# Asset Misappropriation in Small Businesses

Jay P. Kennedy[1]
Michigan State University

"This is an Author's Original Manuscript of an article published by Emerald in the *Journal of Financial Crime*. The published manuscript is available online: https://www.emeraldinsight.com/doi/full/10.1108/JFC-01-2017-0004."

The data presented in this article are based upon research supported by the following organizations:
The Graduate School of the University of Cincinnati;
Center for Criminal Justice Research, School of Criminal Justice, University of Cincinnati;
Goering Center for Family and Private Business, Lindner College of Business, University of Cincinnati

[1] jpk@msu.edu; 1407 S. Harrison Rd., 350 Nisbet, East Lansing, MI 48823; 517-353-2162

**Abstract**

- Purpose: Increase understanding of the types of insider financial frauds that occur within small businesses by focusing on a sample of businesses that have not employed a CFE in response to employee theft.

- Methodology: Survey data analyzed come from 102 small businesses (100 employees or fewer) in a midsized Midwestern city in the United States, and reflect 125 reported employee thefts.

- Findings: Study results indicate that small businesses that do not hire a CFE report certain thefts with greater and lower frequencies as compared to small businesses that do hire a CFE. For particular types of frauds CFEs may be no more useful than the efforts of business owners or managers, and other employees.

- Practical Implications: There may be important organizational differences between businesses that hire CFEs and those that do not, differences related to the ways in which business finances are maintained, the ways in which specific controls are used and the ability of employees to access business resources. These factors may create business-based opportunity structures that make particular types of insider financial frauds more or less likely to occur within a particular business.

- Originality: Existing research on insider financial frauds may not appropriately account for small businesses that cannot afford, or are unwilling, to hire a CFE. The findings discussed in this article contribute to a more complete picture of the types of frauds that small businesses experience, as well as how these businesses deal with insider theft.

## 1. Introduction

Employee theft can be one of the most devastating crimes committed against a business of any size. These crimes are particularly distressing for small businesses because they create greater financial and operational harms relative to the harms created by thefts that occur in larger firms (Association of Certified Fraud Examiners, 2010; 2012; 2014; 2016). For example, employee theft can significantly affect a small business' ability to pay current employees, hire new employees, invest in new equipment, and purchase needed materials and services (Author, 2014). Additionally, when employee theft negatively impacts business operations employee morale may suffer, outputs and quality can decline, and revenue may be lost (Payne and Gainey, 2004). These and other negative consequences can exacerbate any financial issues that result from insider thefts.

According to the Association of Certified Fraud Examiners' (ACFE) biannual *Report to the Nations* (2010; 2012; 2014; 2016) the most commonly occurring form of insider financial frauds are asset misappropriations. The ACFE data make it clear that small businesses are routinely and significantly harmed by insider financial frauds, and that small businesses suffer greater losses and are victimized more regularly than businesses of any other size. Yet, the data they report may not be applicable to all small businesses. This is because the ACFE data only take into account financial thefts where the business sought the services of a Certified Fraud Examiner (CFE). Given the significant costs associated with hiring a CFE to investigate employee thefts, the ACFE data may not appropriately account for small businesses that cannot afford, or are unwilling, to hire a CFE. It is, therefore, possible that the picture of insider financial frauds painted by the ACFE data may misrepresent what is actually taking place within small businesses.

This study attempts to increase understanding of the types of insider financial frauds that occur within small businesses by focusing on a sample of businesses that have not employed a CFE in response to employee theft. To accomplish this goal, data from a study of employee theft within small businesses are used to investigate the experiences of businesses that did not hire a CFE; experiences that are not represented in the ACFE data. This article begins with a brief review of the literature relevant to employee theft within small businesses, describes the methods used to gather the data that are examined, discusses the results of the several analyses, and concludes with a discussion of the implications of this study's results as it relates to crime prevention strategies.

## 2. Literature Review

### *2.1. Employee Theft*

The term "employee theft" is used in reference to a wide range of behaviors that include an employee's theft from her/his employer, as well as instances when an employee steals from customers or suppliers (Harris and Benson, 2000; Lindbloom et al., 2007; Weber, Kurke and Pentico, 2003). When asking small business owners about their employee theft experiences The Author (2014) found that the term was used to describe thefts committed against the business, thefts from other employees, and times when employees stole from customers. Additionally, The Author found that small business owners reported a wide variety of items that were stolen by their employees, including: cash, time, raw materials, finished goods, and intellectual property.

