping: A Multidimensional, Hierarchical Framework of Responses to Stressful Consumption Episodes," *Journal of Consumer Research*, 32 (June), 41–53.
- Epley, Nicholas and Ayelet Gneezy (2007), "The Framing of Financial Windfalls and Implications for Public Policy," *Journal of Socio-Economics*, 36 (1), 36–47.
- , Dennis Mak, and Lorraine Chen Idson (2006), "Bonus or Rebate? The Impact of Income Framing on Spending and Saving," *Journal of Behavioral Decision Making*, 19 (January), 1–15.
- Fiske, Susan T. (1982), "Schema-Triggered Affect: Applications to Social Perception," in *Affect and Cognition: The 17th Annual Carnegie Symposium on Cognition*, Margaret S. Clark and Susan T. Fiske, eds. Hillsdale, NJ: Lawrence Erlbaum Associates, 55–78.
- Folkman, Susan, Richard S. Lazarus, Christine Dunkel-Schetter, Anita DeLongis, and Rand J. Gruen (1986), "Dynamics of a Stressful Encounter: Cognitive Appraisal, Coping, and Encounter Outcomes," *Journal of Personality and Social Psychology*, 50 (5), 992–1003.
- Goodman, L.A. (1960), "On the Exact Variance of Products," *Journal of the American Statistical Association*, 55, 708–713.
- Gourville, John T. and Dilip Soman (1998), "Payment Depreciation: The Behavioral Effects of Temporally Separating Pay-

- ments from Consumption,” *Journal of Consumer Research*, 25 (September), 160–74.
- Gross, James J. (1998), “Antecedent and Response-Focused Emotion Regulation: Divergent Consequences for Experience, Expression, and Physiology,” *Journal of Personality and Social Psychology*, 74 (January), 224–37.
- (2002), “Emotion Regulation: Affective, Cognitive, and Social Consequences,” *Psychophysiology*, 39 (May), 281–91.
- Heath, Chip and Jack B. Soll (1996), “Mental Budgeting and Consumer Decisions,” *Journal of Consumer Research*, 23 (June), 40–52.
- Henderson, Pamela W. and Robert A. Peterson (1992), “Mental Accounting and Categorization,” *Organizational Behavior and Human Decision Processes*, 51 (February), 92–117.
- Hirst, Eric D., Edward J. Joyce, and Michael S. Schadewald (1994), “Mental Accounting and Outcome Contiguity in Consumer Borrowing Decisions,” *Organizational Behavior and Human Decision Processes*, 58 (April), 136–52.
- Ito, Tiffany A., John T. Cacioppo, and Peter J. Lang (1998), “Eliciting Affect Using the International Affective Picture System: Bivariate Evaluation and Ambivalence,” *Personality and Social Psychology Bulletin*, 24 (8), 855–79.
- Jackson, Damien (2000), “On the Bubble: The Questionable Role of High-Stakes Testing in North Carolina Classrooms,” *Independent Weekly Online*, (October 18), cover feature.
- Kahneman, Daniel and Amos Tversky (1984), “Choices, Values, and Frames,” *American Psychologist*, 39 (April), 341–50.
- Kaplan, Kalman J. (1972), “On the Ambivalence-Indifference Problem in Attitude Theory and Measurement: A Suggested Modification of the Semantic Differential Technique,” *Psychological Bulletin*, 77 (5), 361–72.
- Kivetz, Ran and Itamar Simonson (2002), “Self-Control for the Righteous: Toward a Theory of Precommitment to Indulgence,” *Journal of Consumer Research*, 29 (September), 199–217.
- Kreinin, Mordechai E. (1961), “Windfall Income and Consumption: Additional Evidence,” *American Economic Review*, 51 (3), 388–90.
- (1963), “Windfall Income and Consumption: A Further Comment,” *American Economic Review*, 53 (3), 448.
- Landsberger, Michael (1966), “Windfall Income and Consumption: Comment,” *American Economic Review*, 56 (June), 534–40.
- Larsen, Jeff T., A. Peter McGraw, and John T. Cacioppo (2001), “Can People Feel Happy and Sad at the Same Time?” *Journal of Personality and Social Psychology*, 81 (October), 684–96.
- , ———, Barbara A. Mellers, and John T. Cacioppo (2004), “The Agony of Victory and the Thrill of Defeat: Mixed Emotional Reactions to Disappointing Wins and Relieving Losses,” *Psychological Science*, 15 (May), 325–30.
- , Catherine J. Norris, A. Peter McGraw, Louise C. Hawley, and John T. Cacioppo (2009), “The Evaluative Space Grid: A Single-Item Measure of Positive and Negative Evaluative Reactions,” *Cognition and Emotion*, forthcoming.
- Lau-Gesk, Loraine (2005), “Understanding Consumer Evaluations of Mixed Affective Experiences,” *Journal of Consumer Research*, 32 (June), 23–28.
- Lazarus, Richard S. and Susan Folkman (1984), *Stress, Appraisal, and Coping*. New York: Springer.
- Lerner, Jennifer S. and Dacher Keltner (2001), “Fear, Anger, and Risk,” *Journal of Personality and Social Psychology*, 81 (July), 146–59.
- , Deborah A. Small, and George F. Loewenstein (2004), “Heart Strings and Purse Strings: Carryover Effects of Emotions on Economic Decisions,” *Psychological Science*, 15 (5), 337–41.
