

December 2002

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SELF-REGULATION FOR ONLINE AUCTIONS: AN ANALYSIS

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***Fraud:** A misrepresentation or concealment with reference to some fact material to a transaction that is made with knowledge of its falsity or in reckless disregard of its truth or falsity and with the intent to deceive another and that is reasonably relied on by the other who is injured thereby*

— Stanley and Stern 1995

Abstract

The most prevalent form of Internet fraud is auction fraud. As fraud affects both the profits of Internet auction houses as well as honest traders of auction goods, they have a mutual incentive to reduce fraud. However, existing research suggests that little effort has been made by the Internet auction industry to control fraud. As a result, there have been increasing calls for government intervention to regulate the Internet auction marketplace. In this study, we perform a grounded theory analysis of fraud in the Internet auction marketplace. Specifically, this research explores the institutions that experienced traders and auction houses employ to reduce the incidence of fraud. Preliminary evidence suggests that, contrary to common perception, the Internet auction industry has developed many sophisticated institutions for combating fraud. These institutions operate primarily by reducing information asymmetries that con artists exploit. However, due to the ease of entry into Internet auction markets, new entrants become easy prey for con artists.

1 INTRODUCTION

Auctions are one of the few successful new business models enabled by the Internet (van Heck and Vervest 1998). Internet auctions are also the leading source of online fraud (National Fraud Information Center 2002). The literature has suggested that attempts by online auction houses to control fraud have been perfunctory (Snyder 2000). As a result, various groups have made increasingly strident calls for government regulation of the Internet auction business (Bywell and Oppenheim 2001).

However, economic theory would predict that both Internet auction houses¹ and the traders of auction goods have strong incentives to reduce fraud. We attempt to resolve this discrepancy through an analysis of Internet auction practice. Specifically, we seek to delineate (1) the institutions that the Internet auction industry (including both auction houses and traders) has enacted to detect and combat fraud, and (2) the underlying mechanisms that they employ.

As little research in the area has been done, we have conducted a grounded theory analysis of the industry. Our research contributes to the literature by demonstrating that, contrary to earlier findings, the Internet auction industry displays a strong degree of enlightened self-interest and, as a result, is highly self-regulated. We have discovered that sophisticated anti-fraud institutions have already been established, and, as a consequence, fraud primarily victimizes new entrants in the market who are unfamiliar with these mechanisms.

¹Our research focuses entirely on the business-to-consumer/consumer-to-consumer Internet auctions made popular by such sites as eBay and Yahoo.

2 RELATED RESEARCH

Three areas of research are directly relevant to the Internet auction fraud problem: (1) auction theory, (2) the economics of self-regulation, and (3) current online auction practices.

2.1 Auction Theory

Auction theory has long fascinated economists because slight variations in auction rules can dramatically impact auction behavior. For example, variations in the ability to enter a market (McAfee and McMillan 1992), and transaction costs (Ginsburgh 1998) all lead to disparities in expected results.

Internet auctions are an interesting special case of auctions, as they are a new form of market and have significant economic impact. Considering fraud, Internet auctions are distinct due to:

- **High degree of anonymity.** In other kinds of auctions, natural means of user authentication exist. For example, in the electronic Dutch flower auctions, user-established EDI links authenticated them (van Heck 1997). As Internet auctions are conducted using existing infrastructure, no such authentication barriers exist. As a result, it is easy for dishonest traders to avoid prosecution.
- **Relaxed legal constraints.** Other kinds of auction houses are required by law to hold or validate goods. For example, in AUCNet, cars and other vehicles are inspected and rated by AUCNet employees prior to the auction (Lee 1997). In Internet auctions where similar mechanisms are lacking, dishonest traders can falsely advertise their products.
- **Low costs for entry and exit.** In other kinds of auctions, entry and exit are often expensive. For example, the auction for U.S. treasury securities requires that first tier participants are regulated members of the international financial community with significant transaction volumes (U.S. Department of the Treasury 2000). In most Internet auctions, entry and exit are effectively costless. In most cases, sellers are charged a small listing fee and a closing charge (Beam and Segev 1996). As a result, dishonest traders are able to move in and out of Internet auction markets with impunity.

