

# Friendship fallout and bailout backlash: The psychology of borrowing and lending

Ashley N. Angulo<sup>1</sup>  | Noah J. Goldstein<sup>2</sup> | Michael I. Norton<sup>3</sup>

<sup>1</sup>University of Oregon, Eugene, Oregon, USA

<sup>2</sup>University of California, Los Angeles, The Anderson School of Management, Los Angeles, California, USA

<sup>3</sup>Harvard Business School, Boston, Massachusetts, USA

## Correspondence

Ashley N. Angulo, Lundquist College of Business, 1208 University Street, Lillis 477, Eugene, OR 97403, USA.  
Email: [aangulo@uoregon.edu](mailto:aangulo@uoregon.edu)

## Abstract

Six studies explore the psychology of borrowing and lending. Across two different contexts—friends lending to friends and taxpayers bailing out businesses—lenders are angrier with borrowers who specifically make hedonic (as opposed to utilitarian) purchases with loaned money. This anger is pronounced enough that lenders' negative feelings toward borrowers who made past hedonic (vs. utilitarian) purchases remains even after they have been fully repaid. Undergirding lender anger is *deserved oversight*—a novel construct capturing people's belief that they deserve control and say over another's decision-making. Borrowers and lenders do not agree on who deserves oversight over how the loaned funds are spent in large part because they differ in how much perceived ownership they each feel over the money. When lenders are yet to be repaid, their desire for oversight extends even to purchases made separately from the loaned amount. Finally, these processes and consequences are most powerful when money is lent compared with other forms of exchange, such as gifting money or being paid for work.

## KEYWORDS

deserved oversight, government bailouts, hedonic vs. utilitarian, lending, perceived ownership

Neither a borrower nor a lender be;  
For loan oft loses both itself and friend  
And borrowing dulls the edge of husbandry.  
—Shakespeare, 1992, Hamlet 1.3. 76-77.

## INTRODUCTION

Shakespeare and conventional wisdom warn against the monetary, emotional, and social risks of lending money. Despite the potential drawbacks of this form of monetary exchange, lending money is commonplace, from the transfer of several dollars to a friend to the loan of millions to corporations via taxpayer bailouts. Given the ubiquity of lending at both micro- and macrolevels, we explore the psychology of lending and borrowing money, examining when and why lending leads to relationship conflict and ill will between borrowers and lenders.

Existing research on lending has primarily focused on lending between strangers, examining the factors that

affect whether a given borrower will be offered a loan through peer-to-peer lending websites (Galak et al., 2011; Genevsky & Knutson, 2015; Herzenstein et al., 2011; Lin et al., 2013; Pope & Sydnor, 2011) or traditional off-line lending contexts involving scenarios with loan officers and bank clients (Sussman & Shafir, 2012). Thus, most of the research on lenders' decisions studies the factors that influence *to whom* the lender loans. The even smaller amount of research specifically on borrowers has explored factors that influence borrowers' perception of whether, and how much, to borrow (e.g., Shah et al., 2012).

## THEORETICAL BACKGROUND

### Lending is a unique exchange type, separate from gifting and paying

We propose that lending—amongst consumers or organizations—operates under unique expectations relative to other common forms of exchange, such as gifting and

paying. Under both gifting and paying, the transaction item—whether money or goods—transfers completely from one party to the other. Moreover, with both these types of exchanges, the transaction is complete once in the hands of the recipient. With lending exchanges, however, when the goods or money change hands, the transaction is not complete. Unlike the other two forms of exchange, lending involves “shared possession,” in which ownership of the good is temporarily held by the receiver (Belk, 2010). Borrowers, unlike payees or gift recipients, know they must return the good. Lenders experience a temporary loss of the good when they lend but anticipate its return. We argue these feelings of ownership keep lenders invested in how the funds are being used. Lenders anticipate being repaid, which is one of the central reasons they remain vigilant observers of how the borrower uses the funds. Due to this sense of ownership and the increased vigilance that follows from it, we propose lenders are sensitive to the nature of what the borrower purchases.

### **Lenders have stronger emotional reactions when borrowers make hedonic versus utilitarian purchases**

Research has examined how two dimensions of product characteristics—hedonism and utilitarianism—can be influential in affecting consumer choice, satisfaction, and preferences (Batra & Ahtola, 1991; Mano & Oliver, 1993). While researchers have unpacked what drives consumers' interest in consuming hedonic and utilitarian goods, few have unpacked the consequences we feel when *others* consume hedonic (vs. utilitarian) goods. In this work, we propose a lender will react more negatively to borrowers who engage in hedonic (vs. utilitarian) consumption. This may be in part due to the expectations of borrowing such that lenders might assume a person would not borrow unless that person sees it as a necessity. Therefore, lenders may view hedonic purchases by borrowers as particularly indulgent, which in turn should lead lenders to experience negative emotions such as anger, disappointment, and sadness.

### **Repayment does not make lenders whole**

While we propose the nature of the product (hedonic vs. utilitarian) is one factor that influences lenders' affective reactions and dissatisfaction with the transaction, it remains likely that other factors may assuage lenders' negative feelings. Once the lender is repaid, the shared ownership experience ends. Therefore, one might predict, upon being repaid, lenders may not be affected to learn how the borrower spent the loaned funds. However, we propose lenders are likely to still be more upset with borrowers who made hedonic (vs. utilitarian) purchases even following repayment. We propose lenders' negative

emotions are driven by more than the mere state of financial indebtedness. Lenders may feel they are forgoing the use of the loaned funds and perhaps feel this austere sacrifice should be reciprocated by the borrower with a utilitarian purchase. Lenders may also be angry due to their perception that borrowers engaged in indulgent choices that the lenders might not make even for themselves.

### **Lenders want oversight—control and say—over how the borrower spends**

We propose lenders believe they deserve some level of control and say over borrowers' consumption decisions, a construct we refer to as *deserved oversight*. This concept is distinct from those in the advice-giving literature assessing the relative weight decision-makers give their own versus their advisors' opinions (Bonaccio & Dalal, 2006; Sniezek & Van Swol, 2001; Yaniv & Kleinberger, 2000). Deserved oversight is a personal belief that one should have influence over someone else's decision. Specifically in the current research, it is the belief that one is owed relative decision authority over another person's purchase. We suggest that lenders believe they deserve more oversight over borrowers' spending relative to how much borrowers believe lenders deserve oversight. We argue that deserved oversight is a principal driver of the anger that lenders feel when borrowers make hedonic purchases. That is, the more lenders believe they should have decision-making authority over how the borrower spends the loaned funds, the greater the opportunity for a negative emotional reaction to what the borrower purchases.

### **Deserved oversight is undergirded by asymmetric feelings of ownership**

The “shared possession” characteristic of borrowing (Belk, 2010) creates opportunities for both lenders and borrowers to feel ownership over the target funds. A rich literature has established feelings of ownership exist outside the legal definition of ownership (e.g., Beggan, 1992; Peck & Shu, 2009; Pierce et al., 2003). For example, shared or distributed feelings of ownership are related to psychological ownership (Pierce et al., 1992), mere ownership (Brehm, 1956), and perceived ownership (Peck & Shu, 2009).

Researchers have found that stronger feelings of ownership beget stronger expectations of control (Belk, 1988; Pierce et al., 2003). Thus, we propose the extent to which lenders believe they deserve oversight—control and say—over the consumption activity of the borrower is informed by the ownership that lenders continue to feel over the loaned funds. From the borrower perspective, they, too, are likely to feel ownership over the funds, albeit perhaps less strongly than the primary owner (Bagga et al., 2019). Importantly, borrowers are often in physical possession of

the loaned funds. This directly relates to borrowers' feelings of ownership, as past work finds the role of haptic touch to directly influence consumers' feelings of perceived ownership (Peck & Shu, 2009). Thus, when the loaned funds are cash and physically in the hands of the borrower, perceived ownership should be relatively high and thus inform their beliefs that they deserve more control and say over how they spend it. Even in cases where financial loans are made digitally, borrowers have the experience of observing the loaned amount in their accounts, thus making them feel like the owners of these funds.

Freedom to control one's possessions is a key characteristic of ownership (Furby, 1978), so if both lenders and borrowers feel perceived ownership, then they both expect to control how the funds are spent. Thus, we suggest that an asymmetry in feelings of perceived ownership between lenders and borrowers should be a key driver of their asymmetric perceptions of who deserves oversight over how the loaned money is spent.

### Extensions of oversight

Relevant to this discussion of ownership and oversight is how lenders might mentally account (Thaler, 1999) for the loaned funds and whether their accounting helps explain their expectations and behavior. On the one hand, it is theoretically possible that lenders mentally account for the loaned money in a very narrow sense—that is, they might only feel they deserve oversight over what borrowers choose to consume with the exact funds they loaned to borrowers. However, because money is a very fungible resource, once the loaned funds are integrated into the borrower's account, it is difficult for either party to tell apart money that belonged to the borrower and the new funds provided by the loan. Given this difficulty, we hypothesize lenders will take a broader view in terms of accounting or bracketing (Read et al., 1999) the decisions they believe they deserve oversight over. As a result, we anticipate that lenders—prior to repayment—will feel they deserve oversight over what borrowers choose to consume with money that has clearly come from other sources, such as a bonus from the borrowers' employer. Consistent with this pattern of deserved oversight, lenders should have emotional reactions consistent with our previous theorizing, such that if a borrower uses these new funds (e.g., secured through an external financial windfall; Thaler, 1999) to purchase a hedonic product before the loan is repaid, lenders will be angrier than if the borrower had made a utilitarian purchase.

### Contexts of lending: Interpersonal and business

Lending transactions can occur at both micro consumer-to-consumer levels as well as more macro settings such as governmental business loans in the form of bailouts.

An open empirical question is whether lenders and borrowers operate with similar expectations at these two distinct levels.

At the microlevel, research suggests that friends generally tend to be less likely to incorporate market-like expectations in their exchanges due to the communal nature of such relationships. Previous research has identified market and communal relationships come with unique acceptable types of currency for exchange (Clark & Mills, 1993; Fiske, 1992; Fiske & Tetlock, 1997; Heyman & Ariely, 2004). One characteristic of communal relationships is “people do not keep track of who gives what to whom, there is no bookkeeping of obligations, and no debts are incurred” (Fiske & Tetlock, 1997, p. 265). When relationships are characterized as market-oriented, they follow more common monetary business relationships with tracking of expenses. When friends borrow and lend money, they merge these two relationship categories and lay the groundwork for potential conflict. The difficulty for the consumer lies in the ambiguity of which role to partake in—the friend who does not bookkeep, or the one who expects a timely repayment and some level of decision-making authority over the borrower's consumption decisions.

