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Decisions often involve trade-offs between a more normative option and a less normative but more tempting one. The authors propose that the intrapersonal conflict that is evoked by choices involving incompatible goals can be resolved through scope-insensitive justifications. The authors describe one such mechanism, the “mere token” effect, a new phenomenon in decision making. They demonstrate that adding a certain and immediate mere token amount to both options increases choices of the later-larger option in intertemporal choice and of the riskier-larger option in risky choice. The authors find this effect to be scope insensitive, such that the size of the token amount does not moderate the effect. They show that intrapersonal choice conflict underlies the mere token effect and that reducing the degree of conflict by increasing the psychological distance to the choice outcomes debiases the effect. Moreover, they show that the mere token effect is enhanced when (1) opposing goals in choice are made salient and (2) the choice options represent a starker contrast that generates greater conflict. The authors empirically rule out alternative explanations, including diminishing marginal utility, normative and descriptive utility-based models, liquidity constraints, and naive diversification. They discuss the direct implications of the mere token effect for the marketing of financial services and, more generally, for consumer preference toward bundles and multiattribute products.

*Keywords:* choice conflict, intertemporal choice, risky choice, financial decision making, justification

## Scope Insensitivity and the “Mere Token” Effect

Two souls are in my breast; I see the better, and in the very act of seeing it I do the worse.

—William James

Difficult choices are pervasive throughout decision making. Choosing between two investments can involve trading off low risk for the potential of high returns. Competing offers of employment can vary, with some offering higher immediate compensation and others offering better long-

term earning potential. Similarly, consumers often face choices between products that involve different levels of product risk or differ in when consumption occurs. Consumer product choices might also appeal to a wide range of other competing internal goals, such as taste versus health in choosing among foods and safety versus speed in choosing among cars. In this article, we specifically explore decisions that evoke intrapersonal choice conflict, in which the implicit trade-offs require the decision maker to sacrifice either one internal goal or the other. Such choice conflict involving incompatible goals is not readily resolved by a cognitive process of calibrating compensatory trade-offs, as utility theory suggests, but rather involves justifications that are external to the trade-off (Prelec and Herrnstein 1991; Shafir, Simonson, and Tversky 1993) to ameliorate the emotional conflict experienced (Luce, Payne, and Bettman 1999). We propose that decisions under intrapersonal conflict are affected by the mere presence or absence of justifications and are fundamentally scope insensitive to the mag-

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nitude of the justification. However, the effect of justification on decision making is highly sensitive to the intensity of intrapersonal conflict. Justifications affect decisions when intrapersonal conflict is high and become largely irrelevant in low-conflict choices.

Our conceptualization implies that a “mere token” justification can often resolve choice conflict and significantly alter the choices made. In a series of studies, we demonstrate this new mechanism for resolving conflict between two options in which adding a small token element to both choice options systematically shifts preferences by making it easier to choose a less tempting but higher valued option. For example, in an intertemporal choice conflict between sooner-smaller and later-larger amounts, adding a small immediate amount to both options enhances choice of the later-larger option. Similarly, adding a small certain amount to both options in a risky choice situation enhances choice of the riskier-larger option. We show this mere token effect to be a direct consequence of intrapersonal choice conflict and scope-insensitive justification, incompatible with the normative and descriptive additive utility models of decision making. Notably, the justification in this context provides not only an excuse for relaxing self-control (Kivetz and Simonson 2002a; Kivetz and Zheng 2006; Okada 2005) but also symbolic gratification, facilitating choice of far-sighted options. We show that the role of choice conflict and justification in underlying the effect distinguishes it from naive diversification and mental accounting.

Furthermore, the notion that a small token element of the choice options could have motivational implications has direct consequences for commonly faced consumer decisions. Mere tokens often occur in financial decision making, in which firms give token cash incentives when a new investment or savings account is opened, regardless of the implicit risk or timing of the amounts deposited in the account.<sup>1</sup> Online brokers such as E\*Trade and Discover have offered cash bonuses ranging from \$25 to \$75 to customers who open new accounts (Lee 1999). Banks often give out incentives for opening savings accounts, ranging from toasters to cash bonuses (e.g., HSBC Direct offered a \$25 cash bonus for opening a certificate of deposit account online). Such incentives are designed to attract customers to enroll, but the effect on subsequent choices has not been studied. In general, purchase and consumption decisions for products usually involve considering either bundles of multiple products or single products that comprise bundles of features or attributes. Although the cognitive processes underlying such decisions have been widely studied, researchers have paid less attention to the motivational impact on choices of individual products, beyond the direct value provided. In this research, we employ intertemporal choice and risky choice as empirical contexts in which to explore the effects of intrapersonal conflict and scope-insensitive justifications in these kinds of decisions and multiattribute decision making in general.

We organize the article as follows: We begin by developing our conceptualization of intrapersonal choice conflict and examining the circumstances under which scope-insensitive justification resolves such conflict, thus shifting the choices

made. We present a series of propositions describing a new phenomenon in decision making, the mere token effect, which we derive from the proposed conceptualization. In Study 1, we demonstrate the mere token effect in the domain of intertemporal choice, which has often been used as a theoretical model of self-control conflict. Study 2 extends our findings to the more general domain of risky choice. In both contexts, we provide direct evidence that the mere token effect operates by providing a scope-insensitive justification that reduces intrapersonal choice conflict. With Study 3, we demonstrate that perceived choice difficulty underlies the effect, and with Study 4, we show that the mere token effect is systematically diminished when intrapersonal choice conflict is reduced by increasing psychological distance to the choice outcomes. Study 5 shows that the mere token effect is enhanced when the options represent a starker contrast that heightens the underlying goal conflict, consistent with our conceptualization but in violation of both normative and descriptive utility-based models and in contrast with a diminishing marginal utility explanation. Study 6 demonstrates that activation of competing goals underlies the mere token effect and extend our findings to the domain of payments. Finally, we discuss and empirically rule out several additional alternative explanations, including mental accounting, liquidity constraints, and naive diversification. We discuss the theoretical and managerial implications of both the mere token effect and our conceptualization of scope-insensitive justification.

#### THEORETICAL DEVELOPMENT

In the normative models of choice, such as subjective expected utility theory (Savage 1954), people make choices by evaluating the expected utilities of the alternatives, taking into account subjective outcome probabilities and discounting any temporally delayed outcomes (Samuelson 1937). Researchers have developed descriptive theories such as prospect theory (Kahneman and Tversky 1979) and hyperbolic discounting (Ainslie 1975) to account for ways that people’s actual choices deviate systematically from the predictions of normative models. Both the normative and descriptive compensatory models imply that choice conflict does not affect the actual option chosen (Tversky and Shafir 1992). The implicit assumption in such models is that people are more likely to choose the higher valued option, and when both options are similar in value, decision makers are indifferent between the options.

Choice sets in which the decision maker faces a trade-off between dimensions (e.g., between amount and risk, amount and time), however, can give rise to substantial choice conflict. One stream of research, arising from signal detection theory and the psychophysics of perception, has focused on the conflict elicited by choosing between similarly valued stimuli (e.g., Tyebjee 1979). This research has demonstrated that the time required to make a choice increases as the difference in subjective preference between the options decreases. The underlying explanation is fundamentally cognitive: Facing preference uncertainty (Dhar 1997), a motivated decision maker will find it more difficult to correctly identify the subjectively higher valued of two similar options (as long as neither dominates). For a choice to occur, decision makers may construct preferences (Bettman, Luce, and Payne 1998; Simonson and Tversky 1992; Slovic

<sup>1</sup>Note that this is distinct from the use of alternative or intermediary currency tokens, such as reward program points.

1975) and make decisions using contextual cues rather than stable valuations.

