TOWARDS A MARKET FOR BANK SAFETY

Chris Jay Hoofnagle∗

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TOWARDS A MARKET FOR BANK SAFETY

Chris Jay Hoofnagle

Imagine shopping for a car in 1960. Safety is important to you. How do you assess a car’s performance in surviving a crash? What tools were available then to take an informed decision?

The modern consumer of financial services is in a similar position as the car shopper of the 1960s. How does the modern consumer choose a bank that is relatively safe from identity thieves and other malicious individuals? Perhaps she chooses the larger institution, because it has more resources to address fraud. Or perhaps a smaller institution offers more protection, because it is more obscure. There is no way to know for sure, and thus, consumers cannot make an informed decision.

This article attempts to actuate a market for bank safety by comparing identity theft victim data with government statistics used to measure the relative size of financial institutions. It envisions a future when this market incentivizes financial services firms to explicitly compete to reduce the likelihood that customers will become victims of identity theft or other frauds. In a world of competition in bank safety, consumers who put a premium on avoiding fraud could reward the most proficient firms with their loyalty.

This article concludes that the available data, while weakened by several methodological concerns, do show that certain banks, large and small, have different identity theft footprints. Other discoveries were made as well. First, if present trends continue, there will be a substantial upswing in identity theft complaints to the Federal Trade Commission in 2008. Second, over a three-year period, a small group of companies accounted for almost 50 percent of identity theft incidents. Focusing interventions on this small group of companies could have a profound effect on incidence of identity theft. Finally, non-banking institutions, such as telecommunications companies, have an enormous identity theft footprint; in our highly dependent credit markets, impostors may be using these companies as stepping stones for attacks against banks.

I. INTRODUCTION

This article explores a controversial idea: is it possible to create a market for “bank safety?” Here, bank safety refers to financial institutions’ resistance to fraud against its customers. If such a market existed, with banks competing based upon objective fraud rate information available to the public, consumers could make more informed decisions about where to bank.
To explore this idea, one must assume that at least some fraud is within the control of banks. All businesses, of course, experience some level of fraud. Tolerance for this fraud is balanced against other competing values, such as the importance of quickly acquiring new customers and the costs and inconvenience of preventing the fraud.

Different banks, for reasons not understood by consumers or regulators, may have different vulnerabilities and varied ability to avoid and mitigate fraud. Subject to general standards, banks set their own policies and procedures for credit granting and customer authentication. Many banks are products of mergers and buyouts; for logistical reasons, these institutions may face more difficult challenges in anti-fraud activities. Larger banks may have more resources for anti-fraud efforts, but their very size may also make them attractive to frauds such as phishing. A bank competing to acquire new customers may tolerate more risk and thus allow more impostors to obtain accounts.

To explore the idea of a market for bank safety, three draft versions of this article were released for comment in 2008; all attracted numerous comments from consumers, security professionals, and regulators.¹ This final version incorporates many suggestions and criticisms made by this community.

A. The Automobile Safety Analogy

This proposal has provoked very strong criticism from the financial services industry. That industry sees itself as the victim of identity theft,² and indeed, this effort has a “blame the victim” patina to it. Banks must shoulder the financial burden of many fraud incidents, and as several commenters argued in reviewing draft versions of this article, sometimes consumers themselves are

viewed as having caused the fraud. For instance, the consumer may have fallen for a phishing email or have used a weak password for an account. The following comment was a typical reaction:

This is like grading Chevrolet on its corporate ability to avoid having its cars wreck. Sure, they’d prefer that their vehicles would never be involved in an accident, but since they aren’t driving their cars (once sold) much less the other vehicles which may be involved in the accident, it’s very tough for them to improve “their accident” statistics.

Exploring the analogy of automobile safety is useful here. Although the commenter intended to object to this bank safety effort, the historical example of the automobile safety movement and the resulting market for safety is instructive in thinking about identity theft and other forms of financial fraud. The metaphor illuminates and supports the idea of a market for bank safety.

While the commenter is correct in arguing that automobile manufacturers cannot completely control how people drive, over the past 50 years, a market for auto safety has emerged. The rate of traffic fatalities has decreased dramatically, despite the problem that driver error still causes most accidents.3

When automobile safety captured the attention of Congress and reformers in the 1960s, automakers highlighted the role of driver behavior and the relatively low rates of equipment failure in accident causation.4 Because drivers caused most accidents, automakers reasoned, driver education, rather than safety or design mandates, was the best solution to address harm.5 General Motors spent less than 1% of its budget relative

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3 U.S. DEP’T OF TRANSP., TRAFFIC SAFETY FACTS (2005), available at http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSSFAnn/TSSF2005.pdf. In 1966, the fatality rate per 100 million vehicle miles traveled was 5.5; in 2005, it was 1.45.
4 RALPH NADER, UNSAFE AT ANY SPEED (Grossman 1965).
5 Id. at 252. Chapters seven and eight of Ralph Nader’s Unsafe at Any Speed discuss this debate in detail.
to profits on safety. This exclusive focus on driver behavior prevented innovations in highway safety.