Previous research on the prevalence of employee theft has found that 35.0% to 70.0% of employees admit to having committed employee theft (Boye and Slora, 1993; Hollinger and Clark, 1983; Hollinger, Slora and Terris, 1992; Kamp and Brooks, 1991; Slora, 1989). Thefts are more likely to occur in particular establishments, often those that operate in what are called "high theft industries", such as gas stations, corner stores and fast food restaurants (Hollinger, Slora and Terris, 1992; Wimbush and Dalton, 1997). Typical reasons given as to why an employee would steal from his or her employer include issues of job dissatisfaction (Greenberg, 1990; L. Greenberg and Barling, 1996; Omar et al., 2011; Roberts et al., 2007), an employees' desire to retaliate against the business (Greenberg, 2002), and issues of low conscientiousness (Bowling, 2010; Bowling and Eschleman, 2010) and narcissism (Penny and Spector, 2002).

Dissatisfaction with the level of pay or compensation received from one's employer can also have a strong effect on motivations to engage in employee theft (Broidy, 2001; Rebellon et al., 2009). This is because the assessment of the equity of pay and compensation received for work performed highly influences perceptions of justice and fairness within the organization (Organ and Konovsky, 1989). When workers feel they have been unfairly compensated they may steal from the organization to create the equity they feel the business has denied to them (Greenberg, 1990; Ambrose, Seabright and Schminke, 2002). Feelings of unfair compensation are also likely to lead to perceptions that the business has violated an implicit or explicit contract held with the employee (Coyle-Shapiro and Conway, 2005; Graen and Uhl-Bien, 1985).

*2.2. Impact of theft on the business*

For small business owners employee theft can be more of an emotionally devastating experience than a financially devastating event for the business (Kennedy and Benson, 2016). The loss of important financial resources at the hands of a trusted employee can lead some small business owners to feel as though they have been though a serious personal victimization. Feelings of personal violation and the severing of personal ties as a result of employee theft can lead to a host of emotional and psychological issues for business owners (Kennedy and Benson, 2016). While many small business owners have stated that the emotional costs of employee theft are much more significant than the financial costs, the loss of much needed revenue is also a serious concern for these businesses (Chen and Sandino, 2012; Gross-Schaefer et al., 2000; Author, 2014).

Estimates of the total yearly costs of employee theft to society as a whole vary from the tens of billions of dollars to as much as $400 billion (Appelbaum et al., 2006; Murphy, 1993; Myers, 1999; Rosenbaum, 1976), costing businesses alone as much as $10 million per day (McNees et al., 1980). Part of these losses are due to the fact that employee theft takes materials away from the business, materials that could have produced revenue (Drinkard, 1996; Hoffer, 2010). The high financial cost that results from employee theft likely causes many small businesses to fail (Ghiselli and Ismail, 1998; Holmes, 2011; Moorthy et al. 2009; Niehoff and Paul, 2000), can lead to higher prices for consumers (Bailey, 2006), and may lead the business to lay off workers (Lipman and McGraw, 1988).

### *2.3. Asset misappropriations*

The term asset misappropriation refers to a particular category of employee theft where "an employee steals or misuses the organization's resources (e.g., theft of company cash, false billing statements or inflated expense reports)" (ACFE, 2012). This definition is quite broad, and the entirety of employee theft types could conceivably be subsumed under this umbrella, yet, the ACFE focus especially upon the theft of cash or other financial resources. Accordingly, this study considers asset misappropriations to refer to the theft of cash, or other financial resources of the firm, by an employee. Whether the theft involves physical cash or some other financial instrument, the ACFE data refer to the stolen resources as “cash”. The ACFE categorize asset misappropriation schemes into three sub-categories that are comprised of a total of nine different offense types. A description of each of these categories, as given by the ACFE (2012), is shown in Table 1.

[Insert Table 1 About Here]

The frauds *Skimming* and *Cash Larceny* make up the sub-category of thefts involving cash receipts, which involve an employee taking cash that should go to the business as income. Through the commission of either of these two frauds an employee interferes with a transaction occurring between the business and an outside party, diverting money away from the business. Five of the nine insider fraud schemes are grouped into the sub-category of fraudulent disbursement of cash. In these schemes an employee uses a variety of methods to extract funds directly from the business, with many schemes relying heavily upon the use of deception and manipulation.

The frauds *Misappropriation of Cash on Hand* and *Non-Cash Misappropriation* are classified under the sub-category of other asset misappropriation schemes. During a misappropriation of cash on hand an employee steals cash that is kept at the business, and accounts for all forms of financial frauds that are not appropriately classified in any of the other fraud classifications. Because this study investigates financial frauds, there are no instances of non-cash misappropriations, which are frauds that address the theft of items that have value to the business but are not financial in nature.