A fundamentally different perspective on choice difficulty is the idea that conflict occurs between competing goals rather than choice options (Janis and Mann 1977; Luce, Payne, and Bettman 1999). In this view, decision conflict arises when the choice involves substantial trade-offs on dimensions that implicate personally important competing goals. The literature has used the analogy of multiple selves, each representing a single goal or ideal that can come into conflict in decision making (e.g., James 1890; Schelling 1980). Much of this research has focused on changes in preferences over time and the conflict between impulsive tendencies shortly before the outcome versus more farsighted reasoning that occurs further in advance of the consequences (e.g., Ainslie 1975; Strotz 1955). The notion of conflict arising from competing goals also relates to the contrast between visceral and reasoned reactions (Loewenstein 1996) and between “hot” and “cool” modes of reasoning (Metcalf and Mischel 1999).

The distinction between an impulsive emotional “want” self and a more farsighted rational “should” self has provided a general categorization to encompass this kind of conflict. However, we argue for a broader notion of intrapersonal conflict (Luce, Payne, and Bettman 1999) characterized by conflicting impulses that arise from directly competing motivational goals. For the consumer facing choice options, both of which implicate strongly held goals, choosing either option presents a threat to the self-identity associated with the opposing goal. The literature on cognitive dissonance has demonstrated that when central values are threatened, one response is to resort to behaviors (e.g., Sherman and Gorkin 1980) or even mere symbols (Golwitzer and Kirchof 1998; Steele, Spencer, and Lynch 1993) that bolster the threatened value. Related literature on self-signaling (Bodner and Prelec 2001; Quattrone and Tversky 1984) has argued that people make choices partly according to the diagnostic utility of their choice. Thus, for choices involving competing goals, the process of decision making includes not only cognitive assessment of utility but also motivations regarding the impact of choices on self-identity.

#### *Scope-Insensitive Justifications and the Resolution of Choice Conflict*

Therefore, choice under intrapersonal conflict is a process of internal negotiation that is effortful and could remain stuck in indecision (Luce 1998), particularly when the choice options represent a dramatic trade-off between distinct goals. Furthermore, in this kind of conflict, choices are interpreted as representing the decision maker’s inner values and true identity (e.g., Bodner and Prelec 2001; see also Bem 1967). Thus, in general, the motivational aspect of choice conflict is not receptive to compensatory adjustments in the choice options but rather is affected by reasons, justifications, and rationalizations (e.g., Kivetz and Zheng 2006; Shafir, Simonson, and Tversky 1993; Slovic 1975) that can counter the challenge to self-identity.

It is important to note that the notion of conflict between self-identity goals implies that motivational concerns underlie evaluation of both impulsive and farsighted choice options. Consistent with this view, research on hyperopia (Kivetz and Simonson 2002b) has shown that what has gen-

erally been considered the more objective “should” self can also be characterized as irrational and emotional, subject to feelings of guilt and making nonoptimal choices that lead to negative feelings of regret and “missing out” in the long run (Kivetz and Keinan 2006). Furthermore, although justification and reasons have generally been studied in the context of excusing indulgence (Kivetz and Simonson 2002a; Kivetz and Zheng 2006), in our conceptualization, they can also be employed to lessen the temptation of impulsive options.

In particular, as we describe in the next section, a justification that provides some symbolic measure of gratification can help resolve choice conflict, thus reducing the desire for the nearsighted option. We argue that the role of justification in choice under conflict is further characterized by a qualitative evaluation—the presence or absence of justification in the choice context—rather than a quantitative one. Specifically, incorporating into the choice options an element that serves as a token, symbolically representing one of the goals in conflict, can resolve choice conflict, regardless of the magnitude of the token itself. Thus, choice conflict can be reduced, and decisions shifted, by way of a mere token effect.

#### *The Mere Token Effect*

- P<sub>1</sub>: When a decision maker faces intrapersonal conflict between outcomes representing competing goals, adding a mere token to both options that signifies one of the goals increases choice of the option affiliated with the competing goal.

For example, the proposition implies that in a conflict between the goals of immediacy and magnitude, adding a token of immediate gratification to both options will satisfy the impulsive tendency and free the decision maker to choose a higher-valued but less tempting option. Thus, in an intertemporal choice conflict between sooner-smaller and later-larger amounts, we propose that adding a small immediate amount to both choice options increases preference for the later-larger option, contrary to the predictions of normative and descriptive models of intertemporal choice. It is important to note that the mere token operates as a symbolic justification, and we rule out normative alternative explanations, such as the token amount satisfying a liquidity constraint. A key distinction here is that the mere token is a bonus added to both existing choice options, not an alternative form of expressing the options, and we argue that the token justification addresses two conflict goals rather than providing an additional goal of maximizing intermediary tokens, as in Hsee et al. (2003).

Furthermore, because the token is added to both options, it cannot be interpreted as a trivial tiebreaker (e.g., Brown and Carpenter 2000). A critical aspect of this proposition, alluded to in the use of the term “mere” token, is insensitivity to the scope or magnitude of the token. Thus, we propose the following:

- P<sub>2</sub>: The magnitude of the mere token has a negligible impact on the size of the mere token effect; in particular, even small mere tokens shift choices.

Thus, it is specifically the presence or absence of the token that affects decisions by either providing or not providing a justification. Scope insensitivity has been documented in

valuations when the context is emotional (Hsee and Rottenstreich 2004) and evaluations are conducted separately, rather than relative to other options (Hsee, Rottenstreich, and Xiao 2005). However, unlike the work of Hsee and colleagues, the scope insensitivity we predict in the context of intrapersonal conflict is distinct from low evaluability and diminishing marginal utility. Rather, the impact of the mere token is scope insensitive because the intrapersonal conflict is fundamentally motivational, and the resolution of this conflict occurs through noncompensatory reasoning, external to the quantitative trade-off between options. Thus, scope insensitivity applies only to the elements of the decision interpreted as justification—that is, to the mere token itself. We do not expect scope insensitivity to the underlying dimensions of the choice options, such as time and money. (We investigate this argument in Study 5.)

We predict that the strength of the mere token effect depends on contextual factors of the decision that aggravate or mitigate the intensity of the intrapersonal conflict. Formally,

P<sub>3</sub>: Increasing (decreasing) the intensity of the intrapersonal choice conflict enhances (weakens) the mere token effect.

This implies that the addition of a mere token will differentially affect people’s choices, depending on the degree to which adding the token reduces a choice conflict that they would otherwise feel. In particular, we propose that the degree of intrapersonal choice conflict experienced is moderated by aspects of the context in which the choice occurs, such as the psychological distance (Lewin and Cartwright 1951; Trope and Liberman 2003) to the outcomes. Metcalfe and Mischel (1999) propose that distancing oneself from a decision can increase willpower by shifting decision making from a “hot” emotional system to a “cool” cognitive system of reasoning. We conjecture that increasing psychological distance reduces the degree of intrapersonal choice conflict by “cooling” the negative emotions that the required trade-offs induce. Therefore, consistent with P<sub>3</sub>, our conceptualization implies that the mere token effect will diminish (or even disappear) with greater psychological distance from the decision outcomes.

Furthermore, we note that the nature of the trade-off among the options themselves will directly affect the degree of choice conflict experienced, independent of the aspects of the context in which choice occurs. For example, consider when consumers perceive two choice options as highly dissimilar on important dimensions. As long as a nontrivial trade-off is present, choosing between two such options is likely to be particularly difficult because of the dissimilarity of the options. Accordingly, we conjecture that more dissimilar choice options, which represents a more extreme trade-off between competing goals, lead to stronger mere token effects. Subsequently, we demonstrate that this proposition enables us to distinguish our framework from the predictions of diminishing marginal utility.

In the next two sections, we test the first proposition, demonstrating the mere token effect in the domain of intertemporal choice and then extending the effect to the more general domain of risky choice. In both domains, we test the second proposition and demonstrate insensitivity to the magnitude (or scope) of the mere token. Then, we test the proposed moderators of the mere token effect and shed light on the underlying psychological processes. We demon-

strate that the predictions of our conceptualization and the related findings are diametrically opposed to the predictions of the extant normative and descriptive models of choice. Highlighting the generality of the mere token effect, we show our findings in the domains of both intertemporal and risky choices, and we extend the effect to payments.