At the macrolevel, our account suggests that when taxpayers make loans to businesses through government bailouts, they are likely to be angered when those borrowers spend bailout funds on hedonic (vs. utilitarian) purchases. While taxpayers who lend may have these expectations, evidence from prominent news stories suggest businesses who are bailed out do not share these expectations and assume they should have complete autonomy over what to consume with the loaned money. For example, in 2008, following a substantial bailout, AIG hosted an indulgent golf and spa weekend for their clients, much to the disappointment and frustration of taxpayers (Keegan, 2008). AIG defended their behavior as a regular business practice and argued that because they had every intention to pay back the loan, how they used the money in the meantime was of no consequence. Many consumers and US politicians disagreed and were outraged at the “greed,” with some members of the public even taking to threatening executives with violence (Javers et al., 2009). These examples suggest a disconnect exists amongst taxpayers and the businesses they bail out, which we suggest is informed by underlying asymmetries in perceived ownership and oversight at this more macro level of lending.

Although government and interpersonal lending operate on very different scales, and potentially in the context of very different forms of relational exchange, we argue that the central processes and affective outcomes occurring in both contexts are similar.

### Contributions

We offer the first systematic experimental investigation into borrowing and lending expectations. We examine

perceptions of deserved oversight and how this novel construct relates to lender anger, and we explore the asymmetry between borrowers' and lenders' perceptions of deserved oversight and perceived ownership over the loaned funds. This work sheds light on how lending relationships can go awry, which is informed by the unique expectations and beliefs each party brings to the table. Survey data offers correlational evidence that negative lending experiences can have a damaging effect on the personal relationship between lenders and borrowers (Dezsó & Loewenstein, 2012); we experimentally manipulate factors of the lending experience to offer causal evidence for when and why lending is most pernicious.

We note that our research contributions build on, but also differ substantively from, a related body of work that examines how individuals make judgments about the purchase decisions of those with very low income, especially welfare recipients.

Prior research suggests consumers pass harsher judgment on the purchases made by a very low (vs. high)-income earner because they expect that individual to have fewer necessities, and thus, a smaller amount of that person's purchases is deemed "necessary" (Hagerty et al., 2022; Hagerty & Barasz, 2020). Relatedly, eco-conscious or ethical products are deemed indulgent expenses, and expected to be both out of reach and less moral, for low-income earners to purchase (Olson et al., 2016). Additional work shows that very low-income individuals are not just judged harshly for how they spend their money, but also for how they spend their time. Specifically, recipients of government support who spend their time volunteering to help others are perceived negatively because they could be using that time to earn more money instead (Olson et al., 2021).

There are a number of important differences between the prior work and the current investigation. First, although both examine individuals' reactions to others' purchases, our work goes beyond judgments of consumers in lower income brackets. Of course, some lending transactions certainly are predicated on one party being of a significantly lower income bracket. However, in the domain of interpersonal lending amongst friends, because individuals tend to be friends with those who share their socioeconomic status (Chetty et al., 2022), financial differences amongst borrowers and lenders are often short-lived and unlikely to be the result of drastic income differences. Second, whereas prior work has focused on individual consumer spending, in the current work, we not only focus on the effects of individual consumer spending choices within a new context (i.e., a loan relationship), but also explore the new territory of the effects of business spending in the context of government loans and bailouts.

A third contribution of the current work is the novel construct of deserved oversight. Whereas the prior research has focused primarily on a participant's judgments

of how low-income consumers spend their own limited time and money, our work examines the psychological perception of deserved control that lenders have over how the borrower should spend the funds and investigates the role it plays in negative affective reactions toward the borrower. Fourth, we link deserved oversight to another construct not examined in that prior research: perceived ownership (Peck & Shu, 2009). We show perceptions of who feels like the owner of the loaned funds undergirds the feelings of deserved oversight. Finally, whereas prior work primarily examined perceptions of one party—the low-income consumer, who in many cases was the recipient of government aid—our last study examines the perceptions of two parties—both the lender and the borrower—and uncovers an asymmetry between the two.

In sum, while there is existing work on how consumers judge others' consumption, the current investigation showcases consumers' reaction to how their money in particular is spent, a condition only held when money is loaned and not paid or gifted.

## OVERVIEW OF CURRENT RESEARCH

Six studies examine the psychology of borrowing and lending. Study 1 tests whether lenders (vs. gift-givers or payers) have differential emotional reactions to learning how the receiver spends the transferred funds (i.e., on something hedonic versus utilitarian). Study 2 tests whether lender anger towards borrowers who make hedonic (vs. utilitarian) purchases persists in the face of repayment. Study 3 explores the mediating role of deserved oversight in explaining lenders' anger toward borrowers' leaning toward making a purchase that is framed as hedonic (vs. utilitarian). Study 4 explores an extension of deserved oversight by introducing money external to the initial loan relationship, testing whether lenders feel they deserve oversight even over these new funds and if they have similar negative reactions to borrowers' hedonic purchases. Study 5 replicates earlier studies in a new context: taxpayers and small business owners receiving taxpayer funded bailouts. Study 6 demonstrates an asymmetry between borrowers and lenders both in their perceptions of deserved oversight and who they feel is the owner of the funds.

## STUDY 1

Study 1 investigates the anger lenders have toward borrowers' decisions to spend loaned funds on hedonic versus utilitarian purchases. We also aimed to test the hypothesis that lending (vs. gifting or paying) is a unique form of exchange in that people who parted with their money will be angrier in response to hedonic spending of the funds when the funds have been loaned (as opposed to gifted or paid).

## Methods

Based on a pilot test that compared hedonic versus utilitarian purchases on a spectrum, we decided at minimum to collect 75 individuals per cell. Five hundred participants were recruited on Prolific Academic and paid \$0.95 for 6 min of their time. The final sample ([AsPredicted #127670](#)) consisted of 460 participants (257 females,  $M_{\text{age}} = 35.69$ ,  $SD = 12.03$ ).

Participants read one of six scenarios in which they imagined transferring money to a friend, in a 3 (exchange type: payment, loan, gift) by 2 (recipient purchase type: hedonic vs. utilitarian) between-participants design.

The manipulation of exchange type was provided to participants in the first sentence of the scenario:

*Gift:* “Imagine that one day, you give your friend a gift of \$60 cash.”

*Lend:* “Imagine that one day, you loan your friend \$60 cash.”

*Pay:* “Imagine that one day, you pay your friend \$60 cash for work they did for you.”

Next participants read, “...You go several weeks without seeing your friend. The next time you see them, you ask them what they did with the money.” Participants then read what their friend purchased, and this product was manipulated by condition:

*Utilitarian:* “They show you the book they bought for a class.”

*Hedonic:* “They show you the video game they bought.”

After reading the scenario, participants were asked “To what extent would having this conversation with your friend make you feel angry?” on a 9-point Likert scale, ranging from 1 (Not at All) to 9 (Very Much).

## Manipulation checks

Next, participants answered 12 items (adapted from Voss et al., 2003) on a 7-point scale from 1 (Not at All) to 7 (Extremely) to assess the dimensions of hedonism and utilitarianism of the product the recipient purchased. Items asked participants, “To what extent would you say the following product is enjoyable/unenjoyable/fun/not fun/dull/exciting/helpful/unhelpful/productive/unproductive/useful / not useful.” The enjoyable, fun, exciting, measures were combined with the reverse scored items of unenjoyable, not fun, and dull to create a composite of hedonism ( $\alpha = 0.87$ ). The helpful, productive, and useful measures were combined with the reverse scored items of unhelpful, unproductive, and not useful to create a composite of utilitarianism ( $\alpha = 0.88$ ).

Lastly, participants answered demographics questions, whether they participated in a similar study

before, whether they have loaned money to a friend before, whether they have purchased the item their friend ultimately purchased, and the pre-registered exclusion measures. These exclusion measures included identifying the correct monetary amount exchanged, what product the recipient ultimately purchased, and an attention check paragraph (detailed in [AsPredicted #127670](#)).

## Results

### Manipulation checks

The composite measures confirmed the manipulations. An independent t-test confirmed participants viewed the textbook for class as more utilitarian ( $M = 3.86$ ,  $SD = 0.30$ ) than the video game ( $M = 2.99$ ,  $SD = 0.75$ ,  $t(458) = 16.28$ ,  $p < 0.001$ ). Conversely, participants saw the video game as more hedonic ( $M = 3.78$ ,  $SD = 0.41$ ) than the textbook for class ( $M = 3.04$ ,  $SD = 0.81$ ,  $t(458) = -12.51$ ,  $p < 0.001$ ).

### Anger

A two-way analysis of variance yielded main effects of exchange type,  $F(2, 459) = 55.61$ ,  $p < 0.001$ ,  $\eta^2_{\text{Part}} = 0.20$ , and recipient purchase type,  $F(1, 459) = 40.51$ ,  $p < 0.001$ ,  $\eta^2_{\text{Part}} = 0.08$ , as well as a significant interaction between exchange type and recipient purchase type,  $F(2, 459) = 15.41$ ,  $p < 0.001$ ,  $\eta^2_{\text{Part}} = 0.06$ .

Simple effects tests indicated when money was exchanged as a loan, participants' anger significantly differed toward recipients who made a hedonic purchase ( $M = 4.36$ ,  $SE = 0.25$ , 95% CI [3.864, 4.857]) versus those who made a utilitarian purchase ( $M = 2.24$ ,  $SE = 0.20$ , 95% CI [1.852, 2.619]),  $\mu_{\text{diff}} = 2.12$ ,  $SE = 0.26$ , 95% CI [1.345, 2.904],  $p < 0.001$ ,  $\delta = -1.03$ . When recipients were paid or gifted the money, there were no significant differences between participants' anger toward recipients who made hedonic versus utilitarian purchases, ( $p = 1.00$ ,  $\delta = -0.04$ ) and ( $p = 0.06$ ,  $\delta = -0.51$ ) respectively ([Figure 1](#)).

It is noteworthy that there were differences in anger across exchange types even towards utilitarian purchasers. Specifically, lenders expressed more anger than gift-givers ( $p = 0.007$ ,  $\delta = 0.76$ ) and marginally more than payers ( $p = 0.08$ ,  $\delta = 0.52$ ). However, when recipients made hedonic purchases, lenders were significantly angrier than gift-givers and payers ( $ps < 0.001$ ,  $\delta s > -1.10$ ). Regardless of recipient purchase, gift-givers were not angrier than payers ( $ps > 0.52$ ).

