Executive Summary

More than one-fifth of frauds in our study caused at least $1 million in losses.

Executive Summary

Summary of Findings

- **Survey participants estimated that the typical organization loses 5% of its revenues to fraud each year.** Applied to the 2011 Gross World Product, this figure translates to a potential projected annual fraud loss of more than $3.5 trillion.

- **The median loss caused by the occupational fraud cases in our study was $140,000.** More than one-fifth of these cases caused losses of at least $1 million.

Executive Summary

- **The frauds reported to us lasted a median of 18 months before being detected.**

- As in our previous studies, **asset misappropriation schemes were by far the most common type of occupational fraud, comprising 87% of the cases reported to us;** they were also the least costly form of fraud, with a median loss of $120,000.

- **Financial statement fraud schemes made up just 8% of the cases in our study, but caused the greatest median loss at $1 million.** Corruption schemes fell in the middle, occurring in just over one-third of reported cases and causing a median loss of $250,000.

Executive Summary

- **Occupational fraud is more likely to be detected by a tip than by any other method.** The majority of tips reporting fraud come from employees of the victim organization.

- **Corruption and billing schemes pose the greatest risks to organizations throughout the world.** For all geographic regions, these two scheme types comprised more than 50% of the frauds reported to us.

Executive Summary

- **Occupational fraud is a significant threat to small businesses.** The smallest organizations in our study suffered the largest median losses. These organizations typically employ fewer anti-fraud controls than their larger counterparts, which increases their vulnerability to fraud.

- As in our prior research, **the industries most commonly victimized in our current study were the banking and financial services, government and public administration, and manufacturing sectors.**

Executive Summary

- **The presence of anti-fraud controls is notably correlated with significant decreases in the cost and duration of occupational fraud schemes.** Victim organizations that had implemented any of 16 common anti-fraud controls experienced considerably lower losses and time-to-detection than organizations lacking these controls.

- **Perpetrators with higher levels of authority tend to cause much larger losses.** The median loss among frauds committed by owner/executives was $573,000, the median loss caused by managers was $180,000 and the median loss caused by employees was $60,000.

Executive Summary

- **The longer a perpetrator has worked for an organization, the higher fraud losses tend to be.** Perpetrators with more than ten years of experience at the victim organization caused a median loss of $229,000. By comparison, the median loss caused by perpetrators who committed fraud in their first year on the job was only $25,000.

- **The vast majority (77%) of all frauds in our study were committed by individuals working in one of six departments: accounting, operations, sales, executive/upper management, customer service and purchasing.** This distribution was very similar to what we found in our 2010 study.

Executive Summary

- **Most occupational fraudsters are first-time offenders with clean employment histories.** Approximately 87% of occupational fraudsters had never been charged or convicted of a fraud-related offense, and 84% had never been punished or terminated by an employer for fraud-related conduct.

- **In 81% of cases, the fraudster displayed one or more behavioral red flags that are often associated with fraudulent conduct.** Living beyond means (36% of cases), financial difficulties (27%), unusually close association with vendors or customers (19%) and excessive control issues (18%) were the most commonly observed behavioral warning signs.

Executive Summary

- **Nearly half of victim organizations do not recover any losses that they suffer due to fraud.** As of the time of our survey, 49% of victims had not recovered any of the perpetrator's takings; this finding is consistent with our previous research, which indicates that 40–50% of victim organizations do not recover any of their fraud-related losses.

Executive Summary

Conclusions and Recommendations

- The nature and threat of occupational fraud is truly universal. Though our research noted some regional differences in the methods used to commit fraud — as well as organizational approaches to preventing and detecting it — many trends and characteristics are similar regardless of where the fraud occurred.

Executive Summary

- Providing individuals a means to report suspicious activity is a critical part of an anti-fraud program.

- Fraud reporting mechanisms, such as hotlines, should be set up to receive tips from both internal and external sources and should allow anonymity and confidentiality.

- Management should actively encourage employees to report suspicious activity, as well as enact and emphasize an anti-retaliation policy.

Executive Summary

- External audits should not be relied upon as an organization's primary fraud detection method. Such audits were the most commonly implemented control in our study; however, they detected only 3% of the frauds reported to us, and they ranked poorly in limiting fraud losses.

- While external audits serve an important purpose and can have a strong preventive effect on potential fraud, their usefulness as a means of uncovering fraud is limited.

Executive Summary

- Targeted fraud awareness training for employees and managers is a critical component of a well-rounded program for preventing and detecting fraud.

- Not only are employee tips the most common way occupational fraud is detected, but our research shows organizations that have anti-fraud training programs for employees, managers and executives experience lower losses and shorter frauds than organizations without such programs in place.

- At a minimum, staff members should be educated regarding what actions constitute fraud, how fraud harms everyone in the organization and how to report questionable activity.

Executive Summary

- Our research continues to show that small businesses are particularly vulnerable to fraud. These organizations typically have fewer resources than their larger counterparts, which often translates to fewer and less-effective anti-fraud controls.

- In addition, because they have fewer resources, the losses experienced by small businesses tend to have a greater impact than they would in larger organizations.

Executive Summary

- Managers and owners of small businesses should focus their anti-fraud efforts on the most cost-effective control mechanisms, such as hotlines, employee education and setting a proper ethical tone within the organization.

- Additionally, assessing the specific fraud schemes that pose the greatest threat to the business can help identify those areas that merit additional investment in targeted anti-fraud controls.

Executive Summary

- Most fraudsters exhibit behavioral traits that can serve as warning signs of their actions. These red flags — such as living beyond one's means or exhibiting excessive control issues — generally will not be identified by traditional internal controls.

- Managers, employees and auditors should be educated on these common behavioral patterns and encouraged to consider them — particularly when noted in tandem with other anomalies — to help identify patterns that might indicate fraudulent activity.

Executive Summary

- The cost of occupational fraud — both financially and to an organization's reputation — can be acutely damaging. With nearly half of victim organizations unable to recover their losses, proactive measures to prevent fraud are critical.

- Management should continually assess the organization's specific fraud risks and evaluate its fraud prevention programs in light of those risks.

- A checklist such as the one on slides 254–263 can help organizations effectively prevent fraud before it occurs.

Introduction

The term *fraud* has come to encompass many forms of misconduct.

Introduction

- Although the legal definition of fraud is very specific, for most people — anti-fraud professionals, regulators, the media and the general public alike — the common usage is much broader and generally covers any attempt to deceive another party to gain a benefit.

- Health care fraud, identity theft, padded expense reports, mortgage fraud, theft of inventory by employees, manipulated financial statements, insider trading, Ponzi schemes — the range of possible fraud schemes is large, but at their core, all of these acts involve a violation of trust.

- It is this violation, perhaps even more than the resulting financial loss, that makes such crimes so harmful.

Introduction

- For businesses to operate and commerce to flow, companies must entrust their employees with resources and responsibilities. So when an employee defrauds his or her employer, the fallout is often especially harsh.

- This Report focuses on *occupational fraud* schemes in which an employee abuses the trust placed in him or her by an employer for personal gain. The formal definition of occupational fraud is:

  - *The use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets.*

Introduction

- While this category is but one facet of the overall fraud universe, occupational fraud covers a wide range of employee misconduct and is a threat faced by all organizations worldwide.

- To support the ACFE's mission of educating anti-fraud professionals and the general public about the pervasive threat of occupational fraud, we have undertaken extensive research into the costs and trends related to occupational fraud schemes.

- The findings of our initial research efforts were released in 1996 in the first *Report to the Nation on Occupational Fraud and Abuse*, with subsequent Reports released in 2002, 2004, 2006, 2008, 2010 and the current version in 2012.

Introduction

- The stated goals of these Reports have been to:

  – Summarize the opinions of experts on the percentage of organizational revenue lost to all forms of occupational fraud and abuse.

  – Categorize the ways in which occupational fraud and abuse occur.

  – Examine the characteristics of the employees who commit occupational fraud and abuse.

  – Determine what kinds of organizations are victims of occupational fraud and abuse.

Introduction

- Each version of the Report has been based on detailed information about fraud cases investigated by Certified Fraud Examiners (CFEs).

- With each new edition we have expanded and modified the analysis contained in the previous Reports to reflect current issues and enhance the quality of the data that is reported.

- This evolution has allowed us to draw increasingly meaningful information from the experiences of CFEs and the frauds they encounter.

Introduction

- The 2012 *Report to the Nations on Occupational Fraud and Abuse* provides an analysis of 1,388 fraud cases investigated worldwide and continues our tradition of shedding light on trends in the characteristics of fraudsters, the schemes they perpetrate and the organizations being victimized.

- Throughout the Report, we include comparison charts showing several years' worth of data, which highlights the consistency of our findings over time; this uniformity is among the most notable observations from our ongoing research, and we believe it indicates that many of our findings truly reflect global trends in occupational fraud and abuse.

Introduction

Occupational Fraud and Abuse Classification System

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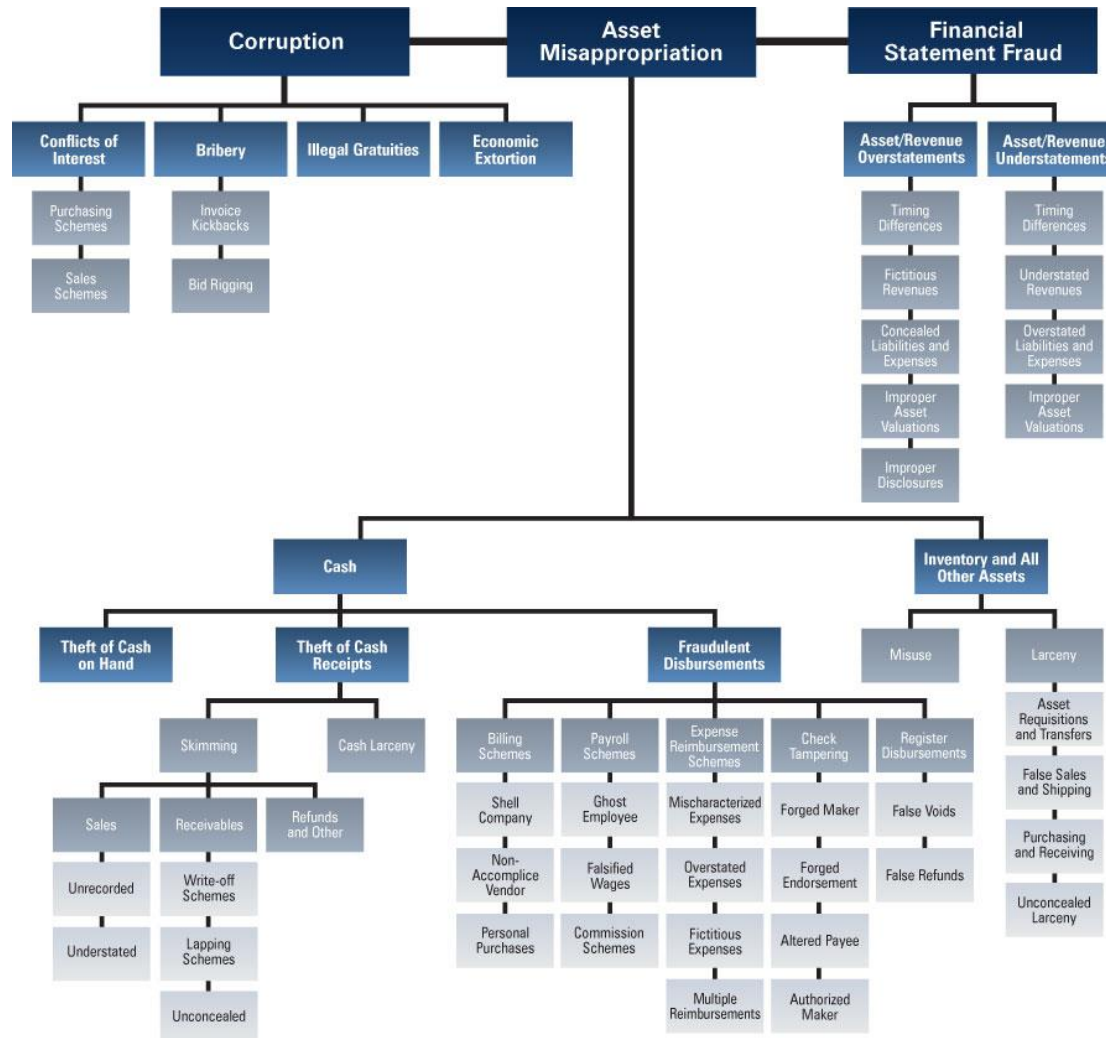
The Cost of Occupational Fraud

The typical organization loses an estimated 5% of its annual revenues to occupational fraud.

The Cost of Occupational Fraud

- Determining the full cost of occupational fraud is an important part of understanding the depth of the problem.

- News reports provide visibility to the largest cases, and most people have heard stories of employees who have stolen from their employers.

- Even so, it can be easy to believe these anecdotes to be anomalies, rather than common examples of the risks faced by all companies.

The Cost of Occupational Fraud

- Unfortunately, obtaining a comprehensive measure of fraud's financial impact is challenging, if not impossible. Because fraud inherently involves efforts at concealment, many fraud cases will never be detected, and of those that are, the full amount of losses might never be determined or reported.

- Consequently, any attempt to quantify the extent of all occupational fraud losses will be, at best, an estimate.

The Cost of Occupational Fraud

- As part of our research, we asked each CFE who participated in our survey to provide his or her best assessment of the percentage of annual revenues that the typical organization loses to fraud.

- The median response indicates that organizations lose an estimated 5% of their revenues to fraud each year.

- To illustrate the magnitude of this estimate, applying the percentage to the 2011 estimated Gross World Product of $70.28 trillion[1] results in a projected global total fraud loss of more than $3.5 trillion.

The Cost of Occupational Fraud

- It is imperative to note that this estimate is based on the collective opinion of anti-fraud experts rather than on specific data or factual observations, and should thus not be interpreted as a literal calculation of the worldwide cost of fraud against organizations.

- Even with that caveat, however, the approximation provided by more than one thousand CFEs from all over the world with a median 11 years' experience — professionals who have a firsthand view of the fight against fraud — may well be the most reliable measure of the cost of occupational fraud available and certainly emphasizes the undeniable and extensive threat posed by these crimes.

The Cost of Occupational Fraud

Distribution of Losses

- Of the 1,388 individual fraud cases reported to us, 1,379 included information about the total dollar amount lost to the fraud.[2]

- The median loss for all of these cases was $140,000, and more than one-fifth of the cases involved losses of at least $1 million. The overall distribution of losses was notably similar to those observed in our 2010 and 2008 studies.

The Cost of Occupational Fraud

Distribution of Dollar Losses
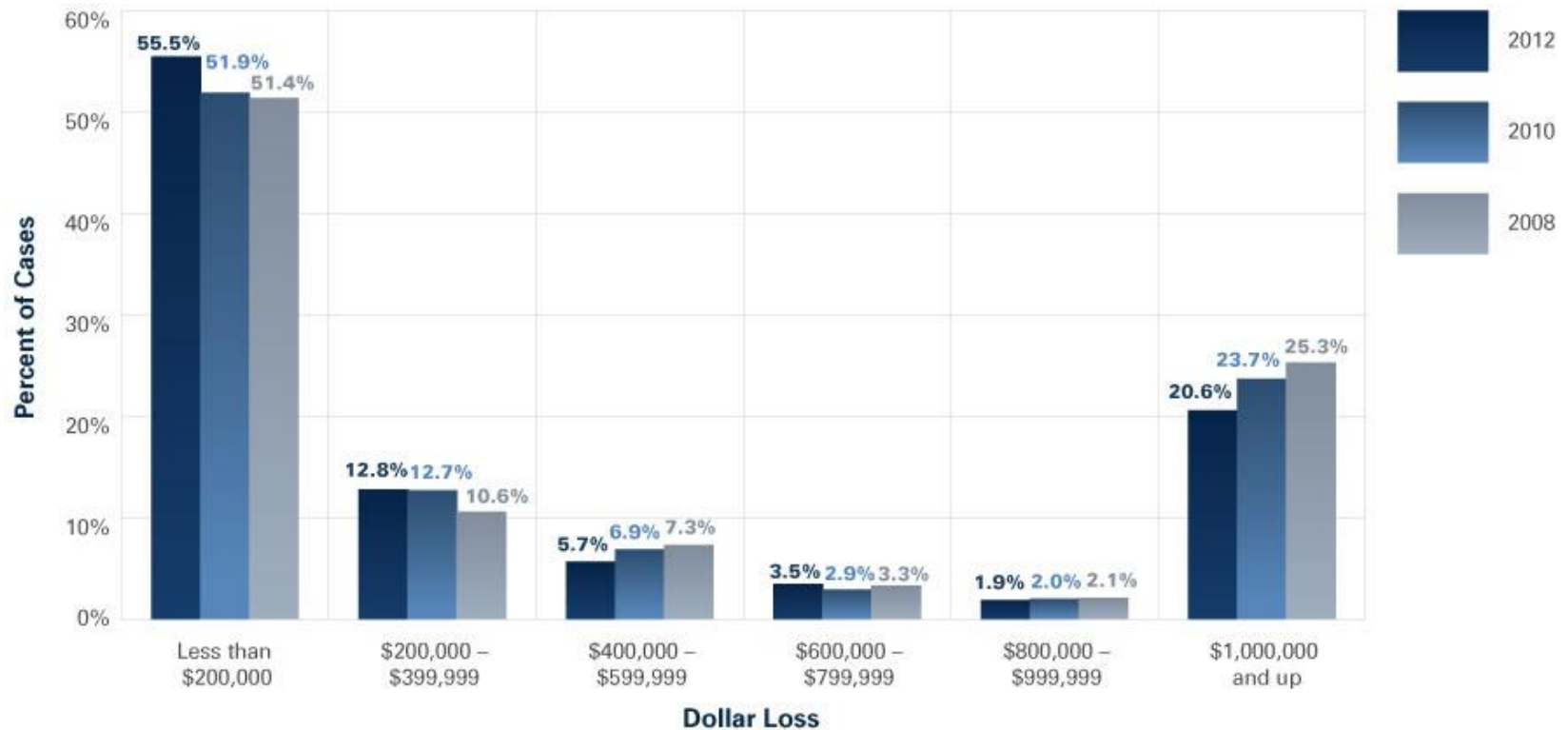
How Occupational Fraud is Committed

Financial statement fraud is the most costly form of occupational fraud, causing a median loss of $1 million.

How Occupational Fraud is Committed

• Our research has consistently reinforced the idea that occupational fraud schemes fall into three primary categories:

  – *Asset misappropriation* schemes, in which an employee steals or misuses the organization's resources (e.g., theft of company cash, false billing schemes or inflated expense reports)

How Occupational Fraud is Committed

– *Corruption* schemes, in which an employee misuses his or her influence in a business transaction in a way that violates his or her duty to the employer in order to gain a direct or indirect benefit (e.g., schemes involving bribery or conflicts of interest)

– *Financial statement fraud* schemes, in which an employee intentionally causes a misstatement or omission of material information in the organization's financial reports (e.g., recording fictitious revenues, understating reported expenses or artificially inflating reported assets)

How Occupational Fraud is Committed

- The following charts illustrate the frequency and costs of these three categories.

- As in prior years, asset misappropriations were by far the most frequent scheme type represented in the frauds reported to us, accounting for more than 86% of cases, yet these schemes also caused the lowest median loss at $120,000.

How Occupational Fraud is Committed

- Conversely, financial statement fraud was involved in less than 8% of the cases studied, but caused the greatest median loss at $1 million.

- Corruption schemes fell in the middle in terms of both frequency (approximately one-third of the cases reported) and median loss ($250,000).

How Occupational Fraud is Committed

Occupational Frauds by Category — Frequency
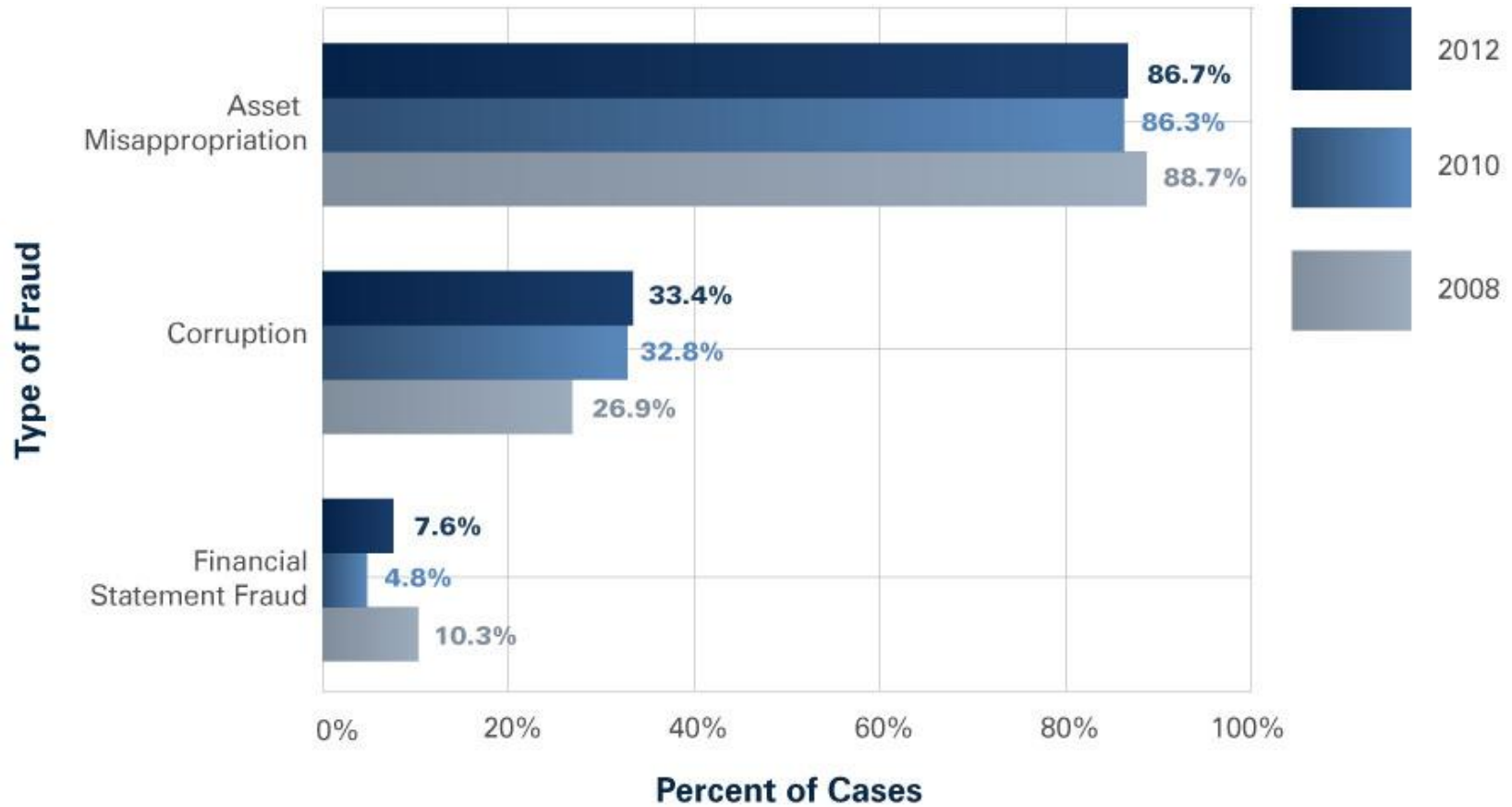
How Occupational Fraud is Committed

Occupational Frauds by Category — Median Loss

How Occupational Fraud is Committed

Asset Misappropriation Sub-Schemes

- As noted on slide 42, the vast majority of occupational frauds involve some form of asset misappropriation. Within this category, however, there are many ways for employees to misappropriate organizational assets and resources.

- Our previous research has identified nine distinct sub-categories of asset misappropriations, eight involving the theft of cash and one covering the misappropriation of non-cash assets. The next table identifies and explains each of these categories and provides their respective frequency and costs as reported in our 2012 study.

How Occupational Fraud is Committed

		Asset Misappropriation Sub-Categories			
Category	**Description**	**Examples**	**Number of Cases**	**Percent of All Cases**	**Median Loss**
SCHEMES INVOLVING 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	• Employee accepts payment from a customer but does not record the sale and instead pockets the money	203	14.6%	$58,000
Cash Larceny	Any scheme in which cash is stolen from an organization *after* it has been recorded on the organization's books and records	• Employee steals cash and checks from daily receipts before they can be deposited in the bank	152	11.0%	$54,000
SCHEMES INVOLVING FRAUDULENT DISBURSEMENTS OF CASH					
Billing	Any scheme in which a person causes his or her employer to issue a payment by submitting invoices for fictitious goods or services, inflated invoices or invoices for personal purchases	• Employee creates a shell company and bills employer for services not actually rendered • Employee purchases personal items and submits an invoice to employer for payment	346	24.9%	$100,000
Expense Reimbursements	Any scheme in which an employee makes a claim for reimbursement of fictitious or inflated business expenses	• Employee files fraudulent expense report, claiming personal travel, nonexistent meals, etc.	201	14.5%	$26,000
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	• Employee steals blank company checks and makes them out to himself or an accomplice • Employee steals an outgoing check to a vendor and deposits it into his or her own bank account	165	11.9%	$143,000
Payroll	Any scheme in which an employee causes his or her employer to issue a payment by making false claims for compensation	• Employee claims overtime for hours not worked • Employee adds ghost employees to the payroll	129	9.3%	$48,000
Cash Register Disbursements	Any scheme in which an employee makes false entries on a cash register to conceal the fraudulent removal of cash	• Employee fraudulently voids a sale on his or her cash register and steals the cash	50	3.6%	$25,000
OTHER ASSET MISAPPROPRIATION SCHEMES					
Misappropriation of Cash on Hand	Any scheme in which the perpetrator misappropriates cash kept on hand at the victim organization's premises	• Employee steals cash from a company vault	164	11.8%	$20,000
Non-Cash Misappropriations	Any scheme in which an employee steals or misuses non-cash assets of the victim organization	• Employee steals inventory from a warehouse or storeroom • Employee steals or misuses confidential customer financial information	239	17.2%	$58,000

How Occupational Fraud is Committed

Duration of Fraud Schemes

- There is obviously great benefit in detecting fraud schemes as close to their inception as possible, including the ability to limit the financial and reputational damage caused by the crime.

- Analyzing the duration of the occupational frauds reported to us can provide insight into areas of opportunity for organizations to increase their fraud-detection effectiveness.

How Occupational Fraud is Committed

- The median duration — the amount of time from when the fraud first occurred to when it was discovered — for all cases in our study was 18 months.

- However, the duration of cases in each category of fraud ranged from 12 months (for register disbursement schemes and non-cash schemes) to 36 months (for payroll schemes).

How Occupational Fraud is Committed

Duration of Fraud Based on Scheme Type
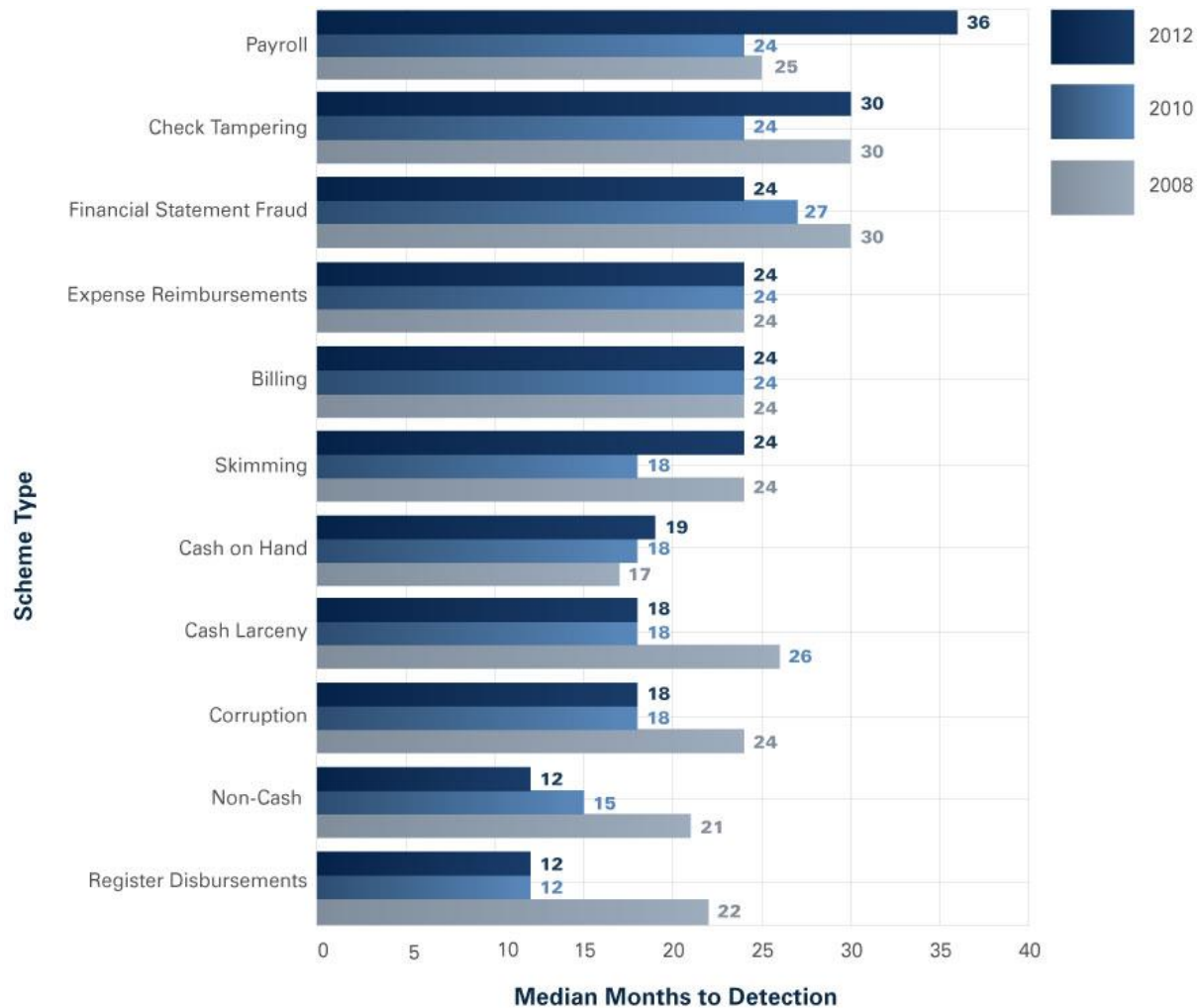
Detection of Fraud Schemes

Frauds are much more likely to be detected by tips than by any other method.

Detection of Fraud Schemes

- The initial detection of a fraud scheme is often the most crucial moment in the fraud examination process — decisions must be made quickly to secure evidence, mitigate losses and execute the best investigation strategy available.

- The method by which a fraud is uncovered can open or close several options for an organization. For instance, the outcome of a case might vary substantially if the first time management learns of an alleged fraud is through an anonymous tip, as opposed to a law enforcement action.

Detection of Fraud Schemes

- Moreover, analyzing the means by which organizations detect instances of fraud gives us insight into the effectiveness of controls and other anti-fraud measures.

- We asked respondents to provide information about how the frauds they investigated were initially uncovered, allowing us to identify patterns and other interesting data regarding fraud detection methods.

Detection of Fraud Schemes

Initial Detection of Occupational Frauds

- Perhaps the most prevalent trend in the detection data is the ongoing importance of tips, which have been the most common method of initial detection since we first began tracking this data in 2002.

- As in our 2010 Report, management review and internal audit were the second and third most common methods of detection, respectively.

Detection of Fraud Schemes

Initial Detection of Occupational Frauds
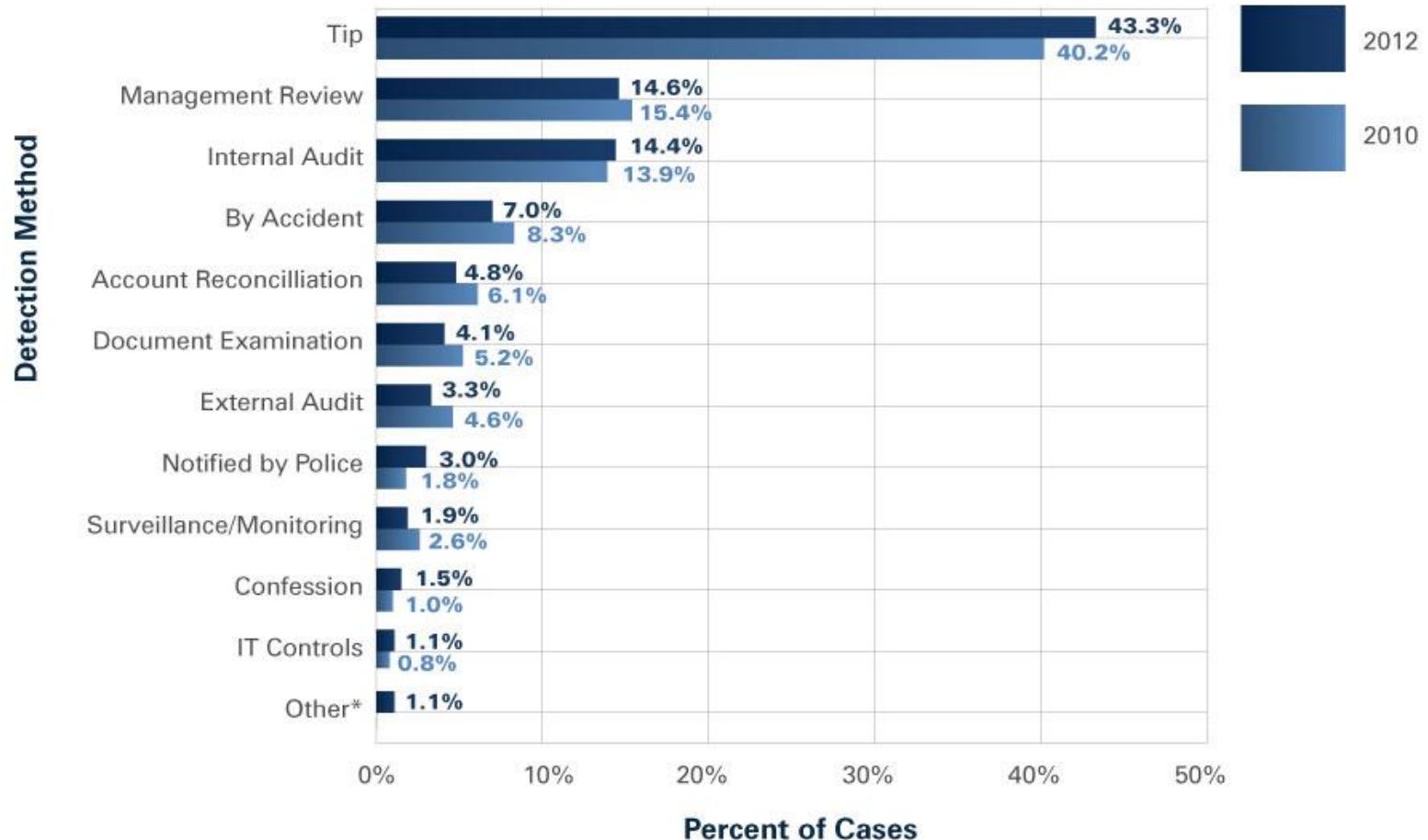
Detection of Fraud Schemes

Median Loss by Detection Method

- Frauds that were first detected as a result of police notification cost companies the most by far, with a median loss of $1 million.

- There are several factors that might relate to the higher losses in this category, including law enforcement's focus on investigating crimes with large amounts in controversy.

Detection of Fraud Schemes

- Generally, the detection categories associated with higher median losses — police notification ($1 million), external audit ($370,000), confession ($225,000) and accident ($166,000) — are the least proactive detection methods.

- In other words, uncovering frauds by these methods is not generally the result of a specific internal control or anti-fraud measure.

Detection of Fraud Schemes

- Conversely, median losses from frauds that were discovered by internal audit ($81,000), document examination ($105,000), IT controls ($110,000), management review ($123,000) and account reconciliation ($124,000) were substantially lower. This latter group of detection methods reflects proactive measures within the organization to stop fraud.