### THE MERE TOKEN EFFECT IN INTERTEMPORAL CHOICE

Researchers have studied intertemporal choices between a lower magnitude but sooner outcome and a larger but delayed outcome as a fundamental decision-making problem in psychology, economics, marketing, and other disciplines (for a broad review, see Frederick, Loewenstein, and O’Donoghue 2002). Intertemporal trade-offs pose a fundamental conflict between the interests of a person’s current and future selves (Bartels and Urminsky 2011) and have been widely applied as a model of self-control conflict between nearsighted and farsighted goals, describing how conflict increases and the will to stick with long-term goals is undermined as tempting alternatives become increasingly immediate. Thus, although timing is an important aspect of decision making (e.g., Simonson 1992), intertemporal choice is also a particularly appropriate context in which to study the more general effect of a mere token on intrapersonal conflict.

#### Study 1a: The Mere Token Effect in Intertemporal Choice

In this and subsequent studies (except Study 3), the participants were all adult consumers participating in unrelated consumer surveys conducted over the Internet. None of the other questions in the surveys related to intertemporal conflict or risky choice. In this study, 311 respondents chose between two delayed rewards. Half the respondents were randomly assigned to the base condition and were asked to choose between two options, a later-larger reward and a sooner-smaller reward. The base condition options are as follows, with the percentage choosing each option given in parentheses: Option A: “\$900 that you receive in one year” (38%), and Option B: “\$300 that you receive in one week” (62%).<sup>2</sup> We assigned the other half of the respondents to the mere token condition, in which we bundled the same choice options with a common amount to be received virtually immediately: Option A: “\$50 that you receive in 3 days and \$900 that you receive in one year” (52%), and Option B: “\$50 that you receive in 3 days and \$300 that you receive in one week” (48%).

Thus, inclusion of the \$50 in both options shifted preferences, increasing the share of the later-larger reward by 14% ( $z = 2.5, p < .01$ ). We argue that for consumers facing intrapersonal choice conflict between their desire for an immediate reward and the higher payoff available by waiting, being offered the small “token” amount of \$50 reduces the conflict, making it easier to ignore the temptation of immediacy and hold out for the later-larger reward. The

<sup>2</sup>This result implies that a majority of respondents had an annual discount rate over 300%, which is very high compared with reasonable expectations of investment rates of return. However, this rate is consistent with the large literature on implicit discount rates, including both hypothetical and actual choices (see Frederick, Loewenstein, and O’Donoghue 2002, Table 1).

effect was robust across different versions of the stimuli, which varied the magnitudes (of the token amount, the sooner-smaller reward, and/or the later-larger reward) and timing of the rewards. Across all 18 between-subjects tests we conducted, we found mere token effects in the predicted direction, ranging from 1% to 17%, with a mean effect of 10%. Furthermore, 13 of the tests were significant at the .05 level, and another 3 were significant at the .10 level.

This demonstration of the mere token effect is consistent with  $P_1$  and directly inconsistent with the established models of intertemporal choice. Both the time-consistent exponential model and the hyperbolic model (which accounts for time inconsistency) share a common additive form, such that common elements cancel out (Loewenstein and Prelec 1992). This implies that the relative evaluations of the options in the base and mere token conditions are equivalent, and additive discounted utility models predict no difference across the two conditions. Thus, our finding of a shift in choice due to adding a mere token to both options is incompatible with both the normative exponential and descriptive hyperbolic discounting models.

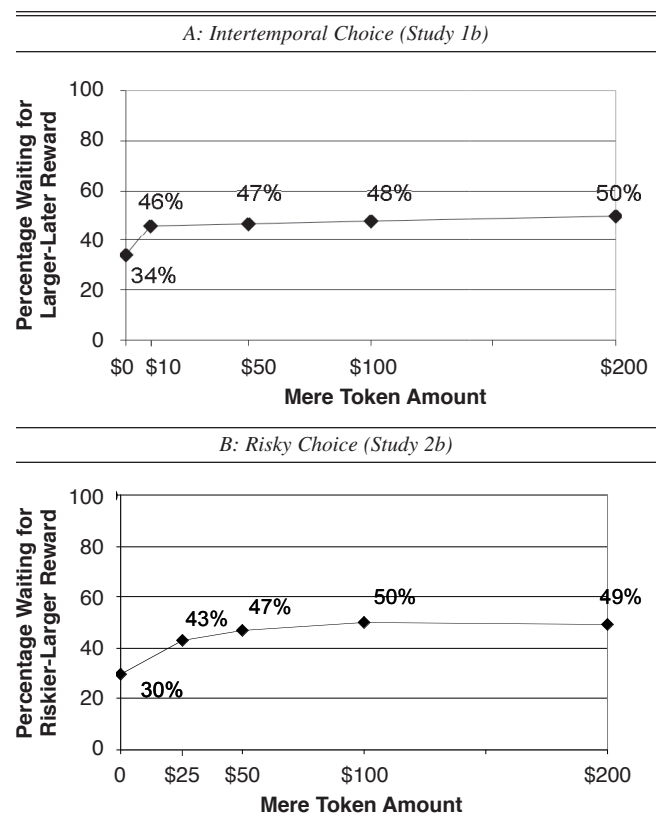
#### Study 1b: Scope Insensitivity and the Mere Token Effect

Consistent with the notion that the mere token provides a justification distinct from the trade-off calculus,  $P_2$  implies that choices are affected by the presence or absence of the mere token and that the mere token effect will be fundamentally insensitive to the magnitude (scope) of the token. To test this prediction, 1459 participants were given one of five hypothetical choices, fully between subjects. In the base condition, participants chose between \$900 that they would receive in one year or \$300 that they would receive in one week. In the four mere token experimental conditions, participants chose between the same two amounts bundled with \$10, \$50, \$100, or \$200 to be received in one day. As Figure 1, Panel A, shows, in the experimental conditions, when the choice included an immediate token amount bundled with both options, more participants were willing to wait for the later-larger amount of \$900 in one year regardless of the token size (all  $ps < .01$ ), compared with the base condition. There were no statistically significant differences between the cells with varying token amounts (all  $ps > .1$ ). Furthermore, when we fit a logistic regression model to the choices in the four experimental conditions, there was no effect of token magnitude (Wald  $\chi^2 = 2.1$ , not significant [n.s.]).

These results demonstrate a striking degree of scope insensitivity with regard to the token amount. The mere presence of even a seemingly trivial amount of immediate gratification systematically increases preferences for the less impulsive option, but increasing the scope of the immediate gratification has no discernible effect on preferences. Note that participants are not scope insensitive to amounts in general (see Study 5); rather, they are scope insensitive specifically to the mere token. This supports the view that the mere token effect operates by providing a (qualitative) justification that counteracts the impulse for the more immediate option.

More broadly, scope insensitivity to the token amount suggests that justifications in general might be evaluated on a discrete basis, as either present or absent. These findings imply that providing customers with an incentive for opening a certificate of deposit savings account (even holding

Figure 1  
SCOPE INSENSITIVITY OF THE MERE TOKEN



overall net present value constant<sup>3</sup>) should be more effective for longer-term accounts than shorter ones, and when added to a range of available accounts, the token will increase choice of the longer-term accounts among the available options. Thus, addressing the motivational goals in conflict is a key aspect of inducing consumers to save money for the future.

#### THE MERE TOKEN EFFECT IN RISKY CHOICE

In this section, we extend the mere token effect to the widely studied domain of risky choice. The normative subjective expected utility model of risky choice (Savage 1954) defines the utility of a gamble as the sum of the expected utilities of the outcomes. Subsequent empirical work on risky choice has demonstrated repeated violations of the expected utility model, leading to a variety of modified models, of which prospect theory (Kahneman and Tversky 1979) and cumulative prospect theory (Tversky and Kahneman 1992) are predominant.