## Discussion

Study 1 demonstrated lenders (vs. gift-givers or payers) were much angrier thinking about a friend making a hedonic purchase compared to a utilitarian one. This

evidence suggests lending is a unique form of exchange characterized by different emotions, norms, and relationships than the types of exchanges more commonly studied in the literature. Of note, we were surprised to find that gift-givers seemed to be somewhat angrier when the borrower made a hedonic purchase compared with a utilitarian one. Although it is speculative, we propose the reasoning for this pattern lies in the language of the scenario. In the gift-giving scenario, there was no specific cause for celebration mentioned (e.g., birthday) or other rationale provided for giving the gift. This could have led participants to infer that they gifted the money to their friend because the friend needed the money—something akin to a loan but without a request for payback. Nonetheless, it is important to note that the difference in participant anger between hedonic and utilitarian conditions when the money was gifted was not significant and was far weaker than the difference when the money was loaned.

We also note that we did not specifically predict that, amongst those in the utilitarian condition, lender anger would be elevated above gift-givers and payers. However, upon reflection, this may have been due to the fact that the scenario did not specify a time line of repayment or whether the loan had been repaid or not. This unpaid loan status could also be a principal driver of lender anger toward borrowers who made hedonic purchases. One purpose of Study 2 was to examine the role that returning the loan (vs. not) might play in lenders' emotional responses.

## STUDY 2

In Study 1, lenders had not been repaid at the time they learned about borrowers' consumption decision; thus, it is possible the lack of loan repayment may be the sole driver of lenders' negative affect. In Study 2, we vary whether the loan had been repaid when lenders learn

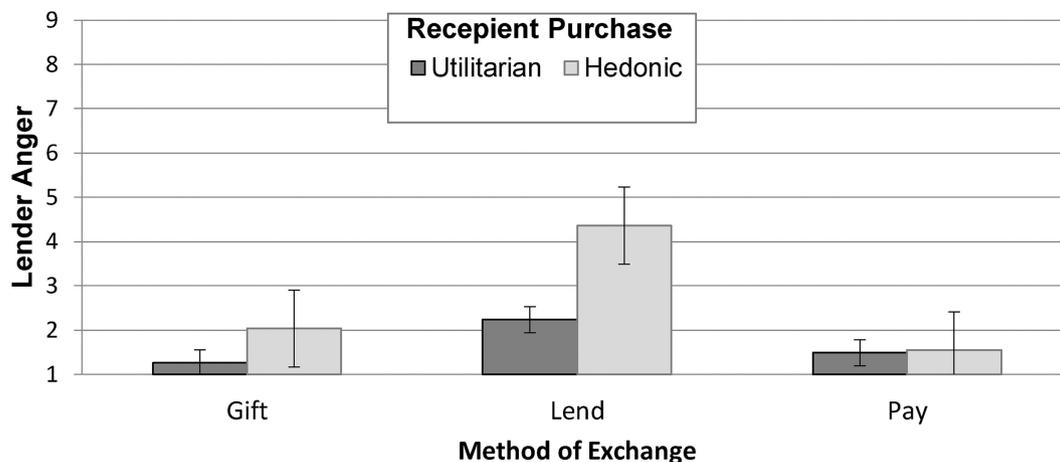
about borrowers' consumption decisions. We expected that lenders' anger with borrowers who make a hedonic (vs. utilitarian) purchase would be most intense when the borrower had not yet repaid the lender. Although we expected repayment of the loan to attenuate the overall level of anger, even when loans had been repaid—in a sense making the lender financially “whole”—we expected lenders would not be made emotionally “whole” and would still be angry to learn that borrowers had made a hedonic (vs. utilitarian) purchase.

## Methods

Three hundred participants (125 females,  $M_{age} = 33.89$ ,  $SD = 11.11$ ) were recruited through Amazon Mechanical Turk and paid \$0.45 to read one of four scenarios in which they imagined loaning money to a friend, in a 2 (borrower purchase type: hedonic vs. utilitarian) by 2 (loan status: repaid vs. not repaid) between-participants design. Participants read that they loaned \$60 to their friend. Next, they read either their friend (the borrower) made a hedonic or utilitarian purchase; in addition, participants either read that the borrower repaid or had yet to repay the loan:

Imagine that one day, you give your friend a loan of \$60 cash. You go several weeks without seeing your friend. The next time you see him, you ask him what he did with the money. He (returns the money to you and) shows you the \$60 worth of iTunes music he bought (\$60 textbook he bought for his class).

As in Study 1, after reading the scenario, participants were asked “To what extent would having this conversation with your friend make you feel angry?” on a 9-point Likert scale, ranging from 1 (Not at All) to 9 (Very Much).



**FIGURE 1** Anger as function of exchange type and nature of the recipient's purchase. Bars represent standard error.

## Results

A two-way analysis of variance yielded a significant main effect of borrower purchase type on lender anger,  $F(1, 296)=91.51, p<0.001, \eta^2_{\text{Part}}=0.236$ , a significant main effect of loan repayment status,  $F(1, 296)=29.37, p<0.001, \eta^2_{\text{Part}}=0.09$  and a significant interaction between borrower purchase type and loan status,  $F(1, 296)=9.33, p=0.002, \eta^2_{\text{Part}}=0.031$  (See [Figure 2](#)).

We conducted simple effects analyses to examine whether participants reported more anger with a borrower who made a hedonic purchase than a utilitarian purchase as a function of loan repayment status. When borrowers had not yet repaid the loan, lenders were angrier with borrowers who made a hedonic purchase ( $M=5.88, SE=0.26, CI [5.372, 6.391]$ ) compared to those that made a utilitarian purchase ( $M=2.61, SE=0.26, CI [2.069, 3.109]$ ),  $\mu_{\text{diff}}=3.29, SE=0.37, 95\% CI [2.564, 4.021], F(1, 296)=79.18, p<0.001, \eta^2_{\text{Part}}=0.211$ . Although the size of the effect was larger when the loan had gone unpaid, consistent with predictions, even when the loan *had been repaid* there were significant differences in anger as a result of what the borrower purchased,  $\mu_{\text{diff}}=1.70, SE=0.37, 95\% CI [0.975, 2.423], F(1, 296)=21.32, p<0.001, \eta^2_{\text{Part}}=0.067$ . Specifically, participants were angrier with borrowers who made a hedonic purchase ( $M=3.67, SE=0.25, CI [3.171, 4.171]$ ) compared to those who made a utilitarian one ( $M=1.97, SE=0.27, CI [1.449, 2.496]$ ), even when the loan had been repaid.

## Discussion

Study 2 found even when loans had been repaid, lenders were angrier with borrowers who made a hedonic (vs. utilitarian) purchase. This suggests that lenders' negative emotions are driven by more than mere financial indebtedness.

## STUDY 3

Although lenders cede physical control of their money upon making a loan to a borrower, we argue they retain a residual belief they should have some decision-making authority (i.e., deserved oversight) over how that money is spent. Study 3 explores how such feelings of deserved oversight drive lenders' anger toward borrowers. Another purpose of Study 3 was to generalize the central results of the prior studies under different circumstances. For example, in the prior studies, the hedonic and utilitarian items were different categories of items (i.e., music or a videogame for hedonic, and textbook for utilitarian), whereas in the current study, the item the borrower was considering purchasing was the same in both conditions (a used car). Moreover, unlike in the prior studies,

we sought to generalize the prior results by making the loaned amount less than the total cost of the purchase. In this context, our examination of deserved oversight would likely be conservative since at least a portion of the cost of the purchase comes from the borrower's personal funds (rather than the lender funding the entire purchase).

## Methods

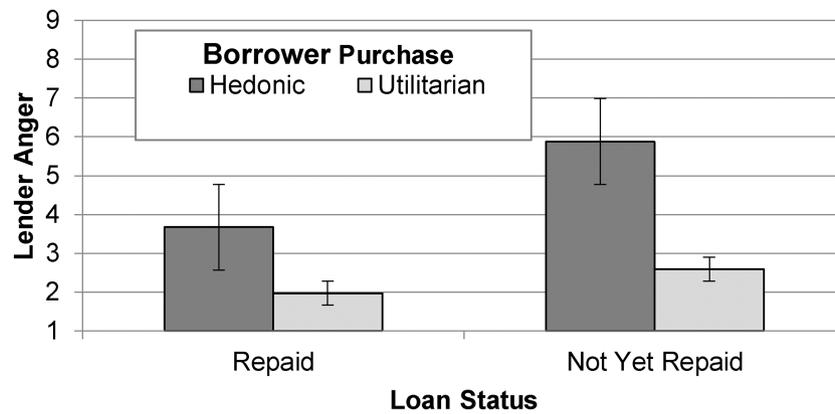
Two hundred and thirty-four participants (176 females,  $M_{\text{age}}=21.79, SD=3.82$ ) recruited through a university's online behavioral laboratory completed the survey online for \$1 payment. Study 3's methods included some notable exceptions to the previous studies. First, whereas in Study 1 and 2, the manipulation of hedonic or utilitarian purchase was based on different product categories (music and videogame vs. a textbook), in Study 3 the same product category was used—a used car—and what varied by condition was the extent to which it had more utilitarian or more hedonic features. Second, to isolate lenders' feelings about how the loan *should* be spent, a scenario was used in which borrowers had not yet made their purchase: Lenders were told that borrowers were leaning toward purchasing either a hedonic or utilitarian used car and were asked to provide their opinions at that time point.

Participants were randomly assigned to read one of two scenarios, which varied the borrower's intended purchase type (hedonic vs. utilitarian):

Imagine your friend needs help buying a used car. You loan them \$3,500 of the \$5,000 they need to purchase a car. Among the many cars in consideration, your friend is strongly leaning toward purchasing a sedan (sports coupe) that gets good gas mileage and is highly dependable but not particularly fun to drive (that gets not so good gas mileage and isn't particularly dependable but is fun to drive). Your friend is hoping to purchase a car in the next week.

## Deserved oversight

Participants completed two items assessing how much control and how much say they should have (in relation to their friend) over the purchase decision, on an 11-point scale, ranging from “1 (the lender should have none (0%) of the control and the borrower should have all (100%) of the control)” to “11 (the lender should have all (100%) of the control and the borrower should have none (0%) of the control.” The two items (one with the word *control* and one with the word *say*) were combined ( $\alpha=0.85$ ) to create a composite measure of deserved oversight.



