# Buyers Versus Sellers: How They Differ in Their Responses to Framed Outcomes 

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#### Abstract

Consumers' reactions to a difference in price can depend on how it is framed. If buyers interpret paying $\$ 60$ rather than $\$ 65$ as getting a $\$ 5$ discount, then they are likely to consider paying $\$ 60$ to be a gain and paying $\$ 65$ to be a nongain. Alternatively, if they interpret having to pay $\$ 65$ rather than $\$ 60$ as incurring a $\$ 5$ penalty, then they may consider paying $\$ 60$ to be a nonloss and paying $\$ 65$ to be a loss. Similarly, sellers can also experience gains, nongains, nonlosses, and losses. This article suggests that buyers are prevention focused and consequently place a greater emphasis on loss-related frames, whereas sellers are promotion focused and place a greater emphasis on gain-related frames. Therefore, for equivalent positive outcomes, buyers feel better about nonlosses, but sellers feel better about gains. For equivalent negative outcomes, buyers feel worse about losses, but sellers feel worse about nongains. These effects, however, disappear when there is little motivation to process information about the monetary transaction.


Consumers acquire products as buyers and dispose them of as sellers. After they decide to buy or sell, however, they might interpret the price they pay or receive using different frames (Levin, Schneider, \& Gaeth, 1998; Tversky \& Kahneman, 1981). Consider the following vignettes: ${ }^{1}$

- Jack is in the bookstore, buying a book. The salesperson says, "You will have to pay $\$ 60$ if you pay by cash but $\$ 65$ if you pay by credit card." As Jack checks his wallet to see if he has enough cash, the salesperson adds, "There is a $\$ 5$ discount for paying by cash." (The salesperson could instead have said, "There is a $\$ 5$ penalty for paying by credit card.")
- Jill is in the bookstore, selling a used book. The salesperson says, "The buy-back price for the first edition of the book is $\$ 60$ and that for the second edition is $\$ 65$." As Jill checks the edition she has, the salesperson adds, "If you have the second edition, you will get a bonus of

[^0]\$5." (The salesperson could instead have said, "If you have the first edition, you will take a loss of \$5.")

Jack and Jill can experience one of four outcomes: (a) gain, (b) nongain, (c) loss, and (d) nonloss (Brendl, Higgins, \& Lemm, 1995; Idson, Liberman, \& Higgins, 2000). In Jack's case, getting or not getting a discount might be experienced as a gain or nongain, respectively, whereas paying or not paying a penalty might be viewed as a loss or nonloss, respectively. In Jill's case, getting or not getting a bonus could be viewed as a gain or nongain, respectively, whereas incurring or not incurring a loss could be seen as a loss or nonloss, respectively. In this article, we consider the affective reactions evoked by such framed outcomes. Given equivalent positive outcomes, what would make Jack and Jill feel better: a nonloss or a gain? Given equivalent negative outcomes, what would make them feel worse: a loss or a nongain? This research suggests that the answers will not be the same for Jack and Jill; buyers and sellers will respond differently to framed outcomes.

The idea that buyers are different from sellers is not new. Research on the endowment effect (Thaler, 1980) suggests that the lowest price at which consumers are willing to sell a product they own is considerably higher than the highest
price they are willing to pay to acquire it (Kahneman, Knetsch, \& Thaler, 1990). It has also been found that buying prices are more influenced by variables such as salient reference prices, whereas selling prices are more influenced by variables such as benefits of possessing the item (Carmon \& Ariely, 2000). Other research shows that arbitrary anchors might also influence these prices (Simonson \& Drolet, 2004). Therefore, it is clear that buyers and sellers differ when they are asked to decide the price they would consider. It is, however, less clear whether buyers and sellers differ in their reactions to prices that are decided by someone else. We show that they do.

Our research extends that of Idson et al. $(2000,2004)$. Although they did look at buying situations, they focused on how framed outcomes are evaluated on the basis of the goals that the outcomes evoked and did not consider the perspectives that buyers brought to bear on the transactions. ${ }^{2}$ We build on their research in two ways. First, we study not only buyers but also sellers. Second, we show that because buyers and sellers approach monetary transactions from different perspectives, they react differently to framed outcomes of these transactions.

This research uses regulatory focus theory (Higgins, 1997, 1998; Pham \& Higgins, 2005) as a tool to understand buyer-seller differences. According to this theory, prevention focus and promotion focus are distinct self-regulatory systems, with the former being concerned with security and protection and the latter with advancement and accomplishment. A prevention focus is associated with the avoidance of losses, whereas a promotion focus is associated with the acquisition of gains. We propose that when approaching a monetary transaction, buyers are relatively prevention focused, and sellers are relatively promotion focused. Therefore, buyers place a greater emphasis on loss-related frames; they feel better about nonlosses than about gains and worse about losses than about nongains. Conversely, sellers place a greater emphasis on gain-related frames; they feel better about gains than about nonlosses and worse about nongains than about losses. These effects, however, occur only when

[^1]individuals are motivated to process the information (e.g., because the money involved is high). We elaborate on this conceptualization in the following pages and present three experiments in support of its implications.