Detection of Fraud Schemes

Median Loss by Detection Method
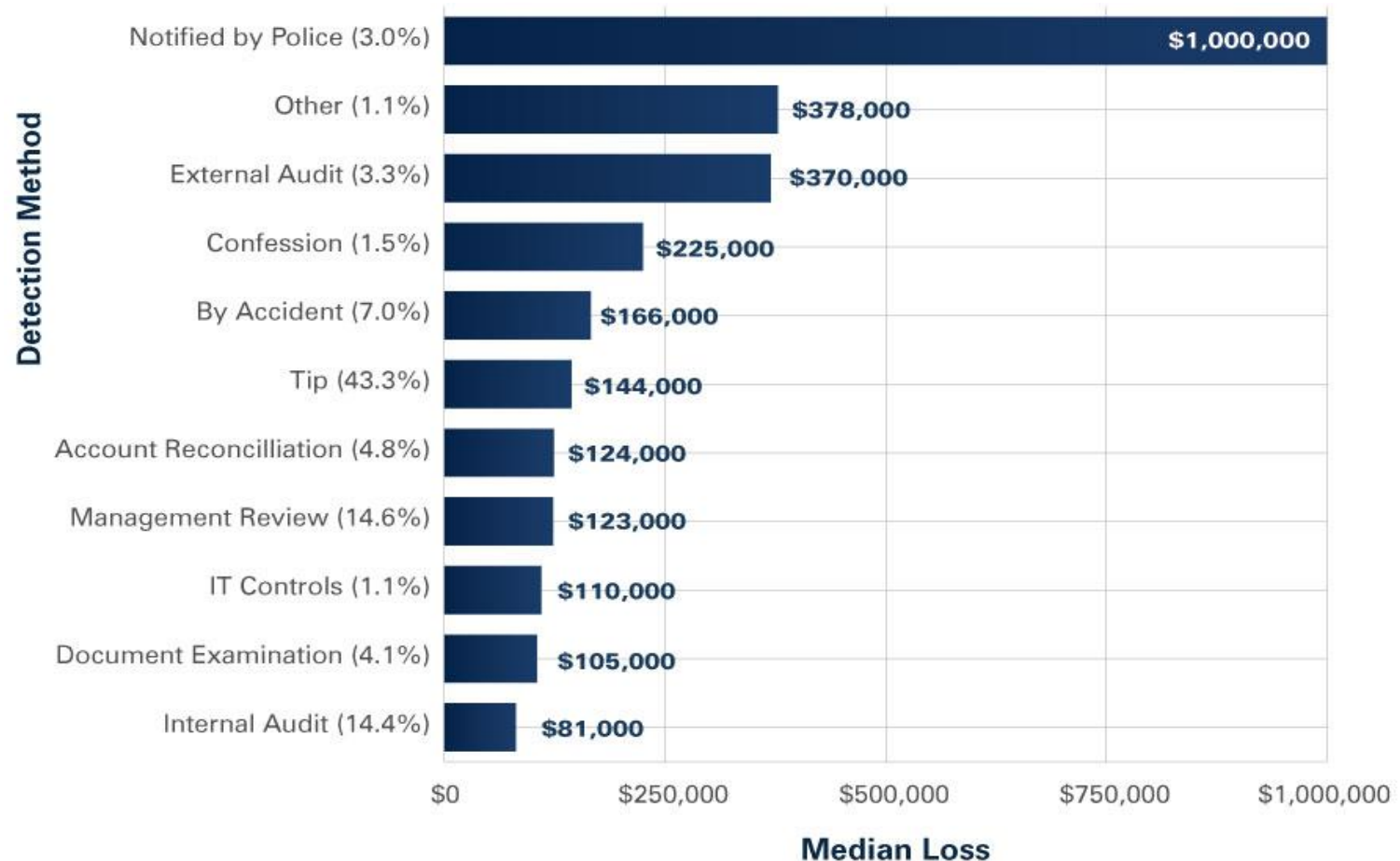
Detection of Fraud Schemes

Source of Tips

- Identifying the most common sources of tips is essential to crafting a system that encourages individuals to step forward with information.

- While just over half of all tips originated from employees, our research reveals that several other parties tip off organizations to a substantial number of frauds.

- Organizations should consider this data when deciding how to best communicate reporting policies and other resources to potential whistleblowers.

Detection of Fraud Schemes

- There are several reasons why a person might want anonymity when reporting a tip, and the data shows that a significant number of tips (12%) came from an anonymous source.

- Tools such as anonymous hotlines or web-based portals, which allow individuals to report misconduct without fear of retaliation or of being identified, can help facilitate this process.

Detection of Fraud Schemes

Source of Tips
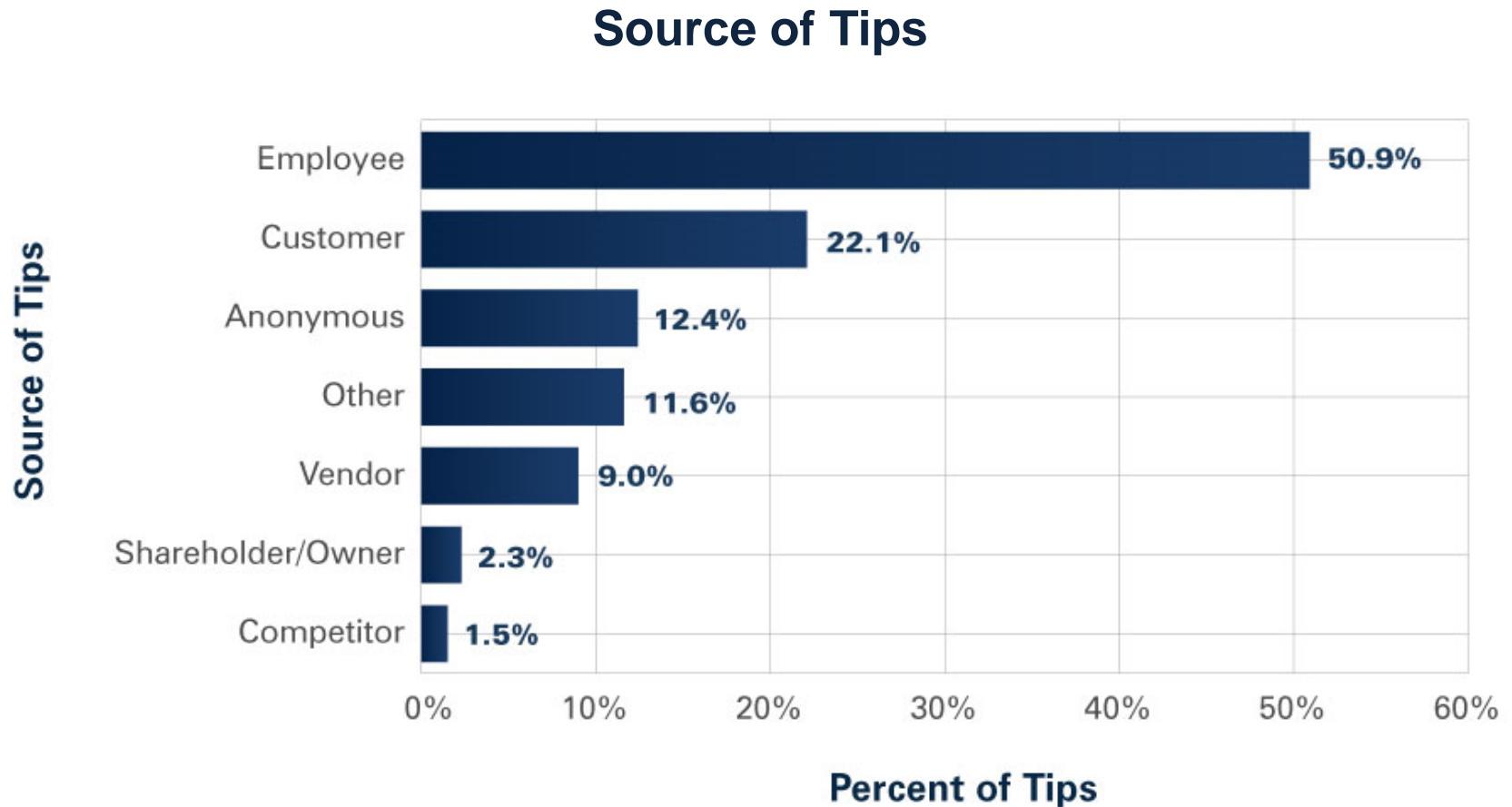
Detection of Fraud Schemes

Impact of Hotlines

- The presence or absence of a reporting hotline[3] has an interesting impact on how frauds are discovered. Not surprisingly, organizations with some form of hotline in place saw a much higher likelihood that a fraud would be detected by a tip (51%) than organizations without such a hotline (35%).

Detection of Fraud Schemes

- Another wide disparity between these two classes of organizations is seen in frauds detected by accident.

- More than 11% of frauds in organizations without hotlines were caught by accident, whereas less than 3% of cases were detected by accident in organizations that had implemented a hotline.

- Similarly, external audit was the detection method for 6% of cases from organizations without hotlines, but only 1% in organizations with hotlines.

Detection of Fraud Schemes

Impact of Hotlines

Chart: Detection Method (vertical axis) vs. Percent of Cases (horizontal axis), comparing Organizations With Hotlines (dark blue) and Organizations Without Hotlines (light blue).

Detection Method	Organizations With Hotlines	Organizations Without Hotlines
Tip	50.9%	34.6%
Internal Audit	16.3%	12.8%
Management Review	13.8%	16.5%
Account Reconciliation	4.5%	4.8%
Document Examination	3.0%	5.8%
By Accident	2.8%	11.3%
Surveillance/Monitoring	2.4%	1.5%
Notified by Police	1.7%	3.7%
Confession	1.3%	1.8%
IT Controls	1.3%	0.5%
External Audit	1.0%	5.7%
Other	1.0%	1.0%

Detection of Fraud Schemes

Initial Detection of Frauds in Small Businesses

- Compared to large organizations, small businesses (those with fewer than 100 employees) differ widely in organizational structure and availability of resources. Our data suggest that small organizations tend to have far fewer anti-fraud controls in place than larger organizations (see slide 122).

- Furthermore, small organizations in our study were victimized by fraud more frequently than larger organizations and they suffered a disproportionately large median loss of $147,000 (see slides 91-92).

Detection of Fraud Schemes

- The difference in levels of control could explain some of the discrepancies between detection methods observed in small and large organizations, as illustrated in the chart on the following slide.

- Note that smaller companies are substantially less likely to detect fraud based on tips or internal audits, while they are more likely to uncover fraud by accident, external audit or police notification.

Detection of Fraud Schemes

Detection Method by Size of Victim Organization
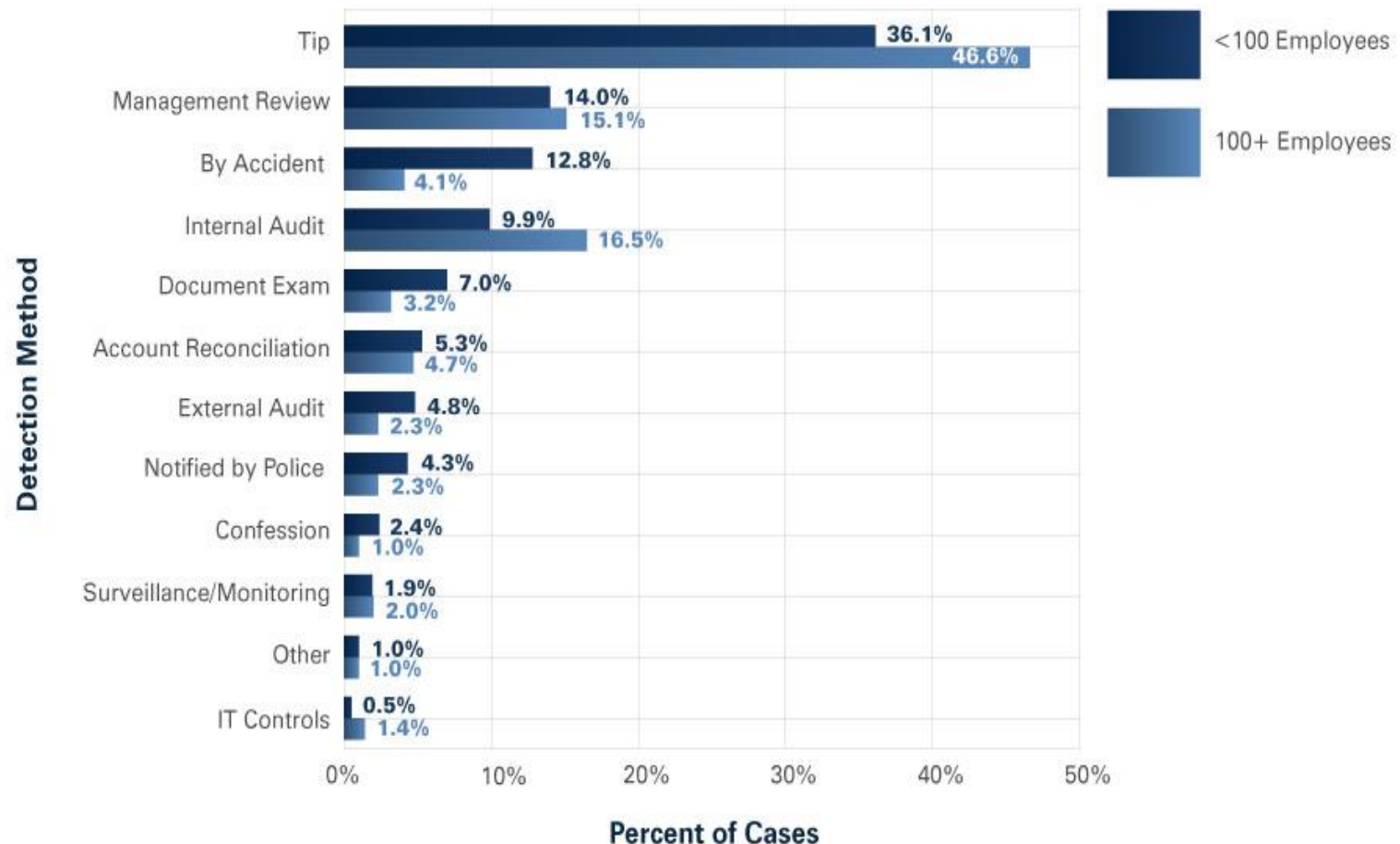
Detection of Fraud Schemes

Detection Method by Scheme Type

- In the chart on slide 67, we compared the detection method to the type of scheme reported — asset misappropriation, corruption or financial statement fraud.

- Every organization has specific fraud risks based on its industry, location, size and several other factors. For instance, publicly traded organizations have special concerns with respect to financial statement fraud and multinational companies often have increased corruption risks to consider.

- Management in such organizations should find it helpful to see how different scheme types are most commonly detected.

Detection of Fraud Schemes

- Tips represented the most common detection method for each type of scheme, but they were significantly higher in corruption cases at 54% (compared to 42% for both asset misappropriation and financial statement fraud schemes).

- Financial statement fraud cases in our study were first uncovered by law enforcement 14% of the time, or about three times more often than corruption cases and over five times more often than asset misappropriation schemes.

Detection of Fraud Schemes

- One interesting similarity in the data is the consistency with which internal audit was responsible for the detection of each scheme type. In each scheme category, 14% of the cases were detected through internal audits.

Detection of Fraud Schemes

Detection Method by Scheme Type

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67
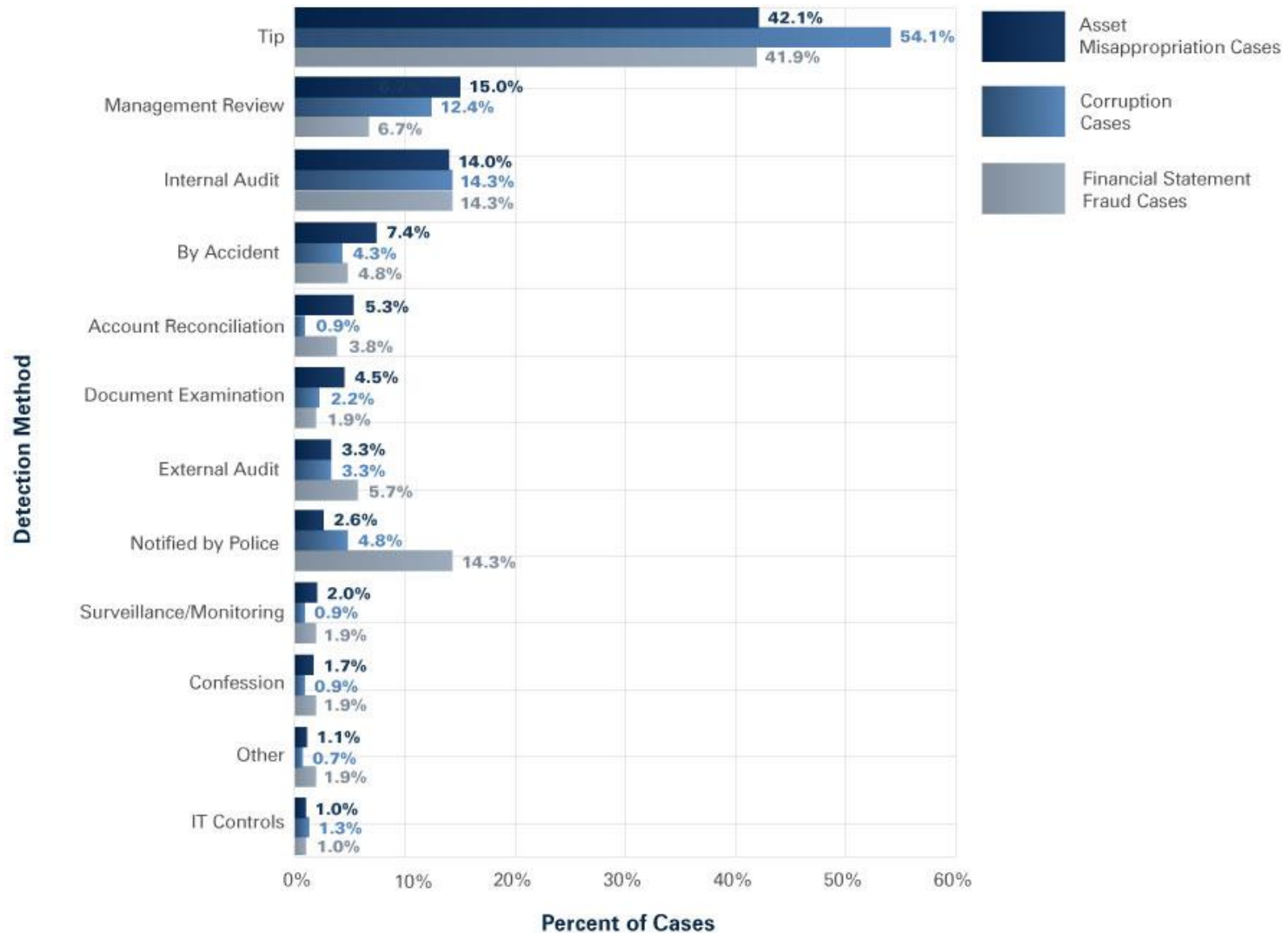
Detection of Fraud Schemes

Detection Method by Region

- The following table shows how frauds were detected based on the region in which they occurred.[4] The findings are in line with our 2010 Report, in that tips were the most common detection method by a wide margin in each region.

- Management review and internal audit consistently came in either second or third in every region.

Detection of Fraud Schemes

- Also similar to our 2010 Report, Africa had the highest percentage of cases detected by tip at 53% (up from 50% in 2010).

- Internal audit was one of the most diverse detection methods across regions, uncovering as few as 10% of cases in Africa and as many as 23% in Europe.

Detection of Fraud Schemes

Detection Method by Region								
	All Cases	United States	Asia	Europe	Africa	Canada	Latin America and the Caribbean	Oceania
Tip	43.3%	43.1%	43.6%	42.9%	52.7%	38.6%	43.2%	42.9%
Management Review	14.6%	14.0%	14.2%	15.8%	15.2%	17.5%	10.8%	20.0%
Internal Audit	14.4%	11.7%	19.6%	23.3%	9.8%	14.0%	13.5%	14.3%
By Accident	7.0%	7.8%	4.4%	3.8%	4.5%	10.5%	10.8%	8.6%
Account Reconciliation	4.8%	5.1%	3.4%	2.3%	6.3%	5.3%	8.1%	8.6%
Document Examination	4.1%	5.1%	2.0%	4.5%	3.6%	3.5%	5.4%	0.0%
External Audit	3.3%	3.5%	3.9%	3.8%	0.9%	1.8%	0.0%	2.9%
Notified by Police	3.0%	3.8%	2.9%	3.0%	0.9%	0.0%	2.7%	0.0%
Surveillance/Monitoring	1.9%	2.2%	1.5%	0.0%	2.7%	5.3%	0.0%	0.0%
Confession	1.5%	1.9%	1.0%	0.8%	0.9%	0.0%	2.7%	2.9%
Other	1.1%	1.3%	1.0%	0.0%	0.9%	1.8%	0.0%	0.0%
IT Controls	1.1%	0.6%	2.5%	0.0%	1.8%	1.8%	2.7%	0.0%

Victim Organizations

Our study included cases from 96 countries, providing us with a truly global view of occupational fraud.

Victim Organizations

Geographical Location of Organizations

- In this study, we received 1,388 cases of occupational fraud from 96 countries, providing us with a truly global view into occupational fraud schemes. We analyzed the fraud cases reported to us based on the geographic region in which the frauds occurred.[5]

- The next chart reflects the distribution of cases by region and the corresponding estimated median loss.

Victim Organizations

- For further analysis, the graphs on slides 75–81 demonstrate the most common fraud schemes committed within each region.

- By comparing our current findings with the results of our 2010 study, we gain insight into specific fraud risks faced by organizations in each region.

Victim Organizations

Geographical Location of Victim Organizations			
Region*	Number of Cases	Percent of Cases	Median Loss (in U.S. dollars)
United States	778	57.2%	$120,000
Asia	204	15.0%	$195,000
Europe	134	9.9%	$250,000
Africa	112	8.2%	$134,000
Canada	58	4.3%	$87,000
Latin America and the Caribbean	38	2.8%	$325,000
Oceania	35	2.6%	$300,000

Victim Organizations

U.S. Cases
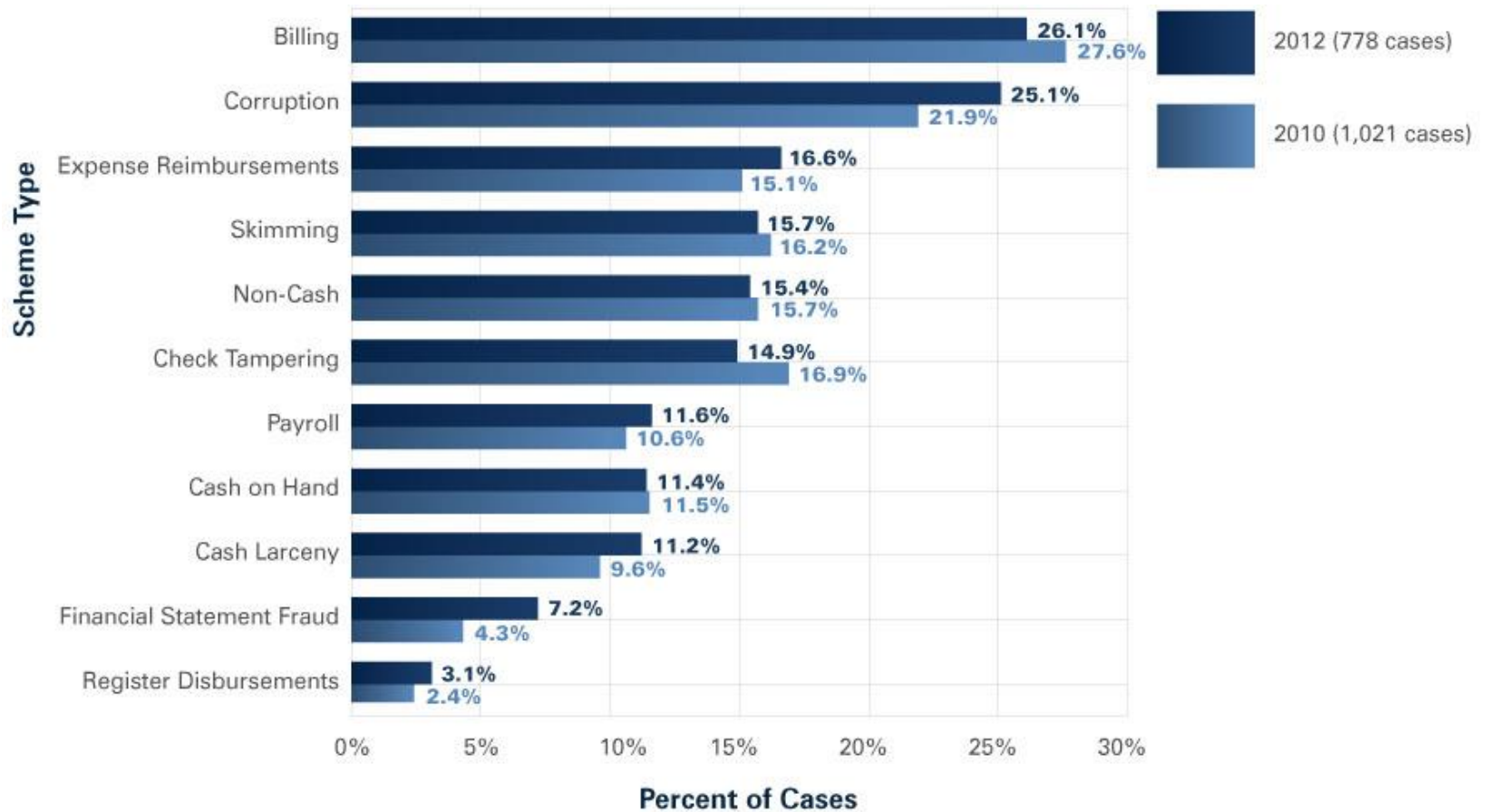
Victim Organizations

Asian Cases
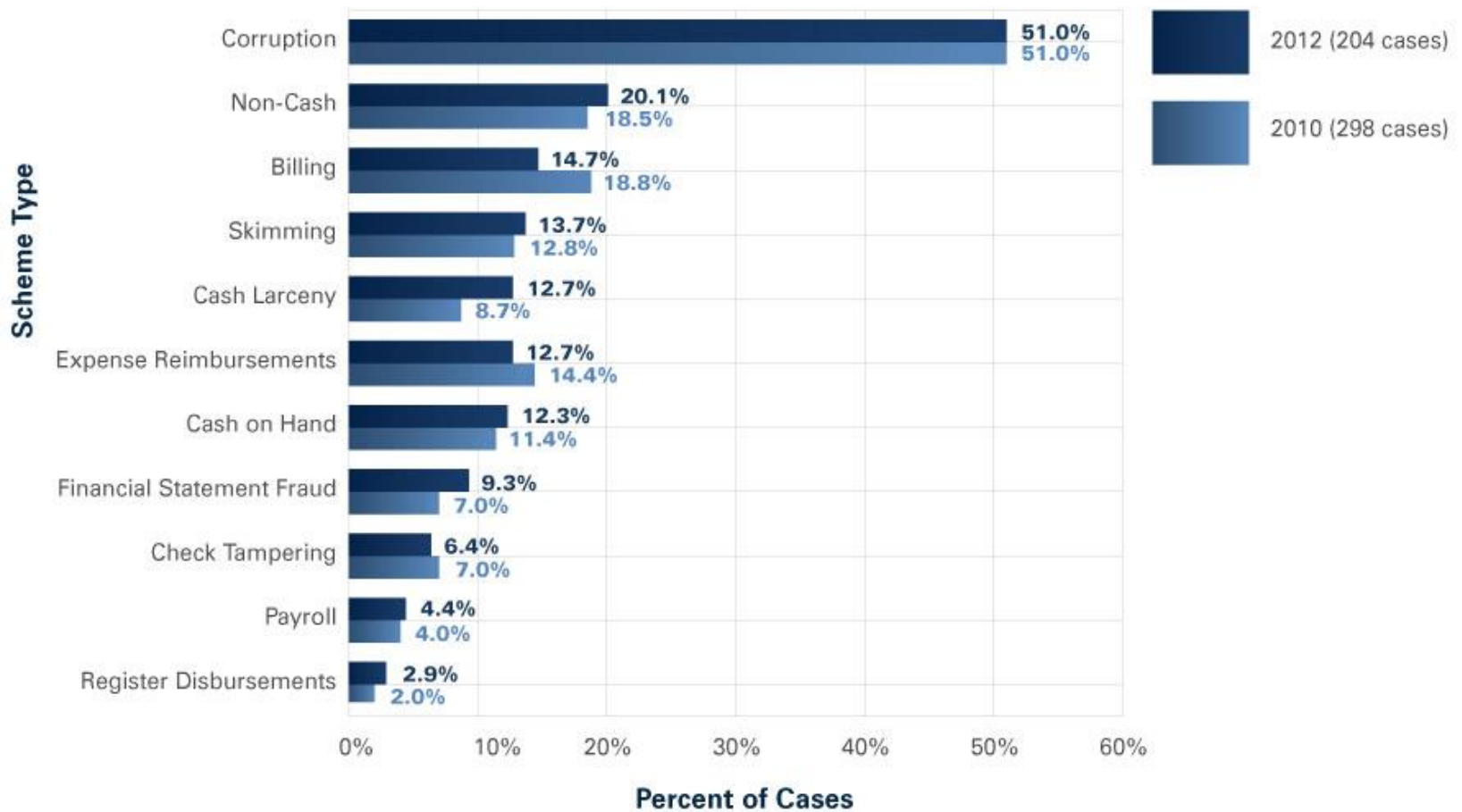
Victim Organizations

European Cases
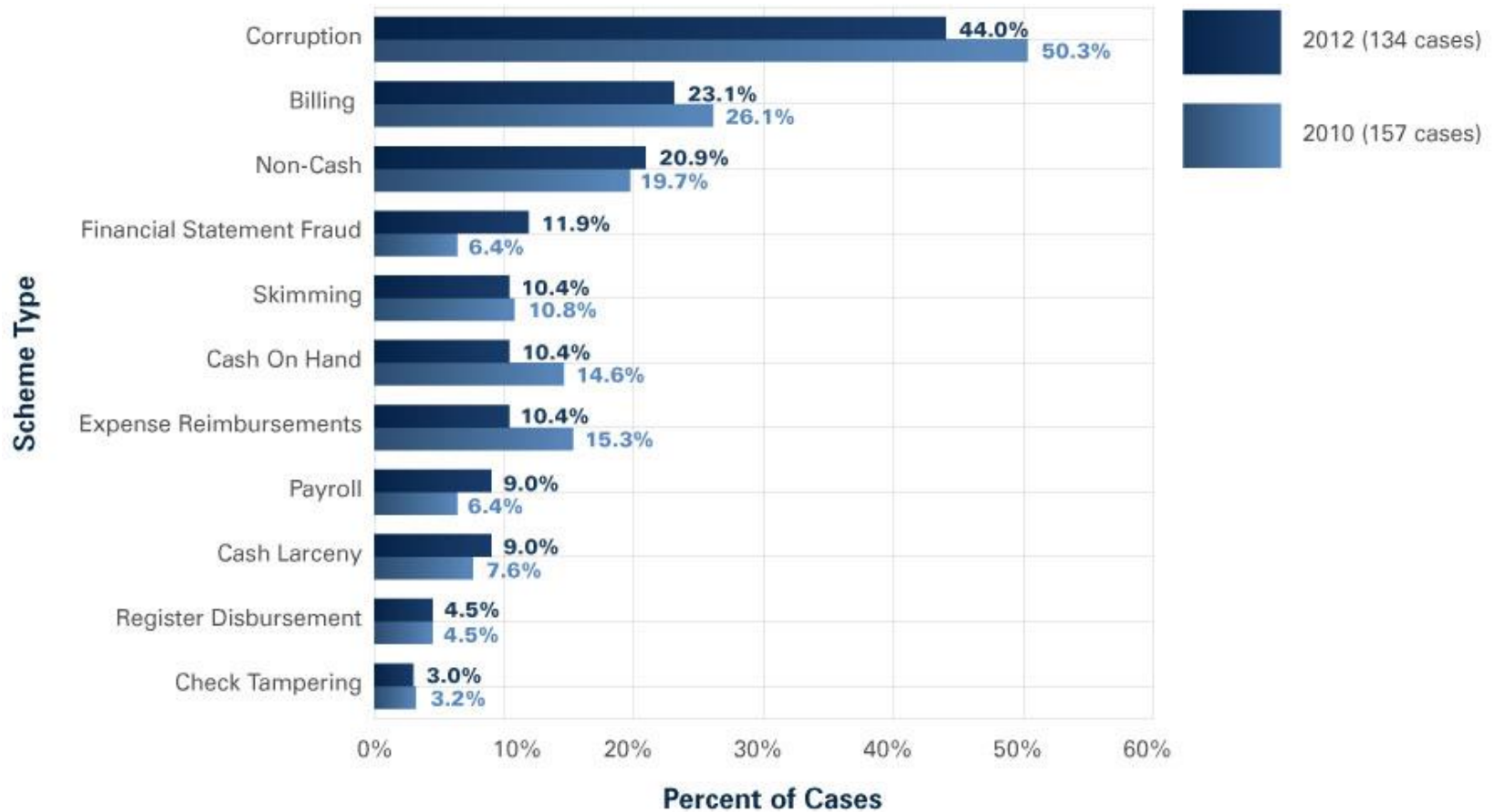
Victim Organizations

African Cases

Scheme Type	2012 (112 cases)	2010 (112 cases)
Corruption	39.3%	49.1%
Billing	31.3%	33.9%
Cash on Hand	19.6%	14.3%
Cash Larceny	17.9%	13.4%
Non-Cash	15.2%	21.4%
Expense Reimbursements	14.3%	17.0%
Check Tampering	12.5%	9.8%
Skimming	12.5%	11.6%
Payroll	9.8%	5.4%
Register Disbursements	7.1%	2.7%
Financial Statement Fraud	4.5%	1.8%