## 3. Methods

*3.1. Data Collection and sample*

The data examined in this study come from a survey of businesses, each employing between 15 and 350 people, located in and around a midsized city in the Midwest United States. As suggested by Dennis (2003) and following a modified Total Design Method (TDM) as outlined by Dillman (1991), each business in the sampling frame received up to three mailings. The first and third mailings contained the same materials, which were an introductory letter, relevant IRB documents, the survey questionnaire, and a pre-addressed postage paid return envelope. The second mailing was a reminder postcard. In addition to using multiple contact methods, the study employed the following TDM features:

- an individually printed, addressed, and signed cover letter,
- the cover letter described the study's social usefulness and why the respondent's participation was important,
- addresses for all mailings were printed directly onto envelopes rather than on address labels,
- questions were presented using large capital or dark letters together with contrasting small letters,
- the questionnaire was printed in a booklet format with a topically neutral but interesting cover and,
- question ordering aligned with the ordering of topics discussed in cover letter.

Additionally, the introductory cover letter identified a local university and a respected industry-academic research center as sponsors of the study (Bartholomew and Smith, 2006). Postage paid return envelopes were used to help increase response rates by ensuring the proper return address was used; this also eliminated the need for respondents to pay postage fees associated with returning a completed survey (Fox, Crask and Kim, 1988; Greer, Chuchinprakarn and Seshadri, 2000). Several weeks after the first mailing was completed a reminder postcard was sent to all non-responding businesses encouraging them to either complete and return the survey they had received, or to contact the principal investigator should they need a replacement questionnaire. Several weeks following the mailing of the reminder postcard all remaining non-responding businesses were sent a second mailing containing the same materials as the initial mailing. This third mailing was the final attempt to recruit study participants.

A total of 314 businesses (9.0%) returned completed and useable surveys. Given the results of previous small business studies it was anticipated that survey response rates would likely be low. Response rates from previous small business studies have ranged anywhere from 15.0% (Hager et al., 2003) to 4.7% (White and Lou, 2005). It is generally accepted that researchers can expect to see low response rates for surveys mailed to small business (Forsgren, 1989; Newby, Watson and Woodliff, 2003). The modified TDM method described above was chosen specifically to increase response rates, and all financially feasible means to increase participation were undertaken. Of the 314 responding businesses 202 (64.3%) reported at least one employee theft. Of these 202 businesses, 102 (50.5%) employed 100 or fewer employees and are considered a small business for the purposes of this study. These 102 small businesses reported 125 incidents of insider financial theft; the125 incidents are the focus of this study. The characteristics of victimized businesses are displayed in Table 2.

[Insert Table 2 About Here]

## 4. Results

### *4.1. Reported Frauds*

Descriptions of the items stolen and how each theft was perpetrated were analyzed and coded into one of three sub-categories of asset misappropriation as defined by the ACFE (2012). Theft descriptions were further coded as a specific type of theft following the ACFE's (2012) offense classification scheme. The ACFE's asset misappropriation classification scheme includes the offense category *non-cash misappropriations,* this category is excluded from the present analyses given the focus on financial frauds. The most frequently reported type of asset misappropriation was *Misappropriation of Cash on Hand* (20.8% of cases). Descriptions of this type of theft included an employee who "would take a little bit of cash out of drawer at a time", a "manager [who] was in charge of residents' money" and "stole money from them", and an employee who was "making change out of a cash/change box in the print/mail room - he was taking more than he put in". The next most common type of insider frauds reported were *Cash Register Disbursements* (15.2% of cases). Incidents described by survey respondents included an employee who "worked at our front desk and would steal small amounts of cash from our register on the days she worked", "two cashiers [who] gave refunds to themselves"' and an employee who "voided sales to cover theft".

Incidents of *Skimming* (11.2% of cases) included times when an "employee took cash from receivables payment account and did not deposit in [the] bank", an employee "only depositing some of the cash received from customers", and when an employee "kept cash payments from patients and did not record the payment per company written policy". *Payroll* schemes comprised 9.6% of the cases reported, and included incidents when an employee "discovered that he could award bonuses to himself that were not on the main payroll report", and when an "employee cancelled health insurance [and] took money that employer was providing". The frauds of *Check Tampering* and *Expense Reimbursements* were reported with equal regularity (8.0% of cases, respectively). *Check Tampering* incidents involved an employee who “wrote checks to her daughter-in-law” and an employee who “forged [a] signature to obtain bank account - stole checks from the mail - deposited checks then withdrew cash”. *Expense Reimbursement* incidents involved an employee who used “company credit card [to purchase] two cell phones” and an incident where an “employee purchased business status COSTCO card, received all bonus checks and purchased personal items for which he was reimbursed”.