## CONCEPTUAL BACKGROUND

According to Thaler (1980), buyers and sellers view transaction prices differently; for a bottle of wine, the money paid is viewed by the buyer as a loss, whereas the money received is viewed by the seller as a gain. If this is so, then buyers should be motivated to lose as little money as possible, but sellers should be motivated to gain as much money as possible. According to regulatory focus theory, the motivation to avoid losses is associated with a prevention focus, and the motivation to achieve gains is associated with a promotion focus (Higgins, 1997, 1998). Therefore, buyers are likely to be prevention focused, and sellers are likely to be promotion focused.

If buyers and sellers differ in terms of their regulatory focus, then their reactions to the outcomes of any given transaction may depend on how these outcomes are framed. The effects of individual differences in regulatory focus on responses to outcomes that are framed in terms of gains or losses were reported by Higgins, Idson, Freitas, Speigel, and Molden (2003). Specifically, promotion-focused participants attached a higher monetary value to a product if they were asked to think about what they would gain from it than when they were asked to consider what they might lose by not having it. In contrast, prevention-focused individuals assigned a lower value to the product in the first case than the second. Similarly, Lee and Aaker (2004) found that promo-tion-focused participants were more persuaded by an appeal that was framed in terms of gains, whereas preven-tion-focused participants were more persuaded by an appeal that was framed in terms of losses.

Thus, these considerations suggest that if buyers are typically prevention focused, they should place greater emphasis on outcomes that are framed in terms of losses rather than gains-that is, they should feel better about not losing a given amount of money than about gaining it, and they should feel worse about losing a given amount of money than about not gaining it. Conversely, if sellers are typically promotion focused, they should place greater emphasis on outcomes that are framed in terms of gains rather than losses; that is, they should feel better about gaining money than about not losing it, and they should feel worse about not gaining money than about losing it.

For this process to unfold, however, it is essential that buyers and sellers possess sufficient motivation to process the framed information presented in a monetary transaction. Zhou and Pham (2004) found that the effects of regulatory focus on financial investments emerged only when participants actively engaged in self-regulation-when they exten-
sively thought about their investment goals. Correspondingly, we expected buyers and sellers to differ in their reactions to framed outcomes only if they are motivated to think about the outcome alternatives (i.e., different prices). Several factors could influence this motivation. Most obviously, people are more likely to be motivated to think about outcome alternatives if the monetary difference between the alternatives is fairly large. Furthermore, in laboratory studies in which participants imagine their reactions to situations rather than actually experience them, participants may be motivated to think only if they have some intrinsic interest in thinking (as reflected, e.g., by their need for cognition; Cacioppo \& Petty, 1982). Both factors are considered in the experiments we report. The hypotheses are as follows.

H1: For equivalent positive outcomes, buyers will experience more positive affect in response to a nonloss than in response to a gain, whereas sellers will experience more positive affect in response to a gain than in response to a nonloss. However, these effects will occur only when processing motivation is high.
H2: For equivalent negative outcomes, buyers will experience more negative affect in response to a loss than in response to a nongain, whereas sellers will experience more negative affect in response to a nongain than in response to a loss. However, these effects will occur only when processing motivation is high.

We evaluated these hypotheses in three experiments in which we used buyer and seller scenarios that evoke prevention and promotion focus, respectively. Experiment 1 demonstrated that buyers feel better about not losing a given amount of money than about gaining it, whereas sellers feel better about gaining a given amount of money than about not losing it. Experiment 2 showed that buyers feel worse about losing a given amount of money than about not gaining it and that sellers feel worse about not gaining a given amount of money than about losing it. Furthermore, the effects in both studies are contingent on participants' motivation to think carefully about the outcome information they are asked to consider. Experiment 3 replicated the buyer-seller reversals of the first two studies in a single experiment and showed that the effects generalize to an additional dependent variable, namely, perceptions of fairness of the business practice of having two different prices.

## EXPERIMENT 1

## Preliminary Data

Preliminary data were collected to confirm the assumption that buyers are typically prevention focused but sellers are typically promotion focused. Because a prevention focus is associated with the motivation to avoid losses and a promo-
tion focus with the motivation to achieve gains (Higgins, 1997), buyers should perceive the money at stake as more of an avoidable loss, whereas sellers should perceive it as more of an achievable gain. Scenarios were created by modifying the stimuli used by Idson et al. (2000). No framing manipulation was used. Participants in the buyer condition imagined the following:


#### Abstract

You are in the bookstore, buying a book that you need for your classes. The book's price is mentioned as $\$ 60$ if you use cash and $\$ 65$ if you use a credit card. You start taking out your wallet to check whether you have enough cash. You remind yourself that there is a $\$ 5$ difference between $\$ 60$ and $\$ 65$.