Percent of Cases
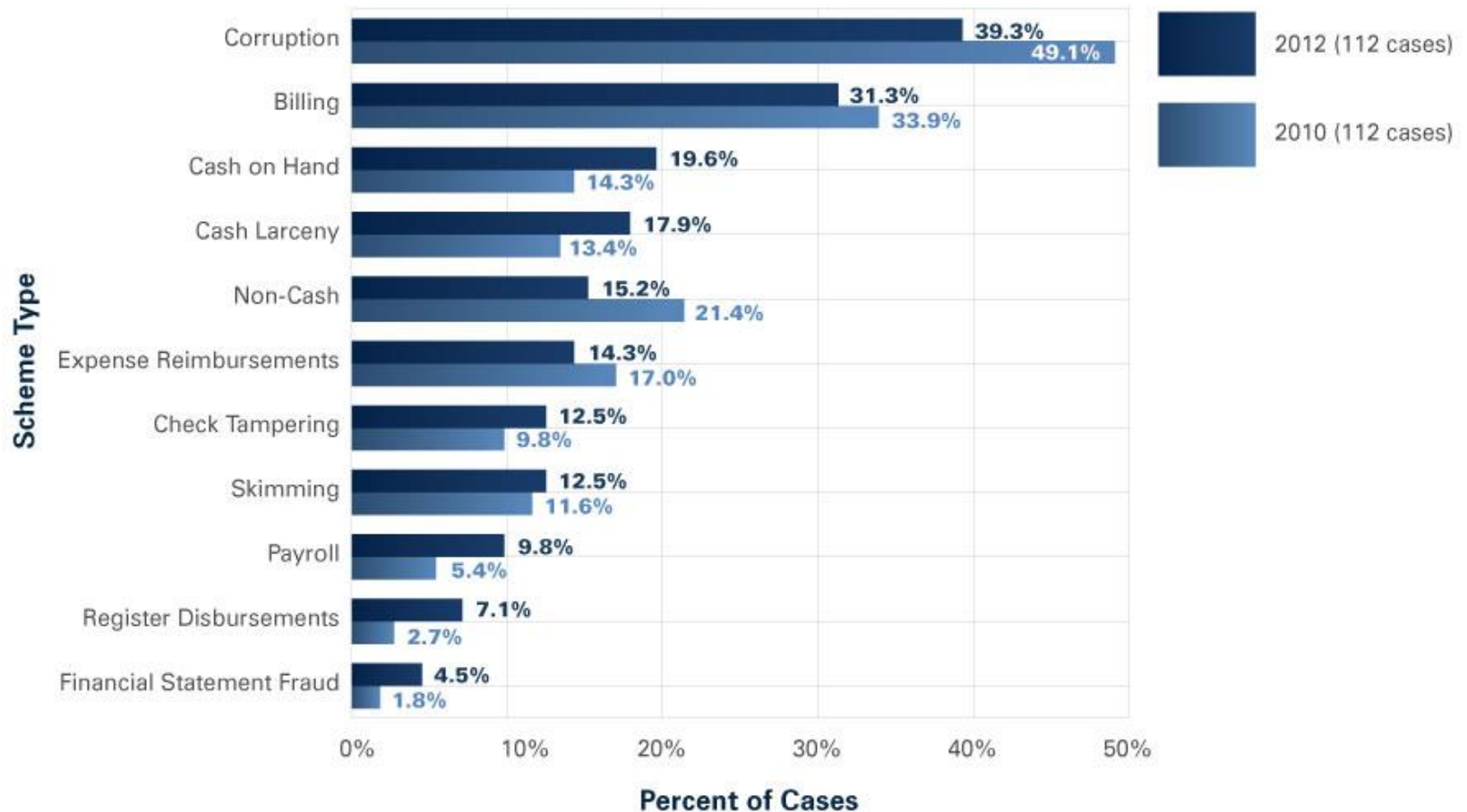
Victim Organizations

Canadian Cases
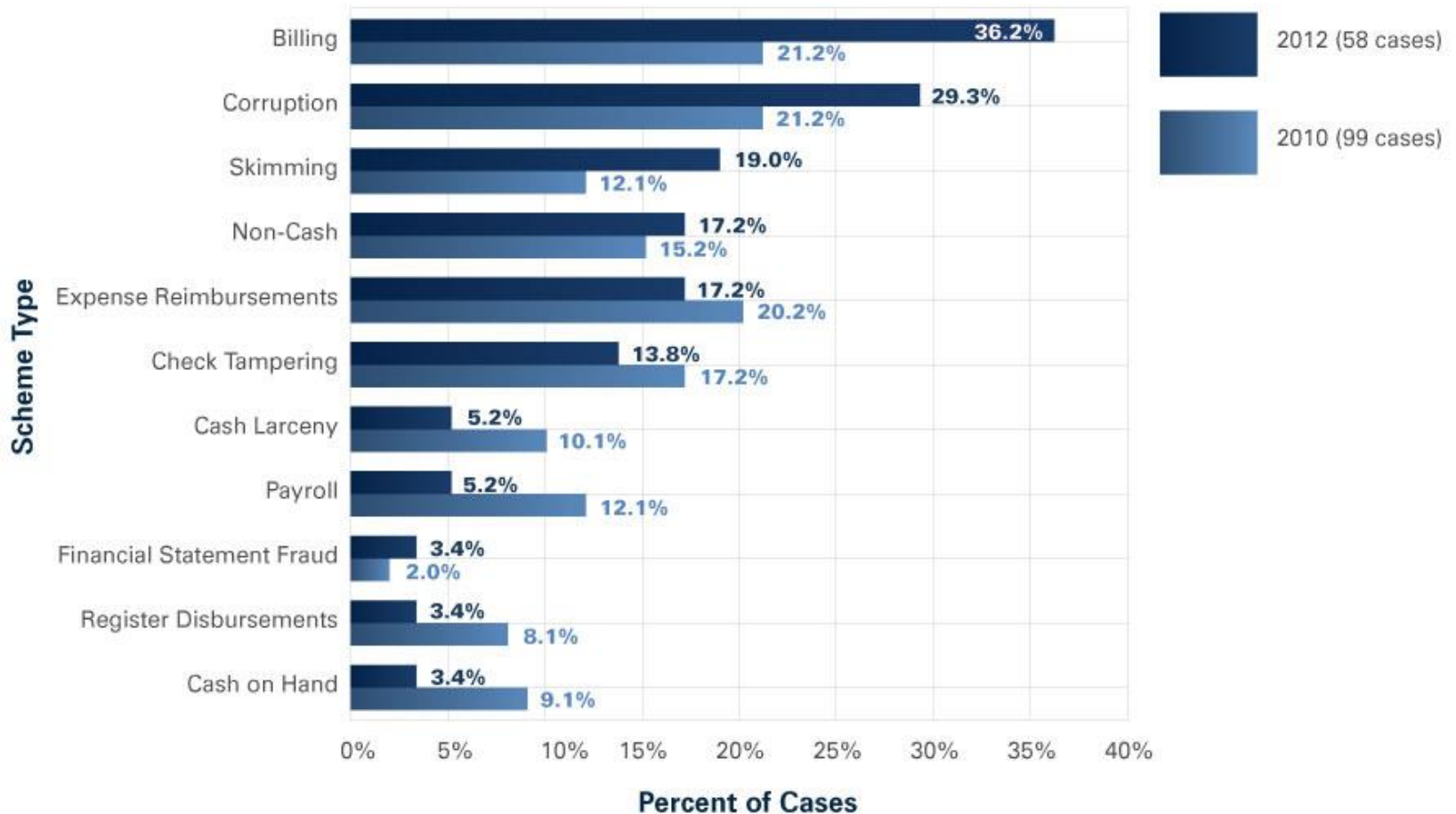
Victim Organizations

Latin American and Caribbean Cases
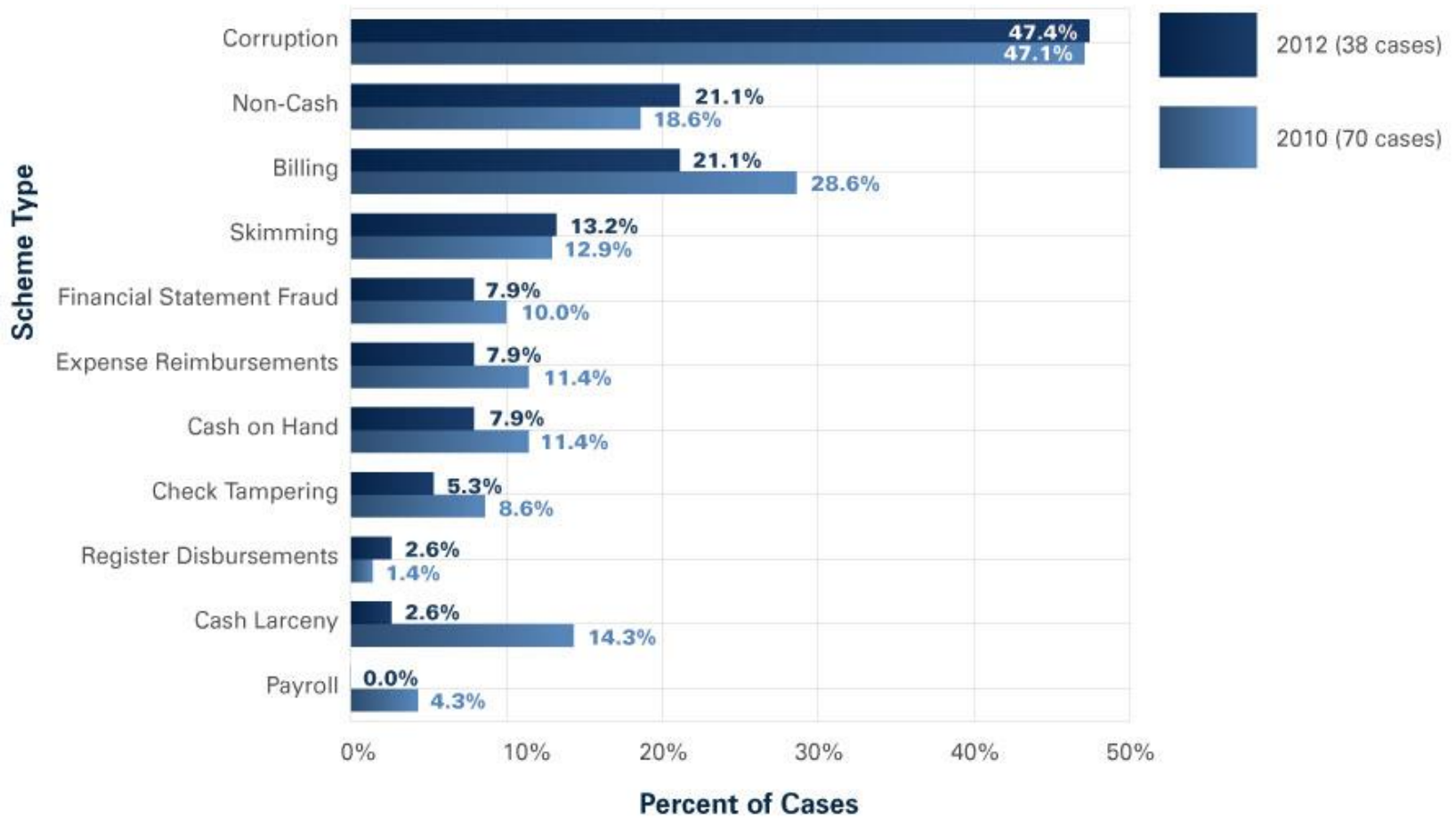
Victim Organizations

Oceanian Cases

Bar chart titled "Oceanian Cases" comparing Percent of Cases by Scheme Type for 2012 (35 cases) and 2010 (40 cases):

Scheme Type	2012 (35 cases)	2010 (40 cases)
Corruption	40.0%	40.0%
Billing	34.3%	27.5%
Non-Cash	22.9%	30.0%
Cash on Hand	20.0%	10.0%
Skimming	17.1%	12.5%
Check Tampering	11.4%	17.5%
Payroll	8.6%	5.0%
Financial Statement Fraud	5.7%	2.5%
Cash Larceny	2.9%	7.5%
Expense Reimbursements	2.9%	10.0%
Register Disbursements	0.0%	2.5%
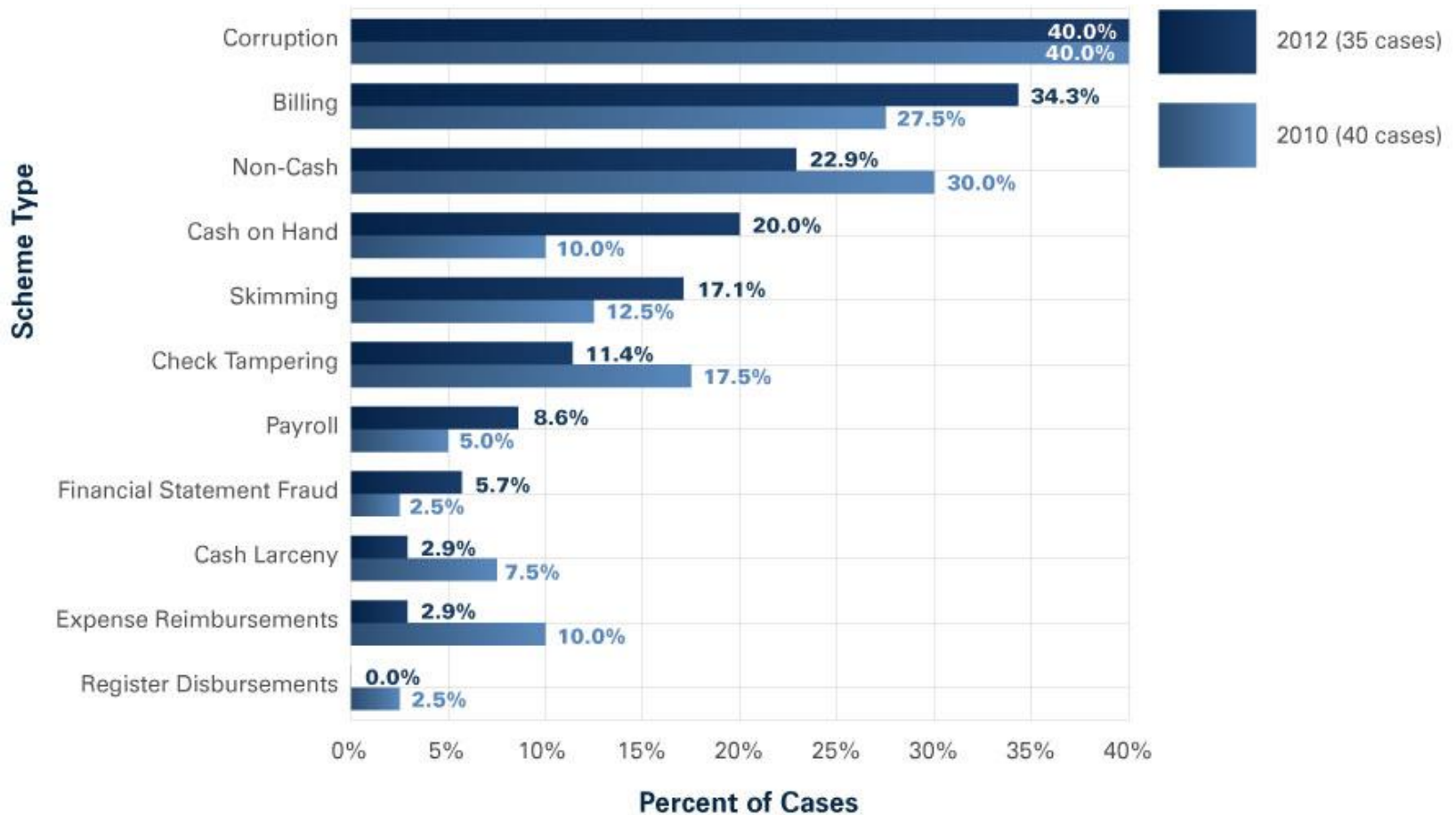
Victim Organizations

Corruption Cases by Region

- Many organizations' leaders are concerned about the risk of corruption as they expand operations into new geographical areas. Consequently, we wanted to examine the breakdown of reported corruption cases by region. The results of this analysis are presented on slide 84.

Victim Organizations

- While the regional variations in the frequency and costs of corruption cases reported to us are interesting, it is important to note that this data does not necessarily reflect overall levels of corruption in each region.

- Instead, readers should view this data as representative of the specific corruption cases that were investigated by the CFEs who took part in our study.

Victim Organizations

Corruption Cases by Region			
Region	**Number of Corruption Cases**	**Percent of All Cases in Region**	**Median Loss**
Asia	104	51.0%	$250,000
Latin America and the Caribbean	18	47.4%	$300,000
Europe	59	44.0%	$250,000
Oceania	14	40.0%	$300,000
Africa	44	39.3%	$350,000
Canada	17	29.3%	$200,000
United States	195	25.1%	$239,000

Victim Organizations

Types of Organizations

- Nearly 40% of victim organizations in our study were privately owned, and 28% were publicly traded, meaning that more than two-thirds of the victims in our study were for-profit organizations. This distribution is consistent with previous Reports.

- Not-for-profit organizations made up the smallest portion of our dataset, accounting for slightly more than 10% of reported cases. Privately owned and publicly traded organizations also continue to suffer the highest reported median losses.

Victim Organizations

Organization Type of Victim — Frequency
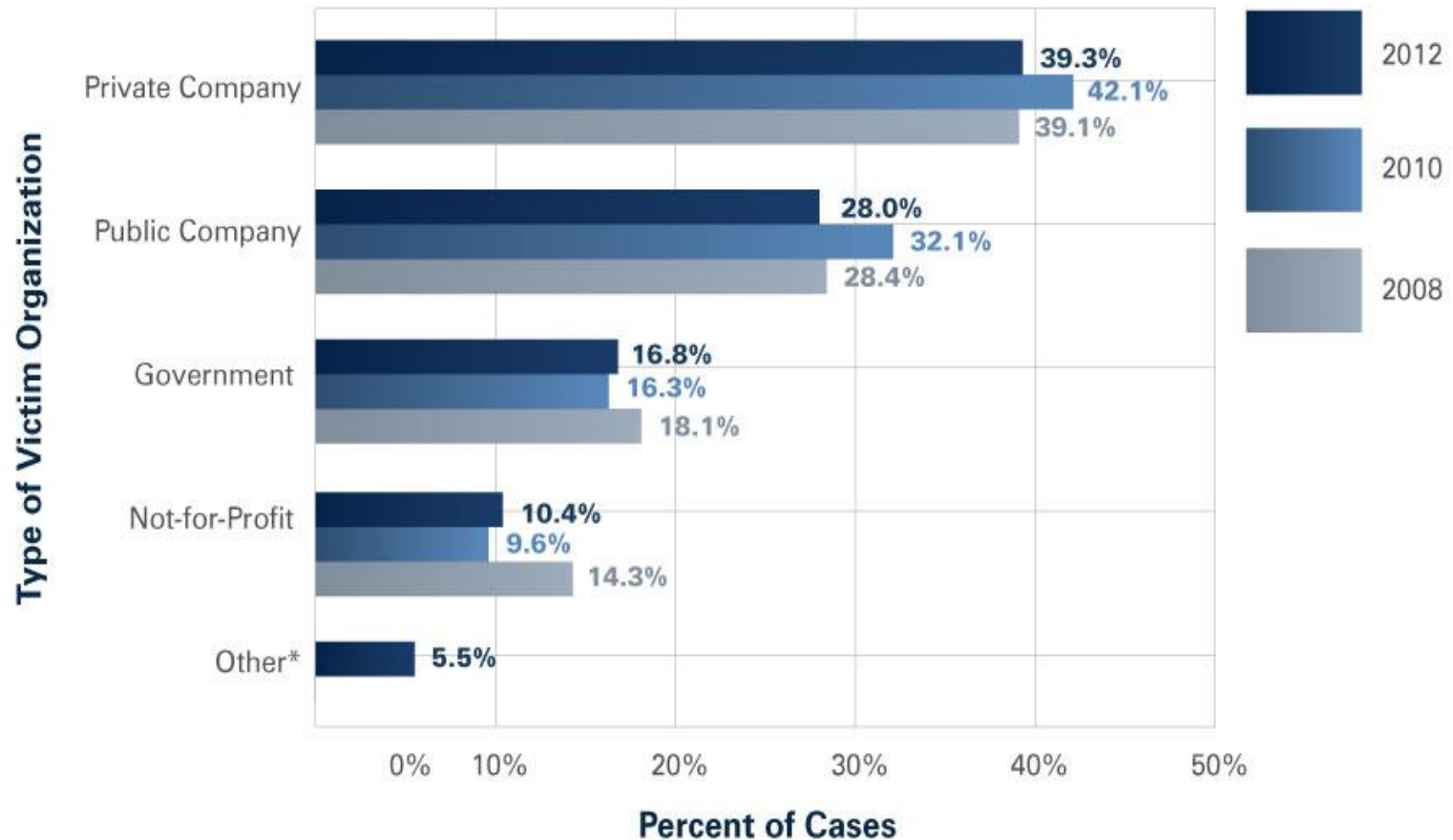
Victim Organizations

Organization Type of Victim — Median Loss

Victim Organizations

Size of Organizations

- Small organizations (those with fewer than 100 employees) continue to be the most common victims in the fraud instances reported to us, though the overall variation between size categories is relatively small.

- Additionally, small businesses make up the vast majority of commercial organizations in many countries,[6] so the distribution of cases reflected in the following chart is skewed toward larger organizations when compared with the distribution of organization size among all enterprises.

Victim Organizations

- This disparity is likely due, at least in part, to the greater propensity of large organizations to employ or hire CFEs to formally investigate fraud cases, rather than a reflection of the actual proportion of fraud occurrences across organizations by size (that is, many small organizations might experience frauds that are not investigated by a CFE, thus precluding their inclusion in our study).

Victim Organizations

- Nonetheless, our observation that the two categories of smaller organizations — those with fewer than 100 employees and those with 100 to 999 employees — have consistently experienced higher median losses than their larger counterparts reflects the significance of fraud in the smallest organizations.

Victim Organizations

Size of Victim Organization — Frequency
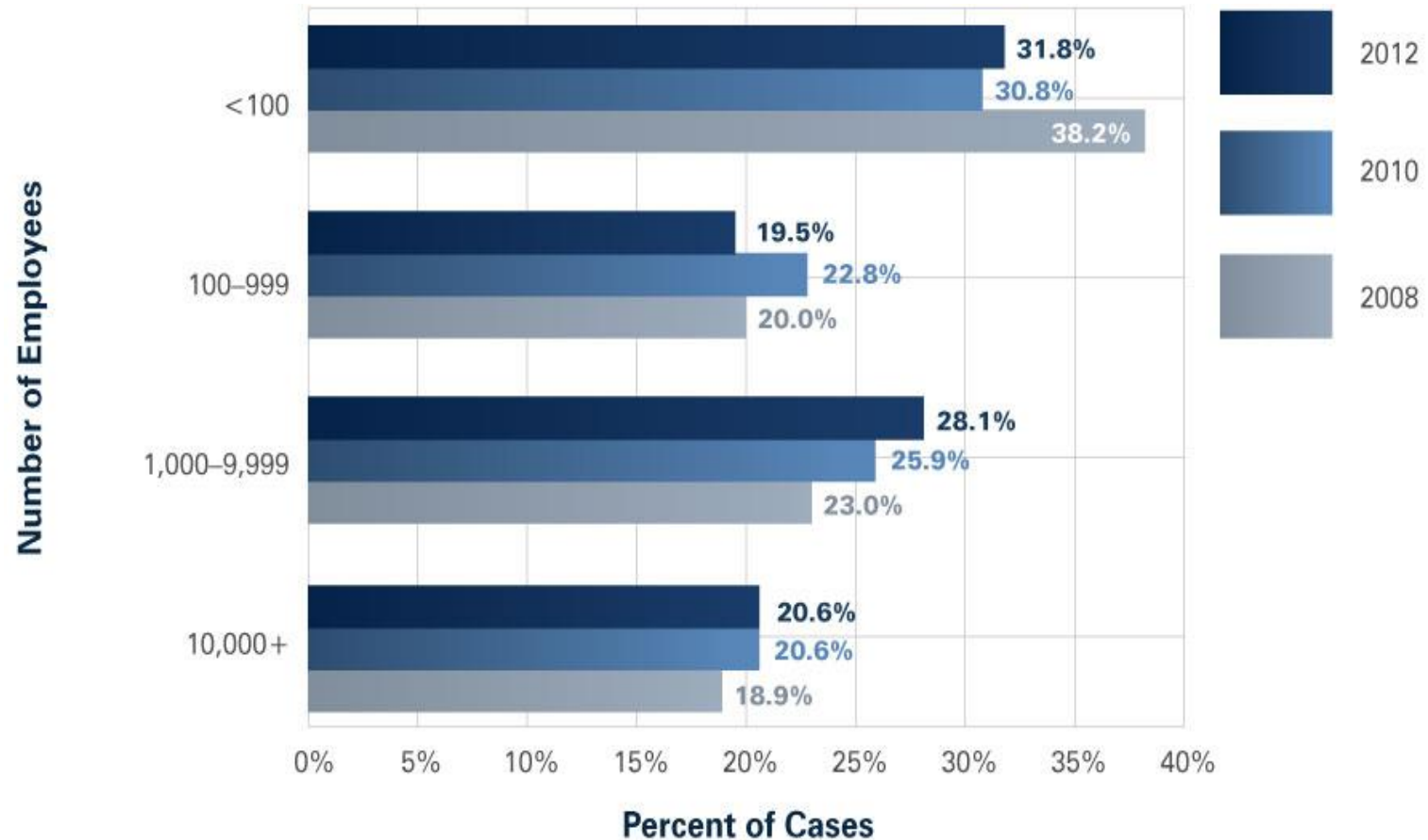
Victim Organizations

Size of Victim Organization — Median Loss

Victim Organizations

Methods of Fraud in Small Businesses

- Our research reinforces the point that the specific fraud risks faced by small organizations typically differ from those faced by larger organizations.

- For example, corruption was observed to be the most prevalent fraud committed in larger organizations, occurring in nearly 35% of the reported cases in companies with more than 100 employees, compared to 28% of small business cases.

Victim Organizations

- In contrast, billing schemes were the most common fraud committed in smaller organizations.

- In addition, check tampering was three times as common and payroll and skimming schemes were noted almost twice as often in smaller organizations than in their larger counterparts.

Victim Organizations

Scheme Type by Size of Victim Organization
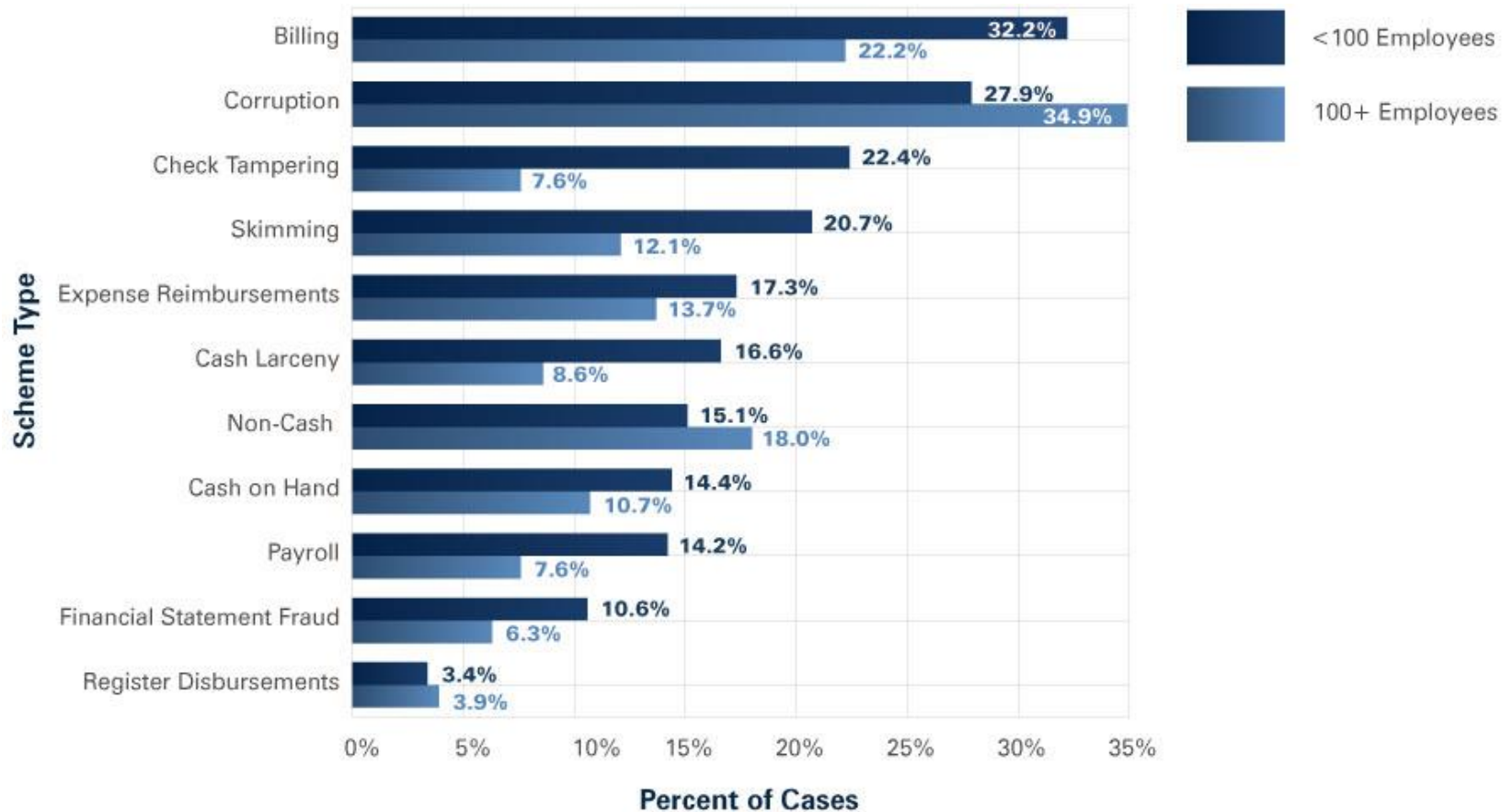
Victim Organizations

Industry of Victim Organizations

- For a better understanding of where fraud is occurring and at what frequency, we categorized the reported cases by industry.

- Banking and financial services, government and public administration, and manufacturing accounted for a combined 37% of the fraud cases reported to us.

Victim Organizations

- Overall, the distribution of cases remains fairly consistent throughout all types of industries across our studies.

- Readers should note, however, that this data likely reflects the industries in which CFEs tend to be retained, rather than the relative likelihood that fraud will occur in any given industry.

Victim Organizations

Industry of Victim Organizations
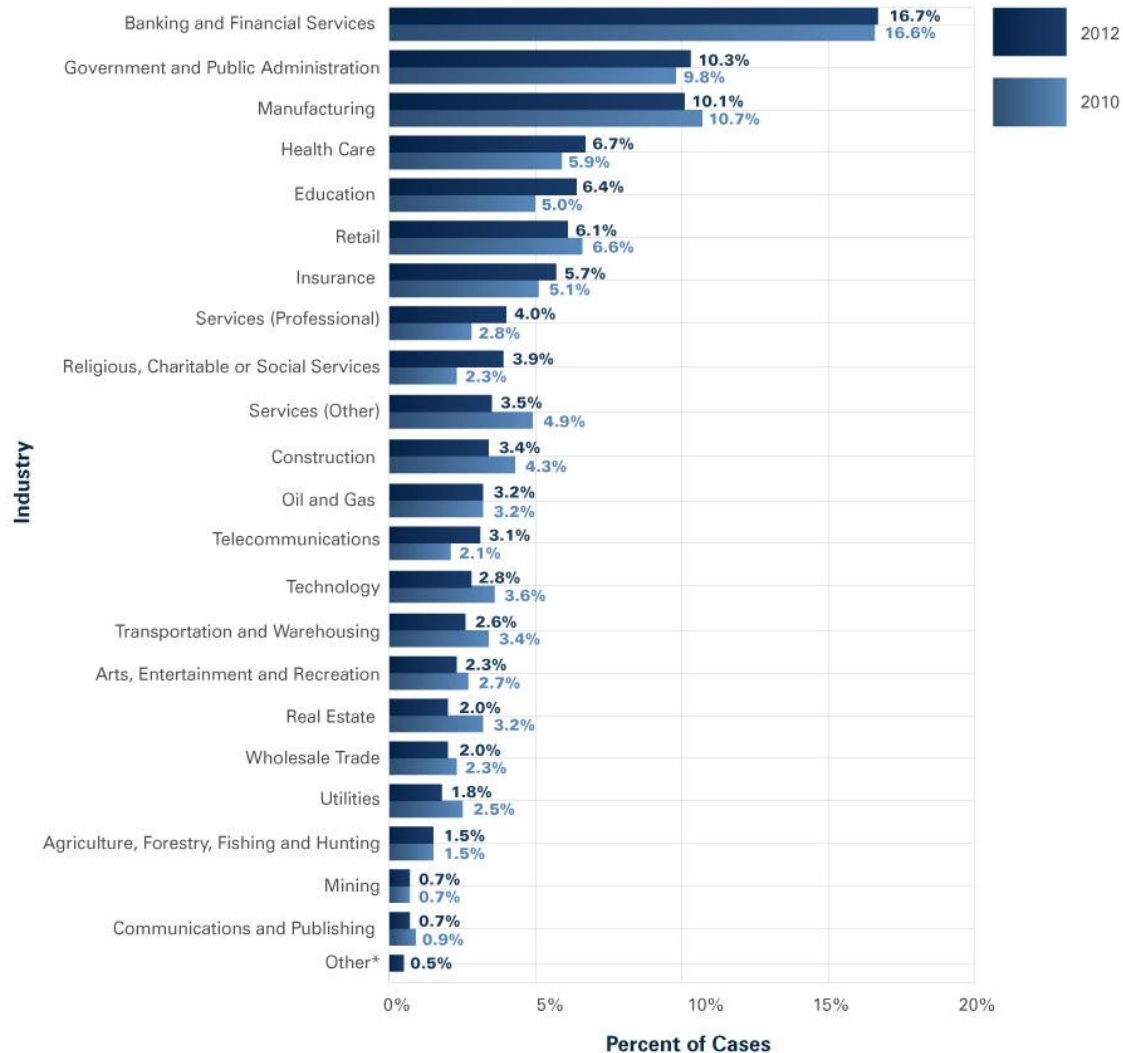
Victim Organizations

- The following chart sorts the industries of the victim organizations by median loss.

- Although the banking and financial services, government and public administration, and manufacturing sectors had the highest number of fraud cases, they were not as severely impacted by the reported frauds as other industries.

- For example, only nine cases reported to us involved the mining industry, but those cases resulted in the largest median loss. Similar findings were noted in the real estate, construction, and oil and gas industries.

Victim Organizations

Industry of Victim Organizations (Sorted by Median Loss)			
Industry	**Number of Cases**	**Percent of Cases**	**Median Loss**
Mining	9	0.7%	$500,000
Real Estate	28	2.0%	$375,000
Construction	47	3.4%	$300,000
Oil and Gas	44	3.2%	$250,000
Banking and Financial Services	229	16.7%	$232,000
Manufacturing	139	10.1%	$200,000
Health Care	92	6.7%	$200,000
Transportation and Warehousing	36	2.6%	$180,000
Services (Other)	48	3.5%	$150,000
Communications and Publishing	9	0.7%	$150,000
Other	7	0.5%	$150,000
Telecommunications	43	3.1%	$135,000
Services (Professional)	55	4.0%	$115,000
Agriculture, Forestry, Fishing and Hunting	20	1.5%	$104,000
Government and Public Administration	141	10.3%	$100,000
Retail	83	6.1%	$100,000
Technology	38	2.8%	$100,000
Insurance	78	5.7%	$95,000
Religious, Charitable or Social Services	54	3.9%	$85,000
Arts, Entertainment and Recreation	32	2.3%	$71,000
Wholesale Trade	27	2.0%	$50,000
Utilities	24	1.8%	$38,000
Education	88	6.4%	$36,000

Victim Organizations

- For a more detailed examination of how fraud affects organizations in different industries, we also broke down the cases within each industry by type of scheme and respective frequency of occurrence.

- The following charts illustrate this analysis for those industries for which more than 40 cases were reported to us.

Victim Organizations

Banking and Financial Services 229 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Corruption	83	36.2%
Cash on Hand	48	21.0%
Cash Larceny	29	12.7%
Billing	29	12.7%
Non-Cash	24	10.5%
Financial Statement Fraud	22	9.6%
Skimming	21	9.2%
Check Tampering	21	9.2%
Expense Reimbursements	13	5.7%
Register Disbursements	9	3.9%
Payroll	3	1.3%

Government and Public Administration 141 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Corruption	50	35.5%
Billing	33	23.4%
Non-Cash	27	19.1%
Skimming	25	17.7%
Expense Reimbursements	19	13.5%
Payroll	18	12.8%
Check Tampering	15	10.6%
Cash on Hand	12	8.5%
Cash Larceny	10	7.1%
Financial Statement Fraud	9	6.4%
Register Disbursements	4	2.8%

Victim Organizations

Manufacturing 139 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Corruption	47	33.8%
Billing	44	31.7%
Non-Cash	39	28.1%
Expense Reimbursements	25	18.0%
Check Tampering	16	11.5%
Payroll	16	11.5%
Financial Statement Fraud	16	11.5%
Cash on Hand	14	10.1%
Skimming	11	7.9%
Cash Larceny	9	6.5%
Register Disbursements	5	3.6%

Health Care 92 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Billing	33	35.9%
Corruption	28	30.4%
Expense Reimbursements	19	20.7%
Skimming	18	19.6%
Check Tampering	17	18.5%
Non-Cash	17	18.5%
Cash Larceny	16	17.4%
Payroll	14	15.2%
Cash on Hand	14	15.2%
Financial Statement Fraud	9	9.8%
Register Disbursements	6	6.5%

Victim Organizations

Education 88 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Billing	28	31.8%
Expense Reimbursements	23	26.1%
Corruption	21	23.9%
Skimming	19	21.6%
Payroll	13	14.8%
Check Tampering	11	12.5%
Cash on Hand	11	12.5%
Cash Larceny	8	9.1%
Non-Cash	7	8.0%
Register Disbursements	5	5.7%
Financial Statement Fraud	4	4.5%

Retail 83 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Non-Cash	23	27.7%
Corruption	19	22.9%
Skimming	15	18.1%
Cash Larceny	15	18.1%
Cash on Hand	14	16.9%
Billing	11	13.3%
Register Disbursements	11	13.3%
Payroll	7	8.4%
Expense Reimbursements	7	8.4%
Check Tampering	5	6.0%
Financial Statement Fraud	4	4.8%

Victim Organizations

Insurance 78 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Billing	24	30.8%
Corruption	21	26.9%
Check Tampering	13	16.7%
Skimming	12	15.4%
Expense Reimbursements	7	9.0%
Non-Cash	6	7.7%
Cash Larceny	5	6.4%
Payroll	3	3.8%
Cash on Hand	3	3.8%
Financial Statement Fraud	2	2.6%
Register Disbursements	0	0.0%

Services (Professional) 55 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Billing	15	27.3%
Corruption	15	27.3%
Check Tampering	10	18.2%
Expense Reimbursements	10	18.2%
Skimming	9	16.4%
Cash Larceny	9	16.4%
Payroll	9	16.4%
Non-Cash	6	10.9%
Cash on Hand	5	9.1%
Financial Statement Fraud	2	3.6%
Register Disbursements	0	0.0%

Victim Organizations

Religious, Charitable or Social Services 54 Cases		
Scheme	Number of Cases	Percent of Cases
Billing	28	51.9%
Check Tampering	18	33.3%
Expense Reimbursements	17	31.5%
Skimming	12	22.2%
Corruption	12	22.2%
Cash Larceny	11	20.4%
Payroll	8	14.8%
Cash on Hand	7	13.0%
Non-Cash	6	11.1%
Register Disbursements	3	5.6%
Financial Statement Fraud	3	5.6%

Services (Other) 48 Cases		
Scheme	Number of Cases	Percent of Cases
Corruption	16	33.3%
Skimming	13	27.1%
Expense Reimbursements	11	22.9%
Cash on Hand	10	20.8%
Billing	8	16.7%
Cash Larceny	7	14.6%
Non-Cash	7	14.6%
Financial Statement Fraud	6	12.5%
Check Tampering	4	8.3%
Payroll	4	8.3%
Register Disbursements	2	4.2%

Victim Organizations

Construction 47 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Billing	17	36.2%
Corruption	16	34.0%
Check Tampering	10	21.3%
Non-Cash	10	21.3%
Payroll	9	19.1%
Cash Larceny	8	17.0%
Expense Reimbursements	6	12.8%
Skimming	5	10.6%
Cash on Hand	5	10.6%
Financial Statement Fraud	4	8.5%
Register Disbursements	0	0.0%

Oil and Gas 44 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Corruption	22	50.0%
Non-Cash	10	22.7%
Billing	9	20.5%
Check Tampering	5	11.4%
Skimming	4	9.1%
Financial Statement Fraud	4	9.1%
Cash Larceny	3	6.8%
Expense Reimbursements	3	6.8%
Payroll	2	4.5%
Register Disbursements	1	2.3%
Cash on Hand	1	2.3%

Victim Organizations

Telecommunications 43 Cases		
Scheme	Number of Cases	Percent of Cases
Non-Cash	14	32.6%
Corruption	13	30.2%
Billing	11	25.6%
Expense Reimbursements	5	11.6%
Skimming	3	7.0%
Cash Larceny	3	7.0%
Payroll	2	4.7%
Cash on Hand	2	4.7%
Financial Statement Fraud	2	4.7%
Register Disbursements	1	2.3%
Check Tampering	0	0.0%

Victim Organizations

Corruption Cases by Industry

- Certain industries are often considered to be particularly susceptible to bribery and other forms of corruption. Consequently, we found it informative to provide an industry-to-industry comparison of the rates at which corruption occurred in the cases reported to us.

Victim Organizations

- Of the cases affecting organizations in the mining, utilities, and oil and gas industries, 50% or more involved some form of corruption. The mining sector had a particularly high occurrence of these schemes, with seven of the nine reported cases involving corruption.