2.2 The Economics of Self-Regulation

Self-regulation is often beneficial for industries with natural information asymmetries such as online auction markets or professional services (Jacobson 2001). Self-regulation often improves the quality of goods and services (Leland 1979). It also enables the development of standards, thereby lowering communication costs (Dewey 1979). Self-regulation can also constitute cartel formation. Suppliers collude to limit market entry, thereby allowing them to extract monopoly rents (Leland 1979).

However, self-regulation only can occur when the self-regulating body can enforce policies. Traditional mechanisms for self-regulation include:

- **Monitoring and Enforcement of Regulations:** Incentives are provided to encourage suppliers to both monitor each other, and to follow regulations (Sethi and Somanathan 1996). For example, modern professions such as medicine, law, and accounting revoke the licenses of rogues, preventing them from practicing (Shaked and Sutton 1981).
- **Signaling Mechanisms:** Self-regulating industries also create mechanisms that screen market entrants. These screens encourage adverse selection in favor of “desirable” participants (Matthews 1991). For example, the New York Stock Exchange requires members to purchase a seat on the board before trading. By purchasing a seat, and sharing in the exchange's profits and losses, a member signals their willingness to behave according to the rules of the exchange (Davis and Neal 1998). Likewise, when accountants follow rules prohibiting advertising, they signal a willingness to put the greater good of the profession over their individual salaries (Matthews 1991). Signaling mechanisms fail when dishonest parties can either mimic or exploit the signal to obtain rents.

2.3 Current Practices

Hence, the Internet auction houses clearly benefit from self-regulation. First, an increase in the stability of the auction market leads to an increase in auction demand and, therefore, an increase in auction commissions. Second, self-regulation prevents the government from establishing market-distorting laws that reduce profits (Oi 1973). For example, advocates of government regulation have suggested that Internet auction houses verify every account on their systems (Snyder 2000)—a policy that would be prohibitively expensive. Finally, fraud can directly impact Internet auction house commissions. For example, sellers will sometimes ask for a low bid price, but raise shipping fees, thereby avoiding commissions based on the final bid price.

Legitimate traders of auction goods also have a clear incentive to self-regulate. A reduction in fraud reduces trader risk, thereby increasing trader welfare. Furthermore, traders incur costs under government regulation. As one trader noted:

If some fool can't wait to be parted from his money, I'm not interested in paying some sort of weird tax, in effect, so that he can risk what ends up being my money to try to get something for nothing.

— rec.collecting.cards.discuss posting, August 15, 1999

However, the empirical literature suggests that the Internet auction industry is doing very little to combat fraud (Bywell and Oppenheim 2001). Auction fraud is the number one source of Internet fraud (National Fraud Information Center 2002), and many existing anti-fraud schemes have been criticized for being ineffective (Snyder 2000). For example, escrow services are only used for trades of at least \$250.00. However, the average selling price of an eBay good is about \$30.00 (Lucking-Reiley 2000). There is thus a seeming contradiction between traditional theory and actual practice.²

3 RESEARCH DESIGN

This study attempts to resolve the disparity between economic theory and actual Internet auction practice through a grounded theory analysis of Internet auctions. Specifically, this study attempts to identify the institutions that the Internet auction industry has enacted to detect and combat fraud, as well as identifying the underlying mechanisms that make these institutions either effective or innocuous.

As very little empirical work on Internet auction fraud has been attempted, grounded theory (Strauss and Corbin 1990) was deemed an appropriate methodology. Grounded theory is a cyclical methodology, involving the continual refinement of hypotheses as new data is gathered. Similarly, data is systematically collected to test and refine the hypotheses.

3.1 Data Collection

To ensure the cross validation of the data, we collected data from three sources:

- **Web Pages Devoted to Auctions:** These included official anti-fraud web pages, such as those of the Internet Fraud Complaint Center, and personal web pages of experienced traders.
- **Bulletin Board Postings:** These included postings on the bulletin boards of the major Internet auction houses (e.g., eBay, Yahoo, Amazon), on UseNet news (archived on Google Groups), and postings on the bulletin boards of devoted auction communities (e.g., the Online Auction Users Association).
- **Auction News Articles:** The media regularly reports about auctions. Sources included general news outlets like CNN, and the New York Times, and specialized sources such as PCWorld, and CNet Central.