The frauds of *Cash Larceny* (7.2%), *Billing* (7.2%) and *Cash Stolen from Another Employee* (4.8%) were the least frequently reported frauds. Examples of the *Cash Larceny* incidents reported include when an employee “gave [the] customer receipt for $5000 [but] showed a deposit of $4000” and when an “employee would deliver cash tickets to customers, then would cancel the ticket and keep the money”. Examples of *Billing* frauds include an employee who “created bogus account to funnel funds out of the company” and when a “purchasing manager created vendors, PO's, invoices, packing slips to have money paid to her accounts”. 8.0% of the frauds reported had no accompanying description of the activity.

When compared to the findings of the ACFE’s previous four reports (2010, 2012, 2014 and 2016), this study’s findings show clear distinctions in the most and least frequently reported insider frauds in the small businesses from which the ACFE gathered data. A comparison, by percentages, of this study’s findings to the data reported in four ACFE reports are displayed in Table 3. The percentages for the ACFE reports sum to greater than 100% because in many cases schemes were classified into multiple categories. Despite this, it is clear that certain types of frauds were reported more often than others, and these patterns show consistency across the several waves of the ACFE reports.

[Insert Table 3 About Here]

As shown in Table 3, across all four waves of the ACFE reports the most frequently reported insider financial fraud was one of the least reported type of fraud in this study; *Billing* schemes. The next most common frauds in the ACFE reports were, in order, *Check Tampering*, *Skimming*, and *Expense Reimbursements*. Again, across all four waves this pattern was consistent. Here we find the only commonality between this study's results and those found from the ACFE reports, as *Skimming* was consistently found to be the third most frequently reported fraud. This study's second most frequently reported fraud, *Cash Register Disbursements*, was consistently the least frequently reported insider fraud in the ACFE reports; this category was not even included in the 2010 report.

The fraud of *Cash Larceny* was reported relatively infrequently in this study and across all four waves of the ACFE reports, yet, its ranking varied by reporting year. This study's most frequently reported type of fraud, *Misappropriation of Cash on Hand*, was reported much less frequently across all waves of the ACFE reports, though its position relative to other frauds varied across the reports. Averaging each category's ranking across the four waves of ACFE data, the following ordering is produced: 1) *Billing*, 2) *Check Tampering*, 3) *Skimming*, 4) *Expense Reimbursements*, 5-tie) *Payroll*, 5-tie) *Misappropriation of Cash on Hand*, 7) *Cash Larceny*, and 8) *Cash Register Disbursements*. Comparing this list to the findings of the present study again highlight important differences in the frequency with which particular frauds are reported.

*4.2. Employee Thieves*

In total 144 employee thieves were identified across the 125 thefts, however, in three instances no individual could be identified as being responsible for the theft. In cases where information on employee thieves was provided, the data were examined and descriptions of employee's position were coded into one of three categories: *Employee, Manager, Owner/Executive*. A brief description of each of these categories is displayed in Table 4; the most commonly reported category of thieves were *Employees* (70.4% of cases), with *Managers* accounting for nearly one-quarter of thefts (23.2%) and *Owners/Executives* responsible for only 4.0% of reported thefts. This trend, more thefts committed by lower-level employees, is also found in the ACFE reports, however, the ACFE reports do not separate data on employee classification based upon business size (i.e., small businesses vs. larger businesses).

[Insert Table 4 About Here]

Thieves in the *Employee* category were significantly more likely to perpetrate one-time schemes ($\chi^2$ [2, $N$ = 121] = 14.393, $p$ = .001). Not surprisingly, these individuals stole significantly less money from their employers than did all other individuals ($t$ = -2.878, $p$ < .001). The ACFE data consistently show that thieves in the *Owner/Executive* category steal significantly more than do all other employees. In cases where an employee thief was identified the offending employee was fired 72.85% of the time. There were no significant position-based differences in whether the individual was fired ($\chi^2$ [2, $N$ = 140] = 1.18, $p$ = .572).