- Linville, Patricia and Gregory W. Fischer (1991), “Preferences for Separating and Combining Events,” *Journal of Personality and Social Psychology*, 60 (1), 5–23.
- Luce, Mary Frances (1998), “Choosing to Avoid: Coping with Negatively Emotion-Laden Consumer Decisions,” *Journal of Consumer Research*, 24 (March), 409–433.
- Mansfield, Carol, George Van Houtven, and Joel Huber (2002), “Compensating for Public Harms: Why Public Goods Are Preferred to Money,” *Land Economics*, 78 (August), 368–89.
- McGraw, A. Peter, Philip E. Tetlock, and Orie V. Kristel (2003), “The Limits of Fungibility: Relational Schemata and the Value of Things,” *Journal of Consumer Research*, 30 (September), 219–29.
- Nowlis, Stephen M., Barbara E. Kahn, and Ravi Dhar (2002), “Coping with Ambivalence: The Effect of Removing a Neutral Option on Consumer Attitude and Preference Judgments,” *Journal of Consumer Research*, 29 (December), 319–34.
- O’Curry, Suzanne (1997), “Income Source Effects,” working paper, Marketing Department, DePaul University.
- and Michal Strahilevitz (2001), “Probability and Mode of Acquisition Effects on Choices Between Hedonic and Utilitarian Options,” *Marketing Letters*, 12 (1), 37–49.
- Pillutla, Madan M. and J. Keith Murnighan (1996), “Unfairness, Anger, and Spite: Emotional Rejections of Ultimatum Offers,” *Organizational Behavior and Human Decision Processes*, 68 (3), 208–224.
- Prelec, Drazen and George F. Loewenstein (1998), “The Red and the Black: Mental Accounting of Savings and Debt,” *Marketing Science*, 17 (1), 4–28.
- Raghunathan, Rajagopal and Michel Tuan Pham (1999), “All Negative Moods Are Not Equal: Motivational Influences of Anxiety and Sadness in Decision Making,” *Organizational Behavior and Human Decision Processes*, 79 (1), 56–77.
- , ———, and Kim P. Corfman (2006), “Informational Properties of Anxiety and Sadness, and Displaced Coping,” *Journal of Consumer Research*, 32 (March), 596–601.
- Ramanathan, Suresh and Patti Williams (2007), “Immediate and Delayed Emotional Consequences of Indulgence: The Moderating Influence of Personality Type on Mixed Emotions,” *Journal of Consumer Research*, 34 (August), 212–23.
- Russell, James A. (2003), “Core Affect and the Psychological Construction of Emotion,” *Psychological Review*, 110 (January), 145–72.
- and James M. Carroll (1999), “On the Bipolarity of Positive and Negative Affect,” *Psychological Bulletin*, 125 (January), 3–30.
- Schaller, Mark and Robert B. Cialdini (1990), “Happiness, Sadness, and Helping: A Motivational Integration,” in *Handbook of Motivation and Cognition: Foundations of Social Behavior*, Vol. 2, E. Tory Higgins and R.M. Sorrention, eds. New York: Guilford Press, 265–96.
- Shefrin, Hersh M. and Richard H. Thaler (1992), “Mental Accounting, Saving, and Self-Control,” in *Choice Over Time*, George F. Loewenstein and Jon Elster, eds. New York: Russell Sage, 187–330.
- Shipton, Parker (1989), *Bitter Money: Cultural Economy and Some African Meanings of Forbidden Commodities*. Washington, DC: American Anthropology Association.
- Smith, Craig A. and Phoebe C. Ellsworth (1985), “Patterns of Cognitive Appraisal in Emotion,” *Journal of Personality and Social Psychology*, 48 (April), 813–38.
- Strahilevitz, Michal and John G. Myers (1998), “Donations to Charity as Purchase Incentives: How Well They Work May Depend on What You Are Trying to Sell,” *Journal of Consumer Research*, 24 (March), 434–46.
- Tetlock, Philip E. (2002), “Social Functionalist Frameworks for Judgment and Choice: Intuitive Politicians, Theologians, and Prosecutors,” *Psychological Review*, 109 (July), 451–71.
- Thaler, Richard H. (1985), “Mental Accounting and Consumer Choice,” *Marketing Science*, 4 (Summer), 119–214.

- (1990), "Anomalies: Saving, Fungibility, and Mental Accounts," *Journal of Economic Perspectives*, 4 (Winter), 193–205.
- (1999), "Mental Accounting Matters," *Journal of Behavioral Decision Making*, 12 (September), 183–206.
- Tice, Dianne M., Ellen Bratslavsky, and Roy F. Baumeister (2001), "Emotional Distress Regulation Takes Precedence over Impulse Control: If You Feel Bad, Do It!" *Journal of Personality and Social Psychology*, 80 (January), 53–67.
- Werthenbroch, Klaus (1998), "Consumption Self-Control by Rationing Purchase Quantities of Virtue and Vice," *Marketing Science*, 17 (4), 317–37.
- Williams, Patti and Jennifer L. Aaker (2002), "Can Mixed Emotions Peacefully Coexist?" *Journal of Consumer Research*, 28 (March), 636–49.
- Zelizer, Viviana A. (1994), *The Social Meaning of Money*. New York: Basic Books.