

DO ONLINE CONSUMERS VALUE CORPORATE SOCIAL RESPONSIBILITY MORE IN TIMES OF UNCERTAINTY? EVIDENCE FROM ONLINE AUCTIONS CONDUCTED DURING THE ONSET OF THE COVID-19 PANDEMIC

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ABSTRACT

The relationships between Corporate Social Responsibility (CSR) and consumer behaviors have been widely explored in the literature. From the consumer standpoint, it has been shown that individuals largely want to be socially responsible actors and that, more than ever, they consider the CSR aspects of products or services when contemplating purchasing decisions. We utilize data from 23,247 online auctions conducted before and during the COVID-19 pandemic to analyze in what way consumer preferences might be influenced by how the CSR characteristics of products are touted in their descriptions. We find that a greater CSR emphasis is positively associated with an increased prospect of an online auction item selling. Additionally, we find CSR is valued more by consumers during a period of economic hardship and social uncertainty (COVID-19). Finally, we find that profit-seeking behaviors by intermediary auction house brokers undermine the effect of CSR on consumer purchasing behavior.

Keywords: Corporate social responsibility (CSR); Retailing; COVID-19; Online auctions

1. Introduction

Consumer purchase decisions are often explained under a Theory of Planned Behavior (TPB) lens (Paul et al., 2016). The TPB's focus on identifying variables associated with the attitudes, norms, and controls that ultimately drive intentions is both theoretically and practically useful (Ajzen, 1991; Ajzen, 2020). Indeed, TPB is the most commonly used theory in the psychological field to increase understanding of human behavior, including consumer purchasing behaviors in e-commerce channels (Conner & Armitage, 1998; Lee et al., 2021; Liao et al., 2007). Early e-commerce research focused on attitudes and norms associated with technology acceptance and personal characteristics such as perceived behavioral control (Liao et al., 2007). The evolution of e-commerce research also had an early focus on individuals' past experiences and attitudes towards using the internet generally or for shopping

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(Jarvenpaa et al., 2000). As internet use became more commonplace, research evolved to emphasize differences in the visual quality of websites and product images (Bland et al., 2007; Jin et al., 2006; Lowry et al., 2008; Mavlanova & Benbunan-Fich, 2010; Rauniar et al., 2009). Given the advances in image compression, and standardization of website formatting, especially in online auctions where all sellers share the same website and most platforms have narrow standards for product images (Fan et al., 2022; Hudson et al., 2018), the advantages gained through website and image quality have diminished (Chen-Yu et al., 2022; Donato & Adigüzel, 2022). Accordingly, scholars note that because contextual conditions and societal norms evolve over time, our understanding of the drivers of purchase decisions should also evolve (Lee et al., 2021). Consistently, Azjen (1991; 2020) explained that the TPB is a theory that is open for revision by adding new variables that help explain the adaptations in attitudes, norms, and controls that ultimately drive intentions and behavior.

The growth of e-commerce channels has been an important contextual and social norm that has altered which variables are important for understanding consumer purchasing behaviors. For example, extant research shows that it is extremely difficult for consumers in e-commerce auction channels (where auction listings are often one-off items rather than items with multiple copies sold in scale) to have knowledge of traditionally important features, such as product quality because conventional means used to convey quality, reputation and brand name, are not as salient in e-commerce auction channels (Ba et al., 2003). Instead, scholars suggest that the TPB needs additional development to accommodate channels such as e-commerce auctions (Azjen, 2020; Ba et al., 2003). Scholars specifically call for a greater understanding of how sellers can increase trustworthiness in the eyes of consumers without the use of traditional trust-gaining information, such as information about quality (Ba et al., 2003). The primary focus of this study is increasing scholarly understanding of how the TPB can help explain consumer purchasing behaviors in e-commerce auction channels by examining how sellers can use information related to Corporate Social Responsibility (CSR) to garner trustworthiness.

Consumers have shown that CSR is an important characteristic that influences what they buy, and from whom. Because consumers want to be socially responsible, they consider the CSR aspects of products and services when contemplating purchasing decisions (Teh et al., 2019). Relatedly, prior studies have found evidence that because many customers are motivated by their desires to positively impact society, they are likely to spend more for products that are produced by sellers using ethical and sustainable practices (Trudel & Cotte, 2009). The relationships between CSR, consumer purchase behaviors, and firm financial performance have been widely examined in the literature (Nova-Reyes et al., 2020). However, the majority of these studies have examined consumers' purchase intentions rather than actual purchasing decisions (Ford & Stohl, 2019).

Similarly, prior research has examined the influence that CSR has on influencing consumers, but extant research has generally investigated traditional business distribution channels with lesser attention paid to online commerce (Zasuwa, 2017). Shopping through online channels has progressively become the purchasing mode of choice for many consumers (U.S. Census, 2022). Simultaneously, social responsibility has increased in importance as a purchase decision criterion for consumers (Schramm-Klein et al., 2016). This emergence of e-commerce and the corresponding shift in consumer attitudes toward sustainability have motivated recent research efforts aimed at better understanding how CSR influences consumers in online channels (e.g., Hosseini-Motlagh et al., 2019; Modak et al., 2014). For example, studies find that consumers' increased awareness of environmental issues makes them more likely to participate in remanufacturing efforts by returning products even when acquired through online distribution channels (Hosseini-Motlagh et al., 2019). Additionally, it has been shown that CSR programs for online sellers can positively increase consumer purchase likelihood (Dang et al., 2020); and that consumers' attentiveness to CSR in online reviews is evolving (D'Acunto et al., 2020).

Although these prior studies provide important scholarly contributions to our understanding of how CSR efforts play a role in online purchase decisions, research is lacking in understanding the effects of having CSR language directly in online product descriptions. Product descriptions are such an important contact point with consumers in e-commerce—because consumers cannot hold or see the product directly—that many studies have examined the effectiveness of various product description features in e-commerce (e.g., Lee & Yoon, 2018; Maier, 2019; Martinez et al., 2020). Our study offers a new contribution to this area by examining whether online listings for items, where the descriptions emphasize CSR, influence consumer purchase behaviors. Specifically, this study examines several germane questions: First, we investigate if an emphasis on CSR-related terminology in a product description plays a role in determining the likelihood that it will be successfully sold via an online auction. Next, building on existing research which suggests that the value placed on CSR by consumers is elevated during severe societal disruptions (Gerzema & D'Antonio, 2011), we examine if severe economic and societal disruptions influence the importance of CSR to online consumers, by leveraging a dataset whose timeline includes auction listings before and after the onset of the COVID-19 pandemic. This time period is of particular interest as the pandemic has led to a dramatic shift in purchasing behaviors as many consumers chose to shop online rather than in-person (Truong & Truong, 2022). Finally,

we investigate if profit-seeking behavior by intermediary auction house brokers undermines or enhances the effect of CSR on consumer purchasing behavior.

We believe this study of the influence of CSR on consumer purchase behavior in online auctions will provide new insights for academics and practitioners. The dataset allows us to examine actual auctions (and whether they successfully sold the items), in contrast to many prior studies that have gauged customer intentions (Ford & Stohl, 2019; Nova-Reyes et al., 2020). Scholars often study the role of CSR within the framework of TPB but usually only focus on explaining intentions, such as willingness to pay more for more sustainable products (Boronat-Navarro & Pérez-Aranda, 2020). However, TPB's ultimate goal is to explain behavior (Ajzen, 1991), which we can determine from auctions that have ended with an item sold or not. Further, given that we look at auctions that ended before the pandemic started as well as those from during the pandemic, we can examine any possible changes in consumer behavior due to this global economic disruption.

Next, we discuss the existing literature related to this area and present our research hypotheses. Then, a discussion of the dataset and the methodology used for our study follows. We then report the results of the analysis and examine the findings. The final section presents a discussion of the study's limitations and possible extensions.