**FIGURE 2** Lenders' anger with borrowers as a function of borrower purchase type and loan repayment status.

## Additional dependent variables

Next, participants answered, “How angry would you be if your friend ended up buying the car they are leaning toward?” on a 7-point scale ranging from 1 (Not at All) to 7 (Extremely). Using the same scale as the anger item and informed by past correlational research that bad lending experiences can damage interpersonal relationships (Dezsó & Loewenstein, 2012), participants responded to, “If your friend ended up purchasing the car they are leaning toward, to what extent would it negatively affect your relationship with your friend?” Next, participants answered two manipulation check items that assessed how “indulgent” and “necessary” the participant viewed the product their friend ended up purchasing. Following these items were exploratory and demographic items (detailed in Appendix S1). To better understand our participants' experience with the lending process, participants were asked two yes or no questions: “Outside of the scenario you read today...Have you ever loaned money to a friend before?” and “Have you ever borrowed money from a friend before?”

## Results

### Lenders' experience with lending and borrowing

77% of participants reported experience loaning money to a friend and 70% reported experience borrowing from a friend.

### Manipulation check

An independent *t*-test confirmed participants viewed the sedan as significantly more necessary ( $M=4.78$ ,  $SD=1.27$ ) than the sports coupe ( $M=2.41$ ,  $SD=1.28$ ,  $\mu_{diff}=2.38$ ,  $SE=0.17$ , 95% CI [2.04, 2.71]),  $t(228)=14.11$ ,  $p<0.001$ ,  $\delta=1.86$ . Conversely, participants saw the sports coupe as significantly more indulgent ( $M=5.22$ ,  $SD=1.51$

than the sedan ( $M=2.61$ ,  $SD=1.35$ ,  $\mu_{diff}=-2.60$ ,  $SE=0.19$ , 95% CI [-2.97, -2.22],  $t(228)=-13.79$ ,  $p<0.001$ ,  $\delta=-1.82$ ).

### Deserved oversight

Also in line with predictions, lenders believed they deserved more oversight over the borrower's decision when the borrower was leaning toward the hedonic car ( $M=4.03$ ,  $SD=2.15$ , CI [3.650, 4.411] compared to the utilitarian car ( $M=3.06$ ,  $SD=2.00$ , CI [2.683, 3.447]),  $\mu_{diff}=-0.97$ ,  $SE=0.27$ , 95% CI [-1.504, -0.426],  $t(228)=-3.53$ ,  $p<0.001$ ,  $\delta=-0.46$ ).

### Relationship

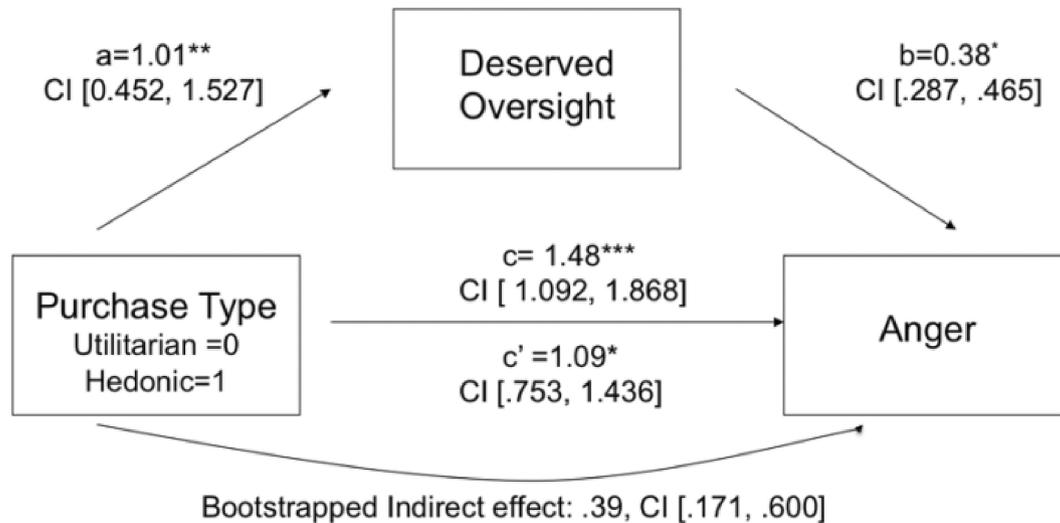
An independent *t*-test confirmed participants believed friends who made hedonic purchases ( $M=2.60$ ,  $SD=1.51$ ) were more at risk of negatively affecting the friendship than those who made utilitarian purchases ( $M=1.55$ ,  $SD=1.20$ ),  $\mu_{diff}=-1.05$ ,  $SE=0.18$ , 95% CI [-1.41, -0.70],  $t(228)=-5.83$ ,  $p<0.001$ ,  $\delta=-0.77$ .

### Anger

Consistent with predictions, lenders reported they would be significantly angrier if the borrower purchased the hedonic car ( $M=3.16$ ,  $SD=0.14$ , CI [2.882, 3.420]) compared to a utilitarian one ( $M=1.68$ ,  $SD=1.27$ , CI [1.400, 1.951]),  $\mu_{diff}=1.48$ ,  $SE=0.20$ , 95% CI [-1.868, -1.092],  $t(228)=-7.52$ ,  $p<0.001$ ,  $\delta=-0.99$ .

### Mediation

We tested whether the relationship between purchase type and anticipated lender anger with the borrower was mediated by lenders' feelings of deserved oversight (Hayes, 2009; Preacher & Hayes, 2004). The direct effect



**FIGURE 3** Lenders' feelings of deserved oversight mediate the relationship between purchase type and lenders' anticipated anger. Coefficients are standardized. \* $p < 0.001$ , \*\* $p < 0.0002$ , \*\*\* $p < 0.0001$ .

of purchase type (with utilitarian coded 0 and hedonic coded 1) was positively associated with anger ( $B = 1.479$ ,  $SE = 0.195$ ,  $p < 0.001$ ). This effect was reduced when deserved oversight was introduced ( $B = 1.094$ ,  $SE = 0.173$ ,  $p < 0.001$ ). Deserved oversight had a significant positive effect on lender anger ( $B = 0.382$ ,  $SE = 0.0462$ ,  $p < 0.001$ ). Bootstrapping the standard errors (with 1000 samples) yielded a 95% bias corrected confidence interval that did not include zero [0.285, 0.466] for the indirect effect of oversight on purchase type and lender anger (Figure 3).

## Discussion

Study 3 made two contributions. First, whereas the manipulations of hedonic versus utilitarian purchases in the prior studies involved completely different product categories, the product category in Study 3 was kept constant (e.g., a used car) across conditions. Second, Study 3 identified one motivation of lenders' anger with borrowers who make hedonic (vs. utilitarian) purchases. Lenders who learn their friend is leaning towards a hedonically framed product believe they deserve more control and say over the borrower's eventual purchase decision. This belief that they deserve oversight, in turn, mediates how angry lenders feel when they think of their friend actually making the hedonic (vs. utilitarian) purchase.

## STUDY 4

Study 3 established lenders believe they deserve oversight over how borrowers spend the money lenders loaned. Study 4 tests whether lenders believe they deserve oversight over new money the borrower earns outside of the loan relationship. We predict that not only will lenders believe they deserve oversight over how these new funds

are spent but will also be upset with borrowers who use these new funds to make a hedonic (vs. utilitarian) purchase.

Study 4 differs from the prior studies in other meaningful ways. First, one methodological distinction in Study 4 relates to the timing of when participants were asked to indicate their level of deserved oversight. In Study 3, deserved oversight was measured only after participants were clued into the purchase that the borrower was leaning toward. In the current study, we sought to capture participants' sense of deserved oversight independent of this information by asking it prior to the revelation about how the loaned funds were spent. Therefore, the key manipulation—what the borrower purchased—was revealed only after the deserved oversight measures. Second, to provide a more robust understanding of lenders' emotional reactions, we also include emotional measures beyond anger in this investigation following the reveal of the borrower purchase. Finally, unlike in previous studies where participants imagined scenarios with their real-life friends, participants in Study 4 were introduced to a borrowing and lending scenario as a third-person observer between two friends. This was done to reduce participant biases, prevent the results from being tainted by the specifics of individual friends chosen, and to see whether the prior effects would replicate when participants are assessing how others would respond as opposed to themselves.

## Methods

Four hundred hits were posted to Prolific for \$0.81 compensation. Four hundred and seven individuals (53.07% females,  $M_{age} = 31.02$ ,  $SD = 11.32$ ) completed the survey in full. Participants were told that they would be reading a scenario involving two friends—a lender and a

borrower—and they were encouraged to take the perspective of the lender throughout the study.

All participants were introduced to the story of Beth (the borrower) and Laura (the lender):

Imagine Laura has recently experienced a financial surplus. She doesn't expect it to last long. Laura already had plans today to meet up with her friend, Beth. During their meeting, money comes up as a topic and Laura shares that she has recently come into some money and is looking to help someone in need. Beth shares she is concerned about paying some of this month's bills. Laura offers to loan Beth some money, and after some hesitation on Beth's part, Beth ultimately agrees to take Laura up on her offer.

Next, interspersed by relevant clipart images (see Appendix S1) to increase participants' attention, participants read:

Today Laura loans Beth \$1000 and Beth agrees to pay Laura back in two months. Beth paid her bills with Laura's help. A month passes and there is one month remaining until Beth needs to pay back Laura. Today, while Laura was scrolling through social media, she saw Beth had been tagged in a post. The company Beth works for was celebrating by sharing the news of everyone's new \$100 bonus. **Beth commented on the post by saying she was excited to purchase food and drinks with the bonus.**

## Deserved oversight

Prior to the introduction of the manipulation (the borrower's hedonic vs. utilitarian purchase), participants were asked to think of the \$100 bonus and were specifically asked to indicate how they believed Laura would answer, “How much control/say should you (the lender) have over how Beth (the borrower) spends this bonus?”, using the 11-point scale ranging from 1 “0%-Laura should have NONE of the control/say and Beth should have ALL of the control/say” to 11 “100%-Laura should have ALL of the control/say and Beth should have NONE of the control/say” ( $\alpha=0.94$ ). Higher numbers on the scale therefore reflect more deserved oversight for the lender compared to the borrower.

Next, participants were reminded there was one month remaining for Beth to pay Laura back. Then, participants were randomly assigned between subjects to learn what Beth purchased (e.g., hedonic vs.

utilitarian). The text read, “Later that week, Beth used \$80 of the \$100 bonus to purchase food and drinks for her party (vs. for her home).” The same clipart image of groceries was displayed to participants in both conditions.