²Alternate explanations for this contradiction may be the elasticity of the Internet auction market: enacting more institutions lead to higher costs that drive traders from the market. We do not believe this explanation, if the cost of additional fraud protection outweighs the reduced cost of fraud, enacting such protection benefits the auction house. As Internet auction fraud is by far the largest reported source of fraud, even costly protection is profitable for the auction house. For example, if the new protection scheme costs \$1 million, but fraud levels are reduced by \$2 million, everyone is better off and demand for Internet auctions will actually rise. Thus, the contradiction remains despite market elasticity.

We began the study by searching through five main sites for the term “auction fraud”—AltaVista and Yahoo (to identify Web pages and articles), the eBay and Yahoo discussion forums, and Google Groups. The articles and postings on those sites then led us to other articles, postings, and organizations. For example, as we learned more about the auction community, we refined our search with highly specific terms like “Jay Nelson” (an infamous con artist), and “IFCCFBI” (the Internet Fraud Complaint Center).

Refinements in the search also led us to other sites and postings of which we would otherwise have been unaware, such as the EbayExodus Web ring (now largely defunct), AuctionWatch (an auction community), and eSafe2Bid (auction security data mining software). Over 42 Megabytes of data on auction fraud were collected. Google Groups alone has almost 20,000 postings concerning auction fraud.

3.2 Data Analysis

As is commonly done in grounded theory, we first employed open coding to identify our initial concepts, and steadily refined the codes as our understanding of auction fraud increased (i.e., axial coding) (Strauss and Corbin 1990). We have four top level codes:

- **Fraud Type:** Subcodes include victim, and perpetrator. Victim in turn is subcoded as buyer, bidder, seller, auction house, and third-party. Perpetrator is sub-coded as buyer or seller. For example, fencing, where a seller uses the auction to dispose of stolen merchandise, is perpetrated by the seller against a third-party and the buyer (who by law must return the stolen merchandise).
- **Formal Institutions:** This identifies institutions enacted by the government, the auction houses, or commercial institutions unrelated to the trading community of practice that hinder or aid fraud.
- **Informal Institutions:** This identifies institutions enacted by traders to hinder or aid in fraud.
- **Comparison:** This code captures information comparing Internet auctions to other kinds of auctions. For example, the fact that the Internet auction houses do not prepare merchandise descriptions (and are thereby not responsible for ensuring the quality of the merchandise) is captured by this code.

Figure 1 relates how the top-level codes interrelate (selective coding). The figure first projects that fraud is a phenomenon common to all markets. However, the level and nature of fraud is determined by the specific market conditions. The formal and informal institutions that reduce fraud, in turn, influence these market conditions. Thus, Internet auction fraud can only be understood by comparing Internet auctions to other kinds of auctions and markets.

By exploring Internet auction fraud in this way, it is possible to then reason about the characteristics of fraud that exist on Internet auctions. Furthermore, it is more appropriate to compare Internet fraud with the actual levels of fraud on other kinds of auctions than to study Internet auctions in isolation. As one person noted:

*Oh sure, oh sure, there's usually a shill in the room at Sotheby's too. Every place you have an auction you'll have shills and crooks. If the auction house finds one they throw them out.*³

— misc.invest.stocks posting, February 5, 2002

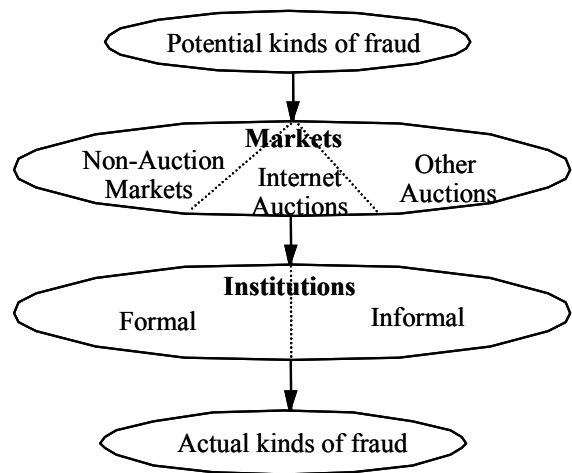


Figure 1. Theoretical Framework of Auction Fraud^a

^aWe gratefully acknowledge the contribution of an anonymous reviewer in revising this figure.

³Ironically, while this paper was under review, the chief executive of Sotheby's was arrested for price-fixing (Reuters News Wire 2002).

4 INTERNET AUCTION FRAUD OVERVIEW

Most Internet auction fraud shares three characteristics: (1) brief transaction time, (2) high value items, and (3) affects a large number of people.