- Although the limited number of cases reported to us in certain industries might impact the reliability of our data, the findings in Transparency International's 2011 *Bribe Payers Index* lend additional credence to our findings; four of the top five industries in our study — oil and gas, utilities, real estate and mining — also fell in the top five industries perceived as most likely to pay bribes in that report.[7]

Victim Organizations

Corruption Cases by Industry			
Industry	**Total Number of Cases**	**Number of Corruption Cases**	**Percent of Cases Involving Corruption**
Mining	9	7	77.8%
Utilities	24	14	58.3%
Oil and Gas	44	22	50.0%
Technology	38	18	47.4%
Real Estate	28	12	42.9%
Agriculture, Forestry, Fishing and Hunting	20	8	40.0%
Wholesale Trade	27	10	37.0%
Banking and Financial Services	229	83	36.2%
Transportation and Warehousing	36	13	36.1%
Government and Public Administration	141	50	35.5%
Construction	47	16	34.0%
Manufacturing	139	47	33.8%
Services (Other)	48	16	33.3%
Health Care	92	28	30.4%
Telecommunications	43	13	30.2%
Services (Professional)	55	15	27.3%
Insurance	78	21	26.9%
Arts, Entertainment and Recreation	32	8	25.0%
Education	88	21	23.9%
Retail	83	19	22.9%
Religious, Charitable or Social Services	54	12	22.2%
Communications and Publishing	9	1	11.1%

Victim Organizations

Anti-Fraud Controls at Victim Organizations

- As part of our research, we examined the frequency and impact of common internal controls enacted by organizations to prevent and detect fraud. We asked each survey participant which of 16 common anti-fraud controls were in place at the victim organization at the time the fraud was perpetrated.

Victim Organizations

- As reflected in the chart on slide 118, external audits of the financial statements were the most commonly utilized control analyzed, employed by more than 80% of victim organizations in both our current and 2010 studies.

- Additionally, more than two-thirds of the victims had independent audits of their internal controls over financial reporting.

Victim Organizations

- Many organizations are required by regulators or lenders to undergo one or both of these forms of audits, which likely contributes to the high occurrence of these controls; nonetheless, it is interesting to contrast this frequency with our previously discussed findings that only 3% of the frauds reported to us were detected by an external audit (see slide 50).

Victim Organizations

- Other common controls include a formal code of conduct (78% of victim organizations), management certification of the financial statements (69% of victim organizations) and a dedicated internal audit or fraud examination department (68% of victim organizations). These controls were also among the most frequently reported in our 2010 study.
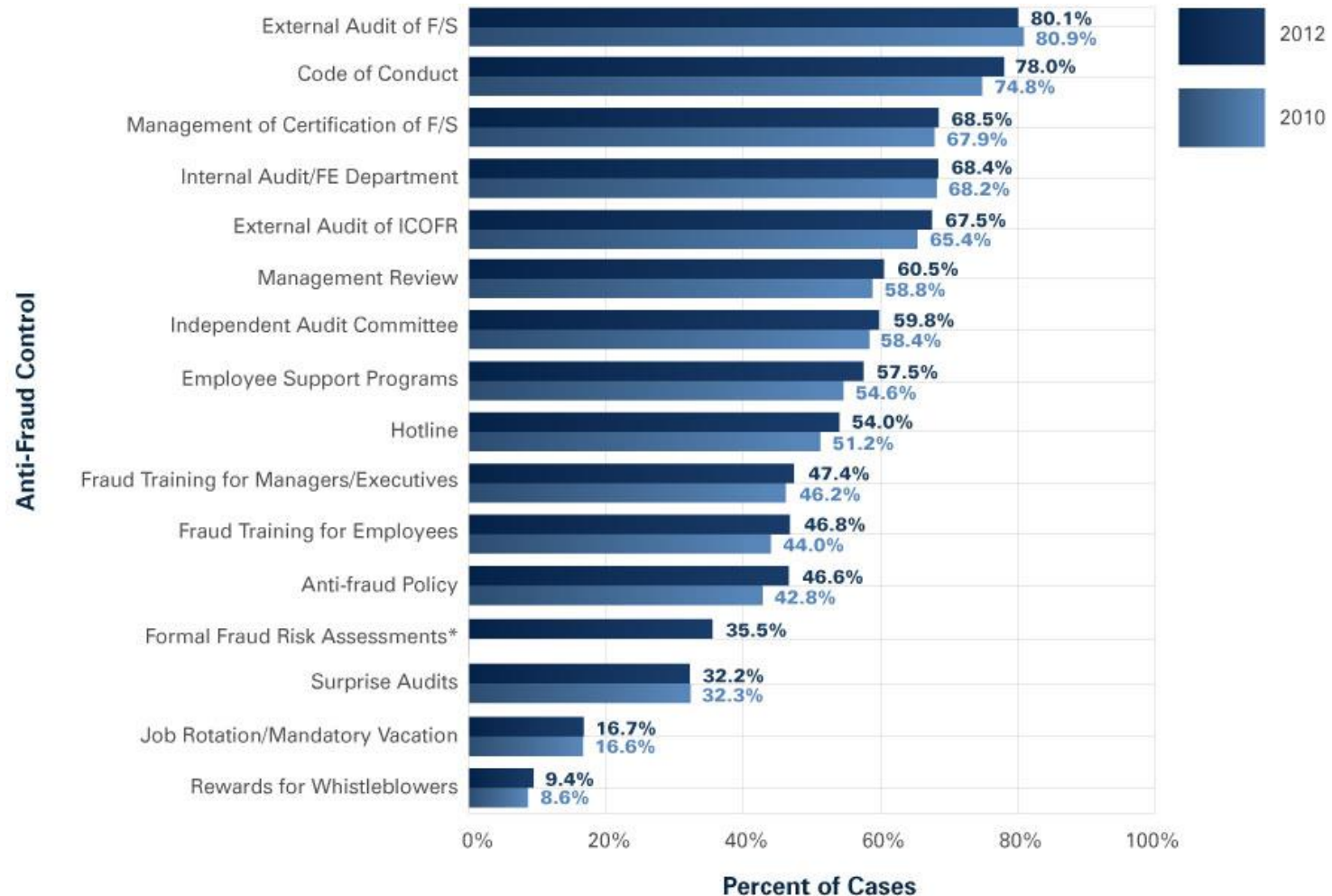
Victim Organizations

- Although tips are consistently the most common fraud-detection method (see slide 50), nearly half of the victim organizations analyzed did not have a hotline mechanism in place at the time of the fraud.

- Our data also indicates that organizations with hotlines had a larger percentage of frauds reported by tip than in organizations without hotlines (see slide 60).

Victim Organizations

- Further, fewer than 10% of the victim organizations in our study offered rewards to whistleblowers who provide tips.

- These low rates indicate that many organizations might not yet realize the importance of proactive efforts to support and encourage tips in order to effectively detect fraud.

Victim Organizations

Frequency of Anti-Fraud Controls[8]

Anti-Fraud Control	2012	2010
External Audit of F/S	80.1%	80.9%
Code of Conduct	78.0%	74.8%
Management of Certification of F/S	68.5%	67.9%
Internal Audit/FE Department	68.4%	68.2%
External Audit of ICOFR	67.5%	65.4%
Management Review	60.5%	58.8%
Independent Audit Committee	59.8%	58.4%
Employee Support Programs	57.5%	54.6%
Hotline	54.0%	51.2%
Fraud Training for Managers/Executives	47.4%	46.2%
Fraud Training for Employees	46.8%	44.0%
Anti-fraud Policy	46.6%	42.8%
Formal Fraud Risk Assessments*	35.5%	
Surprise Audits	32.2%	32.3%
Job Rotation/Mandatory Vacation	16.7%	16.6%
Rewards for Whistleblowers	9.4%	8.6%

Percent of Cases

Victim Organizations

Anti-Fraud Controls at Small Businesses

- Due to their limited resources, small businesses can be especially devastated by a loss of funds to fraud. Unfortunately, however, resource restrictions in most small organizations often mean less investment in anti-fraud controls, which makes those organizations more susceptible to fraud.
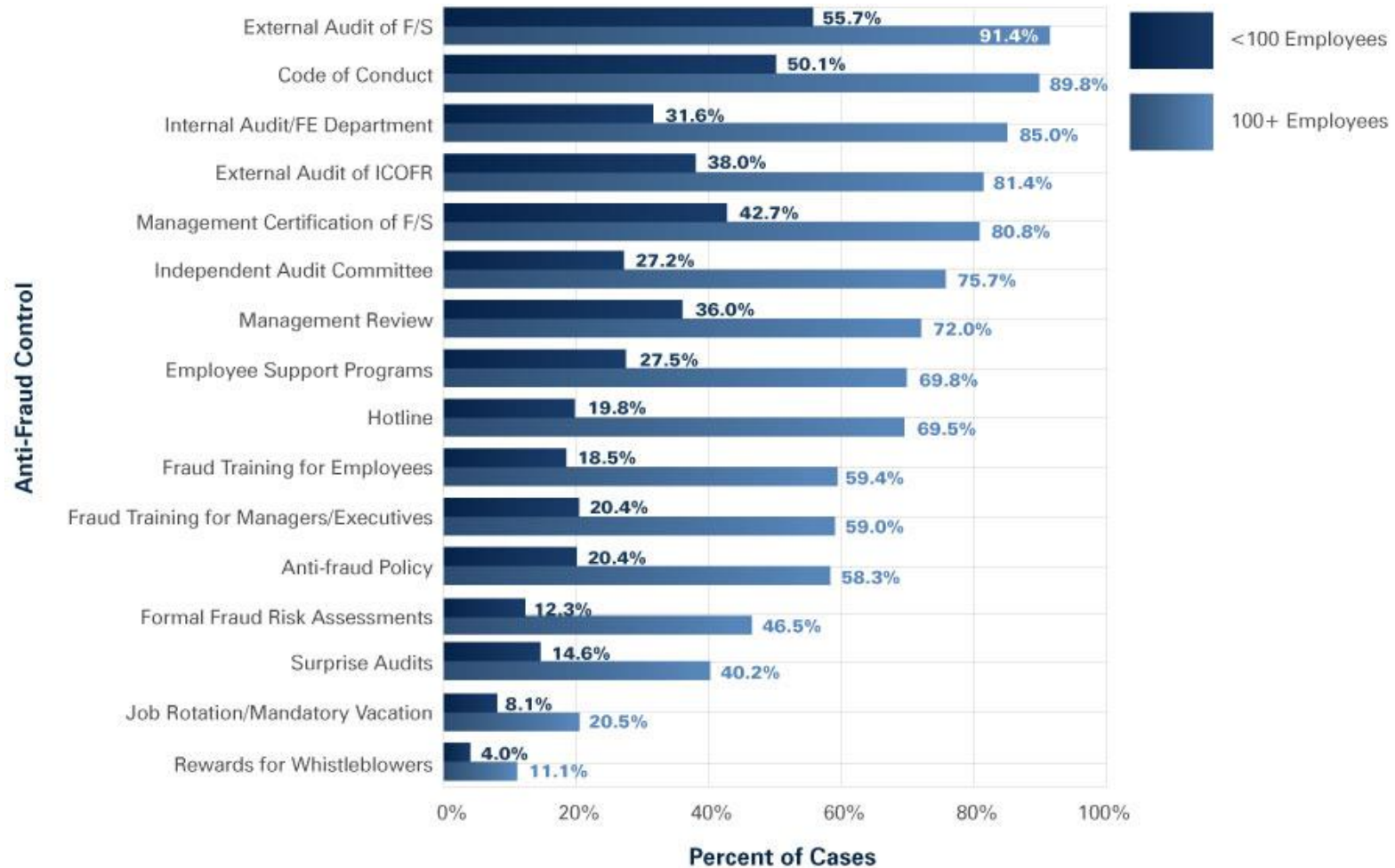
Victim Organizations

- To help illustrate this problem, we broke down the frequency of anti-fraud controls between small companies — those with fewer than 100 employees — and their larger counterparts. As shown in the next chart, there is a dramatic disparity in the implementation of controls between these two groups.

Victim Organizations

- Admittedly, several of the controls analyzed, such as a dedicated internal audit or fraud examination department, do require a significant amount of resources that likely would not provide an appropriate cost/benefit balance for small companies.

- However, other anti-fraud measures — such as a code of conduct, anti-fraud training programs and formal management review of controls and processes — can be implemented at a marginal cost in many small organizations and can greatly increase the ability to prevent and detect fraud.

Victim Organizations

Frequency of Anti-Fraud Controls by Size of Victim Organization

Bar chart comparing anti-fraud controls between <100 Employees and 100+ Employees:

Anti-Fraud Control	<100 Employees	100+ Employees
External Audit of F/S	55.7%	91.4%
Code of Conduct	50.1%	89.8%
Internal Audit/FE Department	31.6%	85.0%
External Audit of ICOFR	38.0%	81.4%
Management Certification of F/S	42.7%	80.8%
Independent Audit Committee	27.2%	75.7%
Management Review	36.0%	72.0%
Employee Support Programs	27.5%	69.8%
Hotline	19.8%	69.5%
Fraud Training for Employees	18.5%	59.4%
Fraud Training for Managers/Executives	20.4%	59.0%
Anti-fraud Policy	20.4%	58.3%
Formal Fraud Risk Assessments	12.3%	46.5%
Surprise Audits	14.6%	40.2%
Job Rotation/Mandatory Vacation	8.1%	20.5%
Rewards for Whistleblowers	4.0%	11.1%

Percent of Cases

Victim Organizations

Anti-Fraud Controls by Region

- We analyzed the frequency with which each of the 16 anti-fraud controls was implemented based on geographical region of the victim organization. Several interesting regional variations in fraud prevention and detection approaches are seen in the following charts.

- One notable trend is that, for several controls, the implementation rate among organizations in regions containing developing countries was markedly greater than the rate in regions primarily made up of developed nations.

Victim Organizations

- For example, the implementation rates of independent audits, surprise audits, anti-fraud policies and rewards for whistleblowers were all greater in Africa than in other regions, and job rotation and mandatory vacation policies were most common among the victim organizations in Latin America and the Caribbean.

- This trend is similar to what we noted in our 2010 Report and indicates that numerous organizations in developing regions, many of whom are facing an uphill battle against corrupt practices, are taking proactive and targeted steps to detect and deter fraud.

Victim Organizations

United States		
Control	**Number of Cases**	**Percent of Cases**
Code of Conduct	527	75.4%
External Audit of F/S	515	72.6%
Internal Audit/FE Deptartment	473	62.6%
External Audit of ICOFR	449	64.1%
Employee Support Programs	427	67.1%
Hotline	403	54.4%
Management Certification of F/S	397	61.7%
Management Review	394	57.2%
Independent Audit Committee	373	53.7%
Fraud Training for Managers/Executives	337	49.7%
Fraud Training for Employees	328	48.4%
Anti-Fraud Policy	323	46.7%
Formal Fraud Risk Assessments	241	35.2%
Surprise Audits	190	27.1%
Job Rotation/Mandatory Vacation	93	13.6%
Rewards for Whistleblowers	56	8.6%

Asia		
Control	**Number of Cases**	**Percent of Cases**
External Audit of F/S	173	91.5%
Internal Audit/FE Deptartment	164	81.6%
Code of Conduct	156	83.4%
Management Certification of F/S	144	81.8%
Independent Audit Committee	143	75.7%
External Audit of ICOFR	134	74.0%
Management Review	120	66.3%
Hotline	112	58.0%
Fraud Training for Managers/Executives	95	51.4%
Anti-Fraud Policy	88	48.9%
Fraud Training for Employees	85	46.7%
Surprise Audits	80	44.2%
Formal Fraud Risk Assessments	73	39.9%
Employee Support Programs	60	35.5%
Job Rotation/Mandatory Vacation	45	25.3%
Rewards for Whistleblowers	22	12.1%

Victim Organizations

Europe		
Control	**Number of Cases**	**Percent of Cases**
External Audit of F/S	114	87.7%
Code of Conduct	98	77.2%
Internal Audit/FE Deptartment	96	73.3%
External Audit of ICOFR	88	72.7%
Management Review	80	65.6%
Independent Audit Committee	78	61.9%
Management Certification of F/S	76	69.7%
Hotline	60	46.2%
Fraud Training for Employees	54	44.6%
Fraud Training for Managers/Executives	53	42.7%
Anti-Fraud Policy	51	41.1%
Formal Fraud Risk Assessments	48	37.5%
Employee Support Programs	47	41.2%
Surprise Audits	46	35.7%
Job Rotation/Mandatory Vacation	21	17.6%
Rewards for Whistleblowers	6	4.9%

Africa		
Control	**Number of Cases**	**Percent of Cases**
External Audit of F/S	96	94.1%
Internal Audit/FE Deptartment	87	78.4%
Code of Conduct	84	80.8%
Management Certification of F/S	82	83.7%
External Audit of ICOFR	74	75.5%
Hotline	62	57.4%
Management Review	61	61.0%
Independent Audit Committee	60	59.4%
Anti-Fraud Policy	55	51.9%
Surprise Audits	49	49.0%
Fraud Training for Employees	46	43.8%
Employee Support Programs	41	43.6%
Formal Fraud Risk Assessments	39	37.9%
Fraud Training for Managers/Executives	33	32.0%
Job Rotation/Mandatory Vacation	21	21.0%
Rewards for Whistleblowers	19	19.8%

Victim Organizations

Canada		
Control	**Number of Cases**	**Percent of Cases**
External Audit of F/S	43	84.3%
Code of Conduct	41	82.0%
Employee Support Programs	38	77.6%
Internal Audit/FE Deptartment	37	66.1%
External Audit of ICOFR	36	73.5%
Management Review	34	65.4%
Independent Audit Committee	31	60.8%
Management Certification of F/S	28	65.1%
Fraud Training for Employees	27	50.9%
Hotline	26	47.3%
Fraud Training for Managers/Executives	24	48.0%
Anti-Fraud Policy	23	44.2%
Formal Fraud Risk Assessments	16	30.2%
Surprise Audits	14	29.2%
Job Rotation/Mandatory Vacation	4	8.3%
Rewards for Whistleblowers	2	4.0%

Latin America and the Caribbean		
Control	**Number of Cases**	**Percent of Cases**
External Audit of F/S	29	80.6%
Internal Audit/FE Deptartment	28	73.7%
Code of Conduct	28	87.5%
Management Review	24	75.0%
External Audit of ICOFR	23	65.7%
Hotline	22	61.1%
Independent Audit Committee	21	67.7%
Management Certification of F/S	20	60.6%
Fraud Training for Managers/Executives	18	54.5%
Anti-Fraud Policy	15	42.9%
Fraud Training for Employees	14	42.4%
Employee Support Programs	14	48.3%
Job Rotation/Mandatory Vacation	12	33.3%
Surprise Audits	8	23.5%
Formal Fraud Risk Assessments	7	19.4%
Rewards for Whistleblowers	3	9.4%

Victim Organizations

Oceania		
Control	**Number of Cases**	**Percent of Cases**
External Audit of F/S	29	87.9%
Management Certificaiton of F/S	26	81.3%
Code of Conduct	26	76.5%
Independent Audit Committee	24	75.0%
Internal Audit/FE Deptartment	22	62.9%
Management Review	20	64.5%
Employee Support Programs	17	58.6%
External Audit of ICOFR	16	53.3%
Hotline	15	48.4%
Anti-Fraud Policy	12	37.5%
Formal Fraud Risk Assessments	8	25.0%
Fraud Training for Employees	8	25.8%
Fraud Training for Managers/Executives	8	25.0%
Surprise Audits	7	23.3%
Job Rotation/Mandatory Vacation	3	9.4%
Rewards for Whistleblowers	0	0.0%

Victim Organizations

Effectiveness of Controls

- As in previous years, we compared the median loss suffered by those organizations that had each anti-fraud control in place with the median loss in organizations lacking the control.

- While all controls were associated with a reduced median loss, the presence of formal management reviews, employee support programs and hotlines were correlated with the greatest decreases in financial losses.

Victim Organizations

- Organizations lacking these controls experienced median fraud losses approximately 45% larger than organizations with the controls in place.

- On the other end of the spectrum, external audits of financial statements — the most commonly implemented control among the victim organizations in our study — showed the least impact on the median loss suffered, with an associated reduction of less than 3%.

Victim Organizations

Median Loss Based on Presence of Anti-Fraud Controls

Control	Percent of Cases Implemented	Control in Place	Control Not in Place	Percent Reduction
Management Review	60.5%	$100,000	$185,000	45.9%
Employee Support Programs	57.5%	$100,000	$180,000	44.4%
Hotline	54.0%	$100,000	$180,000	44.4%
Fraud Training for Managers/Executives	47.4%	$100,000	$158,000	36.7%
External Audit of ICOFR	67.5%	$120,000	$187,000	35.8%
Fraud Training for Employees	46.8%	$100,000	$155,000	35.5%
Anti-Fraud Policy	46.6%	$100,000	$150,000	33.3%
Formal Fraud Risk Assessments	35.5%	$100,000	$150,000	33.3%
Internal Audit/FE Department	68.4%	$120,000	$180,000	33.3%
Job Rotation/Mandatory Vacation	16.7%	$100,000	$150,000	33.3%
Surprise Audits	32.2%	$100,000	$150,000	33.3%
Rewards for Whistleblowers	9.4%	$100,000	$145,000	31.0%
Code of Conduct	78.0%	$120,000	$164,000	26.8%
Independent Audit Committee	59.8%	$125,000	$150,000	16.7%
Management Certification of F/S	68.5%	$138,000	$164,000	15.9%
External Audit of F/S	80.1%	$140,000	$145,000	3.4%

Victim Organizations

- We also analyzed the relationship between the presence of each control and the length of the fraud scheme. The controls with the greatest associated reduction in fraud duration are those often credited with increasing the perpetrator's perception of detection.

- Specifically, organizations that utilized job rotation and mandatory vacation policies, rewards for whistleblowers and surprise audits detected their frauds more than twice as quickly as organizations lacking such controls. Similar to our findings regarding reductions in median losses, external audits of the financial statements were correlated with the smallest reduction in fraud duration of the anti-fraud mechanisms we examined.

Victim Organizations

Duration of Fraud Based on Presence of Anti-Fraud Controls				
Control	Percent of Cases Implemented	Control in Place	Control Not in Place	Percent Reduction
Job Rotation/Mandatory Vacation	16.7%	9 months	24 months	62.5%
Rewards for Whistleblowers	9.4%	9 months	22 months	59.1%
Surprise Audits	32.2%	10 months	24 months	58.3%
Code of Conduct	78.0%	14 months	30 months	53.3%
Anti-Fraud Policy	46.6%	12 months	24 months	50.0%
External Audit of ICOFR	67.5%	12 months	24 months	50.0%
Formal Fraud Risk Assessments	35.5%	12 months	24 months	50.0%
Fraud Training for Employees	46.8%	12 months	24 months	50.0%
Fraud Training for Managers/Execs	47.4%	12 months	24 months	50.0%
Hotline	54.0%	12 months	24 months	50.0%
Mgmt Certification of F/S	60.5%	12 months	24 months	50.0%
Independent Audit Committee	59.8%	13 months	24 months	45.8%
Internal Audit/FE Department	68.4%	13 months	24 months	45.8%
Management Review	68.5%	14 months	24 months	41.7%
Employee Support Programs	57.5%	16 months	21 months	23.8%
External Audit of F/S	80.1%	17 months	24 months	29.2%

Victim Organizations

- In addition, we asked survey participants whether the victim organization had any Certified Fraud Examiners (CFEs) on staff at the time of the fraud. Approximately 45% of organizations had at least one CFE as an employee; these organizations experienced frauds that were 44% less costly, based on median loss, and that lasted half as long as organizations that did not have any CFEs on staff during the fraud's occurrence.

Victim Organizations

Control Weaknesses That Contributed to Fraud

• Identifying the factors that provided the opportunity for a fraud to occur is an important part of preventing similar frauds from occurring again in the future. To this end, we asked survey participants which of several common issues they considered to be the primary control weakness within the victim organization that contributed to the fraud's occurrence.

Victim Organizations

- An outright lack of controls was the most frequently cited factor, noted as the primary weakness in more than 35% of cases. This number jumps to more than 45% for those cases that occurred in small businesses.

- In 19% of the cases, the perpetrator overrode existing controls to carry out his or her scheme; a similar number of respondents stated that a lack of management's review was the key control weakness that contributed to the fraud.

Victim Organizations

- Interestingly, a poor tone at the top contributed to 9% of all the fraud cases reported to us, but was cited as the primary factor in 18% of cases that resulted in a loss of $1 million or more.

- This reinforces the importance of a proper ethical tone from management in protecting an organization against the largest frauds — those cases that have the greatest potential to cripple the organization's finances and reputation.

Victim Organizations

Primary Internal Control Weakness Observed by CFEs
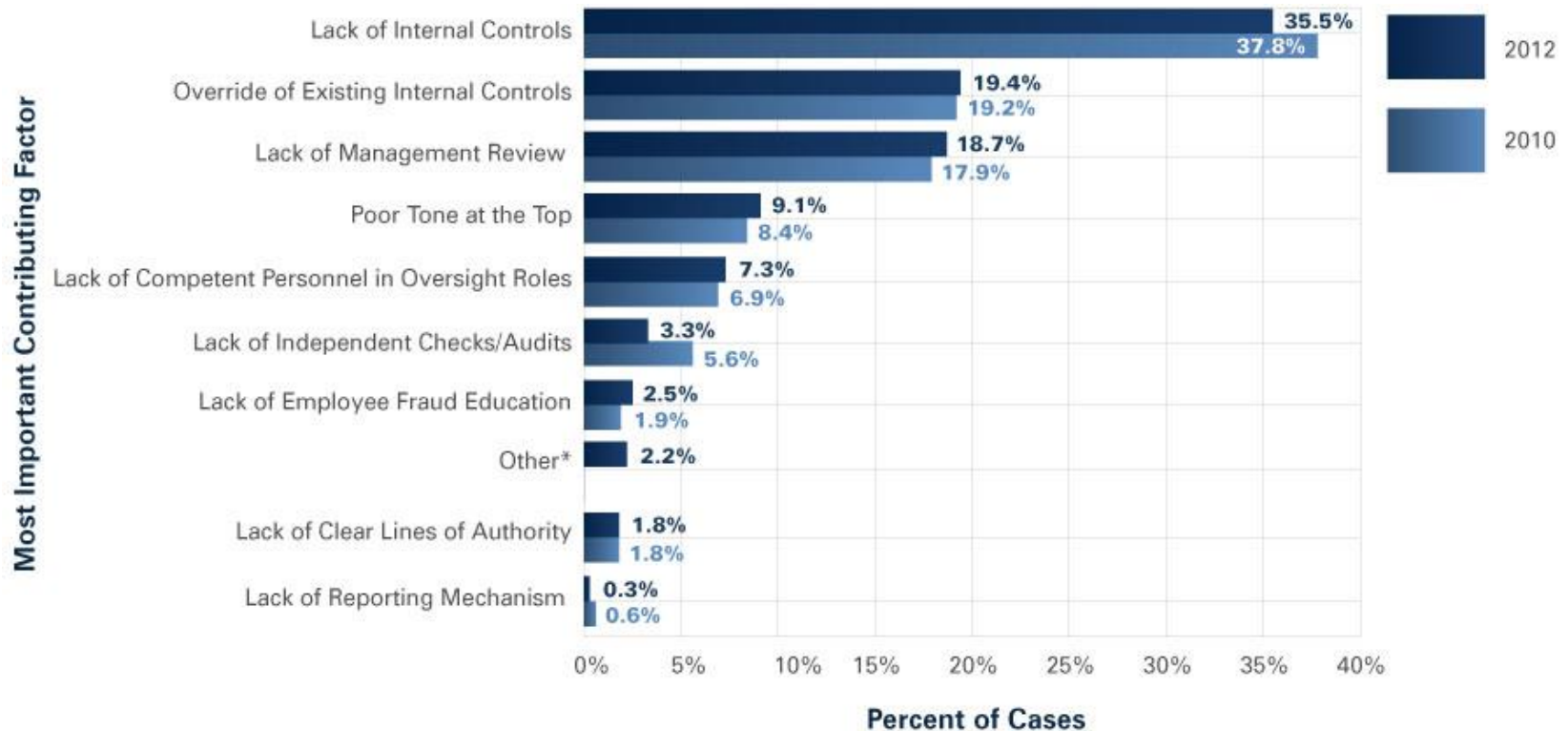
Perpetrators

More than three-quarters of the frauds in our study were committed by individuals in six departments: accounting, operations, sales, executive/upper management, customer service and purchasing.

Perpetrators

- Participants in our study were asked to supply several pieces of demographic information about the fraud perpetrators, including level of authority, age, gender, tenure with the victim, education level, department, criminal and employment history and behavioral red flags that were exhibited prior to detection of the frauds.[9]

- We use this information to identify common characteristics among fraud perpetrators, which can be helpful in assessing relative levels of risk within various areas of an organization and in highlighting traits and behaviors that might be consistent with fraudulent activities.

Perpetrators

- As noted earlier in this Report, one of the most interesting findings in our data is how consistent the results tend to be from year to year, which indicates that many findings regarding the perpetrators in our studies might reflect general trends among all occupational fraudsters.

Perpetrators

Perpetrator's Position

- The next chart shows the distribution of fraudsters based on three broad levels of authority — employee, manager and owner/executive. Approximately 42% of fraudsters were employees, 38% were managers and 18% were owner/executives.

- This distribution is very similar to the findings from our two previous Reports.

Perpetrators

Position of Perpetrator — Frequency
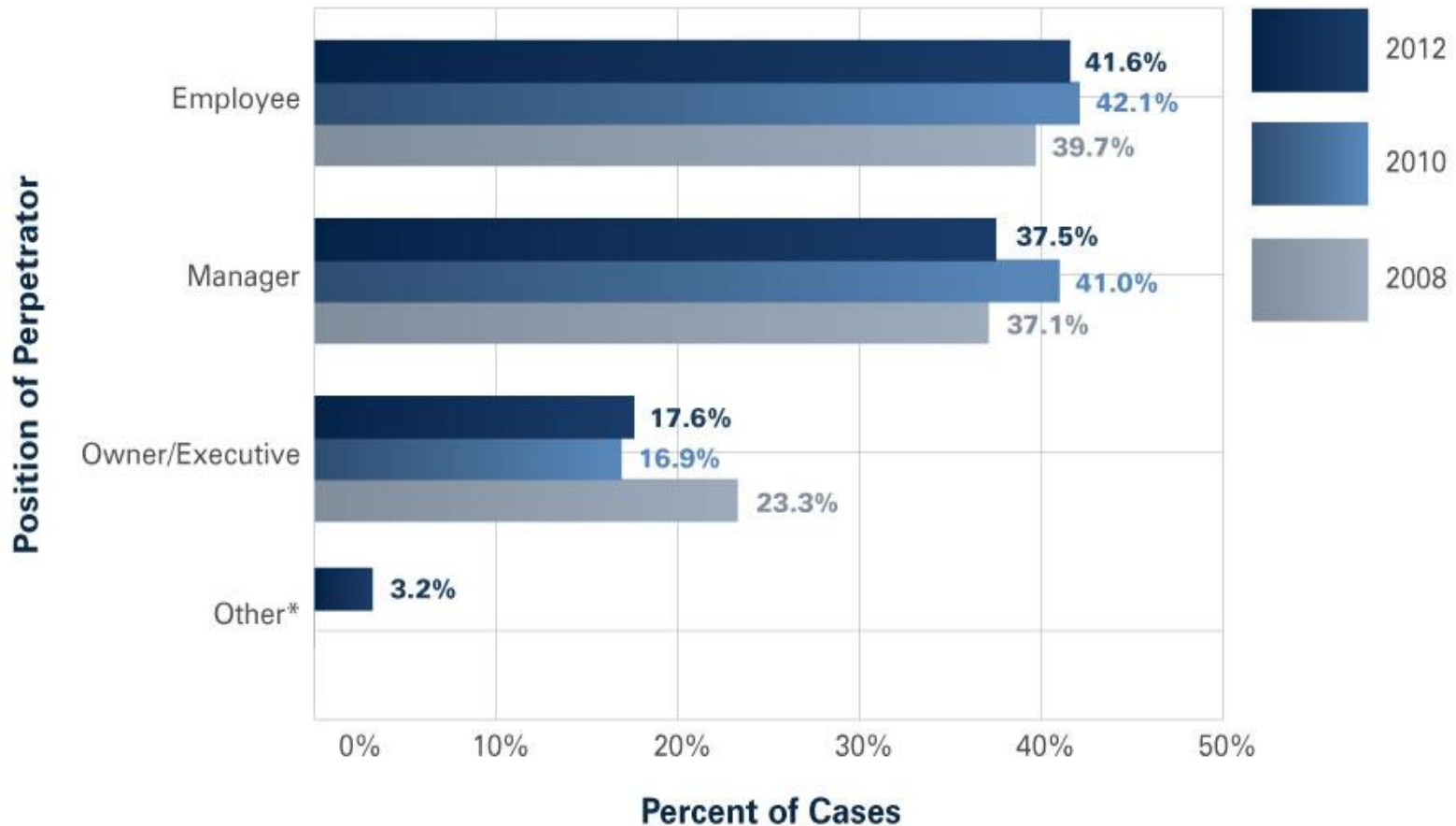
Perpetrators

- There is a strong correlation between the fraudster's level of authority and the losses resulting from the fraud. Owner/executives caused losses approximately three times higher than managers, and managers in turn caused losses approximately three times higher than employees.

- This result was expected given that higher levels of authority generally mean a perpetrator has greater access to an organization's assets and is better positioned to override anti-fraud controls.

Perpetrators

Position of Perpetrator — Median Loss

Perpetrators

- Frauds committed by managers and owner/executives generally lasted for two years before they were detected.

- This was twice as long as the median employee scheme, and it likely reflects the fact that perpetrators with higher levels of authority are typically in a better position to override controls or conceal their misconduct.

- It might also reflect reluctance on the part of employees and anti-fraud personnel to lodge complaints about or investigate those with higher levels of authority.

Perpetrators

Duration of Fraud Based on Position	
Position	**Median Months to Detect**
Employee	12
Manager	24
Owner/Executive	24
Other	10

Perpetrators

- The charts on the following pages illustrate the median loss and distribution of perpetrators based on position of authority for each region in our study.

- In all but one of the regions, between 77% and 86% of frauds were committed by employees and managers, yet owner/executive losses tended to be much larger.

- The one exception was Canada, where owner/executive losses were lower than those caused by managers. However, there was a very small sample of only eight owner/executive cases reported in Canada, which greatly impacts the reliability of that loss figure.

Perpetrators

- Interestingly, losses in the United States and Canada were lower than in every other region — particularly among owner/executives. We are not certain of the reason for this, but we found the same result in our 2010 study.

- This correlation could be the result of truly lower losses caused by U.S. and Canadian executives, or it might simply reflect that U.S. and Canadian CFEs tended to investigate less costly executive malfeasance than their counterparts in other regions.