2. Theoretical Background and Research Hypotheses

E-commerce has grown extensively in recent years; as of 2021, online sales revenue exceeded \$870 billion in the U.S. alone (U.S. Census Bureau, 2022). The shift to online channels accelerated during 2020 as more individuals avoided brick-and-mortar retailers in response to the COVID-19 pandemic (Rattner, 2020). Simultaneously, the value placed on CSR by consumers and sellers has also greatly increased (Schramm-Klein et al., 2016). Below, we review the relevant literature concerning the potential benefits of CSR for firms, its role in influencing consumer purchasing behavior, and how CSR information is traditionally shared with consumers. We then discuss the unique and pertinent aspects of online auctions. Lastly, we synthesize these topics to develop our research model and hypotheses, which are depicted in Figure 1.

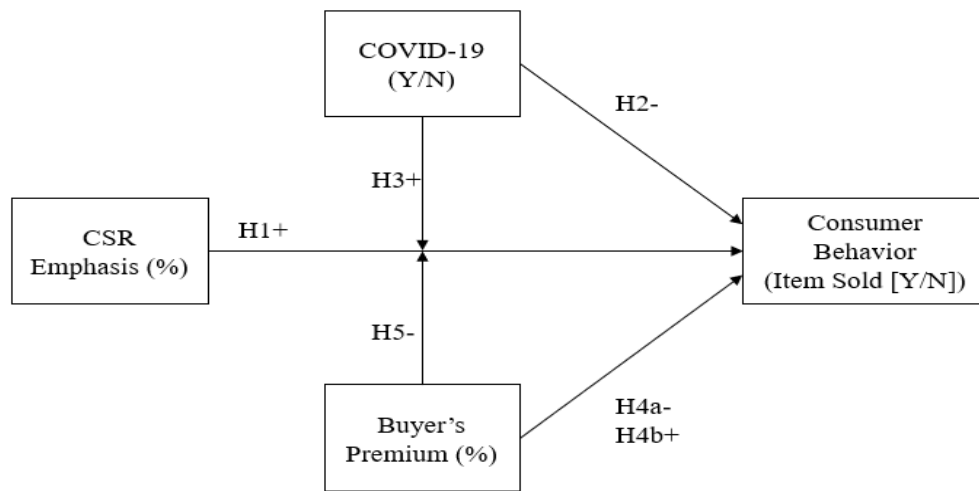


Figure 1: Proposed Model and Hypotheses

2.1 Theory of Planned Behavior and the Motivation to practice CSR

The basic logic of TPB is that attitudes, subjective norms, and perceived behavioral control drive intentions that drive behaviors (Ajzen, 1991). We contribute to TPB by theorizing how information related to CSR can influence attitudes and how economic disruptions can change subjective norms related to consumer purchase behaviors. First, because the goal of TPB is to *explain* human behaviors, rather than merely *predict* when human behaviors will occur, the theory's main purpose is to identify the antecedents of attitudes and beliefs that form as humans learn information (Ajzen, 1991; Ajzen, 2020). Although humans tend to hold many beliefs, they can only give heed to a few beliefs at a time (Miller, 1956). TPB argues people will give heed to the most salient beliefs and the availability of readily accessible information makes beliefs salient (Ajzen, 1991; Ajzen, 2020). Extant literature shows that in e-commerce settings, TPB involves two related steps: (i) getting information and (ii) using that information to make purchasing decisions (Pavlou & Fyngensen, 2006). To the extent that organizations can influence which information is salient for consumers then, they can influence consumers' behaviors (Ajzen, 2020). Research shows that consumers shopping

online engage in information gathering with the specific purpose of dealing with a specific type of uncertainty, social uncertainty (Pavlou & Fyngensen, 2006). Social uncertainty refers to unforeseen contingencies that could have negative outcomes (Pavlou & Fyngensen, 2006; Wong & Moorhouse, 2020). Scholars note that such unforeseen contingencies tend to emerge during periods such as civil unrest, protests, and pandemics, and have specifically identified the COVID-19 pandemic as a source of heightened social uncertainty (Pertwee et al., 2022; Wong & Moorhouse, 2020). Generally, uncertainty tends to diminish or block behaviors (Mattingly et al., 2020). Social uncertainty specifically creates distrust-related psychological barriers to purchasing behaviors, creating a need for consumers to engage in information gathering targeting those barriers (Pavlou & Fyngensen, 2006). The reason social uncertainty blocks action is that trying to anticipate and deal with all the possible negative contingencies that could arise under conditions of distrust is both cumbersome and fear evoking (Pavlou & Fyngensen, 2006). Trust, on the other hand, decreases the need for people to try to account for potential contingencies that are more difficult to foresee in times of heightened social uncertainty and helps consumers feel more comfortable with a transaction (Pavlou & Fyngensen, 2006). When something such as the pandemic causes heightened social uncertainty (Pertwee et al., 2022), factors that build trust become very useful for helping people rule out negative contingencies (Pavlou & Fyngensen, 2006). Recent research suggests that information related to CSR can be a trust-building tool (Kim et al., 2015; Kollat & Farache, 2017) that organizations can use to help consumers form salient attitudes that ultimately drive intentions and behaviors (Boronat-Navarro & Pérez-Aranda, 2020).

The motivation for entities to practice high levels of CSR is often driven by a belief that these actions will positively differentiate them in the marketplace (Ford & Stohl 2019). Specifically, CSR theory largely advocates that sellers (whether they are firms or individuals) exhibiting high CSR standards build psychological bonds with their customers that result in elevated levels of confidence, brand loyalty, and satisfaction (Auger et al., 2008; Green & Pelozo, 2011; Gupta and Brubaker, 1990; Luo and Bhattacharya, 2006). Auger et al. (2008) explain that providing customers with more information related to social features increases their salience. Again, TPB notes that it is the salience of information that ultimately informs intentions and behaviors (Ajzen, 1991; Ajzen, 2020). Sellers that recognize this can leverage CSR to differentiate their products and satisfy customers' desires to feel that purchases positively impact society (Ford & Stohl, 2019). Combined, these impacts of CSR can help to build a competitive advantage for businesses (Martinuzzi & Krummy, 2013).

Prior literature has shown some association between sales and CSR, however, there is limited empirical evidence linking increased sales and "better" CSR (Barnett, 2007). Öberseder et al. (2011) explain that consumers are demanding that corporations provide more CSR information; however, research shows CSR playing a limited role in purchase behavior. In short, there is a gap between how much CSR information consumers ask for and how much CSR information consumers use in their purchase behaviors. Öberseder et al. (2011) go on to propose that disparities among consumers may explain this gap. They suggest that many individuals are not mindful of CSR and do not weigh it as a factor when making purchases. Other consumers may intend to purchase sustainable products; however, when these goods are more expensive, these customers may lack the financial means to purchase them. Indeed, price is a known behavior control within TPB (Kumar, 2021). In line with this, Parsa et al. (2015) found that consumers were only willing to pay modest price premiums to buy from socially responsible companies. The remaining customers identified by Öberseder et al. (2011) are those committed to purchasing sustainable goods and are willing to spend a premium on those products. Although these consumer attributes may impact the importance of CSR to an individual making a purchase, it is important to note that the response to CSR is generally either neutral or positive; hence, we expect that "better" CSR will not negatively reduce the desire of consumers to purchase a product. The lack of clarity concerning the relationship between consumer purchase behaviors and CSR may also be because the vast majority of that prior research investigates consumer intent (Ford & Stohl, 2019; Nova-Reyes et al., 2020). When asked about intentions, consumers respond in the way they feel is socially acceptable, which may not necessarily reflect actual future purchasing behaviors (Devinney et al., 2006).

2.2. Online Auctions

Online auctions are more than just viable business models, they are commonly characterized as a close approximation of what economists refer to as frictionless, competitive markets and cover such a breadth of products that they represent many inclinations of the economy (Bajari & Hortag su, 2003; Brynjolfsson & Smith, 2000; Heun, 2001). The frictionless market theory rests on the assumption that logical consumers evaluate all available information before making a purchase decision (Brynjolfsson & Smith, 2000; Markowitz, 1952; Sharpe 1964).