*4.3. Method of Scheme Detection*

The financial frauds reported by small businesses in this study were detected by a number of different means, yet, the most common method was discovery by a supervisor. Because respondents were allowed to indicate multiple methods of discovery, nearly half (42.4%) of all reported thefts involved discovery by a supervisor. In 18.4% of cases an internal audit led to the discovery of financial fraud, while in 17.6% of cases an employee tip led to the discovery of theft. These were the most prominent methods of discovery reported by respondents.

There were no significant relationships between the type of financial fraud reported (e.g., skimming, cash larceny, billing, etc.) and whether a supervisor discovered the theft ($\chi^2$ [9, $N$ = 125] = 15.921, $p$ = .069), whether the theft was identified through an employee's tip ($\chi^2$ [9, $N$ = 125] = 14.844, $p$ = .095), or whether the theft was discovered through an internal audit ($\chi^2$ [9, $N$ = 125] = 10.747, $p$ = .293). However, frauds classified into the *Cash Disbursements* sub-category were significantly more likely to be discovered through an internal audit ($\chi^2$ [2, $N$ = 115] = 7.603, $p$ = .022).

As shown in Table 5, the three most common methods of fraud detection reported in the ACFE reports were quite similar to this study's findings. The most common method of discovery across all four ACFE reports was a tip, while the second most common method in all four reports was management review, which can be equated to discovery by a supervisor. For the 2010 and 2012 reports the third most common method was discovery by accident, while an internal audit was the third most common method of discovery in the 2014 and 2016 reports.

[Insert Table 5 About Here]

*4.4. Use of Anti-Fraud Controls*

The majority of small businesses in this study reported having an active code of conduct for employees (90.3%), and a large percentage have formal written policies related to appropriate workplace conduct (83.9%). Businesses used internal audits (61.6%) more frequently than they used external audits (40.8%) and nearly half (46.0%) had an anonymous reporting hotline, yet, only 28.0% provided ethics training to employees. Of the companies that provided ethics trainings, most did so yearly (45.7%), or once during the term of employment (42.9%). Only one company held ethics trainings quarterly, while three companies held ethics trainings monthly.

Companies with a code of conduct were significantly more likely to have formal written procedures related to workplace conduct ($\chi^2$ [1, $N$ = 122] = 43.059, $p$ = .000), and to use internal audits ($\chi^2$ [1, $N$ = 120] = 8.012, $p$ = .005). When a company did not use formal written procedures related to workplace conduct, supervisors were significantly more likely to be involved in the discovery of theft ($\chi^2$ [1, $N$ = 124] = 7.240, $p$ = .007). Companies that use internal audits were significantly more likely to discover thefts through the use of internal audits ($\chi^2$ [1, $N$ = 123] = 13.199, $p$ = .000) as well as through the use of external audits ($\chi^2$ [1, $N$ = 123] = 9.205, $p$ = .002). The two most commonly reported anti-fraud controls in the four ACFE reports were consistent from year to year, with external audits being most common followed by having a code of conduct. For the 2010 report, management certification of financial statements was the third most common type of control, while for the 2012, 2014 and 2016 reports internal audits were the third most common control.

*4.5. Referral of Cases to Law Enforcement*

The police were contacted in 22.4% of cases reported by survey respondents, which typically led to an arrest (21.6% of cases overall, 96.4% of cases where the police were called). 18.4% of identified employee thieves were prosecuted criminally, yet, only 5.6% of cases resulted in a sentence of incarceration (just over 30.0% of prosecutions). In only 1.6% of cases did small businesses use the civil court system, as few businesses chose to seek restitution through a civil lawsuit. There were no significant position-based differences in whether the police were contacted ($\chi^2$ [2, $N$ = 140] = 3.49, $p$ = .175), whether the individual was arrested ($\chi^2$ [2, $N$ = 140] = 4.136, $p$ = .126), whether the individual was prosecuted ($\chi^2$ [2, $N$ = 140] = 3.29, $p$ = .193), or if a civil suit was filed ($\chi^2$ [2, $N$ = 140] = 1.231, $p$ = .540). However, employee thieves with the *Manager* classification were significantly more likely to be sentenced to jail or prison relative to other employee thieves ($\chi^2$ [2, $N$ = 140] = 7.313, $p$ = .026).

Detailed information on law enforcement outcomes was not provided in the ACFE reports, and the data provided are not reported by business size. In 2010 64.1% of cases were referred to law enforcement; the percentage of referred cases rose in 2012 to 65.2%, but declined in 2014 and 2016 to 60.9% and 59.3% respectively. As with the data obtained from this study's sample, data from the ACFE reports show that businesses used the civil court system much less frequently than the criminal justice system. In 2010 24.1% of reporting businesses filed a civil suit; over the next three reports 23.5%, 22.2% and 23.1% of businesses, respectively, filed civil suits. According to the ACFE, when victim organizations were awarded monetary judgements as part of their criminal or civil processes the majority of businesses do not recover any of their losses (2016).