Perpetrators

Position of Perpetrator in the United States — 753 Cases
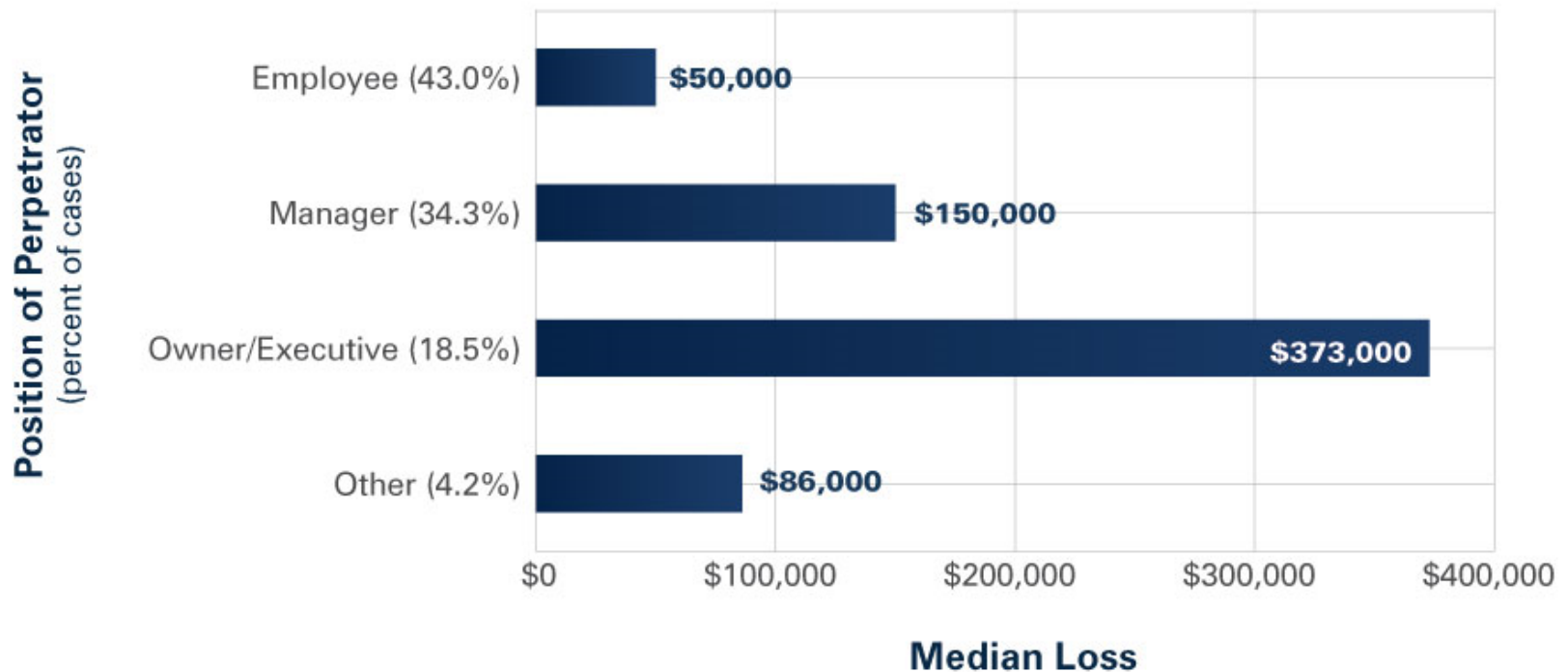
Perpetrators

Position of Perpetrator in Asia — 196 Cases
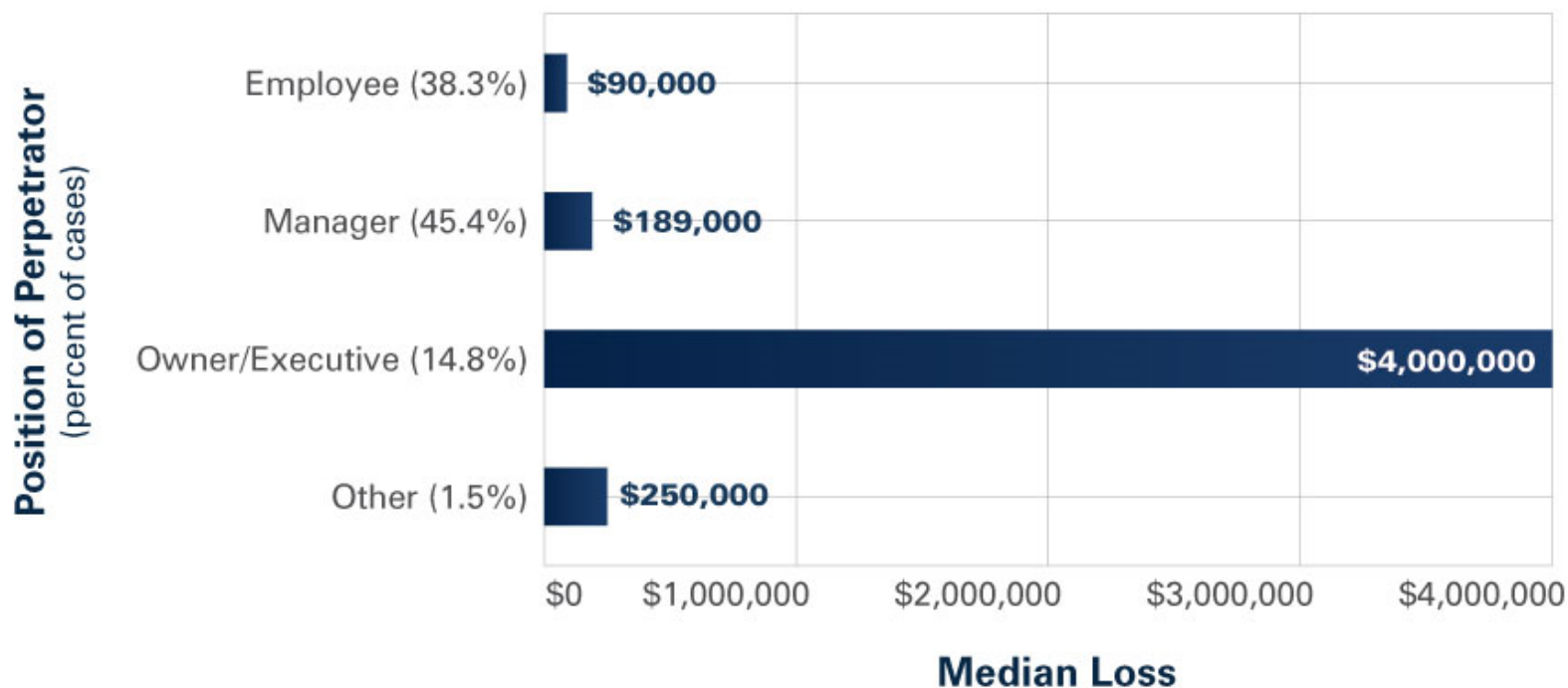
Perpetrators

Position of Perpetrator in Europe — 129 Cases

Perpetrators

Position of Perpetrator in Africa — 105 Cases
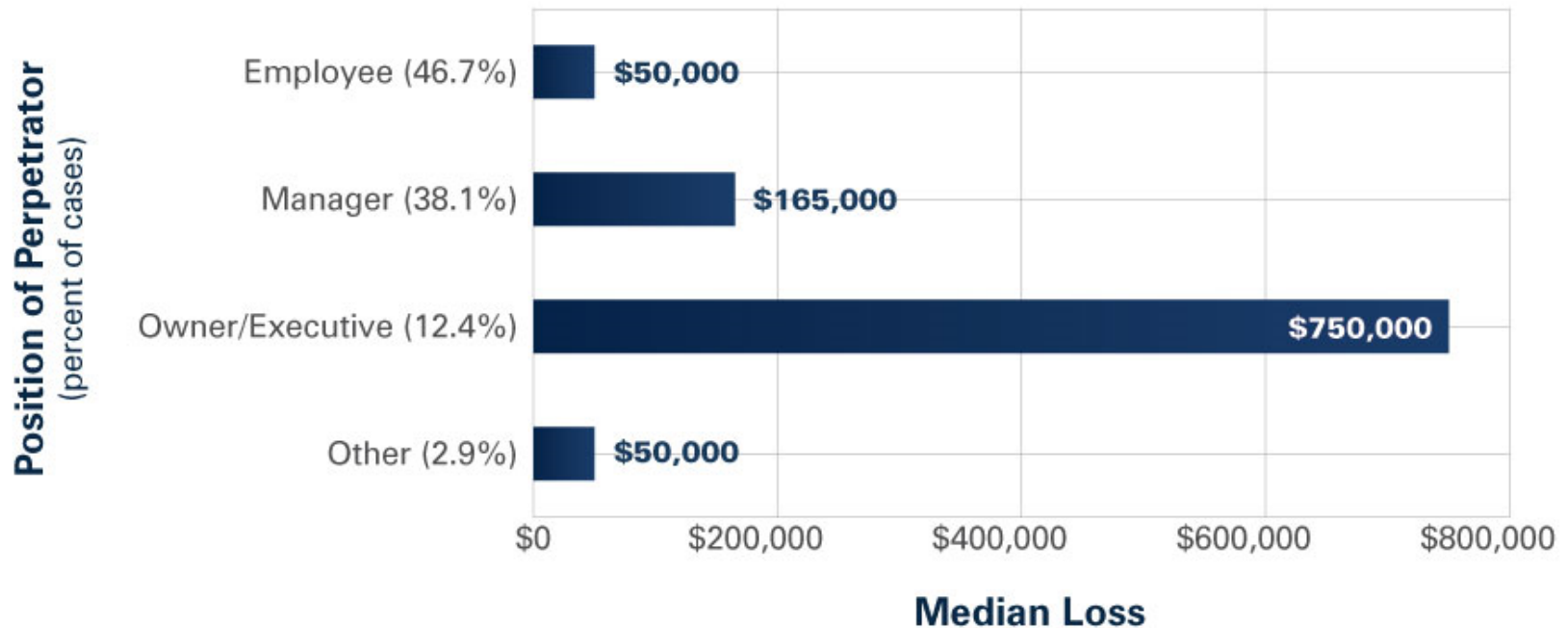
Perpetrators

Position of Perpetrator in Canada — 55 Cases
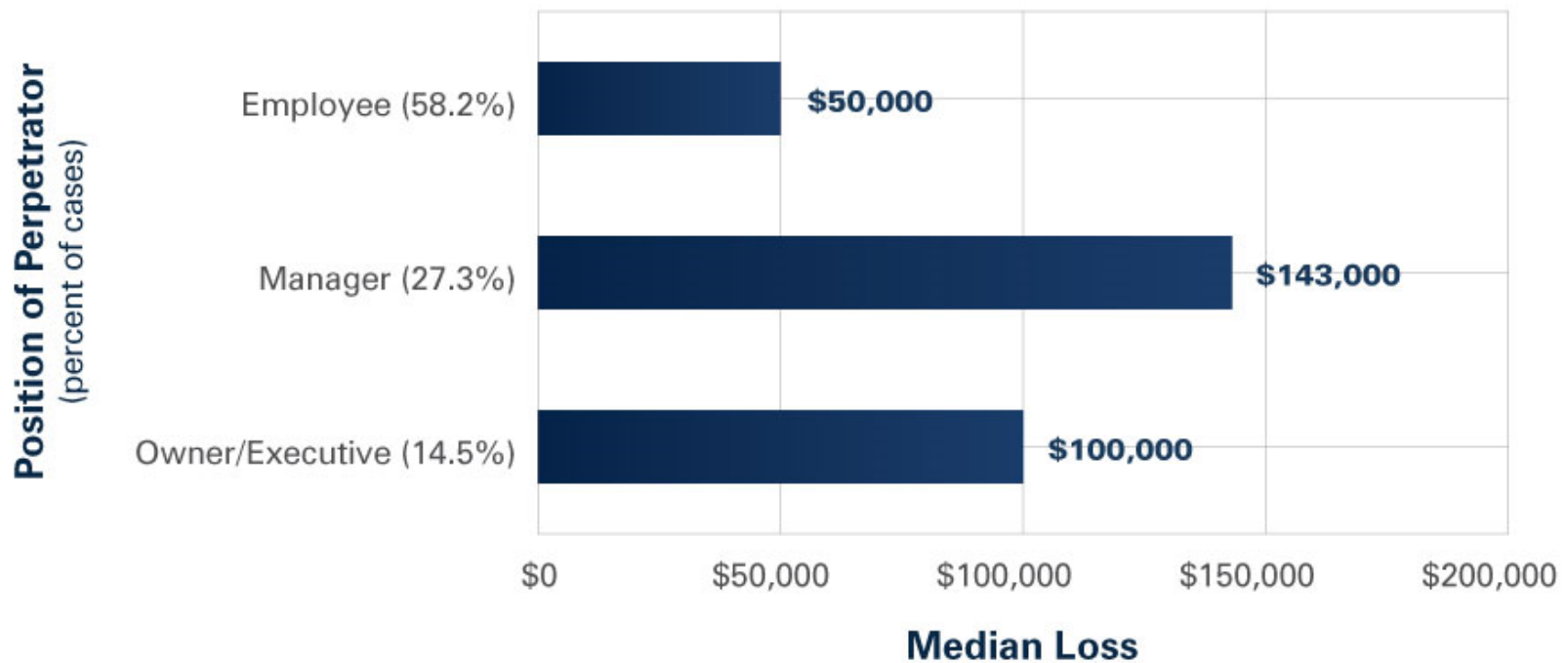
Perpetrators

Position of Perpetrator in Latin America and the Caribbean — 37 Cases
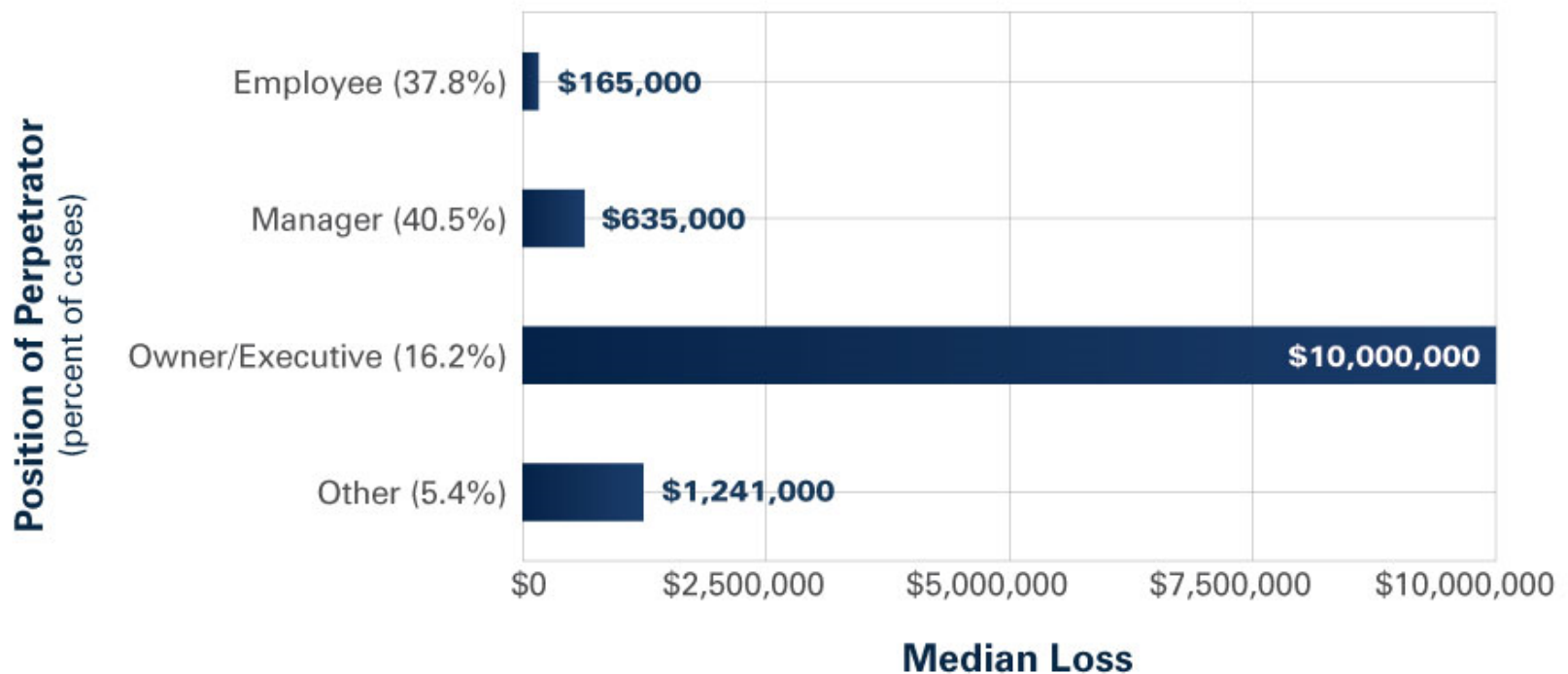
Perpetrators

Position of Perpetrator in Oceania — 35 Cases

Perpetrators

The Impact of Collusion

- When two or more individuals conspire to commit fraud against an organization, it can have an especially harmful effect, particularly when the combined efforts of the fraudsters enable them to circumvent or override anti-fraud controls.

- In our three most recent studies, the rate of collusion (defined as two or more perpetrators engaged in the fraud) has been fairly consistent; multiple perpetrators were reported in 36% to 42% of all cases.

Perpetrators

- Schemes involving collusion have also consistently resulted in much larger losses than those involving a single fraudster.

- As the chart on the following slide shows, the median loss in collusion schemes in our current study was $250,000, which was more than twice the loss resulting from single-perpetrator schemes.

- Interestingly, over the last three studies, losses in single-perpetrator schemes have remained notably constant, while losses in multiple-perpetrator schemes have dropped significantly, from $500,000 in our 2008 study to $250,000 in this Report.

Perpetrators

Number of Perpetrators — Frequency
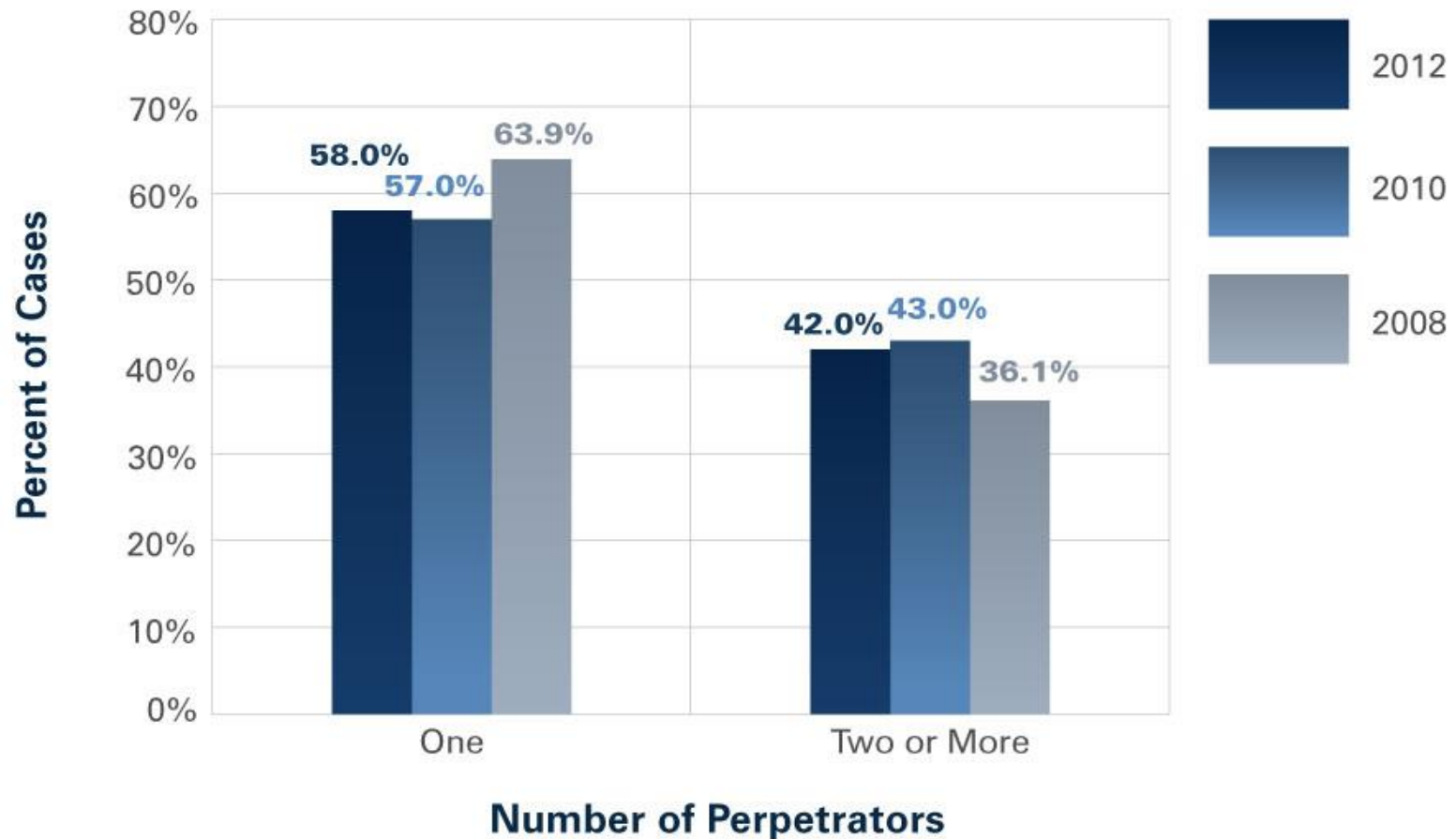
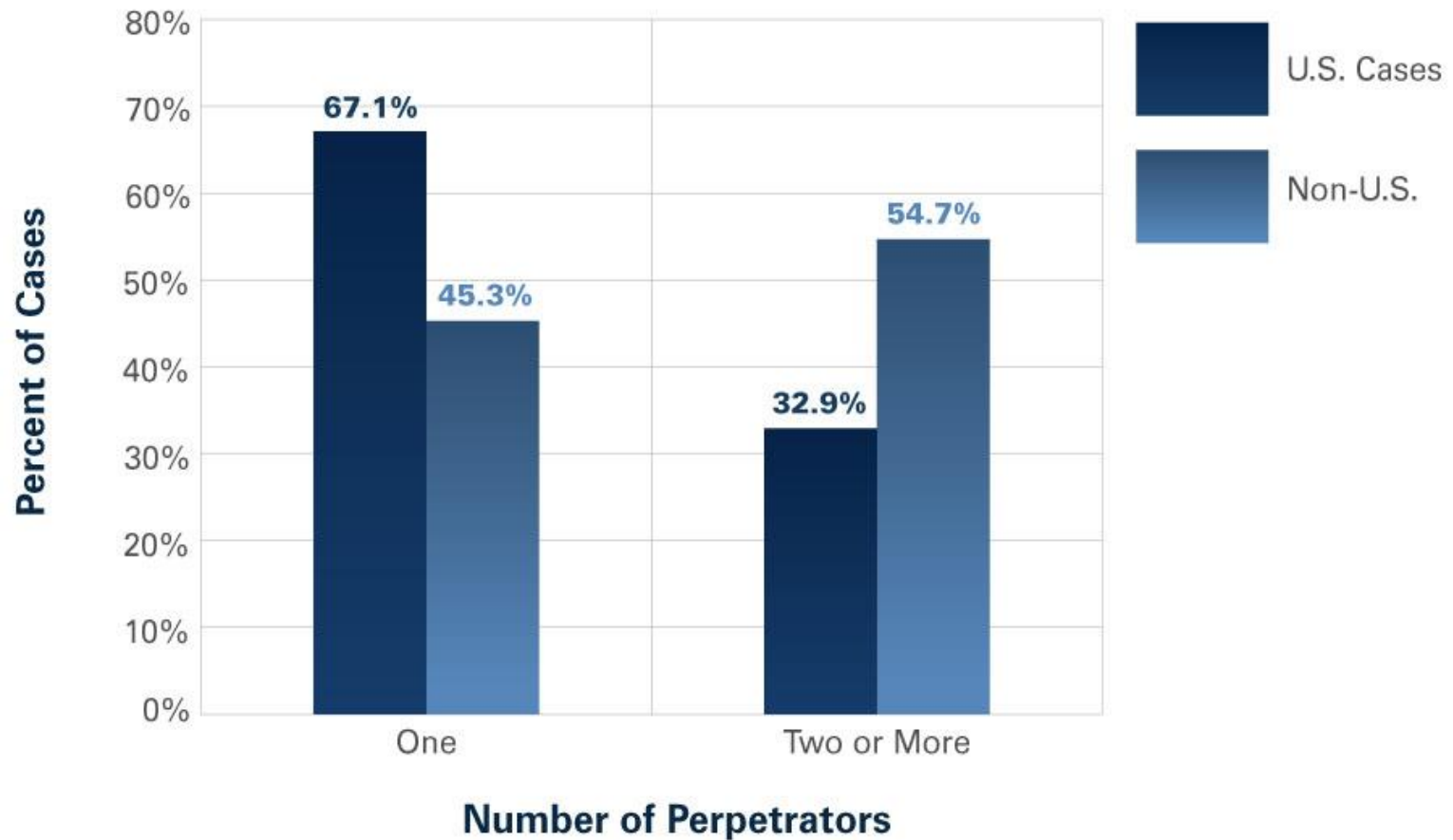# Perpetrators

Number of Perpetrators — Median Loss
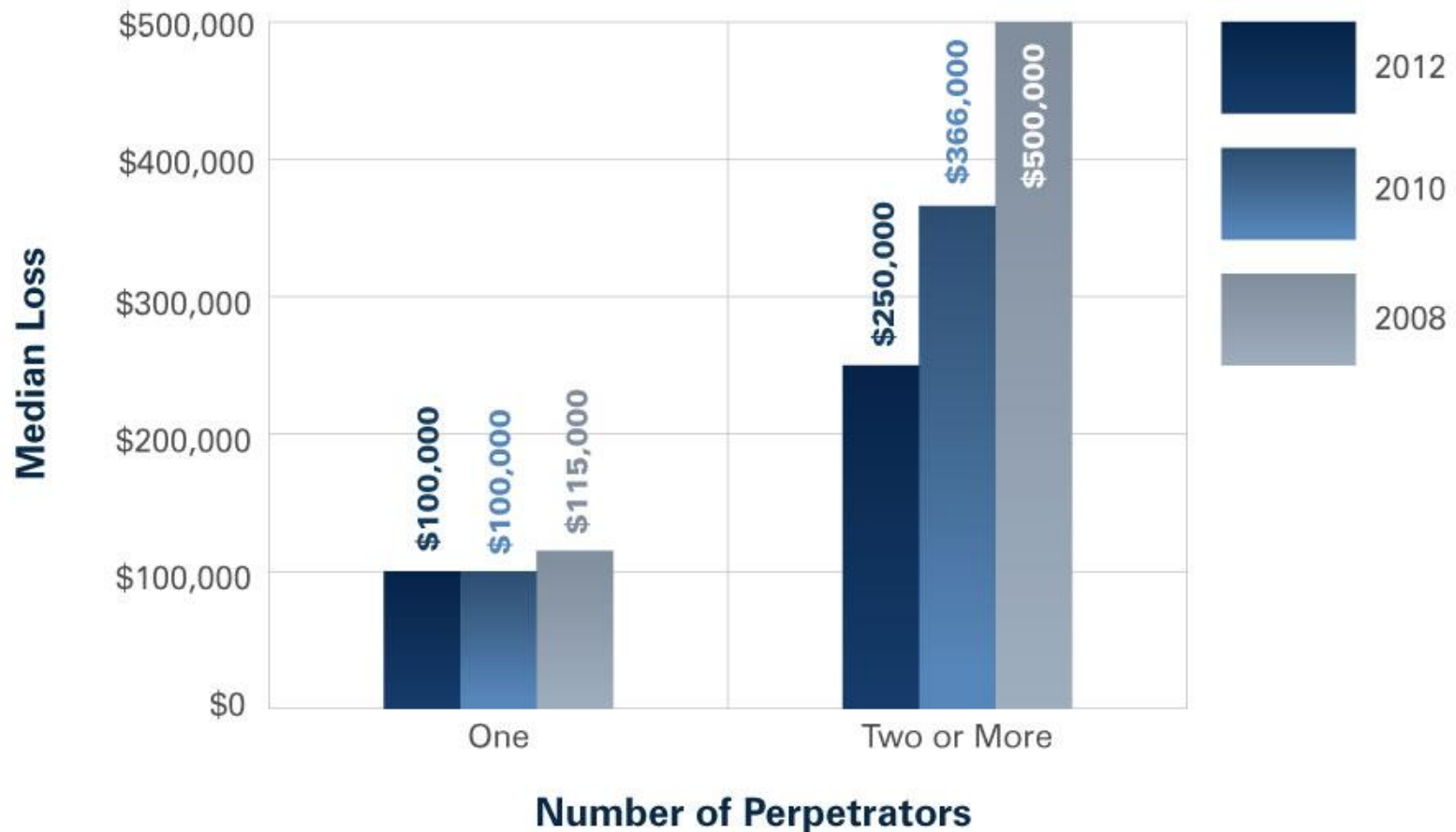
Perpetrators

- Overall, 42% of the cases in our study involved multiple perpetrators, but there was a significant discrepancy between U.S. and non-U.S. cases.

- Within the U.S., only about one-third of all cases involved collusion, whereas in other regions, collusion was reported 55% of the time.

- Also, while the median loss for single-perpetrator cases was the same ($100,000) both inside and outside the United States, collusion cases in non-U.S. countries were almost twice as costly.
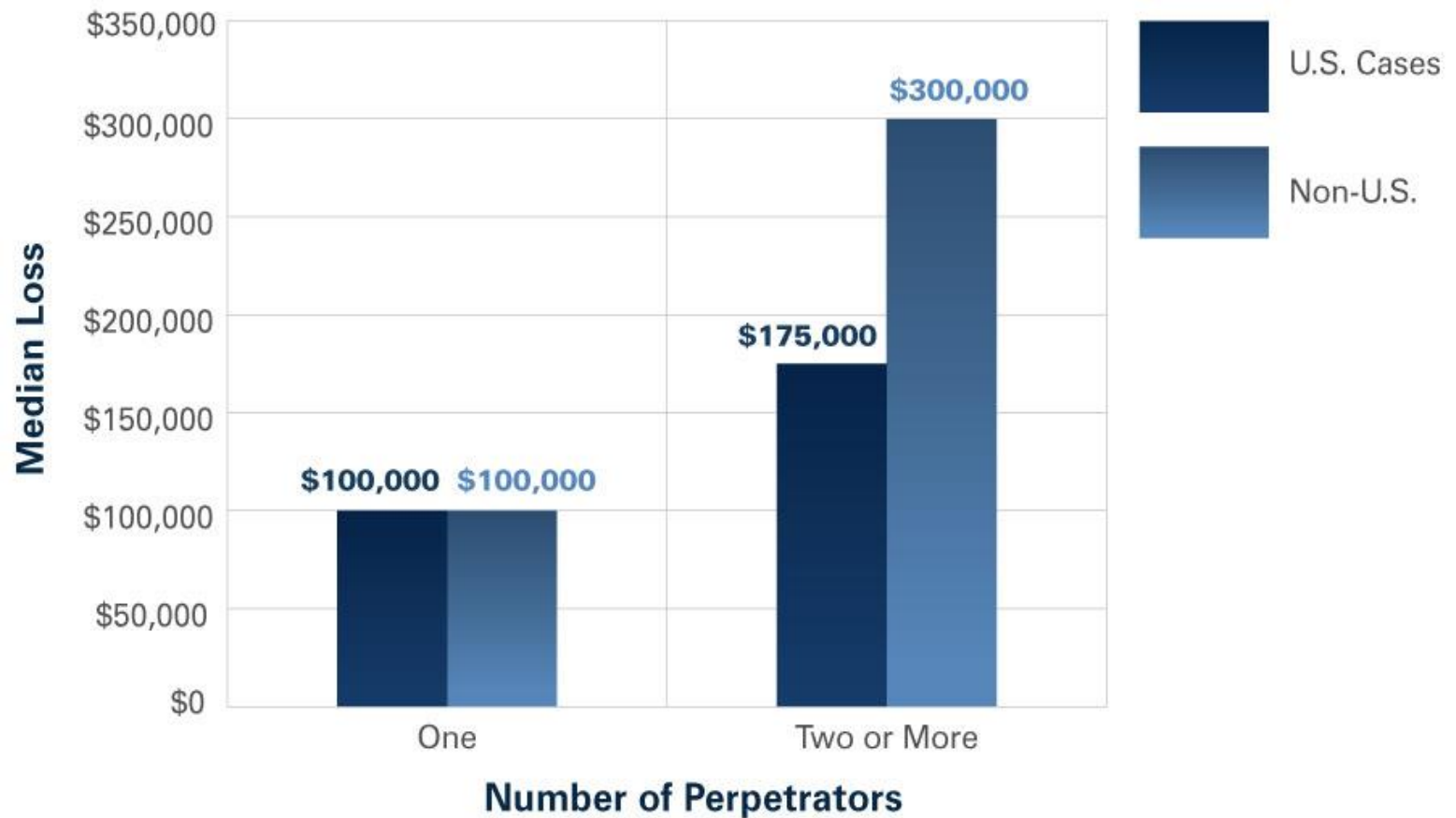
Perpetrators

Number of Perpetrators — Frequency (U.S. vs. Non-U.S.)

Perpetrators

Number of Perpetrators — Median Loss (U.S. vs. Non-U.S.)
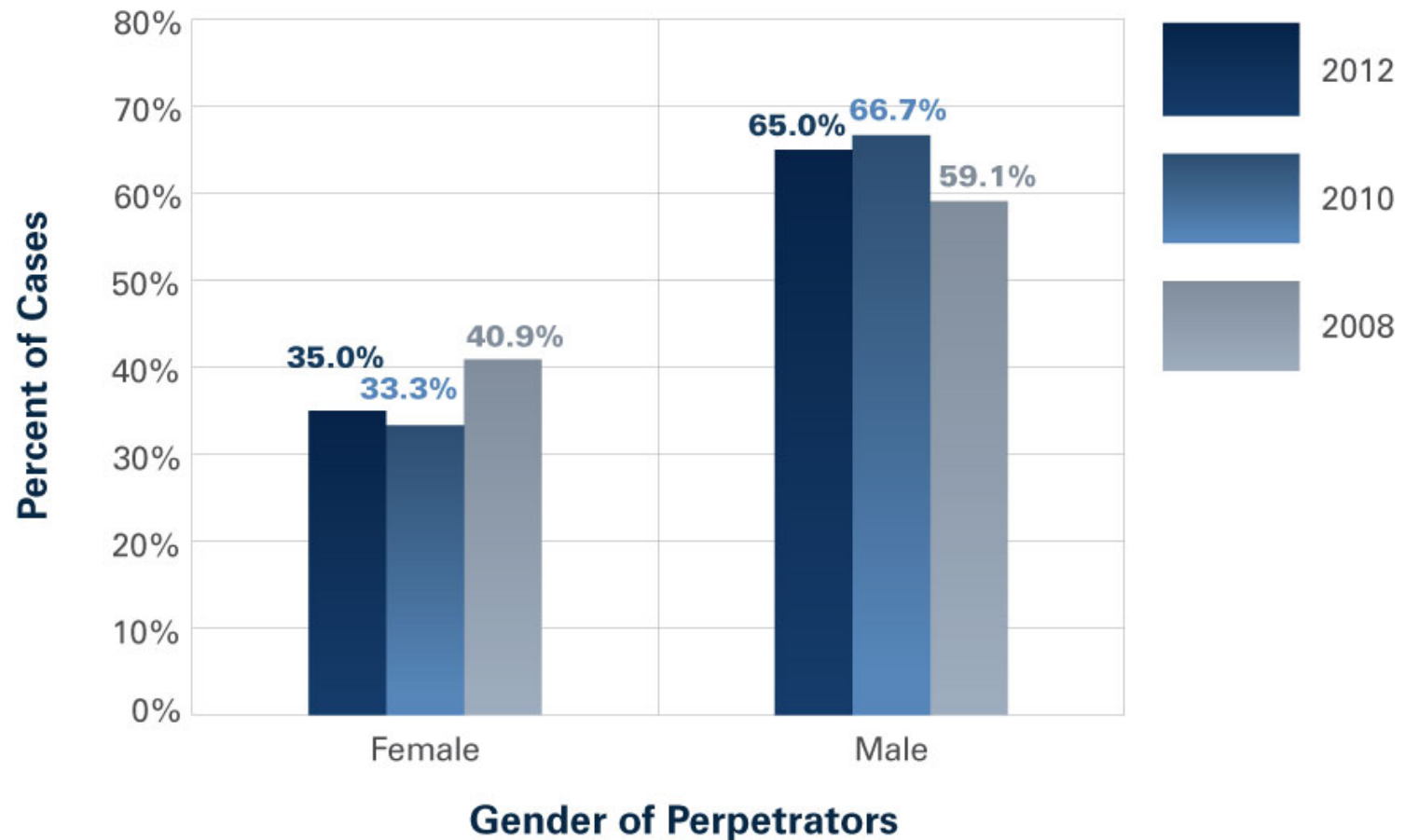
Perpetrator

Perpetrator's Gender

- As the following chart shows, males tend to account for roughly two-thirds of all fraud cases, a ratio that has been fairly consistent in our last three studies.

Perpetrator

**Gender of Perpetrator — Frequency**

Perpetrators

- The ratio of male to female fraudsters varies greatly depending on the region.

- Europe, Asia, Africa and Latin America/Caribbean each saw males account for 75% or more of frauds, which was also true in our 2010 Report.

- Conversely, Canada and the United States had the lowest rates of male fraudsters, which was consistent with 2010, as well.

- Canada, in fact, reported more frauds committed by females than males, although we had a small sample of only 58 Canadian cases, which likely impacts the reliability of that result.

Perpetrators

## Gender of Perpetrator Based on Region
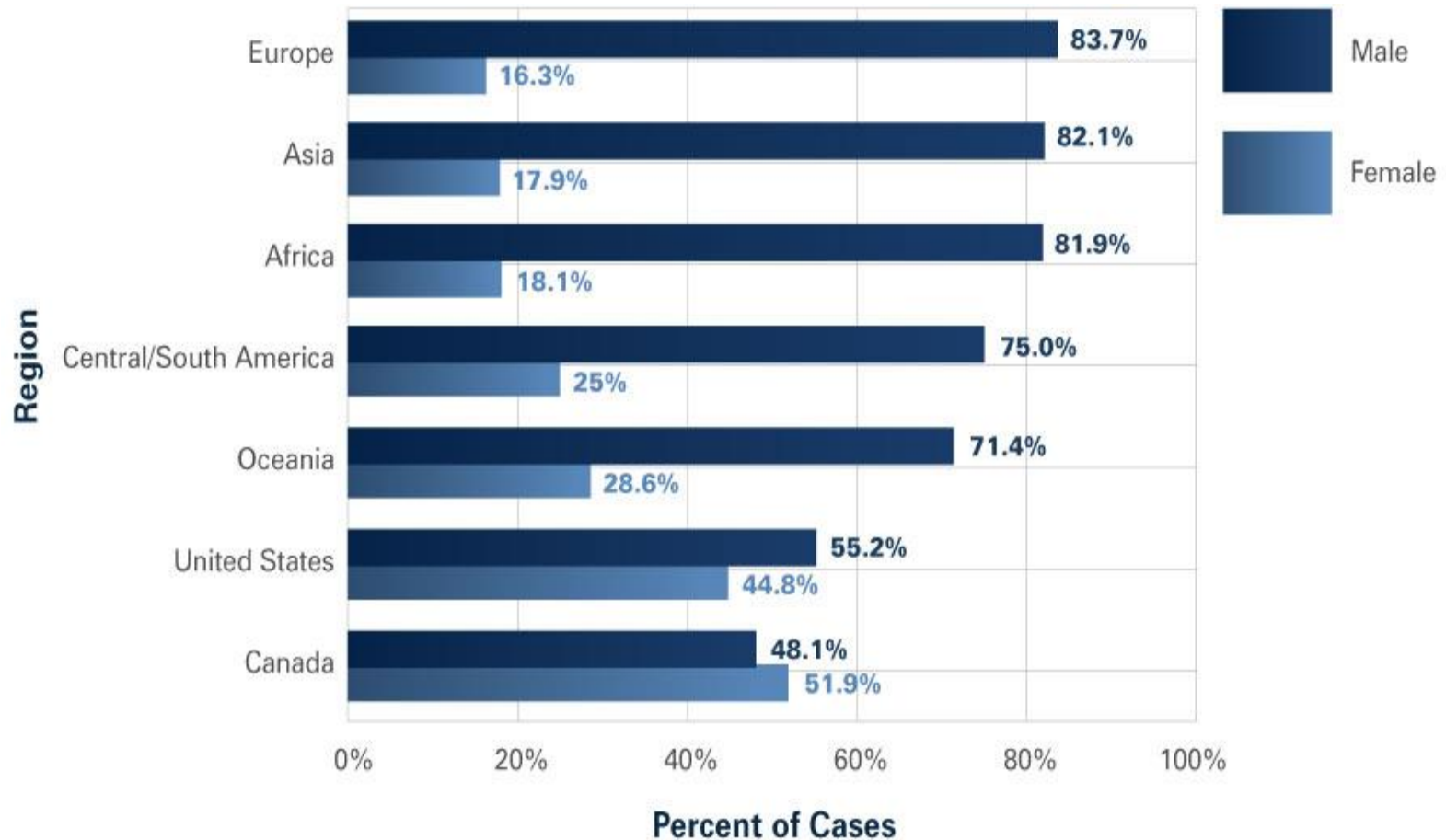
Perpetrators

- One of the most interesting findings in our Report each year is the fact that male fraudsters tend to cause losses that are more than twice as high as the losses caused by females.