Participants in the seller condition imagined the following:


#### Abstract

You are in the bookstore, selling a book that you used last semester. You inspect the list of buy-back prices and notice that the bookstore pays $\$ 60$ for the first edition of the book and $\$ 65$ for the second edition. You start opening your backpack to check the edition you have. You remind yourself that there is a $\$ 5$ difference between $\$ 60$ and $\$ 65$.


Thirty-two students were approached in a university library and asked to read a scenario. After imagining one of the two randomly assigned scenarios, they indicated the extent to which they perceived the $\$ 5$ difference as a loss or a gain along a scale from 1 (a potential loss that I can avoid) to 9 ( $a$ potential gain that I can get). As expected, buyers perceived the difference as more of a loss $(M=2.50)$, whereas sellers perceived it as more of a gain $(M=6.31), F(1,30)=43.91, p$ $<.001$. As we assumed, therefore, buyers were more prevention focused, and sellers were more promotion focused.

## Method

One hundred nine undergraduate students were randomly assigned to imagine one of four scenarios, each representing a different combination of transaction role (buyer vs. seller) and framed outcome (gain vs. nonloss). Participants in the buyer conditions imagined themselves buying a book priced at $\$ 60$ by cash and $\$ 65$ by credit card. Then, participants in the buyer-gain condition read the following:

You remind yourself that if you are able to find the required cash in your wallet, you will get a discount of $\$ 5$. You look into your wallet and realize that you actually have the cash. So you will be getting the $\$ 5$ discount.

In contrast, participants in the buyer-nonloss condition read the following:

You remind yourself that if you are not able to find the required cash in your wallet, you will be charged a penalty of

TABLE 1
Affect From Positive Outcomes as a Function of Need for Cognition, Framed Outcome, and Transaction Role: Experiment 1

|  | Low Need for Cognition |  |  |  | High Need for Cognition |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gain |  | Nonloss |  | Gain |  | Nonloss |  |
|  | M | $n$ | M | $n$ | M | $n$ | M | $n$ |
| Buyer | $6.92 \mathrm{a}, \mathrm{b}, \mathrm{c}$ | 13 | $6.67{ }_{\text {a,b,c }}$ | 12 | 5.47a | 15 | $7.00_{\text {b, }}$ | 15 |
| Seller | $6.73 \mathrm{ab,b}$ | 15 | $7.07{ }_{\text {b, }}$ | 14 | 7.58 b | 12 | $5.92 \mathrm{a}, \mathrm{c}$ | 13 |

Note. Means that do not share a common subscript differ at $p<.05$.
$\$ 5$. You look into your wallet and realize that you actually have the cash. So you will not be charged the $\$ 5$ penalty.

Participants in the seller conditions imagined themselves selling a book priced at $\$ 60$ for the first edition and $\$ 65$ for the second. Then, those in the seller-gain condition read the following:

> You remind yourself that if your book turns out to be the second edition, you will get a bonus of $\$ 5$. You take out the book from your backpack and realize that you actually have the second edition. So you will be getting the $\$ 5$ bonus.

In contrast, participants in the seller-nonloss condition read the following:

You remind yourself that if your book turns out to be the first edition, you will have to take a loss of $\$ 5$. You take out the book from your backpack and realize that you actually have the second edition. So you will not be taking the $\$ 5$ loss.

After reading the scenario, participants responded to the dependent variable that assessed their affective judgments about the outcome on a scale that ranged from 1 (not at all good) to 9 (extremely good). Finally, they were administered the 18 -item Need for Cognition Scale (Cacioppo, Petty, \& Kao, 1984). Individuals high (vs. low) in need for cognition should be more motivated to process information because they engage in and enjoy thinking (Cacioppo \& Petty, 1982).

## Results

Responses to the need-for-cognition items were summed. Scores ranged from 46 to 152, and participants were divided into groups above and below the median (108). Participants’ affective reactions were then analyzed as a function of need for cognition (low vs. high), framed outcome (gain vs. nonloss), and transaction role (buyer vs. seller). Data are shown in Table 1.

In line with Hypothesis 1, buyers with high need for cognition reported more positive affect if the outcome was framed as a nonloss rather than a gain, whereas sellers with high need for cognition reported more positive affect if the outcome was
framed as a gain rather than a nonloss. In contrast, participants with low need for cognition did not differ in the affect they reported regardless of frame or the role they assumed. These conclusions are confirmed by a three-way interaction of need for cognition, framed outcome, and transaction role, $F(1,101)$ $=6.11, p<.05$, and an interaction of framed outcome and transaction role in an analysis of data from high need for cognition participants alone, $F(1,101)=8.75, p<.01$. (The corresponding interaction in an analysis of participants with low need for cognition was not reliable; $F<1$.)

## EXPERIMENT 2

Experiment 1 confirmed that buyers were relatively prevention focused and sellers were relatively promotion focused. Consequently, buyers felt better about nonlosses than about gains, whereas sellers felt better about gains than about nonlosses. Moreover, these effects emerged only when participants were motivated to process the framed information.