## 5. Discussion

The fact that this study found different patterns in the types of thefts reported compared to those reported in the ACFE data may be partially due to the fact that certified fraud examiners are trained to look for particular types of hidden frauds. Businesses may not need a CFE to investigate the theft of physical cash as it is clear when theft has occurred, and it may be clear who committed the theft. While it may seem intuitive that CFEs would discover particular types of frauds more frequently than others due to their training and investigative skills, it is still important to note the distinctions between the ACFE reports and this study's findings. Taken alone, either the results of this study or the ACFE reports would present an incomplete picture of the insider financial frauds that occur within small businesses. Had this study found that small businesses that did not hire a CFE reported frauds with the same regularity as businesses that did hire a CFE, then the ACFE data would be a fine synopsis of small businesses employee theft experiences.

However, study results suggest that for particular types of frauds CFEs may be no more useful than the efforts of guardians within the business (e.g., business owners, managers and other employees). It is particularly interesting to find that the most commonly reported fraud in the ACFE reports was one of the least frequently reported frauds by this study's respondents, and that the most commonly reported fraud in this study was one of the least reported in the ACFE reports. The misappropriation of cash on hand was the most common type of fraud reported by study respondents, a type of fraud that involves an employee's theft of physical cash from the business. The amount of cash that can be stolen, and the extent to which these schemes can persist, is limited by the amount of cash a business keeps on hand, as well as the employee's ability to continually access cash away from the control of other employees/guardians.

Study results also show that the majority of insider financial frauds were committed by lower level employees, yet, these tended to be one-time occurrences and the dollar value impact to the business was small relative to the frauds committed by higher level employees, which were significantly more harmful to the business in terms of accrued losses. This suggests that crime prevention efforts aimed at reducing the prevalence of employee theft within a small business need to focus on opportunities at the lower-level, while efforts aimed at reducing opportunities for significant financial impact due to employee theft need to look at higher level employees. Higher level employee thieves are much more successful and create much greater losses for a business because they have access to business resources *and* knowledge and influence over business controls. This presents several important issues with regard to theft prevention interventions as higher level employees are those most likely to be intimately involved in the selection and implementation of anti-fraud controls.

Internal and external audits are a type of business control that higher level employees may be able to influence, particularly when it comes to the frequency with which these activities take place. Having knowledge of when audits will take place can help the thief prepare ways to hide their crimes, or allow them the opportunity to develop excuses or justifications for any anomalies detected in the audit. In spite of this, results highlight the importance of using internal and external audits, as these practices significantly increase the chances of identifying theft that is occurring. However, these audits can be expensive and it may be difficult for many small businesses to justify the costs of regular external audits, or surprise internal audits, if they do not suspect wrongdoing. The actual costs may outweigh any perceived benefit.

The need to conserve cash and make financially-based decisions around important business practices, such as paying for regular audits, may also influence the decision to hire a CFE to investigate insider frauds. This does not mean that small business owners and managers are reluctant to monitor the business for signs of illegal activity or that they sit and wait for thefts to strike the business. Rather, instead of paying for an outsider to come in and investigate potential irregularities owners and managers took on this responsibility, something reflected in this study's results as supervisors identified the largest number of reported thefts. The ACFE data also reflect this, as they found management reviews to be the second most common form of initial fraud detection.

It may be the case that when a business knows it cannot afford to hire outside experts like CFEs to investigate insider frauds the owners and managers take a more active approach to monitoring the business. It may also be the case that irrespective of the business' willingness to spend money on a CFE or other outside expert certain employees will always actively monitor the business for improprieties because they see these duties as part of their responsibility to the organization. For example, the third most common method of scheme discovery reported by this study's respondents and the most common method reported in the ACFE reports was a tip from another employee. This suggests that employee efforts around fraud prevention and stopping insider abuses are an important form of organizational citizenship behaviors, behaviors that were not explored in this study but deserve attention in future employee theft research.

Creating an environment where employees feel invested enough to bring wrongdoing to the attention of owners and managers begins with formally establishing rules of workplace conduct. Almost all of the businesses in this study indicated that they have a code of conduct for employees, and that they have written policies for appropriate conduct in the workplace. Almost half supported these formal guidelines with a mechanism allowing employees to report wrongdoing anonymously, however, only a little more than one-quarter of businesses provided ethics training. When training was provided it was typically infrequent; this may be a missed opportunity for businesses to reinforce behavioral expectations and provide employees with the knowledge and skills needed to identify and report insider frauds.