A revolution in thinking has since occurred. Driver error is no longer an excuse to avoid safety and design interventions. In fact, driver error continues to cause most crashes, but it is understood in more nuanced ways, and technologies are being developed to help drivers avoid mistakes. Other factors, such as the influence of alcohol, and the importance of enforcing traffic laws are now understood as central factors in reducing accidents.

Accident avoidance was probably not even considered by a 1960s consumer seeking a safe car. Recent empirical studies into vehicle safety have shown that accident avoidance technology, such as traction control systems, have an enormous impact in reducing fatality rates. These studies drive regulatory mandates for safety equipment.

When accidents do occur, innovations ranging from the seat belt to the airbag reduce harm. The National Highway Traffic Safety Administration administers dozens of standards for crash avoidance and crashworthiness of cars, and consumers can obtain crash safety and rollover information online. Automakers such as Volvo have tied their brand name to vehicle safety, and sophisticated safety equipment is available even in less expensive cars. This is all evidence of a vigorous market for

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6 Id. at 253-54.
9 O’Neill, supra note 7 at 297-99.
14 Jonathan Welsh, Cheaper Cars Move to Top Of Safety List – Insurers Give Highest Rating To 9 Vehicles Under $30,000; Kia and Hyundai Join
automobile safety, a market that could not have developed if the debate did not transcend simply blaming the driver for errors.

Many parallels exist between automobile safety and bank safety. Financial services firms conceive of the problem as one caused by consumer error, just as automobile manufacturers attributed accidents to driver error. Consumers completely lacked safety information on cars in the 1960s; today the modern individual lacks reliable methods to understand risk of identity theft at firms.

Bank safety may yield new discoveries. Recall that traction control plays an important role in reducing highway fatalities, and now the role of alcohol in accidents is more clearly established. Better tools to evaluate and track fraud at banks over time may elucidate effective interventions.

It is unlikely that a robust market for bank safety will emerge on its own. While some institutions advertise that they are more resistant to fraud or that they fully recompense victims for losses; these are mere advertising representations. These institutions do not provide consumers with any objective means of distinguishing banks nor are their claims verifiable in any meaningful way.15

Politically, fostering a market for bank safety is not on the regulatory or legislative horizon. Thus, this effort seeks to find proxies for regulatory reporting requirements by banks. The Freedom of Information Act was employed to obtain data about identity theft from the complaint data submitted by victims from 2006 to 2008 to the Federal Trade Commission (FTC). This complaint data identify the institution where impostors established fraudulent accounts or affected existing accounts in the name of the victim. The names of institutions from these complaints were aggregated and used to rank institutions

15 In earlier work, the author argued that to address these problems, lending institutions should publicly report basic statistical information about identity theft events. In the UK, a basic fraud statistics-reporting network already exists. That system could be improved upon by reporting the number of identity theft events suffered or avoided, the form of identity theft attempted, and the product targeted (e.g., mortgage loan or credit card); and the amount of loss suffered or avoided. With reporting, consumers, regulators, and businesses could more accurately assess the identity theft problem and respond appropriately. See Chris Jay Hoofnagle, Identity Theft: Making the Known Unknowns Known, 21 HARV. J. L. TECH. 97 (2007).
employing publicly available and proprietary statistics concerning banks.

II. METHODS

Measuring the incidence and relative rates of identity theft among firms presents several methodological challenges. This section explains the FTC consumer victim data, the statistical data from the Federal Deposit Insurance Corporation (FDIC), and proprietary data that are used to compare the size of institutions. These limitations affect the quality of rate comparisons among institutions, and must be carefully considered before strong conclusions are made concerning firms’ efficacy in preventing fraud.

A. The FTC Consumer Complaint Data

The FTC holds the largest database of information concerning identity theft. The FTC collects information from identity theft victims by phone and through an online form. In doing so, the FTC requests that victims: “Please identify companies or organizations where fraudulent accounts were established or your current accounts were affected...” In the form used to process this data, victims are asked to identify up to three companies where accounts were established or affected. While the FTC performs an annual analysis of this complaint data, the agency does not publicize the names of institutions identified by victims. The Freedom of Information Act (FOIA) was used to request this data, along with additional, non-personally identifiable information provided by victims.

The request for 2006 data resulted in negotiation with the FTC on the scope and amount of records requested. The original

16 The data in this article were collected before the FTC upgraded the consumer complaint system. Fed. Trade Comm’n, FTC Complaint Assistant, available at https://www.ftccomplaintassistant.gov/ (last visited Nov. 13, 2008).
request sought two years of data, but in light of the burden upon
the FTC’s disclosure office to review and release hundreds of
thousands of complaints (the FTC received 674,354 complaints in
2006; 246,035 were identity theft related\textsuperscript{19}), the request was
limited to three randomly-chosen months: January, March, and
September. The request for 2007 data was narrower in that it
only sought institutions’ names and the type of identity theft
crime committed in three months of 2007. Data released from
February, May, and December 2007 were comprised of 83,951
unique records, with 48,247 of those records identifying specific
institutions associated with the crime (the FTC received 813,899
complaints in 2007; 258,457 were identity theft related\textsuperscript{20}). Data
released for 2008 covered the months of January, March, and
May, and were comprised of 103,251 unique records, with 62,623
where the consumer victim named an institution. Table 1
presents a summary of these disclosures.