Experiment 2 investigated how buyers and sellers evaluate framed negative outcomes. Rather than measuring processing motivation through need for cognition, we manipulated the difference between the two prices (i.e., the magnitude of the money at stake). The effects of this manipulation are more likely to correspond to the motivational differences that exist between buyers and sellers outside the laboratory.

## Method

Three factors were manipulated: (a) price difference between the alternative outcomes (low vs. high), (b) framed outcome (nongain vs. loss), and (c) transaction role (buyer vs. seller). The amount at stake was $\$ 5$ ( $\$ 60$ vs. $\$ 65$ ) in the low price difference condition and $\$ 25$ ( $\$ 150$ vs. $\$ 175$ ) in the high price difference condition. ${ }^{3}$ Apart from this motivation manipula-
${ }^{3}$ Even though all participants in Experiment 1 were in the $\$ 5$ condition, the buyer-seller differences were significant only for the high need for cognition condition not for the combined data set. Therefore, Experiment 2 treated $\$ 5$ (relative to $\$ 25$ ) as a low-motivation condition.
tion and the fact that the outcomes were negative (rather than positive), the scenarios were the same as those used in Experiment 1. For buyers, the negative outcome was framed as either a nongain (i.e., not getting a discount) or a loss (i.e., paying a penalty). Similarly, for sellers the negative outcome was framed as either a nongain (i.e., not getting a bonus) or a loss (i.e., taking a loss).

One hundred eighteen undergraduate students were randomly assigned to one of the eight experimental conditions. After reading the scenario, participants reported their affective reactions to the outcome on a scale that ranged from 1 (not at all bad) to 9 (extremely bad). Then, to confirm the motivational differences we assumed, we asked participants to rate, on three 9-point scales, the extent to which they were interested, careful, and paying attention while reading the scenario. Responses to these items were combined to form a single index ( $\alpha=.79$ ).

## Results

The manipulation of motivation was successful. Participants reported more motivation to process information when the price difference was high than when it was low $(M \mathrm{~s}=6.14 \mathrm{vs}$. 5.58), $F(1,110)=4.55, p<.05$. None of the other terms in the model was significant (all $p s>.20$ ).

Analyses of participants' affective reactions indicated that negative affect was stronger when the price difference was high rather than low $(M \mathrm{~s}=5.66 \mathrm{vs} .4 .73), F(1,110)=$ $6.16, p<.05$. Furthermore, buyers expressed stronger negative affect than sellers $\operatorname{did}(M \mathrm{~s}=6.65$ vs. 3.74 $), F(1,110)=$ 59. $69, p<.001$. More relevant to our hypotheses was an interaction of price difference, framed outcome, and transaction role, $F(1,110)=5.19, p<.05$, the nature of which is conveyed in Table 2. In line with H2, when the price difference was high, buyers reported more negative affect if the outcome was framed as a loss rather than a nongain, but sellers reported more negative affect if the outcome was framed as a nongain rather than a loss. In contrast, when the price difference was low, affect ratings for buyers and sellers did not vary by framed outcome. This is confirmed by the interaction between framed outcome and transaction role, which is significant in an analysis of data for high price difference participants alone, $F(1,110)=10.50, p<$
.01, but not reliable in an analysis of data for low price difference participants $(F<1)$.

## EXPERIMENT 3

This experiment investigated buyer-seller differences in high-motivation conditions alone (i.e., high price difference). We included both positive and negative outcomes to test whether buyer-seller reversals of earlier experiments would replicate. In this regard, Experiment 2 revealed stronger negative affect for buyers than for sellers, but Experiment 1 did not reveal any difference for positive affect. In Experiment 3, we determined whether this asymmetry would reemerge.

We also introduced a methodological refinement; specifically, we constructed similar book edition scenarios for both the buyer and seller conditions. This is in contrast to earlier studies, in which the price difference for buyers was based on payment mode, but the price difference for sellers was based on book edition.

Finally, we investigated the effects of framed outcome and transaction role on an additional dependent variable, namely, perceived fairness regarding a business establishment having two different prices for a product. Fairness perceptions are known to be more favorable if the inequality is to the individual's advantage rather than disadvantage (see Xia, Monroe, \& Cox, 2004, for a review). In this context, individuals should feel more advantaged as the price outcome becomes more positive but more disadvantaged as the price outcome becomes more negative. Therefore, we expected individuals' perceptions of fairness to reveal a pattern similar to that for affect. Specifically, buyers should perceive fairness to be higher when they perceive a positive outcome as a nonloss, whereas sellers should perceive it to be higher when they perceive the outcome as a gain. Correspondingly, buyers should perceive fairness to be lower when they perceive a negative outcome as a loss, but sellers should perceive it to be lower when they perceive the outcome as nongain.