Some research has suggested links between a myopic preference for immediacy in intertemporal choice and an analogous preference for certainty in risky choices (e.g., Mischel and Grusec 1967; Prelec and Loewenstein 1991; Rotter 1954). This suggests that a similar form of intrapersonal conflict might apply to risky choice, such that choices between a safer-smaller option and a riskier-larger one rep-

<sup>3</sup>We report replication studies that equalize the offerings in the base and token conditions for intertemporal and risky choices in the Web Appendix (<http://www.marketingpower.com/jmrapril11>).

resent a conflict between the goals of certainty (or risk avoidance) and magnitude. From a long-term perspective, a riskier option with a higher expected value is often preferred; however, an option with a lower expected value but less risk can be tempting. As in the case of intertemporal choice, the intrapersonal conflict that arises for risky choices is characterized not only by cognitive uncertainty but also by a conflict between competing goals. In this research, we use gambles to explore the effect of intrapersonal conflict and scope-insensitive justifications as a representation of the much broader domain of all decisions under uncertainty, including choices involving product risk (e.g., Dowling and Staelin 1994) or between investments. Next, we briefly describe our findings for risky choice, which parallel those for intertemporal choice.

#### *Study 2a: The Mere Token Effect in Risky Choice*

A total of 773 respondents were offered a choice between two lottery tickets. Half the respondents were randomly assigned to the base condition and were asked to choose between a riskier-larger ticket (Choice A: 30% chance to win \$1,000 [30% chose this option]) and a safer-smaller ticket, (Choice B: 50% chance to win \$300 [70% chose this option]). The other half of the respondents were assigned to the mere token condition, in which the same choice options were bundled with a common riskless amount (Choice A: \$100 for certain and a 30% chance to win \$1,000 [45% chose this option]; Choice B: \$100 for certain and a 50% chance to win \$300 [55% chose this option]).

Including the certain \$100 in both options shifted preferences, increasing the share of the riskier-larger reward by 15% ( $z = 4.1, p < .01$ ). We argue that facing the options of the safer-smaller and riskier-larger rewards elicits intrapersonal choice conflict between the goals of certainty and magnitude of the reward. Even when respondents viewed the larger reward as compensating for the associated risk, the relative safety of the safer-smaller reward was tempting. Thus, being offered the guaranteed token amount of \$100 in either case reduces this conflict, alleviates the temptation, and makes it easier to forgo the safer-smaller reward and choose the higher expected value (but riskier) reward. Furthermore, we found no moderating effect of wealth on the mere token effect (logistic regression interaction with self-reported income Wald  $\chi^2 = .22, n.s.$ ), inconsistent with both a liquidity constraint account and expected utility theory.

We found the effect to be robust across different versions of the stimuli that varied the magnitudes (of the token amount, safer-smaller reward, and/or riskier-larger reward) and probabilities of winning. Across ten tests we conducted, we found mere token effects ranging from 2% to 23%, with a mean effect of 13%. All ten effects were in the predicted direction, and eight were significant at the .05 level. We argue that this robust mere token effect in risky choice arises from the same factors as in intertemporal choice. Specifically, the mere token, operating outside the trade-off calculus, provides a token level of guaranteed gain, placating the goal of risk avoidance and reducing choice conflict.

#### *Study 2b: Scope Insensitivity and the Mere Token Effect*

Applied to risky choice,  $P_2$  suggests that the presence of even a token certain amount would provide justification and shift preferences but that increasing the magnitude of the

token amount would have little impact. A total of 721 online survey participants made one of five choices, fully between subjects. In the base condition, participants chose between a 50% chance of winning \$1,000 or an 80% chance of winning \$300. In the four mere token experimental conditions, participants chose between the two previously mentioned options, each bundled with a certain amount of \$25, \$50, \$100, or \$200. As Figure 1, Panel B, shows, when the choice included a token certain amount bundled with each option, more participants were willing to select the riskier option (50% chance of winning \$1,000) regardless of the token size (all  $ps < .05$ ), and there were no significant differences between the cells with varying token amounts (all  $ps > .1$ ). Furthermore, when we fit a logistic regression model to the choices in the four experimental conditions, there was no effect of token magnitude (Wald  $\chi^2 = 1.2, n.s.$ ).

Thus, in the domain of risky choice, we have replicated our finding that increasing the token size has no impact on the mere token effect. It is worth noting that both prospect theory and expected utility theory indicate that in general, the mere token effect is sensitive to token size. However, when the ratio of the probabilities is sufficiently low, both the mere token effect and scope insensitivity to token size can be explained by cumulative prospect theory and subjective expected utility. In Study 5b, we directly rule out these models as an alternative explanation.

For investors choosing among a range of investment options, the token will increase the likelihood of choosing the higher risk and reward investments from among the available options. Taking the intertemporal and risky choice results together implies that consumers saving money through 401(K) accounts will be influenced by their motivational conflict and by the timing and risk of even small amounts of money they view as being related to the choice.

#### *THE ROLE OF CHOICE CONFLICT IN THE MERE TOKEN EFFECT*

In the previous sections, we study the mere token effect as a form of scope-insensitive justification to resolve intrapersonal choice conflict. In the subsequent sections, we turn to the question of how differences in the intensity of conflict moderate the mere token effect, per  $P_3$ . In this section, we provide evidence that the mere token effect occurs specifically when the token reduces the choice conflict experienced by an individual participant and generalize our findings to a within-subject repeated measures design.

#### *Study 3: Evaluations of Relative Choice Conflict and the Mere Token Effect*

A total of 52 students intercepted on the campus of a large midwestern university evaluated their preference between two intertemporal choices by marking a point on an unnumbered 110 mm line segment, anchored by strong preference for the two choice options. Participants made four such evaluations: two intertemporal choices (with and without a token) and two risky choices (again, with and without a token). We counterbalanced the order of the intertemporal and risky choice sections of the survey.<sup>4</sup>

<sup>4</sup>We tested all findings for order effects (i.e., whether the intertemporal tasks or the risky choice tasks were shown first), and we control for order in the analysis of variance results. Because there were no discernible effects of order, we report the results for the full data set.

For the intertemporal choices, participants first expressed their preference on the line-length scale anchored by a strong preference for “\$300 in one week” on the left (measured as 0 on the unnumbered line) and a strong preference for “\$900 in one year” on the right (measured as 110 on the line). Then, participants repeated the evaluation in the mere token version, on the same line length now anchored by “\$50 in one day and \$300 in one week” on the left and “\$50 in one day and \$900 in one year” on the right. Next, they rated the difficulty of each task on seven-point scales.<sup>5</sup>

For their risky choices, the participants first indicated their preference on the line segment between “50% chance of \$300” on the left and “30% chance of \$1,000” on the right; then they repeated the evaluation in the token version between “\$100 for certain and a 50% chance of \$300” and “\$100 for certain and a 30% chance of \$1,000” and rated the tasks’ difficulty.

Comparing the preferences in the two versions, participants expressed a stronger preference for the later-larger option in the intertemporal choice token version compared with the base version ( $M = 74$  mm vs. 63 mm; repeated measures analysis of variance,  $F = 13.9, p < .01$ ) and for the riskier-larger option in the risky choice token version compared with the base version ( $M = 72$  mm vs. 58 mm;  $F = 12.4, p < .01$ ). Thus, we again replicate the mere token effect for both intertemporal and risky choice, using a within-subject relative preference measure.

Furthermore, we propose that the token effect operates by reducing the conflict that participants feel and the difficulty of the choice they experience. To test this, we calculated the difference in the difficulty ratings between the separate base and token version ratings ( $\Delta$ Difficulty) to capture the degree to which each participant believed that the token version was easier (or more difficult, for negative values). We also calculated the average of the two difficulty questions (base and token version) to capture overall difficulty in answering the questions. Then, we fit a linear regression model to predict preference for the later-larger option in the token version for each choice type. The coefficient of  $\Delta$ Difficulty for intertemporal choices was positive ( $t = 2.2, p < .05$ ):

$$(1) \text{Pref}_{\text{LL}|\text{TOKEN}} = 11.7 + .80 \text{Pref}_{\text{LL}|\text{NO TOKEN}} + 4.6 \Delta\text{Difficulty} \\ + 2.0 \text{Mean Difficulty.}$$

This implies that the more difficult the participants found the base version, the more their preference for the later-larger option increased when the token was added. There was also an unpredicted marginally significant effect of average difficulty ( $t = 1.8, p < .10$  [two-tailed]), such that the token was more likely to increase preference for the later-larger option when participants experienced both choices as more difficult, on average.<sup>6</sup>

<sup>5</sup>Participants also evaluated the relative difficulty of the two tasks on another single seven-point scale for both intertemporal and risky choices. This scale yielded the same results, which we omitted in the interest of space.