\textsuperscript{19} \textit{Fed. Trade Comm’n, Consumer Fraud and Identity Theft
Complaint Data, January – December 2006} (Feb. 2007), \textit{available at
http://www.consumer.gov/sentinel/pubs/Top10Fraud2006.pdf} \hfill
[hereinafter FTC 2006] (the FTC received 674,354 complaints in 2006. Of those, 246,035
were related to identity theft).

\textsuperscript{20} \textit{Id.} (the FTC received 813,899 complaints in 2007; 258,457 were related
to identity theft).
TABLE 1: FTC CONSUMER VICTIM COMPLAINT DATA

<table>
<thead>
<tr>
<th>Month Complaint Submitted by Victim</th>
<th>Total Number of Complaints Obtained</th>
<th>Number of Institutions Named in Complaints</th>
<th>Total Number of Complaints Received by the FTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>January-06</td>
<td>29945</td>
<td>16382</td>
<td></td>
</tr>
<tr>
<td>March-06</td>
<td>33161</td>
<td>16168</td>
<td></td>
</tr>
<tr>
<td>September-06</td>
<td>25454</td>
<td>13512</td>
<td></td>
</tr>
<tr>
<td>Total 2006</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>February-07</td>
<td>30634</td>
<td>15415</td>
<td></td>
</tr>
<tr>
<td>May-07</td>
<td>27811</td>
<td>16577</td>
<td></td>
</tr>
<tr>
<td>December-07</td>
<td>25506</td>
<td>16255</td>
<td></td>
</tr>
<tr>
<td>Total 2007</td>
<td>83951</td>
<td>48247</td>
<td></td>
</tr>
<tr>
<td>January-08</td>
<td>34318</td>
<td>21836</td>
<td></td>
</tr>
<tr>
<td>March-08</td>
<td>39264</td>
<td>22594</td>
<td></td>
</tr>
<tr>
<td>May-08</td>
<td>29669</td>
<td>18193</td>
<td></td>
</tr>
<tr>
<td>Total 2008</td>
<td>103251</td>
<td>62623</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>275762</td>
<td>157132</td>
<td></td>
</tr>
</tbody>
</table>

Simply reviewing the number of complaints reveals that, if present trends continue, there will be a major upswing in reports of identity theft to the FTC in 2008. In the three months
sampled in 2008, each had thousands more complaints than the same month in previous years. Overall, the 2008 disclosures contained far more complaints, and identify more institutions.

Once the data were obtained, all the responses from the three company fields were concatenated. Moreover, blank rows, extraneous data (obvious errors, such as zip codes), and rows containing content such as “unknown” or “not provided” were eliminated. The data were adjusted where inconsistent or misspelled names were used (e.g., Wallmart, Citybank, Bank of American), combined where companies that were merged but nevertheless were identified as separate companies by consumers (e.g., AT&T Wireless and Cingular, JP Morgan and Chase), and consolidated when corporate names were merged with a specific product (e.g., “Citibank Visa” became “Citibank”).

Institutions were then ranked in order from high to low by number of fraud events. This means that the number of fraud events is counted differently than complaints. In fact, it is common for a single identity theft complaint to describe several events of fraud, and several institutions involved in the fraud. Therefore, for purposes of this article, any mention of a company name (each complaint allows victims to enter up to three) is an event that was counted for purpose of calculating the overall number and relative rate of identity theft.

Several weaknesses must be considered in evaluating the ranking of institutions. First, the FTC has found that “Most victims of ID Theft do not report the crime to criminal authorities.” Based on a telephonic survey, the FTC estimates that 8.3 million Americans were victims of identity theft in 2005, yet only 255,613 complaints of identity theft were filed with the agency that year. This means that less than one in thirty-two victims take the time to file a complaint. This fact has several implications; it could mean that the consumer complainants are particularly vigilant, interested in redress, or that they have experienced particularly severe incidents.

Second, other forms of identity theft may go unmeasured, because consumers do not perceive that the crime occurred.

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23 See FTC 2006, supra note 19 at 4.
“Synthetic identity theft” events, defined by the FTC as, “Situations in which someone creates a fictitious identity by combining personal information from one or more consumers with invented information, rather than using the identity of an existing individual,” may not be reflected by consumer complaints. This factor, and the low level of consumers who make complaints even when they are aware of fraud, means that the data available are from a relatively small minority of identity theft cases.

Third, several factors complicate victims’ identification of institutions. The FTC’s identity theft complaint form is lengthy and takes substantial time to complete. Victims identify institutions near the end of the form, when they may be fatigued or hurried to complete the task of submitting the complaint. Consumer victims may misidentify a bank, as some have similar names or use neologisms that are difficult for individuals to spell. Consumers also may use the same name to represent different legal entities or products. For instance, a victim submitting “AT&T” might intend to mean AT&T wireless, long distance service, internet service, or even an AT&T-branded credit card. This means that a ranking of incidents concerning very large institutions with multiple product lines can become confusing, because such institutions may actually have a low level of fraud in the banking context, but appear to have high levels of fraud as a result of complaints concerning other product lines.