## Preliminary Data

Preliminary data were collected to confirm that the scenarios to be used in the study evoked the regulatory focus differ-

TABLE 2
Affect From Negative Outcomes as a Function of Price Difference, Framed Outcome, and Transaction Role: Experiment 2

|  | Low Price Difference |  |  |  | High Price Difference |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nongain |  | Loss |  | Nongain |  | Loss |  |
|  | M | $n$ | M | $n$ | M | $n$ | M | $n$ |
| Buyer | $5.93{ }_{\text {a,d }}$ | 15 | $5.69{ }_{\text {a,d }}$ | 16 | 6.59 a | 17 | $8.38{ }_{\text {c }}$ | 13 |
| Seller | $3.79{ }^{\text {b,e }}$ | 14 | $3.50{ }_{\text {b,e }}$ | 14 | $4.67{ }_{\text {b,d }}$ | 12 | $3.00{ }_{\text {e }}$ | 17 |

Note. Means that do not share a common subscript differ at $p<.05$.
ences we assumed. We created two book edition scenarios, one involving buying and the other involving selling. No framing manipulation was used. Participants in the buyer condition imagined the following:

> You are in the bookstore, buying a book that you need this semester. You inspect the list of buying prices and notice that the bookstore charges $\$ 100$ for the first edition of the book and $\$ 125$ for the second edition. To check the edition you need, you start opening your backpack to take out your syllabus. You remind yourself that there is a $\$ 25$ difference between $\$ 100$ and $\$ 125$.

Participants in the seller condition imagined the following:
You are in the bookstore, selling a book that you used last semester. You inspect the list of buy-back prices and notice that the bookstore pays $\$ 100$ for the first edition of the book and $\$ 125$ for the second edition. To check the edition you have, you start opening your backpack to take out your book. You remind yourself that there is a $\$ 25$ difference between $\$ 100$ and $\$ 125$.

Thirty-four undergraduate students were randomly assigned to read one of the two scenarios. They then indicated the extent to which they perceived the $\$ 25$ difference as a loss or a gain along a scale that ranged from 1 (a potential loss that I can avoid) to 9 (a potential gain that I can get).

Then, to examine whether the regulatory focus of buyers and sellers is reflected in an unrelated context, we asked participants to take part in a purportedly different study about brand preferences (Zhou \& Pham, 2004). They read descriptions of three pairs of brands and reported their preferences along a scale from 1 (prefer Brand A) to 9 (prefer Brand B). In the first pair (grape juices), Brand $A$ was rich in vitamin $C$ and iron, thus promoting high energy (promotion benefit), and Brand B was rich in antioxidants, thus reducing the risk of cancer and heart diseases (prevention benefit). In the second pair (toothpaste), Brand A was particularly good for cavity prevention (prevention benefit), and Brand B was particularly good for tooth whitening (promotion benefit). In the third pair (cars), Brand A focused primarily on style and performance (promotion benefit), and Brand $B$ focused primarily on safety and accident protection (prevention benefit). Responses to the items were first coded so that higher ratings indicated a greater prevention rather than promotion focus, and then we averaged them to form a composite measure $(\alpha=.66) .{ }^{4}$

As expected, sellers were more likely than buyers to perceive the $\$ 25$ difference as an achievable gain rather than an avoidable loss ( $M \mathrm{~s}=7.06$ vs. 4.77 for sellers vs. buyers,

[^2]respectively), $F(1,32)=7.09, p<.05$. In addition, the relative promotion focus of sellers and prevention focus of buyers was reflected on the measure of brand preferences $(M \mathrm{~s}=4.12$ vs. 5.89 for sellers vs. buyers, respectively), $F(1,32)=5.83$, $p<.05$. Consistent with our assumption, the buyer and seller scenarios induced prevention and promotion focus, respectively.

## Method

One hundred seventy-one undergraduate students were randomly assigned to one of the eight experimental conditions. Participants in the role of a buyer first imagined themselves buying a book priced at $\$ 100$ for the first edition and $\$ 125$ for the second edition. Then, those in the buyer-gain condition imagined the following:

> Therefore, there is a rebate of $\$ 25$ for the first edition. To check the edition you need, you start opening your backpack to take out your syllabus. You remind yourself that if the required book turns out to be the first edition, you will receive a rebate of $\$ 25$. You look at the syllabus and realize that you actually need the first edition. So you get the $\$ 25$ rebate and buy the book for $\$ 100$ rather than $\$ 125$.

Participants in the buyer-nongain condition imagined the same scenario, except that they realized that they needed the second edition. Therefore, they did not get the $\$ 25$ rebate and bought the book for $\$ 125$ rather than $\$ 100$. Those in the buyer-loss condition imagined the following:

> Therefore, there is a surcharge of $\$ 25$ for the second edition. To check the edition you need, you start opening your backpack to take out your syllabus. You remind yourself that if the required book turns out to be the second edition, you will have to pay a surcharge of $\$ 25$. You look at the syllabus and realize that you actually need the second edition. So you pay the $\$ 25$ surcharge, and buy the book for $\$ 125$ rather than $\$ 100$.