For consumers, digital auction transaction decisions are hierarchical decisions in which potential buyers narrow choice sets from abstract to narrow, often by using heuristics to make information processing less cumbersome (Dholakia & Soltysinski, 2001). Theorizing about buyer behavior in digital auctions is fundamentally about the informational influence of various cues to decision-makers and their cognitions (Kaplan, 1987; Stern & Stafford 2006). Contextual conditions influence the informational cues that tend to drive hierarchical decisions; that is, context can

drive individuals to view and process information differently (Lachman et al., 2015; Salmon et al., 2010). Specifically, as individuals evaluate information relevant to hierarchical decisions, an individual's limited cognitive capacity and limited active memory prevent the individual from considering all relevant information (Leemans & Stokmans, 1992). The inability to review all of the information related to a purchase decision is amplified in settings such as the online auction channel examined in this study, as thousands of new listings are added each day (Dholakia et al., 2002). Consequently, individuals are compelled to prioritize which information they rely on to narrow down choice sets to a more manageable amount of information by using rejection heuristics that consider the information that is most readily available and important to them (Beach, 1993; Dholaki et al., 2002; Leemans & Stokmans, 1992).

In this regard, prior studies of online auctions identified several key themes that consumers may use as screening heuristics when evaluating auction items. For example, research has shown that the likelihood of an item selling in an auction increases more when the information presented by sellers focuses on building trust rather than concentrating on transactional aspects of the auction (Tu et al., 2017). Similarly, the buyer's assessment of the reputation and history of the seller also impacts the probability of an auction item selling successfully (Bland et al., 2005). Additionally, the quality of an item's narrative (e.g., the product description is comprehensive) and the use of certain keywords have also been positively linked to the success of the item's auction (Bland et al., 2007; Shen et al., 2011).

2.3. CSR and Online Auctions

When adopting a CSR focus, firms need to communicate that message to customers in the marketplace. For traditional retailer-to-consumer transactions, this is frequently done using advertising, social media, and word-of-mouth channels (Eisenegger & Schranz, 2011). Additionally, firms frequently use corporate disclosures to draw attention to their CSR efforts. The extant literature on corporate disclosure provides a rich framework to develop an understanding of the possible impacts of CSR disclosure in auctions. A voluminous body of prior work finds disclosure, financial or nonfinancial, to be essential to the existence of efficient, well-functioning financial markets (Core, 2001; Healy & Palepu, 2001; Verrechia, 2001). Generally, these studies document market reactions to the disclosure of new information so long as the disclosure is value-relevant. Numerous studies provide evidence that CSR disclosure is one such type of value-relevant disclosure (Al-Tuwaijri et al., 2004; Dhaliwal et al., 2011; Egginton & McBrayer, 2019; Margolis & Walsh, 2001; Orlitzky et al., 2003). In contrast, in the context of online auctions, the sellers are typically individuals or auction houses acting as brokers and not corporations, therefore they do not have a means beyond the items' descriptions to disclose the CSR aspects of their products to potential consumers. However, as little prior research concerning CSR and online auctions exists, we can draw parallels between corporate CSR disclosure and our area of interest.

As it relates to this study, there are at least three areas of the corporate CSR disclosure literature that apply to the online auction setting. First, bidders may find CSR disclosure to be valuable information in auction listings for reasons of information asymmetry. Formally developed in Akerlof's (1970) market for "lemons" (automobiles of poor quality), informed sellers list items to attract less informed buyers. The structure of this arrangement fosters the conditions for problems of information asymmetry to arise. Less informed bidders rely on, among other things, the selective disclosure of sellers. Therefore, in the absence of a reasonably complete information set, the bidder is reliant on the limited information set offered by the seller. So, assuming that CSR disclosure is value-relevant, then an auction item description containing this information offers the bidder a more complete information set, *ceteris paribus*, thus limiting the problem of asymmetric information.

Second, and along a similar vein to information asymmetry, buyers face the problem of distinguishing a quality item from similar lesser quality items. For example, how can the buyer of an antique Persian rug distinguish between high-quality and low-quality offerings with their limited information set? And, how can sellers signal to buyers that their offering is of higher quality? CSR disclosure wording in auction listings may serve as effective signaling tools enabling discernment of buyer preferences. Several studies suggest that CSR serves as a form of corporate signaling where companies can signal to markets their quality through the use of CSR (Lev et al., 2010; Lys et al., 2015; Mahoney et al., 2013; Su et al., 2014). For example, Lys et al. (2015) found that firms undertake CSR expenditures when they anticipate stronger future financial performance. CSR expenditures in disclosures then act as markers, or signals, to markets helping investors discern "good" companies from "bad" companies. Salam and Bajaba (2021) found that perceived CSR had an effect on purchase intention. In the case of auctions, buyers and sellers face a similar dilemma. Discerning item quality and signaling item quality remain challenging for buyers and sellers, respectively, in a crowded market.

Finally, prior literature on consumer purchasing and investor behavior suggests that consumers and investors derive utility from the non-financial aspects of their acquisitions, e.g., social, community, and environmental characteristics. An expansive body of survey and experimental research examines the influence of, among other things, environmental factors (Barber et al., 2014; Orth et al., 2005; Young et al., 2009) and social and community factors (Boccia et al., 2018; Uhlig et al. 2019) in consumer purchasing decisions. Ingenbleek et al. (2015) identified buyer

social responsibility as the consideration of social issues in consumer purchases. Collectively, these studies suggest that consumers derive utility in their purchases from socially responsible companies.

Despite the differences between the disclosures for corporations and sellers in online auctions, we believe the arguments above support the contention that an auction item, with a description that has a greater, more positive focus on CSR, will enhance the attractiveness of that item. Furthermore, consistent with TPB, information in an item description about CSR (which can convey positive utility as described above) will create positive and salient attitudes towards purchasing the item. According to TPB, salient attitudes are the attitudes that ultimately drive human behaviors. This leads us to our first hypothesis:

H1: An item will be more likely to successfully sell during an online auction when the item's description includes a greater emphasis on CSR.

2.4. Economic Disruptions, Online Auctions, and CSR

Historically, global events such as pandemics and recessions have significantly impacted consumer spending behaviors. TPB specifies two types of subjective norms, injunctive and descriptive, that can help explain why global pandemics might be powerful influencers of individual behaviors (Fishbein & Ajzen, 2011). Injunctive norms refer to the subjective probability that a referent group approves of a behavior (Fishbein & Ajzen, 2010). Descriptive norms refer to the subjective belief that a referent group performs the behavior themselves (Fishbein & Ajzen, 2010). These subjective norms contribute to a perception of social pressure to behave a certain way (Ajzen, 2020). Importantly, the more salient information is about a situation that changes what group members perceive as normal behavior, the stronger those subjective norms will influence behavior (Ajzen, 2020). Humans do not give equal weight to all information when forming beliefs and behavioral intentions (Mattingly et al., 2020); the saliency of information is an important driver of which information will ultimately influence behavior. Powerful economic disruptions, such as pandemics, represent very salient changes to subjective norms. The more an individual consumer sees information related to a global pandemic influencing others' behaviors, the more that individual's descriptive norms will update and pressure them to act accordingly.