Betsy Broder, the Assistant Director of the Federal Trade Commission’s Division of Privacy and Identity Protection, commenting on previous versions of this article, amplified the above-mentioned challenges: “Complaint data may contain errors and may not correctly identify the company that is associated with the identity theft.” Broder concluded that this and other limits of the FTC data fundamentally weaken the effort:

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24 See FTC THEFT SURVEY, supra note 22.
25 See FTC Complaint Assistant, supra note 17. The FTC’s new complaint system collects information about the institution name earlier in the process, but the complaint process is still lengthy.
I am concerned that some readers of the report and, more likely, readers of the press accounts about it, will ignore the caveats in your report and place great weight on its findings than is warranted. In addition to the questions about the underlying data as described above, we believe it would be erroneous to extrapolate from the complaints that the companies with the highest number of complaints were either greater sources of data breaches or had especially lax procedures for opening new accounts.27

Broder’s objection is a serious one, but this effort does not make conclusions concerning security breaches or the particular problem of lax practices. The relationship between security breaches and identity theft is not analyzed here.28 Furthermore, this analysis cannot and does not directly answer the question of whether a specific company has lax procedures for opening new accounts.29

Creating a market for bank safety is an iterative process, one that will require continual tuning. Much like the appreciation for the complexity of auto safety has progressed over time, our understanding of identity theft risk is likely to evolve as well. The fact that some will misinterpret the effort to measure identity theft is not a compelling reason for ending this inquiry.

Returning to an earlier theme, a Bank of America spokesperson remarked that institutions named in a consumer complaint may not have caused the fraud:

27 *Id.*


29 See Letter from Broder, *supra* note 26. Broder suggested a second weakness in using the FTC data to rank institutions: “Some companies take special efforts to direct consumers to the FTC’s complaint system,” accordingly, these institutions “may have a disproportionate number of complaints” in the database. This objection is weakened substantially by the fact that the complaint data described by Broder is coded so that the institutions’ identities are masked. As a result, institution-provided data have not been included in this analysis.
Bank of America spokeswoman Betty Riess says the company hasn’t seen the study yet, but says BoA takes security seriously. “Keep in mind that if we have a customer who reports they are a victim of identity theft that doesn’t correlate to security at BoA,” Riess said, referring to the fact that a BoA customer experiencing identity theft could have had their mail stolen or fallen prey to a phishing attack. “Protecting customer information is a top priority at BoA and we have multiple layers of security.” Riess added that BoA uses online security offerings from RSA and lets customers use one-time credit card numbers for purchases from unfamiliar online retailers.30

Riess and others31 often invoked phishing as an example of a situation where the consumer’s mistake resulted in identity theft. As noted in the introduction, some of the most strenuous objections to earlier drafts of this analysis came from bank security officers frustrated with individuals’ inability to recognize phishing attacks. This objection to the analysis is myopic. While phishing has imposed substantial costs on online banking, other types of attacks dominate the FTC consumer complaint data. The FTC’s analysis of the identity theft complaint data shows that victims suffered a variety of identity-related frauds, a high percentage of which were attacks that established new accounts.32

Further, as explained in the introduction, one of the assumptions of this effort is that fraud events can be shaped by institutions’ policies.33 In the phishing context, a market for bank

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31 See, e.g., Harry Calamari commenting that “nearly all information breaches are most often due to the negligence of the consumer…” on More Accurate Identity Theft Reporting By Banks: The Opening Salvo, Bank Lawyer’s Blog, Mar. 9, 2008, available at http://www.banklawyersblog.com/3_bank_lawyers/2008/03/more-accurate-i.html (last visited Nov. 13, 2008).


33 In a December 2007 workshop on Social Security Numbers held by the Federal Trade Commission, Trey French of Bank of America stated that the bank approved about 14 million credit applications a year mostly through a completely automated process, meaning that the institution had no human review of this account granting. Tramond French, Vice President, Bank of
safety may reveal that some institutions have incorporated designs and technologies that are better at helping consumers recognize and avoid fraud. In other contexts, however, events are clearly the fault of the institution.\textsuperscript{34} For instance, Riess argued that mail theft is outside the bank’s control, but one of the principal reasons mail is stolen is to intercept bank-initiative marketing communications, such as pre-approved credit offers and convenience checks. Almost eight billion of these solicitations are sent annually,\textsuperscript{35} each offering a chance for impostors to open new accounts.\textsuperscript{36} Banks certainly are in control of sending these offers; and the more sent, the larger an attack surface is created for fraud.

B. Data Used to Compare Institutions


\textsuperscript{34} See, e.g., Wolfe v. MBNA Am. Bank, 485 F. Supp. 2d 874 (W.D. Tenn. 2007) (permitting negligence claim against defendant bank to continue under Tennessee law where a fraudulent credit application was accepted despite having a false address, phone number, and mother’s maiden name); see also Hoofnagle, \textit{Identify Theft}, supra note 15 (showing that it is possible to manufacture "synthetic" identities using real Social Security numbers (SSNs) and fake names in order to obtain credit, suggesting that some institutions do not even match SSNs to the applicant’s name; see also Brian Krebs, \textit{The FDIC Computer Intrusion Report}, WASH. POST., Nov. 9, 2007, available at http://voices.washingtonpost.com/securityfix/2008/03/the_fdic_computer_intrusion_re.html.