## Emotion measures

Participants then indicated how intensely they believed Laura would feel the following four emotions (one question for each emotion) upon hearing what Beth purchased using a scale of 1 (Not at all) to 9 (Very Much), participants answered, “How angry/sad/disappointed/hurt ( $\alpha=0.95$ ) do you believe Laura (the lender) would be to learn of Beth's (the borrower) purchase?”

## Results

### Deserved oversight

Participants predicted the lender within the scenario would want some level of decision-making authority over how the borrower spends their \$100 work provided bonus on an average of  $M=3.24$ ,  $SD=0.43$ ,  $CI [2.957, 3.522]$ .

### Anger

Lenders reported being significantly angrier if the borrower purchased food and drinks for her party ( $M=4.24$ ,  $SD=2.42$ ,  $CI [3.91, 4.58]$ ) compared to when the food and drinks were for her home ( $M=3.14$ ,  $SD=2.23$ ,  $CI [2.83, 3.44]$ ),  $\mu_{diff}=-1.11$ ,  $SE=0.23$ , 95%  $CI [-1.559, -0.652]$ ,  $t(405)=-4.79$ ,  $p<0.001$ ,  $\delta=-0.47$ .

### Composite of other emotions

The three emotional measures outside of anger (sad, disappointed, hurt) were highly related ( $\alpha=0.94$ ) and were averaged together to create a composite of negative emotions. Lenders reported having stronger negative emotions when the borrower purchased food and drinks for her party ( $M=4.35$ ,  $SD=2.39$ ) than for her home ( $M=3.20$ ,  $SD=2.26$ ),  $\mu_{diff}=-1.16$ ,  $SE=0.23$ , 95%  $CI [-1.614, -0.700]$ ,  $t(405)=-4.98$ ,  $p<0.001$ ,  $\delta=-0.49$ .

### Regressions

The results of a simple linear regression predicting lender anger based on the amount of deserved oversight showed a significant relationship,  $F(1, 405)=166.77$ ,  $p<0.001$ , with an  $R^2=0.292$ .

Desire for oversight was positively related to the negative emotions composite. The results of a simple linear regression predicting the negative emotions composite based on feelings of deserved oversight showed a significant relationship,  $F(1, 405)=142.00, p<0.001$ , with an  $R^2=0.259$ .

## Discussion

This study shows that lenders believe they deserve some level of oversight over what borrowers consume with the funds that are obtained by sources external to the lending relationship. Moreover, it shows that lenders are emotionally affected by what the borrowers consume with these funds, with stronger negative reactions towards borrowers who use the external funds to make hedonic (versus utilitarian) purchases.

## STUDY 5

Study 5 adds two important dimensions to the psychology of borrowing and lending. First, it changes context, from interpersonal lending to larger-scale societal lending in the form of taxpayer-funded government loans. Second, it moves beyond self-report scale measures by employing a behavioral measure: individuals' willingness to write messages to government officials expressing their opinions on the loan bailout program.

## Methods

In a between-participants design, we manipulated the purchase type that the borrower (in this study, a business owner) was considering (hedonic vs. utilitarian).

Two hundred and forty-nine participants (105 female,  $M_{age}=34.83, SD=0.50$ ) were recruited from Amazon's Mechanical Turk and paid \$0.45 to participate in a short survey interested in "public opinion on a wide range of government programs." Participants were told they would be asked to read about one of three programs that purportedly would be determined randomly (in actuality, they all ended up reading about the last program):

One program involves re-allocating National Parks funds to support a 'Junior Ranger' program for young visitors to the parks. Another program involves federal subsidies for senior citizens who cannot afford transportation to work. The third program involves taxpayer-funded loans to small businesses.

All participants then read about "a federal program that involves taxpayer-funded loans to small businesses

that are experiencing financial difficulty." Next, participants were randomly assigned to read one of two descriptions about how a recipient of these loans was intending to spend the money. The hedonic condition was loosely based on the media report that, following their \$85 billion-dollar government bailout, AIG held a weeklong retreat for its executives (which included spa treatment charges up to \$23,000) at a resort (Whoriskey, 2008).

Participants read, "...using 30% of the loan, the business owner is considering a two-day..."

*Utilitarian:* "...conference for himself and his employees. The conference would take place in Lincoln, Nebraska and would consist of an intensive course on data aggregation using Excel spreadsheets, a recap of new company procedures, and a discussion about training practices."

*Hedonic:* "...morale conference for himself and his employees. The conference would take place in Las Vegas, Nevada and would consist of team building exercises. Some of these exercises would include golf, wine tastings, and spa treatments."

The deserved oversight measure was created from two questions assessing relative desire for control and say over the decision: "When it comes to spending the loan, how much control (say) should the government and the taxpayers have in the decision, relative to the business owner?" on an 11-point scale, ranging from 1 (0%—The government/taxpayers should have NO control/say and the business owner should have ALL (100%) of the control/say) to 11 (100%—The government/taxpayers should have ALL of the control/say and the business owner should have NONE (0%) of the control/say). The two items were averaged to create a measure of deserved oversight ( $\alpha=0.90$ ). Next, participants rated anger by answering: "How angry do you think the government and taxpayers would be if the business owner decided to go through with the conference they have planned?" on a 9-point scale ranging from 1 (Not at All) to 9 (Very Much).

Participants were then asked to indicate their approval of the government loan program. Approval was assessed with two questions, "How much do you like this program?" and "How much do you support the continuation of this program?" on a 9-point scale ranging from 1(Not at All) to 9 (Very Much). Next, participants were asked, "Would you contact your government representative to tell them to vote 'No' on this program?" with options "Yes" coded as 1 and "No" coded as 0. If participants indicated "Yes," then three subsequent text fields appeared: "zip code, your initials, and content of message." Participants were then free to craft a message to their representative.

Finally, participants completed two manipulation checks: "How useful is the conference to the employees' ability to conduct their work effectively?" (utilitarian)

and “How much fun do you think the employees will have at the conference?” (hedonic) on 7-point scales ranging from 1 (Not at All) to 7 (Very Much).

## Results

### Manipulation checks

Participants in the utilitarian conference condition rated the conference as more useful to employees ( $M=4.31$ ,  $SD=1.60$ ) than those in the hedonic conference condition ( $M=2.59$ ,  $SD=1.6$ ,  $\mu_{diff}=1.72$ ,  $SE=0.20$ ,  $CI [1.329, 2.114]$ ,  $p<0.001$ ). Moreover, the conference was rated as more fun for employees by participants who read the planned conference was hedonic ( $M=6.25$ ,  $SD=1.15$ ) compared to those who read it was utilitarian in nature ( $M=4.44$ ,  $SD=1.47$ ,  $\mu_{diff}=-1.81$ ,  $SE=0.17$ ,  $CI [-2.135, -1.478]$ ,  $p<0.001$ ).

### Lender anger

Consistent with the previous studies on interpersonal lending, participants who read that the business owner was planning a hedonic conference reported significantly more anger ( $M=7.35$ ,  $SD=1.91$ ) than those who read about the plans for a utilitarian conference ( $M=5.27$ ,  $SD=2.34$ ),  $t(247)=-7.68$ ,  $\mu_{diff}=-2.08$ ,  $CI [-2.612, -1.549]$ ,  $p<0.001$ ,  $\eta^2_{Part}=0.19$ .

### Deserved oversight

Participants felt the lender (i.e., taxpayers and government officials) deserved significantly more oversight when they read the borrower (i.e., business owner) was planning a hedonic conference ( $M=5.99$ ,  $SD=2.50$ ) compared to a utilitarian one ( $M=4.73$ ,  $SD=2.49$ ),  $t(247)=-3.96$ ,  $\mu_{diff}=-1.25$ ,  $95\% CI [-1.875, -0.629]$ ,  $p<0.001$ ,  $\eta^2_{Part}=0.06$ .

### Approval of the government program

Participants who read that the business owner was planning a utilitarian conference reported liking the government program significantly more ( $M=4.11$ ,  $SD=1.57$ ) than when the business owner was planning a hedonic conference ( $M=3.49$ ,  $SD=1.68$ ,  $t(244)=2.97$ ,  $\mu_{diff}=0.62$ ,  $CI [0.206, 1.023]$ ,  $p=0.003$ ,  $\eta^2_{Part}=0.03$ ). Additionally, support for the government program was significantly higher when the business owner was planning a utilitarian conference ( $M=5.06$ ,  $SD=2.22$ ) compared to a hedonic one ( $M=4.39$ ,  $SD=2.37$ ),  $t(247)=2.30$ ,  $\mu_{diff}=0.67$ ,  $CI [0.095, 1.241]$ ,  $p=0.023$ ,  $\eta^2_{Part}=0.02$ .

### Contacting government representative

A significantly greater percentage of participants indicated they would write to their representative to have them vote “no” on the government program providing loans to small business owners in the hedonic condition (37.3%) than in the utilitarian condition (22%),  $\chi^2(1, N=249)=7.022$ ,  $p=0.008$ . Similarly, 32.5% of participants in the hedonic condition took the time and effort to write a message to their representative (examples from participants include, “Stop wasting taxpayer money on corporate boondoggles,” and “Please discontinue this program. It is a waste of my hard earned money.”), which was significantly higher than the 17.1% of participants in the utilitarian condition who did so,  $\chi^2(1, N=249)=7.96$ ,  $p=0.005$ .

### Mediation

In line with one participant's sentiment in their message to their representative (“the government should have more control over this before passed”), the mediating role of deserved oversight was tested as the indirect effect between the relationship of conference type (hedonic vs. utilitarian) and lender anger. The indirect effect (yielded from 1000 bootstrapped samples) significantly mediated the relationship ( $B=0.32$ ,  $SE=0.121$ ,  $95\% Bias corrected CI [0.132, 0.628]$ ). The direct effect of conference type on lender anger remained significant ( $B=1.75$ ,  $SE=0.270$ , bias corrected  $95\% CI [1.23, 2.32]$ ).

### Path model

Using structural equation modeling, we tested a path model that used the type of conference (utilitarian vs. hedonic) to predict whether participants indicated they would contact their representative to urge them to vote against the bailout loan program's renewal, with deserved oversight and lender anger in the causal chain. The specific indirect effect tested whether the relationship between conference type (utilitarian vs. hedonic) and indicating they would urge their representative to vote against the program renewal was mediated by lender desire for oversight and lender anger. Table 1 outlines the indirect effects of interest for the path model. The direct effect of conference type on participants indicating they would urge their representative to vote against the bailout program renewal (not including any of the mediators) was  $B=0.749$ ,  $p<0.01$ , which dropped to  $B=0.03$ ,  $p=0.93$ , when oversight and anger were included as mediators, suggesting full mediation (Table 1 and Figure 4). An alternative yet similar in results path model testing the influence of purchase type, lender oversight, and anger on participants' choice to write an actual message to their government representative is reported in Appendix SI.