Guthrie et al. (2021) found that the initial shift in purchasing behaviors that occurred during the COVID-19 pandemic initially led to consumers to make reactionary purchasing decisions, driven by fear and uncertainty. Similarly, both the 2003 SARS and 2013 H7N9 outbreaks were associated with several major changes in consumer behaviors: rumors and speculation about the possible impact of the diseases on supply chains, as well as speculation about potential treatments, led to a rash panic buying and stockpiling of essential items (Sheorey, 2011). Concurrently, spending on non-essential items was curtailed dramatically during both of these epidemics (Qiu et al., 2018). Likewise, during the Great Recession of 2008, consumer consumption of non-essential products declined considerably as many households experienced financial distress (Chalise & Anong, 2017). Brem et al. (2021) noted that, unlike some prior outbreaks, COVID-19 is a global pandemic with far reaching effects that may lead to the use of more technologies to adapt to the pandemic conditions. A number of studies supporting this have confirmed that many consumers have shifted away from in-person shopping to online modes during the pandemic (e.g., Guthrie et al., 2021; Laato et al., 2020; Truong & Truong, 2022). Islam et al. (2020) found that the COVID-19 associated panic created fear of scarcity which then led to impulsive and obsessive buying behaviors. Specifically, the pandemic led many consumers to hoard essential goods, while the associated economic disruptions led many consumers to limit non-essential spending (Goodman, 2020). In line with this, Vázquez-Martínez et al. (2021) observed that consumers indeed hoarded essential goods during the pandemic, while demand for luxury goods was virtually nonexistent. Thus, it seems probable that the severe impacts of COVID-19 will likely have an impact on the auctions examined in this study. Given that the auction items constituting our sample are largely non-essential items, we believe that the unprecedented global economic impact of COVID-19 will be associated with a decrease in the likelihood that an item is sold during its auction period. Specifically, we predict:

H2: The likelihood of an item selling in an online auction will be negatively impacted by the COVID-19 pandemic.

Social uncertainty engenders general distrust-related psychological barriers to consumer purchasing patterns as consumers feel an increased inability to foresee all potential negative contingencies (Paylou & Fygensen, 2006). In times of heightened social uncertainty, consumers are likely to develop general fears related to: seller opportunism; whether sellers will properly deliver and stand behind products as social uncertainty causes conditions in the economy to change; the consumer's inability to anticipate all the potential contingencies that can arise because of the social uncertainty; and not feeling confident and in control (Ba & Paylou, 2002; Paylou & Fygensen, 2006). Evidence suggests such fears were warranted during the peak of the COVID-19 pandemic, as some sellers did engage in opportunistic behavior (Noble, 2020). Similarly, scholars note that when SARS broke out in China, consumers' fears led to new sellers and buyers entering the e-commerce economy due to fears of shopping in person resulting in more sellers without reputational capital further reducing trust levels (Clemons et al., 2012). Consumers respond by engaging in information gathering as a means to deal with those distrust related shopping barriers. Such a change in

the information gathering step of TPB represents a fundamental shift in utilized heuristics. For example, during the Great Recession, Gerzema and D'Antonio (2011, p. 1) found that buyers "are moving from mindless consumption to mindful consumption, increasingly taking care to purchase goods and services from sellers that meet their standards and reflect their values." Paylou and Fyngensen (2006) argue that the reason social uncertainty alters action is that the challenges consumers face in anticipating and assessing potential negative contingencies is both cumbersome and fear inducing. Trust, the authors argue, reduces the cognitive demands of evaluating potential contingencies and increases consumer comfort with a transaction. Characteristics of a transaction that build trust would be very useful for consumers navigating contingencies in times of heightened social uncertainty (Paylou & Fyngensen, 2006), e.g., the onset of COVID-19 pandemic (Pertwee et al., 2022). In short, lack of trust during periods social uncertainty drives consumers to feel an increased lack of control over and predictability in a seller's potential behaviors; but, something that garnered some degree of trust can build up a consumer's confidence that it is okay to depend on the seller (Fukuyama, 1995; Paylou & Fyngensen, 2006).

Heightened social uncertainty caused by the shock of the pandemic would likely drive consumers to gather information that mitigates uncertainty. Paylou and Fyngensen (2006) suggest that the trust building characteristics of a transaction would be very useful for consumers navigating periods of heightened social uncertainty. Though we realize that other considerations, e.g., information pertinent to income stability and/or supply chain resilience, may have a primary effect in building trust and thus mitigating uncertainty during periods of social disruption, prior studies suggest that CSR may act as one such mechanism that positively impacts consumer trust (Ball et al., 2004; Swaen & Chumpitaz, 2008). Consumer trust represents a willingness to open oneself up to be vulnerable to negative outcomes that could arise from a transaction (Vinerean et al., 2022). Consumer trust is affected by the values the consumer shares with the company (Morgan & Hunt 1994). Specifically, research shows that CSR affects consumer trust because it affects personal identification with a seller through shared values (Glaveli, 2020). Consumers are more likely to open themselves up to be vulnerable during times of heightened social uncertainty when they share some value, and therefore identify, with a seller. CSR disclosure and initiatives are important for trust building as: 1) they are able to be directly adjusted/controlled by the disclosing entity; and, 2) they provide credible signals pertinent to corporate values (Brown & Dacin, 1997). Pivato et al. (2008, p. 5) suggest that "the creation of trust is one of the most immediate consequences of a company's social performance". Lins et al. (2017) find evidence that CSR activities affect crisis period equity returns through their effect on trust. The authors argue that CSR acts to develop trust and that the relation pays off during periods of shock to overall levels of trust, e.g., during the financial crisis. Bae et al. (2021) explore this effect during the onset of the COVID-19 pandemic and find some evidence that CSR-induced trust positively influenced equity valuations. Consistent with the notion that social uncertainty increased during the onset of the pandemic and that CSR serves as a tool to build trust and thus reduce uncertainty, Knowles et al. (2020) find that online consumers expressed increased interest in purchasing goods from more socially responsible firms during the pandemic. Such findings are consistent with the logic that information gathered by consumers that garners trust can help rule out negative contingencies caused by social uncertainty, thereby acting "as an uncertainty absorption resource that enables the [consumer] to better cope with social uncertainty" (Pavlou & Fyngensen, 2006, p. 124). Collectively, these prior findings lead us to conclude that consumers are likely to place more value on products with better CSR characteristics during severe economic disruption. Thus, we expect that:

H3: The COVID-19 pandemic will positively moderate the effects of CSR product attributes on the likelihood of an item selling.

2.5. Intermediaries and CSR

Auction houses, who act as intermediary brokers for the auction transactions, generate revenue by either requiring the seller to pay a commission (usually calculated as a percentage of the selling price) or by charging a Buyer's Premium (which is a surcharge calculated as a percentage of the selling price paid by the buyer upon conclusion of a sale.) In this study, the online auction site acts as a portal for multiple auction houses, each of which assesses a Buyer's Premium to generate revenue. The Buyer's Premium rates observed within our sample vary from 0% to 35% (with a mean of 23.3%.) To the best of our knowledge, the impact of the Buyer's Premium rate on the likelihood of an auction item selling has not been examined empirically in the literature. Nonetheless, anecdotally, there are two possible, conflicting influences that the Buyer's Premium may have on an auction. First, a higher Buyer's Premium translates into a higher total cost for a consumer, which may dissuade a potential bidder from pursuing an item. Logically, it is anticipated that higher costs to buyers will lower the probability of an item selling (Reddy & Dass, 2006). In contrast, an auction house receiving a higher Buyer's Premium percentage may have more motivation to engage in activities promoting or advertising the items they are brokering (Lu & Lin, 2012). These extra efforts by the auction house may be likely to improve the possibility that an item will sell in an auction (Brandly, 2009). These contradictory potential impacts of the Buyer's Premium on the likelihood of a sale lead us to predict the following hypothesis and its counter hypothesis:

H4a: The likelihood of an item selling will decrease when an intermediary takes a larger portion of the sale as a Buyer's Premium.

H4b: The likelihood of an item selling will increase when an intermediary takes a larger portion of the sale as a Buyer's Premium.

The question of how intermediaries may affect the CSR perceptions of consumers in auction markets has received scant attention in the literature. However, several prior studies do provide some indications of the possible interactions between CSR-focused consumers and intermediaries. In a non-auction context, small enterprises that are motivated to improve their firm's sustainability may lack the resources to independently improve their CSR. In these circumstances, some small firms have partnered with intermediaries, such as universities, government agencies, or other organizations, which help these firms build their sustainability expertise or directly assist them with sustainability efforts (Jenkins 2009). Sustainability efforts incorporating these types of intermediaries are viewed favorably when the entities assisting the firms "are perceived as legitimate intermediaries without self-interest or hidden agenda..." (Klewitz et al., 2012, p. 458). These prior conclusions, coupled with the premise that a key motivation for consumers to buy products with positive CSR attributes is an aspiration to constructively impact society, suggest that an intermediary that appears to be greedy and self-serving may not be positively viewed by CSR focused consumers. In the context of this study, the Buyer's Premium percentage provides consumers with a signal of the level of the auction house's self-interest. Thus, we expect that the effects of emphasizing positive CSR product attributes on the desirability of an item will diminish when the auction house charges a higher premium. Explicitly, our final hypothesis predicts:

H5: Higher Buyer's Premiums will negatively moderate the effects of CSR product attributes on the likelihood of an item selling.