<sup>6</sup>We included average difficulty in the regression to control for the ceiling and floor effects in measurement of the difference score,  $\Delta$ Difficulty. However, the effect of  $\Delta$ Difficulty persists even when we exclude average difficulty from the model for both intertemporal ( $\beta = 3.5, t = -1.7, p < .05$ ) and risky ( $\beta = 3.8, t = 2.1, p < .05$ ) choice.

In the risky choice scenarios, examining preference for the riskier-larger option in the token version, we again find a positive and significant effect of  $\Delta$ Difficulty ( $t = 2.1, p < .05$ ):

$$(2) \text{Pref}_{\text{RL}|\text{TOKEN}} = 44.4 + .49 \text{Pref}_{\text{RL}|\text{BASE}} + 3.9 \Delta\text{Difficulty} \\ - .3 \text{Mean Difficulty.}$$

Here, there was no effect of average difficulty, and rerunning the regression without average difficulty yielded the same results (coefficient of  $\Delta$ Difficulty = 3.8;  $t = 2.1, p < .05$ ). The more a participant believed that the token reduced the choice difficulty inherent in the base condition, the more adding the token increased that participant’s preference for the riskier-larger option.

This study supports the argument that adding a mere token of immediacy or certainty to intertemporal and risky choices, respectively, systematically changes preferences by reducing choice conflict. Note that we only found a directional main effect of difficulty across the two conditions for both intertemporal (3.03 base vs. 2.98 token;  $t = .3, n.s.$ ) and risky choices (3.3 base vs. 3.0 token;  $t = 1.4, p = .10$ ).<sup>7</sup> We conclude that the tendency to interpret the token version as less difficult moderates the mere token effect. This is consistent with the view that people who experience the choice as a conflict between competing motivations find the token version easier and shift their preferences. In contrast, those who do not experience the choice as a conflict might instead experience the token version as more difficult because they have more information to process in the token version, but the token will have no effect on their preferences.

#### USING PSYCHOLOGICAL DISTANCE TO ATTENUATE CHOICE CONFLICT AND THE MERE TOKEN EFFECT

In the preceding studies, we use naturally occurring variation across people (in perceived choice difficulty) to demonstrate the role of choice conflict in the mere token effect. However, the degree of conflict experienced can also systematically depend on the psychological distance of the person to the choice itself (for a comprehensive review, see Liberman, Trope, and Stephan 2007; for a model of psychological distance, see Kivetz and Kivetz 2006). For example, Metcalfe and Mischel (1999) argue that psychological distance from decision stimuli shifts decision making from a “hot” impulsive to a “cool” cognitive system of reasoning, enhancing willpower. On a related note, the work of Kivetz and colleagues (e.g., Kivetz and Simonson 2002b; Kivetz and Keinan 2006) demonstrates that psychological distance weakens indulgence guilt, reducing the reverse self-control problem of hyperopia (excessive farsightedness).

We propose that as psychological distance increases and the degree of experienced intrapersonal conflict is reduced, the need for the justification provided by the mere token is reduced and the mere token effect diminishes. Psychological distance can be manipulated in several ways—for example, by manipulating either the timing or probability of the decision outcome (e.g., Kivetz and Kivetz 2006; Kivetz and

<sup>7</sup>Difficulty ratings in the base version had an inverse U-shaped relationship to preference for both intertemporal choices ( $R^2 = .18$ , peaking at a preference of approximately 80 on the 0–110 scale) and risky choices ( $R^2 = .29$ , peaking at a preference of approximately 55).

Simonson 2002b; Sagristano, Trope, and Liberman 2002; Trope and Liberman 2003). In the following two studies, we investigate  $P_3$  in the domains of intertemporal and risky choice, first manipulating the psychological distance of intertemporal choices by reducing outcome probability and then manipulating the psychological distance of risky choices by delaying the outcomes.

*Study 4a: The Effect of Outcome Uncertainty on the Mere Token Effect in Intertemporal Choice*

In Study 4a, 659 participants made choices between \$1,000 in one year and \$300 in one week, in a 2 (nontoken vs. mere token)  $\times$  2 (high vs. low psychological distance) between-subjects design. We manipulated the presence or absence of justification by including a token amount (\$100 in three days) with each option in the mere token conditions but not in the base, nontoken conditions. In contrast with Study 1, the rewards were presented as lotteries with the probability of winning the chosen option manipulated between subjects (either a 75% or 10% chance). The probability of receiving the option was repeated with each choice option to emphasize that the probabilities were equivalent for both choice options. In a pretest, we confirmed that having only a 10% chance of receiving the chosen reward made the choice seem like an easier decision, compared with when there was a more substantial 75% chance of receiving the chosen reward ( $N = 45$ ,  $t = 3.3$ ,  $p < .01$ ). We expect that this difference in choice conflict will result in a stronger mere token effect when the probability is higher.

We observed a 16% mere token effect for uncertain intertemporal choices when the probability of winning is high. (Choice of the later-larger reward increases to 63% in the mere token condition from 47% in the base condition;  $z = 3.0$ ,  $p < .01$ .) However, when the choices are more remote with only a 10% probability of winning, we found no significant token effect. (Choice of the later-larger reward is 56% in the mere token condition vs. 51% in the base condition;  $z = 1.0$ , n.s.) Thus, we found that reducing outcome certainty, and thereby increasing the psychological distance of the outcomes, reduces the mere token effect ( $z = 1.4$ ,  $p < .10$ ).

*Study 4b: The Effect of Outcome Delay on the Mere Token Effect in Risky Choice*

In Study 4b, 603 participants made choices between a 30% chance to win \$1,000 and a 50% chance to win \$300, in a 2  $\times$  2 between-subjects design. We manipulated the presence or absence of justification by including \$100 for certain with each choice option in the mere token conditions but not in the base, nontoken conditions. We manipulated psychological distance by having the outcomes occur either in the present or after a one-year delay. In a pretest, we confirmed that delaying the consequences of the choice by a year made the decision easier, compared with immediate choice outcomes ( $N = 25$ ,  $t = 2.2$ ,  $p < .05$ ). We expect that this difference in choice conflict results in a stronger mere token effect when the outcome is immediate.

In the immediate condition, we find a significant 15% mere token effect for risky choice, with 25% choosing the riskier-larger option in the base condition compared with 40% in the mere token condition ( $z = 2.8$ ,  $p < .01$ ). When the choices are more remote and both outcomes are delayed by a year, we find no significant effect of a guaranteed token

on choices of the riskier-larger option (42% base condition vs. 47% mere token condition;  $z = .9$ , n.s.). Making the outcomes more psychologically distant reduces the mere token effect ( $z = 1.3$ ,  $p = .10$ ).

Overall, Studies 4a and 4b demonstrate that greater psychological distance reduces the mere token effect in the domain of both intertemporal and risky choice (combined data,  $z = 1.8$ ,  $p < .05$ ). We argue that psychological distance mitigates the very experience of intrapersonal conflict, making the conflict feel less severe. These findings are consistent with choice conflict underlying the mere token effect and are inconsistent with alternative explanations, such as an income effect, liquidity constraints, and naive diversification. Furthermore, both studies provide further support for the proposition that intensity of the conflict moderates the mere token effect.