Brief Transaction Time. Internet auctions are large virtual public venues. As a result, scams are discovered very quickly. In traditional scams, the con artist is often more patient, attempting to gain a victim's trust over time. However, Internet auction fraud has a relatively brief duration:

There is a user on ebay right now that is operating under two names, running three day auctions. This person requests the buyer to escrow the payment, then buys a camera (or whatever) from a dealer such as Beyond.com, and has it sent to the buer [sic]. The buyer then releases the escrow. The problem is that the camera was paid for with a stolen credit card using the buyer's name as the cardholder.

— rec.photo.digital posting, September 24, 1999

High Value Items. While the con artist has to act quickly, a profit must still be made to compensate for his risks. Thus, con artists tend to frequent auction markets for high value goods such as the collectibles (e.g., rare beanie babies, coins, stamps, and sports memorabilia), and electronic goods (e.g., computers) markets. Interestingly, these markets also attract a large number of con artists, counterfeiters, and other criminals in the offline world. As Kevin Pursglove, eBay's VP of Communications, noted:

Sports memorabilia has had a lot of fraudulent activity for years...such items also have a high fraud rate in the offline auction world. More expensive items, such as computers and consumer-electronics products, also have higher fraud rates.

—Interview with Kevin Pursglove by Troy Wolverton of ZDNet, July 1, 2002

To gain traders' confidence, the con artist may first perform legitimate trades in low value goods. For example:

I see a REAL train wreck coming with [name deleted] 7 over 1800 items, 8 1200 items and other high dollar Dutch auctions to boot. Reading her feedback (the last Aug. 2nd) all she was selling up til then was FABRIC. All of the auctions are 3 day...

—alt.marketing.online.ebay posting, December 13, 2001

Affects Large Numbers of People. The above quote also highlights the final characteristic of auction fraud: multiple traders are bilked simultaneously. The con artist has one opportunity to attract a revenue stream, and therefore maximizes the expected revenue from that single attempt.

Fraud itself can take multiple forms. Curry (2001) proposes the taxonomy presented in Table 1.

5 FORMAL MECHANISMS

Both governments and auction houses have enacted formal mechanisms for combating fraud. As there is convergence in the auction market, most Internet auction houses now have all of the formal mechanisms:

Police Action: The police are only involved in the most expensive fraud cases because time spent recovering the loss is otherwise not worthwhile. For example, during its first year of prosecution, the Internet Fraud Complaint Center only gave restitution in four cases. In these cases, plaintiffs received more than \$357,000 (National White Collar Crime Center and Federal Bureau of Investigation 2001). Most fraud cases are also cross-jurisdictional requiring complex coordination between police from disparate geographic regions. Within the United States alone, fewer than 1 in 4 auction fraud cases occurred in the same state (National White Collar Crime Center and Federal Bureau of Investigation 2001).

Reputation Systems: In most Internet auction houses, buyers (winning bidders) and sellers leave public feedback about each other. Using such systems, honest traders build a reputation, signaling their honesty. Reputation systems are highly effective, but are open to abuse. Fraudulent traders often threaten honest traders with “retaliatory feedback.” There have also been recorded cases of con artists who patiently built up good reputations to commit major swindles. As noted by Susan Grant, director of the National Consumers League's Internet Fraud Watch:

Table 1. Auction Fraud Types

1. Shilling	Seller bids on own auctions to drive up its price.
2. Bid shielding	Two bidders collude on an auction. One bidder makes a low bid, while the second makes an inflated bid. Seconds before the auction ends, the higher bidder withdraws.
3. Misrepresentation	Seller intentionally describes an item incorrectly.
4. Fee stacking	Seller adds hidden costs such as handling charges to the item after the auction ends.
5. Failure to ship	Seller never sends the goods.
6. Failure to pay	Buyer never sends the money.
7. Reproductions and counterfeits	Seller advertises counterfeit goods as the real thing.
8. Triangulation/fencing	Stolen goods are sold.
9. Buy and switch	Buyer receives merchandise and refuses it. However, buyer switches original merchandise with inferior merchandise.
10. Loss or damage claims	Buyer claims item was damaged and buyer disposed of it. Buyer wants money back.
11. Shell auction	Seller sets up an auction solely to obtain names and credit cards.