\textsuperscript{36} See, e.g., Bob Sullivan, \textit{Even torn-up credit card applications aren't safe}, MSNBC, Mar. 14, 2006, available at http://redtape.msnbc.com/2006/03/what_if_a_despe.html; \textit{Identity thieves feed on credit firms' lax practices}, USA TODAY, Sept. 12, 2003, p. 11A; Kevin Hoffman, \textit{Lerner's Legacy: MBNA's customers wouldn't write such flattering obituaries}, CLEVELAND SCENE, Dec. 18, 2002; Scott Barancik, \textit{A Week in Bankruptcy Court}, ST. PETERSBURG TIMES, Mar. 18, 2002, at 8E. The lax standards associated with new account openings with prescreened offers are illustrated by cases where accounts have been opened in the name of dogs. See, e.g., \textit{Dog Gets Carded}, WASH. TIMES (Jan. 30, 2004); \textit{Dog Issued Credit Card, Owner Sends In Pre-Approved Application As Joke}, NBC San Diego (Jan. 28, 2004).
Depository Institutions (SDI) database. The data are drawn from the Federal Financial Institution Examination Council Call Reports (a regular statement on a bank’s condition), and from the Office of Thrift Supervision. SDI was used to generate reports on the comparative size of banks using two different measures. The first measure captures the likely number of consumer accounts that an institution has, the other describes the total amount deposited in these accounts.

First, “Number of deposit accounts of $100,000 or less,” is a SDI figure that is offered annually in the June Call Report. It is defined as, “Number of deposit accounts of $100,000 or less held in domestic offices.”

Second, “Deposit accounts of $100,000 or less,” is a SDI figure defined as “Amount of deposit accounts of $100,000 or less held in domestic offices and in insured branches in Puerto Rico and U.S. territories and possessions.”

These measures are intended to focus on a bank’s consumer base. Other measures, such as Total Deposits, would include accounts over $100,000 that are more likely held for business customers. Those measures allow banks with large commercial practices to appear to perform better than smaller banks lacking corporate-oriented accounts.

In addition to the FDIC measures, the Nilson Report offers a ranking of credit card issuers by volume of cash advances and purchases made. Nilson Report data is used to rate the top 10 credit card issuers by volume. This measure should more fairly portray institutions such as American Express and other major credit card issuers that have a small depository account footprint, but very large risk exposure because of the prevalence of credit card fraud. It should be noted that the Nilson Report’s data is proprietary and its sources are not always clearly stated. The publication claims to be, “The world’s leading source of news and proprietary research on consumer payment systems.”

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40 Id.
Since 2008 data are not yet available, 2007 data are substituted to compare major credit card companies in 2008.

C. Challenges Comparing Non-Financial Services Institutions

Financial services institutions are subject to a range of regulatory requirements, including the regular reporting described above. Few other industries are subject to such reporting, and this presents a challenge for comparing non-banking institutions that rank high in identity theft complaints. In particular, telecommunications companies ranked highly in overall events, but their relative rates of fraud are not compared here because up to date and reliable statistics on the number of accounts (and their types) among telecommunications companies are not available.

III. COMPARISONS AND DISCUSSION

A. Raw Count of Events, 2006-2008

Table 2 on the next page presents the top 25 most frequently identified institutions by consumers in their complaints to the FTC in 2008. The average number of events per month is calculated from the three months of data obtained from the FTC in 2006-2008. High standard error indicates that fraud rates varied greatly from month to month, suggesting that identity theft has seasonal peaks.
From year to year, the “top 25” group of companies remains relatively constant. From 2006-2007, Home Depot, the Internal Revenue Service, and JC Penney were added to the top 25 list, while Walmart (dropped to 29), Dish Network (dropped to 41), and Bellsouth (merged with AT&T) fell outside the top 25.
From 2007-2008, Dish Network reappeared in the top 25, while eBay dropped to 31.

This constancy among the top 25 is important because this small cohort is named in almost half of identity theft events.