## Discussion

Study 5 demonstrated lenders were less satisfied with borrowers who intended to make hedonic (vs. utilitarian) purchases at a more macro societal level: business owners spending government loans. Moreover, this dissatisfaction motivated a behavioral response in the form of written messages to political representatives.

## STUDY 6

Having established the differential impact of borrowers making hedonic vs. utilitarian purchases with loaned money in the previous studies, Study 6 shifts the focus to investigate asymmetries between lenders and borrowers' psychologies by having participants take on the role of each party. Study 6 also explores the underlying mechanism driving feelings of deserved oversight. After the money has changed hands, taxpayers and government officials providing the bailout money (the lenders) and the companies receiving these bailouts (the borrowers) are each likely to feel a strong sense of perceived ownership (Peck & Shu, 2009) over that money; we suggest this sense of ownership is likely to undergird asymmetric perceptions of who should determine how that money is spent.

## Methods

Two hundred and forty-one undergraduate students from a university (189 female,  $M_{age} = 20.59$ ,  $SD = 2.55$ ) were recruited from a laboratory pool to participate in a "perspective taking" study in exchange for \$1.

In a between-participants design, we manipulated the role individuals took (borrower vs. lender) in a taxpayer-funded bailout scenario outlining a case in which a group of government officials had agreed to loan money to a business owner. Prior to learning the full details of the case, participants were randomly assigned to the role of the government official or the role of the business owner. All participants read:

This case involves a business owner of a midsize company who requested a taxpayer-funded loan through the government after experiencing financial difficulty. He and the government officials responsible for this program came to an agreement that

the government would loan him half of the money he calculated he would need for the business to weather the current economic storm. Specifically, the government loan was for \$250,000 of the \$500,000 he needs, with the rest coming from his personal bank account.

Next, participants were instructed to take the perspective of the person to whom they had been randomly assigned by writing a few sentences as if they were that person.

Specifically, participants in the role of *lender* read:

Now that you have read the case we would really like you to take the perspective of the government official who loaned the money. If you were the government official, how would you feel about the level of oversight (i.e., control or say) you should have over how the business owner spends the money? What do you think the government official would think?

Participants in the role of *borrower* read:

Now that you have read the case we would really like you to take the perspective of the business owner who borrowed the money. If you were the business owner, how would you feel about the level of oversight (i.e., control or say) you should have over how you spend the money? What do you think the business owner would think?

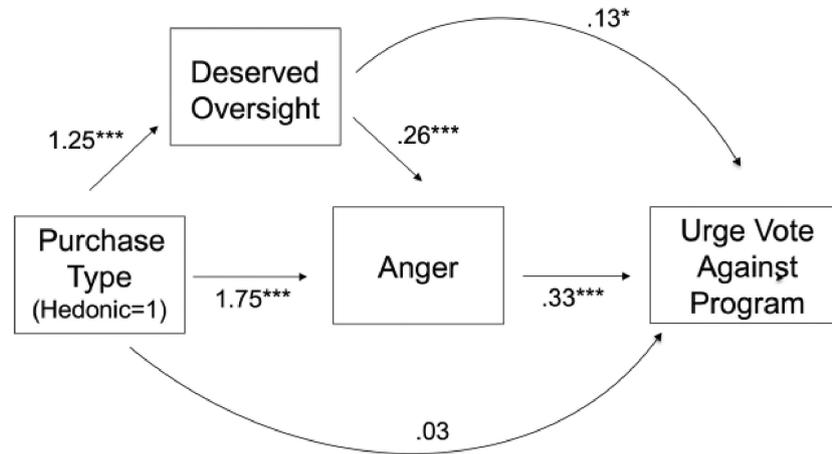
After writing a few sentences as their role, participants were then asked to imagine how the person in their role would feel about two aspects of the situation after the money had been transferred to the business owner: perceived ownership of the loaned funds and deserved oversight over how the loaned funds would be spent.

## Perceived ownership

We adapted perceived ownership measures (Peck & Shu, 2009) to assess individuals' feelings of ownership of the loaned money after the money was transferred to the business owner. Participants indicated on a 7-point Likert scale ranging from 1 (Strongly Disagree) to 7

**TABLE 1** Indirect effects of the path model in Study 5.

Effect	Bootstrap estimate	SE	95% CI lower	95% CI higher
The effect of purchase type on lender anger through deserved oversight	0.322	0.121	0.132	0.629
The effect of purchase type on urging representative to vote against loan program renewal through deserved oversight and anger	0.107	0.057	0.041	0.281



**FIGURE 4** Path diagram of correlations between purchase type, deserved oversight, subsequent anger, and choice to urge government representative to vote against the bailout loan program renewal. \* $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

(Strongly Agree) how much they believed the individual whose perspective they were taking would agree with the statements: “I feel like the money is more the business owner’s than the government’s” and “I feel like the money belongs more to the business owner than to the government.” We reverse-scored these items and created a composite measure ( $\alpha = 0.86$ ), such that higher numbers indicate a stronger belief that the money belongs to the government (the lender) relative to the business owner (the borrower).

### Deserved oversight

Participants then completed the same two items from Study 5 assessing the relative level of control and say they believed each party deserved on 11-point scales, from 1 (The government should have 0% of the control/say and the business owner should have 100% of the control/say) to 11 (The government should have 100% of the control/say and the business owner should have 0%). The two items were averaged to create a composite measure of deserved oversight ( $\alpha = 0.88$ ).

As a manipulation check, participants were asked to identify which role they had taken the perspective of earlier in the study, with two options, “government official” or “small business owner.” Lastly, participants completed an array of demographic questions.

## Results

### Manipulation checks

Participants received an error message if they wrote fewer than 20 characters as their role. Average word count was not significantly different between those in the hedonic ( $M = 38.99$ ,  $SD = 22.94$ ) and utilitarian ( $M = 37.81$ ,  $SD = 22.75$ ) conditions,  $p = 0.69$ . The great majority of

participants (89.63%) correctly identified the role to which they were assigned. The analyses include the full sample; results did not vary substantially based on correct identification of their role.

### Perceived ownership

Consistent with predictions, an independent t-test revealed individuals in the role of lender (i.e., the government official) endorsed the notion that the money belonged to the lenders more strongly ( $M = 4.35$ ,  $SD = 1.44$ ) than those in the role of borrower (i.e., the business owner) endorsed the same notion,  $M = 3.41$ ,  $SD = 1.42$ ,  $t(239) = -5.10$ ,  $\mu_{\text{diff}} = -0.94$ ,  $CI [-1.303, -0.577]$ ,  $p < 0.0001$ ,  $\eta_{\text{Part}}^2 = 0.10$ .

### Deserved oversight

Also, in line with predictions, individuals in the role of lender (i.e., government official) felt that the lender deserved more oversight over the loan ( $M = 5.86$ ,  $SD = 2.02$ ) than those in the role of the borrower (i.e., the business owner) ( $M = 3.77$ ,  $SD = 1.78$ ),  $t(239) = -8.53$ ,  $\mu_{\text{diff}} = -2.091$ ,  $CI [-2.574, -1.608]$ ,  $p < 0.001$ ,  $\eta_{\text{Part}}^2 = 0.23$ .

### Mediation

Mediation analyses were conducted following the procedures outlined by Preacher and Hayes (2004) to test the hypothesis that perceptions of ownership over the loan would mediate the relationship between role (borrower or lender) and the amount of oversight each party believes they deserve relative to the other party. Three regression analyses were conducted to demonstrate the relationship of the mediation model. First, role (borrower=0, lender=1) was positively correlated with a

stronger belief that the lender had greater ownership of the money relative to borrowers,  $B=0.94$ ,  $SE=0.18$ ,  $t(241)=5.12$ ,  $p<0.001$ , which itself was positively correlated with believing the lender should have more oversight over how the loan will be spent,  $B=0.43$ ,  $SE=0.08$ ,  $t(241)=5.31$ ,  $p<0.001$ . The indirect effect of the mediator (perceived ownership) was significant ( $B=0.41$ ,  $t(241)=3.69$ ,  $p<0.001$ ) and the confidence interval estimated using 1000 bootstrap resamples did not include zero, 95% CI [0.206, 0.658] (see Figure 5).

## Discussion

In the context of taxpayer-funded bailouts, Study 6 showed lenders believe they should have more control over how the loan is spent than borrowers believe the lenders should have. Moreover, this asymmetry is driven by each party's different beliefs about who owns the money after the loan changes hands.

## GENERAL DISCUSSION

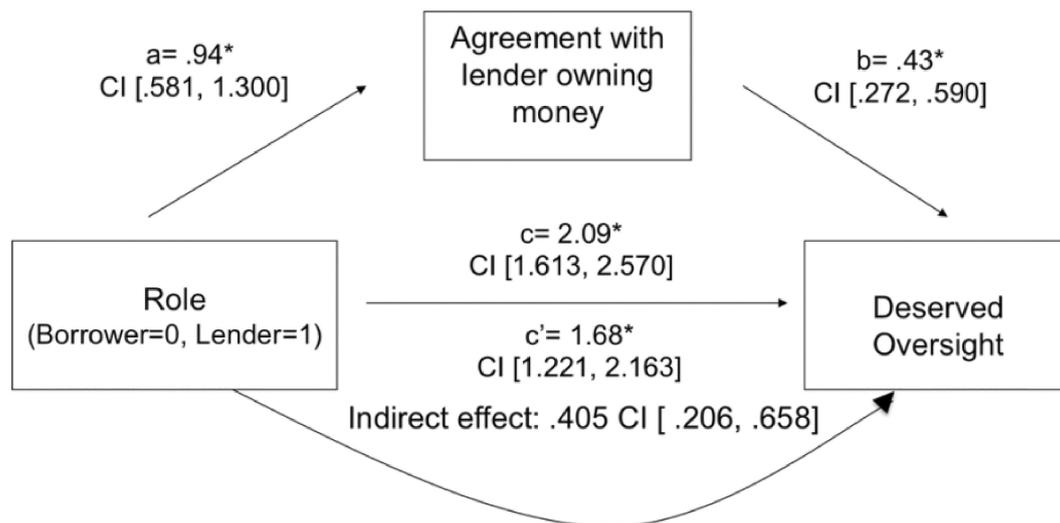
Six studies shed light onto the psychology of a ubiquitous but understudied form of exchange: lending and borrowing. We show lenders have stronger affective reactions when borrowers spend money hedonically, both when friends lend to friends and when taxpayers lend to companies through government bailouts. These affective responses are specific to money lent—rather than money gifted or paid—to a recipient and occur even when loans have been repaid and when borrowers are merely considering making hedonic purchases. We also identify a distinct psychological construct—deserved oversight—as a mediator of individuals' affective reactions. We find lenders' feelings of deserved

oversight even extends to new funds the borrower acquires prior to the loan transaction being complete. In contrast to borrowers, lenders believe they deserve continued oversight over loaned funds, driving their subsequent affective reactions when funds are spent hedonically and even their willingness to write disapproving letters to their government representatives. Lenders and borrowers' asymmetric beliefs of who deserves oversight over how the borrower spends the loaned funds is partly explained by who they believe the owner of the loaned funds is.