*THE IMPACT OF RELATIVE OPTION VALUES ON CHOICE CONFLICT AND THE MERE TOKEN EFFECT*

The results reported thus far support our conceptualization of intrapersonal choice conflict underlying the mere token effect, such that consumers are largely scope insensitive to the magnitude of the mere token but sensitive to the intensity of the choice conflict. In this section, we investigate the impact on the mere token effect of varying the values of the actual choice options. In particular, we argue that the mere token effect is fundamentally sensitive to the degree to which the intrapersonal conflict is characterized by motivational conflict (as opposed to preference uncertainty arising from similarly valued options), and we describe how the degree of choice conflict changes with the relative option values. Moreover, the following studies enable us to directly contrast the mere token effect with the predictions of the commonly used additive utility models, ruling out a diminishing marginal utility account.

We suggest that the larger the implicit trade-off between goals represented by two options, the greater is the resulting choice conflict, yielding a stronger mere token effect. For example, consider the choice conflict experienced in making intertemporal choices as the size of the sooner-smaller reward is varied. When the sooner-smaller reward is similar in magnitude to the later-larger reward, there is little or no penalty for choosing immediacy, and the decision involves minimal choice conflict. As the sooner-smaller reward size is reduced, the trade-off may approach the indifference point, at which the sooner-smaller and later-larger options are similarly valued. For these kinds of choices, conflict arises for two reasons: First, distinguishing the higher valued of the two options is difficult, and second, the choices represent a trade-off between the goals of immediacy and magnitude. As the sooner-smaller reward is further reduced, it becomes increasingly apparent that the later-larger option is valued more highly, and any preference uncertainty is reduced. However, the options in this case represent an ever-starker contrast between immediacy and magnitude. Thus, even as preference uncertainty based on valuation diminishes, the conflict between goals is steadily increasing. First, we provide support for this assertion in the domain of intertemporal choice, and then, we extend the argument to risky choices, demonstrating that our findings are contrary to the predictions of expected utility and prospect theory models.



Table 1  
PERCENTAGE OF SUBJECTS CHOOSING THE LATER-LARGER OPTION (\$1,000 IN ONE YEAR) IN STUDY 4A

	Size of Sooner-Smaller Choice Option (in One Week)								
	\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900
Without mere token	72%	67%	58%	48%	51%	38%	27%	20%	15%
With mere token	78%	77%	79%	64%	50%	49%	36%	18%	15%
Shift to later-larger	+6%*	+10%**	+21%***	+16%***	-1%	+11%**	+9%**	-2%	0%

\*significant at 10%.

\*\*significant at 5%.

\*\*\*significant at 1%.

*Study 5a: The Effect of Sooner-Smaller Reward Size on the Mere Token Effect in Intertemporal Choice*

In Study 5a, participants were presented with one of 18 intertemporal choices, in a 2 (base vs. token)  $\times$  9 (varying sizes of sooner-smaller rewards) between-subjects design ( $N = 3139$ ). Participants in the base conditions made a choice between \$1,000 in one year and a sooner-smaller amount in one week that varied (between subjects) from \$100 to \$900 (see Table 1). In the mere token conditions, we bundled both the same choice option pairs with \$100 in three days. In a pretest, we confirmed that participants considered choosing between \$1,000 in a year and a relatively large immediate amount an easier decision, compared with when the immediate amount was smaller (\$900 vs. \$300 in a week;  $N = 58$ ;  $t = 2.2$ ,  $p < .05$ ). Thus, the mere token effect should be stronger for lower values of the sooner-smaller reward, which are associated with more choice conflict.

For each of the nine tests of the mere token effect in Table 1, adding the mere token tended to increase choice of the later-larger option in the conditions in which the sooner-smaller amounts were lower and therefore more people were choosing the later-larger reward. It is noteworthy that this is counter to a ceiling effect: The two strongest mere token effects were when the sooner-smaller amounts were \$400 and \$300 (both  $ps < .01$ ), and the later-larger reward was relatively appealing (chosen by 64% and 79% of the participants, respectively).

We fit a main effects logistic regression model to the full data set, which shows that choice of the later-larger reward decreases as the size of the sooner-smaller reward increases ( $\beta_{\text{SIZE}} = -.004$ , Wald  $\chi^2 = 492.6$ ,  $p < .001$ ) and increases when a mere token is offered ( $\beta_{\text{TOKEN}} = .407$ , Wald  $\chi^2 = 26.2$ ,  $p < .001$ ). Then, we fit a full model, including the interaction between sooner-smaller reward size and mere token. The model confirms that the mere token effect is stronger when the sooner-smaller reward is smaller ( $\beta_{\text{INT}} = .001$ , Wald  $\chi^2 = 5.5$ ,  $p < .05$ )—that is, when the later-larger reward has relatively higher utility and choice share. Therefore, these findings are consistent with our conceptualization, which predicts that as the sooner-smaller reward size is reduced, the “right” choice becomes clearer, but the remaining conflict is increasingly motivational. Consequently, when the sooner-smaller reward is reduced, the mere token effect increases.

*Study 5b: The Effect of Safer-Smaller Reward Size on the Mere Token Effect in Risky Choice*

Next, we generalize the aforementioned finding to the domain of risky choice in a study ( $N = 759$ ) in which we

manipulate the size of the safer-smaller reward. We compare three levels of the safer-smaller amount, with participants in the base condition choosing between a 50% chance of winning \$1,000 and a 90% chance of winning the smaller amount (\$100, \$300, or \$600, between-subjects). In the mere token conditions, we bundled both options with \$50 for certain. In a pretest, we confirmed that participants viewed choosing between a 50% chance of winning \$1,000 and a relatively large high-likelihood amount (e.g., 90% chance of winning \$600) as an easier decision than choosing between a 50% chance of winning \$1,000 and a relatively small high-likelihood amount (e.g., 90% chance of winning \$100) ( $N = 59$ ;  $t = 2.0$ ,  $p = .05$ ).<sup>8</sup> Thus, in general, we should find stronger mere token effects for smaller values of the safer reward.

For the lowest safer-smaller amount (\$100), the mere token increased preference for the riskier-larger option by 20% (61% vs. 41%;  $z = 3.3$ ,  $p < .01$ ). When the safer-smaller amounts were larger, we predicted reduced choice conflict, and we found a weaker effect of the mere token for the \$300 amount (28% vs. 26%;  $z = .3$ , n.s.) and the opposite effect for the \$600 amount (10% vs. 15%;  $z = 1.1$ , n.s.). Consistent with our findings in the domain of intertemporal choice, we observe the expected interaction between safer-smaller reward size and the mere token in a logistic regression model that we fit to these data (Wald  $\chi^2 = 7.8$ ,  $p < .01$ ).

*Contrasting the Intrapersonal Conflict Framework with Diminishing Marginal Utility*

Comparing the mere token effect across differing levels of the safer-smaller reward is of particular interest in testing diminishing marginal utility as an alternative explanation. In direct contrast with our findings, both cumulative prospect theory and subjective expected utility predict that increasing the size of the safer-smaller reward increases the mere token effect. Specifically, these models imply that adding a mere token makes the riskier-larger option more appealing when that gamble is lost, but adding the mere token favors the safer-smaller option when that gamble is won. This is because the mere token is valued less when added to the riskier-larger reward than the safer-smaller reward, in accordance with diminishing marginal utility. However, as the size of the smaller reward increases, this difference in mere token valuation between the two options (when winning) lessens, and the advantage that the mere token brings to the safer-smaller option when winning is

<sup>8</sup>We used only two levels in the pretest, and we did not pretest the 90% chance of winning \$300.

reduced (i.e.,  $\Delta_1$  vs.  $\Delta_2$  in Figure 2). Thus, the benefit of the mere token to the safer-smaller reward is reduced when the safer-smaller reward is larger, and adding a mere token should yield even stronger preferences for the riskier-larger option, thus strengthening the effect. This prediction is general, assuming only concavity of the value (or utility) function (e.g., diminishing marginal utility), and is independent of the outcome probabilities and the form of the probability weighing function.<sup>9</sup>

Thus, the results of Study 5b are actually contrary to cumulative prospect theory and expected utility models and help rule out the diminishing marginal utility account. Taken together, Studies 5a and 5b are consistent with our conceptualization of the mere token effect as a justification that resolves choice conflict, with the strongest effects observed when the options present a starker contrast between opposing goals.<sup>10</sup>

#### THE IMPACT OF PRIMING CONFLICTING GOALS ON THE MERE TOKEN EFFECT

In the studies thus far, we demonstrate that choice conflict underlies the mere token effect, and we argue that this occurs when two goals are in conflict. We have assumed that as people consider trade-offs in choices, both competing goals are spontaneously activated, which gives rise to conflict between the competing goal motivations (e.g., immediacy and magnitude). In contrast, when the options do not differ substantially on how well they satisfy one of the goals (i.e., when the values on one of the dimensions are similar, as in Studies 5a and 5b) the decision can be resolved by focusing on the goal for which values do vary, without encountering goal conflict. This suggests that even when consumers face choice options that vary on both dimensions, differences in the degree to which the competing goals are activated will affect goal conflict and, consequently, whether a mere token effect is observed. Specifically, if only one goal is activated, less conflict will be experienced, and the token will have less of an impact on choice.