Participants in the buyer-nonloss condition imagined the same scenario, except that they realized that they needed the first edition. Therefore, they avoided the $\$ 25$ surcharge and bought the book for $\$ 100$ rather than $\$ 125$.

Participants in the role of a seller first imagined themselves selling a book priced at $\$ 100$ for the first edition and $\$ 125$ for the second edition. Then, those in the seller-gain condition imagined the following:

[^3]Participants in the seller-nongain condition imagined the same scenario, except that they realized that they had the first edition. Therefore, they did not get the $\$ 25$ bonus and sold the book for $\$ 100$ rather than $\$ 125$. Those in the seller-loss condition imagined the following:

> Therefore, there is a deduction of $\$ 25$ for the first edition. To check the edition you have, you start opening your backpack to take out your book. You remind yourself that if the book you have turns out to be the first edition, you will have to take a deduction of $\$ 25$. You look at the book and realize that you actually have the first edition. So you take the $\$ 25$ deduction, and sell the book for $\$ 100$ rather than $\$ 125$.

Those in the seller-nonloss condition imagined the same scenario, except that they realized that they had the second edition. Therefore, they avoided the $\$ 25$ deduction and sold the book for $\$ 125$ rather than $\$ 100$.

After reading the scenario, participants reported their affective reactions to the outcome on a scale that ranged from -9 (very bad) to +9 (very good). Then, they reported perceived fairness about the policy of having a $\$ 25$ difference between editions, on a scale that ranged from 1 (not at all fair) to 9 (very fair).

## Results

We used a 2 (outcome: positive vs. negative) $\times 2$ (frame: gain related vs. loss related) $\times 2$ (transaction role: buyer vs. seller) between-subjects factorial design. For ease of data analysis, we chose to have two levels of outcome and two levels of frame rather than four levels of framed outcome: (a) gain, (b) nonloss, (c) nongain, and (d) loss. However, to maintain consistency with the earlier experiments, we interpret our results in terms of framed outcomes.

Affective reactions. Participants obviously had more favorable affective reactions to positive outcomes than to negative ones $(M \mathrm{~s}=7.17$ vs. -2.59$), F(1,163)=612.26, p<$ .001. Of more importance are the interactive effects of out-
come, framing, and transaction role. Data pertaining to these effects are summarized in the top half of Table 3. As in Experiment 1, buyers reported more positive affect if the outcome was framed as a nonloss rather than a gain, whereas sellers reported more positive affect if the outcome was framed as a gain rather than a nonloss. As in Experiment 2, buyers reported more negative affect if the outcome was framed as a loss rather than a nongain, whereas sellers reported more negative affect if the outcome was framed as a nongain rather than a loss. These conclusions are confirmed by a three-way interaction of outcome, frame, and transaction role, $F(1,163)=30.69, p<.001$; an interaction of frame and transaction role in an analysis of data from posi-tive-outcome participants alone, $F(1,163)=13.36, p<.001$; and an interaction of frame and transaction role in an analysis of data under negative outcome conditions alone, $F(1,163)=$ $17.51, p<.001$.

The interaction of outcome and transaction role was also significant, $F(1,63)=15.53, p<.001$. Specifically, buyers reported more negative affect than sellers ( -3.74 vs. -1.43 , respectively, $F(1,163)=115.52, p<.001$, but did not differ from sellers in their response to positive outcomes (7.58 vs. 6.77, respectively; $p>.10$ ). Note that this asymmetry was also evident in Experiments 1 and 2. The data in Table 3 suggest that the difference between buyers and sellers was particularly evident in the negative outcome, loss framing condition ( -4.62 vs. 0.00 for buyers vs. sellers, respectively). This difference was also pronounced in comparable conditions of Experiment 2 ( 8.38 vs. 3.00 , respectively, when the price difference was high; see Table 2). We consider this difference further in the General Discussion section.

Fairness perceptions. Perceptions of fairness were lower for negative than for positive outcomes ( 4.47 vs .5 .11 , respectively), $F(1,163)=4.32, p<.05$. Furthermore, they were lower for buyers than for sellers (4.34 vs. 5.24, respectively), $F(1,163)=8.50, p<.01$. More relevant to our hypotheses was an interaction of outcome, frame, and transaction role, $F(1,163)=17.49, p<.001$, the nature of which is conveyed in the bottom half of Table 3. For positive out-