3. Data and Methodology

3.1. Data Sample

To create our dataset, we scraped finished auctions from LiveAuctioneers.com. LiveAuctioneers.com, which is used as a sales portal by over 5,000 auction houses, is one of the largest auction sites for art, collectibles, fashion, furniture, and antiques, in the world (LiveAuctioneers, 2020).

The dataset used for our study includes complete information for 23,247 auctions conducted between January 1, 2020, and April 19, 2020. This dataset represents all auctions completed during the time period of interest. Sixty-four percent of these auctions resulted in the item selling successfully. The remaining auctions did not result in a completed sale due to the reserve price not being satisfied.

3.2. Variable Descriptions

The variables included in our study are discussed below. The descriptive statistics for these variables are included in Table 1.

Table 1: Variable Descriptive Statistics (N = 23,247)

Variable	Mean	Min	Max	Std. Dev.
Item Sold (1/0 = Yes/No)	0.65	0	1	0.48
CSR Emphasis (Overall Sample)	0.84%	0%	25%	2.3%
COVID-19 (1/0 = Yes/No)	0.56	0	1	0.50
Buyer's Premium	23%	0%	35%	7%
Number of Bids (ln[# of Bids])	1.10	0	4.60	1.04
Est. low value of item (ln[\$])	5.9	2.3	9.6	1.5
Est. high value of item (ln[\$])	0.47	0.008	8.25	0.84
Description Length (#)	27.7	9	206	19.6
Item Quality Emphasis (%)	0.83%	0	50%	2.1%
Seller Frequency	0.005%	0.004%	2.9%	0.006%

3.3. Dependent Variable

Item Sold (Binary 1 / 0 = Yes/No): we employ a binary variable to represent whether an item is successfully sold in an auction.

3.4. Independent Variables

CSR Emphasis (%): measures the extent that an auction item’s description accentuates that the product has positive CSR attributes. To construct this measure, we analyzed the free-form text item description field in each auction using content analysis software to assess what percentage of the words in each item’s description matched keywords in a CSR dictionary developed by Pencle and Mălăescu (2016). Pencle and Mălăescu (2016) created several word lists relating to various dimensions of CSR. We utilize the CSR dictionary focused on the “social and community” dimension as it was most applicable to the context of this study. The dictionary contains 174 words and phrases such as “philanthropic”, “civic engagement”, “indigenous people”, “charitable foundation”, “community outreach,” and “sustainable.” Pencle and Mălăescu (2016) developed the dictionary using a mixture of qualitative analysis and content analysis software to produce an initial list of words. The initial list creation followed the guidelines developed by Short et al. (2010) that recommend the use of both deductive and inductive processes to identify words that frequently appear in CSR literature. To confirm the content validity of the lists, they were validated and finalized by three judges with significant expertise in the field of CSR. These judges utilized a multi-round process to review and come to a consensus on each keyword’s applicability to the respective CSR word list (Pencle & Mălăescu, 2016). Of note, the use of the Pencle and Mălăescu (2016) dictionaries to measure the level of CSR emphasis within text samples has been supported in the literature; for example, Mariani and Borghi (2021) used the CSR term list to look at the trends in discourse in online hotel reviews, while Von Selasinsky and Lutz (2021) examined how the use of the CSR terms impacts crowdfunding performance. Similarly, Bland et al. (2007) demonstrated that the mention of certain keywords can have a significant impact on online auction outcomes.

In our sample, 4,457 item descriptions contain at least one term from the CSR dictionary. To better illustrate the distribution of CSR Emphasis among these item descriptions, Table 2 presents the summary statistics by quintile for the sub-sample of item descriptions containing at least one CSR term.

Table 2: CSR Emphasis by Quintile for Descriptions Containing > 0 CSR Terms (N = 4,457)

Variable	Mean	Min	Max	Std. Dev.
Quintile 1: CSR Emphasis	1.71%	0.78%	2.32%	0.42%
Quintile 2: CSR Emphasis	2.71%	2.35%	3.13%	0.23%
Quintile 3: CSR Emphasis	3.71%	3.15%	4.17%	0.30%
Quintile 4: CSR Emphasis	4.89%	4.22%	5.56%	0.40%
Quintile 5: CSR Emphasis	8.39%	5.63%	25%	3.02%

COVID-19 (Binary 1 / 0): The World Health Organization (WHO) declared the COVID-19 virus to be a global pandemic on March 11, 2020 (Xia et al., 2020). To control for this, a binary variable, COVID-19, is employed. COVID-19 is set to 0 for auctions with end dates before the declaration, and 1 if the auction end date was after the declaration.

Buyer’s Premium (%): The Buyer’s Premium is an additional service charge (percentage) paid to the auction house (by the buyer) that is added to the final selling price of any item sold (Brandly, 2009).

Number of Bids (ln[#]): How many bids an item received is included as a control variable as it can influence whether an item sells (Johns & Zaichkowsky, 2003). The Number of Bids is non-normally distributed, which we compensated for by utilizing the natural log of the variable.

Estimated Lowest and Highest Value of Item (ln[\$000s]): For each item, the lowest and highest values are estimated by the seller. Prior research has shown that these values influence consumers and impact the likelihood of the item successfully selling (Gilkeson & Reynolds, 2003).

Description Length (# of words): We include the description length as a control, as wordier item description has been shown to increase the perceived utility of a product being sold on an online auction (Kauffman & Wood, 2006).

Item Quality Emphasis (%): Theoretically, the perceived quality of a product may confound the impact of the CSR Emphasis on potential buyers. Given that traditional indicators of quality, such as brand name, are less relevant in online auctions (Ba et al., 2003), controlling for the possible influence of quality required a different approach. In line with TPB, information that highlights that a product is high quality has been shown to be a positive signal to buyers in online auctions (Dimoka & Pavllou, 2006). Thus, like the approach used to develop the CSR Emphasis measure, we utilized content analysis software to search the item descriptions for 170 words and terms that are

frequently used to describe high product quality (Spacey, 2019) and determine the percentage of words in each description matching words from that list.

Seller Frequency (%): Prior research has theorized that online auction buyers perceive greater utility for items being sold by more experienced sellers (Kauffman & Wood, 2006). To control for this potential effect, we include in our analysis Seller Frequency, which measures the percentage of the total number of auctions in our sample that are hosted by an item's seller.

Item Category (Binary 1 / 0): The items included in our data are grouped into eight unique categories (Table 3). Seven binary variables were used to identify the category in which an item fell. Items falling within the Art Category (which had the greatest number of items) are identified by setting all seven binary variables equal to zero.

Table 3: Auction Data

Item Category	Number of Items
1. Art	8,385
2. Collectibles	4,032
3. Fashion	556
4. Furniture	402
5. General	2,121
6. Home and Garden	2,830
7. Jewelry	3,800
8. Memorabilia	1,121

3.5. Methodology

The binary nature of the dependent variable led us to choose logistic regression for the analysis (Palocsay et al., 2000). We utilize three models to evaluate our five hypotheses. Model 1 examines our first and fourth hypotheses, by testing the level of CSR Emphasis within an item description and the Buyer's Premium relationships with the likelihood of the item selling in the auction. Model 2 incorporates the COVID-19 pandemic indicator variable to test the second hypothesis. Model 3 is the full model, which includes interaction terms that examine if the influence of CSR on the probability of an item selling varies during the COVID-19 pandemic and as the Buyer's Premium changes (H3 and H5).