One problem with feedback forms is that the feedback can suddenly change and someone may have a positive feedback rating one minute, and then if all of [a] sudden there are problems reported, it can change that feedback to be negative.

— CNN Interview, September 28, 2000

However, building up a reputation is expensive as every successful trade incurs costs. As a result, most of the artificially high reputations are built through trades in low value items and are identifiable by savvy traders.

Complaints to Auction Houses: Most Internet auction houses have official complaint systems. However, these official systems are often deluged with non-fraud complaints. Internet auction houses also have to proceed cautiously, because of their legal exposure when they make an error. As Kevin Pursglove, eBay's VP of Communications, noted:

We try to move as fast as we can, once we have what we believe is a legitimate body of evidence.

— New York Times Interview, April 19, 2001

Insurance: Most of the major auction houses provide free insurance to buyers. However, the insurance amount is often capped at a small sum (on EBay, \$200 less a \$25 deductible).

Escrow: An escrow service protects the buyer by ensuring that the seller only receives payment when the buyer is satisfied. An escrow service works as follows. The buyer pays money to the escrow service, which then notifies the seller that the money has been paid. The seller ships the merchandise to the buyer who then inspects it. If the buyer is satisfied, the buyer authorizes the escrow service to release the funds to the seller. Otherwise, the buyer returns the merchandise.

While escrow protects the buyer, it also increases the seller's risk. Buyer can artists reject the merchandise, but substitute inferior quality goods in lieu of the original. As a result, many sellers categorically refuse to utilize the escrow services offered (e.g., <http://www.mindspring.com/~bookdealers/noescrow.html>).

6 INFORMAL INSTITUTIONS

Auction traders have also developed numerous informal institutions to combat fraud. In our investigation, we have identified five separate informal institutions:

Intermediary: In the intermediary institution, full-time traders with unsullied reputations resell goods purchased from low reputation sellers. In effect, such intermediaries charge a markup for absorbing market risk. Intermediaries are able to perform their task for two reasons. First, because these are high volume traders, they are more able to tolerate the effects of fraud. Second, as they are more experienced, they are better able to identify fraudulent transactions:

Our Trusted Intermediary is [name deleted], who is extremely well known on rec.toys.lego. As the proprietor of [company, he] has participated in literally thousands of transactions with several hundred people. I am sure [he] will supply bonafides if you need them, but probably 1/2 of the rec.toys.lego group will vouch for him.

— rec.toys.lego posting, December 12, 1999

The reputations of trusted intermediaries do not just derive from their official auction feedback rating. Frequently, such intermediaries are active on public forums such as bulletin boards. As a result, their behavior, mannerisms, and identity are often public knowledge. This provides the trusted intermediaries with an incentive not to defraud their customers.

Collectives: Traders have also begun to organize into collectives for mutual protection. Membership in these collectives is by authentication. Traders submit a home address, telephone number, and other kinds of personal information, and are then subjected to an investigation by the collective. One example collective is the Online Auction Users Association (OAU) (www.auctionusers.org).

These collectives not only serve as an authentication service, but also help members when they suspect that a fraud has occurred by offering advice and support. As one OAU member who was almost victimized by a fraudulent auction noted:

All this “shilling” and “bumping bids” and stuff. It just STINKS.... You’re all a great group, and I’m proud to be a part of the OAU.

— OAU posting, December 14, 1999

Self-Interest: Experienced traders also act in pure self-interest to reduce fraud. For example, victims of fraud often band together temporarily for mutual assistance. By reporting their combined losses, they often can motivate authorities to act against a con artist.

Many experienced members of the auction industry also behave in certain ways during auctions to reduce their individual risk of fraud. For example, many experienced bidders engage in snipe bidding (bidding only at the end of an auction) to overcome shilling. As one experienced auctioneer noted:

SNIPER your bids! The closer to the end of the auction that you place your bid, the less likely you are to be SHILLED. For instance, placing your bid 10 seconds before the auction closes would practically ensure you wouldn’t be shilled AFTER placing your bid, as there isn’t enough time.

— webpage at basestealer.com

The Internet auction houses have also acted in a self-interested way to reduce their exposure to fraud. Auction houses’ primary source of revenue is their commissions, which are a percentage of the final price. To avoid such fees, sellers will artificially boost their stated shipping costs. Bidders then lower their bids to compensate.