## Limitations and future research

In our experiments, we traded off internal validity via vignettes, which allowed for more control, and external generalizability. However, Study 5 provides evidence that people find frivolously spent loaned funds sufficiently aversive that they are willing to write messages to their government representatives at the expense of their own time. Indeed, while vignettes require participants to imagine themselves in particular scenarios, the vast majority of our participants reported prior experience lending and borrowing money—as the results in Study 3 demonstrate—suggesting the affective reactions observed in our studies are likely drivers of real-world conflict surrounding borrowing and lending. Nonetheless, the field's understanding of this phenomenon will certainly be broadened and deepened by assessing borrowers' and lenders' real-world experiences or even conducting in vivo experiments in which such exchanges might occur.

The present work also focused largely on the lender's experience and the factors shaping and comparing their expectations. While Study 6 compared lender and borrower expectations, future work could focus more



**FIGURE 5** Strength of agreement with the sentiment that the lender owns the money mediates the relationship between role (borrower or lender) and the reported amount of oversight individuals believe the lender deserves.  $*p<0.001$ , 95% Confidence Intervals.

on the borrower perspective and whether it is similarly egocentric (Epley et al., 2004). Such research could dive into the psychological processes undergirding borrowers' expectations for the transaction and how they view the loaned funds. We posit that prior to being repaid, lenders perhaps see the borrower's total assets as more fungible than borrowers do, and thus any money in the borrower's possession could be the money owed back to the lender. However, borrowers may consider the loaned money and their own money to be in two different mental accounts: one in which they owe and one in which they have a new surplus. For borrowers, this theorizing would be consistent with past work on windfalls and mental-accounting, wherein money from a new source represents a separate account (Thaler, 1999; Thaler & Shefrin, 1981). Relatedly, borrowers might not view their debts and windfall collectively in the same manner as lenders. Borrowers may feel less weighed down by their debt in light of the new loaned money and see their aggregate wealth more favorably, consistent with past consumer financial research (Sussman & Shafir, 2012). Lastly, future work might explore interventions aimed at borrowers (either individuals or firms) to help mitigate negative reactions from their lenders. This work might seek to encourage justifiable purchases, or perhaps reminders that the borrowers are not the primary owners of the funds.

The current investigation also specifically focused on *monetary* loans; however, lending can often involve the exchange of tangible goods. Given our conceptualization of perceived ownership and how it shapes lenders' desire for oversight, tangible goods (compared to money) might be even more prone to lenders' negative feelings toward borrowers for two reasons. First, tangible goods are less fungible than money. Although physical money may degrade physically, both physical money and money transferred between bank accounts do not lose their objective monetary value. However, physical goods do decay and show wear when used. Thus, lenders of tangible goods might be particularly unnerved to have their new device be used for a hedonic versus utilitarian purpose. Second, feelings of possession or ownership are much higher for the items we own, store, and protect than for digital currency being held in a bank or application (Atasoy & Morewedge, 2018; Kahneman et al., 1990). Due to the haptic nature of physical possessions, lenders may thus feel more ownership (Peck et al., 2013; Peck & Childers, 2003) over their tangible items and this may further increase their desire for oversight.

Furthermore, borrowers may experience the same heightened perceived ownership over tangible items compared to non-tangible ones, thus potentially exacerbating conflict further. On the other hand, perhaps borrowers are more likely to experience a powerful sense of ownership over non-tangible things like money due to greater ease of mental accounting with money compared with goods. In other words, it is easy to pay one's electric

bill with a friend's money and see the next paycheck we get as our own money, but it is harder to borrow a friend's car, book, or emotional support animal and consider it our own. We think these unanswered questions are ripe for future exploration.

Another limitation of our work relates to the narrow band of emotional measures we asked participants to report. Motivated to understand how friendships could fall apart and what drove taxpayer outrage, the set of evidence provided is limited to negative reactions. It is possible that friends and taxpayers who loan are sometimes happy with borrowers who make hedonic (vs. utilitarian) purchases. For instance, happiness and other positive emotions may increase especially if the lender anticipates being able to use or benefit from the borrower's transaction (e.g., friends who invest in speakers for a shared movie night or a bailed-out business that can now afford to provide discounts to its loyal customers). Positive emotional reactions may also be moderated by the closeness of the relationship between lender and borrower, a factor that we did not manipulate the present investigation. For example, perhaps lenders would feel a great deal of happiness and enthusiasm for a borrower who makes a joyful hedonic purchase if the two are extremely close (i.e., best friends) as opposed to merely acquaintances. On the other hand, perhaps borrowers would be expected to spend lenders' money more responsibly the closer the relationship between the two. We think this is an interesting avenue for further research.

Future research should also explore the role social norms might play in lending transactions. We see at least two intriguing possibilities with regard to the normative expectations that borrowers and lenders bring to their transaction. Perhaps both parties tend to share the same normative expectations, but some borrowers simply violate those shared expectations with their purchase behavior. In contrast, there may be a divergence between what purchase behavior borrowers and lenders believe to be normatively appropriate or inappropriate. Additionally, there are likely a host of perceptions that lenders may have about borrowers whose purchase behaviors they consider to be normatively (e.g., Cialdini et al., 1991) or morally inappropriate (Olson et al., 2016, 2021), including perceiving borrowers to be disrespectful, selfish, or irresponsible.

Cultural norms may also play a role in how common it is for individuals and organizations to seek out loans, and how borrowers and lenders behave within this form of exchange. It may be that in line with cushion theory (Weber & Hsee, 1999) and the expectation of receiving more social support financially, people in more collectivist cultures may engage in riskier financial choices such as lending. It may even be seen as more of a cultural violation to indulge and spend hedonically with loaned funds when the culture values thriftiness, thus potentially exacerbating the results

we observe in the current research. All our data were collected amongst a US sample, but we encourage future research to focus outside those boundaries to study what differences may emerge amongst distinct cultural groups.

Finally, we expect a variety of other factors to shape the range of reactions between lenders and borrowers. For example, a longstanding friendship may be strong enough to weather asymmetric perceptions and emotions when it comes to the new loan; on the other hand, if a loan is introduced late in that friendship, it might also be particularly sensitive to a change in relational structure (i.e., going from exclusively communal for years to incorporating economic elements for the first time). One might also predict friends who regularly engage in lending to be more equipped at managing their emotional reactions or perhaps expectations at the onset of the transaction. Similarly, at the small-business and taxpayer level, older citizens may feel less shocked as they are more familiar with bailouts and the nature of them being under-regulated. On the other hand, older citizens may feel they have paid into tax reservoirs longer and thus feel more ownership and desire more oversight over how these funds are used.

### Additional implications

Although Shakespeare's Polonius suggests lending amongst peers should be avoided altogether, the ubiquity of lending transactions suggests this strategy is not practical. One step toward successful interpersonal loan experiences could involve outlining loan agreement details prior to the exchange. Indeed, part of the discomfort that drives lenders' desire for oversight may arise from ambiguity aversion (Fox & Tversky, 1995) with regard to how the funds are used, and when—or if—the loan will be repaid. Similarly, within taxpayer funded bailouts, more oversight can be built into the arrangement. Political support for this has been increasing since the 2008 financial crisis, where in response to uncapped salaries for executives, then President Obama said, “If the taxpayers are helping you, then you've got certain responsibilities to not be living high on the hog” (Associated Press, 2009). More recently with the economic downturn related to the novel coronavirus (COVID-19), the US Congressional \$2.2 trillion pandemic relief package and Paycheck Protection Program (PPP; a program intended for the utilitarian purpose of payroll) loans have reinforced the sometimes ambiguous and asymmetric expectations business owners and taxpayers (along with their Congressional representatives) face with government funded loans, with some complaining it “came with no user manual and it was extremely confusing” (Toh, 2020). Calls for more oversight echoed from consumers, taxpayers, and small business owners outraged that chain restaurants and

large hoteliers were awarded the funding (Toh, 2020). This backlash was severe enough that some former recipients of the PPP, such as Shake Shack, returned the money under public pressure. Echoing the results from our current research, seeing companies who were not struggling to pay their workers (such as Shake Shack and their \$100 million cash reserves) likely felt indulgent to consumers, small businesses, and taxpayers. In contrast, it is likely that Shake Shack—at least initially, prior to giving back the loan—felt that the loan was a necessity and therefore perfectly utilitarian in nature. This example suggests a fruitful area of future research, in which consumption decisions borrowers feel are necessary and utilitarian are perceived as an indulgence by those to whom they are in debt.

A related lender anger mitigation strategy might be to have borrowers—particularly companies who receive bailouts—frame their purchases as utilitarian or highlight the potential utilitarian dimensions of their purchases so as to minimize negative taxpayer reaction. For example, a company that spends money on a seemingly indulgent retreat for its workers can point to the long-term utility of employee retention, particularly if competitor companies are doing the same. Similarly, if a borrower frames a hedonic purchase like hosting a celebratory party as a means to network professionally, lenders might view the purchase as more justified, a hypothesis open to empirical testing.

One of the central contributions of the current manuscript is the investigation of the novel construct of deserved oversight, an aspect of multi-party decision-making processes. Although we examined this construct in the context of borrowing and lending, its psychological underpinnings may also influence other domains, such as joint decisions made between relationship partners or amongst colleagues. For example, in the context of spouses making financial decisions, the higher-earning spouse may believe she or he contributes more to the couple's shared funds and therefore deserves greater oversight over monetary decisions—a view likely not shared by the lower-earning spouse. However, unlike shared finances and joint consumption decisions, lending is a temporary transfer of one's funds to another with the expectation of repayment. Future research might investigate whether lenders do see the loan relationship more like a joint purchase decision whereas borrowers see themselves more as independent agents.