- In our 2012 study, the median loss in a scheme committed by a male was $200,000, while the median loss for a female was $91,000. The next chart shows that this has been a consistent trend over the last three Reports.

Perpetrators

Gender of Perpetrator — Median Loss
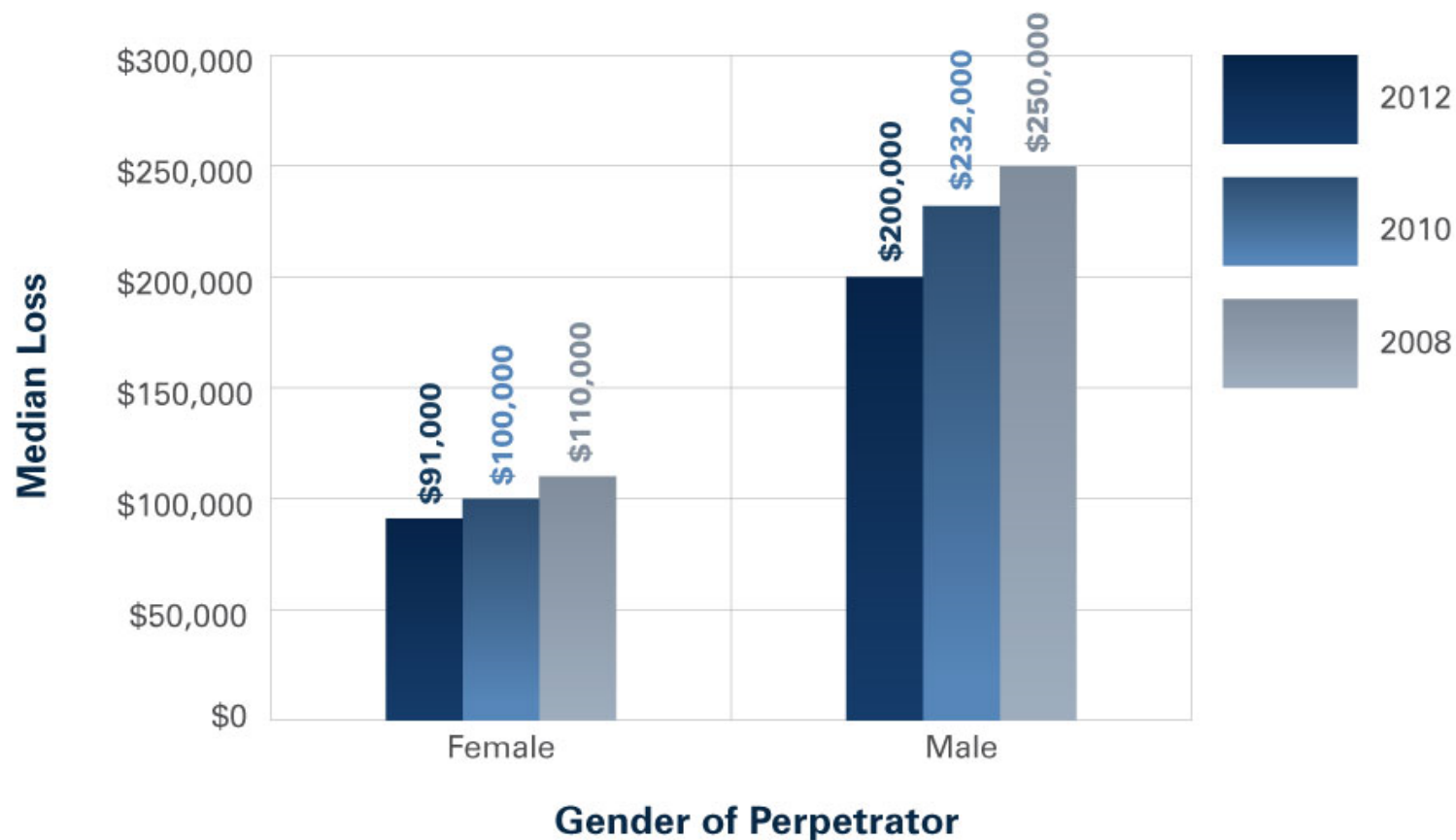
Perpetrators

- This disparity does not appear to be based solely on males occupying higher levels of authority than females. In the next chart, we compared losses by gender based on the perpetrators' levels of authority. Males caused significantly higher losses at every level.[10]

Perpetrators

Position of Perpetrator — Median Loss Based on Gender
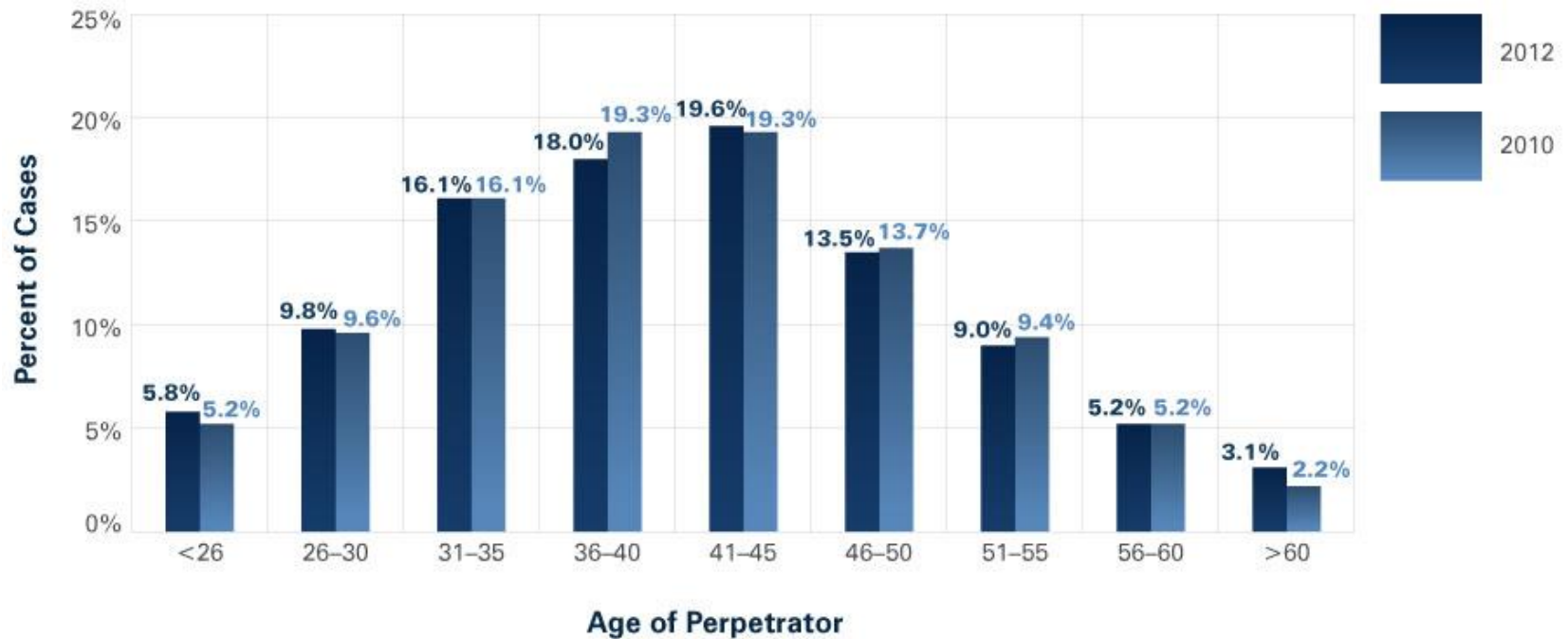
Perpetrators

Perpetrator's Age

- As shown in the next chart, the distribution of fraudsters based on their age fell roughly along a bell-shaped curve and was fairly consistent from 2010 to 2012.

- Approximately 54% of all fraudsters were between the ages of 31 and 45. Fraud losses, however, tended to rise with the age of the perpetrator.

Perpetrators

- This upward trend was not nearly as dramatic in 2012 as in our 2010 study, but we still saw incremental increases for each advancing age range, punctuated by an unexpected outlier in the 50–55 year range, where the median loss rose to $600,000, nearly two-and-a-half times higher than the median loss in any other age range.
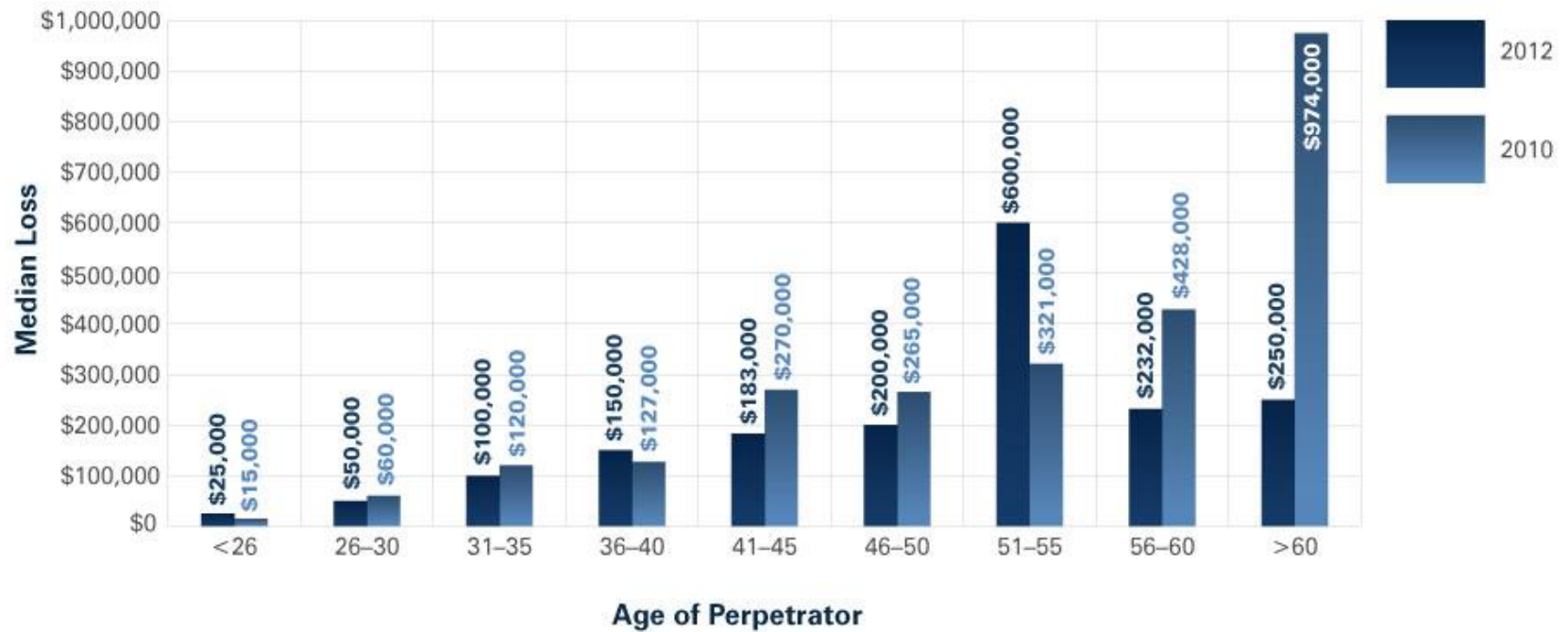
Perpetrators

Age of Perpetrator — Frequency

Perpetrators

Age of Perpetrator — Median Loss

Perpetrators

Perpetrator's Tenure

- We continue to see that tenure has a strong correlation with fraud losses. Individuals who have worked at an organization for a longer period of time will often enjoy more trust from their supervisors and co-workers, which can mean less scrutiny over their actions.

- Their experience can also give them a better understanding of the organization's internal controls, which enables them to more successfully carry out and conceal their fraud schemes.

Perpetrators

- Approximately 42% of occupational fraudsters had between one and five years of tenure at their organizations. Meanwhile fewer than 6% of perpetrators committed fraud within the first year on the job.

- Overall, the distribution of tenure was consistent with what we found in our two prior Reports.

Perpetrators

Tenure of Perpetrator — Frequency
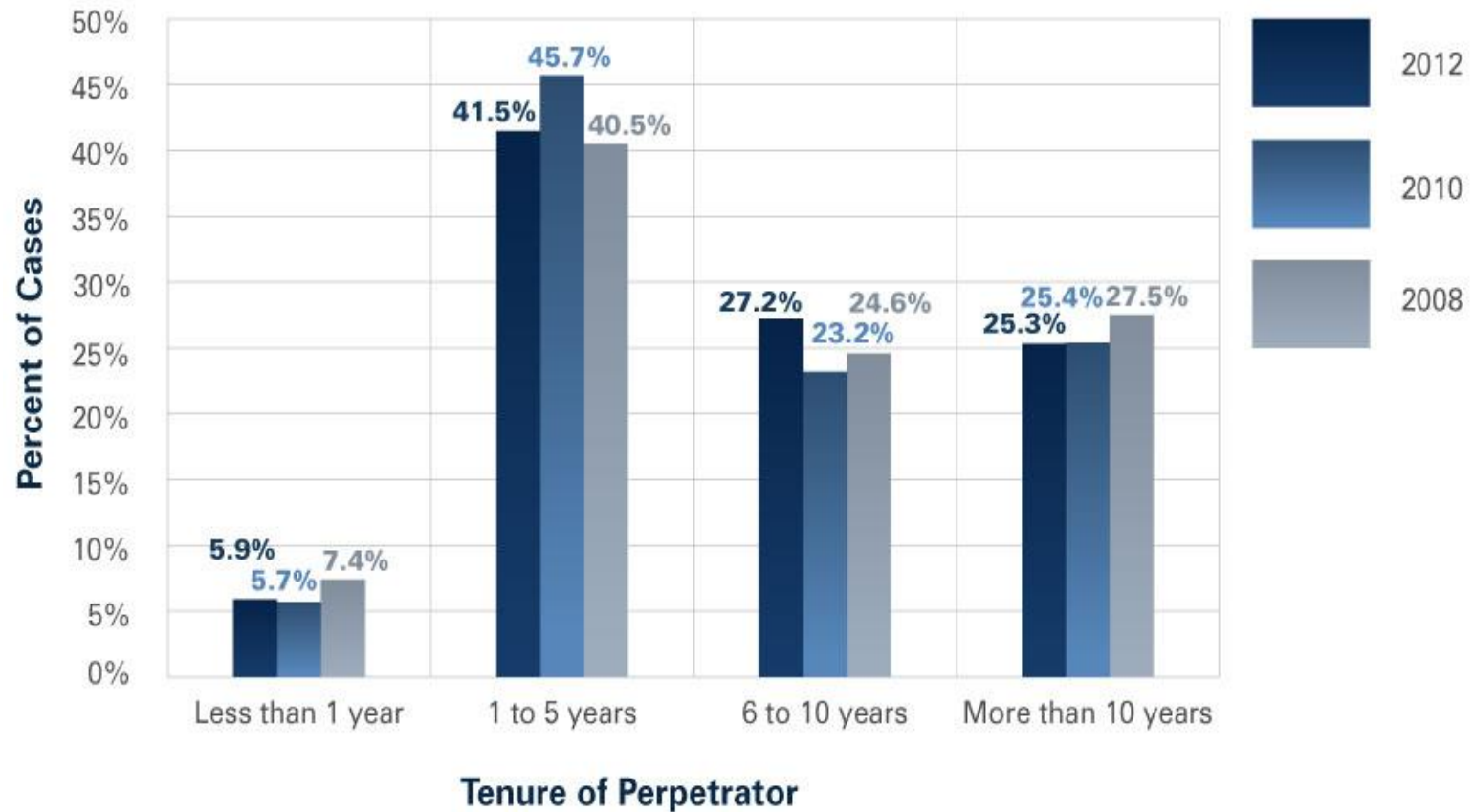
Perpetrators

- As noted in the last chart, occupational fraud losses tend to rise based on the length of time the perpetrator works for the victim organization.

- Our current data shows that fraudsters with more than ten years of authority caused a median loss of $229,000 (see next chart). This was more than double the median loss caused by perpetrators who had been with the company for one to five years, and nearly ten times greater than the median loss caused by fraudsters with less than one year of tenure.

Perpetrators

- The correlation of fraud losses and tenure has been a consistent finding in past Reports, although we note that losses were lower in 2012 across all tenure ranges compared to our previous studies.

Perpetrators

Tenure of Perpetrator — Median Loss
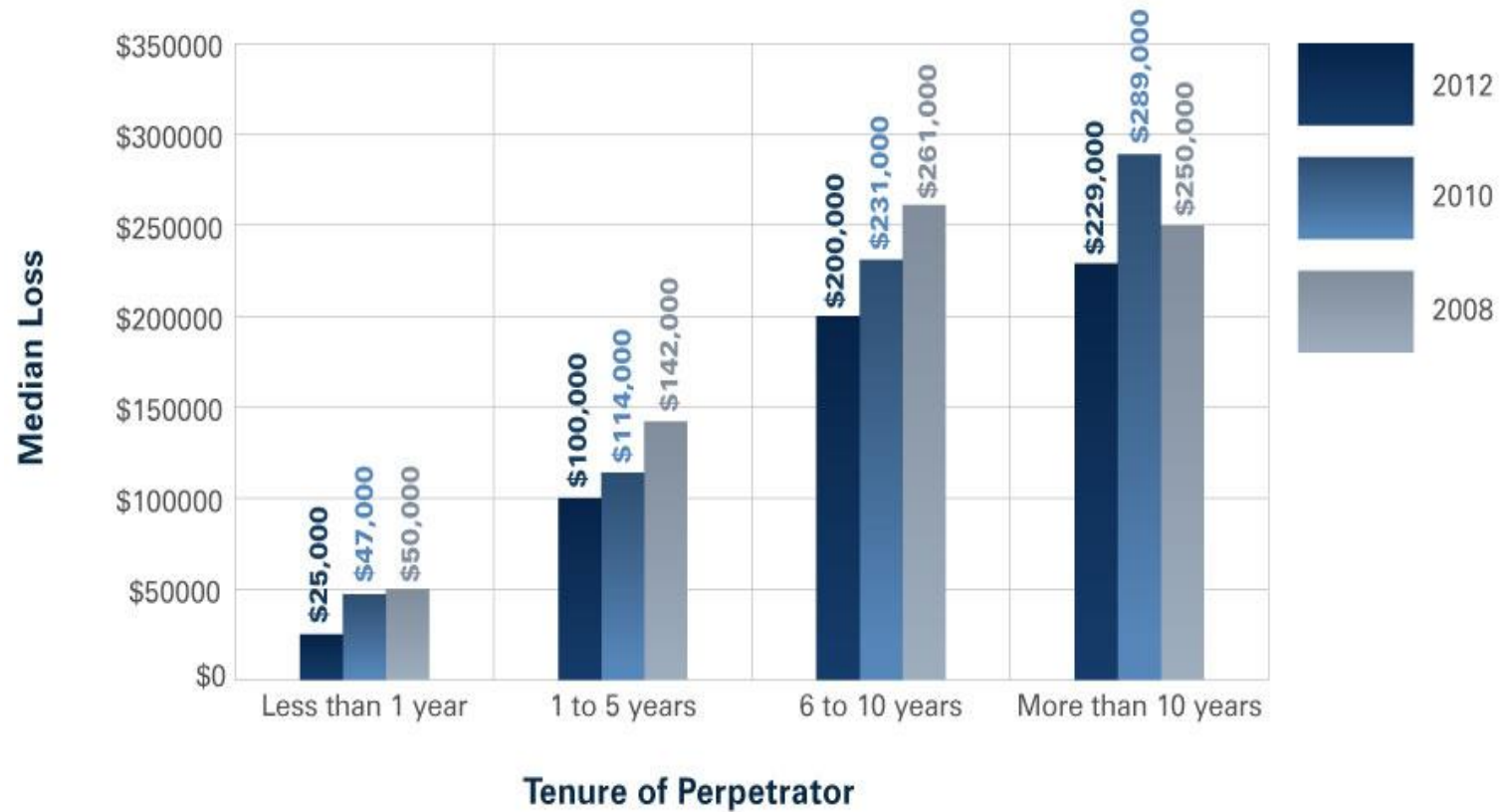
Perpetrators

Perpetrator's Education Level

- The following chart shows the distribution of fraudsters based on their education level. Approximately 54% of fraud perpetrators had a college degree or higher.

- This was similar to the distribution noted in 2010, when 52% of perpetrators had college or postgraduate degrees.

Perpetrators

Education of Perpetrator — Frequency
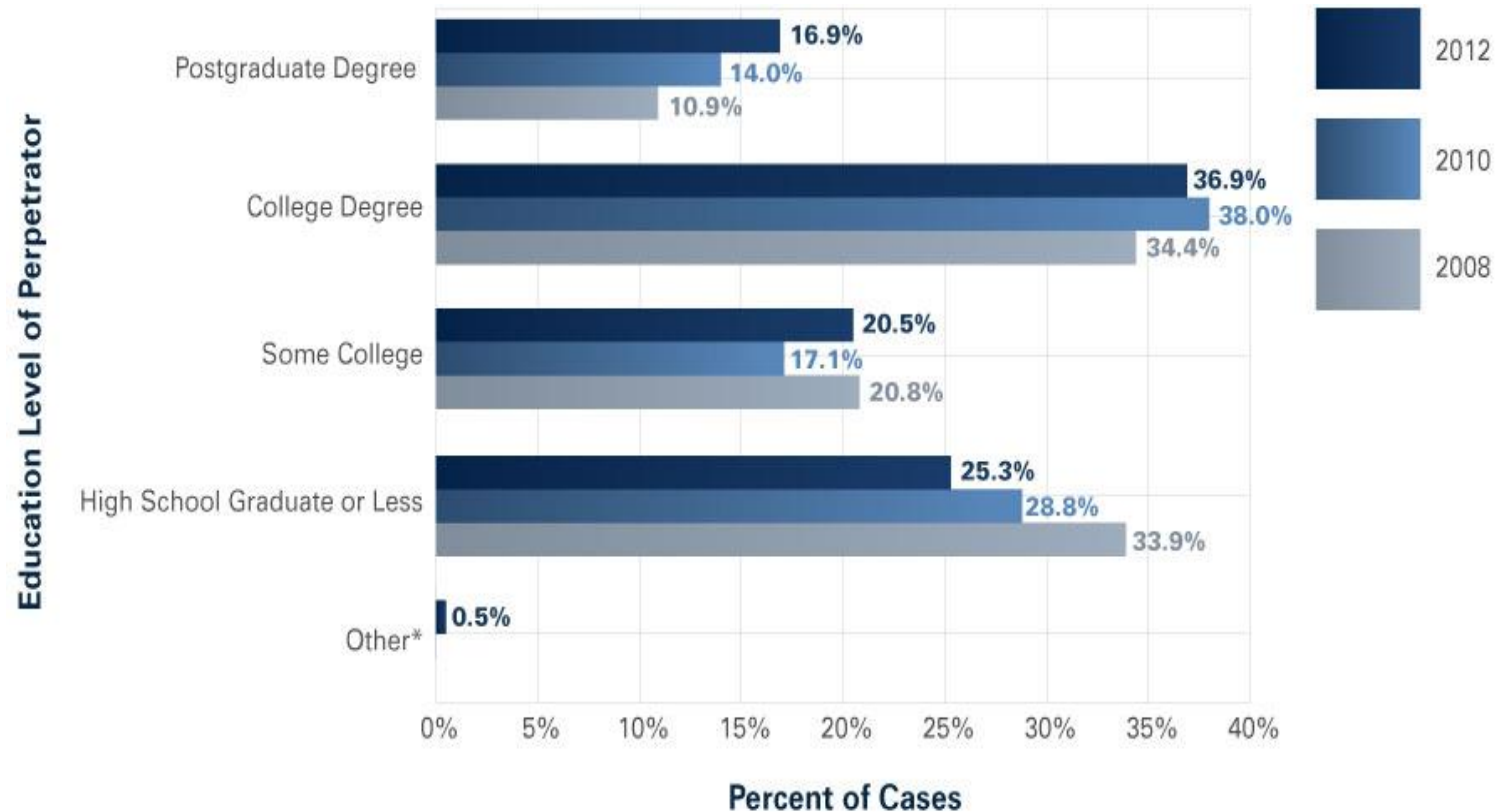
Perpetrators

- Historically our studies have found that fraudsters with higher levels of education tend to cause greater losses.

- We would generally expect more highly educated individuals to have greater levels of authority within their employing organizations, which is probably the most significant reason for this correlation.

- Individuals with higher education might also possess better technical ability to engineer fraud schemes.

Perpetrators

- In our 2012 data, losses rose in direct correlation to education levels. Individuals with postgraduate degrees caused $300,000 in median losses, compared to $200,000 for those with bachelor's degrees. Those with a high school diploma or less caused a median loss of $75,000.

Perpetrators

Education of Perpetrator — Median Loss
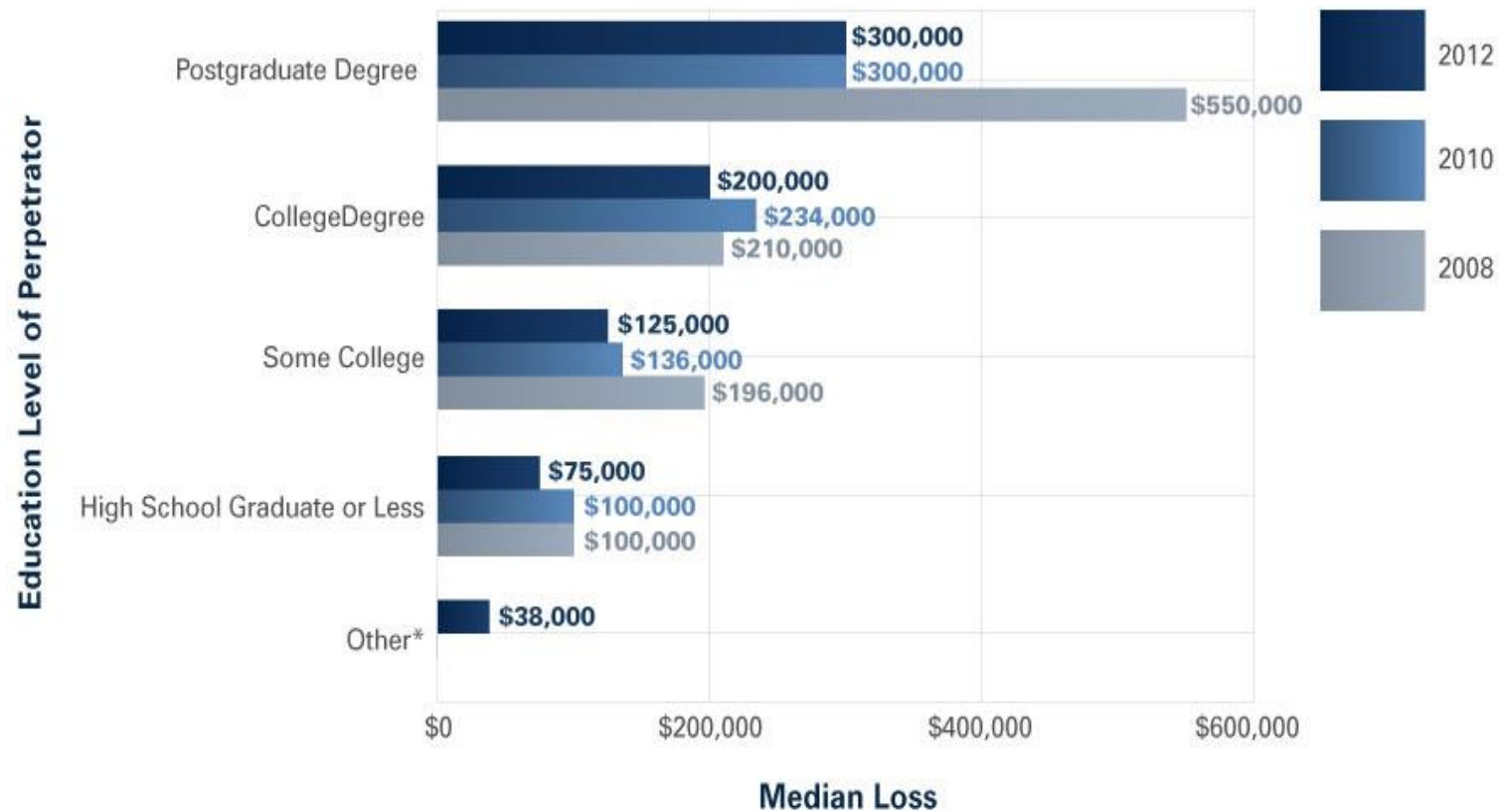
Perpetrators

Perpetrator's Department

- The six most common departments in which fraud perpetrators worked were accounting, operations, sales, executive/upper management, customer service and purchasing.

- Collectively, these six departments accounted for 77% of all cases reported to us. As the chart on the following slide illustrates, the distribution of cases based on the perpetrator's department was remarkably similar to the distribution in our 2010 study.

Perpetrators

Department of Perpetrator — Frequency
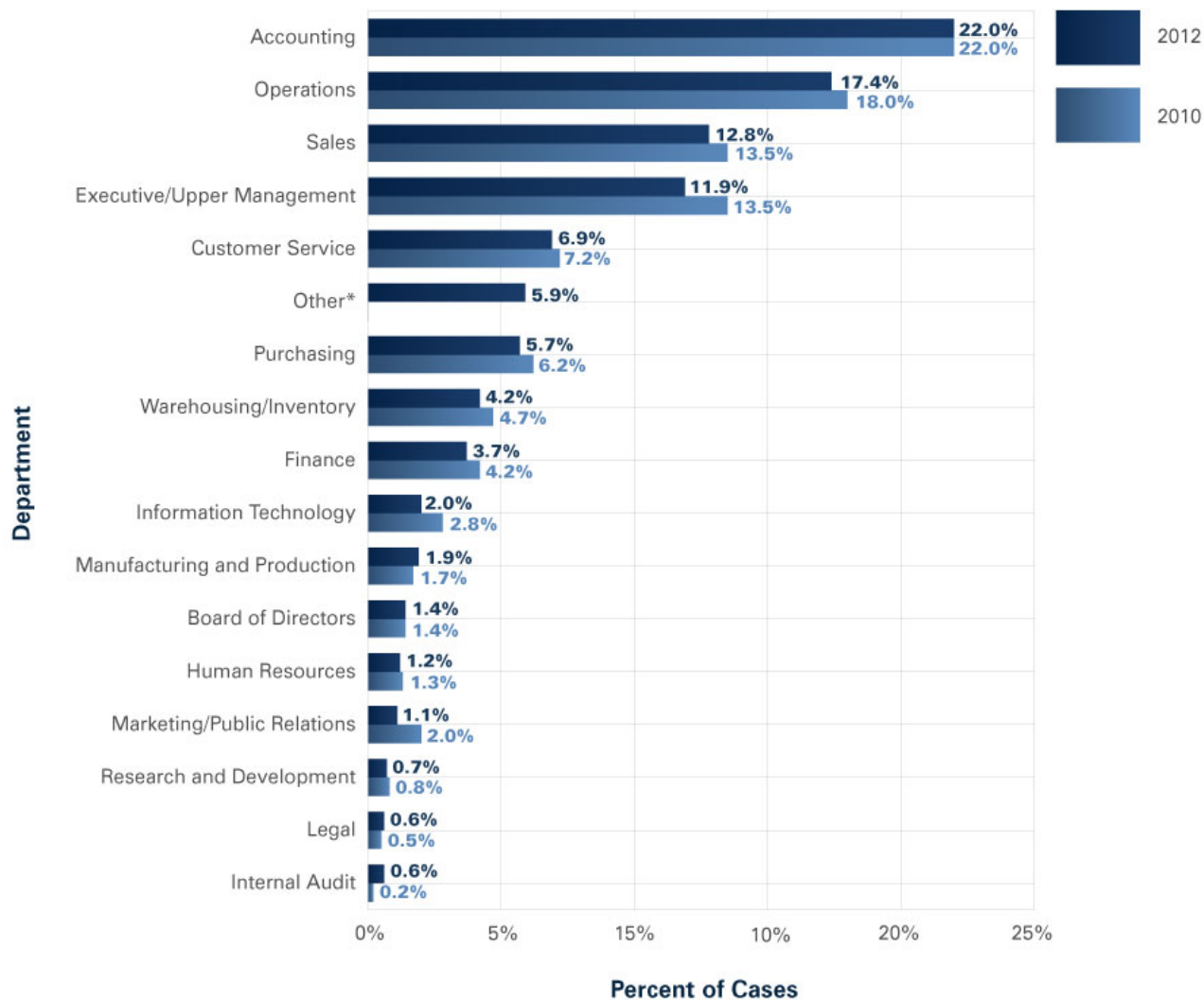
Perpetrators

- Not surprisingly, schemes committed by those who were in the executive/upper management suite caused the largest median loss ($500,000), while customer service cases resulted in the lowest median loss ($30,000).

- Schemes committed by those in the accounting department ranked fifth on median loss ($183,000), but this department accounted for 22% of all reported cases, far more than any other category.

Perpetrators

Department of Perpetrator (Sorted by Median Loss)			
Department	**Number of Cases**	**Percentage**	**Median Loss**
Executive/Upper Management	159	11.9%	$500,000
Finance	49	3.7%	$250,000
Board of Directors	19	1.4%	$220,000
Purchasing	76	5.7%	$200,000
Accounting	293	22.0%	$183,000
Legal	8	0.6%	$180,000
Marketing/Public Relations	14	1.1%	$165,000
Manufacturing and Production	25	1.9%	$160,000
Human Resources	16	1.2%	$121,000
Research and Development	9	0.7%	$100,000
Information Technology	27	2.0%	$100,000
Other	79	5.9%	$100,000
Operations	232	17.4%	$100,000
Sales	170	12.8%	$90,000
Warehousing/Inventory	56	4.2%	$67,000
Internal Audit	8	0.6%	$32,000
Customer Service	92	6.9%	$30,000

Perpetrators

Perpetrator's Department Based on Region

- In the following tables we present the distribution of cases based on the perpetrator's department for each region.

- The top six departments noted in the previous section (accounting, operations, sales, executive/upper management, customer service and purchasing) accounted for between 69% and 81% of the cases in every region.

Perpetrators

United States 750 Cases		
Department	Number of Cases	Percent of Cases
Accounting	197	26.3%
Operations	137	18.3%
Executive/Upper Management	91	12.1%
Sales	81	10.8%
Other	56	7.5%
Customer Service	53	7.1%
Warehousing/Inventory	28	3.7%
Purchasing	23	3.1%
Finance	21	2.8%
Board of Directors	11	1.5%
Manufacturing and Production	10	1.3%
Human Resources	9	1.2%
Information Technology	8	1.1%
Marketing/Public Relations	7	0.9%
Research and Development	7	0.9%
Legal	6	0.8%
Internal Audit	5	0.7%

Asia 198 Cases		
Department	Number of Cases	Percent of Cases
Sales	39	19.7%
Operations	32	16.2%
Executive/Upper Management	25	12.6%
Purchasing	23	11.6%
Accounting	22	11.1%
Customer Service	13	6.6%
Warehousing/Inventory	9	4.5%
Finance	8	4.0%
Manufacturing and Production	6	3.0%
Board of Directors	4	2.0%
Human Resources	4	2.0%
Information Technology	4	2.0%
Other	4	2.0%
Marketing/Public Relations	3	1.5%
Legal	2	1.0%
Internal Audit	0	0.0%
Research and Development	0	0.0%

Perpetrators

Europe 128 Cases		
Department	**Number of Cases**	**Percent of Cases**
Sales	24	18.8%
Accounting	21	16.4%
Executive/Upper Management	18	14.1%
Operations	16	12.5%
Purchasing	12	9.4%
Finance	8	6.3%
Warehousing/Inventory	7	5.5%
Customer Service	6	4.7%
Information Technology	6	4.7%
Manufacturing and Production	4	3.1%
Board of Directors	3	2.3%
Internal Audit	1	0.8%
Other	1	0.8%
Research and Development	1	0.8%
Human Resources	0	0.0%
Marketing/Public Relations	0	0.0%
Legal	0	0.0%

Africa 107 Cases		
Department	**Number of Cases**	**Percent of Cases**
Accounting	24	22.4%
Operations	22	20.6%
Purchasing	9	8.4%
Executive/Upper Management	8	7.5%
Sales	8	7.5%
Finance	7	6.5%
Other	7	6.5%
Information Technology	4	3.7%
Warehousing/Inventory	4	3.7%
Customer Service	3	2.8%
Manufacturing and Production	3	2.8%
Marketing/Public Relations	3	2.8%
Human Resources	2	1.9%
Internal Audit	2	1.9%
Board of Directors	1	0.9%
Legal	0	0.0%
Research and Development	0	0.0%

Perpetrators

Canada 55 Cases		
Department	**Number of Cases**	**Percent of Cases**
Accounting	11	20.0%
Sales	10	18.2%
Customer Service	8	14.5%
Operations	6	10.9%
Other	4	7.3%
Purchasing	4	7.3%
Information Technology	3	5.5%
Executive/Upper Management	2	3.6%
Finance	2	3.6%
Warehousing/Inventory	2	3.6%
Human Resources	1	1.8%
Marketing/Public Relations	1	1.8%
Research and Development	1	1.8%
Board of Directors	0	0.0%
Manufacturing and Production	0	0.0%
Legal	0	0.0%
Internal Audit	0	0.0%

Latin America and the Caribbean 37 Cases		
Department	**Number of Cases**	**Percent of Cases**
Accounting	7	18.9%
Executive/Upper Management	7	18.9%
Operations	7	18.9%
Customer Service	4	10.8%
Purchasing	3	8.1%
Finance	2	5.4%
Other	2	5.4%
Sales	2	5.4%
Warehousing/Inventory	2	5.4%
Manufacturing and Production	1	2.7%
Board of Directors	0	0.0%
Human Resources	0	0.0%
Legal	0	0.0%
Internal Audit	0	0.0%
Information Technology	0	0.0%
Marketing/Public Relations	0	0.0%
Research and Development	0	0.0%

Perpetrators

Oceania 35 Cases		
Department	**Number of Cases**	**Percent of Cases**
Operations	7	20.0%
Executive/Upper Management	6	17.1%
Sales	5	14.3%
Accounting	4	11.4%
Customer Service	4	11.4%
Warehousing/Inventory	3	8.6%
Other	2	5.7%
Finance	1	2.9%
Information Technology	1	2.9%
Manufacturing and Production	1	2.9%
Purchasing	1	2.9%
Board of Directors	0	0.0%
Human Resources	0	0.0%
Legal	0	0.0%
Internal Audit	0	0.0%
Marketing/Public Relations	0	0.0%
Research and Development	0	0.0%

Perpetrators

Scheme Type Based on Perpetrator's Department

- The previous section of this Report identified the departments that are most commonly associated with occupational fraud.