TABLE 3
Affect and Fairness as a Function of Framed Outcome and Transaction Role: Experiment 3

|  | Positive Outcomes |  |  |  | Negative Outcomes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gain |  | Nonloss |  | Nongain |  | Loss |  |
|  | M | $n$ | M | $n$ | M | $n$ | M | $n$ |
| Affect |  |  |  |  |  |  |  |  |
| Buyer | $6.70_{\mathrm{a}, \mathrm{e}}$ | 20 | $8.45{ }_{\text {b }}$ | 20 | $-2.86_{c, f}$ | 21 | $-4.62 \mathrm{~g}$ | 21 |
| Seller | $7.95 \mathrm{a}, \mathrm{b}$ | 22 | $5.59 \mathrm{~d}, \mathrm{e}$ | 22 | $-22.866_{\text {h,f }}$ | 22 | $0.00_{\text {i }}$ | 23 |
| Fairness |  |  |  |  |  |  |  |  |
| Buyer | $4.05{ }_{\mathrm{a}, \mathrm{d}}$ | 20 | $5.40{ }_{\text {b, }}$ | 20 | 4.48 a , ${ }^{\text {c }}$ | 21 | $3.43{ }_{\text {d }}$ | 21 |
| Seller | 6.18 b | 22 | $4.82{ }_{\text {a,c,e }}$ | 22 | $4.27 \mathrm{a}, \mathrm{c}, \mathrm{d}$ | 22 | $5.70_{\mathrm{b}, \mathrm{e}}$ | 23 |

Note. Means for each dependent variable that do not share a common subscript differ at $p<.05$. The comparison of buyer-nongain and buyer-loss cells for fairness ( 4.48 vs. 3.43 ) is marginally significant $(p<.10)$.
comes, buyers perceived higher fairness when the outcome was framed as a nonloss versus a gain, whereas sellers perceived higher fairness when the outcome was framed as a gain versus a nonloss. For negative outcomes, buyers perceived lower fairness when the outcome was framed as a loss versus a nongain, whereas sellers perceived lower fairness when the outcome was framed as a nongain versus a loss. This was confirmed by the interaction of frame and transaction role that was significant in an analysis of data from posi-tive-outcome participants alone, $F(1,163)=9.41, p<.01$, as well as from negative-outcome participants alone, $F(1,163)$ $=8.09, p<.01$.

## GENERAL DISCUSSION

Three experiments offer support for our theorizing. Specifically, when approaching monetary transactions, buyers are prevention focused, and sellers are promotion focused. This difference in regulatory focus causes buyers and sellers to react differently to framed outcomes, but only when individuals possess sufficient processing motivation. Buyers feel better about nonlosses, but sellers feel better about gains, and buyers feel worse about losses but sellers feel worse about nongains. A similar reversal arises for fairness perceptions.

The evidence that buyers and sellers differ in their regulatory focus and hence in their reactions to framed outcomes, yields interesting implications for research in the areas of buyer-seller differences, regulatory focus, and framed outcomes.

## Implications for Research <br> on Buyer-Seller Differences

Our results complement prior research on buyer-seller differences (e.g., Kahneman et al., 1990) that shows that buyers and sellers differ when they are asked to decide on the price they would consider. We show how buyers and sellers differ in their affective reactions to prices decided by someone else. Furthermore, by showing that the two also differ in their perceptions of fairness, we add to the prior research that has studied fairness only from the perspective of a buyer dealing with a business establishment (see Xia et al., 2004, for a review).

This research should be considered in the context of endowment effects (Kahneman et al., 1990); that is, sellers tend to require more money to sell an object they own than they would normally pay in order to buy it. Although this general difference may have contributed to buyer-seller differences in our studies, it cannot account for our findings. Even if sellers were reluctant to part with their products, it would not explain why they felt better about gains than about nonlosses. In fact, it is possible that endowment effects do not arise at all under conditions in which buyers and sellers have already decided to buy and sell, respectively. Simonson and Drolet
(2004) suggested that the endowment effect is likely to be less pronounced when sellers are certain that they wish to sell. Future research could try to understand whether the certainty of buying and selling is critical to the difference between endowment effects and the effects we observed in this research.

Our experiments also revealed some unexpected findings. For example, buyers generally experienced more unfavorable reactions than sellers to negative outcomes, but they experienced similar reactions to positive outcomes. Because buyers are prevention focused, they try to avoid negative outcomes. Furthermore, the loss condition refers to a situation in which the frame is negative (e.g., penalty) and the outcome is also negative (e.g., paid penalty). Therefore, the buyer-loss cell represents a unique combination of all things negative, leading to more intense negative affect. Although the seller-gain condition represents an equivalent combination of all things positive, the generally lower impact of positive information on judgments (Skowronski \& Carlston, 1989) may have contributed to the asymmetry we observed.

One interesting issue is whether buyers are always prevention focused and sellers are always promotion focused. We studied situations in which individuals encounter plausible book prices. However, prices might sometimes be surprising. Consider a person selling her home. She thinks that her house is worth $\$ 100,000$, but a house inspection reveals problems because of which she is likely to get only between $\$ 20,000$ and $\$ 30,000$. To her, receiving either price might seem like a loss and, therefore, she might not be promotion focused. Future research could try to delineate the boundaries of the regulatory focus differences we propose.