4. Empirical Results

Stata 15 was used to run the logistic regressions for our analyses, the results of which are presented in Table 4. In all three models, the Likelihood Ratio chi-square statistics are significant ($p < 0.001$), which indicates that the models are well specified. At least 7 of the 13 control variables are statistically significant ($p < 0.05$) in each of the three models, supporting their inclusion in the model.

4.1 Hypothesis Test Results

The results of our analysis are presented in Table 4. Model 1 examines the control variables, Model 2 tests the main effects hypotheses (H1, H2, H4a, and H4b), while Model 3 tests the interaction effects hypotheses (H3 and H5). We find that items with a greater CSR Emphasis are more likely to sell, supporting Hypothesis 1 ($p < 0.001$). Next, the results show that the COVID-19 indicator variable is not significant, thus Hypothesis 2 is unsupported. An examination of the interactions of COVID-19 and the Buyer's Premium with CSR Emphasis, finds that the effect of CSR on the likelihood of an item selling does increase during the COVID-19 pandemic ($p < 0.05$), supporting Hypothesis 3. The analysis also demonstrates that a higher Buyer's Premium is positively related to the probability of an item selling ($p < 0.001$), which leads us to reject Hypothesis 4a and accept Hypothesis 4b. Building on that, the results support Hypothesis 5, as the relationship between CSR Emphasis and the prospect of an item selling decreases as the Buyer's Premium rate increases ($p < 0.001$). A summary of the results of the hypothesis tests is included in Table 5.

Table 4: Logistic Regression Results

VARIABLES	(1) Item Sold (Yes/No)	(2) Item Sold (Yes/No)	(3) Item Sold (Yes/No)
CSR Emphasis [H1]		0.0753***	0.174***
		(0.0107)	(0.0330)
COVID-19 [H2]		0.0113	-0.0239
		(0.0407)	(0.0441)
CSR Emphasis x COVID-19 [H3]			0.0446**
			(0.0218)
Buyer's Premium [H4]		0.0301***	0.0365***
		(0.00292)	(0.00322)
CSR Emphasis x Buyer's Premium [H5]			-0.00601***
			(0.00122)
ln (Number of Bids)	2.432***	2.357***	2.362***
	(0.0340)	(0.0343)	(0.0344)
ln (Est. Lowest Value of Item)	-0.212***	-0.227***	-0.222***
	(0.0161)	(0.0163)	(0.0163)
ln (Est. Highest Value of Item)	-0.232***	-0.224***	-0.221***
	(0.0290)	(0.0287)	(0.0287)
Description Length	0.00225**	0.00153	0.00142
	(0.00105)	(0.00105)	(0.00105)
Item Quality Emphasis	0.0204**	0.0281***	0.0194**
	(0.00913)	(0.00947)	(0.00959)
Seller Frequency	-106.6***	-113.8***	-114.1***
	(3.920)	(4.103)	(4.114)
Category: Collectibles (1 = Yes, 0 = No)	-0.0901	0.0407	0.0417
	(0.0593)	(0.0610)	(0.0610)
Category: Fashion (1 = Yes, 0 = No)	-0.935***	-0.771***	-0.755***
	(0.151)	(0.153)	(0.154)
Category: Furniture (1 = Yes, 0 = No)	0.199***	0.163**	0.134*
	(0.0764)	(0.0767)	(0.0769)
Category: General (1 = Yes, 0 = No)	0.0230	0.00151	-0.0228
	(0.0652)	(0.0660)	(0.0661)
Category: Home and Garden (1 = Yes, 0 = No)	-0.238***	-0.212***	-0.223***
	(0.0600)	(0.0608)	(0.0609)
Category: Jewelry (1 = Yes, 0 = No)	-0.0187	0.218**	0.0112
	(0.0935)	(0.102)	(0.108)
Category: Memorabilia (1 = Yes, 0 = No)	-0.178	-0.110	-0.107
	(0.124)	(0.125)	(0.126)
Constant	0.700***	0.0781	-0.0540
	(0.102)	(0.120)	(0.125)
Likelihood Ratio Chi-square	13,999***	14,150***	14,186***
Pseudo-R ²	0.464	0.469	0.470
Observations	23,247	23,247	23,247

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.10

Table 5: Summary of Hypothesis Tests

Hypothesis	Relationship	Finding(s)
1	CSR Emphasis increases likelihood Item Sold	Supported
2	COVID-19 decreases likelihood Item Sold	Not Supported
3	(CSR Emphasis x COVID-19) increases likelihood Item Sold	Supported
4a	Buyer's Premium decreases likelihood Item Sold	Not Supported
4b	Buyer's Premium increases likelihood Item Sold	Supported
5	(CSR Emphasis x Buyer's Premium) decreases likelihood Item Sold	Supported

Figures 2 and 3 are presented to graphically exhibit the impacts of the two interactions that we examine on the likelihood of an item selling in an auction. Figure 2 demonstrates the significant, increased influence of CSR Emphasis on the probability of an item selling during the COVID-19 pandemic. Figure 3 shows that when the Buyer's Premium is low (0%), a higher CSR Emphasis is positively associated with the probability of an item selling. However, when the Buyer's Premium is high (35%), increased CSR Emphasis is negatively related to the probability of an item selling.

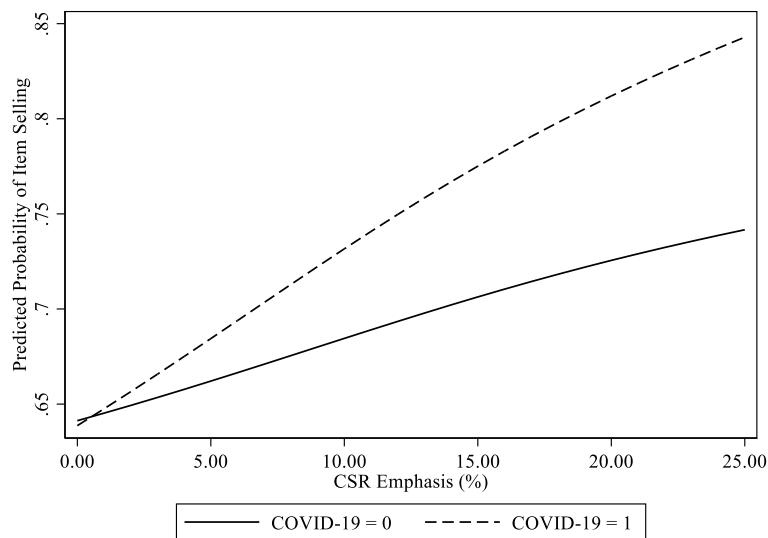


Figure 2: Interaction Effects of COVID-19 and CSR Emphasis

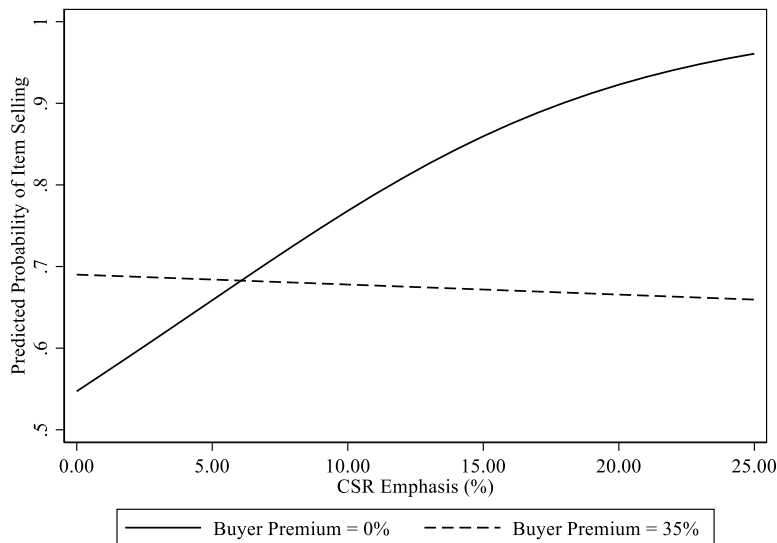


Figure 3: Interaction Effects of Buyer's Premium and CSR Emphasis

4.2 Robustness Tests

Two additional sets of analyses were conducted to examine the robustness of our findings. First, to test whether the inclusion of any CSR terminology in a description (regardless of how many words), improves the likelihood of an item selling, we coded a binary variable to denote if an item description included any (one or more terms from the CSR dictionary) as opposed to none. As shown in Table 6, the main effects (H1 and H4b) and the interaction effects (H3 and H5) are still significant.