- In the following tables, we have presented the most common schemes committed within each department. We looked only at the six departments that accounted for at least 5% of all cases.

- Corruption was the most common scheme in every department except accounting, where billing fraud (31%) and check tampering (30%) were the two most common scheme types.

Perpetrators

Accounting 293 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Billing	91	31.1%
Check Tampering	87	29.7%
Skimming	67	22.9%
Payroll	54	18.4%
Corruption	50	17.1%
Cash on Hand	50	17.1%
Cash Larceny	50	17.1%
Expense Reimbursement	39	13.3%
Fraudulent Statements	27	9.2%
Non-Cash	16	5.5%
Register Disbursements	15	5.1%

Operations 232 Cases		
Scheme	**Number of Cases**	**Percent of Cases**
Corruption	76	32.8%
Billing	56	24.1%
Expense Reimbursement	45	19.4%
Non-Cash	41	17.7%
Skimming	30	12.9%
Cash on Hand	27	11.6%
Cash Larceny	26	11.2%
Check Tampering	23	9.9%
Payroll	20	8.6%
Fraudulent Statements	15	6.5%
Register Disbursements	7	3.0%

Perpetrators

Sales 170 Cases		
Scheme	Number of Cases	Percent of Cases
Corruption	53	31.2%
Non-Cash	38	22.4%
Skimming	31	18.2%
Expense Reimbursement	26	15.3%
Billing	25	14.7%
Cash Larceny	19	11.2%
Cash on Hand	16	9.4%
Register Disbursements	10	5.9%
Fraudulent Statements	8	4.7%
Check Tampering	6	3.5%
Payroll	4	2.4%

Executive/Upper Management 159 Cases		
Scheme	Number of Cases	Percent of Cases
Corruption	85	53.5%
Billing	52	32.7%
Expense Reimbursement	34	21.4%
Fraudulent Statements	33	20.8%
Non-Cash	25	15.7%
Skimming	24	15.1%
Cash on Hand	22	13.8%
Payroll	20	12.6%
Cash Larceny	19	11.9%
Check Tampering	13	8.2%
Register Disbursements	4	2.5%

Perpetrators

Customer Service 92 Cases		
Scheme	Number of Cases	Percent of Cases
Corruption	19	20.7%
Non-Cash	18	19.6%
Skimming	12	13.0%
Cash on Hand	12	13.0%
Cash Larceny	10	10.9%
Billing	7	7.6%
Expense Reimbursement	7	7.6%
Check Tampering	5	5.4%
Register Disbursements	4	4.3%
Fraudulent Statements	1	1.1%
Payroll	0	0.0%

Purchasing 76 Cases		
Scheme	Number of Cases	Percent of Cases
Corruption	52	68.4%
Billing	27	35.5%
Non-Cash	15	19.7%
Expense Reimbursement	5	6.6%
Skimming	3	3.9%
Payroll	3	3.9%
Fraudulent Statements	3	3.9%
Check Tampering	2	2.6%
Cash on Hand	2	2.6%
Cash Larceny	1	1.3%
Register Disbursements	1	1.3%

Perpetrators

Perpetrator's Criminal and Employment History

- **Perpetrator's Criminal Background**

    - In 860 of the cases in our study, the respondent was able to provide information about the fraudster's criminal history. In only 6% of those cases had the fraudster been convicted of a fraud-related offense prior to the scheme in question. This is consistent with our findings from previous studies.

Perpetrators

Perpetrator's Criminal Background

Perpetrators

- **Perpetrator's Employment History**

  – There were 695 cases in which the CFE provided information on the fraudster's employment history, and their responses show that the vast majority (84%) of occupational fraudsters had never been punished or terminated by an employer for a fraud-related offense before the frauds in question.

  – Only about 7% of fraudsters had previously been terminated by another employer for fraud.

Perpetrators

Perpetrator's Employment Background
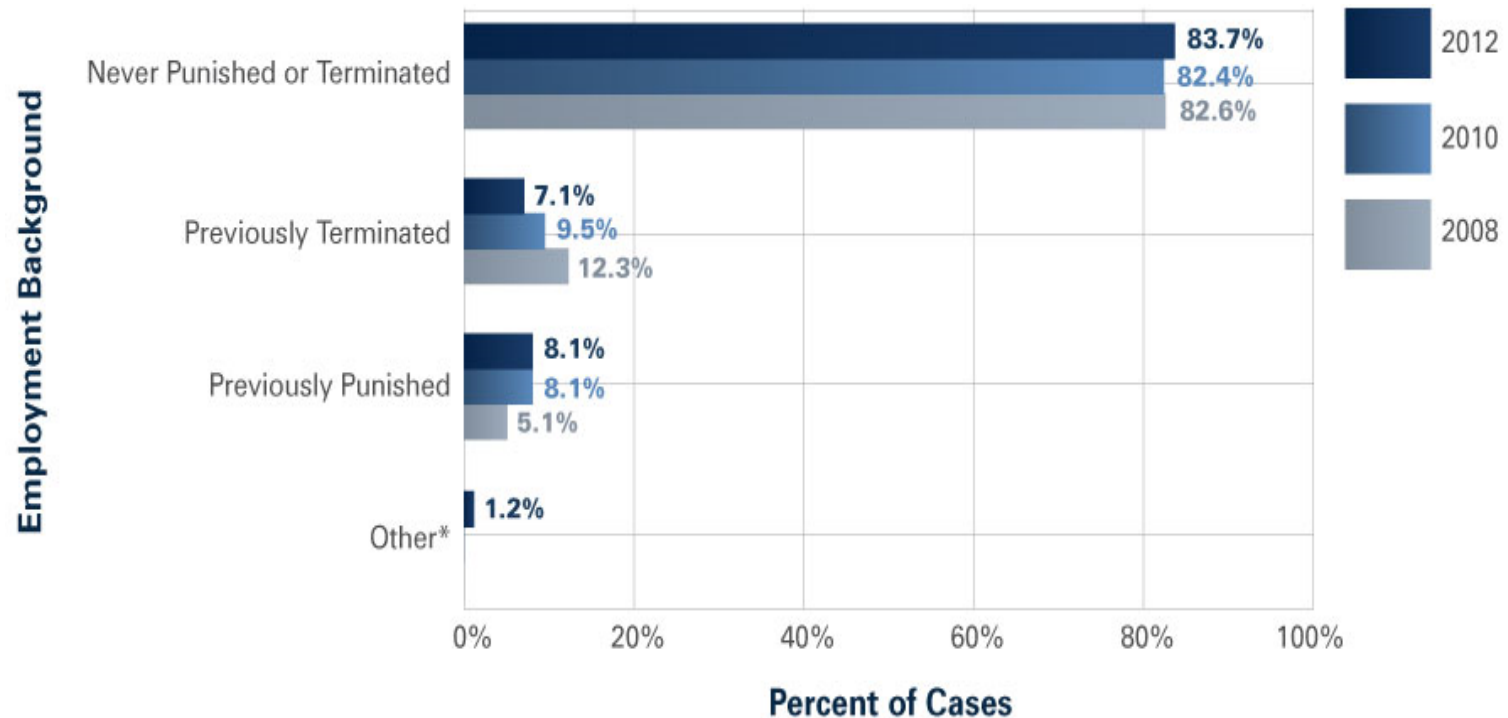
Perpetrators

Behavioral Red Flags Displayed by Perpetrators

- Most occupational fraudsters' crimes are motivated at least in part by some kind of financial pressure. In addition, while committing a fraud, an individual will frequently display certain behavioral traits associated with stress or a fear of being caught.

Perpetrators

- These behavioral red flags can often be a warning sign that fraud is occurring; consequently, one of the goals of our study was to examine the frequency with which fraudsters display various behavioral red flags.

- Based on prior research, we compiled a list of 16 common red flags and asked survey respondents to tell us which, if any, of these traits had been exhibited by the fraudsters before the schemes were detected.

Perpetrators

- In 81% of all cases reported to us, the perpetrator had displayed at least one behavioral red flag, and, within these cases, multiple red flags were frequently observed. The next chart shows the percentage of cases in which each respective red flag was reported.

- The fraudster living beyond his or her means (36%), experiencing financial difficulties (27%), having an unusually close association with vendors or customers (19%) and displaying excessive control issues (18%) were the four most commonly cited red flags in 2012, just as they were in 2010.
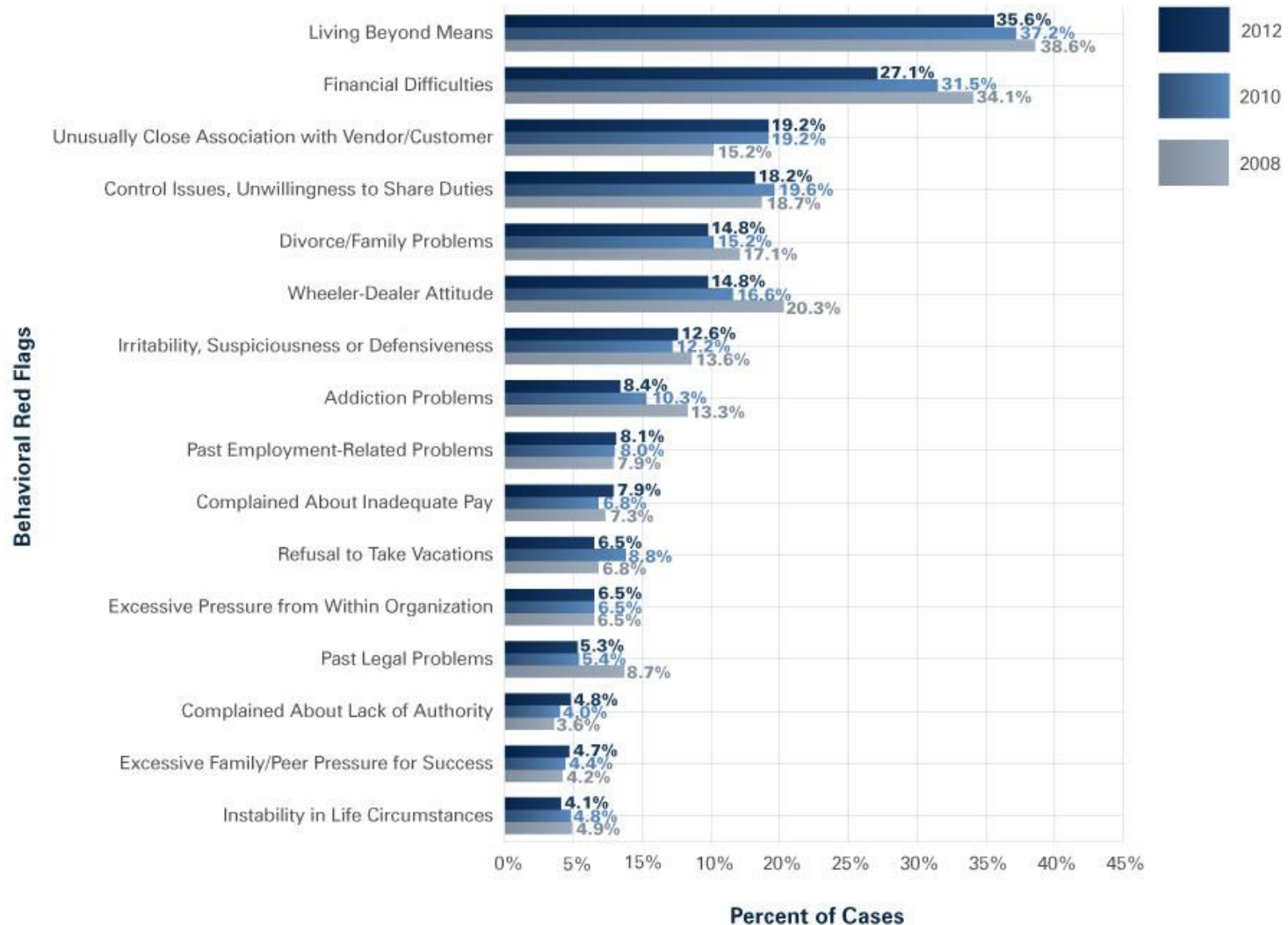
Perpetrators

- The consistency of the distribution of red flags from year to year is particularly remarkable. Despite the fact that the group of perpetrators analyzed in our 2012 study was completely different than the perpetrators included in our 2010 and 2008 studies, each group seems to have collectively displayed behavioral red flags in largely the same proportion.

Perpetrators

- One other interesting point about the data in the following chart is that the rate at which financial difficulties were cited has decreased nearly 7% from our 2008 study. This is particularly unexpected, as our studies focus on frauds that were investigated in the two years prior to each survey.

- For instance, the cases that were reported in our 2008 study would have been investigated in 2006 and 2007, prior to the onset of the global financial crisis in 2008. Yet financial difficulties were cited as a red flag more often in the 2008 survey than in either the 2010 or 2012 surveys, both of which included cases that occurred during the peak of the global crisis.

Perpetrators

Behavioral Red Flags of Perpetrators

Percent of Cases

Perpetrators

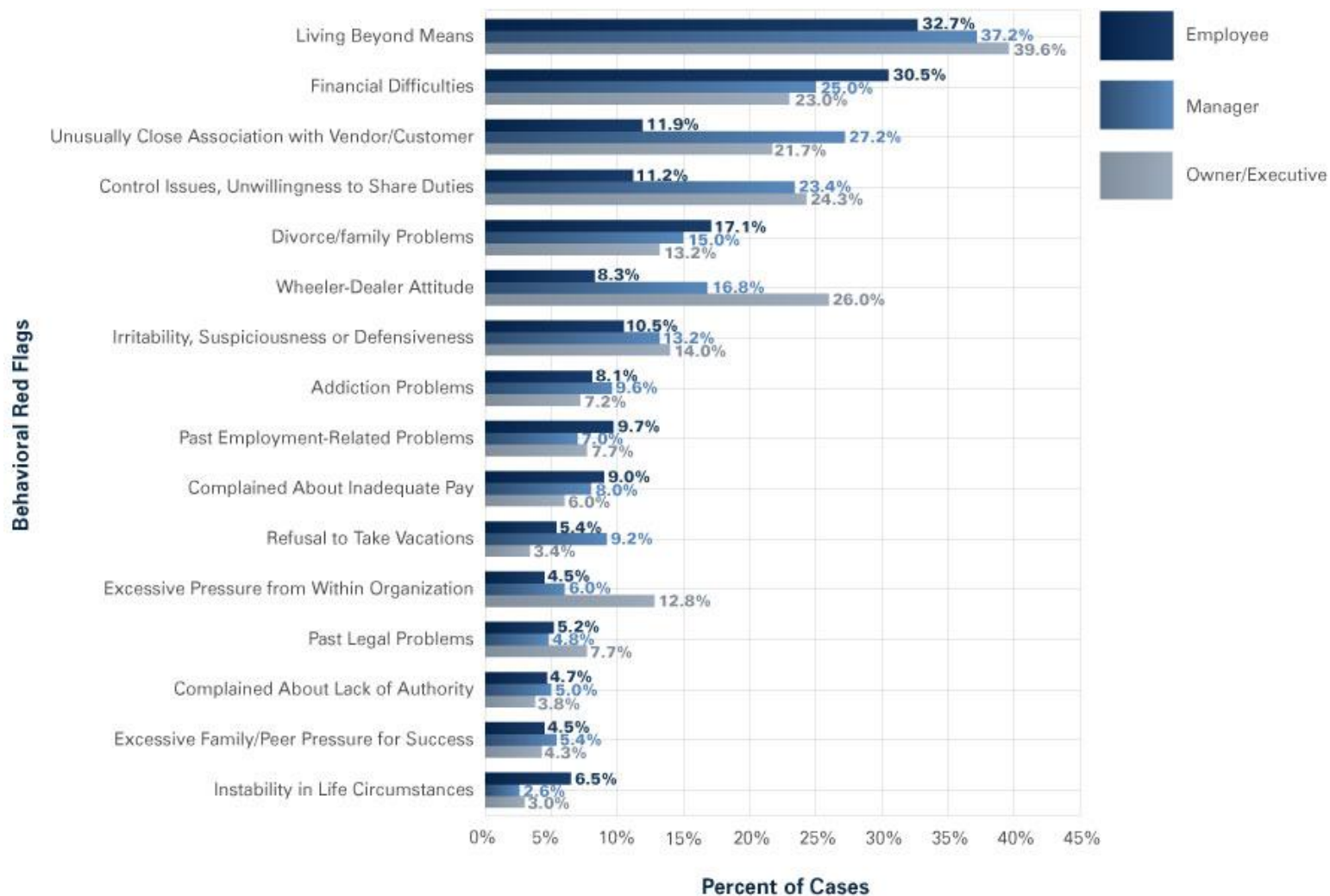## Behavioral Red Flags Based on Perpetrator's Position

- The next chart shows how behavioral red flags were distributed based on the perpetrator's level of authority. This provides some insight into the varying motivations and pressures that affect fraudsters at different levels within an organization.

Perpetrators

- For example, we can clearly see that owner/executives are much more likely than employees or managers to exhibit a wheeler-dealer attitude or to experience excessive pressure to perform from within the organization.

- Employees, conversely, are relatively unlikely to exhibit these red flags but are much more likely than executives to be motivated by financial difficulties.

Perpetrators

Behavioral Red Flags of Perpetrators Based on Position

Perpetrators

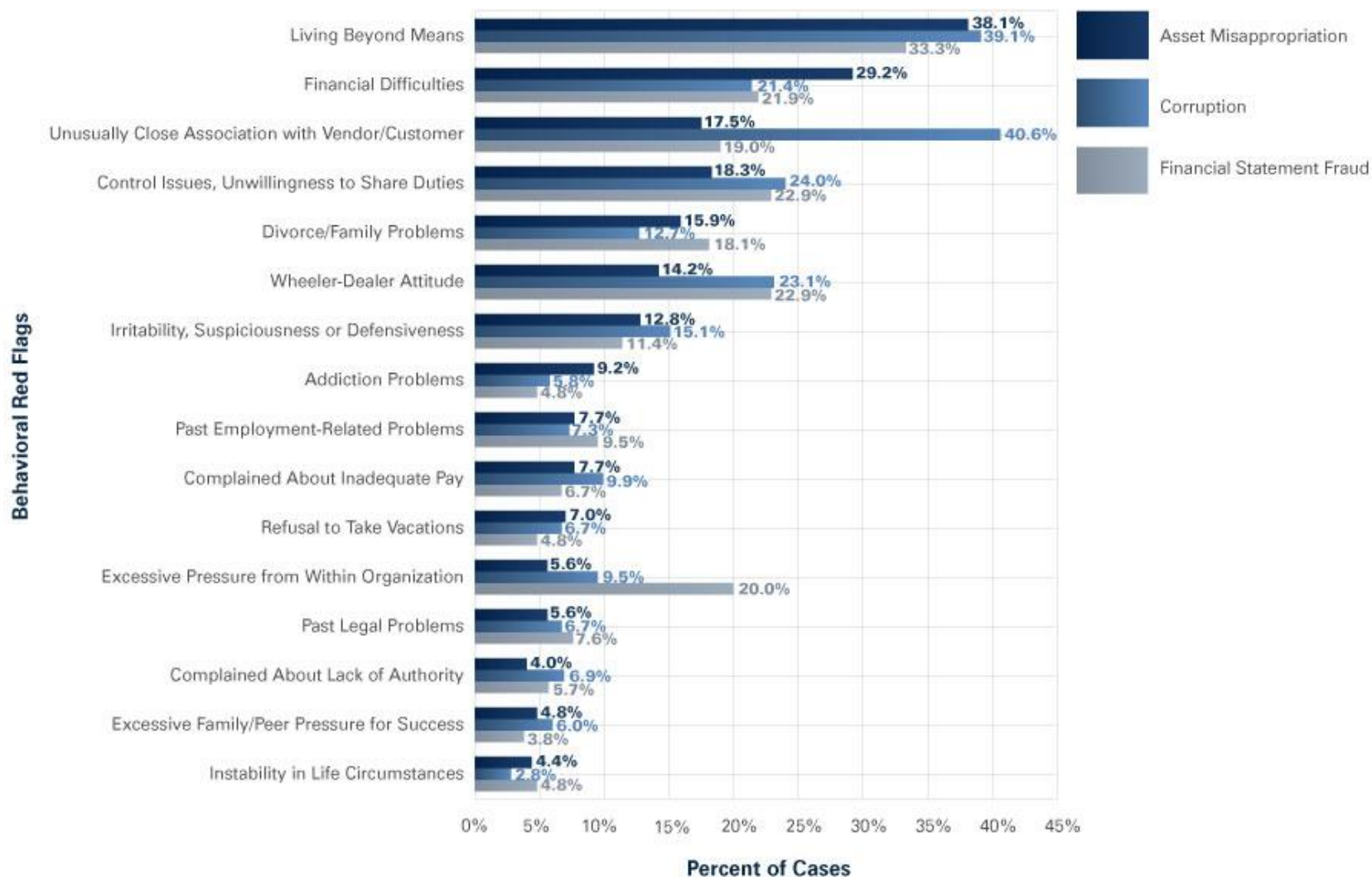## Behavioral Red Flags Based on Scheme Type

- We also analyzed behavioral red flags based on the type of fraud that was committed. As the next chart shows, fraudsters who engaged in corruption exhibited unusually close associations with vendors or customers in 41% of cases — a much higher rate than for the other scheme categories.

Perpetrators

- These perpetrators also frequently were living beyond their means (39%) and displayed serious control issues or an unwillingness to share their professional duties (24%).

- Individuals engaged in financial statement fraud were much more likely than other fraudsters to face excessive pressure from within their organizations (20%), but they were less likely to be living beyond their means (33%) or experiencing financial difficulties (22%).

Perpetrators

Behavioral Red Flags of Perpetrators Based on Scheme Type

Perpetrators

Behavioral Red Flags Based on Department

- In the following tables we have presented the distribution of behavioral red flags for every department that accounted for at least 5% of the frauds in this study.

- This data can be helpful for organizations in conducting fraud risk assessments within particular departments or organizational functions, particularly when combined with the information discussed previously regarding the frequency of different fraud schemes within each department (see slides 197-199).

Perpetrators

Accounting 293 Cases		
Behavioral Red Flag	**Number of Cases**	**Percent of Cases**
Living Beyond Means	128	43.7%
Financial Difficulties	89	30.4%
Control Issues/Unwillingness to Share Duties	57	19.5%
Divorce/Family Problems	55	18.8%
Irritability, Suspiciousness or Defensiveness	37	12.6%
Addiction Problems	33	11.3%
Refusal to Take Vacations	32	10.9%
Complaining About Inadequate Pay	19	6.5%
Past Employment-Related Problems	19	6.5%
Unusually Close Association with Vendor/Customer	18	6.1%
Past Legal Problems	17	5.8%
Wheeler-Dealer Attitude	15	5.1%
Instability in Life Circumstances	13	4.4%
Excessive Family/Peer Pressure	11	3.8%
Complaining About Lack of Authority	10	3.4%

Operations 232 Cases		
Behavioral Red Flag	**Number of Cases**	**Percent of Cases**
Living Beyond Means	74	31.9%
Financial Difficulties	73	31.5%
Unusually Close Association with Vendor/Customer	67	28.9%
Control Issues/Unwillingness to Share Duties	49	21.1%
Wheeler-Dealer Attitude	47	20.3%
Irritability, Suspiciousness or Defensiveness	40	17.2%
Divorce/Family Problems	37	15.9%
Complaining About Inadequate Pay	23	9.9%
Past Employment-Related Problems	22	9.5%
Addiction Problems	18	7.8%
Excessive Pressure from within Organization	15	6.5%
Refusal to Take Vacations	15	6.5%
Complaining About Lack of Authority	13	5.6%
Excessive Family/Peer Pressure	13	5.6%
Past Legal Problems	10	4.3%
Instability in Life Circumstances	9	3.9%

Perpetrators

Sales 170 Cases		
Behavioral Red Flag	**Number of Cases**	**Percent of Cases**
Financial Difficulties	46	27.1%
Living Beyond Means	44	25.9%
Unusually Close Association with Vendor/Customer	31	18.2%
Wheeler-Dealer Attitude	26	15.3%
Excessive Pressure from within Organization	25	14.7%
Divorce/Family Problems	21	12.4%
Control Issues/Unwillingness to Share Duties	20	11.8%
Past Employment-Related Problems	16	9.4%
Irritability, Suspiciousness or Defensiveness	15	8.8%
Complaining About Inadequate Pay	11	6.5%
Excessive Family/Peer Pressure	10	5.9%
Addiction Problems	8	4.7%
Instability in Life Circumstances	8	4.7%
Complaining About Lack of Authority	7	4.1%
Refusal to Take Vacations	7	4.1%
Past Legal Problems	6	3.5%

Executive/Upper Management 159 Cases		
Behavioral Red Flag	**Number of Cases**	**Percent of Cases**
Living Beyond Means	78	49.1%
Wheeler-Dealer Attitude	51	32.1%
Control Issues/Unwillingness to Share Duties	42	26.4%
Financial Difficulties	40	25.2%
Unusually Close Association with Vendor/Customer	36	22.6%
Divorce/Family Problems	22	13.8%
Irritability, Suspiciousness or Defensiveness	21	13.2%
Past Employment-Related Problems	19	11.9%
Addiction Problems	17	10.7%
Excessive Pressure from within Organization	16	10.1%
Past Legal Problems	13	8.2%
Excessive Family/Peer Pressure	11	6.9%
Complaining About Lack of Authority	10	6.3%
Complaining About Inadequate Pay	9	5.7%
Refusal to Take Vacations	7	4.4%
Instability in Life Circumstances	6	3.8%

Perpetrators

Customer Service 92 Cases		
Behavioral Red Flag	Number of Cases	Percent of Cases
Living Beyond Means	33	35.9%
Financial Difficulties	31	33.7%
Divorce/Family Problems	16	17.4%
Unusually Close Association with Vendor/Customer	11	12.0%
Addiction Problems	8	8.7%
Irritability, Suspiciousness or Defensiveness	8	8.7%
Complaining About Inadequate Pay	8	8.7%
Instability in Life Circumstances	8	8.7%
Wheeler-Dealer Attitude	7	7.6%
Past Employment-Related Problems	7	7.6%
Past Legal Problems	6	6.5%
Excessive Pressure from within Organization	5	5.4%
Excessive Family/Peer Pressure	4	4.3%
Control Issues/Unwillingness to Share Duties	4	4.3%
Complaining About Lack of Authority	3	3.3%
Refusal to Take Vacations	3	3.3%

Purchasing 76 Cases		
Behavioral Red Flag	Number of Cases	Percent of Cases
Unusually Close Association with Vendor/Customer	36	47.4%
Living Beyond Means	29	38.2%
Control Issues/Unwillingness to Share Duties	17	22.4%
Financial Difficulties	12	15.8%
Irritability, Suspiciousness or Defensiveness	9	11.8%
Wheeler-Dealer Attitude	9	11.8%
Divorce/Family Problems	7	9.2%
Addiction Problems	5	6.6%
Complaining About Inadequate Pay	5	6.6%
Complaining About Lack of Authority	4	5.3%
Excessive Family/Peer Pressure	3	3.9%
Refusal to Take Vacations	3	3.9%
Past Employment-Related Problems	3	3.9%
Excessive Pressure from within Organization	2	2.6%
Instability in Life Circumstances	2	2.6%
Past Legal Problems	1	1.3%

Case Results

Our research indicates that 40–50% of victim organizations do not recover any of their fraud losses.

Case Results

- We asked respondents several questions about the legal proceedings and loss recovery efforts in their cases to help understand what happens to perpetrators and their victims in the aftermath of a fraud.
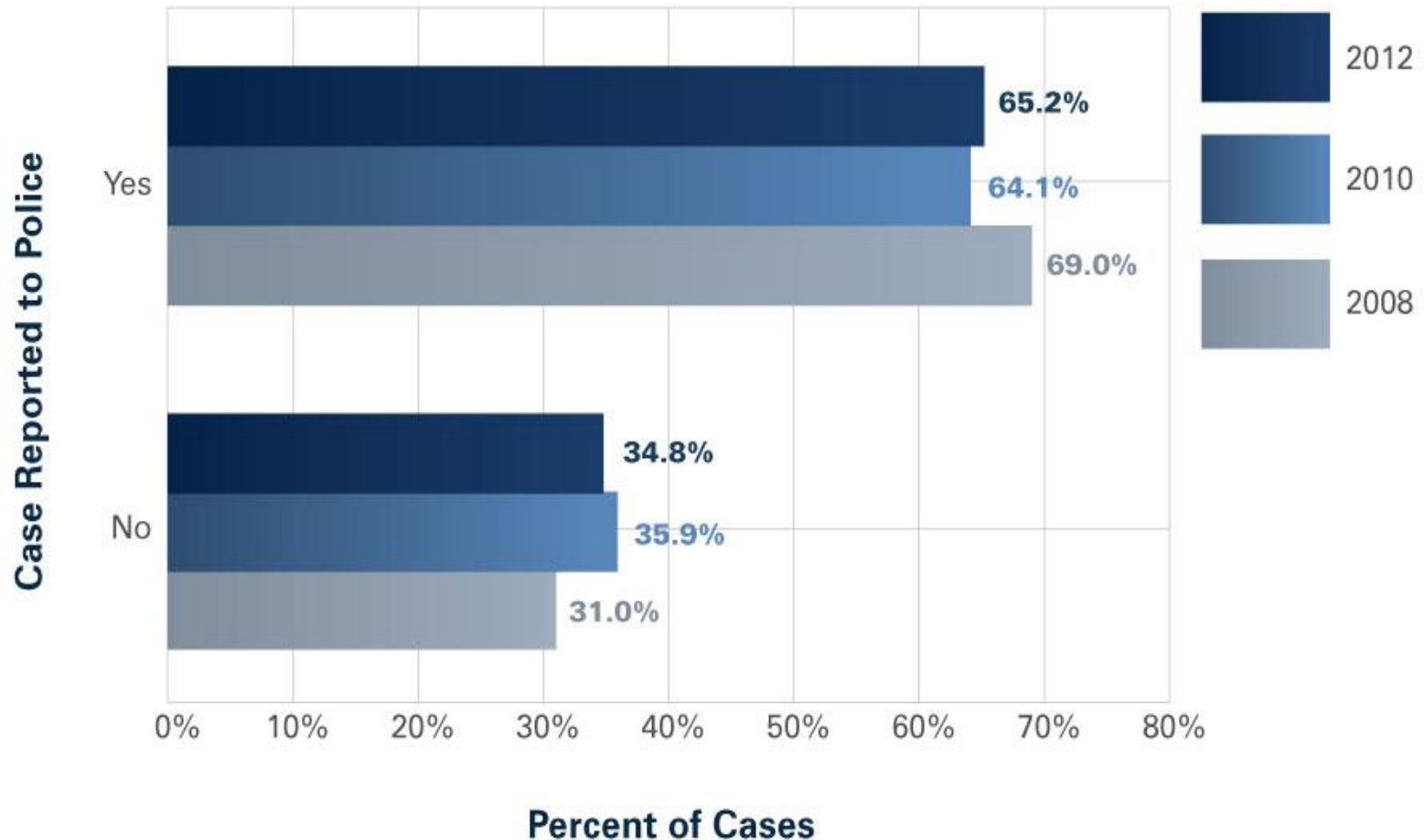
Case Results

Criminal Prosecutions

- In more than two-thirds of the cases we reviewed, the victim organization referred the case to law enforcement authorities for criminal prosecution.

- The median loss in these cases was $200,000, compared to a median loss of $76,000 for cases that were not referred.

Case Results
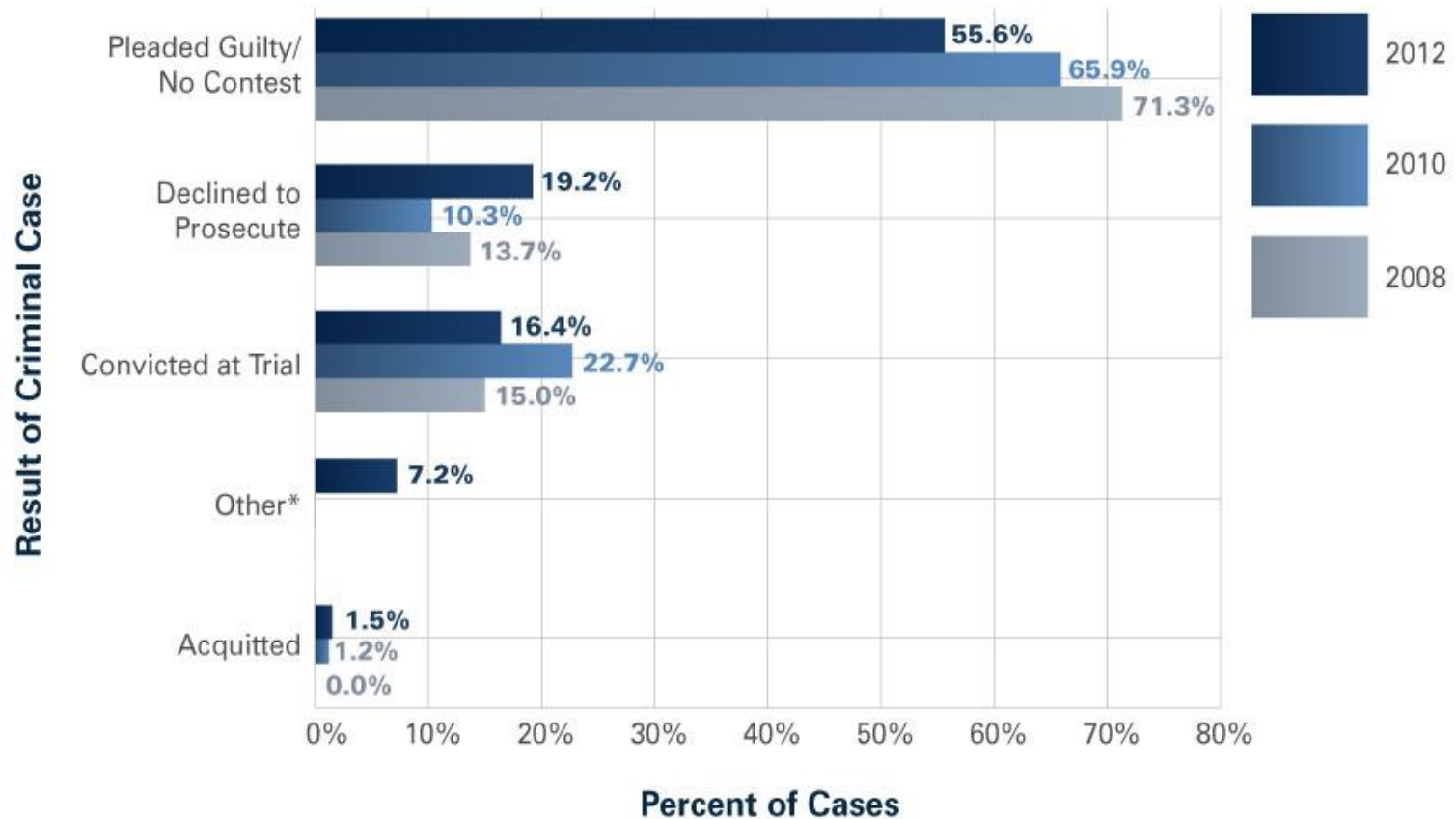

Cases Referred to Law Enforcement

Case Results

- For the cases that were referred to law enforcement, we also asked survey participants about the outcome of the criminal case. A large number of those cases were still pending at the time of our research.

- However, in the 390 cases for which an outcome was known, approximately 16% of the perpetrators were convicted at trial, and 56% pleaded guilty or no contest to their crimes. There were only six cases in which the perpetrator was acquitted.

Case Results

### Result of Cases Referred to Law Enforcement

Case Results

- For the 454 cases in which the victim organization did not refer the case to law enforcement, we asked survey participants to identify the reasons for this decision.

- The most commonly cited factor was fear of bad publicity, followed by a determination that the organization's internal sanctions were sufficient punishment for the misconduct.