### CONCLUSION

The current work helps explain both the lavish spending by bailout recipients, as well as government and taxpayer anger toward those choices. After such loans took place, bailout recipients such as AIG likely felt greater perceived ownership over that money than lenders felt

was warranted, because lenders felt that money was still theirs—not the bailout recipients'. This relates closely to the last line from *Hamlet* that opened this investigation (“and borrowing dulls the edge of husbandry”). In those times, husbandry meant economy or thriftiness, suggesting that when people (and by extension, other entities like corporations) borrow money, they tend to indulge in hedonic rather than utilitarian purchases. AIG likely felt no reason to prioritize thrift because they felt the money was theirs to spend as they pleased, licensing them to spend as lavishly as they would prior to the bailout.

Given the ubiquity of lending transactions at the micro- and macrolevels, it behooves research to explore and understand the affective and behavioral consequences of borrowing and lending in order to mitigate both constituent backlash against government decisions and fallout amongst friends.

## DATA AVAILABILITY STATEMENT

Stimuli and data repository stored publicly on Open Science Framework: [https://osf.io/quvs7/?view\\_only=7deb49c2504a4a32bd3f9b9a0427d5bf](https://osf.io/quvs7/?view_only=7deb49c2504a4a32bd3f9b9a0427d5bf).

## ORCID

Ashley N. Angulo  <https://orcid.org/0000-0001-9233-1453>

## REFERENCES

- Associated Press. (2009). President: No execs living high on the hog. *Los Angeles Daily News*. <https://www.dailynews.com/2009/02/04/president-no-exec-s-living-high-on-the-hog/>
- Atasoy, O., & Morewedge, C. K. (2018). Digital goods are valued less than physical goods. *Journal of Consumer Research*, 44(6), 1343–1357.
- Bagga, C. K., Bendle, N., & Cotte, J. (2019). Object valuation and non-ownership possession: How renting and borrowing impact willingness-to-pay. *Journal of the Academy of Marketing Science*, 47(1), 97–117.
- Batra, R., & Ahtola, O. T. (1991). Measuring the hedonic and utilitarian sources of consumer attitudes. *Marketing Letters*, 2, 159–170.
- Beggan, J. K. (1992). On the social nature of nonsocial perception: The mere ownership effect. *Journal of Personality and Social Psychology*, 62(2), 229–237.
- Belk, R. (2010). Sharing. *Journal of Consumer Research*, 36(5), 715–734.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(2), 139–168.
- Bonaccio, S., & Dalal, R. S. (2006). Advice taking and decision-making: An integrative literature review, and implications for the organizational sciences. *Organizational Behavior and Human Decision Processes*, 101(2), 127–151.
- Brehm, J. W. (1956). Postdecision changes in the desirability of alternatives. *The Journal of Abnormal and Social Psychology*, 52(3), 384–389.
- Chetty, R., Jackson, M. O., Kuchler, T., Stroebe, J., Hendren, N., Fluegge, R. B., Gong, S., Gonzalez, F., Grondin, A., Jacob, M., Johnston, D., Koenen, M., Laguna-Muggenburg, E., Mudekereza, F., Rutter, T., Thor, N., Townsend, W., Zhang, R., Bailey, M., ... Wernerfelt, N. (2022). Social capital II: Determinants of economic connectedness. *Nature*, 608(7921), 122–134.
- Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior. In *Advances in experimental social psychology* (Vol. 24, pp. 201–234). Academic Press.
- Clark, M. S., & Mills, J. (1993). The difference between communal and exchange relationships: What it is and is not. *Personality and Social Psychology Bulletin*, 19, 684–691.
- Dezső, L., & Loewenstein, G. (2012). Lenders' blind trust and borrowers' blind spots: A descriptive investigation of personal loans. *Journal of Economic Psychology*, 33(5), 996–1011.
- Epley, N., Keysar, B., Van Boven, L., & Gilovich, T. (2004). Perspective taking as egocentric anchoring and adjustment. *Journal of Personality and Social Psychology*, 87(3), 327.
- Fiske, A. P. (1992). The four elementary forms of sociality: Framework for a unified theory of social relations. *Psychological Review*, 99(4), 689–723.
- Fiske, A. P., & Tetlock, P. E. (1997). Taboo trade-offs: Reactions to transactions that transgress the spheres of justice. *Political Psychology*, 18(2), 255–297.
- Fox, C. R., & Tversky, A. (1995). Ambiguity aversion and comparative ignorance. *The Quarterly Journal of Economics*, 110, 585–603.
- Furby, L. (1978). Possession in humans: An exploratory study of its meaning and motivation. *Social Behavior and Personality: An International Journal*, 6(1), 49–65.
- Galak, J., Small, D., & Stephen, A. T. (2011). Microfinance decision making: A field study of prosocial lending. *Journal of Marketing Research*, 48(SPL), S130–S137.
- Genevsky, A., & Knutson, B. (2015). Neural affective mechanisms predict market-level microlending. *Psychological Science*, 26(9), 1411–1422.
- Hagerty, S. F., & Barasz, K. (2020). Inequality in socially permissible consumption. *Proceedings of the National Academy of Sciences of the United States of America*, 117(25), 14084–14093.
- Hagerty, S. F., Barasz, K., & Norton, M. I. (2022). Economic inequality shapes judgments of consumption. *Journal of Consumer Psychology*, 32(1), 162–164.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408–420.
- Herzenstein, M., Sonenshein, S., & Dholakia, U. M. (2011). Tell me a good story and I may lend you money: The role of narratives in peer-to-peer lending decisions. *Journal of Marketing Research*, 48(SPL), S138–S149.
- Heyman, J., & Ariely, D. (2004). Effort for payment a tale of two markets. *Psychological Science*, 15(11), 787–793.
- Javers, E., Lerer, L., & McGrane, V. (2009). *Bailout Backlash hits Obama plans*. Politico. <https://www.politico.com/story/2009/03/bailout-backlash-hits-obama-plans-020095>
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1990). Experimental tests of the endowment effect and the Coase theorem. *Journal of Political Economy*, 98(6), 1325–1348.
- Keegan, R. W. (2008). AIG's post-bailout spa retreat. *TIME*. [http://content.time.com/time/specials/packages/printout/0,29239,1855948\\_1863946\\_1863950,00.html#](http://content.time.com/time/specials/packages/printout/0,29239,1855948_1863946_1863950,00.html#)
- Lin, M., Prabhala, N. R., & Viswanathan, S. (2013). Judging borrowers by the company they keep: Friendship networks and information asymmetry in online peer-to-peer lending. *Management Science*, 59(1), 17–35.
- Mano, H., & Oliver, R. L. (1993). Assessing the dimensionality and structure of the consumption experience: Evaluation, feeling, and satisfaction. *Journal of Consumer Research*, 20(3), 451–466.
- Olson, J. G., McFerran, B., Morales, A. C., & Dahl, D. W. (2016). Wealth and welfare: Divergent moral reactions to ethical consumer choices. *Journal of Consumer Research*, 42(6), 879–896.
- Olson, J. G., McFerran, B., Morales, A. C., & Dahl, D. W. (2021). How income shapes moral judgments of prosocial behavior. *International Journal of Research in Marketing*, 38(1), 120–135.
- Peck, J., Barger, V. A., & Webb, A. (2013). In search of a surrogate for touch: The effect of haptic imagery on perceived ownership. *Journal of Consumer Psychology*, 23(2), 189–196.

- Peck, J., & Childers, T. L. (2003). To have and to hold: The influence of haptic information on product judgments. *Journal of Marketing*, 67(2), 35–48.
- Peck, J., & Shu, S. B. (2009). The effect of mere touch on perceived ownership. *Journal of Consumer Research*, 36(3), 434–447.
- Pierce, J. L., Kostova, T., & Dirks, K. T. (2003). The state of psychological ownership: Integrating and extending a century of research. *Review of General Psychology*, 7(1), 84–107.
- Pierce, J. L., Van Dyne, L., & Cummings, L. L. (1992). Psychological ownership: A conceptual and operational examination. In M. Schnake (Ed.), *Proceedings of the Southern Management Association* (pp. 203–211). Valdosta State University.
- Pope, D. G., & Sydnor, J. R. (2011). What's in a picture? Evidence of discrimination from prosper.com. *Journal of Human Resources*, 46(1), 53–92.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717–731.
- Read, D., Loewenstein, G., Rabin, M., Keren, G., & Laibson, D. (1999). Choice bracketing. In B. Fischhoff & C. F. Manski (Eds.), *Elicitation of preferences*. Springer. [https://doi.org/10.1007/978-94-017-1406-8\\_7](https://doi.org/10.1007/978-94-017-1406-8_7)
- Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. *Science*, 338(6107), 682–685.
- Shakespeare, W. (1992). In B. A. Mowat & P. Werstine (Eds.), *The tragedy of Hamlet, Prince of Denmark*. Washington Square-Pocket.
- Snizek, J. A., & Van Swol, L. M. (2001). Trust, confidence, and expertise in a judge-advisor system. *Organizational Behavior and Human Decision Processes*, 84(2), 288–307.
- Sussman, A. B., & Shafir, E. (2012). On assets and debt in the psychology of perceived wealth. *Psychological Science*, 23, 101–108. <https://doi.org/10.1177/0956797611421484>
- Thaler, R. H. (1999). Mental accounting matters. *Journal of Behavioral Decision Making*, 12(3), 183–206.
- Thaler, R. H., & Shefrin, H. M. (1981). An economic theory of self-control. *Journal of Political Economy*, 89(2), 392–406.
- Toh, M. (2020). *Shake shack returns \$10 million emergency loan to the US government*. CNN Business. <https://www.cnn.com/2020/04/20/business/shake-shack-ppp-loan-sba/index.html>
- Voss, K. E., Spangenberg, E. R., & Grohmann, B. (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research*, 40(3), 310–320.
- Weber, E. U., & Hsee, C. K. (1999). Models and mosaics: Investigating cross-cultural differences in risk perception and risk preference. *Psychonomic Bulletin & Review*, 6(4), 611–617.
- Whoriskey, P. (2008). AIG spa trip fuels fury on hill. *Washington Post*. <http://www.washingtonpost.com/wp-dyn/content/article/2008/10/07/AR2008100702604.html>
- Yaniv, I., & Kleinberger, E. (2000). Advice taking in decision making: Egocentric discounting and reputation formation. *Organizational Behavior and Human Decision Processes*, 83(2), 260–281.

## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

**How to cite this article:** Angulo, A. N., Goldstein, N. J., & Norton, M. I. (2024). Friendship fallout and bailout backlash: The psychology of borrowing and lending. *Journal of Consumer Psychology*, 00, 1–19. <https://doi.org/10.1002/jcpy.1410>