Table 6: CSR Emphasis Binary Indicator Robustness Test Results

VARIABLES	(1) Item Sold (Yes/No)	(2) Item Sold (Yes/No)
CSR Emphasis Binary Indicator (Y=1 / N=0)	0.395*** (0.0542)	0.857*** (0.147)
COVID-19	0.0191 (0.0407)	-0.0546 (0.0455)
CSR Emphasis x COVID-19		0.421*** (0.101)
Buyer's Premium	0.0309*** (0.00293)	0.0395*** (0.00338)
CSR Emphasis x Buyer's Premium		-0.0318*** (0.00564)
Control Variables Omitted for Parsimony		
Constant	0.0940 (0.120)	-0.0598 (0.126)
Likelihood Ratio Chi-square	14,153***	14,206***
Pseudo-R ²	0.469	0.471
Observations	23,247	23,247

Next, to examine if the relationship between CSR Emphasis and the likelihood of an item selling changes as the level of CSR Emphasis varies, we examined the quintiles of CSR Emphasis (shown in Table 2) separately. To conduct this test, we coded five binary indicator variables, representing the five quintiles of CSR Emphasis. In the analysis, presented in Table 7, we included these five indicator variables to examine if the main effects and interactions differ across the quintiles (note that the base case of descriptions without any CSR terms is denoted by all five indicators being equal to zero.) The results of Model 1 show that the main effect of CSR Emphasis on increasing the likelihood that an item sells is significant across all five quintiles. However, the strongest effect occurs for levels of CSR Emphasis within the fourth quintile. The results of the interaction tests (Model 2) are less clear. The relationship is only significant for CSR Emphasis levels in the fourth quintile for both the COVID-19 and Buyer's Premium interactions. The implications of these findings are discussed in the next section.

Table 7: CSR Emphasis by Quintile Robustness Test Results

VARIABLES	(1) Item Sold (Yes/No)	(2) Item Sold (Yes/No)
CSR Emphasis (Quintile 1)	0.349*** (0.111)	0.240 (0.304)
CSR Emphasis (Quintile 2)	0.224** (0.102)	0.188 (0.258)
CSR Emphasis (Quintile 3)	0.271** (0.107)	0.549 (0.337)
CSR Emphasis (Quintile 4)	0.758*** (0.104)	1.704*** (0.284)
CSR Emphasis (Quintile 5)	0.349***	0.542

	(0.113)	(0.351)
COVID-19 [H2]	0.0133	-0.0505
	(0.0408)	(0.0455)
CSR Emphasis (Quintile 1) x COVID-19		-0.0887
		(0.206)
CSR Emphasis (Quintile 2) x COVID-19		0.258
		(0.209)
CSR Emphasis (Quintile 3) x COVID-19		0.261
		(0.213)
CSR Emphasis (Quintile 4) x COVID-19		0.853***
		(0.223)
CSR Emphasis (Quintile 5) x COVID-19		0.119
		(0.237)
Buyer's Premium	0.0314***	0.0383***
	(0.00294)	(0.00338)
CSR Emphasis (Quintile 1) x Buyer's Premium		0.00672
		(0.0124)
CSR Emphasis (Quintile 2) x Buyer's Premium		-0.00317
		(0.0113)
CSR Emphasis (Quintile 3) x Buyer's Premium		-0.0180
		(0.0128)
CSR Emphasis (Quintile 4) x Buyer's Premium		-0.0805***
		(0.0101)
CSR Emphasis (Quintile 5) x Buyer's Premium		-0.00986
		(0.0128)
Control Variables Omitted for Parsimony		
Constant	0.0454	-0.134
	(0.121)	(0.127)
Likelihood Ratio Chi-square	14,171***	14,293***
Pseudo-R2	0.469	0.473
Observations	23,247	23,247

5. Discussion and Implications

This study provides several contributions to the understanding of how CSR influences consumer purchase behavior. First, the finding that a greater CSR Emphasis is positively associated with an increased prospect of an item selling, adds to the limited body of CSR research that considers tangible transactions (Ford & Stohl, 2019). Next, the finding that consumers in our sample appear to place more value on CSR during a period of economic hardship empirically emphasizes a potential benefit of CSR that has not been widely shown in the literature. This finding supports TPB's assertion that salient information is an important driver of action. Similarly, the finding that an increasing Buyer's Premium diminishes the positive impacts of CSR on an auction highlights a previously unexplored aspect of CSR.

5.1. Theoretical Implications

Although it is suggested that CSR motivates consumers, which may lead to a competitive advantage for sellers with a greater CSR focus, the literature has not consistently supported this. Considering the prior mix of findings, we feel that this study's results provide new evidence in support of the positive impact that CSR can have on consumer purchasing behaviors, notably using a dataset of actual transactions rather than customer intentions. Barber et al. (2012) found that consumers have a high intention to purchase environmentally friendly wines but there was a wide gap between stated willingness to pay and the actual price paid. We acknowledge that our study does not definitively determine the precise psychological process that leads consumers to be more likely to purchase more sustainable goods; however, we postulate that our findings may be a combination of consumers' desires to support the entities that promote CSR, CSR's ability to build trust between buyers and sellers, and CSR information influencing which beliefs are most salient at the time of a purchase decision.

The lack of support for the second hypothesis predicting a lower percentage of items sold during the COVID-19 crisis, might be the consequence of several factors. First, the items sold in the auctions in our sample are largely non-essential, luxury items, with an average selling price over \$1,000 - which may indicate that the buyers of the goods in our sample are individuals experiencing less income insecurity than typical persons affected by the COVID-19 pandemic. Parr (2020) notes that people who have jobs where they can work from home tend to be more white-collar than those who must go to work to perform their duties, supporting this contention that they may have less income insecurity and are not dramatically altering their buying behaviors. Laato et al. (2020) found a strong link between intention to self-isolate and the intention to make unusual purchases. Finally, many brick-and-mortar stores were forced to shut down by state and local governments (McCaskill, 2020). Additionally, the pandemic saw an extraordinary number of consumers shift away from in-person to online shopping (Guthrie et al., 2021; Laato et al. 2020; Truong and Truong, 2022). It is possible that a combination of fewer in-person auctions and the adoption of online shopping modes by many consumers offset declines in auction purchases due to increased income insecurity, which possibly might explain the lack of support for the second hypothesis.

Although COVID-19 was not found to directly affect the likelihood of an item selling, the interaction tests reveal that in certain circumstances it can significantly impact an auction. Specifically, during the COVID-19 pandemic, CSR Emphasis became a stronger predictor of whether an item sold in an auction. While this finding would not be expected for buyers facing income insecurity, the characteristics of the market from which our sample was drawn (i.e., luxury items and financially stable consumers) may again help explain this result. This suggests that some consumers may be more focused on conducting societally beneficial transactions during this upheaval, perhaps to alleviate anxiety and feel comfort, much as they were in the aftermath of the hurricane Katrina disaster when victims rewarded themselves with non-essential purchases (Kennett-Hensel et al., 2012). There is some anecdotal evidence of these types of behaviors taking place during the COVID-19 crisis: one report found that as the crisis persisted, consumer spending broadened from a focus on essential goods to also include purchases of entertainment products (e.g., online streaming services, books, and games) (Rattner, 2020).