Partly as a result, the auction houses have begun to purchase interests in electronic payment systems. For example, eBay has a controlling interest in Billpoint (now eBay payments).⁴ As commissions on the payment systems are a percentage on the total sale price, the auction houses are able to extract some of the rents owed through this form of fraud.

⁴eBay has also recently purchased controlling ownership of PayPal. However, at the time of this writing, PayPal has not yet been fully integrated into the eBay organization.

Charities: Many experienced traders also devote their time and energy to tracking and exposing fraud. Sometimes, these traders work with the authorities to shut down fraudulent traders:

EBay finally yanked [name deleted] 40 fraudulnt [sic] auctions after 4 days of effort on our behalf!!! Thanks to the groundswell of pressure from a lot of you regarding them!!! Thank you so much for all of your letters and support. I have received over 500 eMails from all of you and I forwarded most of them to both the FBI and NBC News who were instrumental in getting these auctions closed down.

— rec.music.makers.bass posting, July 30, 1999

In other cases, these traders attempt to warn people away from fraudulent auctions. For example:

Things I (and others) think you should know about [name deleted] before you decide to send payment. a) the seller has listed hundreds of items, all high demand, and all with “too good to be true” prices, he has no history of this type of selling. b) sellers 70+ positive feedbacks (except for a few) are all for BUYING low priced items, most less than a dollar, NOT for selling...

— alt.marketing.online.ebay posting, August 30, 2001

To work successfully, these charities comprise multiple individuals working together. By working as a group, they reduce the individual cost of monitoring fraudulent transactions. Also, charities in effect pay for their monitoring through advertising. Rescued traders are often willing to transact future business with members of the charities.

Vigilante: Traders that perform charitable acts tread a thin line as their actions can be construed as “interfering with an auction,” a violation on most Internet auction houses. Thus, many charities grow disenchanted and turn vigilante, bypassing formal mechanisms to shut down fraudulent auctions. These vigilante groups actively interfere with fraudulent auctions in violation of the rules of many auction sites. In some cases, vigilante groups even commit fraud by bidding with no intent of purchase. As one vigilante posted:

You peole [sic] have been hammering all over the scammers auctions in the high price laptop and cameras!Everyone is getting all kinds of questions thrown at them from escrow refusals to serial numbers. ...WAY TO GO!!! WOOWOOHOOOOOOO!!

— Yahoo BBS posting, January 24, 2002

Such vigilantes actively discourage fraudulent traders and encourage them to move elsewhere:

Just knowing they are out there and checking can be a deterrent to scam artist w/ equal enforment [sic] for us mom and poppers as well as the big sellers.

— e-Bay BBS posting, November 16, 2001

However, being vigilante carries substantial risks. Kevin Pursglove, E-Bay’s VP of Communications, noted that:

We have had a number of cases where individual users with the best intentions go after the wrong person. ... We’ve had to suspend a fair number of users over this.

— PCWorld Interview, February 22, 2002

7 DISCUSSION

Table 2 summarizes the above institutions. Benefits and harms refer to the auction industry members with reduced/increased level of fraud risk as a result of these institutions. Combats refers to the fraud type in Curry’s (2001) taxonomy.

Our investigation suggests that, contrary to earlier findings, the online auction industry is self-regulating. However, the self-regulatory mechanisms in place primarily benefit auction participants who are familiar with the system:

People that ask you to do things that are inconsistent with the culture and common practices of a site like e-bay do so for only one reason, and that is some sort of subtfuge [sic].

— OAU posting, November 7, 2000

Table 2. Anti-Fraud Institution

Institution	Formal/Informal	Benefits	Harms	Combats	Remarks
Police Action	Formal	Buyer, Seller, Third Party		5, 6, 7, 8, 11	High value auctions only
Reputation Systems	Formal	Buyer, Seller		All except 1, 2	Can be mimicked by con artist
Complaints	Formal	Buyer, Seller, Third Party		All but 4	Limited effectiveness due to constraints on auction house
Insurance	Formal	Buyer	Auction house	3, 5, 7, 8	Low value auctions only
Escrow	Formal	Buyer	Seller	3, 5, 6, 7	Exposes seller to 9, 10
Intermediary	Informal	Buyer, Seller		All but 4	Intermediary markup reflects market value of reputation and risk
Collective	Informal	Buyer, Seller		All but 4	Participants share knowledge
Self-Interest	Informal	All		All	
Charity	Informal	All		All but 4	Altruistic behavior really long term profit maximization
Vigilante	Informal	All	Buyer, Seller	All but 4	Sometimes criminal behavior

New entrants into an auction community are often unaware of the major intermediaries and collectives, and do not have the sophisticated self-interested strategies that experienced industry players do. As a result, these are the ones who are often at the mercy of con artists. In the following example, the new entrant did not know enough about auction practice to effectively protect himself and was subsequently berated by an oldtimer.