This study also found that most employee thieves are fired, yet, for a variety of reasons (see Kennedy, 2015) relatively few were referred to law enforcement for prosecution. The ACFE reports show a much higher percentage of businesses referring cases to law enforcement, and despite the fact that small businesses are not disaggregated from all other businesses, it is likely the case that businesses who rely upon the expertise of a CFE may be more likely to take their issues to law enforcement. Furthermore, these businesses may be more likely to pursue civil trials as they likely have the financial resources and the support of experts such as CFEs. Yet, the

ACFE data suggest that these efforts are not typically effective as it is very difficult to recover losses from employee thieves. Knowing that the likelihood of full recovery is low (Author, 2014), many small business owners see civil suits as another losing proposition and may be content with cutting their losses and simply firing the offending employee.

## 6. Conclusion

Employee theft is a significant problem for small businesses, and responses to theft will vary based upon available businesses resources and the types of frauds employees commit. In all respects insider financial frauds, like other forms of employee theft, are crimes of opportunity. When employee thieves have greater opportunities to steal physical cash directly from the business, it is likely the case that the assistance of outside experts will not be sought. However, when insider frauds involve deception and manipulation of business controls, experts such as CFEs play a crucial role in scheme detection and the identification of employee thieves.

### *6.1. Limitations*

There are two main limitations to this study's results that deserve mention. First, this study's sample was drawn from businesses located in and around a midsized, Midwestern U.S. city. It is possible that the insider financial fraud experiences of small businesses in other areas, such as those located in densely populated urban areas or more suburban or rural communities, may not be appropriately captured in these data. It is also possible that small businesses in other parts of the world may have different experiences with insider frauds. However, the value of this study is not found in its broad applicability, but in its description of insider frauds relative to those reported by the ACFE. In fact, should future research find that businesses in other areas experience different types of insider financial frauds this study's results will still contribute to our understanding of small business employee theft.

The second limitation relates to the types of businesses included in the sample. It is possible that unique industry-level variations exist across the population of small businesses. These differences may affect operating procedures, opportunities for theft, and standard practices regarding the use of particular controls such as internal or external audits. Future research should investigate the potential for significant industry-related differences in terms of opportunities for insider frauds, as well as the ways in which businesses respond to those frauds.

*6.2. Future research*

The results of this study show that small businesses that did not hire a certified fraud examiner reported certain frauds more and less frequently than did small businesses that have employed a CFE. This suggests that there may be important organizational differences between businesses that hire CFEs and those that do not; differences related to the ways in which business finances are maintained, the ways in which specific controls are used, and the ability of employees to access business resources. These factors may create business-based opportunity structures that make particular types of insider financial frauds more or less likely to occur within a particular business. Future research should explore how organizational factors influence opportunities for particular types of frauds, and business responses to those frauds.

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Table 1: *Asset Misappropriation Sub-Categories and Scheme Types*

| Offense Type | Description |
|---|---|
| **Theft of Cash Receipts** | |
| Skimming | Any scheme in which cash is stolen from an organization before it is recorded on the organization's books and records. |
| Cash Larceny | Any scheme in which cash is stolen from an organization after it has been recorded on the organization's books and records. |
| **Fraudulent Disbursements of Cash** | |
| Offense Type | Description |
| Billing | Any scheme in which a person causes his or her employer to issue a payment by submitting invoices for fictious goods and services, inflated invoices or invoices for personal purchases. |
| Expense Reimbursements | Any scheme in which an employee makes a claim for reimbursement of fictious or inflated business expenses. |
| Check Tampering | Any scheme in which a person steals his or her employer's funds by intercepting, forging or altering a check drawn on one of the organization's bank accounts. |
| Payroll | Any scheme in which an employee causes his or her employer to issue a payment by making false claims for compensation. |
| Cash Register Disbursements | Any scheme in which an employee makes false entries on a cash register to conceal the fraudulent removal of cash. |
| **Other Schemes** | |
| Misappropriation of Cash on Hand | Any scheme in which the perpetrator misappropriates cash kept on hand at the victim organization's premises. |
| Non-Cash Misappropriations | Any scheme in which an employee steals or misuses non-cash assets of the victim organization. |