## Implications for Research on Regulatory Focus

It is well known that prior regulatory focus, either situational or chronic, can influence judgments. We show something different. Consistent with recent research (Zhou \& Pham, 2004), we demonstrated that even the judgment context itself (e.g., buying vs. selling) can evoke regulatory foci. Furthermore, we show that the consequent effects on framed outcomes occur only when processing motivation (e.g., need for cognition) is high. This complements the finding that regulatory focus effects might be weaker when need for cognition is high (Evans \& Petty, 2003). Specifically, a match between self-guide (i.e., desired end-states associated with regulatory focus) and message frame was found to have a weaker effect on individuals high in need for cognition, presumably because they did not need the extra motivation required to process information. Perhaps the difference resides in whether the regulatory focus is chronic (as in Evans \& Petty, 2003) or situationally induced (as in our studies). High processing motivation might be required for the active engagement of induced self-regulation (Zhou \& Pham, 2004).

Our results are based on the notion that promotion-focused individuals place greater emphasis on gain-related frames,
and less emphasis on loss-related frames than preven-tion-focused individuals (Higgins, 1998). However, it is possible that a match between regulatory focus and frame might have led to a regulatory fit experience, which in turn influenced the affect of buyers and sellers (Higgins, 2000, 2002, Higgins et al., 2003). Specifically, our buyer-seller reversals might have been driven by such a regulatory fit between buyers' prevention focus and loss-related frames and between sellers' promotion focus and gain-related frames. Whether such a process indeed underlies our results awaits future examination.

## Implications for Research on Framed Outcomes

Although prior research has studied the affect evoked by framed outcomes (Idson et al., 2000, 2004), we show that what matters is not only the frame but also the person processing the framed information. We demonstrate that two aspects of buyers and sellers-(a) regulatory focus and (b) motivation to process information-influence evaluations of framed outcomes.

Our results were based on scenario-based experiments. It is possible that real world settings, such as those in which real money is used, might dampen the results; that is, participants' affect might be determined more by the absolute amount of tangible dollars than the language that is used to frame the prices. However, our results suggest even stronger buyer-seller reversals in more realistic settings because participants would presumably be more motivated to process information about the transaction. Future research could delve deeper into this issue.

Overall, this research offers new insights into the psychology of consumers engaging in monetary transactions. Buyers and sellers view equivalent transactions from different perspectives. Moreover, depending on how price differences are framed, the two react differently to price outcomes. Therefore, buyers and sellers are like the two faces of a transaction coin. They are fused together in a monetary exchange, but they do not share the same view.

## ACKNOWLEDGMENTS

Our contributions to this article are equal. We thank Jane Ebert, Joan Meyers-Levy, Akshay Rao, and L. J. Shrum for their comments on earlier drafts of this manuscript. We also thank the reviewers for their constructive criticism.

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Received: August 5, 2004
Revision received: February 18, 2005
Accepted: April 1, 2005

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[^0]:    Requests for reprints should be sent to Ashwani Monga, University of Texas at San Antonio, College of Business, 6900 North Loop 1604 West, San Antonio, TX 78249. E-mail: ashwani.monga@utsa.edu
    ${ }^{1}$ The buying illustration is based on Thaler's (1980) cash-credit example and is a modified version of the bookstore scenario used by Idson, Liberman, and Higgins (2000).

[^1]:    ${ }^{2}$ Idson et al.'s (2000) scenarios reveal a potential problem. Consider gains and nonlosses in their book scenarios. In the gain condition, participants were told that the book's price was $\$ 65$ but that there was a $\$ 5$ discount for paying in cash. Therefore, before they imagined checking their wallets for cash, they were mentally prepared to pay $\$ 65$ because that was the book's price. When they found cash in their wallet (i.e., got the discount), they saved $\$ 5$ from the $\$ 65$ they had planned for. In contrast, those in the nonloss condition were told that the book's price was $\$ 60$ but that there was a $\$ 5$ penalty for paying by credit card. Therefore, they were mentally prepared to pay $\$ 60$ for the book. When they found cash in their wallets (i.e., avoided the penalty), they spent the $\$ 60$ they had planned for. Therefore, those in the gain (vs. nonloss) condition may have imagined a wealth state that was higher by $\$ 5$, leading to gains being evaluated more favorably than nonlosses. A similar explanation exists for Idson et al.'s finding of losses being evaluated more unfavorably than nongains. In our research, participants in all framed outcome conditions imagine identical starting price points (e.g., $\$ 60$ by cash, $\$ 65$ by credit card).

[^2]:    ${ }^{4}$ The first two items were from Zhou and Pham (2004). They also used a third choice that was between snacks: chocolate cake versus fruit salad. We replaced this item with that of cars because we wanted the third choice to be about brands as well, rather than different products, and because Zhou and Pham found weak significance for snacks $(p=.19)$.

[^3]:    Therefore, there is a bonus of $\$ 25$ for the second edition. To check the edition you have, you start opening your backpack to take out your book. You remind yourself that if the book you have turns out to be the second edition, you will receive a bonus of $\$ 25$. You look at the book and realize that you actually have the second edition. So you get the $\$ 25$ bonus, and sell the book for $\$ 125$ rather than $\$ 100$.