<table>
<thead>
<tr>
<th>Company</th>
<th>2006 (48.4% of all cases)</th>
<th>2007 (49.8% of all cases)</th>
<th>2008 (47.3% of all cases)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOME DEPOT</td>
<td>0.49%</td>
<td>0.74%</td>
<td>0.63%</td>
</tr>
<tr>
<td>WACHOVIA</td>
<td>0.95%</td>
<td>0.87%</td>
<td>0.63%</td>
</tr>
<tr>
<td>DELL</td>
<td>0.66%</td>
<td>0.62%</td>
<td>0.63%</td>
</tr>
<tr>
<td>DIRECTV</td>
<td>0.62%</td>
<td>0.62%</td>
<td>0.63%</td>
</tr>
<tr>
<td>JC PENNEY</td>
<td>0.73%</td>
<td>0.75%</td>
<td>0.69%</td>
</tr>
<tr>
<td>WELLS FARGO</td>
<td>1.03%</td>
<td>1.70%</td>
<td></td>
</tr>
<tr>
<td>COMCAST</td>
<td>0.72%</td>
<td>0.79%</td>
<td>0.79%</td>
</tr>
<tr>
<td>MACY'S</td>
<td>0.77%</td>
<td>1.04%</td>
<td>0.91%</td>
</tr>
<tr>
<td>TMOBILE</td>
<td>1.53%</td>
<td>1.01%</td>
<td></td>
</tr>
<tr>
<td>DISH NETWORK</td>
<td>1.09%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISCOVER</td>
<td>1.14%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TARGET</td>
<td>1.15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSBC</td>
<td>1.23%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMERICAN EXPRESS</td>
<td>1.60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEARS</td>
<td>1.30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WASHINGTON MUTUAL</td>
<td>2.04%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRS</td>
<td>2.13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFNI</td>
<td>0.35%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITIBANK</td>
<td>2.64%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPRINT / NEXTEL</td>
<td>3.22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAPITAL ONE</td>
<td>3.44%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JP MORGAN CHASE</td>
<td>3.98%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT&amp;T</td>
<td>4.16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VERIZON</td>
<td>4.79%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BANK OF AMERICA</td>
<td>7.24%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Just 25 Companies Account for Almost 50% of Complaints Where the Victim Named an Institution Involved, 2006-8

Over this three year period, covering 150,000 complaints, the top 25 (as of 2008) accounted for 48.4% of cases in 2006, 49.8% in 2007, and 47.3% in 2008.
Over these three years, the companies listed accounted for 47-49% of identity theft complaints where the victim named a company. These data present a clear opportunity for several modes of regulatory intervention. These interventions could use an agency’s “soft” power. For instance, regulators should provide outreach to these 25 companies, in order to ensure that they are aware of the incidence of misuse of personal information involving their company. The agency could provide expert assistance in improving practices, and in sharing approaches that have been used at other institutions. Short of those steps, if a regulator were simply to express concern about a certain institution accounting for a non-trivial amount of identity theft, it would certainly actuate a response.

Other interventions may be appropriate as well. For instance, regulators could pose as impostors to test these companies’ authentication practices, and help them improve upon them. Enforcement actions could be brought where these companies are not following generally accepted security practices.

The FTC and other regulators could profoundly affect this landscape by simply bringing publicity to this problem. If, as this paper has done, federal regulators published statistics concerning incidence of fraud, executives would act quickly to change practices to address their appearance on the “top 25” list.

Since this small group accounts for so much of the fraud affecting consumers, a more interventionist agency might consider requiring this cohort to develop an identity theft prevention and remediation plan. This plan could be reviewed by regulators, and would set a clear performance benchmark for reducing levels of fraud (falling out of the top 25 list).

B. Non-Banking Institutions

1. Retailers

While a market for bank safety focuses on financial services institutions, this top 25 list indicates that many other businesses are frequently involved in fraud. In some cases, these are large, high volume retailers, such as Target and Home Depot. Executives at these companies may not even be aware that hundreds of individuals are filing complaints with the FTC every month concerning fraud at their stores. Because of the extraordinary amount of fraud associated with these retailers, it
would be wise for them to routinely verify the identity of customers paying with credit cards, and to invest more in widely-available new account fraud detection tools.

2. Telecommunications Companies

All the major telecommunications companies (AT&T, Verizon, T-Mobile, and Sprint/Nextel) appear in the top 20 of the ranking. AT&T and Verizon rank as 2 and 3 in 2008; in 2007, Verizon ranked as number 1, having more fraud events than all banks. Similarly, three television providers, Comcast, DirecTV, and Dish Network, appear in the top 25 as well.

Clearly, identity theft among telecommunications companies is a major, industry-wide problem. But consumer advocates, the media, and regulators are more focused on the role of banks in fraud. It is generally believed that banks have better security and authentication practices than the telecommunications industry. These statistics suggest that impostors are exploiting a different level of care used in this specially-regulated industry.

Identity theft at telecommunications companies presents substantial risk to other actors in our highly interdependent credit authentication system. Once a telecommunications account is established, that fact is used both as an identifier and authenticator among financial institutions when deciding whether to issue new lines of credit. This presents risk because impostors can leverage fraudulent telecommunications accounts in order to commit larger-scale, traditional financial identity theft.

3. Collections Agencies

AFNI, a collections agency, was named by victims in between .85% and 4.45% of all identity theft complaints from 2006-2008. This indicates that consumers are confused about the role of collections agencies. Assuming companies are acting in good faith, when they turn over an account for collections; the belief is the account is legitimate and the customer is simply a deadbeat. The collections agency then contacts the putative account holder and that person claims that the account is fraudulent. Consumers are confused by this process, and in large numbers, they are making complaints to the FTC, where they
identify the collections agency, rather than the company at which the account was actually established. This offers another opportunity for intervention: authorities could require collections agencies to act differently when collecting on behalf of a client with a large number of fraudulent accounts. The collections agency could request that the client rereview delinquent accounts for fraud before collecting on them, in order to save consumers the inconvenience of a debt collection call and derogatory notations on their credit files.