Table 2: *Victim (Business) Characteristics*

| Number of Employees | N | % |
|---|---|---|
| 15 to 24 | 52 | 50.98% |
| 25 to 49 | 29 | 28.43% |
| 50 to 74 | 15 | 14.71% |
| 75 to 100 | 6 | 5.88% |
| *Total* | *102* | *100.00%* |

| Industry | N | % |
|---|---|---|
| Services | 44 | 43.14% |
| Manufacturing | 18 | 17.65% |
| Retail Trade | 17 | 16.67% |
| Construction | 9 | 8.82% |
| Finance, Insurance, Real Estate | 6 | 5.88% |
| Transportation | 4 | 3.92% |
| Wholesale Trade | 4 | 3.92% |
| *Total* | *102* | *100.00%* |

| Scheme Sub-Category | N | % |
|---|---|---|
| Theft of Cash Receipts | 17 | 16.67% |
| Fraudulent Cash Disbursements | 45 | 44.12% |
| Other Schemes | 40 | 39.22% |
| *Total* | *102* | *100.00%* |

| Scheme Type | N | % |
|---|---|---|
| Misappropriation of Cash on Hand | 24 | 23.53% |
| Cash Register Disbursements | 17 | 16.67% |
| Other | 16 | 15.69% |
| Skimming | 9 | 8.82% |
| Check Tampering | 9 | 8.82% |
| Cash Larceny | 8 | 7.84% |
| Expense Reimbursements | 8 | 7.84% |
| Payroll | 6 | 5.88% |
| Billing | 5 | 4.90% |
| *Total* | *102* | *100.00%* |

| Employee Position | N | % |
|---|---|---|
| Employee | 76 | 74.51% |
| Manager | 20 | 19.61% |

| | | |
|---|---|---|
| Owner/Executive | 5 | 4.90% |
| No Description Given | 1 | 0.98% |
| *Total* | *102* | *100.00%* |

Table 3: *Ranking of Most Commonly Reported Frauds by Asset Misappropriation Category*

| | Study Results | ACFE 2010 | ACFE 2012 | ACFE 2014 | ACFE 2016 |
|---|---|---|---|---|---|
| Misappropriation of Cash on Hand | 1 | 5 | 6 | 7 | 5 |
| Cash Register Disbursements | 2 | * | 8 | 8 | 8 |
| Skimming | 3 | 3 | 3 | 3 | 3 |
| Payroll | 4 | 6 | 7 | 4 | 6 |
| Expense Reimbursements | 5 | 4 | 4 | 4 | 4 |
| Check Tampering | 5 | 2 | 2 | 2 | 2 |
| No Description Given | 5 | N/A | N/A | N/A | N/A |
| Cash Larceny | 8 | 7 | 5 | 6 | 7 |
| Billing | 8 | 1 | 1 | 1 | 1 |

Table 4: *Employee Position Categorizations*

| Position | Description | Examples from Data |
|---|---|---|
| Employee | Line-level employees with no clearly identified supervisory responsibilities | - Clerk<br>- Sales service/Accounting<br>- Cashier<br>- Bookkeeper<br>- Order processor |
| Manager | Employees with clearly identified supervisory responsibilities within the business | - Financial manager<br>- Manager<br>- Office manager<br>- Billing manager<br>- Shift manager |
| Owner/Executive | Employees identified as either business owners, or high-level executives within the business | - President and CEO<br>- CFO<br>- Controller<br>- Vice President |

Table 5: *Most Common Method of Scheme Discovery (ACFE Category)*

| | Study Results | | ACFE 2010 | ACFE 2012 | ACFE 2014 | ACFE 2016 |
|---|---|---|---|---|---|---|
| | N | % | % | % | % | % |
| Supervisor discovered (Management Review) | 53 | 35.57% | 15.30% | 14.00% | 18.80% | 14.50% |
| Internal audit | 34 | 22.82% | 8.20% | 9.90% | 9.80% | 12.00% |
| Other Method | 25 | 16.78% | 32.30% | 30.90% | 28.80% | 33.50% |
| Employee informant (Tip) | 22 | 14.77% | 33.30% | 36.10% | 34.20% | 29.60% |
| Employee caught in the act (Surveillance/Monitoring) | 13 | 8.72% | 2.10% | 1.90% | 1.90% | 2.20% |
| Employee admission (Confession) | 1 | 0.67% | 1.70% | 2.40% | 1.10% | 1.80% |
| External audit | 1 | 0.67% | 7.10% | 4.80% | 5.40% | 6.40% |
| *Total* | *149* | *100.00%* | *100.00%* | *100.00%* | *100.00%* | *100.00%* |