As discussed in the theoretical development section, two alternative predictions on the effect of higher Buyer's Premiums were both established by prior literature. Our finding, which empirically supports that a higher Buyer's Premium is associated with a greater likelihood of an item selling is a new insight for the online auction field. However, the negative impact of the interaction between the Buyer's Premium and CSR Emphasis on the odds of an item selling is a more noteworthy contribution, given the CSR focus of this study. This finding reveals that the outcomes of CSR efforts by an organization may be diminished by simultaneous efforts to maximize profits. Although the underlying reason for this is not apparent, we believe that the observed relationship may be evidence that buyers view profit-taking to be counter to good CSR practices. Specifically, higher levels of profit taking may impact the level of trust between buyers and sellers, which might lead buyers to conclude that the CSR efforts of the seller are not genuine. While our findings reflect a unique marketplace type, examples from industry suggest that this result may apply across a broader arena. For instance, Nike was a pioneer in CSR transparency that widely touted its sustainability efforts, however, revelations of low wages and poor working conditions for manufacturing resulted in boycotts and negative press (Newell, 2015).

5.2. Practical Implications

This study's findings have practical implications for persons and firms utilizing online channels to sell goods. A key finding of this analysis is that item descriptions that have a greater emphasis on CSR appear to have a greater appeal to consumers. To leverage this, sellers should carefully consider how they can position their products to best tout their sustainable characteristics. Additionally, given that the robustness tests concluded that the effect of emphasizing CSR was significant across the five quintiles of CSR Emphasis, sellers should recognize that even including a few words touting the CSR related characteristics of an item can improve the odds of a successful auction. However, sellers should not consider the selling of an item with positive CSR attributes to be an opportunity to inflate profits – as such actions may counteract the positive effects of CSR on the transaction. Likewise, while higher Buyer's Premiums generally relate to a higher probability of an item selling, sellers should be aware that the benefits of promoting the CSR aspects of products are reduced as the Buyer's Premium increases. Sellers should also be aware that this negative effect is strongest when the level of CSR Emphasis is relatively high (i.e., in the fourth quintile.)

To gather additional practical insights, we conducted a post-hoc analysis examining the interaction effect of CSR Emphasis with each product category. The results of this analysis, shown in Table 8, indicate that while the moderating effect of CSR Emphasis is positive in all 8 categories, it is only significant for 5 item types (Furniture, General, Home and Garden, Jewelry and Memorabilia). The effect of CSR Emphasis on Item Sold is strongest in the Jewelry category, followed by Home and Garden. These findings are not surprising, given the public visibility and outcry over the use of exploitive and inhumane practices in the gemstone industry (e.g., blood diamonds and conflict minerals) (Mugova & Sachs, 2019). The Home and Garden relationship is also not unexpected as the Home and

Garden industry was an early adopter of marketing sustainable “green products” (Holt, 2012). Also, of note, the lack of a negative relationship in any category supports the contention that emphasizing CSR typically has either a positive or neutral effect on consumers (Barnett, 2007; Parsa et al., 2015). This more detailed view of our findings should encourage sellers of items within those five categories to clearly highlight the CSR aspects of their products and also not discourage sellers of items in the other categories from following suit.

Additionally, sellers should be aware of the economic environment beyond their marketplace as the influence of CSR on the appeal of a product may be heightened during times of economic distress. Studies of prior times of economic distress, such as the 2003 SARS and 2013 H7N9 outbreaks and the 2008 Great Recession, found that observed changes in customer behaviors did not persist beyond those events. In contrast, Guthrie et al. (2021) contend that consumers have permanently adapted to the circumstances of the pandemic and that the shifts in purchasing behaviors will endure. Given this, as stated by Knowles et al. (2020), the pandemic has provided a “golden moment” for firms to reinvent their business models to fit what has become the new normal in consumer behavior. Thus, sellers should recognize that many consumers now prefer online shopping, which presents their potential customers with an unprecedented variety of choices coupled with extensive access to information about these choices. Accordingly, in light of our study’s findings, sellers should be intentional in promoting and providing information regarding the social benefits of their products, as well as their firm’s commitment to CSR when offering products through online channels. Nonetheless, while the overall interaction effect between CSR Emphasis and COVID-19 is significant, the robustness test of the quintiles of CSR Emphasis gives some indication that there may be diminishing returns beyond a certain level of CSR Emphasis, that sellers should be aware of when writing descriptions to appeal to socially minded consumers.

Table 8: Post-hoc Logistic Regression Result – CSR Emphasis and Item Category

VARIABLES	(1) Item Sold (Yes/No)
Main effects and Control Variables Omitted for Parsimony	
CSR Emphasis (Base Case – Category: Art)	0.00838 (0.0167)
CSR Emphasis x (Category: Collectibles)	0.0214 (0.0280)
CSR Emphasis x (Category: Fashion)	0.144 (0.113)
CSR Emphasis x (Category: Furniture)	0.103* (0.0546)
CSR Emphasis x (Category: General)	0.0812* (0.0455)
CSR Emphasis x (Category: Home and Garden)	0.0950*** (0.0344)
CSR Emphasis x (Category: Jewelry)	0.381*** (0.0418)
CSR Emphasis x (Category: Memorabilia)	0.109* (0.0582)
Constant	-0.0702 (0.119)
Likelihood Ratio Chi-square	14,250***
Pseudo- R^2	0.472
Observations	23,247

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

6. Limitations and Future Research

This study has several limitations. First, the auction data set was retrieved from one site only and over a limited period (before and during the beginning of the COVID-19 pandemic.) Despite this, we believe that the results are likely generalizable since the models controlled for the COVID-19 timeframe and because the auction site consolidates over 5,000 unique auction houses. The nature of the items included in the auction, which were moderate to high-end luxury items, may limit the applicability of our findings to other goods, specifically those that are lower cost or essential in nature. Due to the hoarding of perceived essential items during the pandemic, we felt that a site with auction items that would not be hoarded provided a good context to examine the effect of CSR language and product characteristics on purchase decisions – so purchase behavior can be assessed based on consumers’ perception of product characteristics related to dimensions other than scarcity of toilet paper or hand sanitizer. A future study could perhaps look at essential item sales from a site like Amazon to see if items listed as “green” had a variance in sales (holding price constant) from before the pandemic to during. Furthermore, non-essential item sales in emerging markets are not covered in our dataset and analysis. Thus, the results may also not be applicable to developing economies, where consumers lack the disposable income to consider purchasing non-essential luxury items.

Extensions to this study could extend our findings and help to confirm their generalizability to other online channels. A similar study of successful transactions on online retail sites that sell non-luxury items would serve to confirm or reject the applicability of our study in a broader context. Additionally, we believe that a deeper investigation focusing on the interactions between CSR and profit-taking, perhaps from a psychological perspective, would help to identify the underlying drivers of our findings. Our findings naturally lead to the psychological research question: do profit-taking efforts undermine the perceived legitimacy of CSR descriptions or is financial information simply more salient information than CSR information for the average consumer, consistent with theorizing in the TPB model? Burke et al. (2018) found that a reputation for CSR increased the intention to purchase. However, Zasuwa (2019) found that when trust is undermined, CSR can have a negative effect on consumer purchase intentions. An extension of this study could look at repeated purchases from companies or sellers that signal CSR. Another interesting idea, which comes from Marques et al. (2021), is including health as a fourth dimension of Sustainability (beyond people, planet, and profit). Future research could look for indicators of commitment to health as a more holistic measure of sustainability.

Another area for future research on the influence of CSR on consumer purchase behaviors is an examination of the perceived behavioral control of buying items with a CSR focus in their descriptions on purchase decisions. In this study, the focus is primarily on constructs related to attitudes and subjective norms influencing purchase decisions; however, TPB has three primary drivers of behavior: attitudes, subjective norms, and perceived behavioral control (Ajzen, 2020). Perceived behavioral control refers to perceptions about the ease of performing a behavior and the degree to which the actor is in control of the behavior (Ajzen, 1991). Extant research notes that the perceived behavioral control of buying ‘green’ products positively influences intentions to purchase ‘green’ products (Yang, 2019); however, the influence of perceived behavioral control on the actual purchase of auction items with CSR descriptions deserves further scholarly attention.

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