In the final study, we provide evidence for our argument that activation of two competing goals generates choice conflict, which can then be resolved by the presence of mere tokens. Specifically, we use a priming task to make either a single goal or both competing goals salient and show that this moderates the mere token effect. Furthermore, in this study, we generalize the mere token effect to the domain of payments and show that mere tokens can also serve as a justification to facilitate shortsighted choices.

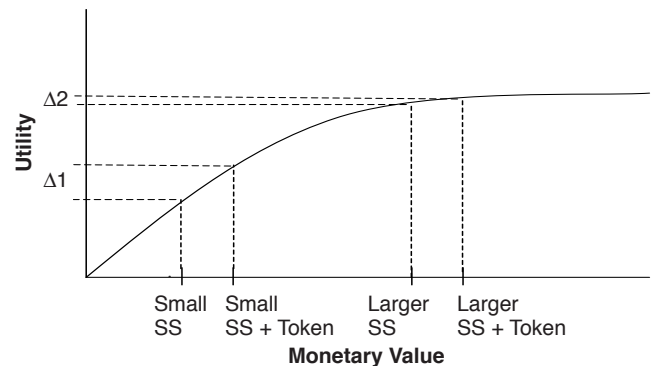
#### Study 6: The Effect of Single-Goal and Dual-Goal Priming on the Mere Token Effect

In an online study of moviegoing, 580 moviegoers ages 18–49 years evaluated a list of nine potential movie titles. The list was a mix of real titles taken from best-selling novels (e.g., *A Thousand Splendid Suns*) and fake titles. We constructed multiple versions of each fake title to create

<sup>9</sup>A detailed proof of these claims is available from the first author on request.

<sup>10</sup>An additional study yields analogous findings, contrary to the predictions of prospect theory and expected utility theory, by manipulating outcome probability. We find stronger mere token effects when the probability of the riskier-larger reward is higher, and therefore the choice options are more extreme, eliciting more conflict.

Figure 2  
DIMINISHING MARGINAL UTILITY PREDICTS STRONGER EFFECTS FOR LOWER-VALUED “SMALLER-SAFER” OPTIONS



stimuli for (1) the control condition (e.g., *And This We Are*), (2) the immediacy prime condition (e.g., *And This We Spend*), and (3) the prudence prime condition (e.g., *And This We Save*). We used five versions of the priming task in all: a control version, a version with only immediate enjoyment primes, a version with only prudence primes, and two versions of mixed primes, with half of the fake titles representing immediacy and half representing long-term prudence. In the analysis that follows, we collapse the two single-goal primes and the two mixed (dual-goal) primes, yielding a 3 (control, single goal, dual goal)  $\times$  2 (base, mere token) design.<sup>11</sup>

After the movie title evaluation, participants were asked a series of ostensibly unrelated questions about credit card payments. Specifically, they were told they owed a \$600 debt on their credit card. In the base condition, they chose between paying their balance in full or making no payment and being charged \$10 of interest. In the token condition, we added a minimum required payment of \$20 to both options, so participants chose between paying the balance in full (including the \$20 minimum) or only paying the \$20 minimum and being charged \$10 of interest.

We propose that when the competing goals of immediate gratification (represented by not paying the balance due) and being prudent about long-term interests are both activated, the resulting conflict can be resolved by the token minimum payment. In this context, reasons and rationalizations might provide a justification for indulgence, helping the consumer overcome feelings of guilt about indulging and making it easier to choose the more shortsighted option, a result in the opposite direction of the previous studies. We predict that the presence of the token payment will increase the choice to defer further payments in the control (because both goals are usually spontaneously activated) and the dual-goal conditions but not in the single-goal conditions.

The token payment increased payment deferral in the control condition (11% deferral in the base condition vs. 27% deferral in the mere token condition;  $z = 2.63$ ,  $p < .01$ ) and in the dual-goal conditions (13% vs. 33% deferral in the

<sup>11</sup>The two single-goal prime conditions did not significantly differ from each other in any of the results, and the two mixed (dual-goal) prime conditions also did not significantly differ from each other in any of the results.

base vs. mere token condition;  $z = 3.09, p < .01$ ). In contrast, the token payment had little effect on choices in the single-goal condition (17% vs. 21% deferral;  $z = .87, n.s.$ ). Priming a single goal reduces the mere token effect, compared with the no-prime control condition ( $z = 1.54, p < .10$ ) and the dual-goal prime condition ( $z = 2.01, p < .05$ ).

We have argued that the mere token effect is reduced when only a single goal is primed because there is less choice conflict than when both goals are present in the control and dual-goal prime conditions. This implies that the impact of the prime on the mere token effect should be particularly pronounced among people who find the two financial goals (immediate enjoyment and long-term prudence) a strong source of decision conflict. To test this, we asked participants to rate the degree to which the two goals of “having enough money now” and “ensuring strong finances for the future” were easy or difficult to reconcile in their lives. They rated their goal-conflict on a five-point scale anchored by 1 = “Very easily—I can work towards both goals together,” and 5 = “With difficulty—the two goals are often in conflict in my life.”<sup>12</sup>

In a logistic regression predicting payment deferral, we find a marginally significant three-way interaction among the single-goal prime, the presence of the token payment, and the individual tendency to experience goal conflict ( $\beta = .362, \text{Wald } \chi^2 = 2.8, p < .10$ ).<sup>13</sup> The estimated model parameters predict that for people with the lowest rating of goal conflict, being primed with the single goal makes little difference for the mere token effect ( $\Delta\text{Deferral} = +7.0\%$  in the single-goal condition vs.  $\Delta\text{Deferral} = +4.5\%$  in the control and dual-goal conditions). In contrast, the single-goal prime substantially reduces the mere token effect among those who gave the highest rating of goal conflict ( $\Delta\text{Deferral} = +.1\%$  in the single-goal condition vs.  $\Delta\text{Deferral} = +31.4\%$  in the control and dual-goal conditions). Thus, the inclusion of a token minimum payment has the strongest effect on increasing payoff deferral for participants with high goal conflict for whom both goals were salient. When only one goal was made salient or if the participants had lower levels of goal conflict, there was less of a role for the token in the decision, and we observed little effect of adding a token payment.

### GENERAL DISCUSSION

Across these studies, we demonstrate a new phenomenon in decision making, the mere token effect, in the domains of risky and intertemporal choice and for payment timing. The reported studies provide evidence that the effect is scope insensitive and is moderated by the intensity of intrapersonal conflict, consistent with our conceptualization and contrary to the extant normative and descriptive models based on additive utility. In the following section, we briefly address several potential alternative explanations. Then, we explore the implications of the mere token effect in particular, and scope-insensitive justifications in general, for both

consumers and firms and for the broader literature on decision making.