Tell me, what was it about this seller's feedback that made you feel comfortable sending him money? Was it his reputation? Was it the comments from previous customers? I'm also curious why you did not use an Escrow service, as eBay recommends, on a transaction this large? Why you did not use a credit card that would offer chargeback protection in case of a problem?

— eBay BBS posting, July 12, 2002

However, these new entrants are in part protected by the charities and vigilantes who expend a cost in tracking down fraudulent auctions. The charities and vigilantes in turn are rewarded when the new entrants participate in their auctions.

Our findings also suggest that the informal institutions are more effective than government regulation could be, because they target fraud at its source. Fraud primarily occurs because of information asymmetries, i.e., the con artist knows something auction participants do not know. Intermediaries, collectives, and charities reduce these information asymmetries and thereby facilitate the invisible hand. Regulation, on the other hand, constrains behavior by making unwanted behaviors costly. However, because fraud occurs in myriad forms, it is not possible to constrain fraudulent behavior without similarly constraining desirable behavior.

Thus, enacting regulation on the Internet auction market needs to be performed carefully, if at all. First, such regulations are unlikely to reduce fraud unless they deal specifically with information asymmetries. Regulations designed to subsidize trader risk or punish the con artist are likely to be ineffective. Second, such regulations may disrupt existing informal anti-fraud mechanisms, and thus may worsen the incidence of fraud. Third, regulations are always costly to enact. Individuals must be paid

to enforce them, and infrastructure must be installed. As Internet auction markets are highly elastic (Enos 2001), the enactment of such regulations can cause the overnight collapse of markets. Finally, government regulations often have unintended consequences. For example, because government regulations transfer the costs of fraud to taxpayers,⁵ those protected by government institutions frequently engage in riskier behavior (Calomiris 1990).

This is not to say that informal institutions eliminate fraud. The individual must be responsible for protecting himself. The individual must also realize that in Internet auctions, time is the premium currency. To be safe, the individual must investigate the auction, the trader, and the community of practice. By investing in the community, and following accepted practices, the trader does much to reduce his own personal fraud risk.

8 CONCLUSION

In this study we have examined the phenomenon of Internet auction fraud using a grounded theory approach. Our analysis demonstrates that, contrary to findings in prior literature, but in accordance with economic theory, the Internet auction industry is doing its best to control fraud. However, anti-fraud institutions are grounded more in auction practices than in formal institutions. Our study has identified five informal institutions enacted by traders and auction houses alike to combat fraudulent behavior: auction intermediaries, collectives, self-interested behaviors, charities, and vigilantes. While formal institutions constrain behavior, these informal institutions primarily function through reducing information asymmetries.

Our study employed grounded theory, and has all of the limitations of that approach. First, theoretical, and not random sampling was employed. As a result, the findings may not be fully representative of auction fraud. Second, the research was inductive, and exploratory, and therefore conclusion validity could not be obtained. Finally, because Economic Man was applied as a conceptual lens, it is possible that our subjective reality does not coincide with the realist objective reality. Nevertheless, as Internet auction fraud is a difficult phenomenon to unearth, and little formal research has been done on the subject, grounded theory was the most appropriate methodology.

Furthermore, auction fraud is a pressing concern, and our findings will by no means be the last word on the subject. As future research, we intend to interview auction participants to identify additional anti-fraud institutions. In addition, we intend to empirically test some of the theories discovered in this research. For example, if auction houses are motivated by enlightened self-interest, then traders should be willing to segment the market based on their level of risk acceptance. Distinct market segments should emerge, where each market segment reflects a willingness of traders to absorb correspondingly higher risk for correspondingly lower monetary prices. By triangulating multiple data sources and epistemological traditions, we hope to obtain a better understanding of the Internet auction fraud phenomenon. Also, we intend to explore how the various informal anti-fraud institutions evolved from the Internet auction communities of practice and predict their final form.

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⁵Note that all rules are costly in that they require enforcement.

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