Case Results

**Reason(s) Case Not Referred to Law Enforcement**
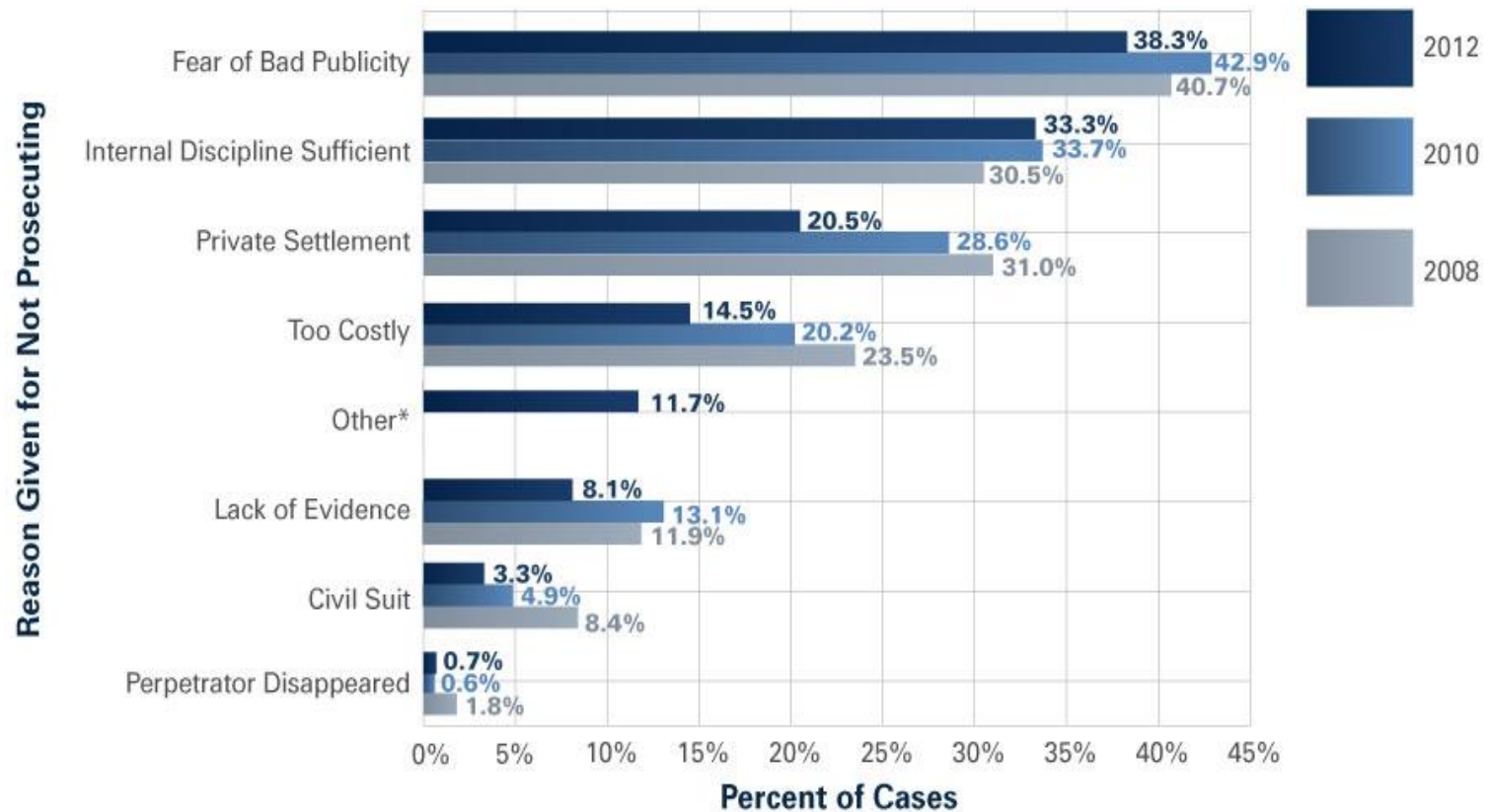
Case Results

Civil Suits

- Our research shows that victim organizations are more likely to pursue criminal action against a perpetrator than they are to file a civil lawsuit.

- Civil suits were filed in less than one-quarter of cases in our current study. These cases tended to involve the most costly frauds; the median loss for cases resulting in a civil suit was $400,000.

Case Results

Cases Resulting in Civil Suit
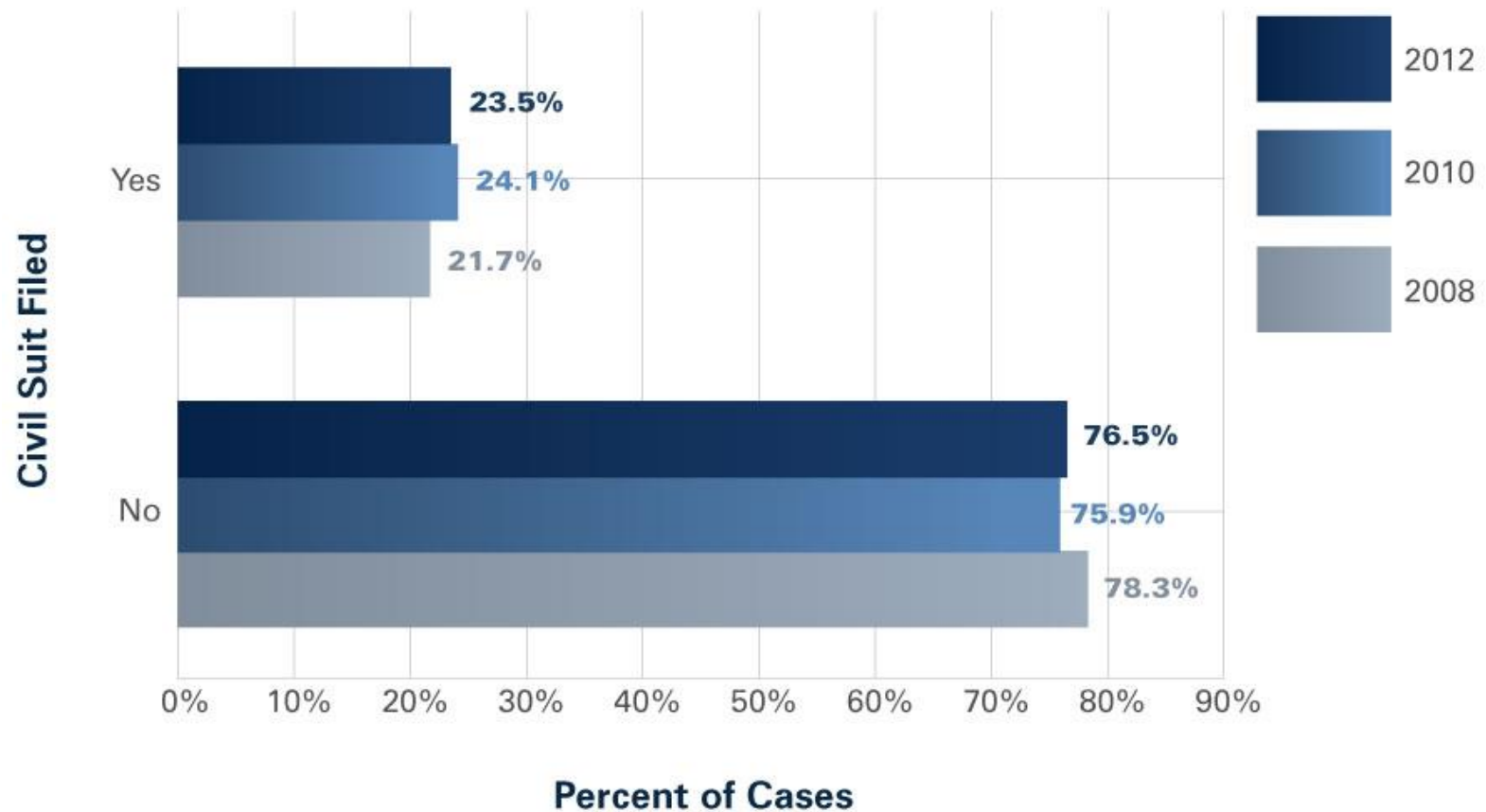
Case Results

- When the victim organization's management did pursue a civil action against the perpetrator, they received a judgment in their favor in nearly half of the cases and settled with the perpetrator in another 31% of the cases.

- The judgment was in favor of the perpetrator in nearly 15% of the cases in which a civil suit was filed.

Case Results

Result of Civil Suits
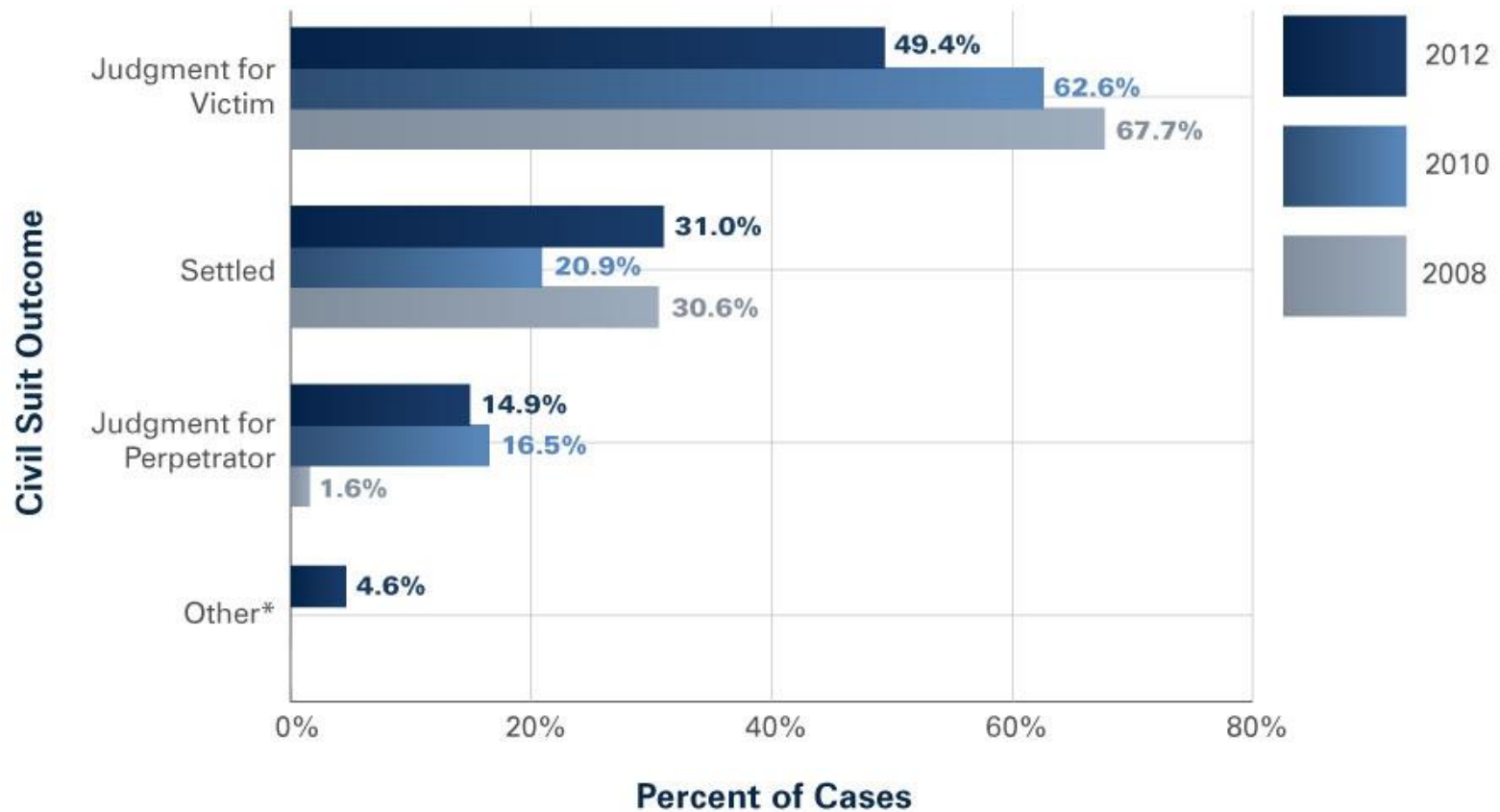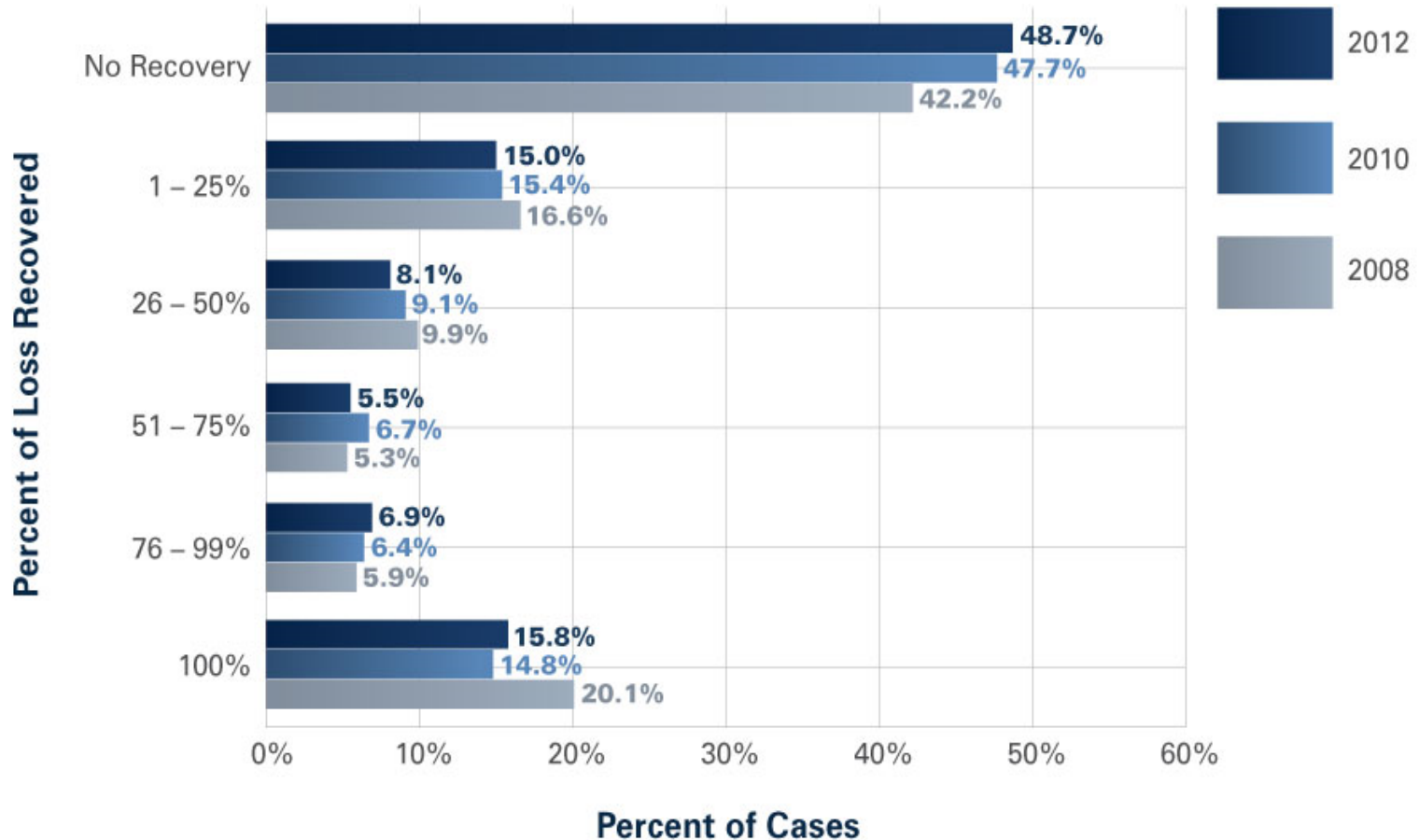
Case Results

Recovery of Losses

- We also asked respondents about how much, if any, of the fraud losses the victim organization had recovered at the time of the survey.

- Because many of the investigations were only recently completed and a large number of legal proceedings were still underway as of the survey period, the recovery efforts of many of the victim organizations are likely to continue for quite a while.

Case Results

- However, survey participants reported that, as of the time of the survey, 49% of victims had not recovered any losses.

- This finding is consistent with our previous research, which indicates that between 40% and 50% of victim organizations do not recover any of their fraud losses.

- In contrast less than 16% of victims in our 2012 study had made a full recovery through restitution, insurance claims or other means.

Case Results

Recovery of Victim Organization's Losses

Methodology

The data in this study is based on 1,388 cases of occupational fraud that were reported by CFEs.

Methodology

Survey Methodology

- The 2012 *Report to the Nations on Occupational Fraud and Abuse* is based on the results of an online survey opened to 34,275 Certified Fraud Examiners (CFEs) from October 2011 to December 2011.

Methodology

- As part of the survey, respondents were asked to provide a detailed narrative of the single largest fraud case they had investigated that met the following four criteria:

   1. The case must have involved occupational fraud (defined as internal fraud, or fraud committed by a person against the organization for which he or she works).

   2. The investigation must have occurred between January 2010 and the time of survey participation.

   3. The investigation must have been complete at the time of survey participation.

   4. The CFE must have been reasonably sure the perpetrator(s) was/were identified.

Methodology

- Respondents were then presented with 85 questions to answer regarding the particular details of the fraud case, including information about the perpetrator, the victim organization and the methods of fraud employed, as well as about fraud trends in general.

- We received 1,428 responses to the survey, 1,388 of which were usable for purposes of this Report. The data contained herein is based solely on the information provided in these 1,388 cases.

Methodology

Analysis Methodology

- In calculating the percentages discussed throughout this Report, we used the total number of complete and relevant responses for the question(s) being analyzed.

- Specifically, we excluded any blank responses or instances where the participant indicated that he or she did not know the answer to a question.[11] Consequently, the total number of cases included in each analysis varies.

Methodology

- Several survey questions allowed participants to select more than one answer. Consequently, the sum of percentages in many charts and tables throughout the Report exceeds 100%.

- All loss amounts discussed throughout the Report are calculated using median loss rather than mean, or average, loss.

- Average losses were heavily skewed by a limited number of very high-dollar frauds. Using median loss provides a more conservative — and we believe more accurate — picture of the typical impact of occupational fraud schemes.

Methodology

Who Provided the Data?

- We opened the survey to all CFEs in good standing at the time of the survey launch. We asked respondents to provide certain information about their professional experience and qualifications so that we could gather a fuller understanding of who was involved in investigating the frauds reported to us.
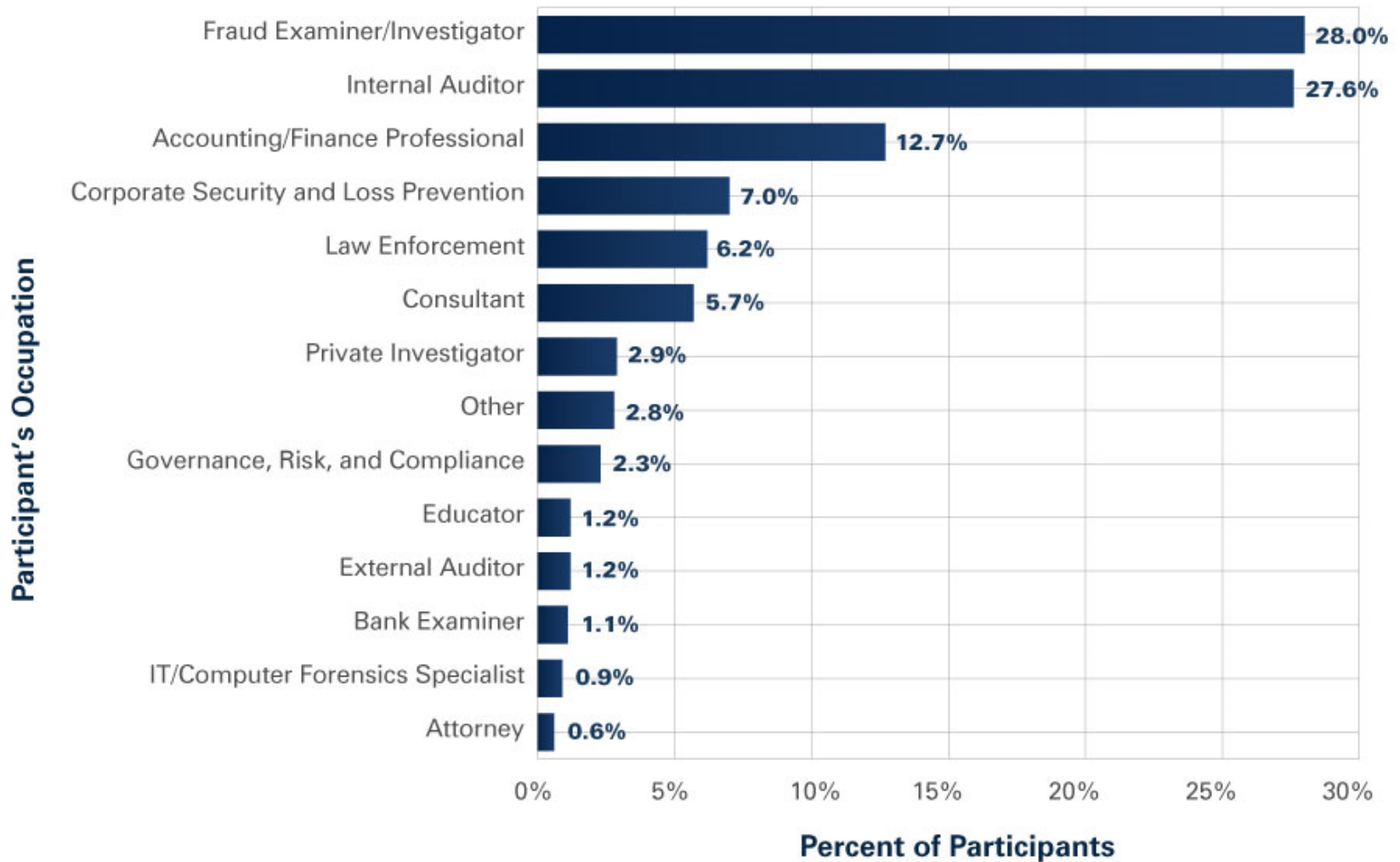
Methodology

- **Primary Occupation**

    – More than half of the CFEs who participated in our survey identified themselves as either fraud examiners/investigators or internal auditors.

    – Nearly 13% are accounting or finance professionals, and 7% work in corporate security or loss prevention roles.

Methodology

Primary Occupations of Survey Participants

Percent of Participants

- Fraud Examiner/Investigator: 28.0%
- Internal Auditor: 27.6%
- Accounting/Finance Professional: 12.7%
- Corporate Security and Loss Prevention: 7.0%
- Law Enforcement: 6.2%
- Consultant: 5.7%
- Private Investigator: 2.9%
- Other: 2.8%
- Governance, Risk, and Compliance: 2.3%
- Educator: 1.2%
- External Auditor: 1.2%
- Bank Examiner: 1.1%
- IT/Computer Forensics Specialist: 0.9%
- Attorney: 0.6%

Participant's Occupation

Methodology

- **Experience**

    – Survey participants had a median 11 years of experience in the fraud examination profession.

    – Of those participants who provided information on their tenure in the field, 78% had more than five years of anti-fraud experience, and nearly one-fifth of participants have worked in fraud examination for more than 20 years.

Methodology

**Experience of Survey Participants**

Methodology

- **Nature of Fraud Examinations Conducted**

    – Of the CFEs who provided information about the nature of fraud examination engagements they conduct, more than half stated they work in-house at an organization for which they conduct internal fraud examinations.

    – Twenty-nine percent identify themselves as working for a professional services firm that conducts fraud examinations on behalf of other companies or agencies, and 12% of respondents work for a law enforcement agency.

Methodology

Nature of Survey Participants' Fraud Examination Work

Law Enforcement, 11.8%

Professional Services Firm, 28.6%

In-House Examiner, 57.5%
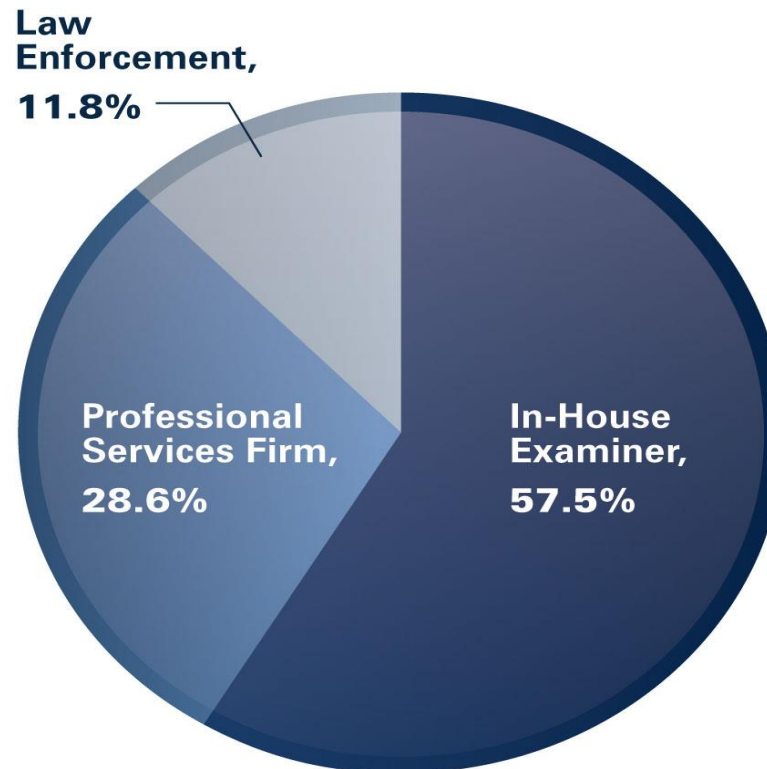
Appendix (Breakdown of Geographic Regions by Country)

Africa 112 Cases	
Country	**Number of Cases**
Botswana	1
Cameroon	2
Gabon	1
Ghana	4
Kenya	20
Liberia	1
Malawi	2
Mauritius	2
Namibia	1
Nigeria	30
Republic of the Congo	1
Seychelles	1
South Africa	34
South Sudan	1
Sudan	1
Uganda	6
Zambia	3
Zimbabwe	1

Appendix (Breakdown of Geographic Regions by Country)

Asia 204 Cases	
Country	**Number of Cases**
Afghanistan	2
Azerbaijan	1
Bahrain	1
Brunei	1
China	35
Cyprus	3
India	34
Indonesia	20
Iran	1
Israel	3
Japan	3
Jordan	1
Kazakhstan	3
Kuwait	2
Kyrgyzstan	1
Malaysia	20
Oman	2
Pakistan	10
Philippines	13
Qatar	3
Saudi Arabia	3
Singapore	6
South Korea	4
Taiwan	3
Thailand	1
Turkey	11
United Arab Emirates	15
Vietnam	2

Appendix (Breakdown of Geographic Regions by Country)

Europe 134 Cases	
Country	**Number of Cases**
Albania	1
Austria	2
Belgium	7
Bulgaria	2
Croatia	1
Czech Republic	5
Denmark	1
Finland	3
France	4
Germany	16
Greece	11
Hungary	2
Italy	6
Kosovo	2
Latvia	1
Montenegro	1
Netherlands	6
Poland	4
Portugal	3
Romania	8
Russia	9
Serbia	2
Slovakia	2
Spain	5
Switzerland	7
Ukraine	2
United Kingdom	21

Appendix (Breakdown of Geographic Regions by Country)

Latin America and the Caribbean 38 Cases	
Country	**Number of Cases**
Argentina	3
Barbados	1
Belize	2
Bolivia	1
Brazil	4
Chile	1
Colombia	2
Costa Rica	1
Dominican Republic	3
El Salvador	1
Jamaica	1
Mexico	11
Nicaragua	1
Panama	2
Peru	1
Saint Kitts and Nevis	1
Trinidad and Tobago	1
Venezuela	1

Appendix (Breakdown of Geographic Regions by Country)

Oceania 35 Cases	
Country	**Number of Cases**
Australia	27
Fiji	1
New Zealand	7

Appendix

Countries with Reported Cases
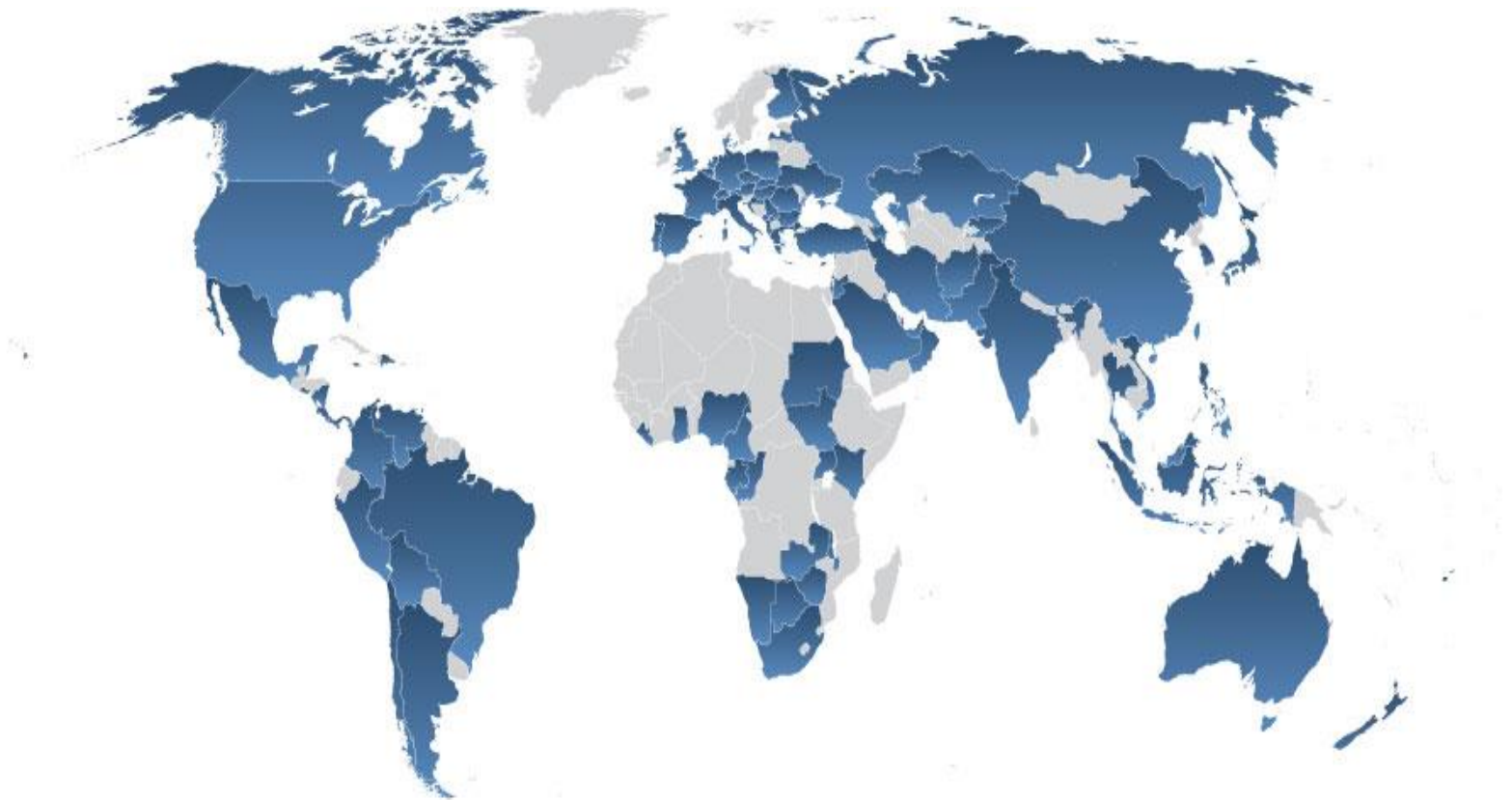
Fraud Prevention Checklist

- The most cost-effective way to limit fraud losses is to prevent fraud from occurring. This checklist is designed to help organizations test the effectiveness of their fraud prevention measures.

Fraud Prevention Checklist

1. **Is ongoing anti-fraud training provided to all employees of the organization?**

   ❑ Do employees understand what constitutes fraud?

   ❑ Have the costs of fraud to the company and everyone in it — including lost profits, adverse publicity, job loss and decreased morale and productivity — been made clear to employees?

   ❑ Do employees know where to seek advice when faced with uncertain ethical decisions, and do they believe that they can speak freely?

   ❑ Has a policy of zero-tolerance for fraud been communicated to employees through words and actions?

Fraud Prevention Checklist

2. Is an effective fraud reporting mechanism in place?

❑ Have employees been taught how to communicate concerns about known or potential wrongdoing?

❑ Is there an anonymous reporting channel available to employees, such as a third-party hotline?

❑ Do employees trust that they can report suspicious activity anonymously and/or confidentially and without fear of reprisal?

❑ Has it been made clear to employees that reports of suspicious activity will be promptly and thoroughly evaluated?

❑ Do reporting policies and mechanisms extend to vendors, customers and other outside parties?

Fraud Prevention Checklist

3. **To increase employees' perception of detection, are the following proactive measures taken and publicized to employees?**

❑ Is possible fraudulent conduct aggressively sought out, rather than dealt with passively?

❑ Does the organization send the message that it actively seeks out fraudulent conduct through fraud assessment questioning by auditors?

❑ Are surprise fraud audits performed in addition to regularly scheduled audits?

❑ Is continuous auditing software used to detect fraud and, if so, has the use of such software been made known throughout the organization?

Fraud Prevention Checklist

4. **Is the management climate/tone at the top one of honesty and integrity?**

❑ Are employees surveyed to determine the extent to which they believe management acts with honesty and integrity?

❑ Are performance goals realistic?

❑ Have fraud prevention goals been incorporated into the performance measures against which managers are evaluated and which are used to determine performance-related compensation?

❑ Has the organization established, implemented and tested a process for oversight of fraud risks by the board of directors or others charged with governance (e.g., the audit committee)?

Fraud Prevention Checklist

5. Are fraud risk assessments performed to proactively identify and mitigate the company's vulnerabilities to internal and external fraud?

Fraud Prevention Checklist

6. **Are strong anti-fraud controls in place and operating effectively, including the following?**

   ❑ Proper separation of duties

   ❑ Use of authorizations

   ❑ Physical safeguards

   ❑ Job rotations

   ❑ Mandatory vacations

Fraud Prevention Checklist

7. Does the internal audit department, if one exists, have adequate resources and authority to operate effectively and without undue influence from senior management?

Fraud Prevention Checklist

8. **Does the hiring policy include the following (where permitted by law)?**

    ❑ Past employment verification

    ❑ Criminal and civil background checks

    ❑ Credit checks

    ❑ Drug screening

    ❑ Education verification

    ❑ References check

Fraud Prevention Checklist

9. Are employee support programs in place to assist employees struggling with addictions, mental/emotional health, family or financial problems?

10. Is an open-door policy in place that allows employees to speak freely about pressures, providing management the opportunity to alleviate such pressures before they become acute?

11. Are anonymous surveys conducted to assess employee morale?

About the ACFE

The ACFE serves more than 60,000 members in more than 150 countries worldwide.

About the ACFE

- The ACFE is the world's largest anti-fraud organization and premier provider of anti-fraud training and education.

- Together with more than 60,000 members in over 150 countries, the ACFE is reducing business fraud worldwide and providing the training and resources needed to fight fraud more effectively.

About the ACFE

- Founded in 1988 by Dr. Joseph T. Wells, CFE, CPA, the ACFE provides educational tools and practical solutions for anti-fraud professionals through initiatives including:

  - Global conferences and seminars led by anti-fraud experts

  - Instructor-led, interactive professional training

  - Comprehensive resources for fighting fraud, including books, self-study courses and articles

  - Leading anti-fraud periodicals including *Fraud Magazine®, The Fraud Examiner* and *FraudInfo*

  - Local networking and support through ACFE chapters worldwide

  - Anti-fraud curriculum and educational tools for colleges and universities

About the ACFE

- The positive effects of anti-fraud training are far-reaching. Clearly, the best way to combat fraud is to educate anyone engaged in fighting fraud on how to effectively prevent, detect and investigate it.

- By educating, uniting and supporting the global anti-fraud community with the tools to fight fraud more effectively, the ACFE is reducing business fraud worldwide and inspiring public confidence in the integrity and objectivity of the profession.

About the ACFE

- The ACFE offers its members the opportunity for professional certification. The CFE credential is preferred by businesses and government entities around the world and indicates expertise in fraud prevention and detection.

About the ACFE

Membership

- Immediate access to world-class anti-fraud knowledge and tools is a necessity in the fight against fraud.

- Members of the ACFE include accountants, internal auditors, fraud investigators, law enforcement officers, lawyers, business leaders, risk/compliance professionals and educators, all of whom have access to expert training, educational tools and resources.

About the ACFE

- Members all over the world have come to depend on the ACFE for solutions to the challenges they face in their professions. Whether their career is focused exclusively on preventing and detecting fraudulent activities or they just want to learn more about fraud, the ACFE provides the essential tools and resources necessary for anti-fraud professionals to accomplish their objectives.

- To learn more, visit ACFE.com or call (800) 245-3321 / +1 (512) 478-9000.

About the ACFE

Certified Fraud Examiners

- CFEs are anti-fraud experts who have demonstrated knowledge in four critical areas: Fraudulent Financial Transactions, Fraud Investigation, Legal Elements of Fraud, and Fraud Prevention and Deterrence.

About the ACFE

- In support of CFEs and the CFE credential, the ACFE:

    - Provides bona fide qualifications for CFEs through administration of the Uniform CFE Examination

    - Requires CFEs to adhere to a strict code of professional conduct and ethics

    - Serves as the global representative for CFEs to business, government and academic institutions

    - Provides leadership to inspire public confidence in the integrity, objectivity, and professionalism of CFEs

About the ACFE

Copies of the 2012 _Report to the Nations on Occupational Fraud and Abuse_ are available from:

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