4. The Internal Revenue Service

The Internal Revenue Service (IRS) accounted for .03% of fraud in 2006, .74% in 2007, and 2.19% in 2008. This precipitous rise is reflected in the popular media, and in April 2008, the Treasury Inspector General for Tax Administration reported that the IRS needed to take extra measures to shield citizens from identity theft.42

IV. COMPARATIVE RANKINGS

A. Number of Accounts

Table 3 compares how the largest 25 banks (total deposits, 2008) compare on fraud events, using the number of deposit accounts under $100,000 metric. This metric was used because most consumer accounts are likely to have under $100,000. A total deposit figure could be misleading, because accounts over $100,000 may be held by large, corporate clients.

Under this metric, large institutions that focus on credit card accounts have relatively high rates of fraud, which is to be expected, because these companies do not have a strong depository base. For that reason, this metric is more effective in comparing institutions with a mix of credit card and consumer deposit accounts.
B. Volume of Smaller Accounts

Table 4 compares how the largest 25 banks (total deposits, 2008) compare on fraud events, based upon how much is deposited in smaller accounts. Table 4 uses a metric that captures the amount of money deposited in small accounts.

**Table 4: Events Per Volume of Deposit Accounts Under $100,000, 2006-2008**

<table>
<thead>
<tr>
<th>Institution Name</th>
<th>Events Per Deposit Accounts of $100,000 or less, 2008</th>
<th>Events Per Deposit Accounts of $100,000 or less, 2007</th>
<th>Events Per Deposit Accounts of $100,000 or less, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital One</td>
<td>156.85</td>
<td>180.8</td>
<td>202.53</td>
</tr>
<tr>
<td>HSBC</td>
<td>122.42</td>
<td>100.66</td>
<td>84.15</td>
</tr>
<tr>
<td>JP Morgan Chase</td>
<td>74.29</td>
<td>68.16</td>
<td>59.09</td>
</tr>
<tr>
<td>Citibank</td>
<td>70.89</td>
<td>62.09</td>
<td>58.41</td>
</tr>
<tr>
<td>State Street Bank</td>
<td>58.98</td>
<td>0</td>
<td>78.25</td>
</tr>
<tr>
<td>Bank Of America</td>
<td>50.24</td>
<td>13.9</td>
<td>45.33</td>
</tr>
<tr>
<td>Wash. Mutual</td>
<td>42.29</td>
<td>36.16</td>
<td>31.08</td>
</tr>
<tr>
<td>The Bank Of New York</td>
<td>32.88</td>
<td>83.92</td>
<td>170.82</td>
</tr>
<tr>
<td>US Bank</td>
<td>24.27</td>
<td>24.34</td>
<td>25.96</td>
</tr>
<tr>
<td>Commerce Bank</td>
<td>12.74</td>
<td>17.48</td>
<td>22.28</td>
</tr>
<tr>
<td>Wells Fargo Bank</td>
<td>11.64</td>
<td>14.21</td>
<td>25.09</td>
</tr>
<tr>
<td>Regions Bank</td>
<td>11.02</td>
<td>9.79</td>
<td>4.7</td>
</tr>
<tr>
<td>RBS Citizens</td>
<td>10.43</td>
<td>10.4</td>
<td>Data not available</td>
</tr>
<tr>
<td>Suntrust Bank</td>
<td>9.41</td>
<td>8.47</td>
<td>7.6</td>
</tr>
<tr>
<td>Fifth Third Bank</td>
<td>9.15</td>
<td>7.86</td>
<td>7.95</td>
</tr>
<tr>
<td>Keybank</td>
<td>8.52</td>
<td>8.33</td>
<td>8.48</td>
</tr>
<tr>
<td>Wachovia</td>
<td>8.47</td>
<td>9.47</td>
<td>13.81</td>
</tr>
<tr>
<td>BB&amp;T</td>
<td>7.04</td>
<td>7.38</td>
<td>9.24</td>
</tr>
<tr>
<td>Countrywide</td>
<td>7.03</td>
<td>11.76</td>
<td>11.4</td>
</tr>
<tr>
<td>National City Bank</td>
<td>6.43</td>
<td>8.68</td>
<td>10.4</td>
</tr>
<tr>
<td>Lasalle Bank</td>
<td>4.84</td>
<td>4.11</td>
<td>5.34</td>
</tr>
<tr>
<td>PNC Bank</td>
<td>4.38</td>
<td>7.48</td>
<td>7.09</td>
</tr>
<tr>
<td>Merrill Lynch</td>
<td>3.01</td>
<td>1.6</td>
<td>3.15</td>
</tr>
<tr>
<td>ING Bank</td>
<td>1.46</td>
<td>0.85</td>
<td>0.12</td>
</tr>
</tbody>
</table>

The largest U.S. banks, JP Morgan Chase, Citibank, and Bank of America, appear in the overall top 25, and are second only to
large, credit-card heavy firms in the comparative charts. This observation attracted strong criticism in earlier versions of this article. Several remarked that this finding simply stated the obvious: larger banks were bigger targets of scammers, and thus one should expect larger institutions to fare worse on identity theft. This statement was perhaps best expressed by Patrik Jonsson, who reported that “. . .many banks say the Hoofnagle study simply told people what they already knew—that the biggest banks are going to have the most problems with fraud.”