#### *Alternative Explanations of the Mere Token Effect*

Although there are potential alternative explanations for the basic effect of adding a mere token, the rival accounts cannot explain our findings of a consistent role of choice conflict as a moderator of the effect in Studies 3–6. In addition, we have specific evidence against the notion that the findings are due to magnitude effects (see the Web Appendix at <http://www.marketingpower.com/jmrapr111>), diminishing marginal utility (Study 5b), and liquidity constraints (Study 2a).<sup>14</sup> The naive diversification heuristic (Benartzi and Thaler 1999) might suggest that adding the mere token to risky choices yields a preference for the riskier-larger diversified option over the safer-smaller nondiversified option but cannot explain the process findings in Studies 3–6 and is incompatible with Study 5b.

We ruled out diminishing marginal utility as a direct alternative explanation (e.g., through prospect theory) in Study 5b. However, a more complex alternative account might argue that consumers code immediate and delayed outcomes to separate mental accounts (Thaler 1985) and that diminishing marginal utility then applies separately to each mental account. In this view, when a token is added to the sooner-smaller option, it is in the same mental account and is not fully valued, due to diminishing marginal utility. In contrast, when it is added to the later-larger option, consumers put it in a separate mental account and value it in full because diminishing marginal utility occurs separately within each mental account. The later-larger option would then be improved more by adding the token than would the sooner-smaller. However, this suggests that when the sooner-smaller is near zero, there should be minimal diminishing sensitivity to the token and therefore little observed mere token effect, compared with when the sooner-smaller approaches the later-larger in value, which is when diminishing marginal utility has more of an effect. Thus, this mental accounting explanation would predict stronger mere token effects for high values of the sooner-smaller option than for low values, which is the exact opposite of what choice conflict would predict and what we find in Study 5a. An analogous argument implies that the results of Study 5b rule out this mental accounting explanation of our risky choice findings.

#### *Implications of the Intrapersonal Conflict Framework for Consumers and Firms*

*Financial services marketing.* The kinds of choices that give rise to the mere token effect can be seen directly in choices about savings and investments. Brokerage accounts often offer riskless cash bonuses for opening an investment account, and banks offer immediate cash bonuses for opening certificate of deposit savings accounts. Our findings suggest that these token bonuses could fundamentally diminish risk sensitivity and time impatience in the subsequent decisions made. Furthermore, many companies offer matching contributions to 401(K) accounts in the form of

<sup>12</sup>There were no significant differences in this measure across the goal priming conditions.

<sup>13</sup>This interaction was driven by both the control condition and the dual-goal prime. In separate analyses of single-goal versus control and single-goal versus dual-goal conditions, the three-way interaction was similar in magnitude.

<sup>14</sup>We also note that in an analysis of the large samples in Studies 2a and 5a, we find that the mere token effect is robust across a variety of demographic subgroups defined by gender, age, income, and education.

company stock. We suggest that the risk associated with the stock may affect the investment choices, such that receiving low-risk stock may spur greater investment in high-risk, high-return funds, and for those receiving a matching contribution in high-risk companies, the effect would be reversed in favor of safer investments. Conceptually, such effects could be found for nonmonetary tokens as well (e.g., a toaster, other promotional items that banks give for opening accounts). In such situations, the key factor would be the degree to which the promotional item represents a goal in conflict.

For all these predictions, we would expect the size of the bonus to have little impact and psychological factors (e.g., the availability of the bonus to be integrated into the decision, the degree of psychological distance, the intensity of the conflict) to moderate the effect. More generally, our findings demonstrate the significant role of motivational conflict and the potential resolution of conflict through justifications in financial decision making.

*Consumer choices.* The mere token effect also has important implications for choices between bundled offerings and, more generally, multiattribute choice. When the choice options each speak to a conflicting consumption goal, bundling an element of choice (a product, feature, or attribute) with both options can resolve the conflict and have a significant impact on the choices made. Thus, before the 2010 oil spill in the Gulf of Mexico, British Petroleum’s “Beyond Petroleum” campaign and investments in alternative energy can be understood as an attempt to address the motivational conflict facing environmentally concerned consumers. Similarly, Toyota’s promotion of an MP3 player in the 2007 Camry might have resolved motivational conflict between practical goals, already represented by the Camry, and enjoyment goals, which might be better served by competitors but are well represented by the MP3 player. Arguably, the resolution of such conflicts for most consumers is driven by the presence or absence of such initiatives rather than their scope.

These findings carry further implications for the competitive dynamics between firms promoting competing offers, each with a unique strength that addresses a distinct conflicting goal. If one firm adds a token element to their offer that provides some satisfaction on the goal represented by the opposing firm’s strength, it may gain share out of proportion with the value of the token element added. Furthermore, if the second firm then counters by matching the offer, it would not reverse the gain in share, because a shift in choice would occur even when the token element is bundled with both options. The second firm might be better served by adding its own token element, addressing the first firm’s main strength.

#### *Implications of the Intrapersonal Conflict Framework for the Literature on Decision Making*

The mere token effect is reminiscent of the self-control strategy of substitution, in which a small vice is used to satisfy the impulsive desire for gratification and increase willpower to avoid greater vices (see Ainslie 1975; Hoch and Loewenstein 1991). Thus, for example, a dieter may substitute chewing gum for a tempting dessert to avoid a complete breakdown of willpower. Similarly, the mere token effect suggests that under certain circumstances,

bundling small vices with the choice options when confronted by a conflict between virtue and vice may boost choices of the more virtuous options. However, it should be noted that we demonstrated the mere token effect in the context of static binding decisions, and people might not necessarily stick to those choices over time. Moreover, conflict will likely increase with the proximity of the choice options, and when a mere token has been adapted to, and segregated from, the choice options, the effect of the mere token might be reduced or eliminated. This suggests that unless the choices are binding, the mere token might have only a temporary effect or might even backfire due to behavioral activation triggered by consumption of the token (Wadhwa, Shiv, and Nowlis 2006).

The implications of our conceptualization of intrapersonal conflict extend beyond issues of self-control to goal conflict in general. Intrapersonal conflict can arise from any set of competing goals, and therefore, we expect individual differences in how goals are personally structured and evaluated to moderate the results of the current research. When goals are sufficiently parallel, we may observe symmetric mere token effects, in which adding a token representing one goal shifts choices in one direction, which could be reversed by instead adding a token that represents the other goal in conflict, shifting choices in the opposite direction. Thus, separate from any main effects that such a manipulation might have, adding a large low-probability token to a risky choice or a large delayed amount to an intertemporal choice might reverse the small certain and small immediate token effects documented here.<sup>15</sup>

However, many decisions can involve primary (or default) and secondary goals. When this is the case, we suggest that justifications and reasons will be most effective when addressing the secondary goal, enabling choice of an option consistent with the primary goal. Thus, in a given choice context, the same mere token might address what is the primary goal for one person, with little effect on choice, and what is the secondary goal for another, with a substantial effect. Recent research on hyperopia points to precisely this form of reversibility of primary and secondary goals. To the hyperopic person who feels acutely that he or she is missing out due to insufficient indulgence (Kivetz and Keinan 2006), abstention is arguably an impulsive secondary goal, and indulgence can be construed as the primary (albeit unfulfilled) goal. In that case, reasons and rationalizations might provide a justification for indulgence, helping overcome feelings of guilt about indulging and making it easier to choose the indulgence. Consistent with this view, in Study 6, the token payment facilitates a “vice” choice (accepting a penalty to pay later) rather than enabling a “virtuous” choice (paying off the entire bill now) as in the other studies reported.

Last, we note that the mere token effect represents one specific type of justification. The literature on reasons, justifications, and rationalizations has described a wide range of contexts in which justification is used and many types of information that are interpreted as justification cues. The conceptualization we develop is applicable in many of these domains, specifically when justifications are used to resolve motivational or intrapersonal conflict rather than just prefer-

<sup>15</sup>We thank an anonymous reviewer for making this point.

ence uncertainty. In the broad range of such choice contexts, we suggest that our proposals regarding scope-insensitive justification and the roles of psychological distance and conflict intensity as moderators merit further research.

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