This assumption that larger banks have bigger fraud problems is not obvious, and probably contradicts many consumers’ expectations. It would be perfectly rational for a consumer to assume that a big, reputable bank has more sophisticated systems and more intense investment in security systems than a smaller bank or credit union, and therefore conclude that larger institutions are harder to attack. This assumption also contradicts some of the promises underlying the recent laws that allow permissive information sharing among bank affiliates. Proponents of information sharing argued that more opportunities to share personal information would help in identifying and fighting fraud. Combined, these factors may lead individuals to believe that bigger banks are safer.

These data, however, enable the consumer to choose very large banks that still perform relatively well. For instance, Wachovia, the fourth largest US bank, appears in the overall top 25 list, but performs much better than the largest banks on comparative measures of fraud. These data also show that relatively smaller banks, such as PNC and ING, have dramatically lower incidents and rates of fraud. A safety sensitive consumer may use these banks to avoid the inconvenience and harm of identity theft.

C. Comparison of the Largest Credit Card Issuers by Volume

The measures used thus far do not fairly account for identity theft among credit card issuers. Major issuers often have a small depository base, and thus appear to have very high rates of fraud compared to institutions with a mix of financial services products, or no credit cards offerings at all.

In order to more meaningfully compare major credit card issuers, Nilson Report’s data on the volume of purchases and cash advances was used. To make a comparison concerning 2008 events, 2007 volume data were used, because this year’s data is not yet available.

### Table 6: Events Per Volume of Sales Among Major Credit Card Issuers, 2006-2008

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HSBC</td>
<td>72.35</td>
<td>60.41</td>
<td>51.35</td>
</tr>
<tr>
<td>Capital One</td>
<td>64.84</td>
<td>52.94</td>
<td>43.91</td>
</tr>
<tr>
<td>GE Money Bank</td>
<td>53.94</td>
<td>42.44</td>
<td>Data not available</td>
</tr>
<tr>
<td>Bank Of America</td>
<td>44.38</td>
<td>12.1</td>
<td>41.47</td>
</tr>
<tr>
<td>Wells Fargo Bank</td>
<td>35.84</td>
<td>39.49</td>
<td>75.81</td>
</tr>
<tr>
<td>Discover Bank</td>
<td>16.71</td>
<td>27.76</td>
<td>25.48</td>
</tr>
<tr>
<td>JP Morgan Chase</td>
<td>25.64</td>
<td>23.62</td>
<td>21.04</td>
</tr>
<tr>
<td>Citibank</td>
<td>22.73</td>
<td>19.01</td>
<td>19.05</td>
</tr>
<tr>
<td>US Bank</td>
<td>18.34</td>
<td>16.58</td>
<td>20.04</td>
</tr>
<tr>
<td>American Express</td>
<td>8.99</td>
<td>8.21</td>
<td>9.12</td>
</tr>
</tbody>
</table>

Perhaps not surprisingly, despite processing an enormous volume of transactions, American Express had the lowest rate of complaints among the largest credit card issuers. American Express has a different threat exposure, because of its focus on business expense accounts and control over issuing practices. It is also possible that the company’s focus on customer service causes consumer victims to forgo making complaints to the FTC.
V. CONCLUSION

Those who are interested in avoiding identity theft and other financial fraud are in a similar position today as the safety conscious automobile shopper was in the 1960s. Since the 1960s, the automobile safety movement, which involved a range of interventions including providing consumers objective data about safety, sparked a vigorous market for safety, identified new technologies, and elucidated public policy alternatives that enhanced highway safety. Today, even inexpensive cars have sophisticated safety technology, and the safety-conscious consumer has more information and choices in automobile purchasing.

This article seeks to actuate a similar market for bank safety. Such a market would provide accurate, objective statistics about fraud to consumers, regulators, and other businesses. With this fraud data, consumers who place a high value on avoiding identity theft and similar inconveniences could choose institutions with the lowest fraud risk. To date, a safety sensitive consumer may assume that a large bank is a good choice, but this article shows that the picture is more complex: the largest institutions have very high levels of fraud events, even when controlling for the number and size of accounts. Some smaller institutions, which consumers may assume to be less sophisticated and less resourced to address fraud, actually have very low overall events and relative rates of identity theft.

Just as the automobile safety movement elucidated non-obvious factors in highway safety, this effort reveals new opportunities for interventions that would protect consumers. For instance, about half of all identity theft events involve a handful of companies. Federal regulators possess a number of tools to incentivize this small group to enhance anti-fraud measures. Finally, fraud is a major problem at non-banking institutions, and these crimes may be stepping stones to more serious attacks on financial institutions.

A fully-functioning bank safety market would illuminate these problems and others, and provide heightened incentives for identity theft prevention and remediation.